# STANDARD DOCUMENTS

### Standard Documents AGENDA

- 1. Documents Which Are Considered Standard
- 2. Proposing Changes, Additions, or Deletions
- 3. Where Current Versions Are Available
- 4. Changes in 2002 and 2003
- 5. Forthcoming Standards Changes
- 6. Where Changes Are Identified
- 7. Special Provisions
- 8. Pay Items

# 1. DOCUMENTS WHICH ARE CONSIDERED STANDARD

# **Documents Which Are Standard**

- 1. Standard Specifications
- 2. Standard Drawings
- 3. Design Policy

# **Standard Specifications**

• Contract requirements which are best expressed in words or text, that can be applicable to all work.

# **Standard Specifications**

- The 5 ways to specify are as follows:
- 1. Description of the Work
- 2. Material Requirements
- 3. Construction Requirements
- 4. Measurement for Payment
- 5. Basis of Payment
- This is a chronological occurrence of the work.
- Every specification must address all of these.

# **Standard Specifications**

Arrangement - Essentially "project chronological" as follows:

Section 100: General Provisions

Section 200: Earthwork

Section 300: Bases

Section 400: Asphalt Pavements Section 500: Concrete Pavements Section 600: Incidental Construction

Section 700: Structures

Section 800: Traffic Control Devices and Lighting

Section 900: Materials Details

# **Standard Drawings**

• Pre-developed details which may apply to more than one project, and therefore need not be detailed in the plans

# **Standard Drawings**

- Identified and arranged in same manner and order as Standard Specifications.
- Each drawing number consists of Std. Spec. reference number, 4-letter code pertaining to its details, and serial drawing number for the code.

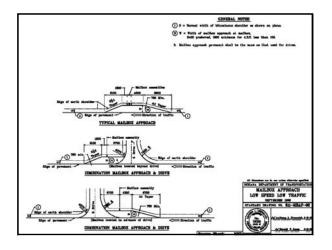
# **Standard Drawings**

• Standard Drawing number example:

611-MBAP-02

611 is Std. Spec. section number for Mailboxes.

MBAP means MailBox APproach. 02 is the second 611-MBAP drawing.



# Design Policy

• Written instructions, guidelines, or requirements for designing a project

# Design Policy

 The Indiana Design Manual has been developed into 9 Parts as follows:

I: Project Development [Gray Binder]
II: Plan Development [Beige Binder]
III: Location Surveys [Maroon Binder]
IV: Hydrology / Hydraulics [Two Light Blue Binders]
V: Road Design [Two Red Binders]
VI: Structural Design [Two Dark Blue Binders; still in development]
VII: Traffic Design [Green Binder]
VIII: Maintaining Traffic [in Green Binder with Part VII]
IX: Right-Of-Way [in Green Binder with Parts VII]

### Design Manual

• The 9 Parts are divided into Chapters as follows:

1: Project Development, 13 Chapters: 1 through 13
II: Plan Development, 8 Chapters: 14 through 22
III: Location Surveys, 6 Chapters: 23 through 27
IV: Hydrology / Hydraulics, 12 Chapters: 28 through 39
V: Road Design, 18 Chapters: 40 through 57
VI: Structural Design, 17 Chapters: 58 through 74
VII: Traffic Design, 6 Chapters: 75 through 80
VIII: Maintaining Traffic, 4 Chapters: 81 through 84
IX: Right-Of-Way, 3 Chapters: 85 through 87

# Design Manual

- The Indiana Design Manual Parts and Chapters are not referenced or tied into the Standard Specifications and Standard Drawings numbering system.
- However, the Manual Parts and Chapters are arranged in an approximately chronological order in which a project is designed.

2. PROPOSING CHANGES, ADDITONS, OR DELETIONS TO STANDARD DOCUMENTS

### **Proposing Addition**

- Develop electronic draft Standard Specifications, Standard Drawings, and design policy.
- May assign section numbers to draft specifications.
- Do not assign numbers to drawings.
- Do not assign Design Manual chapter or section numbers to draft design policy.

### **Proposing Change**

- Mark up hardcopies of existing Standard Specifications, English-measure Standard Drawings, and Design Manual.
- Make marks legibly in black.
- A change may include additional, new material. Extensive new material may be developed electronically, compatible with Department-used software.

# **Proposing Deletion**

- Identify which portions of Standard Specifications, Standard Drawings, or the Design Manual should be deleted.
- Hardcopies may be marked up, X'd out, etc.
- Deletion may be proposed with change or addition

### Standards Committee

The Standards Committee is the only
Department entity authorized to approve
all changes, additions, and deletions to
Standard Specifications, Standard
Drawings, and design policy.

### Standards Committee

### Representation:

- Chair: Chief Highway Engineer
- · Voting Membership:
  - Contracts and Construction Division's Standards Section Manager
  - Contracts and Construction Division Chief
  - Design Division representative
  - District Construction representative
  - Materials and Tests Division Chief
- Operations Support Division Chief
- Nonvoting Membership:
  - Secretary (Cont. & Constr. Division's Specifications Engineer)
  - Federal Highway Administration representative

### Standards Alteration Procedure

### Committee Member:

- · C. & C. Div. Chief
- C. & C. Div. Standards Mgr.
- Design Div. Representative

### Accepts Alterations From:

- C. & C. Field Engineers and Contracts Sections
- Legal, Multimodal, Program Development divisions; C. & C. Div.'s Standards Section
- Design, Enviro. Planning & Engrg., Land Acquis. divisions; district development, consultants

### Standards Alteration Procedure

### Committee Member:

Accepts Alterations

- District Construction representative
- District Construction; contracting industry
- Matls. & Tests Division Chief
- Materials and Tests, Research divisions
- Operations Support Division Chief
- Operations Support Div.

### Standards Committee

- Proposals to alter standard documents are submitted by the Committee members to the secretary.
- He or she compiles them into a Committee meeting agenda.
- The agenda is electronically developed about 3 weeks before its meeting.
- It is then posted on the Department's website at www.in.gov/dot/div/contracts/standards/sc/

### Standards Committee

- Hardcopies are distributed to the Committee members.
- The Committee meets on set dates, about monthly, and considers each agenda item.
- The Committee discusses each item, and may propose further changes to it.

### Standards Committee

- After discussion, the Committee may deem an item unworthy of a vote in that meeting, and table it for a later meeting, after it is further revised per Committee discussion by its proposer.
- After discussion, the Committee will vote to pass an item as proposed, or per discussion in the meeting, or to fail it, either vote by majority rule.

### Standards Committee

- For each passed item, the Federal Highway Administration representative must concur in the passage so that the alteration may be applied to the National Highway System.
- For each passed item, the Committee will then determine the contract letting date of its first effectiveness.

### Standards Committee

• The Committee secretary develops a set of minutes for each meeting, showing the changes made to each item during the meeting, and the Committee's action regarding each item.

3. WHERE CURRENT VERSIONS OF STANDARD DOCUMENTS ARE AVAILABLE

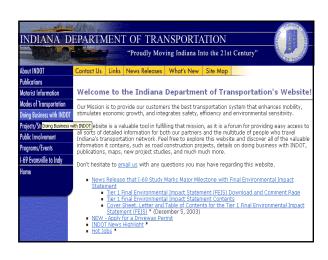
### Standard Documents Availability

**Department INTERnet Websites** 

index.html

• Standard Specifications: www.in.gov/dot/div/contracts/standards/book/

Click on desired range of effective dates. Incorporates Supplemental Specifications.



# **Doing Business with INDOT**

### Contractors and Consultants

- Construction Contracts Information (Contractors)
   For Contractors/Suppliers working on INDOT contracts.
- <u>Designer Information (</u>Consultants)
   For all designers working on INDOT projects or using INDOT data.
- Professional Services Bulletins
- Certified Technician Program Information

# Standards and Specifications

- Standard Drawings
- Standard Specifications with Supplementals
- Recurring Special Provisions
- Design Policy, Design Manual and More....
- Latest Updates
- Standards Committee Agenda & Minutes

# Standard Specifications with Supplementals

### Complete Copy:

- 1999 Standard Specifications Book,
   Effective for lettings Between September 1, 2004 and February 28, 2005
- 1999 Standard Specifications Book,
   Effective for lettings Between March 1, 2004 and August 31, 2004
- 1999 Standard Specifications Book, Effective for lettings Between September 1, 2003 and February 28, 2004
- 1999 Standard Specifications Book, Effective for lettings Between March 1, 2003 and August 31, 2003
- 1999 Standard Specifications Book,
   Effective for lettings Between September 1, 2002 and February 28, 2003

Standard Specificati 1999 Standard Specificati Effective on or after Mar	ons	mentals
Sections and Titles	The PDF Version	MS Word Version
Cover Page and SI Units	Cover.pdf (63k)	Cover.doc (85k)
Table of Contents	Toc.pdf (220k)	Toc.doc (281k)
Pay Items	Pay items.pdf, (93k)	Pay items.doc (72k
Section 100	<u>Sec100.pdf</u>	<u>Sec 100.doc</u>
General Provisions	360k	587k
Section 200	Sec200.pdf	Sec 200.doc
Earthwork	298k	516k
Section 300	Sec300.pdf	Sec 300.doc
Bases	76k	127k
Section 400	Sec400.pdf	<u>Sec 400.doc</u>
Bituminous Pavements	187k	463k
Section 500	<u>Sec500.pdf</u>	<u>Sec 500.doc</u>
Rigid Pavements	209k	425k
Section 600	Sec600.pdf	<u>Sec 600.doc</u>
Incidental Construction	291k	670k
Section 700	<u>Sec700.pdf</u>	<u>Sec 700.doc</u>
Structures	544k	1,348k
Section 800 Traffic Control Devices and Lighting	<u>Sec800.pdf</u> 270k	<u>Sec 800.doc</u> 452k
Section 900	<u>Sec900.pdf</u>	<u>Sec 900.doc</u>
Materials Details	767k	2,206k

### SECTION 200 - EARTHWORK

### SECTION 201 - CLEARING AND GRUBBING

201.01 Description. This work shall consist of clearing, grubbing, removing, and disposing of all vegetation and debris, except such objects as are designated to remain or are to be removed in accordance with other sections of these specifications, within the construction limits shown on the plans. If no construction limits are shown, the right-of-way and easement areas will be the construction limits. This work shall include the preservation from injury or defacement of all vegetation and objects designated to remain.

### CONSTRUCTION REQUIREMENTS

201.02 General. Right-of-way lines and construction limits will be established. Trees, shrubs, plants, seeded or sodded shoulders, slopes or other things to remain will be designated. All such designated items and vegetation shall be preserved. All areas outside the construction limits shall remain in their original condition. All damage to natural terrain, vegetation, objects designated to remain, or areas outside the construction limits which have subsequently eroded or been damaged, shall be repaired or replaced in accordance with 621.10.1. Tree wound dressing required for cut or scarred surfaces of trees or shrubs selected for retention shall be in accordance with 914.096?

### Standard Documents Availability

### **Department INTERnet Websites**

• Standard Drawings:

www.in.gov/dot/div/contracts/standards/drawings/index.html

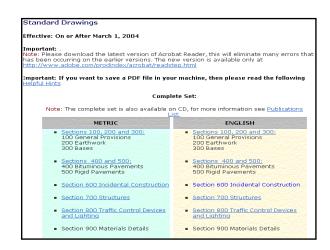
Click on desired effective date. Make choice of English- or Metric-measure set.

# Standards and Specifications

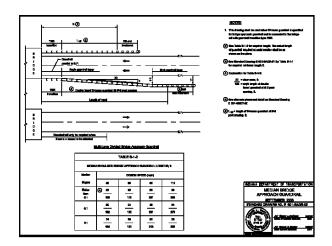
- Standard Drawings
- Standard Specifications with Supplementals
- Recurring Special Provisions
- Design Policy, Design Manual and More....
- Latest Updates
- Standards Committee Agenda & Minutes

### Standard Drawings

- Effective On or After September 1, 2004
  - Standard Drawing Complete Set
  - Standard Drawings Index
  - Revised and New Drawings
    - Metric
    - English
- Effective On or After March 1, 2004
  - Standard Drawing Complete Set
  - Standard Drawings Index
  - Revised and New Drawings
    - Metric
    - English







### Standard Documents Availabilty

**Department INTERnet Websites** 

 Metric-Units Design Manual: <u>www.in.gov/dot/div/contracts/standards/dm/</u>
 Click on desired Manual Part. English-units version not yet available.

# Standards and Specifications

- Standard Drawings
- Standard Specifications with Supplementals
- Recurring Special Provisions
- Design Policy, Design Manual and More....
- Latest Updates
- Standards Committee Agenda & Minutes

# Design Policy

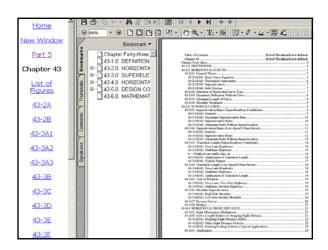
- Design Manual Information
- Design Memos
- Electronic Frames
- Pipe Material Selection Program (executable file)
- <u>Underdrain Table</u> (zipped MS Excel file)

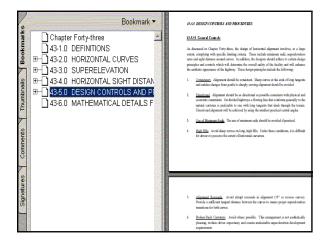
# Design Manual

- Design Memorandums
- Design Manual On-Line Version \*(opens in new window)\*

### The Indiana Design Manual Part 1 Chapters 1-13 "Project Development" Chapters 14-21 "Plan Development" Part 2 Part 3 Chapters 22-27 "Location Surveys" Chapters 28-39 "Hydrology/Hydraulics" Part 4 Chapters 40-57 Part 5 "Road Design" Part 6 Chapters 58-74 "Structural Design" Part 7 Chapters 75-80 "Traffic Design" Part 8 Chapters 81-84 "Work Zone Traffic Control" Part 9 Chapters 85-87 "Right-of-Way"

Part 5 R	oad Design
Chapter Forty	BASIC DESIGN CONTROLS
Chapter Forty-one	HIGHWAY CAPACITY
Chapter Forty-two	SIGHT DISTANCE
Chapter Forty- three	HORIZONTAL ALIGNMENT
Chapter Forty-four	VERTICAL ALIGNMENT
Chapter Forty-five	CROSS SECTION ELEMENTS
Chapter Forty-six	INTERSECTIONS AT-GRADE
Chapter Forty- seven	RAILROAD/HIGHWAY GRADE CROSSINGS
Chapter Forty- eight	INTERCHANGES





### Standard Documents Availabilty

### **Department INTERnet Websites**

• Standards Committee Agendas and Minutes: www.in.gov/dot/div/contracts/standards/sc/ Click on desired meeting date.

# Standards and Specifications

- Standard Drawings
- Standard Specifications with Supplementals
- Recurring Special Provisions
- Design Policy, Design Manual and More....
- Latest Updates
- Standards Committee Agenda & Minutes

# **Standards Committee Agenda & Minutes**

Date	Agenda	Minutes
January 2004	Canceled	
February 2004	<u>Available</u>	
March 2004		
April 2004		
May 2004		
June 2004		
July 2004		
August 2004		
September 2004		
October 2004		
November 2004		
December 2004		

s	Aft cor Ma	s Committee Agence er reviewing the Items, if you nments, please return to this il Comments button to send y specify the Item you are refer a Agenda Memorandum (3 p.	I have any page and use the E- our request. Be sure rring to.	ry 2004
Item	Subject	Description	Download File	E-mail Comments
Item 35-4 Item 35-4a Item 35-5 Item 35-6	616.02 616.04 616.07 616.12	Materials Placing Grouted Riprap Blank Traversable Riprap Method of Measurement	Pages 4 - 14	E-Mail Comments
Item 35-7 Item 35-8	616.13 Standard Drawings	Basis of Payment 616-RRLV-05	(151 kb)	
Item 35-9	Design Policy	Riprap		
Item 44-13	Design Policy	Pavement Patching		
Item 44-14	715.10.1	Pavement Patching		
Item 44-15	715.11	Method of Measurement	Pages 15 - 30	
Item 44-16	715.12	Basis of Payment	(116 kb)	E-Mail Comments
Item 44-16a	718.08 718. <del>08</del> 10 718. <del>09</del> 10	Patching Underdrains Method of Measurement Basis of Payment		E-mail Comments
Item 44-17	Standard Drawings	715-CPER-01, 02, 03		

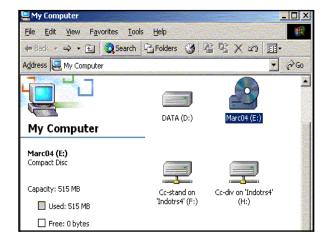
Item No. 35-6
Mr. Cales
Date: 2/19/04

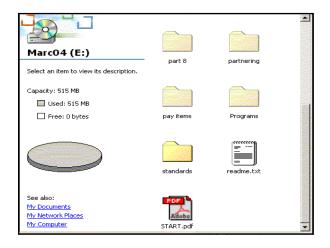
REVISION TO 1999 STANDARD SPECIFICATIONS

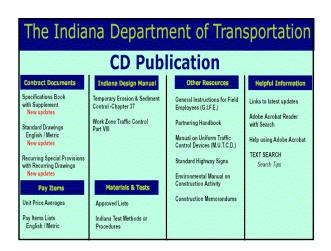
SECTION 616, BEGIN LINE 141, DELETE AND INSERT AS FOLLOMS:
Grouted riprop, and precast Precast concrete riprap, including the area occupied by the wedge course, will be measured by the square meter (square yard), parallel to the slope. Grouted riprap will be measured by the square meter (square yard) of the type specified.

SECTION 616, AFTER LINE 150, INSERT AS FOLLOMS:
Coarse aggregate size 2 or uniform riprap used for making riprap traversable will be measured by the square meter (square yard) in accordance with 109.01(b).

# Standard Documents Availability Construction and Design Reference Guide CD, Effective March 2004 Letting - Getting Started: 1. On Desktop, click on My Computer 2. Click on Marc04(E:) 3. Click on START.pdf 4. Get CD Publications menu



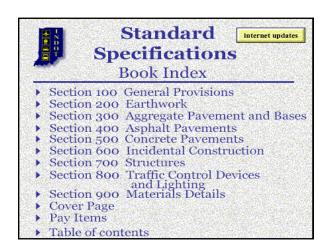


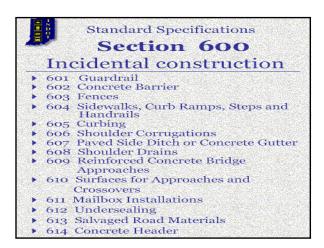




# Specifications Book with Supplement New updates Standard Drawings English / Metric New updates Recurring Special Provisions with Recurring Drawings

New updates

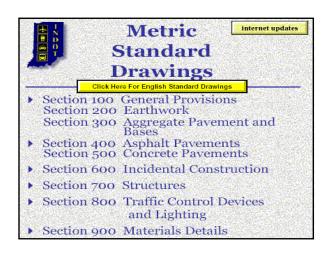






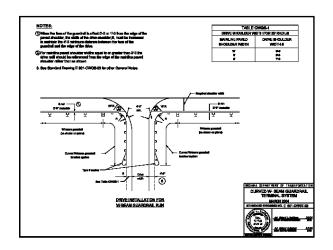
# Construction and Design Reference Guide CD Standard Drawings On CD Publications menu, under Contract Documents, click on Standard Drawings English / Metric You're interested in an english-units drawing, so click on the Click Here for English Standard Drawings bar In the listing of even-hundred drawing numbers titles, click on the desired one Get a listing arranged numerically by drawing numbers, then 4-alpha codes Click on desired Code Meaning Get PDF file of desired drawing





1	English Standard Drawings
	Cick Here For Metric Standard Drawings
•	Section 100 General Provisions Section 200 Earthwork Section 300 Aggregate Pavement and Bases
٠	Section 400 Asphalt Pavements Section 500 Concrete Pavements
٠	Section 600 Incidental Construction
١	Section 700 Structures
٠	Section 800 Traffic Control Devices and Lighting
•	Section 900 Materials Details

	English Standard Drawings Effective for Lettings on or After March 1, 2004 Section 600: Incidental Construction				
Spec. Ref.	Code	Page	Code Meaning	Drawing Title	Date
E601	BAGR	01	Bridge Approach Guardrail	Roadside Bridge Approach Guardrail	5/3/99
E601	BAGR	02	Bridge Approach Guardrail	Median Bridge Approach Guardrail	9/2/03
E601	CWGS	01	Curved W-Beam Guardrail System	Curved W-Beam Guardrail Connector System	9/2/03
E601	CWGS	02	Curved W-Beam Guardrall System	Curved W-Beam Guardrail System	1/3/00
E601	CWGS	03	Curved W-Beam Guardrall System	Curved W-Beam Guardrail System	9/1/99
E601	CWGS	04	Curved W-Beam Guardrail System	Curved W-Beam Guardrail System	3/1/02
E601	CWGS	05	Curved W-Beam Guardrail System	Curved W-Beam Guardrail System	4/1/96
E601	CWGS	06	Curved W-Beam Guardrall System	Curved W-Beam Guardrail System	4/3/95
E601	CWGT	01	Curved W-Beam Guardrail Terminal	Curved W-Beam Guardrail Terminal System	9/2/03
E601	CWGT	02	Curved W-Beam Guardrail Terminal	Curved W-Beam Guardrail Terminal System	3/1/04



# **Effective Documents Timing**

- Department website and CD updates are effective with March and September lettings of each year for Standard Specifications and Drawings.
- The website is updated and a CD is issued with these updates about 6 to 7 months before each such effective letting date.

# **Effective Documents Timing**

- Design Policy and Technical Advisory documents which complement Standard Specifications and Drawings alterations are posted on the website upon Standards Committee passage at
- Other Technical Advisories which do not require Committee approval are also posted here upon their development.

# **Effective Documents Timing**

- Policy Changes and Technical Advisories are electronically incorporated into the Design Manual annually in early summer.
- The website's electronic version is made to reflect these changes.
- Hardcopy versions of the changes are issued to all Manual holders at this time.

# **Effective Documents Timing**

• Policy Changes and Technical Advisories, once incorporated into the Manual after the Manual changes are issued, are then deleted from the Memos website.

# 4. CHANGES TO STANDARD DOCUMENTS IN 2002 AND 2003

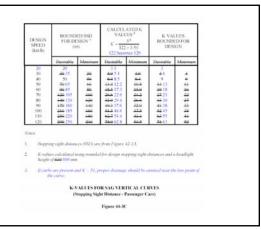
### Changes to Standard Documents

- In this presentation we will only report changes that have occurred, or soon will, with some background information.
- We will not make nor entertain editorial comments about the changes.

AASHTO 2001 Policy On Geometric Design of Highways and Streets, b.k.a. "The Green Book"

- 1. The truck eye height is lowered from 8 ft to 7.6 ft (2.45 m to 2.33 m).
- 2. The object height for stopping sight distance is raised from 6 in. to 24 in. (150 mm to 600 mm).
- 3. Longer stopping sight distances are therefore required.
- 4. The cumulative result of these changes is longer sag vertical curves and shorter crest vertical curves.





### **Shoulder Corrugations**

- A design policy and Standard Specifications have been established to complement the Standard Drawings.
- Corrugations may only be milled, and may not be rolled or formed.

### SECTION 606 - SHOLL DER CORRECATION

606.01 Description. This work shall consist of placing corrugations in paved shoulders in accordance with 105.03. Corrugations shall not be constructed within the limits of reinforced concrete bridge approaches or on bridge decks.

The operation shall be coordinated such that milled materials do not encroach or pavement lanes carrying traffic and all milled materials are disposed of in accordance with 101.07.

The corrugations shall be constructed by cutting smooth strips in existing or newly constructed shoulders. The operation shall be conducted by means of a cutting machine that provides a series of smooth cuts without tearing or snauging. The cityipnent shall include guides to maintain uniformity and consistency in the alignment of the strips.

606.02 Method of Measurement. HMA and PCCP shoulder corrugations will be measured by the meter (linear foot), measured parallel to the center line of the roadway. Gaps in PCCP shoulder corrugations at the D-1 joints will be included as milled PCCP corrugations.

606.03 Basis of Payment. HMA and PCCP shoulder corrugations will be paid for at the contract unit price per meter (linear foot), when specified.

Payment will be made under:

Pay Item	Pay Unit
Milled HMA Shoulder Corrugations	

### 45-1.02(06) Shoulder Corrugations

Shoulder corrugations should be considered for shoulders only on a roadway designed as a nural facility.

The minimum paved width for an outside shoulder to be corrugated is 6 ft (1.8 m). If guardrail, concrete burner railing, or another type of roadside burner is adjacent to an outside shoulder, such minimum proved width is 7 ft (2.1 m). The minimum paved width for a median shoulder to be corrugated is 4 ft (1.2 m).

Shoulder corrugations should be milled, not rolled, with no regard to the shoulder pavement material

# Subgrade Treatment

- The Department's Materials and Tests
   Division's Geotechnical Section will specify
   one of 5 newly identified treatment methods
   to be used for each project that requires such
   treatment
- The contractor may choose from options within the type specified.

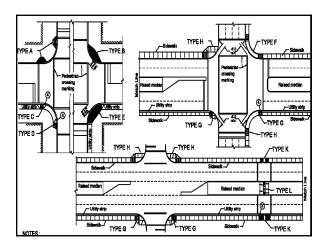
### 17-3.02 Subgrade Treatment

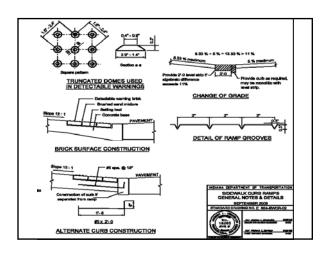
The subgrade treatment methods are as follows.

- Tree A. This treatment consists of 16 in. (400 mm) of chemical soil modification, or 12
  in. (300 mm) of the subgrade exentated and replaced with course aggregate No. 53.
  Where granters sook classified in accordance with AASITIOM 1415 as A.74, A.25, or A.3
  exist, the subgrade may be treated by compacting 24 in. (600 mm) to density and
  mointer requirements.
- 2 Type B. This treatment consists of 8 in. (200 mm) of chemical soil modification, or 6 in. (150 mm) of the subgrade exervated and replaced with coarse aggrapate. No. 53. Where granular sold classified in accordance with AASITOM 145 as A-1, A-2, or A-2 exist, the subgrade may be treated by compacting 12 in. (200 mm) to density and mointure requirements.
- Type C. This treatment consists of 24 in. (600 mm) compacted to the density and moisture requirements, or 12 in. (300 mm) of subgrade excurated and replaced with course aggregate No. 53, or 16 in. (400 mm) of chemical soil modification.
- Type D: This treatment consists of 12 in. (200 mm) compacted to the density and moisture requirements, or 6 in. (150 mm) of subgrade exercised and replaced with coarse aggregate No. 53, or 8 in. (200 mm) of chemical soil modification.
- Type E. This treatment consists of 6 in. (150 mm) compacted to the density and moisture requirements, or 6 in. (150 mm) of subgrade exeavated and replaced with coarse aggregate No. 43.

# Sidewalk Curb Ramps

- Colored, textured tactile warning devices have been added per ADA requirements.
- Some curb ramp types and uses have been changed per ADA requirements.





### Partial 3R Work

- Work that had been identified as "resurface" work has been renamed as Partial 3R, which includes the pavement treatments as follows:
- 1. Preventative Maintenance
- 2. Functional
- 3. Structural

### 2.7.04 Types of Partial 3R Treatments

### 52-7.04(01) Preventative Maintenance (PM) Treatment

The HMA PM treatments most commonly used are chip seals, crack sealing, microsurfacing surface milling and thin HMA inlay, thin HMA overlay, sand seals, sopbalt sawing and sealing torthe.

The PCCP PM treatments most commonly used are sawing and sealing joints, retrofit joint le transfer, diamond grinding, and Concrete Pavement Restoration (CPR).

### 52-7:04(02) Functional Treatment

An BMA functional treatment consists of an Intermediate course and a Surface course. The placement of the Intermediate course may be preceded by milling. The pavement should be designed in accordance with Section 52-9.0.

A PCCP functional treatment may consist of Concrete Pavement Restoration (CPR) to be used correct functional distresses. CPR may comist of crack scaling, partial and full depth patchin rescaling of joints, underscaling, diamond grinding, or retrofit dowel bars. An HMA overla

### 52-7,04(03) Structural Treatmen

An IBMA structural treatment may consist of Base, Intermediate, and Surface courses, will mailing of the existing pavement. The pavement should be designed in accordance with Section 52-0.0.

A PCCP with structural failure may be rehabilitated with slab reduction techniques such cracking and seating or rubblization and overlay.

### Context-Sensitive Design

• A design policy has been established which intends to have the designer consider the concept of context sensitivity in the design process.

### Interstate-Routes Lane Closures

 Policy establishes the minimum number of open traffic lanes in construction zones on selected routes and locations within each such route.

# Treatment of Drinking Water and Wastewater in Rest Areas

 Policy establishes need for possible dedicated water treatment plants and other considerations for rest areas per federal and IDEM regulations.

### **Pavement Milling**

- Five milling types established, based on ultimate pavement treatment.
- 1. Asphalt Scarification or Profile Milling
- 2. Asphalt Milling
- 3. Asphalt Removal Milling
- 4. Concrete Pavement Milling
- 5. Transitions Milling

### 5. FORTHCOMING STANDARDS CHANGES

### AASHTO 2002 Roadside Design Guide

- 1. Consider backslope when establishing clear zone width
- 2. In work zone, base design speed on original posted limit instead of work-zone posted limit
- 3. Establish work-zone pavement dropoff depth policy
- 4. Revise mailbox approach widths based on new AADT ranges

### TL-4 Thrie-Beam Guardrail

- This is a new steel-beam and -post guardrail configuration which has been successfully crash tested to NCHRP 350 Test Level 4.
- It may be used as a barrier along an outside shoulder or as a median barrier.

### TL-4 Thrie-Beam Bridge Railing

- This is a new steel bridge railing configuration which has been successfully crash tested to NCHRP 350 Test Level 4.
- It may be used on a bridge in lieu of a truckheight concrete bridge railing, either along an outside coping or as a median barrier.

### **Public Road Approaches**

 Geometrics to be revised to accommodate the design vehicles' turning radii which they are intended to accommodate.

### **Retaining Walls**

- Establish design policy, standard specifications, and standard details as required for all types of retaining walls.
- Provide design information as to the best type of wall appropriate for each cut or fill situation, and depth of retained material.

# Placing Concrete Railing At or Near MSE Retaining Wall

- Details and design policy in development which establish standard location of railing as follows:
- 1. Atop or near the top of a wall
- 2. Alongside the bottom of exposed portion of a wall

# **Bridge Bearing Assemblies**

• Standardize bearing assemblies for use with steel beams and prestressed concrete bulb-tee girders.

### **Forthcoming Changes**

• When to take place?

All of the forthcoming changes described here are expected to be considered by the Standards Committee within the next 1 to 6 months. Once passed by the Committee, they could take effect yet in 2004.

# HALFTIME!!

- No Justin
- No Janet
- BUT PLEASE BE BACK IN 15 MINUTES.

# 6. WHERE CHANGES ARE IDENTIFIED

# **Standard Documents Changes**

• How Identified on Website:

Standard Specifications

- 1. Click on Complete Copy for desired effective letting dates range.
- 2. Click on The PDF Version of the desired section and title.
- Changes since the last letting dates' range version are highlighted in yellow.

# Standards and Specifications

- Standard Drawings
- Standard Specifications with Supplementals
- Recurring Special Provisions
- Design Policy, Design Manual and More....
- Latest Updates
- Standards Committee Agenda & Minutes

# Standard Specifications with Supplementals

### Complete Copy:

- 1999 Standard Specifications Book, Effective for lettings Between September 1, 2004 and February 28, 2005
- 1999 Standard Specifications Book,
   Effective for lettings Between March 1, 2004 and August 31, 2004
- 1999 Standard Specifications Book, Effective for lettings Between September 1, 2003 and February 28, 2004
- 1999 Standard Specifications Book, Effective for lettings Between March 1, 2003 and August 31, 2003
- 1999 Standard Specifications Book,
   Effective for lettings Between September 1, 2002 and February 28, 2003

### Standard Specifications with Supplementals 1999 Standard Specifications Effective on or after March 1, 2004 Sections and Titles The PDF Version MS Word Version Cover Page and SI Units Cover.pdf (63k) Table of Contents Toc.pdf (220k) <u>Cover.doc</u> (85k) <u>Toc.doc</u> (281k) Table of Contents Pay Items Pav items.pdf, (93k) Pav items.doc (72k) Sec 100.doc 587k Section 100 General Provisions Sec100.pdf 360k Sec 200.doc 516k Sec200.pdf 298k Section 200 Earthwork Sec 300.doc 127k Sec300.pdf 76k Section 300 Bases Sec400.pdf 187k <u>Sec 400.doc</u> 463k Section 400 Bituminous Pavements <u>Sec 500.doc</u> 425k <u>Sec 600.doc</u> 670k <u>Sec 700.doc</u> 1,348k Section 800 Traffic Control Devices and Lighting <u>Sec 800.doc</u> 452k Sec800.pdf 270k <u>Sec900.pdf</u> 767k Section 900 Materials Details Sec 900.doc 2,206k

ESAL CATEGORY	ESAL
1	< 300,000
2	300,000 to < 3,000,000
3	3,000,000 to < 10,000,000
4	10,000,000 to < 30,000,000
5	≥ 30,000,000

401.05 Volumetric Mix Design. The DMF shall be determined for each mixture from a volumetric mix design by a design laboratory selected from the Department's list of approved Mix Design Laboratories. A volumetric mixture shall be designed in accordance with the respective AASHTO and ASTM references as listed below.

# **Standard Documents Changes**

• How Identified on Website:

### Standard Drawings

- 1. Click on Revised and New Drawings for effective letting date desired.
- Click on Metric or English as desired to see a drawings list arranged numerically by Standard Specifications section number.
- 3. The Drawing Subject may be clicked on to view the revised or new drawing.

# Standards and Specifications

- Standard Drawings
- Standard Specifications with Supplementals
- Recurring Special Provisions
- Design Policy, Design Manual and More....
- Latest Updates
- Standards Committee Agenda & Minutes

### Standard Drawings

- Effective On or After September 1, 2004
  - Standard Drawing Complete Set
  - Standard Drawings Index
  - Revised and New Drawings
    - Metric
    - English
- Effective On or After March 1, 2004
  - Standard Drawing Complete Set
  - Standard Drawings Index
  - Revised and New Drawings
    - Metric
    - English

	dard [		ngs ord Drawings		
Effect	ive for	Letting	is on or After March 1, 2004		
Sec.	Code	Page	Drawing Subject	Drawing Contents	Date
E205	TECD	04	Temporary Erosion Control Ditch	Temporary Sediment Trap	3/1/04
E402	TMPT	01	Pavement Treatment Termination	Termination Of Mainline Pavement Overlay	3/1/04
E503	CCPJ	03	PCCP Joints	Longitudinal Joint	3/1/04
E503	CCPJ	06	PCCP Joints	Transverse Joint Seals	3/1/04
E601	CWGT	02	Curved W-Beam Guardrail Terminal	Curved W-Beam Guardrail Terminal System	3/1/04
E601	GRET	06	Guardrail End Treatment	Grading At Guardrail End Treatments	3/1/04
E601	TTGB	03	Guardrail Transition Type TGB	Guardrail Transition Type TGB	3/1/04
E601	TTGB	04	Guardrail Transition Type TGB	Guardrail Transition Type TGB	3/1/04
E601	TTGB	05	Guardrail Transition Type TGB	Guardrail Transition Type TGB	3/1/04
E601	WBGA	01	W-Beam Guardrail Assemblies	W-Beam Guardrail Assemblies	3/1/04
E601	WBGC	03	W-Beam Guardrail Components	W-Beam Guardrail Components	3/1/04
E605	CNCC	02	Concrete Center Curb	Concrete Center Curb Type B	3/1/04
E609	BRJT	01	Bridge Joint	Type 1A Joint	3/1/04
E609	RCBA	01	Reinforced Concrete Bridge Approach	Bridge Approach Slab with Asphalt Pvmt.	3/1/04
E609	RCBA	02	Reinforced Concrete Bridge Approach	Bridge Approach Slab & Terminal Joint For PCCP	3/1/04

### **Standard Documents Changes**

How Identified on Website:

### Indiana Design Manual

- 1. Click on desired Part title.
- 2. Changes since the previous year's version are highlighted in yellow.

# Standards and Specifications

- Standard Drawings
- Standard Specifications with Supplementals
- Recurring Special Provisions
- Design Policy, Design Manual and More....
- Latest Updates
- Standards Committee Agenda & Minutes

# Design Policy

- Design Manual Information
- Design Memos
- Electronic Frames
- Pipe Material Selection Program (executable file)
- Underdrain Table (zipped MS Excel file)

# Design Manual

- Design Memorandums
- Design Manual On-Line Version \*(opens in new window)\*

### The Indiana Design Manual Chapters 1-13 Part 1 "Project Development" Part 2 Chapters 14-21 "Plan Development" Part 3 Chapters 22-27 "Location Surveys" Part 4 Chapters 28-39 "Hydrology/Hydraulics" Part 5 Chapters 40-57 "Road Design" Chapters 58-74 "Structural Design" Part 6 Part 7 Chapters 75-80 "Traffic Design" Part 8 Chapters 81-84 "Work Zone Traffic Control" Part 9 Chapters 85-87 "Right-of-Way"

# Part 8 Work Zone Traffic Con

Chapter Eighty-one TRANSPORTATION MANAGEMENT PLANS

Chapter Eighty-two <u>TRAFFIC CONTROL PLANS/DESIGN</u>

Chapter Eighty-three TRAFFIC CONTROL DEVICES

Chapter Eighty-four RESERVED

### 82-602 Two-Way Traffic on a Divided Highway

The following provides several design considerations where two-way traffic on a single roadway of a divided highway is used.

- Length. The optimum segment length of two-way traffic on a divided highway is considered
  to be less than 6 km. Where the segment length exceeds 6 to 8 km, operational efficiency
  may be severely reduced as traffic backs up behind slower vehicles.
- Positive Protection
  - a. Freeway. Temporary concrete barrier along with temporary solid yellow lines as shown on the INDOT Standard Drawings should be used within each crossover and between the crossovers to separate opposing traffic.
  - Other Multilune Roachway. Tubular markers should be used to enhance the delineation and separation of the opposing traffic flows on each side of a temporary double solid yellow line. The tubular markers are placed onto the pavement between the solid yellow lines as shown cut the INDOT Standard Dearwings.

### **Standard Documents Changes**

- How Identified on CD: Standard Specifications
- In the CD Publication menu under Contract Documents, click on New Updates to see a listing of section numbers, section titles, and the date of Standards Committee passage of the change.
- 2. Click on Specifications Book with Supplement, click on desired even-hundred section number in Book Index, and click on the desired section title within the even hundred to see its specifications text. Changes since the last CD issuance are highlighted in yellow.

### **Contract Documents**

Specifications Book with Supplement New updates

Standard Drawings English / Metric New updates

Recurring Special Provisions with Recurring Drawings New updates

Section	Title	Date
101.01	Abbreviations	5/22/03
105.17	Field Office	5/22/03
211.02	Materials	1/16/0:
211.10	Basis of Payment	1/16/0
213	FLOWABLE MORTAR BACKFILL	1/16/0:
302.06(a)	Aggregate Separation Layers and Dense Graded Subbase	5/22/0:
304.05	Widening	5/22/0:
304.07	Basis of Payment	5/22/0:
401.05	Volumetric Mix Design	5/22/0:
401.08	Job Mix Formula	5/22/0:
401.09	Acceptance of Mixtures	5/22/0:
401.16	Density	5/22/0:
401.18	Pavement Smoothness	5/22/0:
401.19	Pay Factors	5/22/0:
401.19(b)	Density	5/22/0:
401.19(c)	Smoothness	5/22/0:
402.04	Design Mix Formula	5/22/0:
402.05	Volumetric Mix Design	5/22/0:
402.06	Job Mix Formula	5/22/0:
402.08	Recycled Materials	5/22/0:
402.09	Acceptance of Mixtures	5/22/0:
405.02	Asphalt Material	5/22/0:
405.07	Application of Asphalt Material	5/22/0:
406.02	Asphalt Material	5/22/0:
409.02	Mixing Plant	5/22/0:
409.02(a)	Certified HMA Mixing Plant	5/22/03
400 02(a)1	Plant Inspection	5/22/0

Changes in the source or types of aggregates shall require a new DMF. A new DMF shall be submitted to the District Materials and Tests Engineer for approval one week prior to use.

Changes in the source of specified binders, except for PG 58-28 or PG 64-22, shall require a new DMF.

The mixture design compaction temperature for the specimens shall be 150°C (300°F) for dense graded mixtures and 125°C (260°F) for open graded mixtures.

Design criteria for each mixture shall be based on the ESAL shown in the contract documents and shall be as follows:

# **Standard Documents Changes**

- How Identified on CD: Standard Drawings
- In the CD Publication menu under Contract Documents, click on New Updates to see a memorandum that identifies which drawings are updated, plus background information regarding each update.
- Click on Standard Drawings English / Metric then click on desired even-hundred Standard Specifications section number to see a listing of all drawings in that even hundred. The Date column shows the date in larger bolder type for the drawings changed since the last CD issuance.

### **Contract Documents**

Specifications Book with Supplement New updates

Standard Drawings English / Metric New updates

Recurring Special Provisions with Recurring Drawings New updates March 1, 2004

### STANDARD DRAWING MEMORANDUM 04-3

TO: All Designers, Operations and District Personnel, Consultants, Contractors, and Vendors

<u>/s/ Richard K. Smatzer</u> Richard K. Smutzer Chief Highway Engineer THRU:

FROM: /s/ Richard L. VanCleave Richard L. VanCleave

Acting Standards Engineer

SUBJECT: New and Revised Standard Drawings

EFFECTIVE: Lettings Between March 1, 2004, and September 1, 2004

New and revised metric and English standard drawings have been approved by the Chief Highway Engineer with the date of March 1, 2004. The drawings which are listed below under Standards Committee Action were verbally approved during Standards Committee meetings by the Federal Highway Administration with the date of March 1, 2004. The drawings which are listed below under Editorial Changes were submitted to and approved by the Federal Highway Administration on March 27, 2003 and December 5, 2003 with an effective date of March 1, 2004.

The Standard Drawings Index has been revised also to reflect these changes which will be effective March 1, 2004.

All drawings and the current Standard Drawing Index appear on the Department compact diseduted March 2004.

### STANDARDS COMMITTEE ACTION

The following drawings have been added to complement the new Chapter 56, Partial 3R Projects, in the Indiana Design Manual.

402-TMPT-01 Shows method for terminating mainline paving overlay.

Indicates limits for paving overlay wedge at private or commercial drives. Shows method and limits for paving public road approaches where the 610-DRIV-21 610-PRAP-01

mainline pavement is being overlayed.

The following drawings have been revised to increase epoxy coated reinforcing bar usage and slab thickness criteria for reinforced concrete bridge approaches and appurtenances thereto; to enhance Type 1-A joint details and to clarify the usage of dense graded subbase. Standard drawing numbers have been revised and will be in agreement with the new reinforced concrete bridge approach specifications section designation.

609-BRJT-01 Shows Type 1-A joint detail enhancement

Adds upper slab reinforcement details and dense graded subbase Adds upper slab reinforcement details and dense graded subbase. 609-RCBA-01 609-RCBA-02

609-RCBA-03 Adds upper slab reinforcement layout details. Adds upper slab reinforcement layout details. 609-RCBA-03

Adds upper slab reinforcement quantities. Adds upper slab reinforcement quantities. 609-RCBA-05 609-RCBA-06

609-RCBA-07 Adds reinforced concrete bridge approach pavement ledge details.

EDITORIAL REV	JISIONS
205-TECD-04	Sediment trap slope and course Aggregate No. 8 filter stone information added.
503-CCPJ-03	Backer rod and sealant dimensions revised and notes added.
503-CCPJ-06	Sealant and backer rod depth dimensions clarified.
601-CWGT-02	Dimensions rounded and notes added.
601-GRET-06	Slope information added and Note No.6 revised and located on plan view.
601-TTGB-03	Hole pattern and Note No.3 added.
601-TTGB-04	Hole pattern and Note No.3 added.
601-TTGB-05	Hole pattern and Note No.3 added.
601-WBGA-01	Shoulder and ground slope notes added or enhanced and superfluous bolt note deleted.
601-WBGC-03	Hex head bolt detail deleted.
605-CNCC-02	Horizontal and radius dimensions added to Section C-C on English

### Standard Documents Changes

• Policy Changes and Technical Advisories

A Policy Change document must accompany changes to Standard Specifications or Drawings if such changes affect design policy.

Like the changed specifications or drawings, it must be approved by the Standards Committee in order to take effect.

# Standard Documents Changes

version: metric version effective date made consistent

• Policy Changes and Technical Advisories

A Technical Advisory summarizes the actual affects on the Design Manual that are created by a Policy Change.

Technical Advisories need not be approved by the Standards Committee.

A Technical Advisory may be issued independent of a Policy Change. It may be required to clarify a design matter, or revise a design procedure but not actually change it.

**HOW TO ACCESS POLICY CHANGES (PC)** AND TECHNICAL ADVISORIES (TA)

### PC and TA Access

• Website

Domain: www.in.gov/dot/div/contracts/standards/memos/memos.htm

- 1. Click on Doing Business
- 2. Under Standard Specifications, click on Design Policy, Design Manual, and More
- 3. Under Design Policy, click on Design Memos
- 4. Get reverse chronological listing of TAs and PCs
- 5. Under PDF Files, for desired memo number, Click on Technical Advisory, Policy Change, or other wordage shown
- 6. Get PDF version of desired document

# Doing Business with INDOT

### Contractors and Consultants

- <u>Construction Contracts Information</u> (Contractors)
   For Contractors/Suppliers working on INDOT contracts.
- <u>Designer Information</u> (Consultants)
   For all designers working on INDOT projects or using INDOT data.
- Professional Services Bulletins
- Certified Technician Program Information

# Standards and Specifications

- Standard Drawings
- Standard Specifications with Supplementals
- Recurring Special Provisions
- Design Policy, Design Manual and More....
- Latest Updates
- Standards Committee Agenda & Minutes

# Standards and Specifications

- Standard Drawings
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- Recurring Special Provisions
- Design Policy, Design Manual and More....
- Latest Updates
- Standards Committee Agenda & Minutes

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the If y Imp	earlier ve ou have a portant: If to print I	dewilload the latest version of Acrobat Reader, this will elerations. The new version is available only at http://www.acrobatestart.org/www.acrobatestart.	dobe.com/prodindex/acro	bat/readstep.html
ll Desig	n Memos	issued prior to December 19, 2003, except the following	g, have been deleted fro	
			10111	es
03-19		Drainage in Curbed Section	Technical Advisory	
03-10	12/08/03	Guardrail at Culverts	Technical Advisory	Attachments (2 MB
03-10	12/00/03 10/15/03	Guardrail at Culverts Reinforced Concrete Bridge Approaches (RCBA)	Technical Advisory Technical Advisory	
03-10 03-17 03-16	12/08/03 10/15/03 10/02/03	Guardrail at Culverts Reinforced Concrete Bridge Approaches (RCBA) Pavement Milling	Technical Advisory Technical Advisory Technical Advisory	Attachments (2 MB Policy Change
03-10 03-17 03-16 03-15	12/00/03 10/15/03 10/02/03 10/02/03	Guardrail at Culverts Reinforced Concrete Bridge Approaches (RCBA)	Technical Advisory Technical Advisory Technical Advisory Technical Advisory	
03-10 03-17 03-16 03-15 03-14	12/08/03 10/15/03 10/02/03 10/02/03 9/30/03	Guardrail at Culverts Reinforced Concrete Bridge Approaches (RCBA) Pavement Milling Sidemalik Curb Ramps for Partial 3R Projects Rule 5 Submission for Erosion Control Plan	Technical Advisory Technical Advisory Technical Advisory Technical Advisory Technical Advisory	
03-10	12/00/03 10/15/03 10/02/03 10/02/03 9/30/03 9/10/03	Guardrail at Culverts Reinforced Concrete Bridge Approaches (RCBA) Pavement Milling Sidewalk Curb Ramps for Partial 3R Projects	Technical Advisory Technical Advisory Technical Advisory Technical Advisory	
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October 2, 2003

DESIGN MEMORANDUM No. 03-16

POLICY CHANGE

TO: All Design, Operations, and District Personnel, and Consultants

FROM: /s/ Anthony L. Uremovich

Anthony L. Uremovich
Design Policy Engineer
Contracts and Construction

Contracts and Construction Division

SUBJECT: Pavement Milling

EFFECTIVE: October 21, 2003, Letting

The design considerations for pavement milling have been changed as described in Design Memorandum No. 03-16 Technical Advisory. There are now five milling methods.

[F:\Des\Signed\0316-pc.doc]

DESIGN MEMORANDUM No. 03-16 TECHNICAL ADVISORY

TO: All Design, Operations, and District Personnel, and Consultants

FROM:

<u>/N Anthony L. Uremovich</u> Anthony L. Uremovich Design Policy Engineer Contracts and Construction Division

COMPLEMENTS: Indiana Design Manual Section 52-7.0 SUPERSEDES: Indiana Design Manual Section 56-4.04(09)

EFFECTIVE: October 21, 2003, Letting

The new design requirements for each type of pavement milling work are as follows.

### I. Additions to Indiana Design Manual Chapter Fifty-two

Section 52-7.05 is a new section to be added as follows.

52-7.05 Milling of Pavements

An asphalt or concrete pavement may be milled to remove distressed layers or material, make crown corrections, maintain oarb heights or vertical clearances, searify existing surfaces, profile existing surfaces, remove asphalt overlays, or provide pavement transitions in accordance with Recutring Special Provision 36-6R-463, attached hereto. The five types of milling of pavements and their enernal tauseace are as follows:

### PC and TA Access

• Construction and Design Reference Guide CD

PCs and TAs are not accessible through this medium.

### 7. SPECIAL **PROVISIONS**

# Special Provisions

• Special provisions are specifications which are intended to apply to a specific contract. They could also be called, but they ordinarily are not called, "contractspecific specifications."

# **Special Provisions**

• Special provisions should not be used as a mechanism for introducing a new concept, piece or manner of work, or pay item for the purpose of averting due Standards Committee consideration of such.

### Types of Special Provisions

- Recurring Special Provision which can, and usually does, stand without modification for a specific contract
- Recurring Special Provision which cannot stand without modification
- Unique Special Provision

### **Recurring Special Provisions**

- These are standard documents which may be accessed both from the website and CD.
- Maintained by the Department's specifications manager.

### **Recurring Special Provisions**

Access Via Website

### Domain

www.in.gov/dot/div/contracts/standards/rsp/index.htm

### Instructions

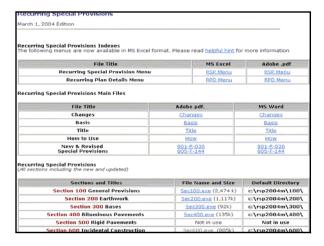
- 1. Click on edition showing desired effective date
- 2. Under File Name and Size, click on desired "even hundred" file, e.g. Sec600.exe
- 3. Get File Download box
- 4. Click on Open
- 5. Note that Unzip to Folder box identifies document as saved to C:\ drive

# Standards and Specifications

- Standard Drawings
- Standard Specifications with Supplementals
- Recurring Special Provisions
- Design Policy, Design Manual and More....
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- Standards Committee Agenda & Minutes

### Recurring Special Provisions

- September 2004 Edition
   Effective On or After September 1, 2004
- March 2004 Edition
   Effective On or After March 1, 2004
- September 2003 REVISED Edition (Updated June 23, 2003)
   Effective On or After September 1, 2003
- September 2003 Edition
- Effective On or After September 1, 2003
- March 2003 Edition
- Effective On or After March 1, 2003
- September 2002 Edition (Updated June 27, 2002)
   Effective On or After September 1, 2002



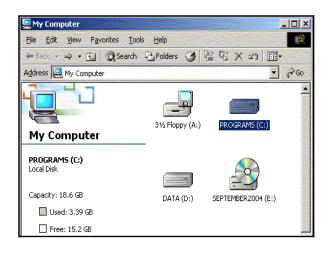


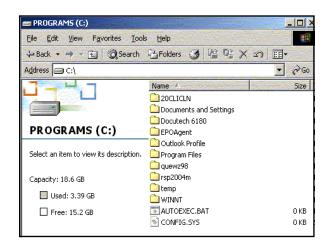


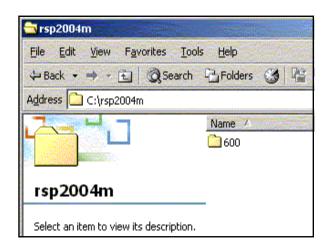
# Recurring Special Provisions Instructions for Access Via Website Click Unzip Get Winzip Self-Extractor box Click OK Click OK Click out of website or minimize it On Desktop, click My Computer Click on C:\ drive

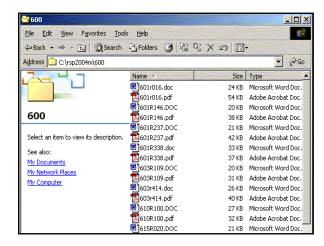
# Recurring Special Provisions Instructions for Access Via Website Note rspccyym subdirectory, e.g., rsp2004m, and click on it Note the lone subdirectory named as desired even hundred, e.g., 600, and click on it Click on PDF file of desired special provision code and view PDF version of provision text May delete PDF file once finished with it Kes, it's a hoop, but we're working on it.











SPARE PARTS PACKAGE FOR GUARDRAIL END TREATMENT

The Standard Specifications are revised as follows:

SECTION 601, AFTER LINE 123, INSERT AS FOLLOWS:

One spare parts package will be required as described herein for each type of guardrail end treatment specified. Such spare parts package shall correspond to that required for the selected alternate, if the specified guardrail end treatment type allows for alternate units. The spare parts package shall be delivered to the project site.

The spare parts package shall be in accordance with the replacement parts list for the selected alternate. Such list is available from the selected alternate guardrail end treatment manufacturer.

SECTION 601, AFTER LINE 157, INSERT AS FOLLOWS:

The guardrail end treatment for which it is specified.

SECTION 601, AFTER LINE 167, INSERT AS FOLLOWS:

The guardrail end treatment spare parts package will be paid for at the contract unit price per each for the type of guardrail end treatment manufacturent parts package will be paid for at the contract unit price per each for the type of guardrail end treatment for which it is specified.

SECTION 601, AFTER LINE 183, INSERT AS FOLLOWS:

Guardrail End Treatment,

SPARE PARTS PACKAGE.

EACH

Type

# Recurring Special Provisions

• Codes

Each RSP is assigned a code number, arranged as three numerals, a hyphen, one capital letter, a hyphen, and three numerals.

### **Recurring Special Provisions**

• Codes

The first three digits represent the number of the Standard Specifications section where the provision would appear if it were a standard specification, e.g., 601.

# Recurring Special Provisions

• Codes

The letter stands for the type of work which the provision is most often applied to, as follows:

- B Bridges
- C Contracts in general
- L Land acquisition demolition
- M Maintenance
- R Roads
- T Traffic

### **Recurring Special Provisions**

• Codes

The final three numerals are the serial number for each letter. For example, the first "R" provision was assigned 001, without regard to its Standard Specifications section number. The next, 002, and so on. Code 601-R-237 identifies the 237th "R" provision numbered, but not the 237th "609-R."

SPARE PARTS PACKAGE FOR GUARDRAIL END TREATMENT

The Standard Specifications are revised as follows:

SECTION 601, AFTER LINE 123, INSERT AS FOLLOWS:

One spare parts package will be required as described herein for each type of guardrail end treatment specified. Such spare parts package shall correspond to that required for the selected alternate, if the specified guardrail end treatment type allows for alternate units. The spare parts package shall be delivered to the project site.

The spare parts package shall be in accordance with the replacement parts list for the selected alternate. Such list is available from the selected alternate guardrail end treatment manufacturer.

SECTION 601, AFTER LINE 157, INSERT AS FOLLOWS:

The guardrail end treatment spare parts package will be measured per each for the type of guardrail end treatment for which it is specified.

SECTION 601, AFTER LINE 167, INSERT AS FOLLOWS:

The guardrail end treatment spare parts package will be paid for at the contract unit price per each for the type of guardrail end treatment for which it is specified.

\_\_\_\_\_, Spare Parts Package .....EACH type SECTION 601, AFTER LINE 183, INSERT AS FOLLOWS: Guardrail End Treatment.

### **Recurring Special Provisions**

• The only RSPs approved as such by the Standards Committee are those pending incorporation into the Standard Specifications in the next website update or CD issuance, provided the Committee decided to make the specification requirement effective ahead of that time.

### **Recurring Special Provisions**

• Most other RSPs which can be placed without modification into a contract set are worthy of consideration by the Standards Committee to become standard specifications. It just hasn't happened yet.

# Recurring Plan Details

- These are standardized plan details which have been approved by the Standards Committee which do not currently appear on standard drawings.
- They are pending incorporation into the Standard Drawings in the next website update or CD issuance, provided the Committee decided to make the requirement for such details effective ahead of that time.

### **Recurring Plan Details**

• Like many RSPs, most other RPDs which can be placed into contract plans are worthy of consideration by the Standards Committee to become standard drawings. It just hasn't happened yet.

### Recurring Plan Details

- RPD code numbers are modeled after those for RSPs. The number for a RPD is followed by a lower case "d," for "detail," e.g., 609-R-443d.
- Some RPDs have accompanying RSPs, which would have the same code number but without the "d;" the others do not.

# **Recurring Plan Details**

• How to Access Them

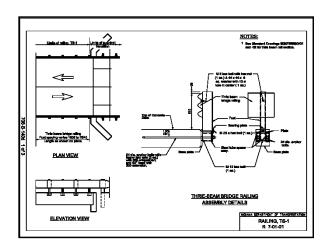
### Website:

- 1. Go to same domain as that for RSPs.
- 2. Scroll to Recurring Plan Details table.
- 3. Click on desired code number in Drawings column to see a PDF version of the desired RPD.

### Recurring Special Provisions

- September 2004 Edition
   Effective On or After September 1, 2004
- March 2004 Edition
   Effective On or After March 1, 2004
- September 2003 REVISED Edition (Updated June 23, 2003)
   Effective On or After September 1, 2003
- September 2003 Edition
   Effective On or After September 1, 2003
- March 2003 Edition
   Effective On or After March 1, 2003
- September 2002 Edition (Updated June 27, 2002)
   Effective On or After September 1, 2002

Drawings	File Name	# of Drawings
107-C-169d	Traffic Control Device Report Form	1 Form
602-T-388d	Concrete Barrier	5 Metric, 5 English
610-M-008d	Typical Approach Details	1 Sheet
701-B-101d	Pile Driving and Equipment Data Form	1 Form
706-B-140d	Bridge Railing Type TS-1 & Guardrail Transition TGS-1	3 Metric, 3 English
718-R-397d	Outlet Protectors Type 2 & 3 Precast Alternative	2 Metric, 2 English
724-B-131d	Typical Polymer Modified Asphalt Joint System	1 Sheet
724-B-147d	Alternate SS Joint	2 Metric, 2 English
805-T-038d	Loop Tagging System	1 Sheet
805-T-039d	Loop Testing Table	1 Sheet



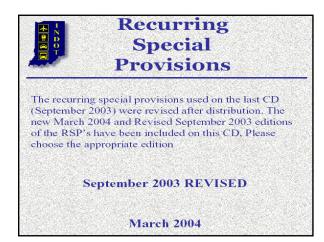
### Recurring Plan Details

How to Access Them

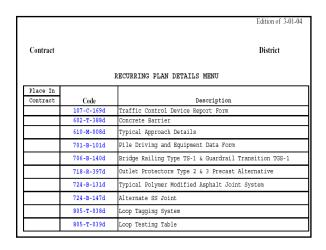
### CD:

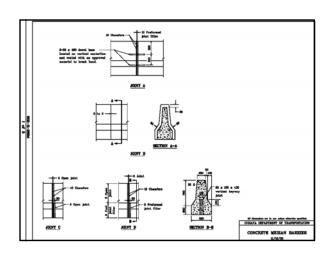
- 1. In the CD Publications menu, under Contract Documents, click on Recurring Special Provisions with Recurring Drawings.
- 2. Click on effective letting month, e.g., March 2004.
- 3. Under Recurring Special Provisions, click on Recurring Plan Details.
- 4. In the Recurring Plan Details Menu, in the Code column, click on the desired code number to see a PDF version of the desired drawing.





Recurring Special Provisions		
▶ section 100	General Provisions	
▶ section 200	Earthwork	
▶ section 300	Aggregate Pavement and Bases	
▶ section 400	Asphalt Pavements	
▶ section 500	Concrete Pavements	
	Incidental Construction	
▶ section 700	Structures	
• section 800	Traffic Control Devices and Lighting	
▶ section 900	Materials Details	
▶ Recurring P	lan Details	





# Unique Special Provisions

- A unique special provision is one which must be developed by the designer only for a type of work which the Department has never done.
- It is used for only one contract.
- The designer should note that such work may have been done in the past in a slightly different manner, which may be standardized. A unique provision would therefore be unnecessary.

# **Unique Special Provisions**

- If a unique provision is still required, it must address all 5
  ways to specify, described earlier as work description,
  materials requirements, construction requirements, method
  of measurement, and basis of payment, in this order.
- Work aspects which are already included in Standard Specifications that apply, should be referred to, only by the section number. For example, "\_\_\_\_\_ shall be in accordance with 610.03."

# **Unique Special Provisions**

 Work aspects which are already included in Recurring Special Provisions that apply, should not be referred to. Instead, such provisions should be incorporated into the contract set.

### 8. PAY ITEMS

# Pay Items

- For the purpose of contract administration, each pay item must have a code number. The number consists of 3 digits, a hyphen, then 5 digits. The first three digits correspond to its complementary Standard Specifications section number. The last five digits are a serial number in a series of all pay items assigned a number.
- For example, 609-10380 is for a pay item in Standard Specifications Section 609, and is the 10,380<sup>th</sup> pay item numbered by the Department. It is not Section 609's 10,380<sup>th</sup> numbered pay item.

### Pay Items

- If a unique pay item appears to be required, the designer must contact the Contracts and Construction Divisions' Contracts Section for a number.
- The Section will determine whether a new number is necessary. A new number is unnecessary if one of the situations exist as follows:

### Pay Items

• New Number Unnecessary:

The proposed wording closely resembles that for an existing pay item.

Example

Existing: Pipe, Type 4, Circular, 24 in. Proposed: Pipe, Circular, 24 in., Type 4 Proposed: Pipe, Type 4, Round, 24"



# Pay Items

• Pay Items Lists Access

### Website:

- 1. The domain is as follows:

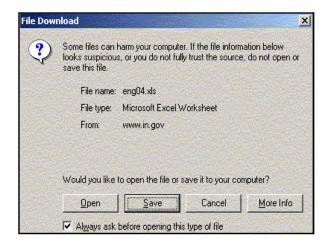
  www.in.gov/dot/div/contracts/pay
- 2. For the desired effective date, click on Metric Pay Items List or English Pay Items List, as desired
- 3. Get File Download box, click on Open
- 4. Get Excel file with items arranged by Standard Specifications section, then serially within each section.

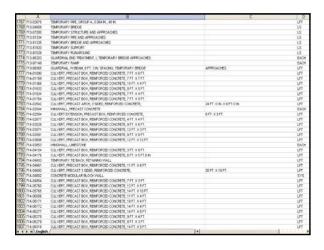
# Bid Tabulations

Pay Item List

# March 2004 (updated 10/24/03)

- For Contracts on or after March 1, 2004
  - Metric Pay Items List (MS Excel)
  - English pay Items List (MS Excel)
- Update the Item Catalog in Estimator (High Est.)
  - Item Met.csv (Metric)
  - Item Eng.csy (English)



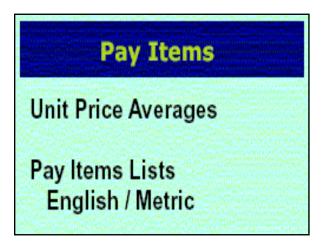


### Pay Items

• Pay Items Lists Access

### CD:

- In CD Publications menu, under Pay Items, click on Pay Item List English / Metric
- 2. Get Pay Items menu, click on Metric Pay Items List or English Pay Items List as desired
- 3. Get Launch C:\ Program Files.... box, click on Open
- Get Excel file Item\_met.xls or Item\_eng.xls. Items are arranged by Standard Specifications section, then serially within each section.



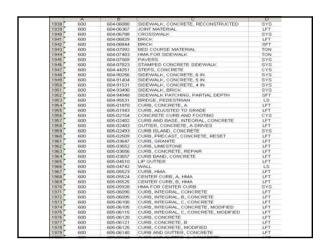
# Pay Items

Be Sure to check the internet for the latest updates!

Unit Price Averages (Metric and English)

Metric Pay Item List (Microsoft Excel File) English Pay Items List (Microsoft Excel File)





# Pay Items • Determining Pay Item Name 1. Pay item names are worded from least specific description to most specific description. Required descriptions are set off by commas. Example: Standard - QC/QA-HMA, 4, 64, Surface 9.5 mm Poor - 9.5 mm Surface, 64, 4, HMA, QC/QA 2. Pay items that require supplemental descriptions are those that require structure numbers, parcel numbers, etc., in their names.

### Pay Items

- Considerations When Requesting a Code Number
- Check the Standard Specifications and Recurring Special Provisions for the latest effective letting date to determine if the pay item name is already formatted in a standard manner.
- Check the Pay Items List to determine if the pay item description already exists, possibly worded differently.
- Check related Technical Advisory documents to determine if the pay item description has been added since the last website and CD updates.

### Pay Items

- Procedure for Obtaining a Code Number
- If the proposed pay item name appears genuinely new, it must be submitted to the Contracts and Construction Division's Contracts Section's senior systems analyst.
- The submission must include three copies of its complementary unique special provision, the proposed pay item name wording, its complementary Standard Specifications section number, and both english and metric pay units.

### Pay Items

- Procedure for Obtaining a Code Number
- 3. If the analyst determines that a new number should be assigned, he or she may reword the item name to be in accordance with standard practice, or
- 4. The analyst may determine that a new number is unwarranted.

### Pay Items

- Procedure for Obtaining a Code Number
- The analyst will provide the new number and possible rewording, or, if no new number is warranted, the existing code number and pay item name to be used.
- The analyst's determination is final. The designer must use the code number and wording provided.

### **INDOT** Website Domains

• Standard Specifications:

www.in.gov/dot/div/contracts/standards/book/index.html

• Standard Drawings:

 $\underline{www.in.gov/dot/div/contracts/standards/drawings/index.html}$ 

· Design Manual:

www.in.gov/dot/div/contracts/standards/dm

· Standards Committee:

www.in.gov/dot/div/contracts/standards/sc

• Design Policy Changes and Technical Advisories:

 $\underline{www.in.gov/dot/div/contracts/standards/memos/index.html}$ 

• Pay Item Lists:

www.in.gov/dot/div/contracts/pay/

THIS CONCLUDES
THE SESSION.

ANY FURTHER QUESTIONS ??????

LADIES AND GENTLEMEN, THIS ROAD SCHOOL IS COMPLETED. GOODNIGHT, IRENE.

Please Drive Carefully.