

SUPPLEMENTAL SPECIFICATIONS  
INDIANA DEPARTMENT OF TRANSPORTATION  
1999 STANDARD SPECIFICATIONS

March 1, 2004

REVISION TO 1999 STANDARD SPECIFICATIONS

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SECTION 101, LINE 15, DELETE AND INSERT AS FOLLOWS:

~~ABF ACBF~~      air-cooled blast furnace slag

SECTION 101, AFTER LINE 27, INSERT AS FOLLOWS:

*ATSSA*      *American Traffic Safety Service Association*

Section 101, AFTER LINE 36, INSERT AS FOLLOWS:

*CMD*      *concrete mix design*

SECTION 101, AFTER LINE 38, INSERT AS FOLLOWS:

*DMTE*      *District Materials and Tests Engineer*

SECTION 101, AFTER LINE 60, INSERT AS FOLLOWS:

*MAF*      *mixture adjustment factor*

SECTION 101, AFTER LINE 62, INSERT AS FOLLOWS:

*MSG*      *maximum specific gravity*

SECTION 101, AFTER LINE 65, INSERT AS FOLLOWS:

*NACE*      *National Association of Corrosion Engineers*

SECTION 101, AFTER LINE 71, INSERT AS FOLLOWS:

*PCC*      *portland cement concrete*  
*PCCP*      *portland cement concrete pavement*

SECTION 101, AFTER LINE 84, DELETE AND INSERT AS FOLLOWS:

*SSD*      *saturated surface dry*

SECTION 101, AFTER LINE 186, INSERT AS FOLLOWS:

***101.18.1 Embankment Foundation.*** *The existing materials upon which an embankment is to be constructed.*

SECTION 101, BEGIN LINE 371, DELETE AND INSERT AS FOLLOWS:

***101.56 Subgrade.*** ~~The top surface~~ *upper portion* of a roadbed upon which the pavement structure and shoulders are constructed.

SECTION 103, BEGIN LINE 112, DELETE AS FOLLOWS:

~~The procedure for completing the Affirmation Action Certification is set out in the Prequalification and Bidding Regulations.~~

SECTION 104, BEGIN LINE 137, DELETE AND INSERT AS FOLLOWS:

consideration. *Such submittal shall include the complete details of the alternate maintenance of traffic scheme including all traffic control devices to be incorporated.* If approved, the alternate plan shall not increase the cost of maintaining traffic to the Department. The portion of the roadway being used by public traffic shall be

kept in such condition that such traffic will be adequately accommodated. Drums in accordance with ~~801.10~~ *801.09* shall be placed at 60 m (200 ft) intervals where drop-offs of greater than 75 mm (3 in.) are adjacent to the shoulder until the aggregate or earth wedge is placed. Temporary approaches to businesses, parking lots, residences, garages, farms,

SECTION 104, LINE 213, DELETE AND INSERT AS FOLLOWS:

Drums in accordance with ~~801.10~~ *801.09* shall be placed at the side of the roadway at the patch locations. If an opened hole cannot be patched for two or more calendar days, a 150 mm

SECTION 105, LINE 238, INSERT AS FOLLOWS:

sections may be taken by the Department. *The re-establishment of the centerline control points shown on the plans, right-of-way points used for fence or markers, and section corners shall be performed by a land surveyor who is registered in the State or by people under the direct supervision of said land surveyor, per the requirements of IAC Title 865 of the State Board of Registration for Land Surveyors Statutes and Rules.*

SECTION 105, BEGIN LINE 246, INSERT AS FOLLOWS:

the elevation on the proper forms furnished by the Department. The forms shall be signed, sealed, and dated by a land surveyor *or engineer* who is registered in the State. *The work shall be performed in accordance with Part 3 of the Department's Design Manual.* Copies of the

SECTION 105, BEGIN LINE 258, DELETE AND INSERT AS FOLLOWS:

Field notes shall be kept in *hard covered bound* field note books in a clear, orderly, and neat manner consistent with standard engineering practices and in accordance with the Department's prescribed note book procedure, including titles, number, and indexes. Such note books shall *be furnished by the Contractor and shall* adequately document all survey information. Copies of field notes shall be furnished

SECTION 105, BEGIN LINE 282, DELETE AND INSERT AS FOLLOWS:

standard procedure for Department engineering personnel. All inspection, *and testing,* ~~and determining location of construction signs~~ will be performed by Department Personnel.

SECTION 105, BEGIN LINE 296, DELETE AND INSERT AS FOLLOWS:

accomplish the work shall be included in the cost of this work. A change in plans or scope of work which ~~results in a cost~~ *causes the Contractor's construction engineering cost* to increase or decrease ~~of~~ *by* \$500.00 or more per occurrence will be paid for or deducted from the original lump sum price bid *for construction engineering.* An amount of less than \$500.00 per occurrence will not be considered for price adjustments.

SECTION 105, AFTER LINE 459, INSERT AS FOLLOWS:

*The Contractor may be assessed damages for failure to maintain the required traffic control devices, except for construction warning lights, in accordance with 801.03. For each day, or portion thereof, during which a type of traffic control device is in non-compliance, damages will be assessed at a rate of \$40 for each day, per non-compliant unit within a device. If the pay unit for a traffic control device is per day, the damage assessment will equal twice the unit price.*

*Non-compliance caused by events beyond the control of the Contractor may not be assessed damages. Immediate repairs shall be made to protect the traveling public.*

*Assessment of damages for non-compliance of construction warning lights will be in accordance with 801.14.*

SECTION 105, DELETE LINES 499 THROUGH 779.

SECTION 105, AFTER LINE 780, INSERT AS FOLLOWS:

**105.17 Field Office.** *If a pay item for such is included in the contract, a field office, to be located as mutually agreed, shall be provided for the Department's exclusive use. If there is a building within the limits of the right-of-way that is suitable for a field office, is acceptable, and is scheduled to be removed under the terms of the contract, such building may be equipped and furnished as the field office. If the building is large enough to provide adequate space for a field laboratory, no additional payment will be allowed for a field laboratory as a separate pay item. A building within the right-of-way that is furnished under this specification shall be removed by the time all other pay items have been completed and prior to the date of the last work. Other facilities for the field office shall then be provided.*

*The field office shall be complete with all utility connections and equipment requirements in place by the start of work unless the Contractor notifies the Engineer in writing that this is not possible. If the Contractor is unable to provide the permanent field office prior to the start of the work, the Contractor and the Engineer shall agree on temporary field office arrangements including which furnishings are necessary, prior to the start of work. A temporary field office shall not be used for more than two months unless otherwise approved.*

*The office shall be of the type shown on the Schedule of Pay Items. The office shall have a solid level floor with no holes, weatherproof roof, be dust-proof, and wind-tight. It shall be provided with satisfactory lighting, heating, and air conditioning equipment. It shall be able to sustain a uniform temperature between 20°C and 26°C (68°F and 80°F).*

*The trailer shall be securely supported by adequate blocking. The blocking shall provide a foundation to prevent settlement.*

*Each trailer shall be furnished with steps meeting IOSHA/OSHA requirements at each doorway.*

*The building or trailer furnished for a field office shall be in accordance with all applicable state and local codes and applicable IOSHA/OSHA requirements. The field office shall also contain the following equipment and be in accordance with the following requirements.*

		Office Type		
		<i>A</i>	<i>B</i>	<i>C</i>
820	<i>Minimum Area</i>	<i>37 m<sup>2</sup> (400 sft)</i>	<i>51 m<sup>2</sup> (550 sft)</i>	<i>60 m<sup>2</sup> (650 sft)</i>
	<i>Pencil Sharpener</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
	<i>Broom/Dust Pan</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
	<i>Six-hook Coat Rack</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
	<i>Toilet Facilities</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
	<i>Drinking Water</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
	<i>Fire Extinguishers</i>	<i>1</i>	<i>2</i>	<i>2</i>
	<i>First Aid Kit</i>	<i>1</i>	<i>1</i>	<i>1</i>
	<i>Bloodborne Pathogen Kit</i>	<i>1</i>	<i>1</i>	<i>1</i>
	<i>Smoke Detector</i>	<i>1</i>	<i>1</i>	<i>2</i>
830	<i>CO Detector (if applicable)</i>	<i>1</i>	<i>1</i>	<i>1</i>
	<i>Doors</i>	<i>2</i>	<i>2</i>	<i>2</i>
	<i>Windows</i>	<i>6</i>	<i>8</i>	<i>8</i>
	<i>Lockable Storage Area</i>	<i>1</i>	<i>1</i>	<i>1</i>
	<i>Shelving</i>	<i>4.9 m (16 lft)</i>	<i>6.1 m (20 lft)</i>	<i>7.3 m (24 lft)</i>
	<i>Telephones</i>	<i>2</i>	<i>2</i>	<i>3</i>
	<i>Answering Machine/voice mail</i>	<i>1</i>	<i>1</i>	<i>1</i>
	<i>Telephone Lines</i>	<i>3</i>	<i>3</i>	<i>4</i>
	<i>File Drawers</i>	<i>4</i>	<i>8</i>	<i>12</i>
	<i>Desks</i>	<i>2</i>	<i>4</i>	<i>4</i>
840	<i>Office Folding Tables</i>	<i>1</i>	<i>2</i>	<i>2</i>
	<i>Chairs</i>	<i>4</i>	<i>8</i>	<i>12</i>
	<i>Drafting Tables</i>	<i>1</i>	<i>1</i>	<i>1</i>
	<i>Drafting Stools</i>	<i>1</i>	<i>1</i>	<i>1</i>
	<i>Trailer Tie-Down System</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
	<i>Electrical Outlets</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
	<i>Trash Disposal</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
	<i>Waste Paper Baskets</i>	<i>2</i>	<i>4</i>	<i>4</i>
	<i>Supplies</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
	<i>Calculators</i>	<i>1</i>	<i>2</i>	<i>2</i>
850	<i>Copier</i>	<i>1</i>	<i>1</i>	<i>1</i>
	<i>Fax Machine</i>	<i>1</i>	<i>1</i>	<i>1</i>
	<i>Computers</i>	<i>1</i>	<i>1</i>	<i>2</i>
	<i>Electrical Service</i>	<i>100 amp</i>	<i>100 amp</i>	<i>100 amp</i>
	<i>Parking Spaces</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
	<i>Microwave Oven/Refrigerator</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>

*The office and the equipment shall be furnished in a condition satisfactory to the Department. All mechanical and electrical equipment shall be maintained in good working condition.*

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*The minimum dimensions shall be 2.4 m (8 ft) wide, 2.1 m (7 ft) in height (from floor to ceiling), and have a floor area as specified in the Schedule of Pay Items. For a trailer, the calculation of minimum area will be based on the exterior box dimensions. The Contractor may request to furnish a field office with less than the specified area. If approved, a change order will be executed.*

*Hand-washing and toilet supplies shall be provided.*

870 *Potable drinking water with both hot and cold water capabilities shall be furnished. Drinking cups and paper towels shall be provided.*

*The fire extinguishers shall be a five-pound, Class ABC or higher rated and shall be maintained in a fully charged and operable condition. They shall be conspicuously located where they will be readily accessible and immediately available. They shall not be obstructed or obscured from view. They shall contain operating instructions and placed in such a manner that the extinguisher operating instructions face outward. Fire extinguishers shall meet all IOSHA/OSHA requirements.*

880 *The First Aid Kit shall meet the requirements of ANSI Z308.1-1978.*

*If the field office is heated with fossil fuel, a carbon monoxide detector, in working condition, shall be furnished.*

890 *There shall be at least two doors and the appropriate number of windows as previously listed, not including windows that are part of the doors, on office trailers. Each door shall have a satisfactory lock. When the trailer is locked, one door must always be able to be opened from inside the trailer. If a padlock is used to secure the door, it shall be a high security type which is invulnerable to bolt cutters, hacksaws, hammers, or prybars. The padlock shall be mounted in such a manner that locking and unlocking the door is determined to be fast and convenient. Installation of additional hardware to protect the lock or multiple padlocks on the door will not be permitted. However, additional hardware to receive this type lock will be acceptable. The Contractor shall furnish the number of office keys as directed. The Department will maintain a list of all personnel who are given keys.*

900 *The windows shall be hinged or sliding and have a minimum area of 0.45 m<sup>2</sup> (5 sft) each. Windows shall be provided with locks and satisfactory screens. All windows in the field office, including windows that are part of the doors, shall be covered. This covering may be shades, blinds, or other approved devices.*

*The office shall contain one lockable storage area suitable to store a nuclear gauge and shall have a minimum storage volume of 1.3 m<sup>3</sup> (48 cu ft).*

*The shelving shall have a minimum width of 250 mm (10 in.).*

*At least one telephone shall be a cordless phone having a frequency of at least 900 MHz.*

910        *The automatic telephone answering machine/voice mail shall be capable of providing both a minimum one minute outgoing message and 30 minute total recording time for incoming calls. It shall have a remote operation feature, which may be used from push-button telephones to retrieve, replay, erase, and save messages.*

*All filing cabinet drawers shall have a filing depth of 635 mm (25 in.). At a minimum, the files shall be fire resistant steel filing cabinets with a class D or higher classification established by UL or Safe Manufacturers National Association. All files shall have a lock. At least four drawers shall be fire proof.*

920        *The desktops shall be at least 1220 mm (48 in.) wide and 635 mm (25 in.) deep. All desks shall contain at least two drawers, one of which shall be provided with a lock.*

*Each folding table shall be a minimum size of 760 mm x 1520 mm (30 in. x 60 in.).*

*There shall be a height adjustable chair with castors for each desk. The remaining chairs may be stackable or folding chairs.*

930        *The drafting table shall contain a tilt top work table for drafting purposes. Dimensions shall be at least 760 mm x 1520 mm (30 in. x 60 in.). The drafting stool shall be proportional to each drafting table.*

*The office shall have a minimum of one electrical outlet for each work station (desks, drafting tables, computer stations, etc.)*

*The Contractor shall be responsible to provide a place or container for trash to be deposited for removal by the Contractor.*

940        *Supplies to be furnished shall include all items required for proper operation of the required equipment. This includes, but is not limited to, operating manuals and paper supplies.*

*Calculators shall be electric powered and have a printer with a minimum 12-digit capacity.*

*All field offices shall be equipped with a table top dry ink copier machine using plain paper and capable of making full size copies of 279 mm x 432 mm (11 in. x 17 in.) originals. The copier shall be capable of reducing and increasing copy sizes. The copier shall have a self-feeding tray and be capable of producing at least 12 copies per minute.*

950        *The FAX machine shall be kept in good working condition at all times. If the machine becomes inoperable, requires repair, or is stolen, it shall be repaired or replaced within three work days. The machine shall be provided with a telephone service line dedicated for its use. The machine shall be capable of the following:*

- a. *load a minimum of 10 pages of documents into an automatic document feeder,*
- b. *automatically dial a minimum of 25 preprogrammed FAX numbers,*
- c. *handle a document size of 216 mm (8.5 in.) in width and 279 mm (11 in.) in length,*
- d. *have the ability to page number,*
- e. *have a standard resolution of 200 x 100, and detail resolution of 200 x 200 (the numbers may vary by  $\pm 5$ ),*
- f. *have a transmission speed of 15 s at 9600 bps, on a 216 x 279 mm (8.5 x 11 in.) document with standard resolution,*
- g. *have automatic reception,*
- h. *have 16 shades of halftones,*
- i. *have a transmit terminal identification and shall automatically add transmit terminal identification to all documents,*
- j. *have the ability to produce reports as follows:*
  - (1) *error report,*
  - (2) *transaction confirmation report,*
  - (3) *transfer result report,*
  - (4) *transmission report, and*
  - (5) *program list*
- k. *have a transmit and receive counter, a clock, and a monitor speaker,*
- l. *be built in accordance with the international group standards CCITT G3, and*
- m. *be equipped with a handset.*

*The fully operational multimedia microcomputer system shall include a microcomputer, keyboard, color monitor, and printer. The computer equipment shall be placed on a separate computer work station.*

*The computer shall be in accordance with the requirements shown below.*

*1. Desktop System.*

- a. Microprocessor: Intel Pentium compatible, 166 MHz, or faster*
- b. 32 MB RAM, or larger*
- c. At least one 1.44 MB 3.5 in. diskette drive. If more than one diskette drive is furnished, the A: drive shall be 1.44 MB 3.5 in.*
- d. One fixed disk (hard drive), minimum 1.2 GB*
- e. 6X CD ROM drive, or faster*
- f. Multimedia sound system with amplified audio speakers*
- g. An SVGA display adapter, 1Mb video ram minimum*
- h. MPEG-1 full motion, full screen video*
- i. A minimum of one serial port*
- j. One parallel port*
- k. One mouse port with a 2-button mouse and mouse pad*
- l. A 101 key enhanced keyboard*
- m. A 56k V.34 fax/modem board. Port COM2 shall be designated*
- n. Operating system shall be Windows 95 or Windows 98*

*2. SVGA Display.*

- a. A 380 mm (15 in.) color display, or larger*
- b. Graphics 1024 x 768*
- c. Dot pitch 0.28 mm*
- d. Non-interlaced*
- e. A swivel stand*

*3. An inkjet printer shall be provided meeting or exceeding the following.*

- (1) HP compatible print codes*
- (2) Fully compatible with DOS programs. HP Deskjet 600 or 900 series. Other brand printers are acceptable if they are equal to the HP 600 or 900 series.*
- (3) If settings are required, the printer shall be set for letter quality, 10 pitch, IBM extended graphic character set (ASCII 128 thru 255).*
- (4) Parallel port interface and connecting cable supplied*

*4. Software.*

- a. Paradox, Ver. 4.5 for DOS*
- b. MS Excel for Windows 95 or newer*
- c. MS Word for Windows 95 or newer*
- d. McAfee antivirus software for Windows 95. This shall be the latest version and shall be fully installed, with Vshield option activated. The Department will provide periodic updates for the DT and associated files containing new virus names, etc. The Contractor may provide this service if it so desires.*



5. *Miscellaneous Requirements.*

- a. *Uninterruptible Power Supply (UPS) minimum 280VA/175W (15 minutes) with full time surge suppression and noise isolation, including RJ-11 connections for modem phone line surge protection. American Power Conversion (APC) model Back-UPS Pro 280 (APC part # BP280), or equivalent*
- b. *Glare screen for 380 mm (15 in.) monitor*
- c. *Printer stand for supplied printer*
- d. *Dust covers for all equipment*
- e. *Black ink cartridges and 8 1/2" x 11" sheet paper for inkjet printers shall be supplied and replenished as needed.*
- f. *A supplemental phone line in addition to the standard telephone line shall be installed and connected to the PC modem through the UPS surge protection described above. If a supplemental phone line is being installed to accommodate a FAX machine, this same line may be used for joint FAX and PC communications using a line splitter or other appropriate device.*

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*The requirements shown herein shall be considered as minimum requirements. Equipment or software which exceeds these requirements may be furnished, except where DOS or Windows is specified.*

*All manuals necessary for operation of the system shall be provided. These shall include manuals for microcomputer operations, DOS and Windows operating system, monitor operation, printer operation and code references, and all other manuals or documentation normally furnished with the equipment or software when purchased.*

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*The microcomputer system in the field office shall be installed, and maintained in good working order. If a portion of the system becomes defective, inoperative, damaged, or stolen, that portion shall be repaired or replaced within five business days, Mondays through Fridays, after the Contractor is notified of such situation.*

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*The Department will be utilizing the hardware and software specified herein to run Construction Management System software applications. These applications are known to run on IBM and fully IBM compatible equipment. If the Department experiences problems running these applications due to requirement compatibility, the Contractor shall, within five business days, Mondays through Fridays, replace and set up appropriate equipment to ensure compatibility to the satisfaction of the Department.*

*The office shall have 120/240 voltage service with the minimum specified service and breaker amperage.*

1100        *The office shall have a mutually agreed upon number of all-weather parking spaces. Such parking spaces shall be either paved or surfaced with type O compacted aggregate, size No. 53, or other acceptable materials.*

*The microwave oven shall have a minimum 1.0 cu ft capacity with a minimum 1100 watts and shall have digital controls.*

*The combination refrigerator/freezer shall have a minimum combined capacity of 12 cu ft.*

1110 **105.18 Method of Measurement.** *Field office will be measured by the month for the specified type. Partial months will be rounded up to the next half or whole month. The Department will provide two weeks advanced notice of when the office will be vacated.*

**105.19 Basis of Payment.** Field office will be paid for at the contract unit price per month, complete in place until released.

*Payment will be made under:*

1120	<i><b>Pay Item</b></i>	<i><b>Pay Unit Symbol</b></i>
	<i>Field Office, _____</i>	<i>MOS</i>
	<i>type</i>	

*The costs of all heating, electrical, telephone, and other miscellaneous utility bills shall be included in the cost of the field office.*

1130 *If a field office smaller than the specified type is approved, the change order unit price for the smaller field office will be equal to the contract unit price multiplied by the smaller floor area and divided by the specified floor area.*

*If a temporary field office is provided in accordance with 105.17, payment will be 65% of the unit price.*

*The cost of materials necessary for the all-weather parking surface shall be included in the cost of the field office.*

SECTION 106, BEGIN LINE 112, DELETE AND INSERT AS FOLLOWS:

If the Contractor elects to supply materials other than structural steel which require on-site sampling or testing as they are manufactured in out-of-state manufacturing plants located more than ~~160 km (100 mi)~~ *100 km (60 mi)* outside a State line, the Contractor shall provide the sampling or testing services required. No additional payment will be made for

SECTION 106, BEGIN LINE 119, DELETE AS FOLLOWS:

The standards for materials and methods of tests of AASHTO and ASTM or other specification referred to herein or elsewhere shall be the standard, interim, or tentative specifications included in the latest published edition which is on file at the ~~Division of Materials and Tests~~ on January 1 of the year of the date of advertisement for bids, unless otherwise specified. Indiana Test Methods and Procedures will be

SECTION 106, BEGIN LINE 163, DELETE AND INSERT AS FOLLOWS:

The portion of the right-of-way not required for public travel may be used for storage purposes and for placing of the *Contractor's* plant and equipment, subject to requirements set

out in 107.08 and ~~as approved only by written request. All additional space required, unless otherwise stipulated,~~

~~shall be provided with no additional payment.~~ *Approval will be based on compliance with 107.08 and the Contractor's proposed procedure for re-establishing vegetation in the affected area to its original condition or better.* Except as provided in 105.07 and except where necessary for drainage, if storage limits are shown on the plans, the right-of-way

within such storage limits will be available for construction operations and storage of materials. Private property shall not be used for storage purposes without written permission of the owner or lessee. If requested, copies of such written permission shall be furnished. All storage sites shall be restored to their original condition with no additional payment. This shall not apply to the stripping and storing of topsoil, or to other materials salvaged from the work.

SECTION 107, BEGIN LINE 34, DELETE AND INSERT AS FOLLOWS:

The Contractor and its subcontractors shall not discriminate against an employee or applicant for employment to be employed in the performance of any contract with respect to his or her hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of race, color, sex, ~~handicap~~ *disability*, religion, national origin, or ancestry. Breach of this covenant may be registered as a material breach of the contract.

SECTION 107, AFTER LINE 79, INSERT AS FOLLOWS:

*The Department is exempt from State, Federal, and local taxes and will not be responsible for any taxes levied on the Contractor as a result of the contract.*

SECTION 107, BEGIN LINE 144, DELETE AS FOLLOWS:

Training and upgrading of minorities and women toward journeymen status is the primary objective ~~of this special provision~~. Accordingly, the Contractor shall make every effort to enroll minority and women trainees, for example, by conducting systematic and direct recruitment through public and private sources likely to yield such minority and women trainees to the extent that such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this ~~special~~ provision. This training commitment is not intended, and shall not be used, to discriminate against an applicant for training, whether a member of a minority group or not.

SECTION 107, BEGIN LINE 359, DELETE AND INSERT AS FOLLOWS:

signs shall be provided to control and direct traffic. All construction vehicles and equipment shall have amber lights in accordance with ~~801.06~~ *801.14(d)* when in the work area and

located on the pavement, sidewalk or shoulder with the road open to traffic. Vehicles

SECTION 107, BEGIN LINE 369, DELETE AND INSERT AS FOLLOWS:

be constructed and erected in accordance with the plans. Temporary pavement markings, when required, shall be placed in accordance with ~~801.14~~ *801.12* or as directed.

SECTION 107, LINE 388, INSERT AS FOLLOWS:

replaced as often as necessary to keep them effective. *Failure to maintain these devices may result in the assessment of damages in accordance with 105.14 and 801.14.*

SECTION 107, BEGIN LINE 489, DELETE AND INSERT AS FOLLOWS:

**107.14.1 Erosion Control Plan and Proof of Publication.** ~~If the contract work is expected to disturb 2 or more hectares (5 or more acres) of total land area, such work shall be in accordance with the following procedures. The Department will prepare the necessary information to initiate the submittal requirements of 327 IAC 15-5. The Contractor shall supply all remaining requirements of 327 IAC 15-5 in accordance with 108.03.~~

The Department will prepare an *preliminary* Erosion Control Plan as required by 327 IAC 15-5. ~~The Department and will then submit the Erosion Control Plan it to the appropriate Soil and Water Conservation District.~~

~~The Department will prepare a Notice of Intent letter for the project in accordance with 327 IAC 15-5-5, 327 IAC 15-5-6, and 327 IAC 15-3, and will submit it to the IDEM. Such Notice of Intent will be accompanied by a Proof of Publication in a newspaper of general circulation in the affected area.~~

No construction activity shall begin until the Notice of Intent is filed by the Department. The Engineer will notify the Contractor of such filing.

SECTION 107, BEGIN LINE 580, DELETE AND INSERT AS FOLLOWS:

On those portions of an incomplete ~~project~~ *contract* that have been ordered opened to traffic

or are constructed under traffic and the contract time has not yet expired, the Department will assume the responsibility for repairs of damages resulting directly from traffic, except as set out in 402.10 and 801.18, provided that such damage is not the direct or indirect result of the operations of the Contractor and provided the Contractor is unable to collect damages from the responsible party or parties.

SECTION 108, AFTER LINE 27, INSERT AS FOLLOWS:

**108.01.1 Release of Retainage to Subcontractors.** *If the Contractor is withholding portions of payments due subcontractors as retainage, the Contractor shall release such retainage to the subcontractor within 30 calendar days after satisfactory completion of the work performed by the subcontractor.*

*For the purposes of this section, satisfactory completion will be interpreted as when the subcontractor has completed all physical work and completed other contract requirements, including the submission of all submittals required by the specifications and the Department.*

SECTION 108, BEGIN LINE 50, DELETE AND INSERT AS FOLLOWS:

The Contractor shall furnish the Engineer with a ~~progress~~ *bar graph type* schedule *which shows the estimated times required to prosecute the major or critical items of work for approval* ~~on all contracts, except on those contracts with acceptance unless the contract has less than 60 calendar days completion~~ time, less than 35 work days, or less than 60 days between the date of the notice to proceed and the calendar completion date. *This schedule shall incorporate all contract requirements regarding the order of performance of work and each activity. The schedule shall graphically show the calendar time for which each activity is scheduled for work.* The ~~progress~~ schedule may be used as the basis for establishing major construction operations and as a check on the progress of the work. Sufficient materials, equipment, and labor shall be provided to guarantee the completion of the project in accordance with the plans and specifications within the *specified completion time set forth in the proposal*. The Engineer shall be notified at least three days in advance of the date on which the work is expected to begin. *The schedule shall be submitted at the preconstruction conference.*

~~For contracts greater than \$2 million, a bar graph type schedule which shows the estimated times required to prosecute the major or critical items of work shall be furnished. This schedule shall incorporate all contract requirements regarding the order of performance of the work and each activity. The schedule shall graphically show the calendar time for which each activity is scheduled for work.~~

~~The bar graph schedule shall be provided in addition to the progress schedule. The bar graph schedule shall be submitted at the preconstruction conference.~~

The Department and the Contractor shall meet at least once each month to review actual and proposed schedules. The Contractor shall submit the correspondence to the district after each monthly meeting addressing each item of work that is behind schedule and as to what action will be taken to get the work back on schedule.

If, in the opinion of the Engineer, construction progress has been or will be materially affected by changes in the plans or in the quantities of work, or if performance has failed to conform to the ~~approved~~ *accepted* schedule, a revised ~~progress~~ schedule shall be submitted when requested. ~~Approval~~ *Acceptance* of the ~~progress~~ schedules will in no way justify them, but will simply indicate concurrence in their reasonableness and feasibility on the assumption *that* every effort shall be made to meet them. Existence of a current and ~~approved progress~~ *accepted* schedule will be a condition precedent to the processing and payment of a partial pay estimate.

SECTION 108, BEGIN LINE 102, DELETE AND INSERT AS FOLLOWS:

~~A plan of operation for accomplishing temporary and permanent erosion control work relating to grubbing, grading, paving, and other work which might create erosion shall be submitted for approval prior to starting the work, unless the requirement is waived.~~

*An amended Erosion Control Plan shall be submitted in accordance with 327 IAC 15-5 for those areas not included in the Department submittal or as necessary for changes initiated by the Contractor. Items to include consist of sequencing of operations, borrow and disposal areas, and haul roads as well as any revision to the Department's submittal. All appropriate erosion control items shall be in place prior to disturbing the project site. A copy of the amended plan shall be provided to the Engineer.*

~~When determined necessary for the prevention of pollution due to erosion, temporary berms, dikes, dams, silt fences, ditching, or sediment basins shall be constructed. Such control measures shall be maintained until permanent erosion control measures are placed. Temporary erosion control measures and sediment control measures shall be in accordance with 205. Permanent erosion control measures shall be incorporated into the work at the earliest practicable time as the construction progresses to stabilize the site. Payment for construction and removal of temporary erosion control measures and sediment control measures will be in accordance with 205.11. Payment will not be made when the work is required due to the Contractor's negligence, carelessness, or failure to install permanent controls in a timely manner.~~

~~The center line length of excavation and embankment causing pollution from erosion will be limited to approximately 1200 m (4,000 ft) per each grading spread. This exposed erodible earth material may be decreased if necessary to prevent excessive pollution which shall be contained within the right of way.~~

~~Construction of cofferdams and piers in the flowage area of live streams shall be performed in such a manner as to minimize production of turbidity and suspended solids in the stream. Excavation from cofferdams shall not be deposited in the stream.~~

~~Seed mixture shall be placed as early as practicable to keep the area of bare soil exposed at one time by construction operations to a minimum. The requirements of 621.11 shall apply. Watering shall be in accordance with 621.05(e).~~

~~When sod is placed during the months of June, July, and August as a permanent erosion control feature, as required above, it shall be subject to the conditions specified in 621.11. Water ordered after the 30 day period in accordance with 621.10 will be paid for at the contract unit price for water.~~

~~In order to minimize stream pollution, to bodies of water, the practices and controls set out below shall be followed.~~

- ~~(a)~~ (a) When borrow material is obtained from other than commercially operated sources, erosion of the borrow site shall be so controlled both during and after completion of the work that erosion will be minimized and sediment will not enter streams or other bodies of water. Waste or disposal areas and construction roads shall be located and constructed in a manner that keeps sediment from entering streams.
- ~~(b)~~ (b) Frequent fording of live streams will not be permitted. Temporary bridges or other structures shall be used wherever an appreciable number of stream crossings are necessary. Unless otherwise approved in writing, mechanized equipment shall not be operated in live streams. Only coarse granular material of sufficient size to preclude movement by the water will be permitted to be placed in live streams during construction.
- ~~(c)~~ (a) When work areas or gravel pits are located in or adjacent to live streams *bodies of water*, such areas shall be separated from the main stream by a dike or other barrier to keep sediment from entering a flowing stream *contained*. Sediment disturbance of such stream *these bodies of water* shall be minimized during the construction and removal of such barriers.
- ~~(d)~~ (b) All waterways shall be cleared as soon as practicable of false-work, temporary piling, debris, or other obstructions placed during construction operations and not a part of the finished work.
- ~~(e)~~ (c) Water from aggregate washing or other operations containing sediment shall be treated by filtration, a settling basin, or other means sufficient to reduce the sediment content to not more than that of a stream into which it is discharged.
- ~~(f)~~ (d) Pollutants such as fuels, lubricants, asphalts, raw sewage, *wash water or waste from concrete mixing operations*, and other harmful materials shall not be discharged into or near rivers, streams, and impoundments or into natural or manmade channels. *Wash water or waste from concrete mixing operations shall not be allowed to enter live streams. existing bodies of water.*
- ~~(g)~~ (e) All applicable regulations of fish and wildlife agencies and statutes relating to the preventions and abatement of pollution shall be complied with in the performance of the contract.

When temporary construction materials are no longer required or used for maintenance of traffic or for other temporary purposes, such materials shall be removed and disposed of ~~with no additional payment except~~ as provided herein. If temporary roadbed or asphalt pavement materials are used for embankment construction, such materials will be classified as excavation and paid for at the contract unit price per cubic meter (cubic yard) for the type of excavation shown in the Schedule of Pay Items. No allowance will be made for overhaul or added haul. If temporary HMA pavement materials are used in the work for subbase, base, approaches, or for new shoulder

construction, such materials will be paid for as salvaged road material in accordance with 613.

Temporary concrete pavement, temporary concrete base, or temporary concrete widening, when no longer required for maintenance of traffic, shall be removed and disposed of in accordance with ~~the applicable provisions of 202.05~~. Such removal and disposal will be paid for as ~~pavement removal~~ *in accordance with 202.13*.

Temporary drainage structures, temporary concrete median barriers, and other temporary devices required and used for the maintenance of traffic shall remain the property of the Contractor. All costs for furnishing, placing, maintaining, removal, and disposal of temporary drainage structures shall be included in the contract lump sum price for maintaining traffic. If there is no pay item for maintaining traffic, these costs shall be included in the various pay items listed in the proposal, unless otherwise provided.

SECTION 108, BEGIN LINE 337, DELETE AND INSERT AS FOLLOWS:

shall be as defined in 101.30. Temporary pavement marking materials in accordance with ~~801.14~~ *801.12* shall be placed if the final marking materials cannot be placed in accordance with 808.06(b).

SECTION 109, BEGIN LINE 18, INSERT AS FOLLOWS:

The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice. *Results are to be determined using the standard "5" up procedures as defined in General Note 9 on Page 8 herein.*

When the

SECTION 109, BEGIN LINE 187, INSERT AS FOLLOWS:

**(e) Measurement of ~~Portland Cement Concrete~~ PCC.** For design and production, ~~portland cement concrete~~ PCC will be measured by the cubic meter (cubic yard). The relative yield will be determined in accordance with ~~501.03(a)~~ *505.01*. Payment for ~~portland cement concrete~~ PCC will be in the unit designated for the specified use.

SECTION 109, BEGIN LINE 214, DELETE AS FOLLOWS:

The wet mass (weight) will be used for the basis of payment, if the percent of moisture is determined to be less than 6% for B borrow; 9% of optimum moisture content, as determined in accordance with AASHTO T 99 ~~except as modified in 203.24~~, whichever is greater, for size No. 53 or No. 73 aggregates or modifications thereof when specified; or 4% for aggregates of all other specified sizes including sand.



SECTION 109, BEGIN LINE 302, DELETE AND INSERT AS FOLLOWS:

If an increase or decrease in a contract item is ~~more than that provided in accordance with 104.02,~~  
the contract unit price will be the rate of payment unless an adjusted price is agreed to by the parties to the contract. ~~An adjustment would be based only on that portion of a major item over or under 20% of the contract quantity of such item, or on that portion of a~~  
*The contract unit price for a minor item may be adjusted if agreed to by the parties for only that portion of the item* which exceeds 6% of the total bid amount of the contract. A loss or gain of overhead costs will not be a consideration for adjusting the unit price.

SECTION 109, BEGIN LINE 566, DELETE AND INSERT AS FOLLOWS:

**109.07 Partial Payments.** The contract may contain more than one project. Partial payments may be made once each month as the work progresses or twice each month if it is determined that the amount of work performed is sufficient to warrant such payment. These payments will be based on estimates, prepared by the Engineer, of the value of the work performed and materials complete in place in accordance with the contract. No partial payment will be made or estimates will not be submitted when the total value of the work done since the last estimate amounts to less than \$500.

~~From the total of the amounts ascertained as payable, an amount equivalent to no less than 3% of the whole will be deducted and retained by the Department until after substantial completion of the entire contract in an acceptable manner, except Except as set out in 105 IAC 11-3-8 of the Rules For Prequalification of Contractors And Bidding-, The the balance, or an amount not to exceed 97% of the whole less all previous payments and less amounts claimed which are required to be held by the Department in accordance with Indiana Code 8-23-9-26 through 8-23-9-39, will be certified for payment. When a contract bid is submitted, the bidder may submit a completed and signed Election to Establish Interest Bearing Account, on a form provided by the Department and on which the bidder elects that retainage is to be placed in an interest bearing escrow account. Failure to complete, sign and submit the form with the contract bid will be deemed a decision not to establish such an account. All fees for the escrow service, including compensation to the escrow agent for its services and to the Treasurer of State for establishing and administering escrow accounts, will be obtained from the escrow account. The Department may order the withdrawal of all or portions of the retainage and accrued interest from the escrow account for cause as set out in 105.11, 105.15(b), 106.09, 108.08, 108.09, 109.02, and as otherwise specified. Cause includes any of the following:~~

- ~~(a) default of the Contractor;~~
- ~~(b) overpayments;~~
- ~~(c) the Contractor's failure to accept, within 90 days, the contract's final quantities as determined by the Department as being accurate;~~
- ~~(d) the Contractor's failure to provide required documents;~~

- ~~(e) the Contractor's failure to resolve claims or liens against the Contractor;~~
- ~~(f) noncompliance with court orders;~~
- ~~(g) the Contractor's failure in any other manner to fulfill responsibilities under the contract.~~

~~After the contract has substantially been completed, the Department may authorize distribution of a portion of the retainage, provided the Contractor files a written request therefor accompanied by the written consent of the surety on its bond. No allowance will be made for materials received which have not been incorporated into the work *except in accordance with 111.*~~

For a bridge contract involving two or more structures, estimates in no less than the minimum as set out herein may be submitted for each structure rather than for the entire contract. If the contract is awarded on the basis of a combination proposal for two or more bridges, one contract will be written for all bridges listed in the combination proposal. Separate semimonthly estimates may be authorized for each individual bridge in the same manner as set out above, the same as though each bridge was awarded as a separate contract, unless otherwise specified.