




Office of Engineering
Project Development Division
Bridge Design Section
PO Box 94245 | Baton Rouge,
LA 70804-9245
Phone: 225-379-1302

John Bel Edwards, Governor
Shawn D. Wilson., Ph.D., Secretary

MEMORANDUM

TO: ALL CONSULTANTS
ALL BRIDGE DESIGNERS

FROM: PAUL FOSSIER, P.E.
BRIDGE DESIGN ENGINEER ADMINISTRATOR 

SUBJECT: BRIDGE DESIGN TECHNICAL MEMORANDUM NO. 72 (BDTM.72)
PUBLICATION OF NEW CONCRETE SURFACE FINISH SPECIAL DETAILS

DATE: April 20, 2017

Effective immediately, the “Concrete Surface Finish (Class 2 & Class 3)” special details shall be incorporated into all projects letting under the 2016 Standard Specifications. The special details consist of two sheets as follows:

Sheet 1 of 2 (Index No. BD.2.11.10.0.01) - Provides details for the application of concrete surface finish to structural components in bridge projects. This sheet is sealed by the Engineer of Record responsible for this special detail.

Sheet 2 of 2 (Index No. BD.2.11.10.0.02) – Provides a standard table to present concrete surface finish quantities and locations. The Engineer of Record for the project fills in the standard table and seals this sheet.

Background:

Historically, concrete special surface finishing was specified as a Class 2A concrete surface finish in the past DOTD Specifications, including the 2006 Specifications. This specification directed the contractor where to apply this finish on a bridge component level. However, for a variety of reasons, the finish was not always applied in all intended areas and was occasionally omitted completely. The surface finish application was paid for incidental to the concrete for the bridge element being constructed. Without any direct reference in the plans or in the list of pay items, the concrete surface finish was often overlooked in construction.

Currently, the Concrete Surface Finishes section of the DOTD specifications has been updated in the 2016 Standard Specifications. The former Class 2A finish has been renamed Class 3 Special Finish, and a new Class 2 Rubbed Finish item has been added to provide a nicer-looking finished product where desired. The new specification directs the contractor to the plans for the locations of the Class 2 and Class 3 finishes and establishes pay items for each; these surface finishes are no longer incidental to the concrete pay items.

Since the plans are now referenced in the Specifications, they need to show the application of the concrete surface finish. Special Details were developed to provide the contractor consistent application directions, as well as provide the Engineer of Record details that can be used for all projects.

Application Guidelines

Concrete surface finish shall be applied in accordance with the guidelines in the table on Page 3. Any exceptions shall be submitted with detailed justifications to the Bridge Design Engineer Administrator for review and approval. Coordination with Road Design is required to ensure that the surface finish quantities for roadway permanent barriers are included in the roadway plan quantities. The locations (such as Stations, Bent Nos., Span Nos., etc.) of structural components receiving surface finish shall be identified clearly in the quantity table. When concrete surface finish is required on existing concrete components for bridge widening or bridge rehabilitation projects, these same guidelines shall apply. The quantities for the existing components shall be included on Sheet 2 of 2. When concrete surface finish is required on substructure components in water, extend the finish to the “Surface Finish Water Elevation”. For the purpose of calculating quantities, this elevation is taken as the average measured water surface elevation obtained from the latest three inspection reports. For special structures, such as operator’s houses for movable bridges, the locations of application shall be shown and called out on the Coatings & Color Schedule plan sheet in the Architectural Details.

Examples:

Three examples of Sheet 2 of 2 for various project types are attached for reference. They are as follows:

- Example 1 – Slab Span/Pile Bent Bridge in rural area
- Example 2 – Girder Span/Pile Bent Bridge over stream crossing in rural area
(Exception obtained to apply surface finish for purposes of aesthetics at request of the community)
- Example 3 – Bridge Widening, in urban area, with multiple parallel structures of various types and having less than 1 foot of distance between the structures
(Exception obtained to apply surface finish to existing portion of structure for purposes of aesthetics)

Table - Concrete Surface Finish Application Guidelines

Structural Components		Application Guidelines	Special Details (Sheet 1 of 2)
Bridge Railing/Barrier, Pier or Bent Protection (using Barrier), and Visible Concrete Portion of Hand Railing in all projects		Apply Class 2 and Class 3 finishes	Detail 1
Slab, Bent Cap, and Pile or Drilled Shaft in Slab Span/Pile Bent Bridges	Rural area or over stream crossing	Do not apply surface finish	N/A
	Urban area where aesthetics is important to the Community	Apply Class 3 finish	Details 2 and 6
Deck, Exterior Concrete Girder, Bent Cap, and Pile or Drilled Shaft in Girder Span/Pile Bent Bridges	Rural area or over stream crossing	Do not apply surface finish	N/A
	Urban area where aesthetics is important to the Community	Apply Class 3 finish	Details 2, 3 and 6
Deck, Exterior Concrete Girder, Bent/Pier Cap, Columns (including Strut/Crash Wall between columns), and Footing in Girder Span/Column Bent Bridges		Apply Class 3 finish	Details 2, 3, 6, and 8
Concrete Tower above Bent/Pier Cap or Footing including Platform and Strut between Columns (such as in cable-stay bridges and movable bridges)		Apply Class 3 Finish	Detail 7
Wingwall, Retaining Wall, Backwall, and Abutment Cap	Rural area	Do not apply concrete surface finish	N/A
	Urban area where aesthetics is important to the Community	Apply Class 3 finish	Details 4 and 5
Deck/Slab and Exterior Concrete Girder in the middle of Parallel Structures where distance between the structures (edge of deck to edge of deck) is less than 1 foot		Do not apply surface finish	N/A
Riser and Shear Key		Do not apply surface finish	N/A
Bridge Widening or Bridge Rehabilitation – Existing concrete components (except existing bridge railing)		Do not apply surface finish	N/A
Operator’s House – Slab, Platform, Stairs/Ramps, Bent Cap, Piles		Apply Class 3 finish	*

* Class 3 finish shall be applied to all concrete surfaces as specified on the coatings and color schedule details in the Architectural Plans.

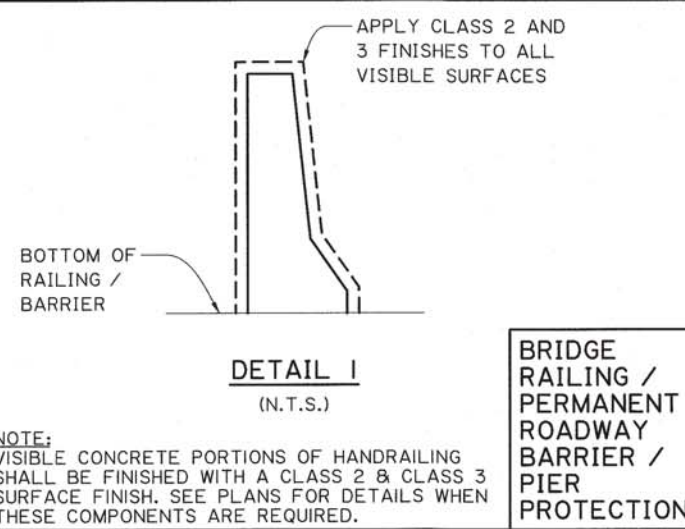
This technical memorandum is posted on the LA DOTD Website under [Inside La DOTD](#) > [Divisions - Engineering](#) > [Bridge Design](#) > [Technical Memoranda – BDTMs](#).

Please contact Ms. Zhengzheng “Jenny” Fu (225-379-1321, zhengzheng.fu@la.gov) if you have questions or comments.

PF/zzf /atw

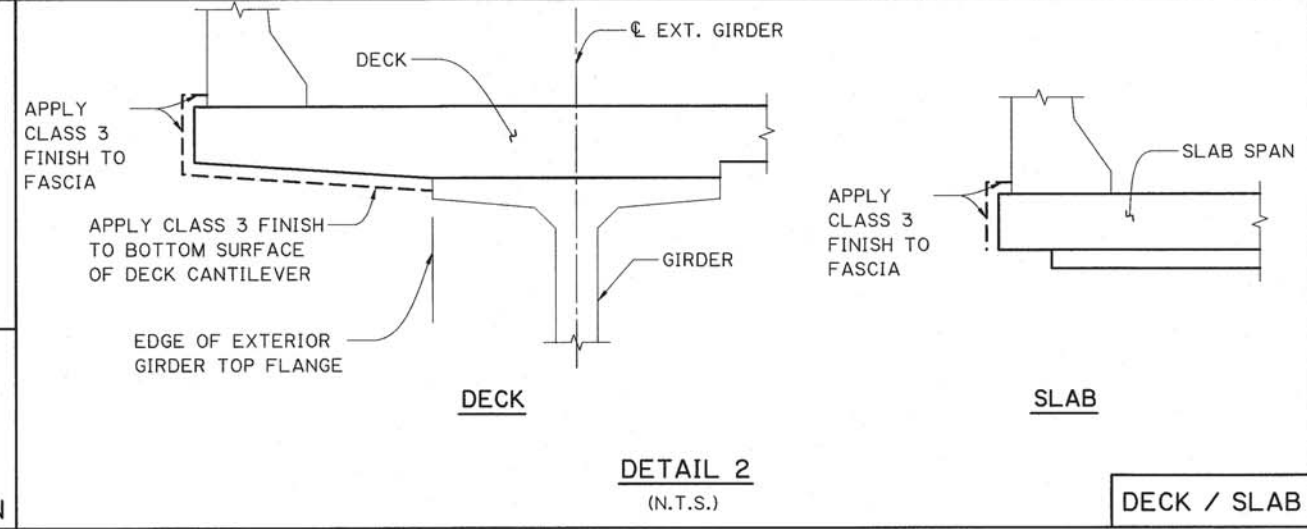
Attachments

Cc: Janice Williams (Chief Engineer)
Edward Wedge (Deputy Engineer Administrator)
Chad Winchester (Chief, Project Development Division)
Kirk Gallien (Assistant Secretary of Operations)
David Miller (Chief Maintenance Administrator)
Michael Vosburg (Chief Construction Division Engineer)
Brian Kendrick (Project Management Director)
Jeff Lambert (Pavement and Geotechnical Engineer Administrator)
Simone Ardoin (Road Design Engineer Administrator)
Art Aguirre (FHWA)
Patrick Wollerson (DOTD Plans Manager)
District Administrators, ADA Engineering, ADA Operations, and District Bridge Engineers
and Area Engineers



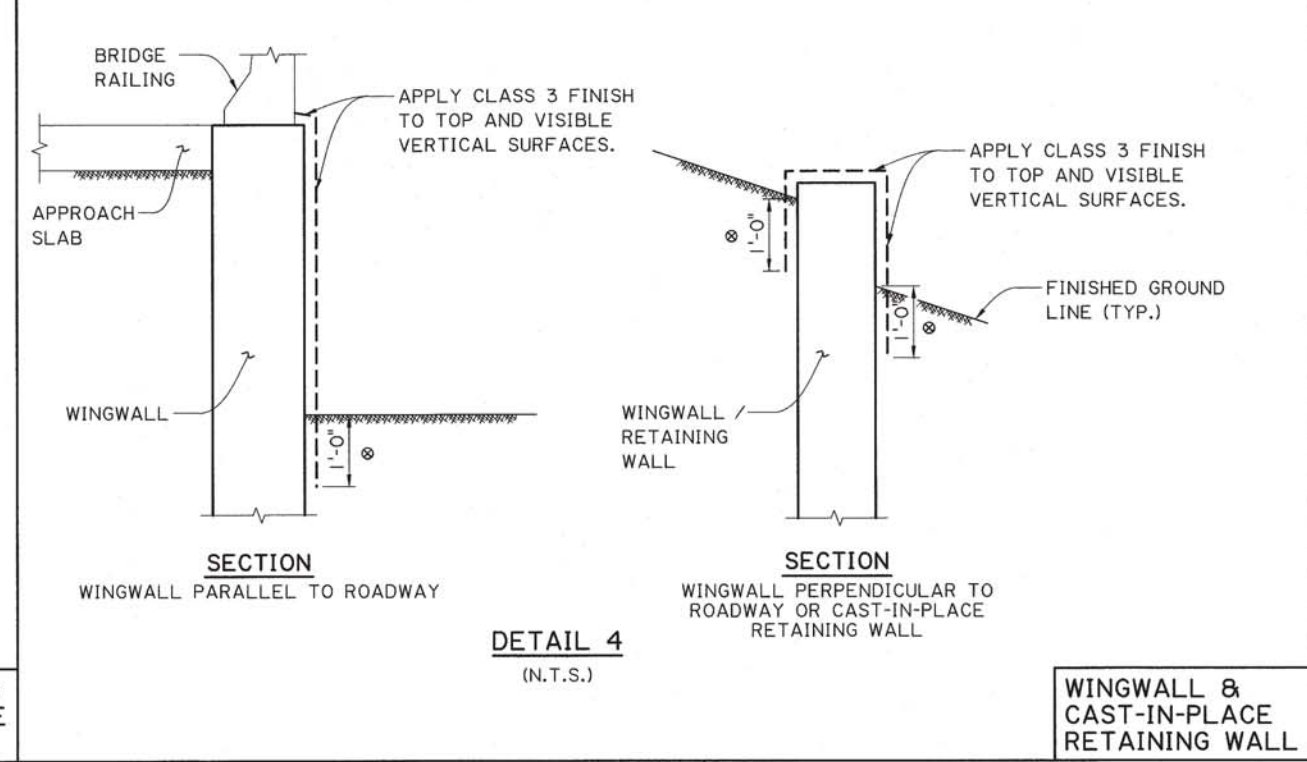
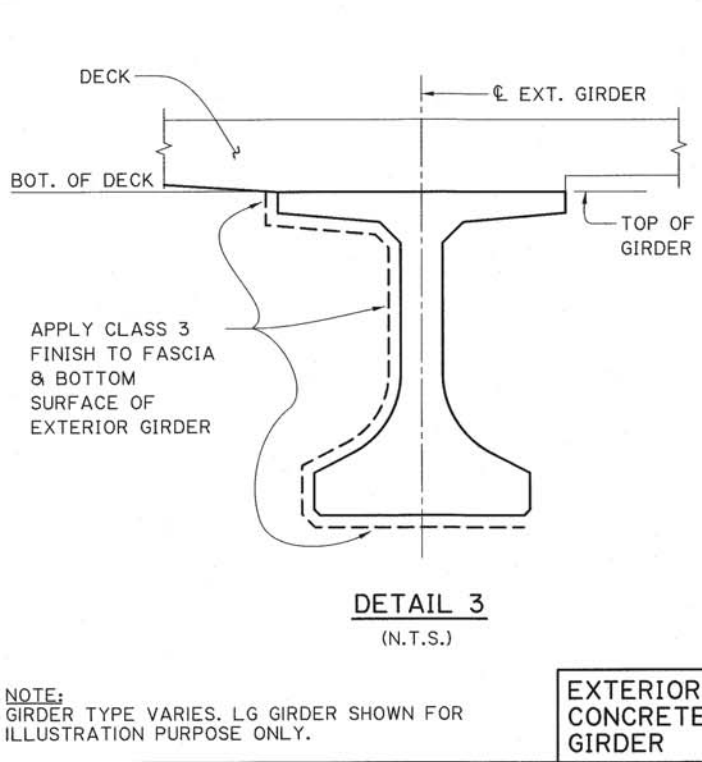
BRIDGE RAILING / PERMANENT ROADWAY BARRIER / PIER PROTECTION

NOTE:
VISIBLE CONCRETE PORTIONS OF HANDRAILING SHALL BE FINISHED WITH A CLASS 2 & CLASS 3 SURFACE FINISH. SEE PLANS FOR DETAILS WHEN THESE COMPONENTS ARE REQUIRED.

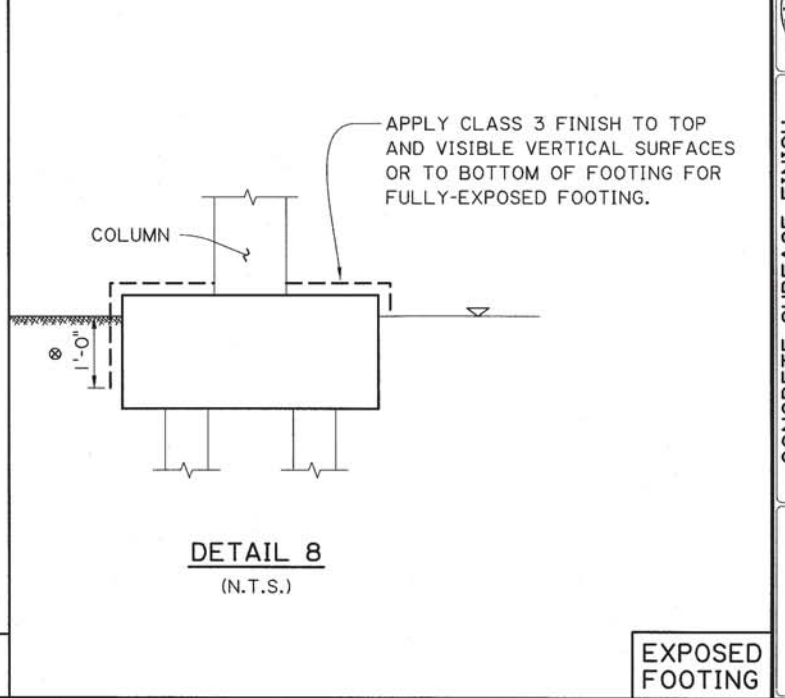
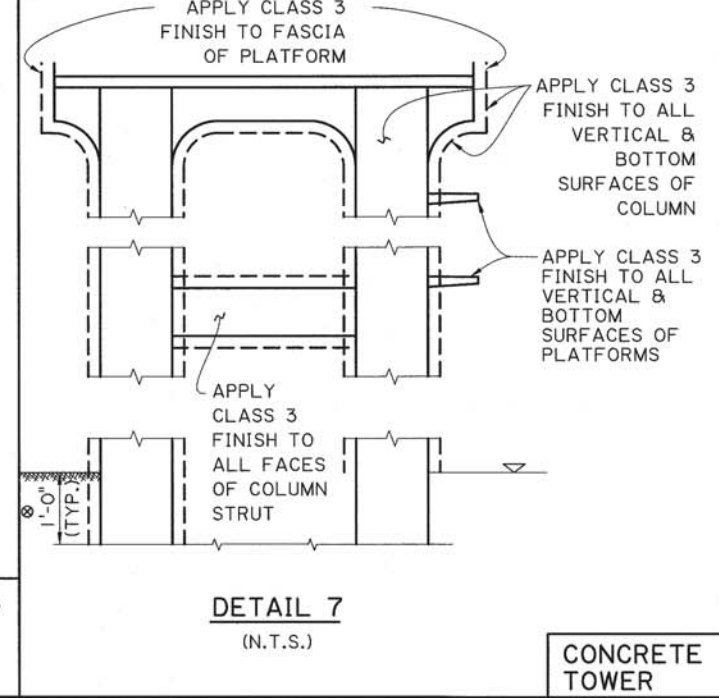
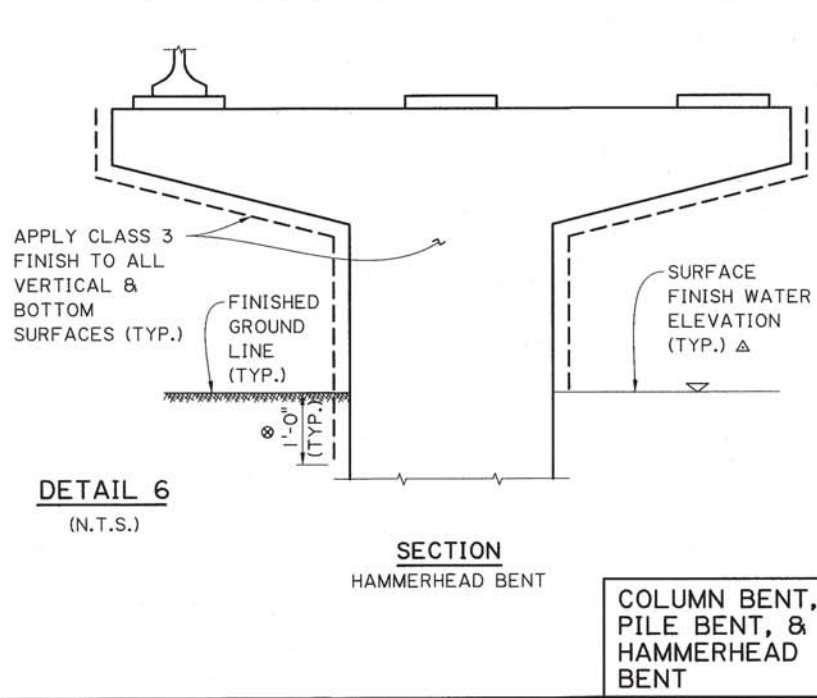
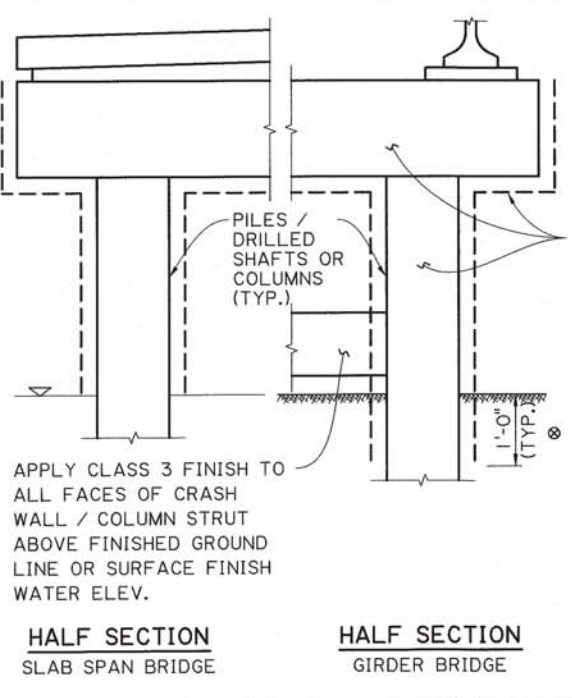
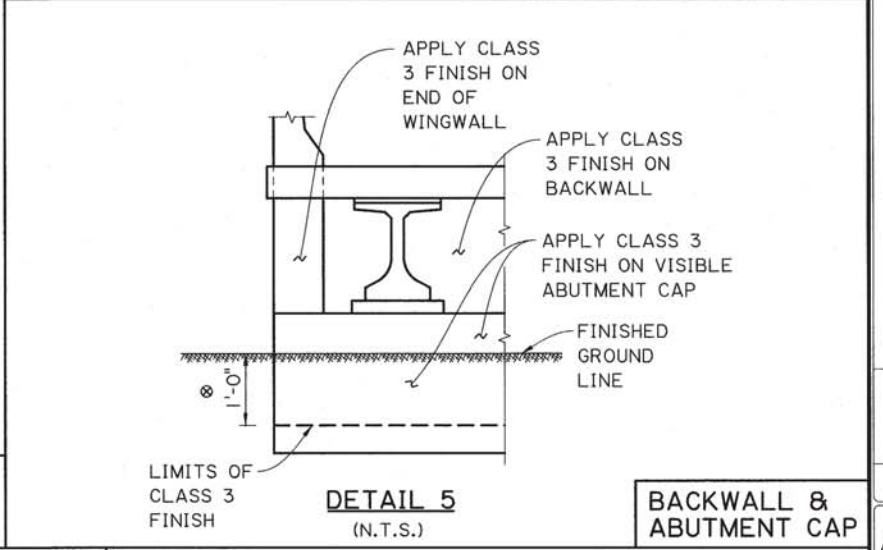


NOTES:

1. CONFORM TO SECTION 805.08 CONCRETE SURFACE FINISHES OF THE 2016 LADOTD STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES.
2. APPLY FINISHES TO STRUCTURAL CONCRETE COMPONENTS IN ACCORDANCE WITH THE DETAILS ON THIS SHEET AND QUANTITIES SPECIFIED ON SHEET 2 OF 2.
3. DETAILS SHOWN ARE TYPICAL AND ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, ACTUAL SURFACE SHAPES MAY VARY. REFER TO THE SUMMARY TABLES ON SHEET 2 OF 2 FOR REQUIRED LOCATION OF SURFACE FINISHES AND QUANTITIES.
4. THE TERM "VISIBLE" USED HEREIN IS TAKEN TO MEAN VISIBLE AFTER CONSTRUCTION IS COMPLETE, FINISHED GROUND LINES ARE IN PLACE, AND WITH RESPECT TO THE WATER SURFACE ELEVATION AT THE TIME OF APPLICATION.
5. EXTEND CLASS 3 FINISH TO 1'-0" BELOW FINISHED GROUND LINE.
6. THE "SURFACE FINISH WATER ELEVATION" ∇ SHALL BE TAKEN AS THE WATER SURFACE ELEVATION AT THE TIME OF THE CONCRETE SURFACE FINISH APPLICATION. EXTEND SURFACE FINISH TO THIS ELEVATION.



NOTE:
GIRDER TYPE VARIES. LG GIRDER SHOWN FOR ILLUSTRATION PURPOSE ONLY.



SHEET NUMBER	PARISH	CONTROL SECTION	STATE	PROJECT
DESIGNED A. WINDMANN	DESIGNED A. WINDMANN	CONTROL SECTION	STATE	PROJECT
CHECKED A. LANCASTER	CHECKED A. WINDMANN	CONTROL SECTION	STATE	PROJECT
DRAWN A. WINDMANN	REVIEWER A. WINDMANN	CONTROL SECTION	STATE	PROJECT
DATE	NO.	DATE	NO.	DATE
REVISION OR CHANGE ORDER DESCRIPTION	NO.	DATE	NO.	DATE
CONCRETE SURFACE FINISH (CLASS 2 & CLASS 3)				
BD.2.11.10.0.01 - CONC. SURFACE FINISHES				
DOTD BRIDGE DESIGN				



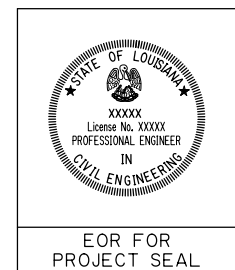
SUMMARY OF SURFACE FINISH QUANTITIES			
STRUCTURE COMPONENT	CLASS 2 (SQ. FT.) (805-18-00100)	CLASS 3 (SQ. FT.) (805-18-00200)	LOCATION (STATIONS, BENT NOS., SPAN NOS., ETC.)
STRUCTURE RECALL NO: XXXXXX		WATER SURFACE ELEVATION = XX.XX Δ	
BRIDGE RAILING	XXX.XX	XXX.XX	STA. XXX+XX.XX TO STA. XXX+XX.XX
BACKWALL	N/A	XXX.XX	
WINGWALL		XXX.XX	
ABUTMENT CAP		XXX.XX	
DECK / SLAB		XXX.XX	
EXTERIOR GIRDER		XXX.XX	
BENT CAP / PIER CAP		XXX.XX	
COLUMNS		XXX.XX	
TOWER		XXX.XX	
PILES		XXX.XX	
DRILLED SHAFTS		XXX.XX	
FOOTINGS		XXX.XX	
OPERATOR'S HOUSE		XXX.XX	SEE ARCHITECTURAL DETAILS FOR LOCATIONS
SUBTOTAL:		XXX.XX	XXX.XX
STRUCTURE RECALL NO: XXXXXX		WATER SURFACE ELEVATION = XX.XX Δ	
BRIDGE RAILING	XXX.XX	XXX.XX	STA. XXX+XX.XX TO STA. XXX+XX.XX
BACKWALL	N/A	XXX.XX	
WINGWALL		XXX.XX	
ABUTMENT CAP		XXX.XX	
DECK / SLAB		XXX.XX	
EXTERIOR GIRDER		XXX.XX	
BENT CAP / PIER CAP		XXX.XX	
COLUMNS		XXX.XX	
TOWER		XXX.XX	
PILES		XXX.XX	
DRILLED SHAFTS		XXX.XX	
FOOTINGS		XXX.XX	
OPERATOR'S HOUSE		XXX.XX	SEE ARCHITECTURAL DETAILS FOR LOCATIONS
SUBTOTAL:		XXX.XX	XXX.XX
MISCELLANEOUS ITEMS:			
PERMANENT BARRIER (ON BRIDGE ONLY)	XXX.XX	XXX.XX	STA. XXX+XX.XX TO STA. XXX+XX.XX
PIER PROTECTION (USING BARRIER)	XXX.XX	XXX.XX	BENT NO(S). X & X ON STR. NO. XXXXXX
HANDRAILING	XXX.XX	XXX.XX	STA. XXX+XX.XX TO STA. XXX+XX.XX
RETAINING WALL	N/A	XXX.XX	STA. XXX+XX.XX TO STA. XXX+XX.XX
SUBTOTAL:	XXX.XX	XXX.XX	

TOTAL CONCRETE FINISH (CLASS 2) (ITEM NO. 805-18-00100) =	XX,XXX SQ. FT.
TOTAL CONCRETE FINISH (CLASS 3) (ITEM NO. 805-18-00200) =	XX,XXX SQ. FT.

NOTES:

SEE SHEET 1 OF 2 FOR DETAILS / APPLICATION OF CONCRETE SURFACE FINISH.

Δ THE ELEVATION PROVIDED IS FOR ESTIMATION PURPOSES ONLY. SEE NOTE 6 ON SHEET 1 OF 2 FOR INFORMATION REGARDING THE ACTUAL LIMITS OF APPLICATION.



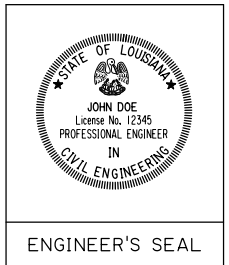
SHEET NUMBER		PARISH		CONTROL SECTION		STATE PROJECT	
DESIGNED	CHECKED	DESIGNED	CHECKED	REVIEWED	SERIES #	2	OF 2
REVISION OR CHANGE ORDER DESCRIPTION							
NO. DATE BY							
CONCRETE SURFACE FINISH (CLASS 2 & CLASS 3)							
BD-2.11.10.0.02 - CONC. SURFACE FINISHES							
 DOTD BRIDGE DESIGN							

SUMMARY OF SURFACE FINISH QUANTITIES			
STRUCTURE COMPONENT	CLASS 2 (SQ. FT.) (805-18-00100)	CLASS 3 (SQ. FT.) (805-18-00200)	LOCATION (STATIONS, BENT NOS., SPAN NOS., ETC.)
STRUCTURE RECALL NO: 050248		WATER SURFACE ELEVATION = N.A. Δ	
BRIDGE RAILING	955.44	955.44	STA. 99+90.00 TO STA. 100+70.00
BACKWALL	N/A	N/A	
WINGWALL		N/A	
ABUTMENT CAP		N/A	
DECK / SLAB		N/A	
EXTERIOR GIRDER		N/A	
BENT CAP / PIER CAP		N/A	
COLUMNS		N/A	
TOWER		N/A	
PILES		N/A	
DRILLED SHAFTS		N/A	
FOOTINGS		N/A	
OPERATOR'S HOUSE		N/A	
SUBTOTAL:		955.44	955.44
MISCELLANEOUS ITEMS:			
PERMANENT BARRIER (ON BRIDGE ONLY)	N/A	N/A	
PIER PROTECTION (USING BARRIER)	N/A	N/A	
HANDRAILING	N/A	N/A	
RETAINING WALL	N/A	N/A	
SUBTOTAL:	N/A	N/A	

TOTAL CONCRETE FINISH (CLASS 2) (ITEM NO. 805-18-00100) =	955.44 SQ. FT.
TOTAL CONCRETE FINISH (CLASS 3) (ITEM NO. 805-18-00200) =	955.44 SQ. FT.

EXAMPLE #1
SLAB SPAN ON PILE BENT BRIDGE
(IN RURAL AREA)

NOTES:
 SEE SHEET 1 OF 2 FOR DETAILS / APPLICATION OF CONCRETE SURFACE FINISH.
 Δ THE ELEVATION PROVIDED IS FOR ESTIMATION PURPOSES ONLY. SEE NOTE 6 ON SHEET 1 OF 2 FOR INFORMATION REGARDING THE ACTUAL LIMITS OF APPLICATION.



SHEET NUMBER XXX	
PARISH	OUACHITA
CONTROL SECTION	001-09
STATE PROJECT	H.000163
DESIGNED / CHECKED	JOHN DOE
DETAILED / CHECKED	JOHN DOE
REVIEWED	JOHN DOE
SERIES #	2 OF 2
NO.	
DATE	
BY	
REVISION OR CHANGE ORDER DESCRIPTION	
CONCRETE SURFACE FINISH (CLASS 2 & CLASS 3) (EXAMPLE #1 - SLAB SPAN)	
BD.2.11.10.0.02 - CONC. SURFACE FINISHES	
DOTD DOTD BRIDGE DESIGN	



SUMMARY OF SURFACE FINISH QUANTITIES			
STRUCTURE COMPONENT	CLASS 2 (SQ. FT.) (805-18-00100)	CLASS 3 (SQ. FT.) (805-18-00200)	LOCATION (STATIONS, BENT NOS., SPAN NOS., ETC.)
STRUCTURE RECALL NO: 040313		WATER SURFACE ELEVATION = 212.00 Δ	
BRIDGE RAILING	2,937.98	2,937.98	STA. 122+82.00 TO STA. 125+28.00
BACKWALL	N/A	300.00	
WINGWALL		262.86	
ABUTMENT CAP		192.52	
DECK / SLAB		1,365.00	ALL SPANS
EXTERIOR GIRDER		2,464.99	ALL SPANS
BENT CAP / PIER CAP		1,528.00	BENTS 2 & 3
COLUMNS		N/A	
TOWER		N/A	
PILES		281.40	BENTS 2 & 3
DRILLED SHAFTS		N/A	
FOOTINGS		N/A	
OPERATOR'S HOUSE		N/A	
SUBTOTAL:		2,937.98	9,332.75
STRUCTURE RECALL NO: 040314		WATER SURFACE ELEVATION = 208.88 Δ	
BRIDGE RAILING	2,101.97	2,101.97	STA. 118+37.00 TO STA. 120+13.00
BACKWALL	N/A	300.00	
WINGWALL		262.86	
ABUTMENT CAP		192.52	
DECK / SLAB		910.00	ALL SPANS
EXTERIOR GIRDER		1,643.33	ALL SPANS
BENT CAP / PIER CAP		764.00	BENT 2
COLUMNS		N/A	
TOWER		N/A	
PILES		225.50	BENT 2
DRILLED SHAFTS		N/A	
FOOTINGS		N/A	
OPERATOR'S HOUSE		N/A	
SUBTOTAL:		2,101.97	6,400.18
MISCELLANEOUS ITEMS:			
PERMANENT BARRIER (ON BRIDGE ONLY)	N/A	N/A	
PIER PROTECTION (USING BARRIER)	N/A	N/A	
HANDRAILING	N/A	N/A	
RETAINING WALL	N/A	N/A	
SUBTOTAL:	N/A	N/A	

TOTAL CONCRETE FINISH (CLASS 2) (ITEM NO. 805-18-00100) =	5,039.95 SQ. FT.
TOTAL CONCRETE FINISH (CLASS 3) (ITEM NO. 805-18-00200) =	15,732.93 SQ. FT.

EXAMPLE #2

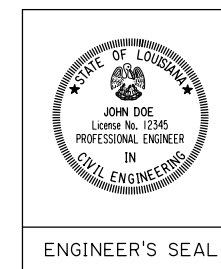
TYPE III GIRDER ON PILE BENT BRIDGE (IN RURAL AREA)

*EXCEPTION OBTAINED TO APPLY SURFACE FINISH FOR PURPOSES OF AESTHETICS AT REQUEST OF THE COMMUNITY.



NOTES:

SEE SHEET 1 OF 2 FOR DETAILS / APPLICATION OF CONCRETE SURFACE FINISH.

Δ THE ELEVATION PROVIDED IS FOR ESTIMATION PURPOSES ONLY. SEE NOTE 6 ON SHEET 1 OF 2 FOR INFORMATION REGARDING THE ACTUAL LIMITS OF APPLICATION.



ENGINEER'S SEAL

SHEET NUMBER	XXX
DESIGNED	JOHN DOE
CHECKED	CHECKER
REVIEWED	REVIEWER
DATE	
NO.	
REVISION OR CHANGE ORDER DESCRIPTION	
BY	
PARISH	CADDO
CONTROL SECTION	001-01
STATE PROJECT	H.000102
 CONCRETE SURFACE FINISH (CLASS 2 & CLASS 3) (EXAMPLE #2 - GIRDER BRIDGE) BD.2.11.10.0.02 - CONC. SURFACE FINISHES	
 DOTD DOT BRIDGE DESIGN	



SUMMARY OF SURFACE FINISH QUANTITIES			
STRUCTURE COMPONENT	CLASS 2 (SQ. FT.) (805-18-00100)	CLASS 3 (SQ. FT.) (805-18-00200)	LOCATION (STATIONS, BENT NOS., SPAN NOS., ETC.)
STRUCTURE RECALL NO(S): 300010 & 300020		WATER SURFACE ELEVATION = N/A Δ	
BRIDGE RAILING	5,414.17	5,414.17	STA. 1152+04.45 TO STA.1154+53.12
BACKWALL	N/A	392.00	
WINGWALL		773.76	
ABUTMENT CAP		782.46	
DECK / SLAB		2,024.00	ALL SPANS (EXCLUDE ON MEDIAN SIDE)
EXTERIOR GIRDER		4,022.35	ALL SPANS (EXCLUDE ON MEDIAN SIDE)
BENT CAP / PIER CAP		2,772.57	ALL INT. BENTS
COLUMNS		2,793.21	ALL COLUMNS
TOWER		N/A	
PILES		N/A	
DRILLED SHAFTS		N/A	
FOOTINGS		N/A	
OPERATOR'S HOUSE		N/A	
SUBTOTAL:		5,414.17	18,974.53
STRUCTURE RECALL NO(S): 300030 & 030316		WATER SURFACE ELEVATION = 4.67 Δ	
BRIDGE RAILING	4,766.76	4,766.76	STA. 1182+29.34 TO STA. 1184+49.34
BACKWALL	N/A	N/A	
WINGWALL		71.94	
ABUTMENT CAP		602.27	
DECK / SLAB		602.88	ALL SPANS (EXCLUDE ON MEDIAN SIDE)
EXTERIOR GIRDER		N/A	
BENT CAP / PIER CAP		6,133.52	ALL INT. BENTS
COLUMNS		N/A	
TOWER		N/A	
PILES		9,150.72	ALL INT. BENTS
DRILLED SHAFTS		N/A	
FOOTINGS		N/A	
OPERATOR'S HOUSE		N/A	
SUBTOTAL:		4,766.76	21,328.08
STRUCTURE RECALL NO(S): 030313 & 030314		WATER SURFACE ELEVATION = N/A Δ	
BRIDGE RAILING	34,161.45	34,161.45	STA. 1197+75.11 TO STA. 1212+20.11
BACKWALL	N/A	1,010.48	
WINGWALL		828.29	
ABUTMENT CAP		566.20	
DECK / SLAB		17,304.22	ALL SPANS (EXCLUDE ON MEDIAN SIDE)
EXTERIOR GIRDER		39,025.84	ALL SPANS (EXCLUDE ON MEDIAN SIDE)
BENT CAP / PIER CAP		19,479.66	ALL INT. BENTS
COLUMNS		21,295.55	ALL COLUMNS
TOWER		N/A	
PILES		N/A	
DRILLED SHAFTS		N/A	
FOOTINGS		N/A	
OPERATOR'S HOUSE		N/A	
SUBTOTAL:		34,161.45	133,671.69

NOTES:

SEE SHEET 1 OF 2 FOR DETAILS / APPLICATION OF CONCRETE SURFACE FINISH.

Δ THE ELEVATION PROVIDED IS FOR ESTIMATION PURPOSES ONLY. SEE NOTE 6 ON SHEET 1 OF 2 FOR INFORMATION REGARDING THE ACTUAL LIMITS OF APPLICATION.

SUMMARY OF SURFACE FINISH QUANTITIES (CONTINUED)			
STRUCTURE COMPONENT	CLASS 2 (SQ. FT.) (805-18-00100)	CLASS 3 (SQ. FT.) (805-18-00200)	LOCATION (STATIONS, BENT NOS., SPAN NOS., ETC.)
STRUCTURE RECALL NO(S): 300050 & 300060		WATER SURFACE ELEVATION = 3.30 Δ	
BRIDGE RAILING	9,506.64	9,506.64	STA. 1230+87.48 TO STA. 1235+47.48
BACKWALL	N/A	1,068.78	
WINGWALL		774.80	
ABUTMENT CAP		679.40	
DECK / SLAB		4,620.00	ALL SPANS (EXCLUDE ON MEDIAN SIDE)
EXTERIOR GIRDER		9,399.80	ALL SPANS (EXCLUDE ON MEDIAN SIDE)
BENT CAP / PIER CAP		11,384.36	ALL INT. BENTS
COLUMNS		N/A	
TOWER		N/A	
PILES		31,930.28	ALL INT. BENTS
DRILLED SHAFTS		N/A	
FOOTINGS		N/A	
OPERATOR'S HOUSE		N/A	
SUBTOTAL:		9,506.64	69,364.06
STRUCTURE RECALL NO(S): 300110 & 300120		WATER SURFACE ELEVATION = 5.70 Δ	
BRIDGE RAILING	11,596.67	11,596.67	STA. 1421+25.85 TO STA. 1426+32.85
BACKWALL	N/A	780.73	
WINGWALL		774.10	
ABUTMENT CAP		781.76	
DECK / SLAB		5,124.00	ALL SPANS (EXCLUDE ON MEDIAN SIDE)
EXTERIOR GIRDER		10,187.83	ALL SPANS (EXCLUDE ON MEDIAN SIDE)
BENT CAP / PIER CAP		9,030.08	ALL INT. BENTS
COLUMNS		11,944.67	ALL COLUMNS
TOWER		N/A	
PILES		N/A	
DRILLED SHAFTS		N/A	
FOOTINGS		N/A	
OPERATOR'S HOUSE		N/A	
SUBTOTAL:		11,596.67	50,219.84

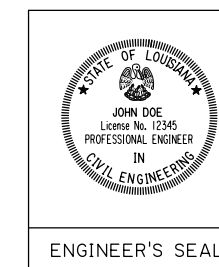
--- CONTINUED ON NEXT SHEET ---

EXAMPLE #3

BRIDGE WIDENING - PARALLEL STRUCTURES W/ LESS THAN 1 FT. BETWEEN STRUCTURES (IN URBAN AREA)

300010 & 300020 - TYPE III GIRDERS ON COLUMN BENTS
 300030 & 030316 - SLAB SPANS ON PILE BENTS
 030313 & 030314 - TYPE IV GIRDERS ON COLUMN BENTS
 300050 & 300060 - TYPE III/LG-36 GIRDERS ON PILE BENTS
 300100 & 300120 - TYPE III GIRDERS ON HAMMERHEAD BENTS
 030459 & 030461 - LG-36/LG-54 GIRDERS ON COLUMN BENTS

***EXCEPTION OBTAINED TO APPLY SURFACE FINISH TO EXISTING PORTION OF THE STRUCTURE FOR PURPOSES OF AESTHETICS.**



ENGINEER'S SEAL

SHEET NUMBER	XXX	PARISH	LAFAYETTE / ST. MARTIN	CONTROL SECTION	450-05 / 450-06
DESIGNED	JOHN DOE	CHECKED	JOHN DOE	REVIEWED	JOHN DOE
DATE		DATE		DATE	
REVISION OR CHANGE ORDER DESCRIPTION					
BY					
SERIES # 2 OF 2					
PROJECT					
H.003003					

CONCRETE SURFACE FINISH (CLASS 2 & CLASS 3)
 (EXAMPLE #3 - BRIDGE WIDENING)
 BD.2.11.10.0.02 - CONC. SURFACE FINISHES

DOTD
BRIDGE DESIGN



SUMMARY OF SURFACE FINISH QUANTITIES (CONTINUED)				
STRUCTURE COMPONENT	CLASS 2 (SQ. FT.) (805-18-00100)	CLASS 3 (SQ. FT.) (805-18-00200)	LOCATION (STATIONS, BENT NOS., SPAN NOS., ETC.)	
STRUCTURE RECALL NO(S): 030459 & 030461		WATER SURFACE ELEVATION = N.A. Δ		
BRIDGE RAILING	7,309.13	7,309.13	STA. 1465+06.25 TO STA. 1468+33.75	
BACKWALL	N/A	657.50		
WINGWALL		243.26		
ABUTMENT CAP		574.83		
DECK / SLAB		1,650.00	ALL SPANS (EXCLUDE ON MEDIAN SIDE)	
EXTERIOR GIRDER		8,086.05	ALL SPANS (EXCLUDE ON MEDIAN SIDE)	
BENT CAP / PIER CAP		4,346.03	ALL INT. BENTS	
COLUMNS		4,990.23	ALL COLUMNS	
TOWER		N/A		
PILES		N/A		
DRILLED SHAFTS		N/A		
FOOTINGS		N/A		
OPERATOR'S HOUSE		N/A		
SUBTOTAL:		7,309.13	27,857.03	
MISCELLANEOUS ITEMS:				
PERMANENT BARRIER (ON BRIDGE ONLY)	N/A	N/A		
PIER PROTECTION (USING BARRIER)	2,004.29	2,004.29	BENT NO(S). 2 & 3 ON STR. NO. 300010	
PIER PROTECTION (USING BARRIER)	1,808.87	1,808.87	BENT NO(S). 8 ON STR. NO. 030313	
HANDRAILING	N/A	N/A		
RETAINING WALL	N/A	N/A		
SUBTOTAL:	3,813.16	3,813.16		

TOTAL CONCRETE FINISH (CLASS 2) (ITEM NO. 805-18-00100) =	76,567.98 SQ. FT.
TOTAL CONCRETE FINISH (CLASS 3) (ITEM NO. 805-18-00200) =	325,228.39 SQ. FT.

EXAMPLE #3 (CONTINUED)

BRIDGE WIDENING - PARALLEL STRUCTURES W/ LESS THAN 1 FT. BETWEEN STRUCTURES (IN URBAN AREA)

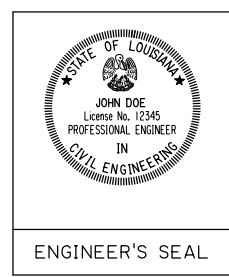
300010 & 300020 - TYPE III GIRDERS ON COLUMN BENTS
 300030 & 030316 - SLAB SPANS ON PILE BENTS
 030313 & 030314 - TYPE IV GIRDERS ON COLUMN BENTS
 300050 & 300060 - TYPE III/LG-36 GIRDERS ON PILE BENTS
 300100 & 300120 - TYPE III GIRDERS ON HAMMERHEAD BENTS
 030459 & 030461 - LG-36/LG-54 GIRDERS ON COLUMN BENTS

*EXCEPTION OBTAINED TO APPLY SURFACE FINISH TO EXISTING PORTION OF THE STRUCTURE FOR PURPOSES OF AESTHETICS.

NOTES:

SEE SHEET 1 OF 2 FOR DETAILS / APPLICATION OF CONCRETE SURFACE FINISH.

Δ THE ELEVATION PROVIDED IS FOR ESTIMATION PURPOSES ONLY. SEE NOTE 6 ON SHEET 1 OF 2 FOR INFORMATION REGARDING THE ACTUAL LIMITS OF APPLICATION.



SHEET NUMBER	XXX	PARISH	LAFAYETTE / ST. MARTIN	CONTROL SECTION	450-05 / 450-06	STATE PROJECT	H.003003
DESIGNED	CHECKED	CHECKED	CHECKED	REVIEWED	REVIEWED	SERIES #	2 OF 2
JOHN DOE	JOHN DOE	JOHN DOE	JOHN DOE	JOHN DOE	JOHN DOE	2	2
NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION					
NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION					
CONCRETE SURFACE FINISH (CLASS 2 & CLASS 3) (EXAMPLE #3 - BRIDGE WIDENING)(CONT.)							
BD.2.11.10.0.02 - CONC. SURFACE FINISHES							
DOTD BRIDGE DESIGN							