

ROADWAY CROSS SECTION  
DOTD Form 03-22-0720

MATT MENU SELECTION - 51

Louisiana Department of Transportation and Development

DOTD 03-22-0720  
Rev. 11/96  
Metric/English

ROADWAY CROSS SECTION

Metric/English: M (M or E) [Entry Field Located on the MATT Menu]

Project No: 852-21-0025

Control Section : 85221

Log Mile - Begin: 0.000

Roadway Direction: 12

Log Mile - End : 3.750

Station - From :      To:     

Number of Lanes: 02

Lane Width : 3.9 3.9                m(ft)

Misc. Information :       
    

ROADWAY SURFACE : 001 Width : 3.9 m(ft) Thickness : 90 mm(in)

Widening: Width :      m(ft) Thickness :      mm(in)

Joint Interval:      m(ft) Cold Planing:      mm(in) Load Transfer:      DB = Dowel Bar  
SL = Starlug

EXISTING SURFACE : 001 Width: 3.0 m(ft) Original Surface:     

BASE : 038 Base Thickness: 220 mm(in)

SUBBASE :      Subbase Thickness:      mm(in)

SUBGRADE LAYER :      Subgrade Soil Group: A1

SHOULDER: (Inside) Surface: 004 Width : 1.0 m(ft)  
Base :      Thickness: 100 mm(in)  
Surface + Base

(Outside) Surface: 004 Width : 1.0 m(ft)  
Base :      Thickness: 100 mm(in)  
Surface + Base

MEDIAN: Type:      Width :      m(ft) Average Daily Traffic: 6100

Approved By: Signature

Roadway Cross Section (03-22-0720) - continued

A Roadway Cross Section record must be entered for each roadway construction type project and as well as every time the control section or typical section changes. Typical section changes which will require data entry on a separate Cross Section are defined by the construction plans, with the following exceptions; 1) Superelevations sections; 2) Width of thickness transition sections and ; 3) Other section which do not apply to the main roadway, such as turn lanes, turnouts, etc. Contact the Pavement Management Section if clarification is needed.

Roadway Cross Section records for roadway type projects are required in most cases to generate a 2059 report. Roadway Cross Section data can be reported in Metric or English units.

Additional explanations and examples indicating proper use of Roadway Direction codes are located at the end of this section.

Metric / English	<input checked="" type="checkbox"/> M (M or E)	M = Metric E = English
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Required entry when selecting '51'.  
\* Located on the MATT Menu \*

**Note 1:** *Since Roadway Cross Section is capable of accommodating metric or english units, entry fields must be entered in the proper format based on the reporting unit chosen, M or E. Example: Shoulder Surface Thickness: 99.99 in. Shoulder Surface Thickness: 999mm*

Project Number	852-21-0025
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Required entry. Must be a valid or lead project no. in TOPS. Associated project numbers are not accepted in this field.

Control Section	85221
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Required numeric entry. First five digits of the project number (99999). Identify associated project numbers here.

Log Mile - Begin:	0.000
Log Mile - End:	3.750

Required numeric entries (999.999). Based on Control Section or change in typical section.

Roadway Cross Section (03-22-0720) - continued

Roadway Direction: 12

Required numeric entry. Must be a valid Rdwy. Direction Code as listed below.

**Note 2:** With Control - In the same direction as Control Section runs as described in the Control Section Manual.  
Against Control - In opposite direction from 'With Control'.

Direction Codes

- |                                 |                                 |
|---------------------------------|---------------------------------|
| 01 Main Rdwy With Control       | 06 Ramp Against Control         |
| 02 Main Rdwy Against Control    | 12 Main Rdwy Both Directions    |
| 03 Service Road With Control    | 34 Service Road Both Directions |
| 04 Service Road Against Control | 56 Ramps Both Directions        |
| 05 Ramp with Control            |                                 |

Station - From:

Station - To:

Can be entered in any of the following formats. Blanks are permitted and leading zeros may be omitted.

Metric: 999+999 99+999 9+999  
English: 9999+99 999+99 99+99 9+99

Number of Lanes: 02

This is a two character numeric field (must be 01 - 05). Blanks are permitted.

**Note 3:** Number of Lanes should show the Total for both directions, even if working in only one direction.

Lane Width: 3.9 (Occurs 5 times)

Numeric (99.9m) (99.9ft). Can provide entries for five lanes.

Misc. Information

Alphanumeric entry, 60 characters. Use this field to enter any information that can not be entered in other fields that is important enough to be noted. Any Associated Project Numbers can also be entered here.

Roadway Cross Section (03-22-0720) - continued

ROADWAY SURFACE: <u>001</u> Code	Width: <u>3.9</u> m(ft)	Thickness: <u>90</u> mm(in)
	Widening: Width: _____ m(ft)	Thickness: _____ mm(in)
Joint Interval: _____ m(ft)	Cold Planing: _____ mm(in)	Load Transfer: _____
		DB = Dowel Bar SL = Starlug

- Roadway Surface Code - Identify the surface as specified in the contract, leave blank if not applicable. Code may be required in some cases (see Note 4). Valid codes located in the Material Codes portion of this book.
- Widths - (99.9m) (99.9ft) Roadway Width required if Roadway Surface Code is entered.
- Thicknesses - (999mm) (99.99 in) Roadway Thickness is required if Roadway Surface Code is entered.
- Joint Interval - (99.9m) (99.99 ft)
- Cold Planing - (999mm) (99.9 in)
- Load Transfer - (DB=Dowel Bar, SL=Starlug)

**Note 4:** At least one of the following types of codes must be entered to create a record: **RDWY Surface Code, Existing Surface Code, Base Code, Subbase Code, or SHLD Surface or Base Code.**

EXISTING SURFACE : <u>001</u> Code	Width: <u>3.0</u> m(ft)	Original Surface: _____ Code
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- Existing Surface Code - Identify the current roadway surface, leave blank if not applicable. Code may be required in some cases (see Note 4). Valid codes located in the Material Codes portion of this book.
- Width (99.9m) (99.9ft)
- Original Surface - Identify the original roadway, leave blank if not applicable. Valid codes located in the Material Codes portion of this book.

BASE: <u>038</u> Code	Base Thickness: <u>220</u> mm(in)
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- Base Code - Identify the base as specified in the contract, leave blank if not applicable. Code may be required in some cases (see Note 4). Valid codes located in the Material Codes portion of this book.
- Thickness - (999mm) (99.99 in), Required if base code is entered.

Roadway Cross Section (03-22-0720) - continued

SUBBASE:	<input type="text" value="Code"/>	Subbase Thickness:	<input type="text" value="mm(in)"/>
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- Subbase Code - Identify the subbase as specified in the contract, leave blank if not applicable. Code may be required in some cases (see Note 4). Valid codes located in the Material Codes portion of this book.
- Thickness - (999mm) (99.99 in) Required if subbase code is entered.

SUBGRADE LAYER	<input type="text" value="Code"/>	Subgrade Soil Group:	<input type="text" value="A-"/>
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- Subgrade Layer Code - Identify as specified in the contract, leave blank if not applicable. Code may be required in some cases (see Note 4). Valid codes located in the Material Codes portion of this book.
- Subgrade Soil Group - (A Group), alphanumeric, first 2 characters must be 'A-'.

SHOULDER: (Inside)	Surface:	<input type="text" value="004"/> Code	Width	: <input type="text" value="1.0"/> m(ft)
	Base :	<input type="text" value="Code"/> Code	Thickness:	<input type="text" value="100"/> mm(in) <i>Surface + Base</i>
(Outside)	Surface:	<input type="text" value="004"/> Code	Width	: <input type="text" value="1.0"/> m(ft)
	Base :	<input type="text" value="Code"/> Code	Thickness:	<input type="text" value="100"/> mm(in) <i>Surface + Base</i>

- Shoulder Surface Code - Identify the shoulder surface as specified in the contract, leave blank if not applicable. Code may be required in some cases (see Note 4). Valid codes located in the Material Codes portion of this book.
- Width - (99.9m) (99.9ft) Required if a shoulder surface code is entered.
- Shoulder Base Code - Identify the shoulder base as specified in the contract, leave blank if not applicable. Code may be required in some cases (see Note 4). Valid codes located in the Material Codes portion of this book.
- Shoulder Thickness - (999mm) (99.99 in). Identify the thickness of the Surface + Base. If no base, identify the surface thickness only.

Roadway Cross Section (03-22-0720) - continued

SUBBASE:	<input style="width: 100%;" type="text" value="Code"/>	Subbase Thickness:	<input style="width: 100%;" type="text" value="mm(in)"/>
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- Subbase Code - Identify the subbase as specified in the contract, leave blank if not applicable. Code may be required in some cases (see Note 4). Valid codes located in the Material Codes portion of this book.
- Thickness - (999mm) (99.99 in) Required if subbase code is entered.

SUBGRADE LAYER	<input style="width: 100%;" type="text" value="Code"/>	Subgrade Soil Group:	<input style="width: 100%;" type="text" value="A-"/>
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- Subgrade Layer Code - Identify as specified in the contract, leave blank if not applicable. Code may be required in some cases (see Note 4). Valid codes located in the Material Codes portion of this book.
- Subgrade Soil Group - (A Group), alphanumeric, first 2 characters must be 'A-'.

SHOULDER: (Inside)	Surface:	<input style="width: 100%;" type="text" value="004"/> <small>Code</small>	Width	: <input style="width: 100%;" type="text" value="1.0"/> m(ft)
	Base :	<input style="width: 100%;" type="text" value="Code"/> <small>Code</small>	Thickness:	<input style="width: 100%;" type="text" value="100"/> mm(in) <small>Surface + Base</small>
(Outside)	Surface:	<input style="width: 100%;" type="text" value="004"/> <small>Code</small>	Width	: <input style="width: 100%;" type="text" value="1.0"/> m(ft)
	Base :	<input style="width: 100%;" type="text" value="Code"/> <small>Code</small>	Thickness:	<input style="width: 100%;" type="text" value="100"/> mm(in) <small>Surface + Base</small>

- Shoulder Surface Code - Identify the shoulder surface as specified in the contract, leave blank if not applicable. Code may be required in some cases (see Note 4). Valid codes located in the Material Codes portion of this book.
- Width - (99.9m) (99.9ft) Required if a shoulder surface code is entered.
- Shoulder Base Code - Identify the shoulder base as specified in the contract, leave blank if not applicable. Code may be required in some cases (see Note 4). Valid codes located in the Material Codes portion of this book.
- Shoulder Thickness - (999mm) (99.99 in). Identify the thickness of the Surface + Base. If no base, identify the surface thickness only.

Roadway Cross Section (03-22-0720) - continued

Median Type	
Median Width	

Median code, numeric. Must be a valid code listed below.

Width, numeric (99.9m) (99.9ft).

**Median Type Codes**

- 001 Barrier
- 002 Gravel
- 003 Paved
- 004 Sod

Average Daily Traffic	6100
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This is a six character numeric field. Blanks are permitted and leading zeros may be omitted. Identified on the Plans Title Sheet.

Approved By: <i>Signature</i>
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Signature of authorized representative.

EXAMPLE 1

MATT MENU SELECTION - 51		Louisiana Department of Transportation and Development		DOTD 03-22-0720 Rev. 11/96 Metric/English	
<b>ROADWAY CROSS SECTION</b>					
Metric/English:	E (M or E) <i>[Entry Field Located on the MATT Menu]</i>				
Project No:	999-99-9999	Control Section :	99999		
Log Mile - Begin:	0.000	Roadway Direction:	01		
Log Mile - End :	3.700				
Station - From :		To:		Number of Lanes:	04
Lane Width :	12.0	12.0			m(ft)
Misc. Information :					
ROADWAY SURFACE :	001	Width :	24.0	Thickness :	2.00
	<small>Code</small>		m(ft)		mm(in)
	Widening: Width :			Thickness :	
			m(ft)		mm(in)
Joint Interv:		Cold Planing:	2.0	Load Transfer:	
	m(ft)		mm(in)		DB = Dowel Bar SL = Starlug

This describes a roadway, comprised of two lanes, which is carrying traffic only in the direction of the control (i.e. from low CSLM); another roadway divided from and adjacent to, this roadway, has lanes carrying traffic in the opposite direction (i.e. against the control).

Each lane of this two-lane roadway is twelve foot wide and in both lanes we are taking off two inches by cold planing and putting back a two inch overlay.



Roadway Cross Section (03-22-0720) - continued

EXAMPLE 2

MATT MENU SELECTION - 51

Louisiana Department of Transportation and Development

DOTD 03-22-0720  
Rev. 11/96  
Metric/English

**ROADWAY CROSS SECTION**

Metric/English:  (M or E) [Entry Field Located on the MATT Menu]

Project No: 999-99-9999 Control Section : 99999

Log Mile - Begin: 0.000 Roadway Direction: 02

Log Mile - End : 3.650

Station - From : \_\_\_\_\_ To: \_\_\_\_\_ Number of Lanes: 04

Lane Width : 12.0 12.0 \_\_\_\_\_ \_\_\_\_\_ m(ft)

Misc. Information : \_\_\_\_\_  
\_\_\_\_\_

ROADWAY SURFACE : 001 Width : 24.0 m(ft) Thickness : 3.50 mm(in)  
Code

Widening: Width : \_\_\_\_\_ m(ft) Thickness : \_\_\_\_\_ mm(in)

Joint Interv: \_\_\_\_\_ m(ft) Cold Planing: \_\_\_\_\_ mm(in) Load Transfer: \_\_\_\_\_ DB = Dowel Bar  
SL = Starlug

This describes a roadway, comprised of two lanes, which is carrying traffic only in the direction opposite of the control (i.e. from high CSLM to a lower CSLM); another roadway, divided from, and adjacent to this roadway, has lanes carrying traffic in a direction opposite this roadway (i.e. with the control).

Each lane of this roadway is twelve foot wide and in both lanes we are putting a 3 ½ inch overlay with no cold planing.

Note: If one project on a multi-roadway facility (i.e. a divided highway) has different typicals on each of its directional roadways, then two cross-section entries would need to be completed similar to those in Examples 1 and 2.

If, however, a project is only doing work on one roadway (either the roadway running with the control or the roadway running against the control), then only one cross-section would need to be completed - similar to those in Examples 1 or 2.



EXAMPLE 3

MATT MENU SELECTION - 51		DOTD 03-22-0720	
Louisiana Department of Transportation and Development		Rev. 11/96 Metric/English	
<b>ROADWAY CROSS SECTION</b>			
Metric/English:	<u>E</u> (M or E) [Entry Field Located on the MATT Menu]		
Project No:	<u>999-99-9999</u>	Control Section :	<u>99999</u>
Log Mile - Begin:	<u>167.028</u>	Roadway Direction:	<u>12</u>
Log Mile - End :	<u>173.058</u>		
Station - From :	<input type="text"/>	To:	<input type="text"/>
			Number of Lanes: <u>04</u>
Lane Width :	<u>12.0</u>	<u>12.0</u>	<u>12.0</u>
			<u>12.0</u> m(ft)
Misc. Information :	<input type="text"/>		
<input type="text"/>			
ROADWAY SURFACE :	<u>001</u> Code	Width :	<u>48.0</u> m(ft)
		Thickness :	<u>3.50</u> mm(in)
Widening: Width :		<input type="text"/>	m(ft)
		Thickness :	<input type="text"/>
		mm(in)	
Joint Interv:	<input type="text"/>	m(ft)	Cold Planing: <u>2.0</u> mm(in)
			Load Transfer: <input type="text"/>
			DB = Dowel Bar SL = Starlug

This describes a multi-roadway project on a divided highway where both roadways (i.e. one carrying traffic in the direction of the control and one carrying traffic in the opposite direction) will receive the same treatment.

On each two lane roadway, we are taking off two inches by cold planing and putting back a 3 1/2 inch overlay.

EXAMPLE 4

MATT MENU SELECTION - 51		Louisiana Department of Transportation and Development		DOTD 03-22-0720 Rev. 11/96 Metric/English	
<b>ROADWAY CROSS SECTION</b>					
Metric/English:	<u>E</u> (M or E) [Entry Field Located on the MATT Menu]				
Project No:	<u>222-22-2222</u>	Control Section :	<u>22222</u>		
Log Mile - Begin:	<u>175.025</u>	Roadway Direction:	<u>12</u>		
Log Mile - End :	<u>183.075</u>				
Station - From :	<input type="text"/>	To:	<input type="text"/>	Number of Lanes:	<u>02</u>
Lane Width :	<u>12.0</u>	<u>12.0</u>	<input type="text"/>	<input type="text"/>	<input type="text"/> m(ft)
Misc. Information :	<input type="text"/>				
ROADWAY SURFACE :	<u>001</u>	Width :	<u>24.0</u>	Thickness :	<u>3.50</u>
	<small>Code</small>		m(ft)		mm(in)
		Widening: Width :	<input type="text"/>	Thickness :	<input type="text"/>
			m(ft)		mm(in)
Joint Interv:	<input type="text"/>	Cold Planing:	<u>2.0</u>	Load Transfer:	<input type="text"/>
	m(ft)		mm(in)		DB = Dowel Bar SL = Starlug

This describes a two lane undivided roadway where one lane is carrying traffic in the direction of the control and the other lane is carrying traffic in the direction opposite of the control. Since both lanes will have the same treatment (i.e. cold plan two inches off and put back a 3 1/2 inch overlay), only one cross-section entry is needed which identifies two lanes and a 24 foot roadway width.

EXAMPLE 5

MATT MENU SELECTION - 51	Louisiana Department of Transportation and Development	DOTD 03-22-0720 Rev. 11/96 Metric/English
<b>ROADWAY CROSS SECTION</b>		
Metric/English:	<u>E</u> (M or E) [Entry Field Located on the MATT Menu]	
Project No:	<u>222-22-2222</u>	Control Section : <u>222222</u>
Log Mile - Begin:	<u>80.042</u>	Roadway Direction: <u>12</u>
Log Mile - End :	<u>110.070</u>	
Station - From :	<input type="text"/>	To: <input type="text"/> Number of Lanes: <u>04</u>
Lane Width :	<u>12.0</u> <u>12.0</u> <u>12.0</u> <u>12.0</u> <input type="text"/> m(ft)	
Misc. Information :	<input type="text"/> <input type="text"/>	
ROADWAY SURFACE :	Code <input type="text"/> Width : <u>48.0</u> m(ft)	Thickness : <u>3.50</u> mm(in)
	Widening: Width : <input type="text"/> m(ft)	Thickness : <input type="text"/> mm(in)
Joint Interv:	<input type="text"/> m(ft)	Cold Planing: <u>2.0</u> mm(in) Load Transfer: <input type="text"/> DB = Dowel Bar SL = Starlug

This describes a four-lane, undivided roadway where two lanes are carrying traffic in the direction of the control and the other two lanes are carrying traffic in a direction against the control. Since all four lanes will have the same treatment (i.e. cold plan two inches off and put back a 3 1/2 inch overlay), only one cross-section entry is required to identify the four lanes and 48 foot roadway width.