

CONSTRUCTION PREQUALIFICATION WORK CLASSIFICATIONS

(Revised 6/15/2021)

B CONCRETE PAVING (Section 602 Standard Specifications)

This work shall consist of constructing a jointed portland cement concrete pavement, base course or shoulder, with or without reinforcement, as specified; large, road work.

Equipment: Major paving equipment (slipform).

Ba CONCRETE PAVEMENT PATCHING AND WIDENING (Section 603 Standard Specifications)

This work shall consist of repairing portions of a concrete pavement with portland cement concrete with or without reinforcement, as required, and with the type of joint specified. This would include miscellaneous concrete pavement, widening, turn lanes, and pavement patching and repair.

Equipment: Compaction equipment, drilling machine (dowel bars), forms, concrete saws, self-powered screed.

Ca CHIP SEALS (Section 508 Standard Specifications)

This work shall consist of surface preparation and application of single chip seal, double chip seal or shoulder chip seal.

Equipment: Chip spreader, pressure distributor, self-propelled pneumatic-tired rollers, pilot car.

Cb HOT MIX ASPHALT/BITUMINOUS PAVING (Sections 501-504, 805, 806, 814 Standard Specifications)

This work shall consist of preparing the existing pavement and constructing HMA/Bituminous pavements, shoulders, and approaches. Also includes paver placed surface seal, HMA curb, HMA shared-use paths, paved ditches.

Equipment: Pressure distributor, pavers, compaction equipment (pneumatic and vibratory rollers), trucks

Ea GRADING, DRAINAGE STRUCTURES AND AGGREGATE CONSTRUCTION (Sections 203-209, 301-303, 306, 307, 401, 403, 404 Standard Specifications)

This work shall consist of the construction of roadways including constructing earth grades by excavating soil or rock and by placing embankments and/or fills, salvaging and stockpiling of selected materials, disposing of surplus or unsuitable material, trimming earth grade, preparing roadway foundations, moving fences, removing and salvaging topsoil, soil erosion and sedimentation control, installation of culverts, end sections, underdrains, drainage marker posts, construction of drainage structures, and other incidental construction.

Equipment: Backhoe, compaction equipment, crane, dozer, excavator, grader, loader, trucks or scrapers.

Fa BRIDGES AND SPECIAL STRUCTURES (Sections 701, 706, 709, 717, 813 Standard Specifications)

This work shall consist of constructing masonry, fabricated steel, prestressed concrete beam or timber bridges, large culverts and grade separations, special structures and other incidental construction.

Equipment: Backhoe, compaction equipment, compressor, crane, dozer, excavator, forms, loader, pile and pneumatic hammer, screed or concrete paver.

Fb **STRUCTURAL STEEL (Sections 707, 708 Standard Specifications)**

This work shall consist of erecting structural steel, prestressed concrete beams, placing diaphragms, and placing reinforcing steel on bridges and grade separations and other incidental structures.

Equipment: Backhoe, compressor, crane, excavator, welding equipment.

Fd **PUMP STATIONS (Section 405 Standard Specifications)**

This work shall consist of constructing pump stations. This will also include the furnishing and installation of pumping equipment, related electrical, mechanical, drainage or housing systems, subsystems, components, appurtenances, and facilities required to complete installation. Construction of station includes excavation, piling, concrete work, backfilling, sewers, drainage structures, and waterproofing.

Equipment: Backhoe, compaction equipment, compressor, crane, dozer, excavator, forms, loader.

G **BUILDING MOVING AND DEMOLITION**

This work shall consist of building moving, demolition, and other incidental construction.

Equipment: Backhoe, crane, dozer, excavator, loader, lowboy, trucks.

H **LANDSCAPING (Section 815 Standard Specifications)**

This work shall consist of excavating planting areas for trees, shrubs, evergreens, and ground cover plants, disposing of the excavated material, furnishing and planting trees, shrubs, and other plants of the type and size indicated on the plans or in the proposal, backfilling the planting holes with prepared soil, watering and cultivating, and all other materials and operations required to complete the work in accordance with the specifications.

Equipment: Auger, backhoe, disc, dozer, drag, excavator, tree spade, water tank or truck.

I **SEEDING AND SODDING/TURF ESTABLISHMENT (Sections 816, 818 Standard Specifications)**

This work shall consist of preparing the foundation, limited placement of topsoil, fertilizing areas to be seeded, seeding or sodding, watering as required.

Equipment: Disc, drag, hydroseeder, mulcher, tractor, truck.

ITS **Intelligent Transportation System**

***Requires a licensed master electrician and a company electrical license. ***

Install Intelligent Transportation Systems (ITS) including, but not limited to: Surveillance, Vehicle Detection, and Traveler Information Systems; Communications and Network Infrastructure; Video Compression Equipment; Road Weather Information Systems (RWIS); Power Systems; and Auxiliary ITS Devices – PLEASE REQUEST ITS REQUIREMENTS BEFORE REQUESTING THIS CLASSIFICATION.

J **MISCELLANEOUS CONCRETE ITEMS (Sections 801-804 Standard Specifications)**

This work shall consist of constructing concrete curb, curb and gutter, sidewalk, barrier wall, driveways, sidewalk ramps, and other incidental construction.

Equipment: Backhoe, compaction equipment, excavator, forms, loader, paver (C&G slipform).

K **SEWERS AND WATER MAINS (Section 402 Standard Specifications)**

This work shall consist of installing lines of sewer pipe, of the required class and the specified inside diameter and shall include excavation, backfilling, sewer taps, bulkheads, trench undercut and backfill, dewatering system, installing/testing/disinfecting/backfilling water mains.

Equipment: Backhoe, compaction equipment, excavator, loader, trench box.

Ka **TUNNELING AND JACKING (Section 401.03(I) Standard Specifications)**

This work shall consist of jacking into place culverts, steel casing, or conduit without disturbing the roadbed or railroad above the culvert/casing/conduit.

Equipment: Cranes, excavator, loader, pipe driving equipment, tunneling/jacking machines.

L **ELECTRICAL (Sections 819, 820 Standard Specifications)**

***Requires a licensed master electrician and a company electrical license. ***

This work shall consist of furnishing all materials and perform all work necessary to provide complete and operating traffic and pedestrian signals, span wires, strain poles, pedestals, illuminated case signs, traffic loops, digital loop detectors/cabinets, and electrical and lighting components. This includes the relocation, removal, salvage or disposal of all above items. Unless otherwise specified, excavation, granular material, backfill, disposal of waste excavated material, together with (in kind) replacement associated hardware, and No. 8 pole wire extending from the fusing at the base of the pole to the luminaire will be included. Two wires shall be extended for each luminaire.

N2 **CLEARING (Section 202 Standard Specifications)**

This work shall consist of removing trees, brush, and other debris.

Equipment: Dozer, loader

N3 **PAVEMENT MARKING (Section 811 Standard Specifications)**

This work shall consist of non-production striping, special markings, and production hot or cold applied pavement marking.

Equipment: Pavement marking machine/truck, supply trucks, cones, hand-held marking machine.

N4 **BRIDGE PAINTING (Sections 715, 716 Standard Specifications)**

***Requires QP1 and QP2 certification. ***

This work shall consist of cleaning and coating existing steel structures.

Equipment: Air compressor, dust collectors, hygiene facilities (showers), sand blasting equipment, scaffolding, tarps, paint sprayer, boat.

N5 **RAILROAD TRACK CONSTRUCTION**

This work shall consist of installing new track for track crossings.

Equipment: Ballast regulator, ballast tamper, dozer, crane, loader, spike pullers, automatic spiker.

N6 PERMANENT SIGNS (Section 810 Standard Specifications)

This work shall consist of installing cantilever/truss overhead signs, installing ground mounted roadside signs and all incidental construction.

Equipment: Cranes, backhoes, loaders, cherry pickers, augers, posthole digger, post driver.

N7 WATERPROOFING (Section 710 Standard Specifications)

This work shall consist of installing membrane waterproofing and protective covers for deck structures and other related operations.

Equipment: Air compressor, asphalt heater/spreader, shotcrete applicator.

Note: The classifications below shown in parentheses following some of the N9 classifications are considered to already include that N9 classification. If you are prequalified in the classification shown in parentheses, please do not request that preceding N9 classification. For example, if you are prequalified in Fa, there is no need to request prequalification in N9-1A, N9-1B, N9-1C, N9-1D, N9-5A, N9-5C or N9-5D.

BRIDGE

N9-1A(Fa) BRIDGE DECK REPAIR (Sections 713, 712, 713, 717 Standard Specifications)

This work shall consist of removing concrete and patching or resurfacing with concrete patching or overlay mixtures, removing, replacing and retrofitting expansion joints, scarifying, hand chipping shallow and deep, and other incidental construction.

Equipment: Scarifier, concrete saws, blast cleaning equipment, machine-mounted hydraulic or pneumatic equipment, manual pneumatic hammer, screed.

N9-1B(Fa) BRIDGE RAILING REPLACEMENT (Section 711 Standard Specifications)

This work shall consist of structural and pipe railing replacement.

N9-1C(Fa) CONCRETE STRUCTURE REPAIR (Sections 712.03, 713 Standard Specifications)

This work shall consist of repairing beams, footings, piers, retaining walls, hand chipping other than deck, blast cleaning steel, and all work specified for preparing areas for patching.

N9-1D(Fa) CONCRETE BRIDGE RAILING (Section 711 Standard Specifications)

This work shall consist of constructing parapet and bridge barrier railings.

N9-1E STRUCTURAL CRACK REPAIR (Sections 702, 703 Standard Specifications)

This work shall consist of repairing cracks including flushing with water, injecting grouts, resins, and sealers.

N9-1F HYDRODEMOLITION (Section 712.03 Standard Specifications)

This work shall consist of removing deck concrete and patches by means of high-pressure water jets, and the removal of material inaccessible to the hydro demolisher by hand-held water blasting equipment.

N9-1G **BRIDGE PAINTING/LIMITED (Sections 715, 716 Standard Specifications)**

***Requires a SSPC QP7 certification and prime or subcontract is limited to \$200,000. ***

This work shall consist of cleaning and coating existing steel structures.

Equipment: Air compressor, dust collectors, hygiene facilities (showers), sand blasting equipment, scaffolding, tarps, paint sprayer, boat.

ROADWAY (GRADE)

N9-2B(Ea) **EDGE DRAIN**

N9-2C(Ea) **EROSION CONTROL STRUCTURES (Section 208.01 Standard Specifications)**

This work consists of installing and maintaining erosion and sedimentation controls to minimize soil erosion and control sediment.

N9-2D **CRUSHING AND SHAPING (Section 305 Standard Specifications)**

This work shall consist of trenching, scarifying, and crushing existing hot mix asphalt/bituminous pavement, loading, hauling, placing (adding new material if required), shaping and compacting the crushed materials.

Equipment: Cold mill or reclaimer, rollers (pneumatic-tired and vibratory), crushing machine. The crushing machine shall be a self-propelled rotary reduction machine capable of crushing and mixing the pavement and underlying aggregate base to the proper size and depth.

PAVEMENTS

N9-3A **COLD MILLING (Section 822 Standard Specifications)**

This work shall consist of removing hot mix asphalt/bituminous pavement to the depth, width, grade, and cross section as shown on the plans. This may include ground or cut shoulder corrugations (rumble strips).

Equipment: Cold mill equipped with automatically controlled and activated cutting drums and grade reference and transverse slope control capabilities, trucks.

N9-3B **RUBBLIZING CO RETE PAVEMENT (Section 304 Standard Specifications)**

This work shall consist of shattering a reinforced or non-reinforced portland cement concrete pavement to construct a rubblized base, and disposal of all excess and unsuitable material.

Equipment: Self-contained, self-propelled pavement breaking machine that uses a resonant frequency or a self-contained, self-propelled pavement breaking machine with multiple impact hammers directly adjacent to each other, and a water system to suppress the dust generated from the pavement shattering operation.

N9-3C(B, Ba) CONCRETE SAWING (Section 603.03(D) Standard Specifications)

N9-3D GRINDING AND GROOVING (Section 603.03(C) Standard Specifications)

This work shall consist of diamond grinding concrete pavement. The purpose is to improve friction levels and ride quality. This may include ground or cut shoulder corrugations (rumble strips).

Equipment: A power driven, self-propelled machine designed for grinding and texturing concrete pavement with diamond blades. The machine shall be capable of grinding the surface without causing damage to the underlying surface of the pavement. The machine shall have a positive means of extracting the slurry material from the pavement and for preventing dust from escaping.

N9-3E(N9-3I) OVERBAND CRACK FILL (Section 505 Standard Specifications)

This work shall consist of cleaning cracks in hot mix asphalt/bituminous pavements and placing the specified materials into and over the crack to eliminate water infiltration.

N9-3F(B, Ba) JOINT OR CRACK FILL (Section 603.03(D) (E) Standard Specifications)

This work shall consist of sawing, cleaning, and sealing cracks in pavements.

N9-3G JOINT REPAIR

This work shall consist of Detail 7 and Detail 8 joint repairs in concrete pavement or hot mix asphalt/bituminous overlaid pavement.

N9-3H(N9-3I) SLURRY SEAL (Section 506 Standard Specifications)

This work shall consist of surface preparation and application of a properly proportioned slurry seal mixture.

Equipment: A continuous flow-mixing slurry seal machine with automated controls, mechanical type single squeegee distributor (attached to the mixing machine), spreader box, hand squeegees, power broom, air compressor, water flushing equipment.

N9-3I MICROSURFACING (Section 507 Standard Specifications)

This work shall consist of surface preparation and application of a properly proportioned microsurfacing mixture. (This will include overband crack fill as it preps the surface for microsurfacing.)

Equipment: A mixing machine equipped with a positive connection conveyor belt aggregate delivery system and an interconnected positive displacement, water-jacketed gear pump to accurately proportion aggregate and asphalt emulsion, spreader box, rut box, hand squeegees, power broom, air compressor, water flushing equipment. If prequalified in microsurfacing, can do slurry seal but not vice versa.

DRAINAGE

N9-4A SEWER CLEANOUT (Section 402.03 (I)(J) Standard Specifications)

This work shall consist of cleaning sewers and culverts and removing sediment from drainage structures.

Equipment: Combination 10 cyd sewer/catch basin cleaner.

N9-4B **SEWER INSPECTION (Section 402.03(K) Standard Specifications)**

This work shall consist of inspecting sewers and culverts by remotely operated television.

Equipment: Television inspection equipment.

FOUNDATION

N9-5A(Fa) **AUGURED PILING (Section 718 Standard Specifications)**

This work consists of providing and constructing augured piling for pile pre-boring, cable guardrail end terminals, etc. and simple drilled shaft foundations.

Equipment: Pile hammers, cranes, drills, augers.

N9-5B **CAISSON DRILLING (Section 718 Standard Specifications)**

This work consists of providing and constructing caissons, cantilever and truss sign foundations, ITS structure foundations, and simple bridge drilled shaft foundations in easy drilling conditions.

Equipment: Pile hammers, drills, augers, cranes, core barrels, slurry pumps, final cleaning equipment, bailing buckets.

N9-5C(Fa) **PILE DRIVING (Section 705 Standard Specifications)**

This work consists of driving timber, cast-in-place concrete piles and steel piles.

Equipment: Pile hammers, crane.

N9-5D(Fa) **SHEET PILING (Section 704 Standard Specifications)**

This work shall consist of furnishing and driving permanent steel sheet piling and furnishing, installing, maintaining, and removing temporary steel sheet piling.

Equipment: Pile and/or drop hammers, crane.

N9-5E **DRILLED SHAFTS/COMPLEX (Section 718 Standard Specifications and Special Provisions)**

This work shall consist of constructing drilled shafts under slurry conditions and finished in rock sockets or hardpan clay. The contractor must be capable and have project experience in constructing drilled shafts under slurry conditions with to an outside diameter of 72 inches or greater, and to a depth of at least 100 ft deep.

Equipment: Drill rigs must have a minimum torque of 125,000 lbf-ft, a minimum crowd force of 40,000 lbf, a minimum extraction force of 40,000 lbf, a minimum drill depth of 125 ft, and must have an interlocking Kelly bar. The contractor must have double flight augers, rock augers, core barrels, clean out buckets, temporary casings, tremie tubes with an inside diameter of at least 10 inches, and slurry tanks capable of holding all of the slurry used during drilled shaft construction.

N9-5F **MICROPILES (Special Provisions)**

This work shall consist of constructing micropiles. Micropiles are small-diameter (14 inches or less in diameter) drilled and grouted non-displacement piles that are reinforced. Micropiles are not augercast piles (piles installed with continuous flight augers that are concreted as the auger is being extracted).

Must be capable of performing Type A and Type B micropiles. Type A micropiles are constructed by placing grout under gravity head only. Type B micropiles are constructed by placing grout under pressure (up to 150 psi). Other types of micropiles are not covered by this prequalification.

Must be capable of duplex drilling. Must be capable of flushing with fluid. Must be capable of pushing/pulling/twisting steel casing into and out of the drilled hole. The contractor must be capable and have project experience of drilling through soil and at least 15 ft into competent rock. Must demonstrate experience with both Type A and Type B micropiles. Must demonstrate experience in managing drilling spoils and slurry.

Equipment: The contractor must have equipment to place casing and threaded rebar from a horizontal to vertical position. Must have a pressure grout mixer capable of mixing cement and water that is lump free. The pressure grouter must be capable of grouting up to a pressure of 150 psi.

Drill rigs: The contractor possess a drill rig that meets at least one of the following set of criteria. Unrestricted access means that there aren't any significant workspace restrictions. Restricted access means that there can be a restricted height limitation, a restricted work area limitation, or both.

Unrestricted access: Drill rigs must have a minimum torque of 8,000 lbf-ft, a minimum crowd force of 13,000 lbf, a minimum extraction force of 13,000 lbf, and a minimum engine horsepower of 120.

Restricted access: Drill rigs must have a minimum torque of 6,800 lbf-ft, a minimum crowd force of 8,500 lbf, a minimum extraction force of 8,900 lbf, a maximum mast height of 144 inches, and a minimum engine horsepower of 75.

GENERAL

N9-6C(B, Ba, Fa) Placing RESTEEL

N9-6E

RAIL SALVAGE

This work consists of removing the tie, spikes, tie plates, and anchors from the track; salvaging reusable tie plates and anchors for reinstallation elsewhere; respacing adjacent specified ties; and cleaning up all miscellaneous debris. Shoulders must be properly dressed and contoured to match existing shoulders.

N9-6F

RAILROAD SIGNALS

N9-6I

RAISED PAVEMENT MARKERS (Section 811.03(G) Standard Specifications)

Equipment: Plunge saw

N9-6K

ATTENUATORS

This work consists of installing an energy absorption unit to be placed in front of a traffic hazard to reduce the impact energy of a moving vehicle.

N9-6L **GUARDRAIL (Section 807 Standard Specifications)**

This work consists of constructing, reconstructing, and erecting guardrail, guard posts, guideposts, guardrail terminals, guardrail anchorages and mailbox posts, including excavation, backfill and disposal of surplus material.

Equipment: Auger, post driver, backhoe, dozer.

N9-6M **FENCES (Section 808 Standard Specifications)**

This work consists of furnishing and erecting or moving existing, woven wire fence, temporary fence, protective fence, chain link fence, high-tensile wire fence, and pedestrian fencing of structures.

Equipment: Auger, post driver.

N9-6N **PAVING BRICK**

This work consists of either preparing base, furnishing and installing a sand bed and furnishing and installing clay brick pavers, or removing clay brick pavers and the subbase materials.

Equipment: Vibratory plate compactors.

NOTE: This document is for informational purposes only to aid in the preparation of the Prequalification Application (Form 1313).