LAFAYETTE CONSOLIDATED GOVERNMENT
SUPPLEMENTAL SPECIFICATIONS
(FOR 2023 STANDARD SPECIFICATIONS)

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LAFAYETTE CONSOLIDATED GOVERNMENT
SUPPLEMENTAL SPECIFICATIONS

The 2023 Lafayette Consolidated Government Standard Specifications for Road, Drainage, Bridges and Other Infrastructure and supplemental specifications thereto are amended as follows:

PART I – GENERAL PROVISIONS

SECTION 102 – GENERAL BIDDING REQUIREMENTS:

Subsection 102.01 – Description (12/2024), page 19

Delete the following paragraph in its entirety from Section 102.01:
"The specifications, contract and bonds governing the construction of the work are the LCG 2016 Edition of the Standard Specifications for Roads, Drainage, Bridges, and Other Infrastructure, together with any supplementary specifications and special provisions attached to this proposal."

And replace with:
"The specifications, contract and bonds governing the construction of the work are the LCG 2023 Edition of the Standard Specifications for Roads, Drainage, Bridges, and Other Infrastructure, together with any supplementary specifications and special provisions attached to this proposal."

Any other requirement found in Subsection 102.01 not addressed above shall be applicable.

PART VI – RIDGID PAVEMENT

SECTION 601 –PORTLAND CEMENT CONCRETE PAVEMENT:

Subsection 601.09(b) – Transverse Expansion Joints (Type EJ – 1-1/2") (12/2024), page 344

Delete the following sentences in its entirety from Section 601.09(b):
"The sleeper slab shall be constructed from Class A Concrete or one of the pavement types complying with Section 901."

And replace with:
"The sleeper slab shall be constructed from Class M3 Concrete or one of the pavement types complying with Section 901."

Subsection 601.09(i) – Transverse Expansion Joints (Type EJ – 4") (12/2024), page 347

Delete the following sentences in its entirety from Section 601.09(i):
"The sleeper slab shall be constructed from Class A Concrete or one of the pavement types complying with Section 901."

And replace with:

"The sleeper slab shall be constructed from Class M3 Concrete or one of the pavement types complying with Section 901."

Any other requirement found in Subsection 601.09 not addressed above shall be applicable.

Subsection 601.18(b)(3) – Compressive Strength (1/2025), page 364

Delete the following sentences in its entirety from Section 601.18(b)(3):
"Average Compressive strength for a lot shall not be less than 4,000 psi or 3,600 psi when air entrainment is used for Type B & D pavement and 5000 psi or 4.500 psi when air entrainment is used."

Any other requirement found in Subsection 601.18(b)(3) not addressed above shall be applicable.

Table 601-1 – Payment Adjustment Schedule (1/2025), page 367

Delete Table 601-1 in its entirety from Section 601:
Air entrainment parameter is removed and Type E concrete mix is added.

And replace with:

Table 601-1
Payment Adjustment Schedule

Parameter	Payment (Percent Of Contract Unit Price/Lot)[1]					
	100	98	95	80	50 or remove and replace[2]	Correct or remove and replace[2]
Deficiency in Average Thickness of 5 cores per lot, inches	0 to 0.10	-----	0.11 to 0.25	0.26 to 0.50	Over 0.50	-----
Average Compressive Strength, psi	5000 & over Type X	-----	4500 to 4999	3750 to 4449	Below 3750	-----
	4000 & over Type B, D, or E	-----	3500 to 3999	3000 to 3499	Below 3000	-----
Category I Average Profile Index (inches/mile/lot) for pavement travel lanes with design speed greater than 45 mph[3]	6.0 or less	6.1 to 7.0	7.1 to 8.0	-----	-----	over 8.0
Category II Average Profile Index (inches/mile/lot) for Urban Areas using continuous paving operations with design speeds 45 mph or less[3]	12.0 or less	12.1 to 13.0	13.1 to 14.0	-----	-----	over 14.0
Category III Average Profile Index (inches/mile/lot) for Urban Areas not using continuous paving operations with design speeds 45 mph or less[3]	16.0 or less	16.1 to 18.0	18.1 to 20.0	20.1 to 22.0	-----	over 22.0

[1]Payment adjustments shall be cumulative.
[2]At the option of LCG after investigation.
[3]As defined in Subsection 601.11 using an approved profilograph

SECTION 602 –PORTLAND CEMENT CONCRETE PAVEMENT REHABILITATION:

Subsection 602.21(e) – Full Depth Patching of Jointed Concrete Pavement (1/2025), page 390

Add the following paragraphs in their entirety to the beginning of Section 602.21(e):
"Acceptance and payment for full depth patching of jointed concrete pavement will be made on a lot basis at the contract unit price per square yard, adjusted in accordance with the following provisions. A lot will be an identifiable pour as described in Subsection 602.20(e). Acceptance and payment for each lot will be based on the compressive strengths of Table 601-1.
Payment for full depth patching of jointed concrete pavement per square yard includes

furnishing all materials and performing the work as specified in Subsection 602.08. All required sawcutting is to be included in the unit price per square yard.

(1) The value per inch thickness will be determined by dividing the contract unit price per square yard by the plan thickness.

(2) The thickness of the patches will be determined by the following:"

Subsection 602.21 – Payment: (1/2025), page 391 - 392

Delete the following paragraphs in their entirety from Subsection 602.21:

" **(g) Patching Continuously Reinforced Concrete Pavement:** Payment for continuously reinforced concrete pavement will be made on a lot basis at the contract unit price per square yard, adjusted in accordance with the following provisions. A lot will be an identifiable pour as described in Subsection 602.17(d). Acceptance and payment for each lot will be based on the compressive strengths of Table 601 1.

Payment for patching continuous reinforced concrete pavement per square yard includes furnishing all materials and performing the work as specified in Subsection 602.10.

Payment for deteriorated base course removed as directed by LCG and replaced with concrete will be made as follows:

(1) The value per inch thickness will be determined by dividing the contract unit price per square yard by the plan thickness.

(2) Thickness of patches will be measured from the surface that exists at the time of patching. Payment for the additional thickness will be made at 50% of the value per inch thus determined.

Grinding Concrete Pavement and Joints: Payment for grinding concrete pavement and joints will be paid for at the contract unit price per square yard which will include furnishing all labor, materials, tools, equipment, and incidentals involved in grinding the pavement, and disposing of the slurry residue.

(h) Longitudinal Shoulder Joint: Payment for longitudinal shoulder joint will be made at the contract unit price per linear foot which includes furnishing all materials and performing the work as specified in Subsection 602.12.

(i) Removal of Existing Shoulder Underdrain Systems: Payment for removal of existing shoulder underdrain systems will be made at the contract unit price per linear foot which includes plugging and backfilling of outfalls, furnishing all materials and performing the work as specified in Subsection 602.13.

(j) Undersealing and Slabjacking Pavement: Payment for undersealing pavement and slabjacking pavement will be made at the contract unit price per ton of portland cement. Holes for undersealing pavement and slabjacking pavement will be made at the contract unit price per each. Payment under these contract items, include furnishing all materials and performing the work as specified in Subsection 602.14.

(k) Dowel Bar Retrofit: Payment for dowel bar retrofits will be made at the contract unit price per each, which includes furnishing all materials and performing the work as specified in Subsection 602.16.

(l) Mid-Panel Reinforcement Mats: Mid-panel reinforcement mats will be paid for at the contract unit price per square foot of mat which includes furnishing all materials, labor, tools and equipment necessary to complete the item.

(m) Removal and Replacement of Existing Concrete Walks and Drives:

(1) Payment shall include cost for loading and transportation to deliver the pulverized full-depth jointed concrete pavement material and paid at the contract unit price per cubic

yard. LCG reserves the right to reject any material at any time for any reason.

(2) Payment shall include all materials, tools, equipment, labor, and incidentals necessary to complete the work for removal and resetting of existing manhole ring and cover and be paid at the contract unit price per each.

(3) The payment shall include saw cutting, removal, and replacement of existing concrete walks and drives and be paid at the contract unit price per square yard."

And replace with:

" **(g) Patching Continuously Reinforced Concrete Pavement:** Payment for continuously reinforced concrete pavement will be made on a lot basis at the contract unit price per square yard, adjusted in accordance with the following provisions. A lot will be an identifiable pour as described in Subsection 602.17(d). Acceptance and payment for each lot will be based on the compressive strengths of Table 601 1.

Payment for patching continuous reinforced concrete pavement per square yard includes furnishing all materials and performing the work as specified in Subsection 602.10.

Payment for deteriorated base course removed as directed by LCG and replaced with concrete will be made as follows:

(1) The value per inch thickness will be determined by dividing the contract unit price per square yard by the plan thickness.

(2) Thickness of patches will be measured from the surface that exists at the time of patching. Payment for the additional thickness will be made at 50% of the value per inch thus determined.

(h) Grinding Concrete Pavement and Joints: Payment for grinding concrete pavement and joints will be paid for at the contract unit price per square yard which will include furnishing all labor, materials, tools, equipment, and incidentals involved in grinding the pavement, and disposing of the slurry residue.

(i) Longitudinal Shoulder Joint: Payment for longitudinal shoulder joint will be made at the contract unit price per linear foot which includes furnishing all materials and performing the work as specified in Subsection 602.12.

(j) Removal of Existing Shoulder Underdrain Systems: Payment for removal of existing shoulder underdrain systems will be made at the contract unit price per linear foot which includes plugging and backfilling of outfalls, furnishing all materials and performing the work as specified in Subsection 602.13.

(k) Undersealing and Slabjacking Pavement: Payment for undersealing pavement and slabjacking pavement will be made at the contract unit price per ton of portland cement. Holes for undersealing pavement and slabjacking pavement will be made at the contract unit price per each. Payment under these contract items, include furnishing all materials and performing the work as specified in Subsection 602.14.

(l) Dowel Bar Retrofit: Payment for dowel bar retrofits will be made at the contract unit price per each, which includes furnishing all materials and performing the work as specified in Subsection 602.16.

(m) Mid-Panel Reinforcement Mats: Mid-panel reinforcement mats will be paid for at the contract unit price per square foot of mat which includes furnishing all materials, labor, tools and equipment necessary to complete the item.

(n) Contractor Retained Reclaimed PCC Pavement: Payment shall include cost for loading and transportation to deliver the pulverized full-depth jointed concrete pavement material and paid at the contract unit price per cubic yard. LCG reserves the right to reject

any material at any time for any reason.

(o) Removal and Resetting of Existing Manhole Ring and Cover: Payment shall include all materials, tools, equipment, labor, and incidentals necessary to complete the work for removal and resetting of existing manhole ring and cover and be paid at the contract unit price per each.

(p) Removal and Replacement of Existing Concrete Walks and Drives: The payment shall include saw cutting, removal, and replacement of existing concrete walks and drives and be paid at the contract unit price per square yard.""

Any other requirement found in Subsection 602.21 not addressed above shall be applicable.

PART VII – INCIDENTAL CONSTRUCTION

SECTION 701 – CULVERTS AND STORM DRAINS:

Subsection 701.02 – Materials (2/2025), page 396

Delete the following sentences in its entirety from Section 701.02:

"Reclaimed Asphaltic Pavement (RAP) 1003.01 & 1003.04(d)."

Subsection 701.02(a) – Cross Drain Pipe or Cross Drain Pipe Arch: (2/2025), page 396 & 397

Delete the following sentences in its entirety from Section 701.02:

"When the item for Cross Drain Pipe or Cross Drain Pipe Arch is included in the contract, the contractor shall furnish reinforced concrete pipe or reinforced concrete pipe arch, unless otherwise specified."

And replace with:

"When the item for Cross Drain Pipe or Cross Drain Pipe Arch is included in the contract, the contractor shall furnish reinforced concrete pipe or reinforced concrete pipe arch in conformance with Sections 1006, 1007, or 1016, as indicated by the pay item, unless otherwise specified."

Subsection 701.02(b) – Storm Drain Pipe or Storm Drain Pipe Arch: (2/2025), page 397

Delete the following sentences in its entirety from Section 701.02:

"When the item for Storm Drain Pipe or Storm Drain Pipe Arch is included in the contract, the contractor has the option of furnishing reinforced concrete pipe or reinforced concrete pipe arch, or thermoplastic pipe, unless otherwise specified."

And replace with:

"When the item for Storm Drain Pipe or Storm Drain Pipe Arch is included in the contract, the contractor has the option of furnishing reinforced concrete pipe or reinforced concrete pipe arch in conformance with Section 1016, as indicated by the pay item, or thermoplastic pipe, unless otherwise specified."

Any other requirement found in Subsection 701.02 not addressed above shall be applicable.

Subsection 701.03 – Excavation (2/2025), page 398

Add the following paragraphs after the first paragraph of this subsection:

"If the sides are deemed unstable as defined by OSHA or when the trench excavation exceeds 5 feet in depth, sloping, benching, and shoring will be required in accordance with the OSHA trench safety standards, 29 CFR § 1926 (P). Consider these and any more stringent trench safety standards as minimum contract requirements.

Submission of bid and subsequent award of contract will serve as certification that all trench excavation in excess of 5 feet will be in compliance LA R.S. 48:251.1.

Consider all available geotechnical information when designing the trench excavation safety system, including groundwater. Evaluate trench stability due to the effects of surcharge loads from adjacent structures, stored materials and equipment, or traffic. Ensure that excavated material is placed a sufficient distance back from the trench edge to preclude material from falling back into the trench, otherwise provide an adequate retention system."

Flexible pipe consists of all corrugated aluminum and thermoplastic pipe.

Delete the following sentence in its entirety from Section 701.03:
"Moisture controls including backfill materials selection and dewatering using sumps, wells, well points or other approved processes may be necessary to control excess moisture during excavation, installation of bedding, over-excavated trench backfilling, pipe placement and pipe backfill at no direct pay."

And replace with:
"Moisture controls including backfill materials selection and dewatering using sumps, wells, well points or other approved processes may be necessary to control rainfall runoff or excess moisture during excavation, installation of bedding, over-excavated trench backfilling, pipe placement and pipe backfill at no direct pay."

Any other requirement found in Subsection 701.03 not addressed above shall be applicable.

Subsection 701.03(a) – Over-Excavation (2/2025), page 398

Delete the following sentences in its entirety from Section 701.03:
"When unsuitable soils as defined in Subsection 203.04 or a stable, non-yielding foundation cannot be obtained at the established pipe grade, or at the grade established for placement of the bedding, unstable or unsuitable soils below this grade shall be removed and replaced with granular material meeting the requirements of Subsection 1003.07, bedding materials meeting the requirements of Subsection 1003.08 or Type A backfill."

And replace with:
"When unsuitable soils as defined in Subsection 203.04 or a stable, non-yielding foundation cannot be obtained at the established pipe grade, or at the grade established for placement of the bedding, unstable or unsuitable soils below this grade shall be removed and replaced with granular material meeting the requirements of Subsection 1003.07, bedding materials meeting the requirements of Subsection 1003.08 or Type A backfill complying with 701.08(a)."

Any other requirement found in Subsection 701.03(a) not addressed above shall be applicable.

Subsection 701.04 – Forming Pipe Bed (2/2025), page 399

Delete the following sentences in its entirety from Section 701.03:
"When bedding materials are specified, additional excavation shall be performed below established pipe grade and the bedding material placed in lifts not exceeding 8" thick and lightly compacted by hand or a dynamic mechanical hand operated compaction device over the surface of each lift."

And replace with:
"When bedding materials are specified, additional excavation shall be performed below established pipe grade and the bedding material placed in lifts not exceeding 8" thick and lightly compacted by hand or a dynamic mechanical hand operated compaction device over the surface of each lift then scarify 3" deep minimum 1/3 pipe diameter wide."

Any other requirement found in Subsection 701.04 not addressed above shall be applicable.

Subsection 701.06(a)(1) – Joint Usage: (2/2025), page 399

Delete the following sentences in its entirety from Section 701.03:
"Type 3 (T3) joints shall be used for all storm drain systems."

And replace with:
"Type 3 (T3) joints shall be used for all cross and storm drain systems."

Any other requirement found in Subsection 701.06(a)(1) not addressed above shall be applicable.

Subsection 701.08(a) – General: (2/2025), page 401

Delete the following sentences in its entirety from Section 701.03:
"Type B backfill materials are selected soils. Where Type B backfill materials are called for Type A backfill materials may be substituted at no additional cost."

And replace with:
"Type B backfill materials are selected soils. Select soils are natural soils with a maximum PI of 20, a maximum liquid limit of 35, and a maximum organic content of 5 percent. Soils with a silt content of 50 percent or greater and also a PI of 10 or less will not be allowed. Where Type B backfill materials are called for Type A backfill materials may be substituted at no additional cost."

Delete the following sentences in its entirety from Section 701.03:
"When corrugated metal pipe is used, the backfill material shall be tested and shall have a resistivity greater than 1,500 ohm-cm and a pH greater than 5 when tested in accordance with LA DOTD TR 429 and LA DOTD TR 430 respectively."

And replace with:
"When corrugated aluminum pipe is used, the backfill material shall be tested and shall have a resistivity greater than 1,500 ohm-cm and a pH greater than 5 when tested in accordance with LA DOTD TR 429 and LA DOTD TR 430 respectively."

Any other requirement found in Subsection 701.08(a) not addressed above shall be applicable.

Subsection 701.08(g) – Density Requirements: (2/2025), page 404

Delete the following sentences in its entirety from Section 701.03:
"The in place density of Type A backfill materials and bedding materials, will not be measured or determined. Type A backfill, exclusive of flowable fill, shall be placed at or near optimum moisture content determined in accordance with LA DOTD TR 418."

And replace with:
"The in place density of Type A backfill materials and bedding materials, exclusive of flowable fill, shall be determined in accordance with DOTD TR 401. Type A backfill, exclusive of flowable fill, shall be placed at or near optimum moisture content determined in accordance with LA DOTD TR 418."

Any other requirement found in Subsection 701.06(g) not addressed above shall be applicable.

SECTION 722 – FIELD PROJECT SITE OFFICE BUILDING:

Subsection 722.02 –General Requirements (2/2025), page 500

Delete the following sentence in its entirety from the last paragraph under Section 701.02:
"Use of a mechanical generator to supply electrical power is NOT acceptable."

And replace with:
"Use of a mechanical generator to supply electrical power shall only be allowed when all efforts to connect to a local power supplier has failed or a power supplier is not available as determined by LCG." When a mechanical generator is allowed by LCG in writing, it shall be rated at 60 decibels or lower. The mechanical generator shall have sufficient power to supply the field project site office building everyday during working hours. The contractor shall be responsible for all cost related to maintaining and operating the mechanical generator. The cost for furnishing, maintaining, and operating the mechanical generator shall be included in the contract per each unit price for Field Project Site Office Building (Equipped).

Any other requirement found in Subsection 722.02 not addressed above shall be applicable.

SECTION 730 – ELECRICAL SYSTEMS:

Subsection 730.01 – Description (12/2024), page 524

Delete the following sentences in its entirety from Section 730.01:
"http://www.lus.org/uploads/LUSRedBook32013318.pdf
http://www.lus.org/uploads/AppendixADetailsTheRedBook.pdf."

And replace with:
"https://www.lus.org/wp-content/uploads/2024/11/LCPCG-Lafayette-Utilities-System-Street-Lighting-Standards-2024.11.01.pdf."

Any other requirement found in Subsection 730.01 not addressed above shall be applicable.

PART VIII – STRUCTURES

SECTION 801 – GENERAL REQUIREMENTS FOR STRUCTURES:

Subsection 801.03(b) – Falsework (12/2024), page 652

Add the following sentence in its entirety to the paragraph in Section 801.03(b):
"The design calculations for falsework shall be provided by the contractor to LCG for review and approval."

Subsection 801.03(c) – Form Drawings (12/2024), page 652

Add the following sentence in its entirety to the paragraph in Section 801.03(c):
"The design calculations for form drawings shall be provided by the contractor to LCG for review and approval."

Any other requirement found in Subsection 801.03 not addressed above shall be applicable.

SECTION 805 – STRUCTURAL CONCRETE:

Subsection 805.01 – Description (1/2025), page 695

Delete the following sentence in its entirety to the paragraph in Section 801.03(b):
"All concrete used to construct approach slabs, barrier rails, bridge decks and caps, when cast-in-place, shall be Class IC(A)(M) concrete and have a minimum 28-day compressive strength of 4,500 psi."

And replace with:
"All concrete used to construct box culverts, barrier rails, bridge decks, and caps, when cast-in-place, shall be Class IC(A)(M) concrete and have a minimum 28-day compressive strength of 4,500 psi."

Any other requirement found in Subsection 805.01 not addressed above shall be applicable.

SECTION 806 – REINFORCEMENT:

Subsection 806.07 – Splicing (12/2024), page 734

Delete Table 806-3 in its entirety from Section 806.07:
Updated lap splice lengths.

And replace with:

Table 806-1
Lap Splice Length for Grade 60 Steel

Bar No.	Lap Splice Length, inches
3	12
4	15
5	19
6	23
7	27
8	30
9	34
10	38
11	43

Any other requirement found in Subsection 806.07 not addressed above shall be applicable.

SECTION 813 – CONCRETE APPROACH SLABS:

Subsection 813.03(b) – Concrete (1/2025), page 797

Delete the following sentences in its entirety from Section 813.07:
"Concrete for all approach slabs shall be Class A, A(M) or IC(A)(M) as specified. Concrete for sleeper slabs under approach slabs shall be either Class A or one of the concrete pavement types."

And replace with:
"Concrete for all approach slabs shall be Class IC(A)(M). Concrete for sleeper slabs under approach slabs shall be either Class M3 or one of the concrete pavement types."

Any other requirement found in Subsection 813.03 not addressed above shall be applicable.

PART IX – PORTLAND CEMENT CONCRETE

SECTION 901 – PORTLAND CEMENT CONCRETE:

Subsection 901.08(b) – Cementitious Material Substitution (12/2024), page 841

Delete the following paragraphs in its entirety from Section 901.08(b):

"A binary concrete mix is one that combines Portland cement and one additional cementitious replacement, e.g. ground granulated blast-furnace slag or fly ash (class C or F).

A ternary concrete mix is one that combines Portland cement with two additional cementitious replacement, e.g., ground granulated blast-furnace slag and fly ash (class C or F) or fly ash (both class C and F).

The maximum substation rate for binary mixtures is 30% fly ash or 50% ground granulated blast-furnace slag for structural or pavement types of concrete mixes.

When ASR mitigation is required, use 30% Class F Fly Ash, 50% GGBFS, or a ternary mixture containing both Class F Fly Ash and ground granulated blast-furnace slag at a minimum replacement rate of 50%.

The maximum substitution rate for ternary mixtures containing Type I, II, III, or IL portland cement is 70 percent of cement. When using Type IP or IS portland cement, the maximum substitution rate for ternary mixtures is 40 percent. Ternary combinations using both class C and F fly ash are allowable. When using fly ash ternary mixtures, replace portland cement with class C and class F fly ash in equal amounts. When using combinations of ground granulated blast-furnace slag and fly ash, the amount of ground granulated blast-furnace slag must be equal to or greater than the amount of fly ash.

The maximum substitution rate for ternary mixtures is 50% of cement for pavement types of concrete mixes."

And replace with:

"A binary concrete mix is one that combines Portland cement and one additional cementitious replacement, e.g. ground granulated blast-furnace slag or fly ash conforming to Subsection 1018.15.

A ternary concrete mix is one that combines Portland cement with two additional cementitious replacement, e.g., ground granulated blast-furnace slag and fly ash conforming to Subsection 1018.15.

The maximum substation rate for binary mixtures is 30% fly ash for both concrete pipe and structural concrete, up to 25% fly ash for cement for other minor structures and concrete pavement, or 50% ground granulated blast-furnace slag for structural or pavement types of concrete mixes.

The maximum substitution rate for ternary mixtures containing Type I, II, III, or IL portland cement is 70 percent of cement. When using Type IP or IS portland cement, the maximum substitution rate for ternary mixtures is 40 percent. Ternary combinations using

both class C and F fly ash are not allowable. When using combinations of ground granulated blast-furnace slag and fly ash, the amount of ground granulated blast-furnace slag must be equal to or greater than the amount of fly ash conforming to Subsection 1018.15."

Any other requirement found in Subsection 901.08 not addressed above shall be applicable.

Table 901-3 – Master Proportion Table for Portland Cement Concrete (1/2025), page 852

Delete Table 901-3 in its entirety from Section 901:

Added surface resistivity exemption for dry cast concrete pipe and pre cast concrete drainage structure.

And replace with:

Table 901-3
Master Proportion Table for Portland Cement Concrete

Class or Type of Concrete	Average Compressive Strength, psi at 28 days	Grade Of Coarse Aggregate (l)	Minimum Bags of Cement of 94 lbs. each to one Cu. Yd. of Concrete	Maximum Water per Sack of Cement (a) (Gallons)	Air Content (Percent by Volume) (d)(c)	Slump Range, inches			Surface Resistivity (k) (kΩ–cm)
						Non-Vibrated Placing (n)	Vibrated Placing Paving (b)	Slip Form Placing	
STRUCTURAL CLASS (Includes Slope Pavement)									
A(M)	4,500	57M, 67, B, D	6.0	6.0	2 – 7	2 – 5	2 – 4(n)	N.A.	22
A	4,500	57M, 67, 89M[p], B, D	6.0	6.0	2 – 7	2 – 5	2 – 4(n)	1 – 2.5	22
IC(A)(M)	4.500	57M, 67, 89M[p], B, D	6.0	6.0	2 - 7	2 – 5	2 – 4(n)	1 – 2.5	22
P(M)	6,000(e)	57M, 67, 89M[p], B, D	7.0	5.0	2 – 7	N.A.	2 – 6(g)	N.A.	22
P	5,000(e)	57M, 67, B, D	6.5	5.0	2 – 7	N.A.	2 – 6(g)	N.A.	22
IC(P)	6,000(e)	57M, 67, 89M[p], B, D	7.0	5.0	2 – 7	N.A.	2 – 6(g)	N.A.	22
S	4,500	B, D	7.0	6.0	2 - 7	6 - 8	N.A.	N.A.	22
MINOR STRUCTURE CLASS (h)									
M[1]	3,500	57M, 67, 89M[p], B,D	5.5	6.0	2 – 7	2 - 5	2 – 4	1 – 2.5	N.A.
M[2]	3,000	57M, 67, 89M[p], B,D	5.0	6.0	2 – 7	2 - 5	2 – 4	1 – 2.5	N.A.
M[3]	4,500	57M, 67, 89M[p], B,D	5.8	6.0	2 – 7	2 - 5	2 – 4(n)	1 – 2.5	N.A.
R	2,000	57M, 67, B, D	4.5	8.0	2 - 7	2 - 5	1 - 3	N.A.	N.A.
PAVEMENT TYPE									
B	4,000	B, D	5.8	6.0	2 – 7	N.A.	2 – 4	1 – 2.5	N.A.
D	4,000	B, D	5.4	6.0	2 – 7	N.A.	2 - 4	1 – 2.5	N.A.
E	4,000(f)(i)	57M, 67, 89M[p], B,D	6.5	6.0	2 – 7	N.A.	2 – 4	1 – 2.5	N.A.
X	5,000(j)	57M, 67, B, D	6.0*	6.0	2 - 7	N.A.	2 – 4	1 – 2.5	N.A.

***LCG Will allow a lesser cement content if proof can be given that concrete will meet 700 P.S.I. Modulus of Rupture**

(a) The maximum water-cement ration (gal/sack) shall be reduced 5% when a water-reducing admixture is used, content shall be increased and 10% when an air-entraining admixture, or air-entraining and water reducing admixtures are used
(b) Also slump range for other concrete placed by extruded methods.
(c) Refer to Subsection 901.08(b)
(d) Total air content ranges when air entrainment is allowed or specified.
(e) Minimum compressive strength required.
(f) Grade 89M or 67shall be used for partial depth patching in accordance with Table 1003-2.
(g) No more than a 2" slump differential for any designated pour. Allow 8-inch maximum slump if water reducers are used.
(h) See Subsection 901.08(a) for allowable types of cement.
(i) For use in full and partial depth patching.
(j) Average flexural strength for pavement type concrete shall be 700 psi.
(k) Value based on a 4-inch x 8 inch test cylinder tested at 56 days of age.
(l) Combined aggregate gradation shall comply with the requirements of Section 1003.02(c).
(m) Grade 89M Course aggregate shall be used only when specified or permitted.
(n) Allow 8-inch maximum slump if water reducers are used.

NOTE:
M[1] -To be used for all curbs and driveways.
M[2] - To be used for sidewalks and all other incidental concrete work.
M[3] To be used for pre-cast and cast-in-place manholes, catch basins, junction boxes, safety ends and other pre-cast and cast-in-place minor structures.
Dry-Cast concrete for concrete pipe and pre cast reinforced drainage structures shall be exempt from the surface resistivity requirement listed in Table 901-3. See Section 1016 specifications.
N.A. – Not Applicable

PART X – MATERIALS

SECTION 1012 – BRIDGE RAILINGS AND BARRIERS:

Subsection 1012.01 – Concrete (1/2025), page 929

Delete the following sentences in its entirety from Section 813.07:

"Concrete for bridge railings and barriers shall be Class AA complying with Section 901."

And replace with:

"Concrete for bridge railings and barriers shall be Class IC(A)(M) complying with Section

901."

Any other requirement found in Subsection 1012.01 not addressed above shall be applicable.

SECTION 1016 – PRECAST REINFORCED CONCRETE DRAINAGE UNITS:

Subsection 1016.05 – Precast Reinforced Concrete Box Culverts (1/2025), page 970

Delete the following sentence in its entirety at the end of the paragraph in Section 1016.05:
"Precast reinforced concrete box culverts shall comply with ASTM C 11577 amended as follows:"

And replace with:
"Precast reinforced concrete box culverts shall comply with ASTM C 1577 amended as follows:"

Insert the following sentence in its entirety at the end of the paragraph in Section 1016.05(b):
"Meeting the Surface Resistivity requirement in Table 901-3 is exempt for dry cast concrete."

Any other requirement found in Subsection 1016.05 not addressed above shall be applicable.

PART XI – TRAFFIC SIGNALS

SECTION 1114 – ELECTRICAL MANHOLE:

Subsection 1114.01 – Electrical Manhole (12/2024), page 1035

Delete the following paragraphs in its entirety from Section 1114.01:

"Electrical manholes shall be constructed as Class A concrete (reinforced), or composite (Quazite type only) as shown in the plans."

Reinforcement shall consist of steel wire fabric, 4" x4" No. 4/4 @ 85 pounds/100 square foot. Manholes may be poured in place or precast."

And replace with:

"Electrical manholes shall be constructed as specified in Section 702 or composite (Quazite type only) as shown in the plans."

Any other requirement found in Subsection 1114.01 not addressed above shall be applicable.

PART XIV – NON-STANDARD ITEMS

SECTION 1420 – NS BRICK RED CONCRETE STAIN SEALER:

Subsection 1420.01 – Description (12/2024), page 1181

Delete the following sentence in the first paragraph in its entirety from Section 1401.01:

"This item consist of furnishing all materials and labor for application of brick red concrete stain sealer to the cast-in-place raised Class A concrete roundabout."

And replace with:

"This item consists of furnishing all materials and labor for application of brick red concrete stain sealer to in place concrete structures."

Subsection 1420.04 – Measurement (12/2024), page 1182

Delete the following paragraph in its entirety from Section 1401.01:

"Measurement of concrete stain sealer for coating of raised Class A concrete roundabout shall be by the square yard, theoretical measurement, based on the dimensions shown on the construction plans and application of two thin coats at 150 ft^2/gal coverage and placed as directed by the Engineer."

And replace with:

"Measurement of concrete stain sealer for coating of in place concrete structures shall be by the square yard, theoretical measurement, based on the dimensions shown on the construction plans and application of two thin coats at 150 ft^2/gal coverage and placed as directed by the Engineer"

Any other requirement found in Section 1420 not addressed above shall be applicable.