

Significant Changes to Spec Book: Design Considerations

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**MDOT Standard Specifications for Construction,
2020 Edition**

Divisions 1, 2, 3, 4

Meeting Agenda

- a) For each Division (as applicable):
 - i) Changes to section organization/numbering
 - ii) FUSPs incorporated
 - iii) Pay items Changes
 - Items added
 - Unit changed
 - Items removed
 - iv) Additional items of note
- b) Other Topics

Division 1 - Organization

Changes to Section numbering:

- **Section 106** is recinded
- **Section 150** (*Mobilization*) is now **Section 110** (*Mobilization*)

Division 1 – FUSPs incorporated

FUSP ID	Frequently Used Special Provision Title
12SP-101A	PROGRESS SCHEDULE
12SP-102A	CONTRACTOR PERFORMANCE EVALUATIONS
12SP-102C	ELECTRONIC TRANSMITTAL OF CONTRACT DOCUMENTS
12SP-102D	LOW BID WITHDRAWAL PRIOR TO CONTRACT AWARD
12SP-102E	DISADVANTAGED BUSINESS ENTERPRISES GOAL AT TIME OF BID
12SP-102G	JOINT/TWO PARTY CHECKS
12SP-102H	DISSEMINATION OF PUBLIC RELATIONS INFORMATION
12SP-104A	DEBRIS OR MATERIAL IN TRAFFIC LANES
12SP-107B	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM INSPECTION AND RESPONSE
12SP-107E	CONSTRUCTION STAGING AREAS
12SP-107J	OPEN TO TRAFFIC
12SP-107K	STORAGE OF MATERIALS ON, UNDER OR ADJACENT TO BRIDGES AND STRUCTURES
12SP-108C	ON THE JOB TRAINING PROGRAM
12SP-108D	SCHEDULE OF LIQUIDATED DAMAGES FOR OVERSIGHT
12SP-109B	FORCE ACCOUNT BUSINESS TAXES
12SP-109C	FORCE ACCOUNT MARK UP FOR BOND PREMIUM, INSURANCE, AND PAYROLL TAXES.
12SP-109D	DELAY COSTS
12SP-150A	JOBSITE POSTER DEFICIENCIES AND INITIAL MOBILIZATION PAYMENT

Division 1 – Additional Items

- **Section 101 – Acronyms & Definitions**
 - Some acronyms were added
 - Multiple definitions were added for piling items.
 - Working Drawings has been defined.
- **Section 102 – Prosecution & Progress**
 - Modified award process. Signed contracts, bond forms, etc. must be submitted within 21 days of transmittal. The Department has 35 days to execute the contract.
- **Section 104 – Control of the Work**
 - Working drawings – Department has 14 calendar days to review submittals. If additional reviews are needed a 7 calendar day review time is allowed. 28 days open, the Contractor is able to submit for a time extension.
 - Approved Working Drawings are part of the order of precedence now – same level as plans
 - Sweep pavements as needed and as directed by the Engineer. Paved roadbeds must have a final cleaning 7 days prior to open to traffic. No additional payment.
 - Contractor Staking was moved to section 824.
- **Section 107 – Legal Relations & Responsibility to the Public**
 - Added requirements for providing notice to the Federal Aviation Administration for permanent/temporary structures.

Division 1 – Additional Items

- **Section 108 – Prosecution and Progress**

- Changed to the Department process for submitting and approving progress schedule changes. Removes the progress schedule from incorporation into the actual contract.
- Standard Contract = 5 day work week
- Expedited Contract = 6 day work week
- Revised Liquidated Damages

Table 108-1 Schedule of Liquidated Damages for Department Oversight		
Original Contract Amount		Amount per Calendar Day, \$
From more than, \$	To and including, \$	
0	100,000	500
100,000	500,000	800
500,000	1,000,000	1000
1,000,000	5,000,000	1,500
5,000,000	15,000,000	2,000
Over 15,000,000		4,000

- **Section 110 – Mobilization**

- Ties first scheduled payment to jobsite posters and also includes adjustments if not in compliance

Division 2 – Pay Item Changes

Pay Items Added

- **Section 205** (*Roadway Earthwork*)
 - Berm Grading - \$Sta (formerly a USP)

Division 2 – FUSPs incorporated

Division 2 – Additional Items

- **Section 202 – Removing Trees, Stumps, & Corduroy**
 - Removing Trees and Stumps – backfill with class III material within the influence of the subgrade, and sound earth outside the influence
- **Section 204 – Removing Miscellaneous Structures & Materials**
 - Pavement removal over utilities must be sawcut
 - Backfill with class III material within the influence of the subgrade, and sound earth outside the influence
- **Section 205 – Roadway Earthwork**
 - Sound Earth Definition - A natural homogeneous material comprised of soil or aggregate that can be compacted to the required density, contains no visible organic material, and has a maximum unit weight of at least 95 pounds per cubic foot
 - Frost heave susceptible material must be removed if within the subgrade surface limits
 - Engineer and Contractor may agree to plan quantity prior to start of work. Alternative methods other than average end area or staked-section method may be used if both parties agree
 - Ditch Cleanout doesn't include restoration items any longer
- **Section 206 – Excavation & Backfill for Structures**
 - Backfill can be placed in 12" lifts between outer limits of the footing and surface elevation and slope paving

Division 3 - Organization

Section 303 (*Open-Graded Drainage Courses*) expanded to include Materials, Construction, and Measurement & Payment subsections rather than simply referencing the contract

Division 3 – FUSPs incorporated

FUSP ID	Frequently Used Special Provision Title (and associated pay items)
12SP-302B	AGGREGATE BASE DENSITY, BRIDGE APPROACH
12SP-303A	OPEN GRADED DRAINAGE COURSE Open-Graded Dr Cse, ___ inch - \$Syd Open-Graded Dr Cse, CIP - \$Cyd Open-Graded Dr Cse, Shld - \$Syd, Ton
12SP-307A*	SHOULDER, CLASS II, TEMPORARY Shoulder, CI II, Temp - \$Ton Shoulder, CI II, ___ inch, Temp - \$Syd

Division 3 – Pay Item Changes

Pay Items Added

– **Section 302 - Aggregate Base Course**

- Aggregate Base, Conditioning, Surplus and Unsuitable, Remove, LM - \$Cyd
- Salv Aggregate Base, Conditioning, LM - \$Cyd

– **Section 306 – Aggregate Surface Course**

- Driveway Maintenance, Commercial - \$Ea (formerly a USP)
- Driveway Maintenance, Residential - \$Ea (formerly a USP)
- Intersection Maintenance - \$Ea (formerly a USP)

– **Section 308 – Geosynthetics for Base**

- Geotextile, Separator, Non-Woven - \$Syd (formerly a USP)
- Geotextile, Stabilization, Non-Woven - \$Syd
- Road Grade Biaxial Geogrid - \$Syd

Division 3 – Additional Items

- **Section 301 – Subbase**
 - Subbase can now be placed in 18” lifts
- **Section 302 - Aggregate Base Course**
 - Aggregate Base can now be placed in lifts up to 8”
- **Section 303 – Open Graded Drainage Course**
 - Incorporated FUSP

Division 4 – FUSPs incorporated

FUSP ID	Frequently Used Special Provision Title (and associated pay items)
12SP-401A	LABELING STORM WATER OUTFALLS Outfall Label - \$Ea
12SP-401B	WRAPPING CULVERT AND STORM SEWER JOINTS
12SP-401C	CULVERT AND SEWER BEDDING AND BACKFILL

Division 4 – Pay Item Changes

Pay Items Added

– Section 401 – Pipe Culverts

- Culv, Outlet Headwall, ___ inch - \$Ea

– Section 406 – Precast Three-Sided, Arch, and Box Culverts

- Construction Dam - \$Ea
- Bypass Pumping - \$Ea (formerly a USP)

Units Changed

– Section 401 – Pipe Culverts

- Culv End Sect, Grate - \$Ea (was \$Lb)

Pay Item Removed

– Section 404 - Underdrains

- Underdrain, PDS, Open-Graded, ___ inch - \$Ft

Division 4 – Additional Items

- **Culverts and Sewers** (Table 401-1 and 402-1)
 - For select culvert/sewer classes, special design is required for fill heights less than 1-ft.
 - Corrugated Polyvinyl Chloride (CPV) is allowed for Class F pipes
 - Class E culverts are now $\leq 1-3'$
 - Laser Technology can be used to measure deflection in lieu of mandrel testing
- **Precast 3-sided, Arch, and Box Culverts**
 - Design for precast 3-sided, arch, or box culverts must be submitted to Engineer for approval at least 14 days prior to fabrication (was 7 previously)
 - If changes are made in the field a new load rating must be performed.
 - Curing methods were updated
 - Cold Weather Precautions were updated to not allow placement of concrete if temperature is below 40 degrees unless they are preheated a quality control plan is in place
 - Box culverts must use 12" wide external rubber gasket seal (previously 9")
 - Both Box and 3-sided culverts must have exterior joints treated with a cold applied joint sealer

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