

**Revisions to the
September 2000
ISTHA Standard
Specifications
(Supplemental Specifications)**

Issued January 2003



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December 2, 2002

Re: Supplement to the 2000 ISTHA Standard Specifications

This book contains the REVISIONS TO THE STANDARD SPECIFICATIONS (SUPPLEMENTAL SPECIFICATIONS) for the Illinois State Toll Highway Authority, effective January 1, 2003. The REVISIONS TO THE STANDARD SPECIFICATIONS herein supplement the ISTHA STANDARD SPECIFICATIONS, dated September 2000.

This book includes the following new section to the Standard Specifications:
Section 714 - Concrete Glare Screen.

This book also includes the complete rewriting of the following requirements to the Standard Specifications:

- Section 519 - Jacking / Cribbing Bridge Girders*
- Section 520 - Bridge Bearing Modifications*
- Section 702 - Guardrail Modifications*
- Section 703 - Guardrail Height Adjustment
- Section 704 - Energy Attenuator
- Section 709 - Moveable Concrete Barrier, Contractor-Furnished.

Additionally, significant revisions have been included to the following sections:

- Sections 401 - Portland Cement Concrete Pavement
- Section 525 - Bridge Expansion Joint Closures
- Section 608 - Insertion Lining for Pipe Culverts
- Section 620 - Seeding
- Section 628 - Erosion and Sediment Control
- Section 701 - Steel Plate Beam Guardrail
- Section 710 - Moveable Concrete Barrier, ISTHA-Owned*
- Section 822 - Epoxy Pavement Markings
- Section 1001 - Maintenance of Traffic
- Section 1600 - Mobilization.

* denotes the new title of these sections.

All REVISIONS TO THE STANDARD SPECIFICATIONS are applicable to, and included by reference, in all contracts advertised and awarded by the Authority on or after the effective date.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kestutis P. Susinskas'.

Kestutis P. Susinskas, P.E.
Chief Engineer

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REVISIONS TO THE SEPTEMBER 2000 ISTHA STANDARD SPECIFICATIONS (Supplemental Specifications)

Issued January 2003

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Illinois State Toll Highway Authority

ERRATA TO 2000 ISTHA STANDARD SPECIFICATIONS

Issued January 2003

Page 87	Subsection 200.1.	Revise the Pay Item Number for ROADWAY EXCAVATION, UNCOMMON from 201U to 203U.
Page 97	Subsection 203.7	Delete the word "therefrom" from the fourth line of subsection 203.7 (b).
Page 100	Subsection 204.4	Delete the word "therefrom" the third line of this subsection.
Page 136	Subsection 218.3	Revise the end of the last sentence of this subsection to read : "...and to receive seeding in accordance with Section 216.3 620 ."
Page 205	Subsection 403.2	Revise the second reference under Type of Construction in Table 4-2 to read as : "Bituminous Binder Surface Course ".
Page 261	Subsection 415.1	Revise the end of this subsection to read: ",,,under the provisions of Subsection 413.7, or as directed by the Engineer."
Page 262		Change the last word in Subsection 415.6 from "RECONSTRUCTION" to " RESTORATION ".
Page 279		Delete the following pay item: "421B AGGREGATE SHOULDERS, SPECIAL TON".
Page 314		Revise the designation of Pay Item Number 438B1 to read : "CONCRETE MEDIAN PAVEMENT (4 4 IN.)".
Page 316	Subsection 439A.1.	Delete the words "and ramp" from the beginning of the second line of this subsection.
Page 349	Subsection 501.10.4(a)	Revise the beginning of the second line of the tenth paragraph of this subsection to read: "....required curing or protection period....".
Page 433	Subsection 507.3	Revise the first line of the fourth paragraph of this subsection to read: "¼ or more of their original cross-sectional area shall be".
Page 436	Subsection 507A.3	Revise the beginning of the third paragraph to read : "Where portions of the existing substructure are to remain in service, portions to be".
Page 445	Subsection 510.3	Revise the first line of the third paragraph of this subsection to read: "¼ or more of their original cross-sectional area shall be".
Page 447	Subsection 511.4	<ul style="list-style-type: none">• Revise the fourth sentence of the second paragraph to read : "All exposed reinforcing bars and newly exposed concrete shall be thoroughly blastcleaned blastcleaned."• Revise the first line of the third paragraph of this subsection to read:

"¼ or more of their original **cross-sectional** area shall be

- Page 451 Subsection 512.4.1 Revise the first line of the third paragraph of this subsection to read as follows:
"¼ or more of their original **cross-sectional** area shall be"
- Page 475 Subsection 516.6 Revise the first line of the third paragraph of this subsection to read:
"¼ or more of their original **cross-sectional** area from corrosion.....".
- Page 482 Subsection 518.7.2
- Delete the fourth sentence of this subsection.
 - Combine the first two sentences of this subsection into one sentence.
- Page 484 Section 518 Revise the designation of Pay Item No. 518D1 to read:
"FLOATING BEARING (0k <R= 500k)".
- Page 494 Subsection 523.2 Revise the first line in this subsection to read :
"CLEAN BRIDGE SEATS ~~shall~~**will** be measured"
- Page 497 Subsection 525.2.2(e) Revise the second line of this subsection to read :
".....welded threaded studs, washers and nuts, when required, shall"
- Page 509 Subsection 527.3 Revise the first line of the fourth paragraph of this subsection to read:
"¼ or more of their original **cross-sectional** area from corrosion.....".
- Page 531 Subsection 531.4 Revise the first line of the last paragraph of this subsection to read:
"¼ or more of their original **cross-sectional** area from corrosion.....".
- Page 536 Subsection 538.4 Revise the first line of Item No.1 in this subsection to read:
"1.) Fully and accurately dimensioned views, showing.....".
- Page 537 Subsection 538.5 Revise the last line of this subsection to read:
"....at least 2 feet **beyond** each side of the box culvert."
- Page 550 Subsection 543.2 Revise the address and telephone for Barsplice Products, Inc., in the table for "Qualified Products for Mechanical Reinforcing Bar Splicer/Coupler Systems" to the following:
**"1300 Grange Hall Road
Beaver Creek, OH 45430
(937)427-6466"**.
- Page 622 Subsection 616.2 Revise the first material reference in this subsection to read :
"Concrete (**Class P**).....1101".
- Page 625 Subsection 617.2 Revise the first material reference in this subsection to read :
"Concrete (**Class P**).....1101".
- Page 648 Subsection 624.1 Revise the second paragraph of this subsection to read :
"It shall also include all incidental operations such as **excavating, backfilling,** mulching, bracing, wrapping, watering, care of living plants and replacement of unsatisfactory plants."

- Page 709 Subsection 706.3.3 Revise the last line of this subsection to read:
"....variation than $\frac{1}{4}$ inch in 20 feet,.....".
- Page 921 Subsection 1005.2 Revise the fourth sentence of the fifth paragraph of this subsection to read :
"The installation, monthly charges and billings for all calls within area codes 312, 773, 630, 708, 815, **224** and 847 shall be paid by the Contractor."
- Page 933 Table 11-1 Revise the requirement of Minimum Required Ultimate Compressive Strength for Class HP concrete to read :
"~~5,000~~ **4000** /7 day".
- Page 983 Subsection 1108.3 Revise the beginning of the first sentence of this subsection to read :
"Stone for hand-laid riprap shall be not less than **1/3** cubic foot in volume....".
- Page 1018 Subsection 1118.4 Delete the word "or" which is centered in the text.
- Page 1033 Subsection 1126.1 Revise the third sentence of this subsection to read as follows:
"At least ~~95~~ **90** percent must pass the No. 10 sieve."
- Page 1039 Subsection 1128.5 Revise the second line of the last paragraph of this subsection to read:
"....Standards for Nursery Stock ~~ASA~~ **ANSI** Z 60.1 adopted by the American Association of Nurserymen."
- Page 1078 Subsection 1139.5 Revise the end of the first paragraph of this subsection to read as follows:
".....has greater strength than the tensile rating of the plastic film (~~2800~~ **2000** psi)".

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 101 – DEFINITION OF TERMS

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Add the following to the list of Abbreviations.

- Between **ACI** and **AISC**:
ADAAG United States Americans with Disabilities Act Architectural Guidelines
- Between **ASCE** and **ASME**:
ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers
- Between **AWWA** and **FHWA**:
BOCA Building Officials Code Association
- Between **FSS** and **IDOT**:
IBC International Building Code
IDNR Illinois Department of Natural Resources
- Between **IES** and **ISTHA**:
ILAC Illinois Accessibility Code of the Capital Development Board
ILPC Illinois Plumbing Code of the Illinois Department of Public Health
- Between **NEMA** and **SAE**:
NFPA National Fire Protection Association
- After **UL**:
USACE United States Army Corps of Engineers

- Between **Addendum** and **Advertisement for Bids**:
Adjusted Contract Award Amount. The Original Contract Award Amount plus the net increase/decrease due to approved Change Orders and/or Extra Work Orders to date.

- Between **Advertisement for Bids** and **Authority**:
Approved Equal. Whenever the term "equal" or "approved equal" is used in these Standard Specifications with respect to the use of a specific article, material or equipment in the Contract, it shall mean that the Contractor may substitute items of comparable quality, design and efficiency, subject to the Engineer determining the acceptability of such articles, materials or equipment.

- Between **Notice to Proceed** and **Pavement**:
Original Contract Award Amount. The total amount of the Proposal, as awarded by the Board.

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 104 – SCOPE OF WORK

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

104.9 – VALUE ENGINEERING PROPOSALS

(d) Acceptance of the Proposal.

Revise this subsection, beginning with the second paragraph, as follows:

"For Contracts with an Original Contract Award Amount less than \$1,000,000, the Contractor will be paid as follows:

"When the total cumulative value of all Value Engineering Proposals submitted for an individual contract is equal to or less than 1.5 percent of the Original Contract Award Amount, payment will be 0.5(B-A-C).

When the total cumulative value of all Value Engineering Proposals submitted for an individual contract is greater than 1.5 percent of the Original Contract Award Amount, payment will be 0.65(B-A-C), for that portion of the cumulative value that exceeds 1.5 percent of the Original Contract Award Amount plus 0.5(B-A-C) for that portion to and including 1.5 percent.

For Contracts with an Original Contract Award Amount of at least \$1,000,000 but do not exceed \$5,000,000, the Contractor will be paid as follows:

"When the total cumulative value of all Value Engineering Proposals submitted for an individual contract is equal to or less than 2.0 percent of the Original Contract Award Amount, payment will be 0.5(B-A-C).

When the total cumulative value of all Value Engineering Proposals submitted for an individual contract is greater than 2.0 percent of the Original Contract Award Amount, payment will be 0.65(B-A-C), for that portion of the cumulative value that exceeds 2.0 percent of the Original Contract Award Amount plus 0.5(B-A-C) for that portion to and including 2.0 percent.

For Contracts with an Original Contract Award Amount exceeding \$5,000,000, the Contractor will be paid as follows:

"When the total cumulative value of all Value Engineering Proposals submitted for an individual contract is equal to or less than 1.0 percent of the Original Contract Award Amount, payment will be 0.5(B-A-C).

When the total cumulative value of all Value Engineering Proposals submitted for an individual contract is greater than 1.0 percent of the Original Contract Award Amount, payment will be 0.65(B-A-C), for that portion of the cumulative value that exceeds 1.0 percent of the Original Contract Award Amount plus 0.5(B-A-C) for that portion to and including 1.0 percent."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 105 – CONTROL OF THE WORK

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

105.2.2 – Working Drawings

Revise the fourth paragraph in this subsection to read:

“All working drawings shall be prepared and sealed by a Structural Engineer currently licensed by the State of Illinois.”

105.2.3 - Shop Drawings

Revise the third paragraph in this subsection to read:

“All shop drawings detailing the fabrication of structural components shall be prepared and sealed by a Structural Engineer currently licensed by the State of Illinois.”

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 107 – LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC
Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

107.1.1 – Wage Rates

Revise this subsection to read:

“The Contractor shall pay not less than the prevailing rate of wages as are on file with the Illinois Department of Labor, and are available at the following web site: <http://www.state.il.us/agency/idol/>. The Contractor shall be required to comply with the provisions of "an Act regulating the rates of laborers, mechanics, and other workers employed in any public works by the State, county, city or any public body of any political subdivision or anyone under contract for public works." (Il. Rev. Stat., Ch. 48. Par. 39-s, as amended from time to time.)”

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 109 – MEASUREMENT AND PAYMENT

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

109.4 – PAYMENT FOR EXTRA WORK

(d) Equipment.

Delete the third sentence in this sub-paragraph.

109.6 - PARTIAL PAYMENTS - MONTHLY ESTIMATES

Revise the last line in the first paragraph of this subsection to read:

".....be less than five percent of the Adjusted Contract Award Amount."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 400 – DESCRIPTION OF PAVEMENTS

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

400.1 - PAY ITEMS FOR PART V

Add the following pay item numbers, designations and units of measure in this subsection:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"401C3	CONTINUOUSLY REINFORCED PC CONCRETE PAVEMENT (12 IN.)	SQ. YD.
401D	LUG SYSTEM COMPLETE	L.F.
401E	PAVEMENT REINFORCEMENT (12 IN.)	SQ. YD."

Delete the following pay item numbers, designations and units of measure in this subsection:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"401A2	FLY ASH COMPENSATED PC CONCRETE PAVEMENT (10 IN.)	SQ. YD.
401B2	FLY ASH COMPENSATED PC CONCRETE PAVEMENT (11 IN.)	SQ. YD.
401C2	FLY ASH COMPENSATED PC CONCRETE PAVEMENT (12 IN.)	SQ. YD.
421B	AGGREGATE SHOULDER, SPECIAL	TON"

Revise the designations of the following pay item numbers. There is no revision to the respective unit of measure.

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>
"420	AGGREGATE SHOULDER WITH FILTER FABRIC
438B1	CONCRETE MEDIAN PAVEMENT (4 IN.)"

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 401 – PORTLAND CEMENT CONCRETE PAVEMENT

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

401.1 – DESCRIPTION

Replace this subsection in its entirety with the following:

"This item shall consist of a pavement composed of Portland cement concrete, with or without reinforcement as specified, constructed on a prepared subbase or base course in accordance with these Specifications and in close conformity with the lines and dimensions shown on the Plans or established by the Engineer."

401.2 - MATERIALS

Delete the following from the list of materials in this subsection:

"Welded Wire Fabric.....1112.20.2".

Add the following to the list of materials in this subsection:

"Epoxy grout.....1151.5".

Add the following to the end of this subsection:

"The Contractor shall not intermix concrete mixes Class P and Class P (FA) for P.C.C. Pavement."

401.7.2 - Placing Reinforcement

Replace this subsection with the following:

"When the pavement is to be reinforced, reinforcing steel of the grade and size specified, shall be furnished clean and free of oil or grease, dirt or other foreign substances. Unless otherwise specified, the reinforcing steel and chair supports shall be epoxy coated.

The reinforcing steel shall be placed as shown on the Plans, with a placement tolerance for individual bars of ± 1 inch, horizontally or vertically. All laps shall be held firmly together by wires or clips spaced not more than 4 feet apart.

Reinforced concrete shall be placed in one layer, with the reinforcement supported on steel chair supports at the depth below the pavement surface indicated on the Plans. The Contractor shall submit shop drawings (in accordance with Subsection 105.2.3) of the proposed chair supports to the Engineer for review prior to fabrication.

The chair supports shall possess the necessary rigidity without scratching the epoxy coating of the reinforcement bars. The spacing of the chair supports shall not exceed 3 feet transversely or 4 feet longitudinally. The chair supports shall be fabricated with sand plates.

401.8.2 - Strike-Off and Consolidation

Revise the first sentence of the first paragraph of this subsection to read:

"After the concrete has been placed in accordance with the foregoing, the concrete shall be struck-off to the specified thickness and vibrated throughout the full depth and width of the pavement."

401.14 - JOINTS

Add the following to the end of this subsection:

"401.14.7 - Lug End Anchorages

The lugs shall be constructed in trench. Excavation for the trench shall be to the minimum dimensions shown on the Plans. The use of forms will not be permitted. The lugs and the concrete pad shall be constructed of either Class P concrete or Class P (FA) Concrete, and shall be cured as specified in Subsection 1101.9.4(a), except that membrane curing is not permitted. The surface of the concrete pad shall be finished rough and shall be free of any dust, dirt or other foreign material at the time the continuously reinforced concrete is placed."

401.14.2 - Transverse Contraction Joints

Delete the fifth and seventh paragraphs of this subsection in their entirety.

401.14.5 - Longitudinal Joints

Delete the third sentence of the first paragraph of this subsection in its entirety.

401.15 - SEALING JOINTS

Delete the penultimate paragraph of this subsection.

401.16 - SURFACE TOLERANCE

PRICE ADJUSTMENT SCHEDULE

(Where Average Profile Index does not exceed 4.25 inches/mile)

Revise the third line under **Profile Index for Entire Project** to read : "over ~~2~~3.25 to 4.25".

401.19 - PAVEMENT WIDENING TIE BARS

Delete the second paragraph of this subsection in its entirety.

Replace the second and third sentences of the third paragraph of this subsection with the following:

"The holes shall be drilled according to the Plan details, and holes shall be blown clean and dry prior to placing the grout. The epoxy grout shall be injected into the holes using a mechanical device which fills the holes from the back toward the face of the pavement."

Add the following to the end of this subsection:

"When the Plan Quantity for PORTLAND CEMENT CONCRETE PAVEMENT exceeds 1500 square yards, the Contractor shall be required to load test five percent of the first 500 tie bars installed, as selected by the Engineer. No further installation will be permitted until the initial five percent testing has been completed and approval to continue installation has been given by the Engineer. Testing shall be required for 0.5 percent of the bars installed after the initial 500. For each bar that fails to pass the minimum requirements, two more bars selected by the Engineer shall be tested. Each bar that fails to meet the minimum load requirements shall be reinstalled and retested. The equipment and method used for testing shall meet the requirements of ASTM E 488. All tests shall be performed within 72 hours of installation. The tie bars shall be installed and approved prior to placing concrete in the adjacent lane."

401.20 - MEASUREMENT

Revise the first paragraph of this subsection to read:

"PORTLAND CEMENT CONCRETE PAVEMENT and CONTINUOUSLY REINFORCED PC CONCRETE PAVEMENT (12 IN.), constructed essentially to the lines and dimensions shown on the Plans will not be measured for payment, but will be calculated in square yards based on the plan lines and dimensions. Adjustment, if necessary, will be made to the calculated quantity for those areas of pavement found to be deficient in thickness as provided in Subsection 401,18. Should the Engineer direct a change in the plan limits of PORTLAND CEMENT CONCRETE PAVEMENT or CONTINUOUSLY REINFORCED PC CONCRETE PAVEMENT (12 IN.), that area involved in the change will be measured in place for adjustment to the calculated quantity. CONTINUOUSLY REINFORCED PC CONCRETE PAVEMENT (12 IN.) constructed beyond the lines and dimensions shown on the Plans or designated by the Engineer will not be computed for payment."

Insert the following as the last two paragraphs of this subsection.

"LUG SYSTEM COMPLETE will be measured for payment in lineal feet across the width of the lug system.

PAVEMENT REINFORCEMENT (12 IN.) will be the calculated square yards of surface area of the pavement in which the pavement reinforcement is installed, and no allowance will be made for laps, splices or portions of bars not used. Expansion joints and extra reinforcement in the pavement over concrete pads, sleeper slabs and at construction joints will not be measured for payment, but shall be included in the Contract unit price for PAVEMENT REINFORCEMENT (12 IN.)."

401.21 - PAYMENT

Revise the first paragraph of this subsection to read:

"Payment for PORTLAND CEMENT CONCRETE PAVEMENT and CONTINUOUSLY REINFORCED PC CONCRETE PAVEMENT (12 IN.), measured as specified, will be made at the Contract unit price per square yard, which payment shall constitute full compensation for preparation of the base or subbase; furnishing and placing all materials including transverse and longitudinal joint assemblies where used, dowel bars and chair supports; cutting and sealing joints and cracks; correcting surface variations; protection from traffic or other damage; handling field samples and cutting and filling core holes; and for all labor, equipment tools and incidentals necessary to complete the work as specified."

Insert the following as the last two paragraphs of this subsection.

"Payment for LUG SYSTEM COMPLETE, measured as specified, will be made at the Contract unit price per lineal foot, which payment shall constitute full compensation for excavation; portland cement concrete; reinforcement and all other appurtenances shown on the Plans; and for all labor, equipment, tools and incidentals necessary to complete the work as specified. The continuously reinforced portland cement concrete pavement over the lugs will be paid for as specified elsewhere in this subsection.

Payment for PAVEMENT REINFORCEMENT, measured as specified, will be made at the Contract unit price per square yard."

Delete the following pay item numbers, designation and units of measure at the end of this section:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
401A2	FLY ASH COMPENSATED PC CONCRETE PAVEMENT (10 IN.)	SQ. YD.
401B2	FLY ASH COMPENSATED PC CONCRETE PAVEMENT (11 IN.)	SQ. YD.
401C2	FLY ASH COMPENSATED PC CONCRETE PAVEMENT (12 IN.)	SQ. YD.

Add the following pay item numbers, designations and units of measure at the end of this section:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
401C3	CONTINUOUSLY REINFORCED PC CONCRETE PAVEMENT (12 IN.)	SQ. YD.
401D	LUG SYSTEM COMPLETE	L.F.
401E	PAVEMENT REINFORCEMENT (12 IN.)	SQ. YD.

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 413 – CONCRETE PAVEMENT REPAIR (FULL DEPTH)

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

413.4.1 – Patching Barricades

Replace the second sentence in the second paragraph of this subsection with the following:

"Where an opening is adjacent to a traffic lane, the patching barricade(s) shall be placed in front of the opening (using leg extensions if necessary), with one of the barricades along the edge of the adjacent traffic lane, in addition to the work-zone barricades. Additional patching barricades shall be placed along the edge of the traveled lane for every twelve (12) feet of open excavation."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 420 – AGGREGATE SHOULDERS

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

420.3 – GENERAL REQUIREMENTS

Insert the following after the penultimate paragraph of this subsection:

"In addition to the aggregate material specified in Subsection 420.2, reclaimed asphalt pavement (RAP) may be used as Aggregate Shoulder without Filter Fabric. The RAP material shall be the result of cold milling or crushing of an existing hot-mix bituminous concrete pavement structure, including shoulders, which was built under either an Authority or IDOT contract. RAP containing contaminants such as earth, brick, concrete, sheet asphalt, sand or other materials identified will not be accepted until the contaminants are thoroughly removed. In addition, one hundred percent of the RAP material shall pass the 1½ inch sieve and shall be reasonably well-graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted.

The Contractor shall advise the Engineer as to the location of the originally placed pavement and/or the origin of the existing stockpiled RAP. The Contractor shall provide free access to the stockpiled RAP for quality control sampling by the Engineer to test for gradation, contaminates and asphalt content of the processed material. Any stockpiled RAP is subject to the approval of the Engineer prior to the RAP being used.

If existing delineators are located in the existing aggregate shoulder, the Contractor shall place and compact the aggregate so as not to disturb any delineators. Damage to any delineators as a result of the Contractor's operation shall be considered as damage to Authority property, as defined in Subsection 105.10. *At the Contractor's option, the existing delineators may be removed and re-installed at the Contractor's expense.* Delineators damaged due to the Contractor's removal operations shall be replaced with new delineators in accordance with Section 820, at no additional cost to the Authority."

Revise the Designation of Pay Item Number 420 to read :
"AGGREGATE SHOULDER WITH FILTER FABRIC".

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 500 – DESCRIPTION OF STRUCTURES

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

500.1 - PAY ITEMS FOR PART V

Add the following pay item numbers, designations and units of measure in this subsection:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"519A	JACKING BRIDGE GIRDERS	EACH
519B	JACKING AND CRIBBING BRIDGE GIRDERS	EACH
520A	BRIDGE BEARING REMOVAL	EACH
520B	RESET BRIDGE BEARING	EACH
520C	REINSTALL BRIDGE BEARING	EACH
530CF	FORMED CONCRETE REPAIR	CU. FT."

Delete the following pay item numbers, designations and units of measure in this subsection:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"519	BRIDGE EXPANSION BEARING REMOVAL	EACH
520	RESET BRIDGE EXPANSION BEARINGS	EACH
525B1	BRIDGE EXPANSION JOINT CLOSURE NEOPRENE SEAL AND ANCHOR BLOCKS 2"	L.F.
525B2	BRIDGE EXPANSION JOINT CLOSURE NEOPRENE SEAL AND ANCHOR BLOCKS 2 ½"	L.F.
525B3	BRIDGE EXPANSION JOINT CLOSURE NEOPRENE SEAL AND ANCHOR BLOCKS 4"	L.F.
525E1	BRIDGE EXPANSION JOINT CLOSURE MODIF. NEOPRENE SEAL AND ANCHOR BLOCKS 2"	L.F.
525E2	BRIDGE EXPANSION JOINT CLOSURE MODIF. NEOPRENE SEAL AND ANCHOR BLOCKS 2 ½"	L.F.
525E3	BRIDGE EXPANSION JOINT CLOSURE MODIF. NEOPRENE SEAL AND ANCHOR BLOCKS 4"	L.F.

Revise the designations of the following pay item numbers. There is no revision to the respective unit of measure.

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>
"525C1	BRIDGE EXPANSION JOINT CLOSURE NEOPRENE STRIP SEAL 2"
525C2	BRIDGE EXPANSION JOINT CLOSURE NEOPRENE STRIP SEAL 2½"
525C3	BRIDGE EXPANSION JOINT CLOSURE NEOPRENE STRIP SEAL 4"
525F1	BRIDGE EXPANSION JOINT CLOSURE MODIFIED NEOPRENE STRIP SEAL 2"
525F2	BRIDGE EXPANSION JOINT CLOSURE MODIFIED NEOPRENE STRIP SEAL 2½"
525F3	BRIDGE EXPANSION JOINT CLOSURE MODIFIED NEOPRENE STRIP SEAL 4"

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 504 – REINFORCING STEEL

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

504.8 – PAYMENT

Replace the third paragraph of this subsection with the following:

“Where required per Subsection 504.6, payment for MECHANICAL BAR SPLICER will be made in accordance with Subsection 543.4.”

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 514 – PLACING CONCRETE FOR BRIDGE DECK OVERLAY

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

514.2.1 - Finishing Machine

(a) **General**

Revise the first line of the first paragraph of this subsection to read:

".....Concrete, or less than ~~6%~~ **5 percent** for Class L-S Concrete".

514.3.3 - Blast-Cleaning

Replace the last sentence of the first paragraph of this subsection with the following:

"Uncoated reinforcing steel shall be blast-cleaned and be free of dirt, detrimental scale, paint, oil, or other foreign substances which may reduce bond with the concrete.

514.5 – MEASUREMENT

Add the following paragraph to this subsection.

“BRIDGE DECK GROOVING will be measured for payment in accordance with Subsection 501.16.”

514.6 – PAYMENT

Add the following paragraph to this subsection.

“Payment for BRIDGE DECK GROOVING, measured as specified, will be made in accordance with Subsection 501.17.”

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 519 – BRIDGE EXPANSION BEARING REMOVAL

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Replace Section 519 in its entirety with the following:

"SECTION 519 - JACKING / CRIBBING BRIDGE GIRDERS

519.1 - DESCRIPTION

This work shall consist of furnishing all labor, equipment and materials necessary to support bridge girder(s) required for substructure rehabilitation, at locations as shown on the Plans and/or as directed by the Engineer. Work directed by the Engineer shall be considered Extra Work as described in Section 101. It shall be understood the word "girder" used in this Section applies to concrete or steel beams and/or girders.

This work can either be the hydraulic jacking and temporary supporting of the girder(s) for bearing removal and replacement or resetting or reinstallation, which can be performed in one day., or it can also include the cribbing or blocking of the supports when the rehabilitation operation is expected to last longer than 24 hours.

519.2 - GENERAL REQUIREMENTS

519.2.1 - Working Drawings

The Contractor shall submit detailed working drawings and computations to the Engineer in accordance with Subsection 105.2.2, which shall depict in full a detailed method of jacking, shoring, and bracing the existing girder(s). The working drawings shall include methods for cribbing if the jacking operations are generally expected to last longer than 24 hours. The Contractor's working drawings will be reviewed by the Engineer before the work is started, but in no case shall the Contractor be relieved of any responsibilities for the consequences of using the working drawings.

Jacking and cribbing under or against the existing steel diaphragms, if applicable, will not be allowed.

519.2.2 - Construction Methods

Jacking shall be performed only when authorized by, and under the observation of, the Engineer. Appropriate measures shall be taken prior to jacking to prevent localized overstressing of the girder webs at the jacking points. Such measures may include the placement of additional stiffeners, load distribution steel bearing plates, blocking between girder flanges, or combinations of such measures. The cost of furnishing and installing such measures as may be necessary to prevent structural damage during jacking, even if not shown on the working drawings, will not be measured separately for payment, but shall be considered as included in the Contract unit price for the respective pay item in this Section.

When this work is to be performed with the existing bridge deck in place, girders shall not be raised by more than 1/8 inch at the point of support when jacking one girder at a time. Simultaneous jacking of multiple girders at one support may be performed, provided the maximum lift is ¼ inch and the maximum differential displacement between girders is 1/8 inch. Suitable gauges for the measurement of superstructure movement shall be furnished and installed by the Contractor.

When the existing bridge deck is in place, traffic shall be removed from the portion of the structure to be jacked prior to and during the entire jacking operation. Whenever possible, traffic (including construction) shall be kept off the portion of the structure during the entire operation. If traffic cannot be kept off that portion of the structure during this operation, then the shoring and cribbing supporting the girder shall be designed to also support the full live load, including impact.

When this work is to be performed with the existing bridge deck removed, jacking shall not commence until after the section of bridge deck over the girders has been removed. Jacking shall be limited to ¼ inch maximum when jacking one girder at a time. Simultaneous jacking of multiple girders at one support may be performed provided the maximum lift is ¾ inch and the maximum differential displacement between girders is ¼ inch. When staged construction is utilized, simultaneous jacking of adjacent girders shall be limited to ¼ inch, unless the diaphragms at the stage line are disconnected, in which case the maximum allowable lift is ¾ inch. Suitable gauges for the measurement of superstructure movement shall be furnished and installed by the Contractor.

Work under this item shall be completed prior to painting structural steel, modifying expansion joint closures, or beginning any work for bridge deck widening or construction, parapet modification, deck repair and/or resurfacing.

519.3– MEASUREMENT

JACKING BRIDGE GIRDERS and JACKING AND CRIBBING BRIDGE GIRDERS will be measured for payment per each girder.

Each girder will be measured only one time for payment. Measurement will not be made for the jacking and cribbing of any girders required as a result of being adjacent to specified girders to be jacked or jacked and cribbed.

519.4 - PAYMENT

Payment for JACKING BRIDGE GIRDERS, measured as specified, will be at the Contract unit price per each, which payment shall constitute full compensation for the preparation of working drawings; jacking the existing superstructure; furnishing jacks; and for materials and furnishing all tools, labor, materials and incidentals necessary to complete the work as specified.

Payment for JACKING AND CRIBBING BRIDGE GIRDERS, measured as specified, will be at the Contract unit price per each, which payment shall constitute full compensation for the preparation of working drawings; stiffeners; bearing plates; shims; blocking; erecting supports; jacking the existing superstructure; furnishing jacks; furnishing and installing all required bracing, blocking, cribbing or temporary structural steel; and for furnishing all tools, labor, materials and incidentals necessary to complete the work as specified.

Payment for any required restoration of drainage ditches, pavement or sloped wall disturbed by the cribbing footings will also be included in the unit price for JACKING AND CRIBBING BRIDGE GIRDERS, and no additional compensation will be provided.

Payment for Extra Work described in Subsection 519.1 will be paid in accordance with Subsection 109.4.

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
519A	JACKING BRIDGE GIRDERS	EACH
519B	JACKING AND CRIBBING BRIDGE GIRDERS	EACH"

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 520 – RESET BRIDGE EXPANSION BEARINGS

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Replace Section 520 in its entirety with the following:

"SECTION 520 - BRIDGE BEARING MODIFICATIONS

520.1 - DESCRIPTION

This work shall consist of the removal of bridge bearings, and either the disposal of them, or the resetting or reinstallation of the bearings to positions consistent with the ambient temperature prevailing at the time the bearings are placed under load in their new positions. This work shall also include preparing the existing bearing pedestal or seat prior to placing the bearing. Reinstallation shall also include the removal of weldments or bolts, rewelding or rebolting in the final position of the bearings, and providing the necessary holes in bottom flanges. This work shall be performed at locations as shown on the Plans and/or as directed by the Engineer.

It shall be understood the word "girder" used in this Section applies to concrete or steel beams and/or girders.

Jacking the girders, and any required bracing or cribbing, shall be performed prior to this work in accordance with the requirements of Section 519.

520.2 - GENERAL REQUIREMENTS

520.2.1 - Bearing Removal

Portions of the existing bearings may be removed by flame-cutting the existing plates. Anchor bolts shall be flame-cut flush with the surface of the pedestal or bearing seat and ground smooth.

For bearings where weldments attach the top plate of the bearing assembly to the bottom flange of the beam or girder, removal of the weld between the plate and the flange shall be accomplished by the Air-Carbon Arc Gouging process. Procedures for the method of weld removal shall be in accordance with publication ANSI/AWS C3.5 "Recommended Practices for Air-Carbon Arc Gouging and Cutting", published by the American Welding Society, Inc. All weld removal and welding shall be accomplished by a qualified welder and shall meet the approval of the Engineer.

The Contractor shall dispose of bearings that will not be reset.

520.2.2 - Reset Bearing

Existing bearing assemblies that are to be reset, or reinstalled and reset, shall be removed and repositioned so that the angle or distance of movement from the neutral position coincides with the calculated thermal movement of the bridge superstructure for the ambient temperature prevailing at the

time. The Engineer will determine the correct position for each bearing, and the Contractor shall reposition the bearing in accordance with the Engineer's directions.

Welding of the top plate to the bottom plate after repositioning shall be accomplished by a qualified welder in accordance with Subsection 503.4.11, or bolted in accordance with the details shown in the Plans, if provided.

520.2.3 - Bearing Surface Preparation

All existing structural steel surfaces and concrete bearing surfaces shall be blastcleaned. The blastcleaned surfaces shall be blown clean to remove all debris and to provide clean contact surfaces.

Concrete bearing pedestals or seats found by the Engineer to be unsound shall be restored in accordance with Section 522.

Concrete bearing pedestals or seats damaged by the Contractor's operations shall be restored in accordance with the applicable portions of Section 522. The Contractor shall incur all costs associated with this work at those locations where unsound concrete was not detected by the Engineer.

520.3 – MEASUREMENT

BRIDGE BEARING REMOVAL will be measured for payment per each for any bearings removed for replacement.

RESET BRIDGE BEARING will be measured for payment per each for any bearings that are not to be removed, but are to be reset.

REINSTALL BRIDGE BEARING will be measured for payment per each for any bearings that are to be removed, reinstalled and reset.

520.4 - PAYMENT

Payment for BRIDGE BEARING REMOVAL, measured as specified, will be made at the Contract unit price per each, which payment shall constitute full compensation for the removal and disposal of bearings which are to be replaced; preparation of the bearing pedestal or seat; and for all labor, equipment, tools and incidentals necessary to complete the work as specified.

Payment for RESET BRIDGE BEARING, measured as specified, will be made at the Contract unit price per each, which payment shall constitute full compensation for preparation of the bearing pedestal or seat; resetting and repositioning the bearing; and for all labor, equipment, tools and incidentals necessary to complete the work as specified.

Payment for REINSTALL BRIDGE BEARING, measured as specified, will be made at the Contract unit price per each, which payment shall constitute full compensation for removal, weld removal and welding; bolts and bolting; preparation of the bearing pedestal or seat; reinstalling and repositioning; and for all labor, equipment, tools and incidentals necessary to complete the work as specified.

RESTORATION AND ADJUSTMENT OF BEARING PEDESTALS will be paid for in accordance with Subsection 522.5, for unsound bearing pedestal surfaces. When this item is not included in the Contract, this work will be accomplished as Extra Work with payment to be in accordance with the provisions of Subsection 109.4.

Supporting the bridge beams or girders to perform this work will be paid for under Section 519.

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
520A	BRIDGE BEARING REMOVAL	EACH
520B	RESET BRIDGE BEARING	EACH
520C	REINSTALL BRIDGE BEARING	EACH"

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 522 – RESTORATION AND ADJUSTMENT OF BRIDGE BEARING PEDESTALS
Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

522.3.1 - Restoration of Pedestals

Revise the eighth paragraph of this subsection to read:

"Should it be found necessary, in the sole judgement of the Authority, to remove and reset any bridge bearing in order to adequately restore the pedestal, this work shall be accomplished as RESET BRIDGE BEARING or REINSTALL BRIDGE BEARING as applicable. If neither item is not included in the Contract, this work will be accomplished as Extra Work with payment to be in accordance with the provisions of Subsection 109.4."

522.5 - PAYMENT

Add the following to the end of this subsection:

"Supporting the bridge girders to perform this work will be paid for under Section 519."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 525 – BRIDGE EXPANSION JOINT CLOSURES

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

525.2 - MATERIALS

Add the following to the specific references in this subsection:

"Reinforcing Steel.....	1112.20.1
Epoxy Coating of Reinforcing Steel.....	1112.20.5
Mechanical Bar Splicers.....	543."

Delete Subsection 525.2.2 in its entirety and replace with the following:

"525.2.2 - Not Used."

525.6.1 - General

Revise the first paragraph of this subsection to read:

"Expansion joint closure devices for new structures and expansion joint closure modifications for existing structures shall be installed as specified on the Plans to permit the freedom of movement."

Replace the fourth paragraph of this subsection with the following:

"Reinforcing steel bars that have been cut or have lost 1/4 or more of their original cross sectional area shall be supplemented by new in-kind bars. Splice lengths between new and existing bars shall be per Subsection 510.3. When, in the Engineer's opinion, the minimum bar splice length(s) cannot be obtained, the Contractor shall furnish and install a MECHANICAL BAR SPLICER, to connect the new and existing reinforcing bars. Epoxy coated reinforcing bars shall be spliced only with REINFORCING STEEL, EPOXY COATED. Uncoated reinforcing bars may be spliced with either REINFORCING STEEL or REINFORCING STEEL, EPOXY COATED."

525.6.2 - Installation of Preformed Joint Seals

Revise the first line of the second paragraph of this subsection to read:

"Structural steel plates shall be furnished in segments of 20 feet ~~minimum~~ **maximum**."

Delete Subsection 525.6.3 in its entirety and replace with the following:

"525.6.3 - Not Used."

525.6.4 - Installation of Neoprene Strip Seal

Revise the first sentence of this subsection to read:

"Extruded neoprene strip seal with extruded steel retainers shall be installed when specified on the Plans."

525.6.5 - Joint Junctions

Revise this subsection to read:

"Where longitudinal joints junction with transverse joint seals, a positive seal shall be provided. When the bridge deck is to receive a rigid concrete overlay, the installation of the joint shall be completed prior to the placement of the concrete overlay."

525.6.6.2 - Warranty

Revise the first sentence of the second paragraph of this subsection to read:

"For bridge expansion joints installed in an existing bridge deck(s), the Contractor shall provide the Authority, notwithstanding the requirements of Subsection 109.9, a 2-year guarantee bond for the expansion joint system as specified herein."

Insert the following between the second and third paragraphs of this subsection:

"In the event only a portion of an existing bridge deck is to be replaced, along with the entire bridge expansion joint, the requirements for a 2-year guarantee bond shall apply to the entire structure(s)."

525.6.6.4 - Jenne Joint Seal System - Installation

Replace this subsection with the following:

"After the concrete is cured and the joint opening form has been removed, the preformed neoprene pressurized seal shall be installed. Before installation of the seal, the entire formed joint opening shall be blastcleaned, and the joint opening shall be dry and free of dirt, grease, oil or other foreign material. No installation of the seal shall be performed in wet conditions, nor when rain is expected within one hour of installation.

The pressurized seals shall be of the size and shape shown on the Plans. The seal shall be cut to the correct length of the appropriate joint opening for installation. If seal construction is performed in several stages of construction, field splicing of the seal segments at the stage construction line shall be in accordance with the manufacturer's recommended procedure. After the seal length is determined and required cut-outs are completed, both ends of the seal shall be plugged (air tight) and the air valves installed. All splices or end plugs in the seal shall be tested for air tightness and integrity by careful inspection and water submergence prior to seal installation in the joint opening.

The seals shall be installed with ADE-52 adhesive. The adhesive shall be applied to the inner faces of the joint opening as evenly as possible, without leaving blank spots. In the same manner, the adhesive shall be applied to the outside walls of the seal. As the adhesive is applied to the seal walls (on both sides), the seal shall be gradually inserted into the gap, in order not to leave sections of glued seal outside the joint and susceptible to intrusion of foreign matter. The seals shall be installed at all times with the top of the seal placed below the top of the adjoining concrete slabs, as shown on the Plans."

525.7 - MEASUREMENT

Replace the second paragraph of this subsection with the following:

"The removal and replacement of concrete for the initial 4 inches in depth is included with this item. Removal and replacement of concrete deeper than the initial 4 inches will be measured as FORMED CONCRETE REPAIR, in accordance with Subsection 530.5, in cubic feet.

When required per Subsection 525.6.1, REINFORCING STEEL and/or REINFORCING STEEL, EPOXY COATED will be measured for payment in accordance with Subsection 504.7. When required, MECHANICAL BAR SPLICER will be measured for payment in accordance with Subsection 543.4."

525.8 - PAYMENT

Delete the last sentence of the second paragraph and the last two sentences of the third paragraph of this subsection. Insert the following paragraph at the end of this subsection:

"Payment for FORMED CONCRETE REPAIR will be made in accordance with Subsection 530.6. Payment for REINFORCING STEEL and/or REINFORCING STEEL, EPOXY COATED will be made in accordance with Subsection 504.8. Payment for MECHANICAL BAR SPLICER will be made in accordance with Subsection 543.4. Should these pay items be required but not included in the Contract, the applicable work will be paid for in accordance with Subsection 109.4 of the Standard Specifications."

Delete the following pay item numbers, designations and units of measure at the end of this section:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"525B1	BRIDGE EXPANSION JOINT CLOSURE NEOPRENE SEAL AND ANCHOR BLOCKS 2"	L.F.
525B2	BRIDGE EXPANSION JOINT CLOSURE NEOPRENE SEAL AND ANCHOR BLOCKS 2-1/2"	L.F.
525B3	BRIDGE EXPANSION JOINT CLOSURE NEOPRENE SEAL AND ANCHOR BLOCKS 4"	L.F.
525E1	BRIDGE EXPANSION JOINT CLOSURE MODIF. NEOPRENE SEAL AND ANCHOR BLOCKS 2"	L.F.
525E2	BRIDGE EXPANSION JOINT CLOSURE MODIF. NEOPRENE SEAL AND ANCHOR BLOCKS 2-1/2"	L.F.
525E3	BRIDGE EXPANSION JOINT CLOSURE MODIF. NEOPRENE SEAL AND ANCHOR BLOCKS 4"	L.F."

Revise the designation of the following pay items to read as follows. There is no revision to the respective unit of measure.

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>
525C1	BRIDGE EXPANSION JOINT CLOSURE NEOPRENE STRIP SEAL 2"
525C2	BRIDGE EXPANSION JOINT CLOSURE NEOPRENE STRIP SEAL 2½"
525C3	BRIDGE EXPANSION JOINT CLOSURE NEOPRENE STRIP SEAL 4"
525F1	BRIDGE EXPANSION JOINT CLOSURE MODIFIED NEOPRENE STRIP SEAL 2"
525F2	BRIDGE EXPANSION JOINT CLOSURE MODIFIED NEOPRENE STRIP SEAL 2½"
525F3	BRIDGE EXPANSION JOINT CLOSURE MODIFIED NEOPRENE STRIP SEAL 4"

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 526 – BRIDGE APPROACH SLAB

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Replace Subsection 526.3 with the following:

"526.3 - SURFACE TOLERANCE

The finished surface of the approach slab shall be tested using a straightedge as specified in Subsection 1203.18.10. The Contractor shall remove all objects and debris from the pavement prior to the required straightedge measurements. The approach slab surface shall be tested in the wheel paths with the 16-foot straightedge set to ¼ inch.

Surface variations, which exceed the above tolerance, will be marked by the Engineer and shall be removed by the Contractor with an approved grinding device consisting of multiple saws. Bushhammers or other impact devices shall not be permitted."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 528 – BRIDGE PARAPET MODIFICATION

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

528.3 - CURING

Revise the first sentence of the second paragraph of this subsection to read:

"When the formed method of construction is used, the forms shall be removed not less than 12 hours nor more than 72 hours after placement of concrete."

528.6 - MEASUREMENT

Replace the last paragraph of this subsection with the following:

"REINFORCING STEEL will be measured for payment in accordance with Subsection 504.7.

Removal and disposal of concrete required for this work will be measured as CONCRETE REMOVAL in accordance with Subsection 507.5."

528.7 - PAYMENT

Add the following to the end of this subsection:

"Payment for REINFORCING STEEL required for this work will be in accordance with Subsection 504.8.

Payment for CONCRETE REMOVAL required for this work will be in accordance with Subsection 507.6."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 529 – CRASHWALL MODIFICATION

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

529.1 - DESCRIPTION

Delete the second paragraph of this subsection.

529.4 - CONSTRUCTION METHODS

Revise this subsection to read:

"The applicable portions of Sections 206, 501, 504 and 507 shall apply except as modified herein."

529.5 - CURING

Revise the first paragraph of this subsection to read:

"The finished crashwall shall be cured by the application of the linseed oil emulsion specified in Subsection 528.5."

Revise the first sentence of the second paragraph of this subsection to read as follows:

"The forms shall be removed not less than 12 hours nor more than 72 hours after placement of concrete."

529.6 - MEASUREMENT

Replace the last paragraph of this subsection with the following:

"REINFORCING STEEL will be measured for payment in accordance with Subsection 504.7.

Removal and disposal of concrete required for this work will be measured as CONCRETE REMOVAL in accordance with Subsection 507.5."

529.7 - PAYMENT

Add the following to the end of this Subsection:

"Payment for CONCRETE REMOVAL required for this work will be in accordance with Subsection 507.6."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 530 – FORMED CONCRETE REPAIR

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

530.4 - CONSTRUCTION METHODS

Revise the first line of the last paragraph of this subsection to read:
".....¼ or more of their original **cross-sectional** area from corrosion.....".

530.5 - MEASUREMENT

Replace the this subsection with the following:

"For repair areas in substructures, FORMED CONCRETE REPAIR for either depth limit will be measured for payment in square feet.

For concrete removal and replacement associated with BRIDGE EXPANSION JOINTS, REPLACEMENT AND RECONSTRUCTION per Subsection 525.7, and for other uses specified in the Special Provisions, FORMED CONCRETE REPAIR will be measured for payment in cubic feet."

530.6 - PAYMENT

Replace this subsection with the following:

"Payment for FORMED CONCRETE REPAIR, measured as specified, will be made at the Contract unit price per either square foot or cubic foot, which payment shall constitute full compensation for the removal and disposal of unsound concrete; surface preparation; application of an epoxy resin adhesive or polyvinyl acetate homopolymer bonding agent; the furnishing, placement and finishing of Class J Concrete; curing; and for all labor, equipment, tools and incidentals necessary to complete the work as specified."

Add the following pay item number, designation and unit of measure at the end of this section:

"530CF FORMED CONCRETE REPAIR CU. FT."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 542 – DRILLED CAISSON SHAFTS

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

542.3 - CONSTRUCTION METHODS

Replace the fourth sentence of the third paragraph of this subsection with the following:

"If rock, boulders, logs, concrete or masonry foundations are encountered during this operation, work shall continue through such obstructions by any available and approved means. Should the equipment being used for this operation be unable to remove the obstruction, the Contractor shall notify the Engineer and upon concurrence of the Engineer, provide special equipment (e.g., special augers, tooling, core barrels or rock augers) necessary to remove the obstruction. The use of special equipment will be considered to be Contract Specified Extra Work as defined in Subsection 1501.1."

542.5 - MEASUREMENT

Insert the following at the beginning of this subsection:

"DRILLED CAISSON SHAFTS will be measured for payment in cubic feet."

Add the following paragraph to the end of this subsection:

"REINFORCING STEEL or REINFORCING STEEL, EPOXY COATED will be measured for payment in accordance with Subsection 504.7."

542.5 - PAYMENT

Add the following paragraphs to the end of this subsection:

"Payment for REINFORCING STEEL or REINFORCING STEEL, EPOXY COATED used in this item of work will be in accordance with Subsection 504.8.

Payment for special equipment required for the removal of the obstructions described in Subsection 542.3 will be in accordance with Subsection 109.4 under Item 1501."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 600 – DESCRIPTION OF DRAINAGE AND EROSION CONTROL

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

600.1 - PAY ITEMS FOR PART VI

Add the following pay item numbers, designations and units of measure in this subsection:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"620B1	OVERSEEDING, CLASS B1	ACRE
620B2	OVERSEEDING, CLASS B2	ACRE
620C1	SELECTIVE MOWING STAKES	EACH
620D1	SEEDING, CLASS D1	ACRE
628M2	FILTER FABRIC INLET PROTECTION	EACH
628Q2	TEMPORARY DITCH CHECK, ROLLED EXCELSIOR LOG	EACH
628R	SEDIMENT BASIN DEWATERING DEVICE	L.F.
628S	TEMPORARY PIPE	L.F."

Delete the following pay item numbers, designations and units of measure in this subsection:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"620A7	OVERSEEDING, CLASS VII	ACRE
620A8	OVERSEEDING, CLASS VIII	ACRE
620A9	SELECTIVE MOWING STAKES	EACH"

Revise the designations of the following pay item numbers. There is no revision to the respective unit of measure.

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>
"620A1	SEEDING, CLASS A1
620A2	SEEDING, CLASS A2
620A3	SEEDING, CLASS A3
620A4	SEEDING, CLASS A4
620A5	SEEDING, CLASS A5
620A6	SEEDING, CLASS A6
622B	STRAW / WOOD FIBER MULCH
628F	FLOTATION BOOM"

Revise the pay item number for RECTANGULAR INLET PROTECTION from "628M" to "628M1".

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 606 – PIPE INSTALLED BY JACKING

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

606.3.3 - Jacking Operations

Replace the last paragraph of this subsection with the following:

"If rock, boulders, logs, concrete or masonry foundations are encountered during this operation, work shall continue through such obstructions by any available and approved means. Should the equipment being used for this operation be unable to remove the obstruction, the Contractor shall notify the Engineer and upon concurrence of the Engineer, provide special equipment (e.g., special augers, tooling, core barrels or rock augers) necessary to remove the obstruction. The use of special equipment will be considered to be Contract Specified Extra Work as defined in Subsection 1501.1."

606.6 - PAYMENT

Replace the last paragraph of this subsection with the following:

"Payment for special equipment required for the removal of obstructions as described in Subsection 606.3.3 will be in accordance with Subsection 109.4 under Item 1501."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 608 – INSERTION LINING FOR PIPE CULVERTS

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

608.1 - DESCRIPTION

Revise this subsection to read:

"This work shall consist of insertion lining of existing pipe culverts with liner pipes and the grouting of the annular space between the existing culvert and the liner. The location and diameter of the culverts to be lined shall be as shown on the Plans and/or as directed by the Engineer."

608.2 - MATERIALS

Revise the following material requirement to read:

"(b) **Polyethylene (PE) Profile Wall Pipe Liner.** Polyethylene (PE) Profile Wall Pipe Liner shall conform to the requirements for ASTM F 667 for sizes 10 inches to 15 inches, and to ASTM F 894 for sizes 18 inches to 96 inches. All sizes shall have wall construction that presents essentially smooth internal and external surfaces. The pipe liner shall have a minimum pipe stiffness of 46 psi at 5 percent deflection, for nominal inside diameters of 42 inches or less. For pipes with a nominal inside diameter greater than 42 inches, the pipe liner shall have a minimum pipe stiffness of 32.5 psi at five percent deflection."

Insert the following in front of the table at the end of this subsection:

"(f) **Controlled Low-Strength Material (CLSM).** Material requirements for CLSM shall be in accordance with the Special Provision included in the Contract."

Add the following data in the table at the end of this subsection:

Nominal Size in.	Profile Wall-F894	
	I.D.	O.D.
48	48	53.76
54	54	60.48
55		
60	60	67.20
63		
66	66	73.92
72	72	80.64
78	78	87.36
84	84	94.08
90	90	100.80
96	96	107.52

608.3 - GENERAL REQUIREMENTS

Revise the fourth paragraph of this subsection to read:

"After the liner has been completely inserted and has been inspected in place by the Engineer, it shall be cut off flush with the ends of the existing culvert or as otherwise directed by the Engineer. Liner pipe shall be allowed to cool to the temperature of the existing culvert before it is cut off. The entire length of the annular space between the existing culvert and the liner pipe shall be filled with CLSM."

Delete the fifth (last) paragraph of this subsection and replace with the following:

"Prior to filling the annular space, the upstream and downstream ends of the annular space between the existing culvert and the liner pipe shall have a cement mortar mixture grout stop. The mixture shall be one part cement and two parts sand. The grout stop shall be no closer than 6 inches from the end. Holes shall be required at the grout stop to allow air to escape when pumping CLSM, and to allow verification that the annular space has been filled with CLSM."

When the CLSM is pumped into the annular space between the existing culvert and the liner pipe, the Contractor shall prevent the floating of the liner pipe. This shall be accomplished by any of the following methods.

- (a) Intermittent Pumping Method. Small amounts of CLSM shall be pumped into the annular space and allowed to harden. This shall continue until the bond between the liner pipe and CLSM is sufficient to resist floating. The remainder of the annular space shall then be filled.
- (b) Bracing Method. Braces shall be installed in the annular space to prevent floating of the liner pipe. Only braces which do not damage the liner pipe shall be used.
- (c) Water Fill Method. The liner pipe shall be temporarily filled with water before filling the annular space with CLSM.
- (d) Other Methods. Other methods may be used with the approval of the Engineer.

The pumping operation shall effectively fill the annular space along the entire length, but shall be performed in a manner that shall not distort the liner pipe. The pressure developed in the annular space shall not exceed the liner pipe manufacturer's recommended value.

Upon completion of the pumping operation, the remaining 6 inches at the upstream and downstream ends shall be filled with a nonshrink grout. Only enough water to make a stiff but workable nonshrink grout shall be used."

608.4 - MEASUREMENT

Replace this subsection with the following:

"INSERTION LINING FOR PIPE CULVERTS will be measured for payment in linear feet of the designation size(s).

CLSM will be measured for payment and the volume computed in cubic yards, calculated by:
(area of the culvert, based on the inside diameter) - (area of the liner pipe, based on the outside diameter)
x (length of the liner pipe between the grout stops)."

608.5 - PAYMENT

Replace this subsection with the following:

"Payment for INSERTION LINING FOR PIPE CULVERTS, measured as specified, will be made at the Contract unit price per lineal foot of the size(s) specified, which payment shall constitute full compensation for removing and replacing headwall grates and/or pipe runners, clearing of debris or other materials, furnishing and installing the liner pipe, and for all labor, equipment, tools and incidentals necessary to complete the work as specified.

Payment for filling the annular space between the existing culvert(s) and liner pipe(s) shall be in accordance with the Special Provision for CLSM."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 610 – STRUCTURES FOR PIPE DRAINAGE SYSTEMS

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Insert the following new requirement to this section:

"610.5.8 - Steps

For all new manholes and catch basins less than ten feet in depth, steps shall be inserted into the sidewall of the structure. Additional step(s) shall also be furnished and installed, as required, to any Reconstructed or Adjusted drainage structure which has steps.

Except as required in this subsection, steps shall conform to the requirements specified in AASHTO M 199.16 and applicable OSHA requirements.

Steps shall comply to the dimensions provided in the Standard Drawings, or as approved by the Engineer. Steps shall be monolithic gray iron conforming to the material requirements of Subsection 1112.11. Steps shall be embedded into the wall a minimum of 3 inches, but shall not protrude outside of the structure. Steps shall have a minimum clear distance of four inches from the rung to attached wall, and shall provide a minimum eighteen inches clear distance from the rung to the opposite wall.

Steps shall be located in the vertical portion of the structure wall (directly opposing the offset conical top), and shall be aligned in one continuous vertical row. For new structures, the top step shall be one foot below the bottom of the casting, with subsequent steps spaced not to exceed sixteen inches on center. Steps shall be inserted as recommended by the step manufacturer. For new drainage structures as well as risers used in Reconstructed structures, holes may be formed with the use of inserts placed in the appropriate locations prior to concrete fabrication. Where a step(s) is required in an existing drainage structure, holes shall be drilled into the existing structure with the hole diameter and depth per the recommendation of the step manufacturer.

Steps will not be measured and paid for separately, but will be included in the Contract unit price for the applicable Structure for Pipe Drainage Systems."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 619 – AGGREGATE DITCH LINING

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

619.2 - MATERIALS

Replace the contents of this subsection with the following:

"All materials shall conform to the applicable portions of Materials, Part XI. Specific references are as follows:

Aggregate	1107.6
Filter fabric.....	1114.3"

Illinois State Toll Highway Authority

**SUPPLEMENTAL SPECIFICATION
FOR
SECTION 620 – SEEDING**

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

620.4 - FERTILIZER AND AGRICULTURAL GROUND LIMESTONE

Insert the following between the first and last sentences of this subsection:

"No fertilizer is required for Seeding Class A4, A5, B1, B2 or D1."

620.5 – SEED BED PREPARATION

Replace the first paragraph of this subsection with the following:

“Seed bed preparation shall not be started until all stones, boulders, debris and similar material larger than 3 inches across have been removed. The area to be seeded shall be scarified and worked to a minimum depth of three inches with a disc or other equipment approved by the Engineer, reducing all soil particles to a size not larger than 2 inches in the largest dimension. If a toothed device is used for scarifying, the teeth shall be spaced not more than nine inches apart. If additional topsoil is required, refer to the requirements of Section 216 or 217, as applicable.

The prepared surface shall be relatively free from all weeds, clods, stones, roots, sticks, rivulets, gullies, crusting and caking. In the process of finishing, a tamping roller or track-laying machine acceptable to the Engineer shall be operated over the entire area to be seeded, to eliminate sub-surface voids resulting from scarification. No seeds shall be sown until the seed bed has been approved by the Engineer.”

620.6 - SEEDING METHODS

Revise the last sentence of this subsection to read:

"The accepted method for seeding Class B1, Class B2 and Class D1 seed, unless otherwise directed by the Engineer, shall be accomplished by overseeding the existing turf with a rangeland type grass drill with a "no-till" attachment, meeting the approval of the Engineer."

620.7 - SEEDING TIME

Add the following to the penultimate paragraph of this subsection:

"The seeding time for Class D1 shall be from May 15 through June 30, and from October 15 through December 1."

620.9 - SEED MIXTURES

Add the following to the end of Table 6-1:

<u>CLASS</u>	<u>TYPE</u>	<u>SEEDING MIXTURES SEEDS</u>	<u>LBS/ACRE</u>	<u>SEASON</u>
"D1	Wetland Mixture	Annual Ryegrass	40	Spring/Fall
		Wetland Grasses (Below)**	6	
	<u>Species</u>		<u>% By Weight**</u>	
	Blue Joint Grass		12	
	Lake Bank Sedge		6	
	Awl-Fruited Sedge		6	
	Tussock Sedge		6	
	Fox Sedge		6	
	Needle Spike Rush		3	
	Blunt Spike Rush		3	
	Fowl Manna Grass		14	
	Common Rush		6	
	Slender Rush		6	
	Torrey's Rush		6	
	Rice Cut Grass		10	
	Hard-Stemmed Bulrush		3	
	Dark Green Rush		3	
	River Bulrush		3	
	Softstem Bulrush		3	
	Prairie Cordgrass		4"	

Replace the listing of pay item numbers, designations and units of measure at the end of this section with the following:

<u>PAY ITEM MEASURE</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"620A1	SEEDING, CLASS A1	ACRE
620A2	SEEDING, CLASS A2	ACRE
620A3	SEEDING, CLASS A3	ACRE
620A4	SEEDING, CLASS A4	ACRE
620A5	SEEDING, CLASS A5	ACRE
620A6	SEEDING, CLASS A6	ACRE
620B1	OVERSEEDING, CLASS B1	ACRE
620B2	OVERSEEDING, CLASS B2	ACRE
620C1	SELECTIVE MOWING STAKES	EACH
620D1	SEEDING, CLASS D1	ACRE"

Illinois State Toll Highway Authority

**SUPPLEMENTAL SPECIFICATION
FOR
SECTION 622 – MULCHING**

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

622.3 – GENERAL REQUIREMENTS

Revise the first sentence of this subsection to read:

“Within 24 hours from the time the seed bed preparation is completed and accepted, seeding and mulching operations shall commence, using one of the following methods.”

Revise the designation of Pay Item Number 622B to read:
"STRAW / WOOD FIBER MULCH".

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 628 – EROSION AND SEDIMENT CONTROL

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

628.2.1 - GENERAL REQUIREMENTS

Revise the first sentence of this subsection to read:

"This work is to be performed to assure compliance with the Contract plans and specifications; the latest editions of the Illinois Environmental Protection Agency "Illinois Urban Manual" and the National Pollutant Discharge Elimination System (NPDES) permit No. ILR10."

628.2.1.1 – Penalties

Revise paragraph (b) of this subsection to read:

"(b) Failure to Respond:

The Contractor shall be required to respond within twelve (12) hours to any request from the Engineer for re-establishing compliance with these Erosion and Sediment Control Specifications. Failure by the Contractor to respond shall be grounds for a penalty of \$1000.00 for each occurrence, to be deducted from the next pay estimate due the Contractor. 'Respond' is interpreted to mean on the job identifying the extent of repairs to be made. 'Occurrence' is interpreted to mean each consecutive 12-hour period, or fraction thereof."

628.3 - EROSION AND SEDIMENT CONTROL - EXCAVATION

Revise the first paragraph of this subsection to read:

"This work shall consist of the clearing, stripping, excavation and satisfactory disposal of all material, including rock, encountered in the construction of new sediment basins, sediment traps, dewatering basins, temporary swales and temporary channel diversions in accordance with these Specifications and the storage volumes as shown on the Plans or as designated by the Engineer."

628.4 - EROSION AND SEDIMENT CONTROL - CLEANOUT

Revise this subsection to read:

"This work shall consist of excavation required for the removal of accumulated sediment, vegetation and debris from traps, basins, the area adjacent to silt fences, super silt fences, rectangular inlet protection, filter fabric inlet protection, ditch checks and any other clean out excavation of accumulated sediment."

628.4.1 - GENERAL REQUIREMENTS

Add the following to the end of the first paragraph of this subsection:

"Silt fences shall be inspected after every storm event. Silt build up against silt fences shall be removed when bulges develop in the fence or when silt reaches 50 percent of fence height."

Revise the second paragraph to read:

"Removed material shall be disposed of, on-site or off-site, in accordance with Subsection 203.4."

628.5.2 - MAINTENANCE

Delete this subsection in its entirety.

628.6 - TEMPORARY SWALE

Revise the second sentence of this subsection to read:

"The temporary swale shall be stabilized through the use of erosion resistant materials such as temporary ground cover and erosion blanket, type III (TREATMENT TYPE I), CA-3 aggregate ditch lining, 3 inches thick (TREATMENT TYPE II) or class 3 riprap, 8 inches thick (TREATMENT TYPE III)."

Delete Subsections 628.8 through 628.8.3 in their entirety, and insert the following:

"628.8 - FLOTATION BOOM

This work shall consist of the furnishing, installation and removal of flotation booms, used for the purpose of temporarily controlling the erosion and turbidity encountered during construction in a waterway.

The Contractor shall furnish, install and remove all specified flotation booms in accordance with the Contract Plans and documents.

628.8.1 - MATERIALS

All materials shall conform to the requirements of Materials, Part XI. Specific reference is as follows:
Flotation Boom.....1114.9

628.8.2 - GENERAL REQUIREMENTS

The flotation boom shall be installed at the location(s) as shown on the Plans. The boom shall be installed in such a manner as to prevent drift shoreward or downstream. The bottom of the boom shall reach the bottom of the waterway using 1 or 2 vertical sections as required.

Anchors shall be installed per the manufacturer's recommendations on both the shore and stream side to maximize stability. Shore anchors shall consist of a post with deadman or approved equal. Stream anchors shall be of sufficient size, type and strength to stabilize the boom with the number and spacing dependant on current velocities. Anchors shall be buoyed to prevent the boom from being pulled under water.

The Contractor shall be responsible for maintenance of the boom throughout construction operations.

On completion of the project, the Contractor shall remove the boom in a manner that will prevent siltation of the waterway."

628.9 - TEMPORARY STREAM CROSSING

Revise this subsection to read:

"This work shall consist of furnishing, placing and removing geotextile fabric, temporary culvert and riprap for temporary stream crossing, excavating the bottom to the required depth and the disposal of excavated materials at the locations indicated on the Plans and/or as directed by the Engineer. When the stream has baseflow, this work also includes the installation of temporary corrugated metal pipe at the stream invert."

628.9.1 - MATERIALS

Add the following to the end of this subsection:

"Corrugated Steel Pipe.....1112.1.2".

628.9.2 - GENERAL REQUIREMENTS

Revise the second paragraph to read:

"When indicated on the Plans and documents, geotextile fabric and corrugated steel pipe shall be placed in the excavated bottom, beneath the riprap, to the lines and dimensions shown in the Plans or as directed by the Engineer."

628.10.3 - MAINTENANCE

Replace this subsection with "Not Used".

628.14 - TEMPORARY RIPRAP

Revise the first sentence of this subsection to read:

"This work shall consist of placing a geotextile fabric and a protective coating of dumped or hand-laid stone or broken concrete riprap for rock check dams, stone outlet structure sediment traps, dewatering basins, temporary swales, diversion dikes, temporary stream crossings, temporary channel diversions and aggregate berms as shown on the Plans, and the removal of the riprap and geotextile fabric upon the completion of the need for these temporary facilities."

628.16 - DIVERSION DIKE

Revise the second sentence of this subsection to read:

"The diversion dike shall be stabilized through the use of erosion resistant materials such as temporary ground cover and erosion blanket (TREATMENT TYPE I), CA-3 aggregate ditch lining, 3 inches thick (TREATMENT TYPE II) or class 3 riprap, 8 inches thick (TREATMENT TYPE III)."

628.18.2 - GENERAL REQUIREMENTS

Revise this subsection to read:

"The Rectangular Inlet Protection shall be constructed as shown on the Plans. At the Contractor's option, an alternate frame and fabric system may be constructed of super silt fence."

628.18A - GEOTEXTILE FABRIC, CLASS C

Revise this subsection to read:

"This work shall consist of the furnishing, installation and removal of geotextile fabrics used to line temporary channel diversions, and to face the temporary dam at those locations."

Insert the following subsections:

"628.18B - FILTER FABRIC INLET PROTECTION

This work shall consist of the furnishing, installation and removal of filter fabric inlet protection, where shown on the Plans and/or as directed by the Engineer.

628.18B.1 - MATERIALS

All materials shall conform to the requirements of Materials, Part XI. Specific references are as follows:

Inlet Basket and Fabric Insert.....	1114.10
Fabric Insert.....	1114.10
Inlet Dam.....	1114.10

628.18B.2 - GENERAL REQUIREMENTS

The filter fabric inlet protection shall consist of one of the following: inlet basket and fabric insert, fabric insert or inlet dam.

The device shall be equipped with an overflow feature, so drainage to the inlet is not completely blocked if the device is full of silt."

628.19 - STONE OUTLET STRUCTURE SEDIMENT TRAP

Revise the second sentence of this subsection to read:

"Also included shall be all of the work necessary to maintain the device, and to remove all materials when directed by the Engineer."

Insert the following subsections:

"628.19.1 - MATERIALS

All materials shall conform to the requirements of Materials, Part XI. Specific references are as follows:

Geotextile Fabric, Class B.....	1114.7
Riprap, Gradation No. 3.....	1108
Coarse Aggregate, CA-3.....	1107

628.19.2 - GENERAL REQUIREMENTS

The stone outlet structure sediment trap shall be excavated to the width, length and depth shown on the Plans.

Geotextile fabric shall be placed below the riprap. Riprap, gradation No. 3 shall be placed to the lines and grades shown on the Plans and a one-foot layer of CA-3 shall be placed against the upstream face.

On completion of the project, all materials shall become property of the Contractor, and shall be removed from the site.

The Contractor shall maintain the device until all work on the Contract has been completed and approved. Maintenance shall consist of the repair of the device where damaged by any cause.

628.19A - SEDIMENT BASIN

This work shall consist of the furnishing of the equipment, labor and materials required to install a sediment basin with a sediment basin dewatering device or sediment basin aggregate berm as shown on the Plans. Also included shall be all of the work necessary to maintain the device and to remove all materials when directed by the Engineer.

628.19A.1 - MATERIALS

All materials shall conform to the requirements of Materials, Part XI. Specific references are as follows:

Concrete, Class P.....	1101
Coarse Aggregate, CA-3 and CA-6.....	1107
Riprap, Gradation No.3.....	1108
Corrugated Steel Pipe.....	1112.1.2
Geotextile Fabric, Class A and B.....	1114.7
Polyvinylchloride (PVC) Pipe (Schedule 80)	1137.1

628.19A.2 - GENERAL REQUIREMENTS

The sediment basin dewatering device shall be constructed to the width, length and elevations shown on the Plans. The sediment basin may be constructed by either excavating to obtain the required volume, or by providing a compacted clay dam at the basin outlets as site conditions allow.

The sediment basin aggregate berm shall be constructed to the width, length and elevations shown on the Plans. Riprap gradation No. 3 shall be placed a minimum of 10 feet away from the basin outlet. A one-foot layer of CA-3 coarse aggregate shall be placed against the upstream face of the berm.

On completion of the project, all materials shall become property of the Contractor and shall be removed from the site.

The Contractor shall maintain the device until all work on the Contract has been completed and approved. Maintenance shall consist of the repair of the device where damaged by any cause."

628.20.2 - General Requirements

Revise the fifth sentence of this subsection to read:

"Ditch checks shall be a minimum of 14 feet long."

Insert the following subsections:

"628.20A - TEMPORARY DITCH CHECK ROLLED EXCELSIOR LOG

"This work shall consist of the equipment, labor and materials required to install temporary ditch check rolled excelsior log as shown on the Plans and/or as directed by the Engineer. Also included shall be all of the work necessary to maintain and remove all materials when directed by the Engineer. Materials shall remain the property of the Contractor.

628.20A.1 - MATERIALS

All materials shall conform to the requirements of Materials, Part XI. Specific references are as follows:

Rolled Excelsior Log.....1114.11.

628.20A.2 - GENERAL REQUIREMENTS

Unless otherwise shown on the Plans, the rolled excelsior log ditch check shall be 20-inch in diameter. Netting at each end of the log shall be secured with metal clips or knotted ends to assure fiber containment. Standard length of each ditch check shall be 10 feet.

Stakes shall be a minimum of one inch square if wood, or minimum one inch diameter if metal. Stakes shall be 4 feet long, driven at a spacing of 2 feet on-center, 2 feet into the ground. Stakes shall be entwined with the mesh covering the roll on the downstream side, and angled with the direction of flow.

When more than one log is required to span the ditch, logs shall be butted tightly end-to-end, and tied together with nylon fasteners ('zip-strips').

628.20B - TEMPORARY ROCK CHECK DAM

This work shall consist of the furnishing of the equipment, labor and materials required to install rock check dam(s), as shown on the Plans and/or as directed by the Engineer. Also included shall be all of the work necessary to maintain the device and to remove all materials when directed by the Engineer.

628.20B.1 - MATERIALS

All materials shall conform to the requirements of Materials, Part XI. Specific references are as follows:

Geotextile Fabric, Class B.....1114.7
Riprap, Gradation No. 3.....1108
Coarse Aggregate, CA-3..... 1107

628.20B.2 - GENERAL REQUIREMENTS

The rock check dam shall be constructed to the width and height shown on the Plans. Geotextile fabric shall be placed below the riprap. Riprap, gradation No. 3, shall be placed to the width of the ditch with a one-foot layer of CA-3 coarse aggregate placed against the upstream face.

On completion of the project, all materials shall become the property of the Contractor and shall be removed from the site.

The Contractor shall maintain the device until all work on the Contract has been completed and approved. Maintenance shall consist of the repair of the device where damaged by any cause."

628.21 - MEASUREMENT

Delete the word "therefrom" in the third line of the second paragraph of this subsection.

Revise the sixth paragraph of this subsection to read:

"TEMPORARY SWALE will be measured along the centerline in lineal feet of swale constructed regardless of width of swale specified."

Delete the eighth paragraph of this subsection in its entirety.

Revise the first sentence of the ninth paragraph of this subsection to read:

"TEMPORARY STREAM CROSSING will not be measured separately for payment, but will be measured as TEMPORARY RIPRAP by weight in tons, and as TEMPORARY PIPE per lineal foot."

Insert the following between the ninth and tenth paragraphs of this subsection:

"TEMPORARY PIPE will be measured per lineal feet completed."

Revise the fourteenth paragraph of this subsection to read:

"TEMPORARY CHANNEL DIVERSION will not be measured separately for payment, but will be measured as EROSION AND SEDIMENT CONTROL - EXCAVATION per cubic yard, TEMPORARY RIPRAP per ton, and SILT FENCE in lineal feet and GEOTEXTILE FABRIC CLASS C in square yards. Earth plugs and dams will not be measured for payment."

Revise the sixteenth through nineteenth paragraphs of this subsection to read as follows:

"TEMPORARY STABILIZATION WITH STRAW MULCH will be measured by acre. Fertilizer nutrients, seeds, seed bed preparation, seed application, straw mulch application and wood fiber mulch application will not be individually measured for payment, but will be considered as included in the Contract unit price for TEMPORARY STABILIZATION WITH STRAW MULCH.

If shown on the Plans, SAME-DAY STABILIZATION will be included in the other unit price items utilized. If not shown on the Plans, SAME-DAY STABILIZATION will be measured and calculated in square yards of area stabilized.

DIVERSION DIKE will be measured along the centerline in lineal feet of dike constructed, regardless of width of dike specified.

RECTANGULAR INLET PROTECTION will be measured on the basis of each structure protected. If constructed as super silt fence, payment will be made as RECTANGULAR INLET PROTECTION."

Insert the following between the nineteenth and twentieth paragraphs of this subsection:

"FILTER FABRIC INLET PROTECTION will be measured on the basis of each structure so protected."

Insert the following paragraphs to the end of this subsection:

"TEMPORARY DITCH CHECK ROLLED EXCELSIOR LOG will be measured per each 10-foot length.

TEMPORARY ROCK CHECK DAM will not be measured separately for payment, but will be measured as TEMPORARY RIPRAP per ton.

FLOTATION BOOM will be measured for payment in feet measured along the centerline of the boom.

SEDIMENT BASIN will not be measured separately for payment, but will be measured as EROSION AND SEDIMENT CONTROL - EXCAVATION per cubic yard, TEMPORARY RIPRAP by weight in tons and SEDIMENT BASIN DEWATERING DEVICE per lineal foot completed.

SEDIMENT BASIN DEWATERING DEVICE will be measured per lineal foot of drain pipe installed. Clay dam, riser pipe, concrete base for riser pipe and filter cloth over wire mesh will not be individually measured for payment, but will be considered as included in the Contract unit price for SEDIMENT BASIN DEWATERING DEVICE."

628.22 - PAYMENT

Revise the eighth paragraph of this subsection to read:

"Payment for AGGREGATE BASE COURSE used for maintenance top dressing will be made at the Contract unit price per ton, which payment shall constitute full compensation for furnishing, transporting, placing, compacting and final removal of the materials specified."

Delete the ninth paragraph of this subsection in its entirety.

Insert the following between the tenth and eleventh paragraphs of this subsection:

"Payment for TEMPORARY PIPE will be made at the Contract unit price per lineal foot of pipe, of the size and type specified."

Revise the eighteenth paragraph of this subsection to read:

"Payment for RECTANGULAR INLET PROTECTION, complete in place and accepted, will be made at the Contract unit price for each structure protected.

Insert the following between the eighteenth and nineteenth paragraphs of this subsection:

"Payment for FILTER FABRIC INLET PROTECTION, complete in place and accepted, will be made at the Contract unit price for each structure protected."

Insert the following between the penultimate and final paragraphs of this subsection:

"Payment for TEMPORARY DITCH CHECK ROLLED EXCELSIOR LOG will be made at the Contract unit price for each 10-foot section installed as shown on the Plans and removed as directed.

Payment for FLOTATION BOOM will be made at the Contract unit price per lineal foot of boom installed.

Payment for SEDIMENT BASIN DEWATERING DEVICE will be made at the Contract unit price per lineal foot of drain pipe installed, which price includes clay dam, riser pipe, concrete base for riser pipe and filter cloth over wire mesh."

Revise the pay item number or designation of the following at the end of this section. There is no revision to the respective unit of measure:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>
"628F	FLOTATION BOOM
628M1	RECTANGULAR INLET PROTECTION"

Add the following pay item numbers, designations and units of measure at the end of this section:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"628M2	FILTER FABRIC INLET PROTECTION	EACH".
628Q2	TEMPORARY DITCH CHECK, ROLLED EXCELSIOR LOG	EACH
628R	SEDIMENT BASIN DEWATERING DEVICE	L.F.
628S	TEMPORARY PIPE	L.F."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 630 – FERTILIZER NUTRIENTS

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

630.5 – PAYMENT

Add the following paragraph to the end of this subsection:

“Payment will not be made for FERTILIZER NUTRIENTS in excess of 103 percent, or AGRICULTURAL GROUND LIMESTONE in excess of 108 percent, of the specified rate.”

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 700 – DESCRIPTION OF ROADWAY SAFETY

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

700.1 - PAY ITEMS FOR PART V

Add the following pay item numbers, designations and units of measure in this subsection:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"701E1AS	GUARDRAIL BARRIER TERMINAL, TYPE 1A, SPECIAL	EACH
701E2S	GUARDRAIL BARRIER TERMINAL, TYPE 2, SPECIAL	EACH
702A	GALVANIZED STEEL PLATE BEAM REINSTALLATION	L.F.
702B	GUARDRAIL REMOVAL AND REPLACEMENT - RAIL ELEMENTS	L.F.
702C	GUARDRAIL REMOVAL AND REINSTALLATION - RAIL ELEMENTS	L.F.
702D	GUARDRAIL POST	EACH
702E	GUARDRAIL POST REMOVAL AND REPLACEMENT	EACH
702F	GUARDRAIL BLOCK-OUT	
702G	GUARDRAIL BLOCK-OUT REMOVAL AND REPLACEMENT	EACH
702H	ET-2000™ IMPACT HEAD REPLACEMENT	EACH
703A	GUARDRAIL HEIGHT ADJUSTMENT - SINGLE RAIL	L.F.
703B	GUARDRAIL HEIGHT ADJUSTMENT - DOUBLE RAIL	L.F.
703C	VERTICAL HEIGHT ADJUSTMENT (MACHINE METHOD) - SINGLE RAIL	L.F.
703D	VERTICAL HEIGHT ADJUSTMENT (MACHINE METHOD) - DOUBLE RAIL	L.F.
704A	ENERGY ATTENUATOR REMOVAL	EACH
710B	RELOCATE MOVEABLE CONCRETE BARRIER, ISTHA-OWNED	L.F.
714	CONCRETE GLARE SCREEN	L.F."

Delete the following pay item numbers, designations and units of measure in this subsection:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"701D	GALVANIZED STEEL PLATE BEAM GUARDRAIL REINSTALLATION	L.F.
701G	GUARDRAIL BLOCK-OUTS	EACH
701H	GALVANIZED GUARDRAIL HARDWARE UNITS	EACH

702	GUARDRAIL BLOCK-OUT INSTALLATION	EACH
703	GUARDRAIL HEIGHT ADJUSTMENT	L.F."

Revise the designations of the following pay item numbers. There is no revision to the respective unit of measure.

**PAY ITEM
NUMBER**

DESIGNATION

"709A	MOVEABLE CONCRETE BARRIER, CONTRACTOR-FURNISHED
709B	RELOCATE MOVEABLE CONCRETE BARRIER, CONTRACTOR-FURNISHED
710	MOVEABLE CONCRETE BARRIER, ISTHA-OWNED"

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 701 – STEEL PLATE BEAM GUARDRAIL

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

701.1 - DESCRIPTION

Revise this subsection to read:

"This work shall consist of new guardrail installations, including terminal end sections and anchor installations, at locations shown on the Plans and/or as directed by the Engineer. Included with this work are all posts, block-outs, rail and hardware required for a complete installation. Also included is the replacement of barrier terminals and anchor installations and existing guardrail locations. All new installations (including the barrier terminals) shall meet the testing criteria contained in the National Cooperative Highway Research Program (NCHRP) Report 350.

This work shall also consist of the complete removal of existing guardrail installations (including barrier terminals and anchor installations), the segregation of acceptable versus unacceptable material, the transportation of acceptable material not being reused to the appropriate ISTHA Maintenance Facility, and the transportation and disposal of unacceptable material by the Contractor."

701.2 - MATERIALS

Replace the second paragraph of this subsection with the following:

"The terminals shall be as described in the following table.

Item No.	Terminal	NCHRP 350 Test Level	Model No.	Manufacturer
701E1S	Type 1, Special with object marker, 50 feet long, two-foundation tube / 6 CRT post design.	3	ET-2000 PLUS	Trinity Industries, Inc.
			SKT-350	Road Systems, Inc.
701E1AS	Type 1-A, Special with object marker, 25 feet long, two-foundation tube / 2 CRT post design.	2 (45 mph)	ET-2000 PLUS	Trinity Industries, Inc.
			SKT-350	Road Systems, Inc.
702E2S	Type 2, Special	3	CAT-350	Trinity Industries, Inc.

Delete the third paragraph of this subsection.

701.3 - GENERAL REQUIREMENTS

To the eighth paragraph of this subsection:

Revise the first sentence to read as follows:

"Removed posts, rails, steel or wood block-outs, and hardware shall be classified by the Contractor, and checked and approved by the Engineer, into one or more of the following categories:".

Add the following to the third bullet point in this paragraph:

"All steel block-outs, removed posts which will not be reinstalled and all hardware shall be considered Category C material.

Delete the tenth, eleventh and twelfth paragraphs of this subsection.

701.4 - CONTRACTOR'S RESPONSIBILITY FOR UNDERGROUND FACILITIES

Revise the first sentence of the first paragraph of this subsection to read:

"It shall be the Contractor's responsibility to ascertain in advance of any work, by any and all possible means, the presence of underground electrical, telecommunication cables (including fiber optic) or storm sewers in or near the vicinity of the work."

Add the following as the last sentence of this subsection:

"Conflicts with existing storm sewers may be addressed by cutting off the guardrail post(s) and encasing the buried end in concrete, per Subsection 701.5."

701.5 - FABRICATION AND ERECTION

Revise the fourth paragraph of this subsection to read:

"Short posts required because of conflict with pier footings, culverts or storm sewers, or for other reasons shall be cast in concrete encasements, 2'x2'x2'. Concrete for encasement of short posts and for terminal anchor posts shall be Class P. When such conflict is identified on the Plans, such encasement will not be measured separately for payment, and shall be considered as included in the Contract unit prices for the various pay items in this Section. When such conflict is not identified on the Plans, such encasement and modification to the guardrail post(s) shall be measured and paid for as Extra Work in accordance with Subsection 109.4.

Revise the last paragraph of this subsection to read:

"Where shoulder widening is required in conjunction with the installation of guardrail barrier terminals, such work shall be constructed as shown in the Plans."

701.6 - MEASUREMENT

Delete the fourth, seventh, eighth and ninth paragraphs of this subsection.

701.7 - PAYMENT

Delete the fourth, seventh and eighth paragraphs of this subsection.

Add the following pay item numbers, designations and units of measure at the end of this section:

"701E1AS	GUARDRAIL BARRIER TERMINAL, TYPE 1A, SPECIAL	EACH
701E2S	GUARDRAIL BARRIER TERMINAL, TYPE 2, SPECIAL	EACH"

Delete the following pay item numbers, designations and units of measure at the end of this section:

"701D	GALVANIZED STEEL PLATE BEAM GUARDRAIL REINSTALLATION	L.F.
701G	GUARDRAIL BLOCK-OUTS	EACH
701H	GALVANIZED GUARDRAIL HARDWARE UNITS	EACH"

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 702 – GUARDRAIL BLOCK-OUT INSTALLATION

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Replace Section 702 in its entirety with the following.

"SECTION 702 - GUARDRAIL MODIFICATIONS

702.1 - DESCRIPTION

This work shall consist of modifying existing guardrail installations within the Contract Limits at locations as shown on the Plans and as directed by the Engineer. The modifications are intended to either correct deficiencies, replace deteriorated elements or upgrade installations to current Federal and/or ISTHA safety requirements.

702.2 - MATERIALS

Subsection 701.2 shall govern.

702.3 - GENERAL REQUIREMENTS

Subsections 701.3, 701.4 and 701.5 shall govern, as applicable.

At the end of each day's work, the guardrail shall be made continuous without gaps, and all anchor sections and terminal sections properly connected to complete the guardrail run. Locations protected with Moveable Concrete Barrier shall be exempt from this requirement.

GALVANIZED STEEL PLATE BEAM REINSTALLATION shall apply to a complete run of guardrail (except for anchor installation and barrier terminal) and shall consist of furnishing and installing new guardrail posts and block-outs and the reassembly of existing rail (Category A, per Subsection 701.3) using new galvanized hardware.

GUARDRAIL REMOVAL AND REINSTALLATION - RAIL ELEMENTS shall consist of the disassembly and reassembly of only the rail elements of an existing guardrail installation, to facilitate the removal and replacement of guardrail posts and/or block-outs, to install additional guardrail posts or to adjust the height of existing guardrail post(s), at locations shown on the Plans or as directed by the Engineer. The disassembled rail shall be temporarily stored against the posts or along the foreslope during this work. New galvanized hardware shall be provided for the reassembly.

GUARDRAIL REMOVAL AND REPLACEMENT - RAIL ELEMENTS shall consist of the removal and disposal of the rail elements of an existing guardrail installation, where the condition of the existing rail has been determined to be Category C (per Subsection 701.3). This item shall consist of furnishing and installing new rail using new galvanized hardware. If during the removal the Engineer determines the

need to replace the post and/or block-out, that work shall be performed as provided elsewhere in this Section.

GUARDRAIL POST shall consist of furnishing and installing new guardrail posts to reinforce an existing guardrail installation as shown on the Plans or as directed by the Engineer. The disassembly and reassembly of the rail elements to permit installation and attachment of the new post(s) will be paid as GUARDRAIL REMOVAL AND REPLACEMENT - RAIL ELEMENTS. The post(s) shall be installed in accordance with Subsection 701.5 to the proper spacing, elevation and alignment. Block-out(s) required will be paid as GUARDRAIL BLOCK-OUT.

GUARDRAIL POST REMOVAL AND REPLACEMENT shall consist of the removal and replacement of guardrail posts, at locations shown on the Plans or as directed by the Engineer. The posts shall be pulled completely from the ground, and all holes remaining after the post removal shall be backfilled and compacted to the satisfaction of the Engineer. Removed posts and block-outs shall be considered Category C material, per Subsection 701.3. New post(s) and wood block-out(s) shall be furnished and installed in accordance with the requirements in Section 701.

New guardrail posts shall accommodate the hole pattern for the new block-out, and no punching, drilling, cutting or welding will be permitted in the field, unless authorized in the field, per Subsection 701.5.

GUARDRAIL BLOCK-OUT shall consist of furnishing a new block-out to be attached to a new guardrail post. The wood for the block-out shall meet the material requirements per Section 1129, and shall be dimensioned as detailed in IDOT Standard Drawing 630001-03. Hardware required to attach the block-out to the post shall be included.

GUARDRAIL BLOCK-OUT REMOVAL AND REPLACEMENT shall consist of removing and disposing existing block-outs, modifying the holes pattern on existing posts and furnishing and installing new block-outs at locations shown on the Plans or as directed by the Engineer. All removed steel block-outs and unusable wood block-outs shall be considered Category C material, whereas removed wood block-outs that are reusable shall be considered Category B material, per Subsection 701.3. When the existing post is to remain, a hole shall be punched (from the approach side of the post) to accommodate the single-bolt connector necessary for the new block-out, and the hole touched up with an approved galvanized paint. The new block-out shall meet the requirements of GUARDRAIL BLOCK-OUT.

ET-PLUS™ IMPACT HEAD REPLACEMENT shall consist of the removal of an existing ET-2000™ impact head, installed on an existing Guardrail Barrier Terminal, Type 1, Special, and the installation of a new impact head with delineation object marker. The new impact head shall be the ET-PLUS™, as manufactured by Trinity Industries, Inc.; Dallas, Texas. Existing impact heads shall be considered Category C material, per Subsection 701.3.

702.4 - MEASUREMENT

GALVANIZED STEEL PLATE BEAM REINSTALLATION, GUARDRAIL REMOVAL AND REPLACEMENT - RAIL ELEMENTS and GUARDRAIL REMOVAL AND REINSTALLATION - RAIL ELEMENTS will be measured for payment in lineal feet of the type specified. The length will be the overall length, measured along the top edge of the top rail element from end to end of the total rail.

GUARDRAIL POST, GUARDRAIL POST REMOVAL AND REPLACEMENT, GUARDRAIL BLOCK-OUT, GUARDRAIL BLOCK-OUT REMOVAL AND REPLACEMENT AND ET-PLUS™ IMPACT HEAD REPLACEMENT will be measured for payment per each.

702.5 - PAYMENT

Payment for GALVANIZED STEEL PLATE BEAM REINSTALLATION, measured as specified, will be at the Contract unit price per lineal foot, which payment shall constitute full compensation for furnishing all new material as required, and for all labor, equipment, tools and incidentals necessary to complete the work as specified.

Payment for GUARDRAIL REMOVAL AND REPLACEMENT - RAIL ELEMENTS, measured as specified, will be at the Contract unit price per lineal foot, which payment shall constitute full compensation for removing and properly disposing of the existing rail and hardware, furnishing new galvanized rail and hardware, and for all labor, equipment, tools and incidentals necessary to complete the work as specified.

Payment for GUARDRAIL REMOVAL AND REINSTALLATION - RAIL ELEMENTS, measured as specified, will be at the Contract unit price per lineal foot, which payment shall constitute full compensation for disposing existing hardware, furnishing new hardware, and for all labor, equipment, tools and incidentals necessary to complete the work as specified.

Payment for GUARDRAIL POST, measured as specified, will be made at the Contract unit price per each, which payment shall constitute full compensation for furnishing new guardrail post(s), and for all labor, equipment, tools and incidentals necessary to complete the work as specified.

Payment for GUARDRAIL POST REMOVAL AND REPLACEMENT, measured as specified, will be made at the Contract unit price per each, which payment shall constitute full compensation for removing and properly disposing the existing post(s), furnishing new post(s), and for all labor, equipment, tools and incidentals necessary to complete the work as specified.

Payment for GUARDRAIL BLOCK-OUT, measured as specified, will be made at the Contract unit price per each, which payment shall constitute full compensation for furnishing new wood block-out(s) with attachment hardware, and for all labor equipment, tools and incidentals necessary to complete the work as specified.

Payment for GUARDRAIL BLOCK-OUT REMOVAL AND REPLACEMENT measured as specified, will be made at the Contract unit price per each, which payment shall constitute full compensation for removing and properly disposing the existing block-out(s), furnishing the new wood block-out(s) with attachment hardware, and for all labor, equipment, tools and incidentals necessary to complete the work as specified.

Payment for ET-PLUS™ IMPACT HEAD REPLACEMENT, measured as specified, will be made at the Contract unit price per each, which payment shall constitute full compensation for removing and properly disposing the ET-2000™ impact heads, furnishing ET-PLUS™ impact heads, along with galvanized hardware, and object marker(s), and for all labor, equipment, tools and incidentals necessary to complete the work as specified.

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
702A	GALVANIZED STEEL PLATE BEAM REINSTALLATION	L.F.
702B	GUARDRAIL REMOVAL AND REPLACEMENT - RAIL ELEMENTS	L.F.
702C	GUARDRAIL REMOVAL AND REINSTALLATION - RAIL ELEMENTS	L.F.

702D	GUARDRAIL POST	EACH
702E	GUARDRAIL POST REMOVAL AND REPLACEMENT	EACH
702F	GUARDRAIL BLOCK-OUT	EACH
702G	GUARDRAIL BLOCK-OUT REMOVAL AND REPLACEMENT	EACH
702H	ET-PLUS™ IMPACT HEAD REPLACEMENT	EACH"

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 703 – GUARDRAIL HEIGHT ADJUSTMENT

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Replace the requirements in Section 703 with the following.

"703.1 - DESCRIPTION

This work shall consist of adjusting the height of existing single or double rail guardrail installations within the Contract Limits at locations as shown on the Plans and as directed by the Engineer. Guardrail that is 3 inches higher or one inch lower than the elevations shown in the Standard Drawings shall be adjusted. The correction of guardrail installed under other items of the Contract will not be included for payment under this item.

Where guardrail posts require height adjustment, the section(s) of guardrail to which they are bolted shall be disassembled and located away from the immediate work area to prevent damage to rail panels. After adjustment/replacement of the posts, the rail shall be reattached with new galvanized hardware furnished by the Contractor. This work shall be performed in accordance with Subsection 701.5 of the Standard Specifications.

Where the posts to be adjusted have steel block-outs or damaged wood block-outs, the block-outs shall be removed and considered Category C material, per Subsection 701.3. New wood blockouts shall be furnished and installed with new hardware. Payment for this work will be made as GUARDRAIL BLOCK-OUT REMOVAL AND REPLACEMENT, per Section 702, for each post requiring adjustment.

When the existing guardrail elevation is below the acceptable elevation limit, the existing post(s) shall be pulled completely from the ground, and all holes remaining after the post removal shall be backfilled and compacted to the satisfaction of the Engineer. The post(s) shall then be reinstalled to the proper elevation and alignment, and the sections of guardrail to which they are bolted reassembled. Any posts identified by the Engineer as damaged prior to the removal operations shall be disposed of the replaced with new posts meeting the requirements of Subsection 701.2 - payment for this work will be made as GUARDRAIL POST REMOVAL AND REPLACEMENT.

When the existing guardrail elevation is above the acceptable elevation limit, VERTICAL HEIGHT ADJUSTMENT (MACHINE METHOD) shall be used to adjust out-of tolerance guardrail installations. VERTICAL HEIGHT ADJUSTMENT (MACHINE METHOD) shall consist of driving out-of tolerance guardrail post(s) to the Plan height. Removal and replacement of the rail will be paid as GUARDRAIL REMOVAL AND REINSTALLATION - RAIL ELEMENTS. When the existing rail is to be replaced with new rail, the operation will be paid as GUARDRAIL REMOVAL AND REPLACEMENT - RAIL ELEMENTS.

Any existing rail or posts damaged by the Contractor's operations shall be replaced with new material at no additional cost to the Authority.

703.2 - MEASUREMENT

GUARDRAIL HEIGHT ADJUSTMENT - SINGLE RAIL or - DOUBLE RAIL will be measured for payment in linear feet. For Single Rail Guardrail installations, the length shall be the overall length measured along the top edge of the rail element from end to end of the total rail adjusted. Where guardrail height adjustment is required of Double Rail Guardrail installations, measurement for payment will be along the centerline of the Double Rail installation, from end to end of the total rail adjusted.

VERTICAL HEIGHT ADJUSTMENT (MACHINE METHOD) - SINGLE RAIL or DOUBLE RAIL will be measured for payment in linear feet. For Single Rail Guardrail installations, the length shall be the overall length measured along the top edge of the rail element from end to end of the total rail adjusted. Where guardrail height adjustment is required of Double Rail Guardrail installations, measurement for payment shall be along the centerline of the Double Rail installation, from end to end of the total rail adjusted.

703.3 - PAYMENT

Payment for GUARDRAIL HEIGHT ADJUSTMENT - SINGLE RAIL or - DOUBLE RAIL, measured as specified, will be made at the Contract unit price per linear foot, which payment shall constitute full compensation for removing and reinstalling the existing posts to the proper elevation, and for all labor, equipment, tools and incidentals necessary to complete the item as specified.

Payment for VERTICAL HEIGHT ADJUSTMENT (MACHINE METHOD) - SINGLE RAIL or DOUBLE RAIL, measured as specified, will be made at the Contract unit price per linear foot, which payment shall constitute full compensation for driving existing posts to the proper vertical alignment.

Payment for GUARDRAIL REMOVAL AND REINSTALLATION - RAIL ELEMENTS, GUARDRAIL REMOVAL AND REPLACEMENT - RAIL ELEMENTS, GUARDRAIL POST REMOVAL AND REPLACEMENT and GUARDRAIL BLOCK-OUT REMOVAL AND REPLACEMENT, if required, will be made in accordance with Section 702. Should these pay items be required but not included in the Contract, the applicable work will be paid for in accordance with Subsection 109.4 of the Standard Specifications.

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
703A	GUARDRAIL HEIGHT ADJUSTMENT – SINGLE RAIL	L.F.
703B	GUARDRAIL HEIGHT ADJUSTMENT – DOUBLE RAIL	L.F.
703C	VERTICAL HEIGHT ADJUSTMENT (MACHINE METHOD) - SINGLE RAIL	L.F.
703D	VERTICAL HEIGHT ADJUSTMENT (MACHINE METHOD) - DOUBLE RAIL"	L.F.

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 704 – ENERGY ATTENUATOR

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Replace the requirements in Section 704 with the following.

"704.1 - DESCRIPTION

This work shall consist of furnishing, assembling and installing manufactured energy attenuators at locations as shown on the Plans and as directed by the Engineer. Work under this Section may also include the removal and proper disposal of existing energy attenuators as shown on the Plans and/or as directed by the Engineer.

704.2 - MATERIALS

Unless otherwise indicated on the Plans, the energy attenuators shall be QuadGuard High Speed™, Model No. QH3609Y, as manufactured by Energy Absorption Systems, Inc. Should the Plans or Special Provisions permit an alternative to the aforementioned, such alternative shall meet the requirements of the National Cooperative Highway Research Program (NCHRP) 350, TL-3, and shall be designed for an impact of 70 mph.

Other materials shall conform to the requirements of Part XI, Materials, unless otherwise specified on the Plans. Specific references are:

Concrete (Class P).....	1101
Reinforcing Steel.....	1112.20.1
Epoxy Coating of Reinforcing Steel.....	1112.20.5

704.3 - ATTENUATOR REMOVAL

At locations, where an existing attenuator is to be removed, the Engineer and ISTHA Maintenance personnel will inspect the existing attenuator(s) and determine whether it is salvageable.

Note: All existing attenuators which are not Quadguard™, or which do not meet NCHRP 350 requirements, will be deemed unsalvageable.

Unsalvageable attenuators shall become the property of the Contractor to be removed and properly disposed of outside the Tollway right-of-way. Salvageable attenuators shall be carefully removed by the Contractor, to prevent damage to the units, and delivered intact to the ISTHA Maintenance facility designated in the Special Provisions. Any salvageable attenuators damaged by the Contractor during removal or transit shall be repaired and/or replaced to the satisfaction of the Engineer.

Removal operations shall include saw cutting as shown on the Plans in accordance with the applicable provisions of Subsections 413.3 through 413.5. All other material removed as part of the removal of the attenuator shall be disposed of in accordance with Subsection 203.4.

704.4 - GENERAL REQUIREMENTS

The Contractor shall submit copies of the manufacturer's specifications and installation details for the Engineer's review. Unless otherwise stated, submittal requirements shall be per Subsection 105.2.3. Submittal requirements shall include details for the reinforced concrete pad and backup structure(s), as required.

When an attenuator is installed as part of new construction, the location shall be prepared in accordance with the Plans, as well as any recommendations from the manufacturer. If required by the manufacturer, the concrete pad and backup structure(s) shall be constructed in accordance with the applicable provisions of Sections 501 and 504, as well as the manufacturer's recommendations.

When an attenuator is installed on an existing Tollway facility, any existing pavement, shoulder and/or concrete median barrier and base shall be removed and properly disposed of. Any restoration of the granular subbase shall be performed in accordance with Subsection 413.7.

The assembly and installation of the energy attenuator shall be in accordance with the manufacturer's recommendations.

704.5 - MEASUREMENT AND PAYMENT

ENERGY ATTENUATOR will be measured and paid for at the Contract unit price per each, which payment shall constitute full compensation for furnishing and delivering the required materials to the site, and for all labor, equipment and incidentals needed to complete the work as specified.

Concrete required for the pad and backup structure(s), if required, will be measured and paid for in accordance with Subsections 501.16 and 501.17. REINFORCING STEEL, EPOXY COATED, if required, will be measured and paid for in accordance with Subsections 504.7 and 504.8.

ENERGY ATTENUATOR REMOVAL will be measured and paid for at the Contract unit price per each, which payment shall constitute full compensation for removing and either transporting the attenuator to the designated ISTHA Maintenance facility, or properly disposing of the unit.

Payment for sawcutting, removal and disposal of concrete and bituminous materials, as well as any restoration of subbase will be included in the Contract unit price for ENERGY ATTENUATOR and ENERGY ATTENUATOR REMOVAL. CONCRETE MEDIAN BARRIER AND BASE REMOVAL will be measured and paid for in accordance with Subsections 712.4 and 712.5.

In the event Pay Items 501B, 504B and/or 712 are not included in the Schedule of Quantities for the Contract, payment for the omitted items shall be in accordance with Subsection 109.4.

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
704	ENERGY ATTENUATOR	EACH
704R	ENERGY ATTENUATOR REMOVAL	EACH

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 705 – CONCRETE MEDIAN BARRIER BASE
Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

705.2 - MATERIALS

Revise the requirements for Subsection (c) to read:

"(c) **Reinforcing Steel.** Steel for tie bars, between the median barrier base and barrier or barrier wall, shall be No. 8 bars meeting the requirements Subsection 1112.20.1. Tie bars shall be epoxy coated in accordance with Subsection 1112.20.5."

705.4 - MEASUREMENT

Revise the third paragraph of this subsection to read:

"Fine grading of subbase, epoxy-coated reinforcing steel (tie bars) and construction of joints will not be measured separately for payment."

705.5 - PAYMENT

Insert the following into this subsection:

"., furnishing and placing epoxy-coated tie bars,"

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 709 – MOVEABLE CONCRETE BARRIER, FURNISH

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Replace Section 709 in its entirety with the following:

"SECTION 709 - MOVEABLE CONCRETE BARRIER, CONTRACTOR-FURNISHED

709.1 - DESCRIPTION

This work shall consist of furnishing, transporting, placing, maintaining, relocating and removing moveable precast concrete barrier sections, together with all necessary hardware, at locations as shown on the Plans and/or as directed by the Engineer. Barrier sections furnished under this section shall meet National Cooperative Highway Research Program (NCHRP) Report 350, Category 3, Test Level 3 requirements and be of the "F shape" configuration.

The initial placement of barrier units, along with the removal of concrete barrier from the Contact Limits will be paid as MOVEABLE CONCRETE BARRIER, CONTRACTOR-FURNISHED, while barrier units relocated for subsequent work zones stages in the Plans will be paid as RELOCATE MOVEABLE CONCRETE BARRIER, CONTRACTOR-FURNISHED.

709.2 - MATERIALS

Materials shall conform to the requirements of Materials, Part XI and as otherwise specified. Specific references are as follows:

Concrete (Class D)*.....	1101
Coarse Aggregate for Concrete.....	1107.2.1
Reinforcing Steel (Grade 60).....	504
Connecting Pins and Anchoring Pins.....	1151

Connecting loop bars shall be smooth bars conforming to the requirements of ASTM A 36.

*Concrete, meeting Section 1020 of the current edition of the Illinois Department of Transportation's *Standard Specifications for Road and Bridge Construction* may be used for this item.

709.3 - GENERAL REQUIREMENTS

Fabrication of precast concrete barrier sections shall be in accordance with Sections 501 and 706, except as modified herein and/or per the Standard Drawings. Precast units shall not be removed from the casting beds until a flexural strength of 300 psi or a compressive strength of 1400 psi is attained. Precast units shall not be transported to the jobsite until a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi is attained. In no case shall precast units be loaded, transported, and used prior to four days after casting.

When transporting concrete barrier units, the Contractor shall comply with all applicable Illinois Motor Vehicle Laws and Illinois Motor Carrier Regulations. Such compliance shall include, but not be limited to,

securing each concrete barrier unit on the transporting vehicle with a minimum of two tie-down chains, regardless of the distance to be traveled. Failure by the Contractor to comply with this requirement shall be grounds for assessment of a Non-Compliance with Specifications penalty, per Subsection 1001.1.2(b).

F-shaped barrier units shall be seated on bare, clean pavement or paved shoulder and pinned together in a smooth, continuous line at the exact locations provided by the Engineer. Placement of barrier units shall always proceed in the direction of traffic flow. The unit at each end of each run of barrier shall be secured to the pavement or paved shoulder using six anchoring pins. The approach end of each run of barrier shall be protected with an accepted NCHRP 350, Test Level 3 crashworthy device as shown on the Plans.

The F-shaped units and ISTHA-owned Moveable Concrete Barrier units (per Section 710) shall not be mixed in the same run of barrier units.

Barrier units or attachments damaged or disturbed by any cause shall be replaced and/or realigned by the Contractor, and the Contractor shall dispose of any damaged units or debris. Such repairs shall be responded to by the Contractor within 30 minutes of notification by the Engineer, and shall be completed within 18 hours of said notification. Failure to comply with the above requirements shall be grounds for assessment of the Maintenance of Traffic penalty(s) per Subsections 1001.1.2 (a) and (b).

If damage or disturbance to the barrier units is caused by or results from the Contractor's operations (including transit or handling), the Contractor shall incur all costs associated with the replacement/realignment of the barrier units. If the barrier units are damaged through no fault of the Contractor, payment for the replacement/realignment of the barrier units, including any required maintenance of traffic, will be considered Contract Specified Extra Work, as defined in Subsection 1501.1.

Barrier units shall be removed from the Contract Limits when no longer required by the Contract. After removal all anchoring holes in the pavement or paved shoulder shall be filled with elastomeric concrete, furnished from one of the following suppliers, and placed and cured in accordance with the supplier's recommendations.

Delcrete™, produced by D.S. Brown Company.

Wabo® ElastoPatch, Wabo®Crete, produced by Watson Bowman Acme® / Harris Specialty Chemicals, Inc.

709.4 - MEASUREMENT

MOVEABLE CONCRETE BARRIER, CONTRACTOR-FURNISHED will be measured for payment in lineal feet along the centerline of the barrier when it is brought to the jobsite, and will be re-measured for payment prior to removal when no longer required.

RELOCATE MOVEABLE CONCRETE BARRIER, CONTRACTOR-FURNISHED will be measured for payment in lineal feet along the centerline of the barrier when barrier is relocated to a location within the Contract Limits.

709.5 - PAYMENT

Payment for MOVEABLE CONCRETE BARRIER, CONTRACTOR-FURNISHED and RELOCATE MOVEABLE CONCRETE BARRIER, CONTRACTOR-FURNISHED, measured as specified will be the Contract unit price per lineal foot, which payment shall constitute full compensation for fabricating, handling, transporting, placing, maintaining, relocating and removing the barrier units; all connection and anchoring hardware; pavement patching material; required maintenance of traffic; and for all labor, equipment, tools and incidentals necessary to complete the work as specified.

Payment for the NCHRP 350 crashworthy devices, required per Subsection 709.3, will be specified elsewhere in the Contract Documents.

Payment for replacement/realignment of barrier not due to the Contractor's operations, specified per Subsection 709.3, will be made in accordance with Subsection 109.4, under Item 1501.

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
709A	MOVEABLE CONCRETE BARRIER, CONTRACTOR-FURNISHED	L.F.
709B	RELOCATE MOVEABLE CONCRETE BARRIER, CONTRACTOR-FURNISHED	L.F."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 710 – MOVEABLE CONCRETE BARRIER PLACEMENT

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Revise the title of Section 710 to read:
"MOVEABLE CONCRETE BARRIER, ISTHA-OWNED".

710.1 - DESCRIPTION

Replace the first paragraph of this subsection with the following:

"This work shall consist of all handling, loading, transporting, placing, maintaining, relocating and returning ISTHA-owned moveable precast concrete barrier sections and transition end sections, together with all necessary hardware, at locations as shown on the Plans and/or as directed by the Engineer."

Add the following paragraphs to the end of this subsection:

"Placing of concrete barrier under Condition Nos. 1, 2 and 4 will be paid as MOVEABLE CONCRETE BARRIER, ISTHA-OWNED, while barrier relocated under Condition No. 3 will be paid as RELOCATE MOVEABLE CONCRETE BARRIER, ISTHA-OWNED.

The location of storage site(s) where the Contractor may receive ISTHA-owned barrier units are specified elsewhere in the Contract Documents.

NOTE: This item shall not be used on Contracts awarded after January 1, 2008."

710.2 - PLACING BARRIER SECTIONS

Revise the first sentence of the second paragraph of this subsection to read:

"Moveable concrete barrier units shall be placed as shown on the Plans - if required and not shown on the Plans, placement will be directed by the Engineer."

Add the following to the end of the second paragraph of this subsection:

"The ISTHA-owned barrier units and the F-shaped Contractor-furnished units (per Section 709) shall not be mixed in the same run of barrier units."

710.3 - MEASUREMENT AND PAYMENT

Replace the first two sentences of the first paragraph of this subsection with the following:

"MOVEABLE CONCRETE BARRIER, ISTHA-OWNED will be measured and paid for at the Contract unit price per lineal foot, as measured along the top of the barrier, which payment shall constitute full compensation for loading, transporting, placing, maintaining, and returning the concrete barrier sections, and for all labor, equipment and incidentals needed to complete the work as specified. The initial placement of barrier and the removal of barrier from the Contract Limits to the ISTHA storage site will be measured individually for payment.

RELOCATE MOVEABLE CONCRETE BARRIER, ISTHA-OWNED will be measured and paid for at the Contract unit price per lineal foot, as measured along the top of the barrier, which payment shall constitute full compensation, for handling, loading and transporting (if required), placing and maintaining

concrete barrier sections relocated to location within the Contract Limits, and for all labor, equipment, tools and incidentals necessary to complete the work as specified. After the initial placement, each subsequent relocation in barrier configuration within the Contract Limits will be measured individually for payment."

Revise the first line of the second paragraph of this subsection to read:

"MOVEABLE CONCRETE BARRIER, DECK ANCHORAGE on new deck **surfaces** will be.....".

Add the following pay item number, designation and unit of measure at the end of this section:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
710B	RELOCATE MOVEABLE CONCRETE BARRIER, ISTHA-OWNED	L.F.

Revise the designation of Pay Item Number 710 to read:

"MOVEABLE CONCRETE BARRIER, ISTHA-OWNED".

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 713 – MODULAR GLARE SCREEN

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

713.2 - MATERIALS

Add the following the list of acceptable glare screen suppliers provided in No. 5 of this subsection:

<u>SUPPLIER</u>	<u>PRODUCT NAME</u>
FlexStake, Inc. 2150 Andrea Lane Fort Myers, FL 33912 Phone: (800) 348-9839	FlexStake® GS

713.4 - MAINTENANCE

Replace the last two paragraphs of this subsection with the following:

"Any assemblies damaged by the motoring public shall be replaced by the Contractor, and will be paid for the additional quantity as MODULAR GLARE SCREEN.

When this item is used as an element of the Contract Maintenance of Traffic requirements, the Engineer will utilize the penalties established in Subsection 1001.1.2 should the Contractor fail to comply with maintaining this item, as herein specified."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 714 – CONCRETE GLARE SCREEN
(NEW SECTION)

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Insert the following to this new section:

"714.1 - DESCRIPTION

This item shall consist of the construction of a cast-in-place concrete glare screen, constructed atop a median barrier wall or bridge parapet. This item shall be constructed to the lines, dimensions, sections and details shown in the Plans, and in accordance with the requirements of these Specifications.

714.2 - MATERIALS

All materials shall conform to the applicable requirements of Materials, Part XI. Specific references are follows:

Concrete (Class D)	1101
Coarse Aggregate for Concrete	1107.2.1
Reinforcing Steel, Epoxy Coated.....	1112.20.1 & 1112.20.5
Grout.....	1151.5

714.3 - GENERAL REQUIREMENTS

Concrete glare screen shall be constructed in accordance with the applicable portions of Section 706.

When concrete glare screen is constructed on an existing concrete median barrier or parapet, the vertical reinforcement bars shall be grouted in place in holes drilled into the existing structure to the satisfaction of the Engineer. Joints in the concrete glare screen shall be a continuation of joints in the existing concrete barrier or parapet and shall be of the same configuration. In addition, if there is a crack in the structure that is working as a joint, a joint shall be placed over it in the glare screen and the reinforcement shall be cut.

When concrete glare screen is constructed on new concrete barrier, it may be constructed integrally with the barrier. Joints in the glare screen shall be in accordance with Subsection 501.9.

714.4 - MEASUREMENT

CONCRETE GLARE SCREEN will be measured for payment in lineal feet in place, measured along the centerline of the concrete glare screen. The area(s) where the glare screen transitions from the top of the barrier to its full height will be measured for payment as CONCRETE GLARE SCREEN.

REINFORCING STEEL, EPOXY COATED will be measured for payment in accordance with Subsection 504.7.

714.5 - PAYMENT

Payment for CONCRETE GLARE SCREEN, measured as specified, will be made at the Contract unit price per lineal foot, which payment shall constitute full compensation for furnishing all materials, labor, equipment, tools and incidentals necessary to complete the work as specified.

Payment for REINFORCING STEEL, EPOXY COATED will be in accordance with Subsection 504.8.

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
714	CONCRETE GLARE SCREEN	L.F."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 800 – DESCRIPTION OF ROADWAY MARKING, SIGNING AND DELINEATION

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

800.1 - PAY ITEMS FOR PART VIII

Add the following pay item number, designation and unit of measure in this subsection:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"805R	REPLACEMENT REFLECTOR	EACH
813B1	WOOD SIGN SUPPORT (4 IN. x 6 IN.)	L.F.
813B2	WOOD SIGN SUPPORT (6 IN. X 6 IN.)	L.F."

Delete the following pay item numbers, designations and units of measure in this subsection:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"813	WOOD SIGN SUPPORT	L.F.
819B	TEMPORARY FENCE, ELECTRIC WIRE	L.F.
822C1	EPOXY PAVEMENT MARKING, NUMBER (6 ft.)	SQ. FT.
822C2	EPOXY PAVEMENT MARKING, NUMBER (8 ft.)	SQ. FT.
822D1	EPOXY PAVEMENT MARKING, SYMBOL (LARGE)	SQ. FT.
822D2	EPOXY PAVEMENT MARKING, SYMBOL (SMALL)	SQ. FT."

Revise the designations of the following pay item numbers. There is no revision to the respective unit of measure.

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>
"819A	TEMPORARY FENCE, PLASTIC
822B1	EPOXY PAVEMENT MARKING, LETTERS, NUMBERS AND SYMBOLS (6-foot)
822B2	EPOXY PAVEMENT MARKING, LETTERS, NUMBERS AND SYMBOLS (8-foot)"

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 805 – RAISED PAVEMENT LANE MARKER

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

805.1 - DESCRIPTION

Add the following to the end of the first paragraph of this subsection:

"Also included is the furnishing and installation of new prismatic reflectors in existing raised pavement marker castings, which were either removed by the Contractor (under Section 1001) or were missing and were directed to furnish and install by the Engineer."

805.3 – INSTALLATION REQUIREMENT

Revise the last sentence of the second paragraph of this subsection to read as follows:

"A rapid setting (hard in one hour) epoxy, meeting the requirements of AASHTO M237, shall be poured into the cut to within 3/8 inch of the pavement surface."

Add the following paragraph to the end of this subsection:

"When the reflector is to be installed into an existing casting, the casting shall be cleaned by the Contractor of all traces of adhesive, rust, dirt, etc. by sandblasting or other methods approved by the Engineer."

805.4 - MEASUREMENT

Add the following paragraph to the end of this subsection:

"REPLACEMENT REFLECTOR will be measured per each, in place and accepted."

805.5 - PAYMENT

Add the following paragraph to the end of this subsection:

"Payment for REPLACEMENT REFLECTOR will be made at the Contract unit price per each, which payment shall constitute full compensation for cleaning the existing raised pavement lane marker casting, furnishing and installing the new reflectors along with adhesive, maintenance of traffic, and for all labor, equipment, tools and incidentals necessary to complete the work as specified."

Add the following pay item number, designation and unit of measure at the end of this section:

<u>PAY ITEM MEASURE</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"805R	REPLACEMENT REFLECTOR	EACH"

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 805A – RAISED PAVEMENT LANE MARKER, BRIDGE

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

805A.1 - DESCRIPTION

Add the following to the end of the first paragraph of this subsection:

"Also included is the furnishing and reinstallation of new prismatic reflectors in existing raised pavement marker castings on bridge decks, which were either removed by the Contractor (under Section 1001) or were missing and were directed to furnish and install by the Engineer."

805A.3 – INSTALLATION REQUIREMENT

Revise the last sentence of the second paragraph of this subsection to read:

"A rapid setting (hard in one hour) epoxy, meeting the requirements of AASHTO M 237, shall be poured into the cut to within 3/8 inch of the pavement surface."

Add the following paragraph to the end of this subsection:

"When the reflector is to be installed into an existing casting, the casting shall be cleaned by the Contractor of all traces of adhesive, rust, dirt, etc. by sandblasting or other methods approved by the Engineer."

805A.4 - MEASUREMENT

Add the following paragraph to the end of this subsection:

"REPLACEMENT REFLECTOR will be measured in accordance with Subsection 805.4."

805A.5 - PAYMENT

Add the following paragraph to the end of this subsection:

"Payment for REPLACEMENT REFLECTOR will be in accordance with Subsection 805.5."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 809 - OVERHEAD SIGN STRUCTURE

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

809.4 - FABRICATION

809.4.2 - Structural Aluminum

Replace Subsection 809.4.2.2 with the following:

- "2. **Welding:** The aluminum alloys to be welded under these specifications may be any of the following ASTM designations:
- (a) Aluminum Fabrication. Aluminum shall be assembled, welded and inspected according to ANSI/AWS D1.2, "Structural Welding Code-Aluminum", except as herein modified.
 - (b) Load-carrying Elements. All primary load carrying elements shall be evaluated as Class I structures by the D1.2 code.
Wrought nonheat-treatable alloys: Alloy 3003 and Alloy 3004.
Wrought heat-treatable alloys: Alloy 6061 and Alloy 6063.
Cast heat-treatable alloys: ASTM B 26 or B 108, Alloy A 356-T61, A444-T4 or AASHTO M193.
Material used for permanent backing shall be at least equivalent in weldability to the base metal being welded.
 - (c) Welding Processes. These specifications include provisions for welding by the gas metal-arc process and the gas tungsten-arc process. Other processes may not be used, except as permitted by the Engineer.

Tungsten electrodes for the gas tungsten-arc process shall conform to the requirements of the latest edition of Specification for Tungsten-Arc Welding Electrodes, AWS A 5.12.

Filler metals to be used with particular base metals shall be as shown in Table 1. Other filler metals may be used as approved by the Engineer or as specified in the plans.

Table 1

<u>Base Metal</u>	<u>Filler Metal</u>
3003 to 3003	ER1100
3004 to 3004	ER4043
3003 to 6061	ER5183 or 5356
6061 to 6061	ER5356*
6063 to 6063	ER5356*
A356-T61 or A444-T4 to 3003	ER4043 or 4145
A356-T61 or A444-T4 to 6061	ER4043 or 4145
A356-T61 or A444-T4 to 6063	ER4043

A356-T61 to A356-T61
A444-T4 to A444-74

ER4043
ER4043

*ER5356 and ER5556 may be used interchangeably for these base metals.

Fill metals shall be kept covered and stored in a dry place at relatively uniform temperatures. Original rod or wire containers shall not be opened until time to be used. Rod and wire shall be free of moisture, lubricant, or other contaminants. Spools of wire temporarily left unused on the welding machine shall be kept covered to avoid contamination by dirt and grease collecting on the wire. If a spool of wire is to be unused for more than a short length of time, it shall be returned to the carton and the carton tightly resealed.

- (d) Shielding Gases. Shielding gas for gas metal-arc welding shall be argon, helium, or a mixture of the two (approximately 75 percent helium and 25 percent argon). Shielding gas for gas tungsten-arc welding done with alternating current shall be argon. Shielding gas for tungsten-arc welding done with direct current, straight polarity, shall be helium.

Hose used for shielding gasses shall be made of synthetic rubber or plastic. Natural rubber hose shall not be used. Hose that has been previously used for acetylene or other gases shall not be used.

- (e) Preparation of Materials. Joint details shall be according to design requirements and detail drawings. The locations of joints shall not be changed without the approval of the Engineer.

Edge preparation shall be by sawing, machining, clipping, or shearing. Gas tungsten-arc or gas metal-arc cutting may also be used. Cut surfaces shall meet the American Standards Association's surface roughness rating value of 1,000. Oxygen cutting shall not be used.

Surfaces and edges to be welded shall be free from fins, tears, and other defects that would adversely affect the quality of the weld.

Dirt, grease, forming or machining lubricants, or any organic materials shall be removed from the areas to be welded by cleaning with suitable solvent or by vapor degreasing.

The oxide shall be removed from all edges and surfaces to be welded just prior to welding by wire brushing or by other mechanical methods, such as rubbing with steel wool or abrasive cloth, scraping, filing, rotary planing, or sanding. If wire brushing is used, the brushes shall be made of stainless steel. Hand or power driven wire brushes and other mechanical devices that have been used on other materials shall not be used on aluminum.

Where mechanical methods of oxide removal are found to be inadequate, a standard chemical method shall be used. Welding shall be done within 24 hours after chemical treatment.

When gas tungsten-arc welding with direct current, straight polarity, is being used, all edges and surfaces to be welded shall have the oxide removed by a standard chemical method.

Welding shall be done on anodically treated aluminum unless the condition is removed from the joint area to be welded.

- (f) Welding Procedure. All butt welds requiring 100 percent penetration, except those produced with the aid of backing, shall have the root of the initial weld chipped or machined out to sound metal before welding is started from the second side. Butt welds made with the use of backing shall have the weld metal thoroughly fused with the backing. Where accessible, backing for welds that are subject to computed stress or which are exposed to view on the completed structure and which are not otherwise parts of the structure shall be removed and the joints ground or machined smooth. In tubular members, butt welds subjected to computed stresses shall be made with the aid of permanent backing rings or strips.

The procedure used for production welding of any particular joint shall be the same as used in the procedure qualification for the joint.

All welding operations, either shop or field, shall be protected from air currents or drafts so as to prevent any loss of gas shielding during welding. Adequate gas shielding shall be provided to protect the molten metal during solidification.

The work shall be positioned for flat position welding whenever practicable.

In both shop and field, all weld joints shall be dry at time of welding.

The size of the electrode, voltage and amperage, welding speed, gas or gas mixture, and gas flow rate shall be suitable for the thickness of the material, design of joint, welding position, and other circumstances influencing the work, and shall be shown on the approved Weld Procedure Specification (WPS).

Gas metal-arc welding shall be done with direct current, reverse polarity.

Gas tungsten-arc welding shall be done with alternating current or straight polarity direct current.

The Contractor shall submit to the Engineer, at his request, two weld samples for destructive testing and macroetching. These samples shall be welded according to the procedures that will be used in production welding. The Contractor shall submit to the Engineer for approval, the procedure to be used for the test samples and production welding. Should tests of these samples indicate unsatisfactory welding, additional samples shall be furnished without cost to the Authority. Poor workmanship as noted by visual inspection shall be sufficient cause for rejection.

Where preheat is needed, the temperature of preheat shall not exceed 177° C (350° F) for nonheat-treated alloys. The temperature shall be measured by temperature indicating crayons, contact or accurate $\pm 2^\circ$ C (3.6° F) non-contact pyrometric equipment. Heat-treated alloys shall not be held at or near the maximum preheat temperature for more than 35 minutes.

- (g) Welding Quality: Regardless of the method of inspection, the acceptance or rejection of welds shall comply with the D1.2 Code and the following conditions:

Welds having defects exceeding the levels of acceptance specified shall be considered as rejected unless corrected according to Sub-Section 809.4.2 (i).

Undercut shall not be more than 0.25 mm (0.01 in.) deep when its direction is transverse to the primary stress in the part that is undercut. Undercut shall not be more than 0.80 mm (1/32 in.) deep when its direction is parallel to the primary stress in the part that is undercut. When undercut is present, the affected area shall be ground to a smooth transition.

- (h) Nondestructive Examination/Nondestructive Testing (NDE/NDT). To determine compliance with these specifications, all welds shall be visually inspected and, in addition, complete joint penetration welds subjected to computed stress shall be inspected by radiographic testing (RT) for butt welds and ultrasonic testing (UT) for "T" and corner joints. RT shall utilize aluminum edge blocks and location marks in addition to the D1.2 requirements. Location marks shall be stamped in the aluminum by the Contractor prior to radiographing, using a prick punch with a dull tip. These will be located by lead arrows, but only the "floating" mark must be visible on the film. The location marks shall consist of center punch marks 40 mm (1 1/2 in.) from the centerline of the weld for plates up to 75 mm (3 in.) thick or 50 mm (2 in.) from the centerline on thicker plates, and 60 mm (2 1/4 in.) in from each edge of the plate. In addition, there shall be one randomly placed, "floating" punch mark within each exposure at the same distance e from the centerline. The punch marks shall be placed in the thinner plate. In a series of overlapping exposures, the location marks shall be placed at approximately every 375-mm (15-in.).

The dye penetrant testing (DPT) shall be performed according to ASTM E 165, Standard Methods for Liquid Penetrant Inspection, Method B, Procedure B-2 or B-3. PT shall be used on partial joint penetration and fillet welds as follows:

100 percent of the top and bottom cantilever truss chords to connection and gusset plates near column; 25 percent of top connection plate to collar; 100 percent of simple span splice flanges to main chords, and random 10 percent to main chords to diagonals, horizontals, and verticals as directed by the Engineer.

Dye penetrant inspection may be omitted, provided the inspector examines each layer of weld metal with a magnifier of 3X minimum before the next successive layer is deposited.

Required NDE/NDT shall be the responsibility of the Contractor and its cost shall be included in the fabrication.

- (i) Corrections. In lieu of rejection of an entire member containing welding that is unacceptable, the corrective measures may be permitted by the Engineer, if the extent of repairs will not adversely effect the structure's serviceability.

Defective welds shall be corrected by removing and replacing the entire weld or as permitted by D1.2 Code. Copper or tungsten inclusions shall be completely removed.

Before re-welding, the joint shall be inspected to assure all of the defective weld has been removed. If dye penetrant has been used to inspect the weld, all traces of penetrant solutions shall be removed with solvent, water, heat, or other suitable means before re-welding.

Repaired areas shall be 100 percent inspected by RT, UT, or PT as applicable.

- (j) Qualification of Procedures, Welders, and Welding Operators. Joint welding procedures that are to be employed under these specifications shall be qualified by tests prescribed in the D1.2 Code. The qualifications shall be at the expense of the Contractor. The Engineer may accept properly documented evidence of previous qualification of the joint welding procedures to be employed.

All welders and welding operators shall be qualified by tests specified by the D1.2 Code. The Engineer may accept properly documented evidence of previous qualification of the welders and welding operators to be employed."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 811 - FOUNDATION FOR OVERHEAD SIGN STRUCTURE

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

811.4.3 - Drilled Shaft Foundation for Cantilever Type Structures

Replace the second paragraph of this subsection with the following:

"If rock, boulders, logs, concrete or masonry foundations are encountered during this operation, work shall continue through such obstructions by any available and approved means. Should the equipment being used for this operation be unable to remove the obstruction, the Contractor shall notify the Engineer and upon concurrence of the Engineer, provide special equipment (e.g., special augers, tooling, core barrels or rock augers) necessary to remove the obstruction. The use of special equipment will be considered to be Contract Specified Extra Work as defined in Subsection 1501.1."

811.7 - PAYMENT

Replace the second paragraph of this subsection with the following:

"Payment for special equipment required for the removal of obstructions, as described in Subsection 811.4.3 will be made in accordance with Subsection 109.4 under Item 1501."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 812 - FOUNDATION FOR GROUND MOUNTED SIGN SUPPORT

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

812.3.2 - Excavation

Replace the second paragraph of this subsection with the following:

"If rock, boulders, logs, concrete or masonry foundations are encountered during this operation, work shall continue through such obstructions by any available and approved means. Should the equipment being used for this operation be unable to remove the obstruction, the Contractor shall notify the Engineer and upon concurrence of the Engineer, provide special equipment (e.g., special augers, tooling, core barrels or rock augers) necessary to remove the obstruction. The use of special equipment will be considered to be Contract Specified Extra Work as defined in Subsection 1501.1."

812.6 - PAYMENT

Replace the second paragraph of this subsection with the following:

"Payment for special equipment required for the removal of obstructions, as described in Subsection 812.3.2 will be made in accordance with Subsection 109.4 under Item 1501."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 813B - WOOD SIGN SUPPORT

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

813B.1 - DESCRIPTION

Revise this subsection to read:

"This work shall consist of furnishing and installing 4 inch by 6 inch and 6 inch by 6 inch wood sign supports for ground mounted signs. The location of the wood sign support installation(s) shall be as shown on the Plans and/or as directed by the Engineer."

813B.3 - GENERAL REQUIREMENTS

Revise the last paragraph of this subsection to read:

"4 inch by 6 inch posts shall be modified by drilling 1½ inch diameter holes centered 4 inches and 18 inches above the groundline and perpendicular to the centerline of the roadway. 6 inch by 6 inch posts shall be modified by drilling 2 inch diameter holes at the same locations and spacing as specified above. Holes drilled in the field shall be swabbed as specified above for cut ends."

813B.4 - MEASUREMENT

Replace the first sentence of the first paragraph of this subsection with the following:

"WOOD SIGN SUPPORT will be measured for payment in lineal feet of the designated size."

813B.5 - PAYMENT

Replace the first sentence of the first paragraph of this subsection with the following:

"Payment for WOOD SIGN SUPPORT, measured as specified, will be made at the Contract unit price per lineal foot of the designated size, which payment shall constitute full compensation for furnishing and installing the wood supports, including excavation, shimming and backfilling; and for all labor, equipment, tools and incidentals necessary to complete the work as specified."

Replace Pay Item No. 813B with the following at the end of this section:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
813B1	WOOD SIGN SUPPORT (4 IN. x 6 IN.)	L.F.
813B2	WOOD SIGN SUPPORT (6 IN. X 6 IN.)	L.F.

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 819 – TEMPORARY FENCE

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

819.2 - MATERIALS

Delete the following from the list of materials in this subsection:

"Temporary Fence, Electric Wire 1113.2".

Add the following to the list of materials in this subsection:

"Temporary Fence, Plastic 1113.2".

819.3 - CONSTRUCTION REQUIREMENTS

Replace Subsection 819.3.2 with the following:

"819.3.2 - Temporary Fence, Plastic

Temporary plastic fence shall consist of orange polyethylene fence fabric, 48 inches high. The fabric shall be attached to either metal or wood posts at 8-foot centers. Posts shall be driven a minimum 2½ feet into the ground."

Replace Subsection 819.3.3 with the following:

"819.3.3 - NOT USED"

819.3.4 - Temporary Fence - Wire Fabric

Add the following to the end of this Subsection:

"For work performed in McHenry, Boone, Winnebago, DeKalb, Ogle and Lee Counties, unless stated otherwise in the Contract Documents, a single strand of barbed wire shall be stretched 2 inches above the top of the fence fabric."

819.5 - REMOVAL AND DISPOSAL

Revise the first sentence in the second paragraph of this subsection to read:

"Prior to the removal of temporary plastic fence, certain portions or sections thereof may be designated by the Engineer to be salvaged and delivered by the Contractor to the Authority."

Add the following to the third paragraph of the subsection:

"All temporary wire fabric fence shall be designated for removal by the Contractor after use."

819.7 - PAYMENT

Revise the designation of Pay Item No. 819A to read:

"TEMPORARY FENCE, PLASTIC".

Delete Pay Item No. 819B.

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 822 – EPOXY PAVEMENT MARKINGS

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

822.1 - DESCRIPTION

Replace this subsection with the following:

"This work shall consist of furnishing and applying 100 percent solid epoxy pavement markings using the "double drop" method for placing glass beads. For markings placed on a new pavement surface, markings shall be of the lines, patterns, sizes and colors shown on the Plans and as directed by the Engineer. For the re-application of markings on existing pavement surface, the epoxy markings shall be in-kind, unless otherwise shown on the Plans or as directed by the Engineer."

822.2 - MATERIALS

822.2.1 - Epoxy Marking Materials

Revise the first sentence of Subsection 822.2.1.A.o) to read as follows:

"Prior to approval and use of the epoxy marking materials, and as directed by the Authority, the proposed manufacturer shall submit a notarized certification of an independent laboratory, together with results of all tests stating that that these materials meet the requirements as set forth herein."

Revise Table 822-1 to read as follows:

TABLE 822-1
GRADATION OF GLASS BEADS

Sieve Size	Percent by Weight Passing Designated Sieve (ASTM D1214)	
	Grading Designation "Double Drop"	
	Type A	Type B
12	95-100	
14	75-95	
16	10-47	
18	0-7	
20	0-5	100
30		75-100
40		---
50		15-40
80		---
100		0-5
200		0-1
PAN		

Revise the first paragraph in Subsection 822.2.1.B.g) to read:

"Flowing Properties - The glass beads, of the gradation type specified, shall flow uniformly through dispensing equipment in atmospheric humidity up to 94 percent. The beads shall be free of silicones, waxes, oils, or other coatings except silane, and shall pass the following test."

822.2.2 - Preformed Plastic Marking Materials

Delete this subsection in its entirety.

822.3 - EQUIPMENT

Replace this subsection with the following:

"Equipment used for installing epoxy pavement markings shall meet the following requirements:

- A. The epoxy pavement marking compounds shall be applied through machinery designed to precisely meter the two components in the ratio of 2:1. This equipment shall also be designed to produce the required amount of heat at the mixing head and gun tip, and maintain those temperatures within the tolerances specified. This machinery shall also have as an integral part of the gun carriage, a high pressure air spray capable of cleaning the pavement immediately prior to the marking application.

- B. The equipment shall be capable of spraying both white and yellow epoxy, according to the manufacturer's recommended proportions, and be mounted on a truck of sufficient size and stability with an adequate power source to produce lines of uniform dimensions and prevent application failure. The truck shall have at least two epoxy tanks, each of 110-gallon capacity and be equipped with hydraulic systems and agitators. It shall be capable of placing stripes on the left and right sides and placing two lines on a three-line system simultaneously with either line in a solid or intermittent pattern, in white or yellow, and applying glass beads by the double drop pressurized bead system at the rate of 10 pounds per gallon for each type of bead.

All guns shall be in full view of operators at all times. The equipment shall have a metering device to register the accumulated installed quantities for each gun, each day. Each vehicle shall include at least one operator who shall be a technical expert in equipment operations and epoxy application technique. Certification of equipment shall be provided at the preconstruction conference."

822.4 - INSTALLATION REQUIREMENTS

Revise the second paragraph of Subsection 822.4.A.d) to read:

"When stipulated in the Contract Plans, the Contractor shall completely remove the existing pavement markings, prior to applying the new markings. This work shall be performed in accordance with Section 803 of the Standard Specifications."

Revise Subsection 822.4.C to read:

- "C. The epoxy material shall be applied to the cleaned road surface at 20 mils \pm 1 mil in thickness, before the glass beads are applied. Glass beads shall be uniformly applied by means of a double drop pressurized bead applicator system. Both the Type A and Type B glass beads shall be applied, meeting the gradation requirements shown in Table 822-1. The system shall apply both the first drop (Type A) glass beads and the second drop (Type B) glass beads, each at a rate of 10 pounds per gallon."

Revise the first two sentences of Subsection 822.4.D to read:

- "D. The epoxy pavement markings shall be applied when the pavement surface temperature is at least 40 degrees F and the air temperature is at least 35 degrees F. When epoxy markings cannot be placed due to the above requirements and the road is open to traffic, the Contractor shall place painted pavement markings, in accordance with Section 802."

822.5 - INSPECTION OF EPOXY PAVEMENT MARKINGS

Revise the first sentence of the first paragraph of Subsection 822.5 to read:

"The epoxy pavement markings will be first inspected following installation, but no later than December 15."

822.7 - PAYMENT

Replace the first paragraph of this subsection with the following:

"Payment for EPOXY PAVEMENT MARKING, measured as specified, will be at the Contract unit price per lineal foot for the various line widths, and per square foot for LETTERS, NUMBERS AND SYMBOLS, for either 6-foot or 8-foot lengths. Such payment shall constitute full compensation for furnishing all materials and for all labor, equipment, tools and incidentals needed to complete the work as specified.

Removal of existing pavement markings, when required per Subsection 822.4.A.d) shall be measured and paid for as PAVEMENT MARKING REMOVAL, in accordance with Subsection 803.5. When this item is not included in the Contract, the removal of existing markings will be paid for in accordance with Subsection 109.4 of the Standard Specifications."

Table 822-2

Revise the accepted square footage for "9" of 8-foot height from 6.1 to 6.2.

At the bottom of the table, replace the headers "**LARGE SIZE**" and "**SMALL SIZE**" with "**8 FOOT**" and "**6 FOOT**", respectively.

Add the following at the bottom of the table:

"Handicapped Symbol 4.6 ---"

Revise the designations of Pay Item Numbers 822B1 and 822B2 at the end of this section, with the following:

<u>PAY ITEM MEASURE</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"822B1	EPOXY PAVEMENT MARKING, LETTERS, NUMBERS AND SYMBOLS (6-foot)	SQ. FT.
822B2	EPOXY PAVEMENT MARKING, LETTERS, NUMBERS AND SYMBOLS (8-foot)	SQ. FT."

Delete the following pay item numbers, designations and units of measure at the end of this section:

<u>PAY ITEM MEASURE</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"822C1	EPOXY PAVEMENT MARKING, NUMBER (6 ft.)	SQ. FT.
822C2	EPOXY PAVEMENT MARKING, NUMBER (8 ft.)	SQ. FT.
822D1	EPOXY PAVEMENT MARKING, SYMBOL (LARGE)	SQ. FT.
822D2	EPOXY PAVEMENT MARKING, SYMBOL (SMALL)	SQ. FT."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 900 – DESCRIPTION OF ROADWAY LIGHTING AND ELECTRICAL WORK
Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

900.4 - PAY ITEMS FOR PART IX

Add the following pay item numbers, designations and units of measure in this subsection:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"907A9	CABLE DUCT IN TRENCH, 2 INCH	L.F.
907A10	CABLE DUCT IN TRENCH, 3 INCH	L.F.
907B9	CABLE DUCT, PLOWED IN, 2 INCH	L.F.
907B10	CABLE DUCT, PLOWED IN, 3 INCH	L.F.
907C9	CABLE DUCT, PULLED IN CASING, 2 INCH	L.F.
907C10	CABLE DUCT, PULLED IN CASING, 3 INCH	L.F.
909H5	FIBER OPTIC CABLE IN CONDUIT OR CABLE DUCT, 48 STRAND	L.F.
909H6	FIBER OPTIC CABLE IN CONDUIT OR CABLE DUCT *	L.F.
910C2A	STAINLESS STEEL JUNCTION BOX TYPE "A"	EACH
910C2B	STAINLESS STEEL JUNCTION BOX TYPE "B"	EACH
910C2C	STAINLESS STEEL JUNCTION BOX *	EACH
910C2D	STAINLESS STEEL JUNCTION BOX *	EACH"

Revise the designations of the following pay item numbers. There is no revision to the respective unit of measure.

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>
"909H1	FIBER OPTIC CABLE IN CONDUIT OR CABLE DUCT, 6 STRAND
909H2	FIBER OPTIC CABLE IN CONDUIT OR CABLE DUCT, 12 STRAND
909H3	FIBER OPTIC CABLE IN CONDUIT OR CABLE DUCT, 24 STRAND
909H4	FIBER OPTIC CABLE IN CONDUIT OR CABLE DUCT, 36 STRAND
910C1A	CAST IRON JUNCTION BOX (24"x12"x8")
910C1B	CAST IRON JUNCTION BOX (12"x8"x6")
910C3A	STEEL JUNCTION BOX (24"x12"x12")
910C3B	STEEL JUNCTION BOX (20x12"x8")"

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 901 – TRENCH AND BACKFILL (ELECTRICAL)

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

901.3.2 - Trench and Backfill in Unpaved Terrain

901.3.3 - Trench and Backfill under Pavement

Replace the last paragraph in each of these subsections with the following:

"If rock, boulders, logs, concrete or masonry foundations are encountered during this operation, work shall continue through such obstructions by any available and approved means. Should the equipment being used for this operation be unable to remove the obstruction, the Contractor shall notify the Engineer and upon concurrence of the Engineer, provide special equipment (e.g., special augers, tooling, core barrels or rock augers) necessary to remove the obstruction. The use of special equipment will be considered to be Contract Specified Extra Work as defined in Subsection 1501.1."

901.5 – MEASUREMENT

Add the following paragraph to this subsection.

"TRENCH AND BACKFILL (ELECTRICAL) will not be measured for payment where conduit is pushed. Where separate circuit runs are placed in a common trench, only one run will be measured for payment along the centerline of the parallel portion."

901.6 - PAYMENT

Replace the last paragraph of this subsection with the following:

"Payment for special equipment required for the removal of obstructions, as described in Subsections 901.3.2 and 901.3.3 will be made in accordance with Subsection 109.4 under Item 1501."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 902 – LIGHT POLE FOUNDATIONS

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

902.3.1 - Steel Helix Foundation - Roadway

Revise the first paragraph of this subsection to read:

"Steel helix foundations shall be fabricated as shown on the Standard Drawings, and shall be either 7 feet or 10 feet in length. Ten-foot helix foundations are required when the ground slope is steeper than 3:1. Steel helix foundations shall be used only for roadway lighting applications, and shall be installed in a manner acceptable to the Engineer and to depths indicated on the Plans and/or Standard Drawings."

902.3.2 - Concrete Foundation - Roadway

Replace the second paragraph of this subsection with the following:

"If rock, boulders, logs, concrete or masonry foundations are encountered during this operation, work shall continue through such obstructions by any available and approved means. Should the equipment being used for this operation be unable to remove the obstruction, the Contractor shall notify the Engineer and upon concurrence of the Engineer, provide special equipment (e.g., special augers, tooling, core barrels or rock augers) necessary to remove the obstruction. The use of special equipment will be considered to be Contract Specified Extra Work as defined in Subsection 1501.1."

902.4 - PAYMENT

Replace the third paragraph of this subsection with the following:

"Payment for special equipment required for the removal of obstructions, as described in Subsection 902.3.2 will be made in accordance with Subsection 109.4 under Item 1501."

Illinois State Toll Highway Authority

**SUPPLEMENTAL SPECIFICATION
FOR
SECTION 907 – CABLE DUCT**

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

907.1 - DESCRIPTION

Revise the second paragraph of this subsection to read:

"The cable duct and conductors shall be factory or field assembled units conforming to the requirements in the Plans as to duct size, number, type and size of conductors. Cable duct for fiber optic cables, as well as cables larger than No. 2 size, shall be installed empty. Fiber optic cables and cables larger than No. 2 size shall be installed in accordance with the requirements in Section 909."

Add the following pay item numbers, designations and units of measure at the end of this section:

<u>PAY ITEM MEASURE</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"907A9	CABLE DUCT IN TRENCH, 2 INCH	L.F.
907A10	CABLE DUCT IN TRENCH, 3 INCH	L.F.
907B9	CABLE DUCT, PLOWED IN, 2 INCH	L.F.
907B10	CABLE DUCT, PLOWED IN, 3 INCH	L.F.
907C9	CABLE DUCT, PULLED IN CASING, 2 INCH	L.F.
907C10	CABLE DUCT, PULLED IN CASING, 3 INCH	L.F."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 909 – WIRE AND CABLE

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

909.2 - MATERIALS

Replace the second through fifth paragraphs of this subsection with the following:

"Fiber optic cable shall be multimode loose tube all-dielectric cable with a dry water-blocking agent. The individual fibers shall be 62.5/125 micron. The maximum attenuation shall be 3.5 db/km @ 850 nm and 1.0 db/km @ 1300 nm.

Fiber optic cable shall be ALTOS All-Dielectric Cables®, as manufactured by Corning Cable Systems, or approved equal. The following list the typical number of strands and the respective ALTOS Part Numbers, for the Contractor's reference.

No. of Strands	Part Number
6	6KW4-14150A20
12	12KW4-14150A20
24	24KW4-14150A20
36	36KW4-14150A20
48	48KW4-14150A20"

909.3.1 - Insulated Wire and Cable

Revise the last paragraph of this subsection to read:

"All wire and cable shall be tested during and after installation in accordance with the procedures specified in Section 918."

909.5 - MEASUREMENT

Revise the third paragraph of this subsection to read:

"Size No. 2 and smaller cable assemblies installed in cable duct will not be measured for payment under the pay items in this Section, but will be included in the measurements for the respective pay items under Section 907."

909.6 - PAYMENT

Revise the third paragraph of this subsection to read:

"No separate payment will be made for wire installed in cable duct, when the cable assembly wire is No. 2 or smaller. Payment will considered included in the Contract unit price for the respective pay items under Section 907."

Revise the designations of Pay Item Nos. 909H1 through 909H4, and add the following pay item numbers, designations and units of measure at the end of this section:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"909H1	FIBER OPTIC CABLE IN CONDUIT OR CABLE DUCT, 6 STRAND	L.F.
909H2	FIBER OPTIC CABLE IN CONDUIT OR CABLE DUCT, 12 STRAND	L.F.
909H3	FIBER OPTIC CABLE IN CONDUIT OR CABLE DUCT, 24 STRAND	L.F.
909H4	FIBER OPTIC CABLE IN CONDUIT OR CABLE DUCT, 36 STRAND	L.F.
909H5	FIBER OPTIC CABLE IN CONDUIT OR CABLE DUCT, 48 STRAND	L.F.
909H6	FIBER OPTIC CABLE IN CONDUIT OR CABLE DUCT*	L.F."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 910 – JUNCTION BOXES, PULL BOXES AND WIREWAYS

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

910.2 - MATERIALS

Add the following to this subsection:

"Embedded Metal Boxes	1143.3
Aggregate for French Drain.....	1107.6"

910.3.1 - Concrete Junction Boxes

Replace the second paragraph of this subsection with the following:

"A french drain, conforming to the dimensions shown in Contract Documents or Standard Drawings, shall be constructed below the constructed below the bottom of the box, including a Schedule 80 P.V.C. plastic pipe as indicated, which shall either be connected to an Authority-owned drainage structure or day-lighted in the right-of-way. The P.V.C. pipe may be omitted at the discretion of the Engineer."

910.3.3 - Metal Junction Boxes, Pull Boxes, and Wireways

Replace this subsection with the following:

"Metal junction boxes, pull boxes, and wireways shall be fabricated of cast iron, cast aluminum, stainless steel or sheet steel, and shall be finished as specified elsewhere in the Standard Specifications, or as noted in the Contract Documents.

Metal junction boxes, pull boxes and wireways shall be supported plumb and level at least 1/4 inch from the structure surfaces by the use of approved spacers. Field drilled and tapped conduit entrances shall be carefully and accurately made. Exposed threads of conduit terminations shall be painted with an approved rust-inhibiting paint.

Stainless steel junction/pull boxes shall be classified as one of the following:

- Type "A" (20"x12"x8") Embedded in a concrete median wall.
- Type "B" (20"x12"x7") Embedded in a concrete parapet wall.

Either type shall be installed flush with the exterior surface of the concrete as shown in the Contract Documents. Conduit openings shall be provided as required in the Contract Documents."

Revise the designations of the following pay item numbers. There is no revision to the respective unit of measure.

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"910C1A	CAST IRON JUNCTION BOX (24"x12"x8")	EACH
910C1B	CAST IRON JUNCTION BOX (12"x8"x6")	EACH
910C3A	STEEL JUNCTION BOX (24"x12"x12")	EACH
910C3B	STEEL JUNCTION BOX (20"x12"x8")	EACH"

Add the following pay item numbers, designations and units of measure at the end of this section:

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
"910C2A	STAINLESS STEEL JUNCTION BOX TYPE "A"	EACH
910C2B	STAINLESS STEEL JUNCTION BOX TYPE "B"	EACH
910C2C	STAINLESS STEEL JUNCTION BOX *	EACH
910C2D	STAINLESS STEEL JUNCTION BOX *	EACH"

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1001 – MAINTENANCE OF TRAFFIC

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

1001.1.2 - Penalties

(c) Failure to Repair Temporary Inertial Crash Cushions

Revise the second sentence of the second paragraph of this subsection to read:

"Failure to comply with this requirement shall be grounds for a daily penalty of \$200 per crash cushion module, for each day or portion thereof (after the initial 24 hour period) that the directed restoration remains incomplete, to be deducted from the next pay estimate due the Contractor."

1001.3 - DEVICES

Insert the following:

"All devices and combination of devices required to maintain traffic during construction shall meet the requirements of the National Cooperative Highway Research Program (NCHRP) Report 350 for their respective categories. The categories are as follows:

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, flexible delineators and plastic drums with no attachments. Category 1 devices shall be crash tested and accepted or may be self-certified by the manufacturer.

Category 2 includes devices that are not expected to produce significant velocity change but may otherwise be hazardous. These include drums and vertical panels with lights, barricades (all types) and portable sign supports. Category 2 devices shall be crash tested and accepted for Test Level 3.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions, truck mounted attenuators and other devices not meeting the definitions of Category 1 or 2. Category 3 devices shall be crash tested and accepted for Test Level 3.

Category 4 includes portable or trailer-mounted devices such as arrow boards, portable changeable message signs, temporary traffic signals and area lighting supports. Currently, there is no implementation date set for this category and it is exempt from the NCHRP 350 compliance requirement.

The Contractor shall provide a manufacturer's self-certification letter for each Category 1 device, and an FHWA acceptance letter for each Category 2 and Category 3 device used on the Contract. The letters shall state the device meets the NCHRP 350 requirements for its respective category and test level, and shall include a detail drawing of the device."

1001.3.1 – Barricades

Replace the second paragraph of this subsection with the following:

"Type I and II barricades shall be 24 inches wide and 36 inches high excluding any warning lights. Type I barricades shall have one rail 8-12 inches high, with Type A sheeting having minimum 4-inch diagonal stripes alternating white with orange. Type II barricades shall be Type I with the addition of a lower reflective-stripped rail.

"Vertical panel barricades shall be frame and rail supported similar to Type I and II barricades constructed of high-density polyethylene plastic, with a overall height (pavement to top of warning light) of 48 inches and a minimum width of 21 inches measured at the base. The panel shall be 12 inches wide, 36 inches high and shall have Type A sheeting with minimum 64-inch wide diagonal stripes alternating white with orange. The Contractor shall provide certification the vertical panel barricades are NCHRP 350 compliant.

Direction indicator barricades shall comply with the requirements for Type II barricades except as follows. The top panel shall have Type AA or AP fluorescent orange sheeting, with a black indicator arrow 21 inches long with a 9.5-inch wide arrow barb and a 3.5-inch wide arrow shaft. The bottom panel shall be 8 inches by 24 inches with orange and white diagonal Type A sheeting."

1001.3.2 - Cones

Delete the last sentence of the first paragraph of this subsection.

1001.3.3 - Plastic Drums

Replace the second paragraph of this subsection with the following:

"Reflectorized sheeting shall meet the minimum brightness values for either Type AA or Type AP, in accordance with Subsection 1133.1.

Delete the last sentence of the third paragraph of this subsection.

1001.3.4 - Signs

Revise the sixth paragraph of this subsection to read as follows:

"All temporary sign supports shall be furnished and maintained by the Contractor. When the work operations exceed four days, all signs shall be post-mounted unless the signs are located on the pavement or define a moving or intermittent operation. When approved by the Engineer, a temporary sign stand may be used to support a sign at five feet when posts are impractical. All sign supports shall meet Category 2 requirements, per Subsection 1001.3. Sandbags shall be used as needed to provide stability for sign supports located on the pavement."

1001.3.7 - Flagging Equipment

Replace this subsection with the following:

"Whenever a flagger is required to be assigned to traffic control, the flagger(s) shall be clothed predominantly in orange color and be wearing a vest of fluorescent orange, fluorescent orange with strong yellow/green stripes or strong yellow/green with fluorescent orange stripes. Each flagger shall have a staff-mounted sign. The sign shall have a "SLOW" face consisting of black letters and border on a fluorescent orange retroreflectorized background. Areas outside the sign borders shall be light blue or black. The portion of the staff within the sign face shall match the sign colors. All colors and letters shall meet applicable federal standards. If the flagger has a dual-faced (STOP/SLOW) sign, the "STOP" face shall be covered to the satisfaction of the Engineer.

If the flagger is required during nighttime operations, the flagger shall be clothed in a full-body retro-reflective suit and orange hat. At night, the flagger(s) station shall be illuminated."

1001.5 - CONSTRUCTION SEQUENCES AND TRAFFIC STAGING

Add the following paragraph to the end of this subsection:

"Where existing pavement markings and raised pavement lane markers conflict with temporary markings as shown on the Plans, the existing markings will be removed or covered in accordance with Section 803. Existing raised pavement lane markers, either within the pavement or bridge deck surface, which conflict with temporary pavement markings but are not required to be removed, will be addressed

by removing the prismatic reflectors and leaving the castings in place. The removal of the reflectors will be included in the Contract lump sum price for Maintenance of Traffic. REPLACEMENT REFLECTORS will be paid for under Sections 805 and 805A."

1001.6.1 - General Requirements

Add the following to the end of the first paragraph of this subsection:

"The Engineer will utilize the current edition of *"Quality Standard for Work Zone Traffic Control Devices*, issued by either the American Traffic Safety Services Association or the Illinois Department of Transportation, in determining the condition of the traffic control devices being used in the Contract."

1001.6.2 – Placement of Barricades

Insert the following prior to the last paragraph of this subsection:

"Vertical panel barricades may be used in lieu of Type II barricades, except as herein noted. Vertical panel barricades shall not be used in areas of lane shifts, tapers, and exit ramp gore conditions, as well as in any traffic split gore conditions, as detailed in the Contract Plans. Vertical panel barricades shall not be used as patching barricades, per Subsection 413.4.1.

Direction indicator barricades shall only be used in lane closure tapers. They shall be used only when traffic is being merged with an adjacent through lane(s) or shifted onto a median crossover. The barricades shall be placed in series in the taper with the arrow panel directing traffic from the closed lane into the adjacent lane(s) or crossover.

Plastic drums shall be used at temporary exit gores, and at other locations shown on the Plans. Additionally, plastic drums may be used in lieu of Type II barricades to assist in shifting traffic from the standard cross-section to a shifted alignment utilizing shoulder pavement and/or a median crossover. Plastic drums shall not be used when traffic is being merged (i.e., a lane closure taper). The drums shall begin and end 500 feet either end of the actual shift. The spacing of the drums shall be per the Plans and applicable Standard details.

When long-term lane closures or lane shifts are placed by the Contractor, a check (Type II) barricade shall be placed in the middle of each lane or shoulder closed within the work zone at 1000-foot centers. When space allows, the adjacent inside and/or outside shoulders which are not being used as a traveled lane in a construction zone shall also have a check barricade placed at 1000-foot centers."

1001.6.4 - Construction Traffic Signs

Add the following to the end of the first paragraph of this subsection:

"Longitudinal dimensions shown on the Plans for the placement of signs may be increased or decreased up to 100 feet to avoid existing facilities or to improve sight distance, when approved by the Engineer."

1001.15 - MEASUREMENT AND PAYMENT

Insert the following in the first paragraph of this subsection:

"...., removal of prismatic reflectors in existing raised pavement lane markers which are to remain but conflict with temporary pavement markings,....."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1004 – TEMPORARY INERTIAL CRASH CUSHION MODULES

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

1004.2 - MATERIALS

Add the following to the end of this subsection:

"Fine aggregate shall be Class A quality. Unbagged sand containing not more than 5 percent moisture shall be used for filling modules."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1107 – COARSE AGGREGATE

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Replace Subsection 1107.6 in its entirety with the following:

"1107.6 - AGGREGATE FOR DITCH LINING AND FRENCH DRAINS

Aggregate for ditch lining and for french drains shall be washed gravel or crushed stone of "D" quality or better.

Gradation for ditch lining aggregate shall be either CA-1, CA-3 or CA-5, unless otherwise shown in the Contract Documents. Gradation for french drain aggregate shall be either CA-5 or CA-7, unless otherwise shown in the Contract Documents."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1112 – STEEL AND IRON PRODUCTS (EXCEPT ANCHOR BOLTS)

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

1112.20.5 - Epoxy Coating of Reinforcing Steel

Revise the last sentence of the sixth paragraph of this subsection to read:
"Patching of these holidays is not required."

1112.23.1 - Rail Elements, Bolts and Nuts

Revise the first three paragraphs of this subsection to read:

"Unless otherwise noted on the Plans, guardrail beams shall be corrugated sheet metal conforming to the requirements of AASHTO M 180, Type 1, Class A.

The bolts, nuts and washers for connections shall be of the design shown in the Plans, and shall be carbon steel conforming to the requirements of ASTM A 307, Grade A. Per this requirement, the head and one end of the stud of each bolt shall be marked to identify the manufacturer and the marking '307A'.

Bolts and nuts shall either be hot-dip galvanized in accordance with AASHTO M 232 (ASTM A 153), Class C, or mechanically galvanized in accordance with AASHTO M 298 (ASTM B 695), Class 50, Type 1. Washers shall be hot-dip galvanized in accordance with AASHTO M 232 (ASTM M 153)."

1112.23.3 - Posts, Plates and End Sections

Revise this subsection to read:

"Steel guardrail posts shall conform to the requirements of ASTM A 709 (AASHTO M 270) Grade 36, with a maximum tensile strength of 80,000 psi, and shall be galvanized in accordance with ASTM A 123 (AASHTO M 111). Holes shall be punched or drilled in the posts prior to galvanization.

Anchor plates, splice plates, end sections and return end sections for guardrail installations shall conform to the requirements of AASHTO M 180, Type 1, Class A."

1112.24 - STEEL POSTS FOR DELINEATORS

Revise the third paragraph of this subsection to read:

"The posts shall be hot-dip galvanized in accordance with ASTM A 123 (AASHTO M 111), Grade 85 (minimum thickness of 2 ounces per square foot). Delineator mounting holes in the posts shall be punched or drilled prior to galvanization."

Illinois State Toll Highway Authority

**SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1113 – FENCING**

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Replace Subsection 1113.2 with the following:

"1113.2 - TEMPORARY FENCE - PLASTIC

Temporary plastic fence shall consist of a high-density polyethylene mesh fabric and shall be fully stabilized for ultraviolet resistance (minimum 2-year rating). The fabric, 48 inches high, shall weigh a minimum 13.5 pounds per 100-foot in length, with an ultimate tensile strength of 2600 psi and a maximum elongation at break of 50 percent."

1113.5.1 - Temporary Fencing

Replace the first sentence in this subsection with the following:

"Posts for temporary plastic fence shall be either wood or steel; posts for temporary wire fabric fence shall be steel. Wood posts for temporary fencing shall be 1-1/4 inches square and shall be generally free of warping."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1114 – NON-METALLIC FILTERING AND SOIL STABILIZING MATERIALS

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

1114.7 - EROSION AND SEDIMENT CONTROL GEOTEXTILES

Revise the last paragraph of this subsection to read:

"Class D - Geoweb cellular confinement system shall be a flexible web system such as Presto Products Companies GEOWEB® GW30V80834P, or approved equal."

Add the following to the end of this section:

"1114.9 - FLOTATION BOOM

Flotation boom system shall be a flexible fabric silt curtain system such as Cape Canaveral Marine Services Turbidity Barrier, or approved equal.

1114.10 - FILTER FABRIC INLET PROTECTION

Inlet Basket and Fabric Insert - Device shall be a basket and fabric insert system such as Mar-Mac Construction Products Company, Inc. Catch-All Inlet Protector, or approved equal.

Fabric Insert - Device shall be a fabric insert such as Emerald Seed & Supply Stream Savers Catch Basin Insert, or approved equal.

Inlet Dam - Device shall be a fabric sleeve and dam such as Dandy Products Inc. Beaver Dam, or approved equal.

1114.11- ROLLED EXCELSIOR LOG

Rolled excelsior log shall consist of an outside open weave containment fabric filled curled excelsior fibers. Product shall be Curlex Sediment Log®, as manufactured by American Excelsior Company , or approved equal."

Illinois State Toll Highway Authority

**SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1121 – GRASS SEEDS**

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

TABLE 11-11 PLANT SEED REQUIREMENTS
Revise the requirements for Brome Grass (2nd line) to read:

Variety of Seeds	Hard Seed Percent Maximum	Purity Percent Minimum	Pure Live Seed Percent Minimum	Weed Percent Maximum	Secondary Noxious Weeds Number per Ounce Maximum Permitted*	Remarks
Brome Grass	----	75	68	2.00	5	----

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1125 – MULCH MATERIAL

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

1125.5 – EROSION BLANKET, TYPE III

Replace this subsection in its entirety with the following:

"Erosion Blanket Type III shall be a long-term turf reinforcement mat (TRM) designed for permanent hydraulic applications where discharges exert velocities and shear stresses that exceed limits of mature natural vegetation.

The TRM shall consist of 100 percent machine produced coconut fiber matrix, incorporated into a non-degradable three-dimensional netting structure. The coconut fiber matrix shall be evenly distributed across the entire mat and stitch bonded between a heavy UV stabilized bottom net, with 0.50 by 0.50 inch openings, a super heavy UV stabilized crimped corrugated middle netting with 0.50 by 0.50 inch openings, and a heavy UV stabilized top net with 0.50 by 0.50 inch openings. The corrugated netting shall form prominent closely spaced ridges across the entire width of the mat to provide sufficient thickness, strength and void space to permit soil filling and retention for the development of vegetation root systems. The three nettings shall be stitched together on 1.50 inch centers with UV stabilized polypropylene thread to form a permanent three-dimensional structure. All mats shall be manufactured with thread stitched along both outer edges, approximately 2 to 5 inches, as an overlap guide for adjacent mats.

The turf reinforcement mat shall be supplied in a protected rolled mat and comply with the following specifications:

Minimum Width	=	6.5 feet
Minimum length	=	55 feet
Dry weight per sq. yd.	=	0.8 to 1.1 pounds (top-net, approx. 8.0 pounds /1000 square feet) (mid-net, approx. 24 pounds / 1000 square feet) (coconut fiber matrix, approx. 55 pounds / 1000 square feet) (bottom-net, approx. 8.0 pounds / 1000 square feet)

The turf reinforcement mat shall be smolder resistant and shall not flame or smolder for more than a distance of 12 inches from a spot where a lighted cigarette is placed on the surface of the mat.

The manufacturer shall furnish a notarized certification with each shipment of turf reinforcement mat stating the number of rolls furnished and that the material complies with these requirements.

Staples shall be made from No. 11 gauge or heavier uncoated black carbon steel wire of sufficient stiffness for soil penetration. They shall be "T" or "U" shaped with pointed ends, from 1 to 2 inches wide at the top and an overall length of 6 inches from top to bottom."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1133 – REFLECTIVE SHEETING AND DELINEATOR REFLECTORS

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

1133.1 - REFLECTIVE SHEETING

Sheeting Properties:

Insert the following between the first and second sentences of the first paragraph of this Subsection:
 "Type AA and AP sheeting shall consist of a flexible colored, cube corner prismatic reflective material having a smooth outer surface."

A. Adhesive

Revise this requirement to read:

"The sheeting shall have a protective liner and either a pre-coated pressure sensitive adhesive (Type I), a tack-free heat-activated adhesive (Type II) or a positionable pressure sensitive adhesive (Type III), each of which shall be capable of being applied without additional adhesive coats on the reflective sheeting or application surface."

Table 1 / Minimum Coefficient of Retroreflection

Add the following at the beginning of this table:

Color	Type AA			
	(0 and 90 degree Rotation Angles)		(45 degree Rotation Angle)	
	Observation Angle 0.2°		Observation Angle 0.5°	
	Entrance Angle		Entrance Angle	
	-4°	+30°	-4°	+30°
White	800.0	400.0	200.0	100.0
Yellow	660.0	340.0	160.0	85.0
Orange*	200.0	120.0	80.0	50.0
Red	215.0	100.0	45.0	26.0
Green	75.0	30.0	18.0	10.0
Blue	43.0	20.0	9.8	5.0
Brown	N/A	N/A	N/A	N/A
Yellow	550.0	130.0	145.0	70.0
Orange*	165.0	45.0	70.0	40.0

* Fluorescent Orange

Color	Type AP			
	Observation Angle 0.2°		Observation Angle 0.5°	
	Entrance Angle		Entrance Angle	
	-4°	+30°	-4°	+30°
White	250.0	80.0	135.0	55.0
Yellow	170.0	54.0	100.0	37.0
Orange*	105.0	30.0	60.0	22.0
Red	35.0	9.0	17.0	6.5
Green	35.0	9.0	17.0	6.5
Blue	20.0	5.0	10.0	3.5
Brown	7.0	2.0	4.0	1.4

* Fluorescent Orange

For **Type A, BB and B** sheeting, revise the headings "Divergence Angle" to "Observation Angle" and "Incidence Angle" to "Entrance Angle".

D. Gloss

Revise this requirement to read:

"The sheeting surface shall exhibit an 85° gloss-meter rating of not less than 50 for Types A, AA, AP and BB, and 40 for Type B, when tested in accordance with ASTM D 523."

E. Durability

Revise the last sentence and corresponding table in this requirement to read:

"The cycle used shall consist of 8 hours at 140°F followed by 4 hours of condensation at 104°F.

Material	Exposure	Minimum Brightness
Types A, AA and AP	*1,000 hours	80% Table 1
Type BB	*1,000 hours	65% Table 1
Type B	500 hours	50% Table 1

*Orange Types A and BB, and Fluorescent Orange Types AA and AP, shall have an exposure time of 300 hours."

G. Flexibility

Revise the first paragraph of this requirement to read:

"Type A, AA and AP sheeting, with the liner removed and conditioned for 24 hours at 72° ± 5°F and 50 percent ± 5 percent relative humidity, shall be sufficiently flexible to show no cracking when bent, in one second's time, around a 1/8 inch mandrel with adhesive (coated with talcum powder to prevent sticking) contacting the mandrel."

K. Thickness

Revise this requirement to read:

"The thickness of the sheeting without protective liner shall not be more than 0.015 inch for Type A, BB and B, and not more than 0.025 inch for Type AA and AP."

N. Identification

Revise the first sentence of this requirement to read:

"Type A, AA, AP and BB sheeting shall have a permanent identifying symbol (watermark) unique to the individual manufacturer incorporated into the sheeting and shall be visible to the naked eye within three (3) feet without the use of special devices."

Add the following to the end of this requirement:

"If material orientation is required for optimum retroreflectivity, permanent marks indicating direction of orientation shall be incorporated into the face of the sheeting and shall be readily visible to the sign fabricator."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1134 – RAISED PAVEMENT LANE MARKERS

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

1134.2 - REFLECTORS

Revise units shown for the table "**Minimum Specific Intensity**" to read:
"(candelas/footcandle)".

1134.3 - TEMPORARY RAISED PAVEMENT LANE MARKERS

Revise units shown for the table "**Minimum Specific Intensity**" to read:
"(candelas/footcandle)".

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1134A – RAISED PAVEMENT LANE MARKERS, BRIDGE

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

1134.2 - REFLECTORS

Revise the table at the end of this subsection to read:

**"Minimum Specific Intensity
(candelas/footcandle)**

Color	Incidence Angle	
	0°	20°
Crystal	3.0	1.2
Amber	1.8	0.7

The marker color(s) shall be as specified in the Contract Documents."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1137 – NONMETALLIC DRAINAGE PIPE

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Add the following subsection:

"1137.3 - SUBSURFACE PANEL DRAIN

The subsurface panel drain shall consist of a hollow, rectangular mat composed of a fully-enclosed high density polyethylene (HDPE) core, integrally wrapped with a geotextile filter fabric envelope. The geotextile filter fabric shall not provide any structural function, but serve only as a filter medium. Nominal dimensions of the panel drain shall be 12 or 18 inches high by 1 inch wide. When oriented vertically, the panel drain material shall not exhibit any tendency to bend over or fold under pressure.

The HDPE core shall be fabricated of polyethylene with a minimum cell classification of PE 324420C, in accordance with ASTM D 3350. The compressive strength of the core shall be a minimum of 4,200 pounds per square foot at a compressed deflection of 20 percent, when tested between parallel plates in accordance with ASTM D 695, with the modification of 1/4 inch thick rubber cushions having standard hardness of 80 Shore A Durometer above and below the specimen.

The geotextile filter fabric envelope shall consist of a non-woven, needle-punched, polypropylene geotextile fabric, having a nominal weight of 4 ounces per square yard. The geotextile fabric shall be ADS 4420, Amoco 4545, or approved equal. The geotextile fabric envelope shall not be glued or permanently fastened to the HDPE core, but shall form a snug-fitting envelope completely surrounding the HDPE core.

The subsurface panel drain shall be furnished with HDPE fittings manufactured by the same company as the panel drain. The fittings shall be designed to directly connect to the corrugated polyethylene outlet pipe. The corrugated polyethylene outlet pipe shall be of the dimensions shown in the Contract Documents, and shall meet the minimum requirements of AASHTO M252, Type S."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1143 – JUNCTION BOXES, PULL BOXES AND WIREWAYS
Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Add the following subsection:

"1143.3 - EMBEDDED METAL BOXES

Embedded stainless steel junction boxes and pull boxes, complete with screw-on covers and gaskets, shall be provided in accordance with the Plan details.

Stainless steel junction/pull boxes shall be constructed of No. 10 gauge Type 304 stainless steel, per ASTM A 240. Covers shall be No. 10 stainless steel with neoprene gaskets and captive stainless steel cover screws. A 4-inch high "R" shall be etched onto the exterior of the cover plate."

Illinois State Toll Highway Authority

**SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1147 – GROUND RODS**

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Replace the requirements in Section 1147 with the following:

"Ground rods shall be copper-clad steel with a minimum copper thickness of 10 mils and UL listed 467. Ground rods shall be one piece, sectional (threaded) steel rods not less than 3/4 inch diameter and 15 feet in length."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1156 – INERTIAL CRASH CUSHIONS

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Replace the requirements in Section 1156 with the following:

"Inertial crash cushions shall be free-standing of the self-purging sand module type. The modules, when assembled in the proper array and filled with sand in the nominal amounts shall meet the NCHRP 350 requirements for Test Level 3 crashworthiness, and the manufacturer shall submit a copy of the FHWA acceptance letter, per Subsection 1001.3.

Each module shall be striped according to Subsection 1001.3.3 for drums. Reflective striping shall be applied prior to assembly of the module array."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1202 – BITUMINOUS EQUIPMENT

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Add the following subsection:

"1202.8 - MATERIAL TRANSFER DEVICE

The material transfer device shall have a minimum surge capacity of 15 tons, shall be self-propelled and capable of moving independent of the bituminous paver, and shall be equipped with the following features.

- The conveyor shall provide a positive restraint along the sides of the conveyor to prevent material spillage.
- The paver hopper insert shall have a minimum capacity of 14 tons.
- The re-mixing mechanism shall consist of a segmented, anti-segregation, re-mixing auger located in the receiving hopper storage system of the material transfer vehicle, or two full-length longitudinal paddle mixer / agitator units designed for the purpose of re-mixing the bituminous material. The longitudinal paddle mixer / agitator units shall be located in the paver hopper insert."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1203 – PORTLAND CEMENT CONCRETE EQUIPMENT

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

1203.10 - CONCRETE SPREADER/PLACER FOR SIDE FORM PAVING

Revise the second sentence in the last paragraph of this subsection to read:

"The vibrating frequency of the internal type shall be 7000 ± 2000 vibrations per minute (VPM)."

Add the following to the end of this subsection:

"A vibrating reed tachometer, hand type, shall be provided with each paver. The vibrating reed tachometer shall have a range from at least 4000 to 10000 VPM.

For contracts with a minimum Plan Quantity of 10000 square yards of PCC Pavement that is twelve (12) feet wide or more, an electronic internal vibrator monitoring device shall be provided. The device shall be capable of displaying the operating frequency of each internal vibrator, and shall be visible to the paving operator. The vibrator monitoring device shall have a range from at least 4000 to 10000 VPM."

Illinois State Toll Highway Authority
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1501 – CONTRACT SPECIFIED EXTRA WORK ITEMS

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

1501.1 – DESCRIPTION OF CONTINGENT ITEMS

Replace Item No. 3 in this subsection with the following:

"3. Replacement or realignment of Contractor-furnished moveable concrete barrier, damaged through no fault of the Contractor (Subsection 709.3)."

Replace Item No.5 in this subsection with the following:

"5. Special equipment required for the removal of obstructions encountered as part of the following work:

- Drilling caisson shafts (Subsection 542.3)
- Pipes installed by jacking (Subsection 606.3.3)
- Drilled shaft foundations for cantilever type signs (Subsection 811.4.3)
- Drilled shaft foundations for ground mounted sign supports (Subsection 812.3.2)
- Trenching for electrical work (Subsections 901.3.2 and 901.3.3)
- Drilled shaft foundations for light poles (Subsection 902.3.2)."

Add the following to the end of this subsection:

"8. Additional items as included in the Special Provisions."

Illinois State Toll Highway Authority

**SUPPLEMENTAL SPECIFICATION
FOR
SECTION 1600 – MOBILIZATION**

Issued January 2003

This revision amends the provisions of the Illinois State Toll Highway Authority Standard Specifications – September 2000 and shall be construed to be a part thereof, superceding any conflicting provisions thereof applicable to the work under the Contract.

Replace the requirements in Section 1600 with the following:

"1600.1 – DESCRIPTION

"This item shall consist of preparatory work and operations necessary for the movement of personnel, equipment, supplies and incidentals to the Contract.

The amount which a Contractor will receive payment for, in accordance with Subsection 1600.2, will be limited to three (3) percent of the Original Contract Award Amount. Should the bid price for this item exceed three (3) percent of the Original Contract Award Amount, the portion in excess of three (3) percent will not be paid until ninety (90) percent of the Adjusted Contract Amount is earned.

It shall be understood that the terms Awarded Contract Amount and Adjusted Contract Amount, for this Item, are defined as the Original Contract Award Amount and Adjusted Contract Award Amount respectively, LESS the sum of any amounts earned for this Item plus any amounts allowed for materials in storage, per Subsection 109.6."

1600.2 - MEAUREMENT AND PAYMENT

"MOBILIZATION will be measured on a lump sum basis and payment will be made in accordance with the following schedule:

- a) With the first partial pay estimate, 75 percent of this pay item, but no more than 2.25 percent of the Awarded Contract Amount will be paid.
- b) When 10 percent or more of the Awarded Contract Amount is earned and submitted on a partial pay estimate, an additional 15 percent of the pay item, but no more than 0.45 percent of the Awarded Contract Amount, will be paid.
- c) When 90 percent of the Adjusted Contract Amount is earned and submitted on a partial pay estimate, the remaining 10 percent of this item, along with any portion of the bid price for this item which exceeds three (3) percent of the Awarded Contract Amount, will be paid.

<u>PAY ITEM NUMBER</u>	<u>DESIGNATION</u>	<u>UNIT OF MEASURE</u>
1600	MOBILIZATION	LUMP SUM