

STANDARD SPECIFICATIONS
SECTION 01110
SUMMARY OF WORK

PART 1 GENERAL

1.1 DESCRIPTION

(For Area AC and RC Contracts only)

- A. Section includes general requirements for Work.
 - 1. Engineer will issue work order, which may consist of one of the following conditions, for each connection as each request is received by the Commission.
 - a. Installation of one water house connection, one sewer house connection, or one water and sewer house connection, serving the same address.
 - b. Locate missing existing water and/or sewer house connection, if short of property line or unable to locate, extend or install.
 - c. Correct defective existing service connection.
 - d. Abandon water or sewer house connection only.
 - 2. Perform Work for site locations with other available data furnished by and under Engineer's direction.

(For all other Contracts)

- A. Section includes general requirements for Work.

1.2 COMMISSION WORK SCHEDULE

- A. The Commission observes 5 day work week, Monday through Friday, 8 hours a day.
- B. Holidays:
 - 1. New Year's Day.
 - 2. Martin Luther King's Birthday.
 - 3. Presidents' Day.
 - 4. Memorial Day.
 - 5. Independence Day.
 - 6. Labor Day.
 - 7. Columbus Day.
 - 8. Veterans Day.
 - 9. Thanksgiving Day and the following Friday.
 - 10. Christmas Day
 - 11. State and National Election Days.
 - 12. Inauguration Day.
- C. Permission to Work.
 - 1. Notify Engineer at least 8 hours before start of site activity.

2. Except as noted below, do no work requiring services of the Commission's inspection and supervisory forces for more than 8 hours a day nor on Commission holidays or weekends, unless authorized by Engineer in writing.
 - a. Clean up and other items for which no specific payment is involved may be performed on Saturdays and Holidays with Engineer's permission.
 - b. After 24 hours written notification to Engineer, tunneling work may be performed up to 24 hours per day continuous operation, subject to jurisdictional restrictions and Special Commitments contained in Contract Documents.
 - c. Request written permission of Engineer to work on Saturdays, Sundays, Holidays or longer than 8 hours per day in order to comply with construction schedule, or because of emergency.
 - 1) Costs incurred by the Commission for overtime hours may be back-charged to the Contractor at the WSSC current published rate.
3. Do not work in roadways during peak vehicular traffic hours following jurisdictional restrictions and requirements contained elsewhere in Contract Documents.

1.3 SPECIFICATION STYLE

- A. These specifications are written in imperative mood and streamlined form.
- B. This imperative language is directed to the Contractor, unless specifically noted otherwise.
- C. The words "shall be" are included by inference where a colon (:) is used within sentences or phrases.

1.4 REFERENCE DOCUMENTS

- A. Applicable Codes, Specifications, and Standards: References to codes, specifications, and standards in Contract Documents are to the latest edition, amendment, and/or revision of reference standard in effect on date of Bid Opening.
- B. Documents on Site: Maintain on site copies of appropriate documents, including codes, specifications, permits, and reference standards named in Contract Documents.

1.5 ABBREVIATIONS AND SYMBOLS

- A. Abbreviations used for technical society, institution, association, or governmental authority references in Specifications:

Abbreviations and Symbols	
AA	Aluminum Association
AAMA	Architectural Aluminum Manufacturer's Association
AAN	American Association of Nurserymen
AAR	Association of American Railroads

Abbreviations and Symbols	
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
ACPA	American Concrete Pipe Association
ADA	Americans with Disabilities Act
AGA	American Gas Association
AGMA	American Gear Manufacturer's Association
AI	Asphalt Institute
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ALS	American Lumber Standards
ANSI	American National Standards Institute
APA	American Plywood Association
AREMA	American Railway Engineering and Maintenance-of-Way Association
ASA	American Standards Association, Inc.
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWG	American Wire Gauge
AWPA	American Wood Preservers Association
AWPI	American Wood Preservers Institute
AWS	American Welding Society
AWWA	American Water Works Association
BOCA	Buildings Officials Code Administration International, Inc.
CRSI	Concrete Reinforcing Steel Institute
DEP	Department of Environmental Protection (Montgomery County)
DNR	Department of Natural Resources
DIPRA	Ductile Iron Pipe Research Association
EPA	Environmental Protection Agency (Federal)
FS	Federal Specifications or Federal Standards
ICEA	Insulated Cable Engineers Association
IEEE	Institute for Electrical & Electronic Engineers
IES	Illuminating Engineering Society of North America
ISA	Instrument Society of America
MBMA	Metal Building Manufacturers Association Standards
MCDPWT	Montgomery County Department of Public Works and Transportation
MDE	Maryland Department of the Environment
MDOT	Maryland Department of Transportation
MIL	Military Specifications
MNCP&PC	Maryland National Capital Park and Planning Commission
MOSH	Maryland Occupational Safety and Health
MPS	Maryland Park Service
MSCS	Maryland Soil Conservation Service

Abbreviations and Symbols	
MSHA	Maryland Department of Transportation State Highway Administration
NACE	NACE International (Formerly, National Association of Corrosion Engineers)
NAPCA	National Association of Pipe Coating Applicators
NBFU	National Board of Fire Underwriters
NEC	National Electrical Code
NEMA	National Electrical Manufacturer's Association
NESC	National Electric Safety Code
NETA	National Electric Testing Association, Inc.
NFC	National Fire Code
NFPA	National Fire Protection Association
NIST	National Institute of Standards and Technology
NPS	National Park Service
NSF	NSF International (Formerly, National Sanitation Foundation)
OSHA	Occupational Safety and Health Administration
PCA	Portland Cement Association
SCS	Soil Conservation Service
SDR	Standard Dimensional Ratio
SSPC	Steel Structure Painting Council
UBC	Uniform Building Code, International Conference of Building Officials
ULI	Underwriter's Laboratories Incorporated
USSG	United State Standard Gauge
USSWG	United States Steel Wire Gauge
WSSC	Washington Suburban Sanitary Commission

1.6 COMMISSION RESPONSIBILITIES

A. Land Acquisition, Rights-of-Way, and Permits:

1. The Commission will:
 - a. Secure land and right-of-way necessary for carrying out and completing Contract Work.
 - b. Obtain permits for construction listed on Drawings, except for the Erosion and Sediment Control Permit for Utility Construction, which is issued directly to the Contractor as stated elsewhere in the Contract Documents.
 - c. A copy of each permit will be available at the construction site through the Engineer.
2. Specific requirements contained in these permits and right of way agreement and those not covered elsewhere in the Specifications or on the Drawings, but are the responsibility of the Contractor will be included in the Special Conditions.
3. Measurement and Payment.
 - a. Work attributed to compliance of land agreement/permits as described by items listed in Bid Schedule.

- b. Other costs attributable to land agreement/permit compliance: Incidental to Contract.
- B. The Commission will supply materials and perform work set forth elsewhere in Contract Documents.

1.7 CONTRACTOR RESPONSIBILITIES

A. Commission Supplied Material:

1. Material Issue Procedures:

- a. Arrange for material for pick up by calling the Commission's Anacostia Warehouse (301-206-4272), at least 3 working days before pickup.
- b. Costs incurred by the Commission for restocking materials when pick up is not made at scheduled time will be paid by the Contractor at the WSSC current published rate and deducted from the most recent estimate.
- c. Material will not be issued on the first and third Friday of each month except for emergencies as approved by the Engineer.
- d. Present itemized list showing quantity and type of material for pick up, contract number and location, adequately sized trucks, and a minimum of 2 individuals for materials release.
- e. Obtain 2 copies of Contract Material Return Form with materials for return of excess materials.
- f. Load material at the yard.
- g. The Commission will furnish equipment with operator to load heavy material.
- h. Observe safety requirements maintained at the Commission's Anacostia Warehouse.
- i. Transport, unload, and store material on Contract site to Engineer's satisfaction.
- j. Replace material damaged or lost between issue and installation at no expense to the Commission.
- k. Cost of the Commission-issued material not used in the Work and not returned will be withheld from final payment.

2. Excess Material Return Procedure.

- a. Return excess materials clean and undamaged, with all accessories.
- b. To return excess material after Contract Work is completed, make arrangements for return, and provide trucks and personnel in same manner as for obtaining the Commission-supplied material.
- c. Present 2 copies of the Contract Material Return Form, completed in black ink or typed, and signed by Engineer to the Commission's Anacostia Warehouse when returning material.
 - 1) One copy will be returned to Contractor after material is accepted.

B. Use of Premises and Offsite Work:

1. Lands by Contractor.

- a. Obtain permits and written approvals from appropriate jurisdictional agency and property owner for use of premises not furnished by the Commission as described herein and offsite areas, including offsite borrow pits and waste areas.

- b. Permits and approvals shall specify treatment of said areas during and at completion of construction.
 - c. Furnish copies of permits and approvals to Engineer before using areas.
 - d. Obtain staging area(s) and mobilize equipment and materials to and from staging area(s) at no additional cost to the Commission.
 - e. See Sections 01500 and 01570 for securing additional grading and sediment control permits.
 - 2. Private Property.
 - a. Do not enter upon private property for any purpose without obtaining written permission from property owner.
 - b. File letters of permission from property owners with Engineer before entering private property.
 - 3. Public Utility Easement (PUE): Not entered upon unless a concurrent WSSC water and sewer easement and Work are shown on Drawings.
- C. Existing Structures: Not loaded with weights that will endanger structure, nor endanger any part of Work due to stresses or pressures.
- D. Public Convenience.
 - 1. Conduct work to ensure least possible obstruction to traffic and inconvenience to the Commission, general public, and residents in vicinity of Work, and to ensure the protection of persons and property.
 - 2. Keep fire hydrants on or adjacent to Work accessible to fire fighting equipment.
 - 3. Make temporary provisions to ensure use of sidewalks and proper functioning of gutters, stormwater systems, drainage ditches, and culverts, and keep them free of obstructions.
 - 4. See Traffic Control Plan, Section 01500.
- E. Explosives:
 - 1. Perform blasting using specialized blasters and store explosives following OSHA, Title 29, CFR 1926.901 "Blaster Qualifications."
 - a. Do not store explosives on site during non-working hours.
 - b. During work hours, store explosives following specifications herein and jurisdictional requirements.
 - 2. No blasting permitted within MSHA rights-of-way without prior approval of type and method by MSHA with appropriate County or Local Jurisdiction permits submitted to Engineer.
 - a. MSHA reserves right to require insurance policy and Letter of Indemnity.
- F. Verification of Dimensions Shown On Existing Work And Dimensions Required For Work To Connect To Existing Work: By actual measurement of existing work.
 - 1. Refer discrepancies between Contract Documents and existing conditions to Engineer before work affected thereby has commenced.

1.8 CONSTRUCTION STAKEOUT BY CONTRACTOR

- A. The Commission will or has established baselines, bench marks or other necessary control points for the Contractor's use.
 - 1. Perform stakeout from the Commission-furnished control points (traverse, property lines and corners, and bench marks) and employ qualified and experienced personnel to provide stakeout.
 - 2. Furnish certification of competency and qualifications of employees to Engineer before commencing with Work.

- B. Preserve and maintain in proper position survey points, bench marks, and baselines provided by the Commission.
 - 1. Retain Professional Surveyor licensed to practice in the State of Maryland to reset points disturbed by Contractor's employees, equipment or neglect to give them proper protection, or Engineer may arrange for resetting points with Commission Survey Party and deduct costs from monies due Contractor.

- C. Notify Engineer of any construction stakeout deviations from Drawings.
 - 1. Discrepancies will be resolved under Engineer's direction before proceeding with Work.

- D. For pipeline construction:
 - 1. Stakeout test pits and furnish Engineer with actual utility locations and elevations, or as otherwise directed by Engineer.
 - 2. Stakeout centerlines and offset lines with spacing of stations maximum of 50 feet (stakes, nails, crosses).
 - 3. Stakeout intermediate points (P.C., P.T., structures, fittings, end of lines, and topographic changes) and as deemed necessary by Engineer.
 - 4. Submit grade sheets showing for each station the marked point elevation, invert elevation required and corresponding cut for both centerline and appropriate offset.
 - a. Each set of notes shall check within plus or minus 0.04 feet.
 - b. Use Contractor's Construction Stake Out Record form, see Standard Detail M/10.0.
 - 5. Flag stakes for protection of all stakes installed to aid in their preservation and maintenance.
 - 6. Perform other engineering and stakeout necessary for setting of batterboards, forms, string lines, and finished grade control, slope stakes and other controls which may be required for proper construction of Work.

- E. For other types of construction:
 - 1. Stakeout following requirements herein and Engineer's direction.
 - 2. Wetlands and Wetland Buffers:
 - a. Cross-sections of work limits every 50 feet before and after construction and before final stabilization to certify restoration to their original grades and elevations.

- F. Construction shall not begin in any given area until Engineer has received and signed grade sheets and has received 2 copies of notes.

- G. Work done without lines and grades or without written approval of Engineer will not be estimated or paid for and may be ordered removed and replaced at no cost to the Commission.

1.9 PROJECT PROGRESS MEETINGS

- A. Project progress meetings will be held periodically to allow Engineer to review Project status.
 - 1. Contractor's superintendent shall attend meeting and accompany Engineer on inspection of Project site.

1.10 INTERPRETATION OF QUANTITIES

- A. (AC and RC Contracts) Quantities appearing in Bid Schedule are given as a general guide for bidding and are not guaranteed amounts but do represent the best estimate of the Commission, based on previous usage and projected needs. approximate only and are prepared for canvassing of bids. Payment to Contractor will be made only for actual quantities of work performed or materials furnished following Contract. Where actual quantity of pay item varies more than 25 percent above or below estimated quantity stated in Contract, an equitable adjustment will be considered upon request of either party. Adjustment shall be based upon any increase or decrease in unit costs due solely to variation above 125 percent or below 75 percent of estimated quantity. This adjustment shall only be applied to the quantity above 125 percent or below 75 percent of estimated quantity. If quantity variation causes an increase in time necessary for completion, Engineer will, upon receipt of written request for extension of time, ascertain facts and make adjustment for extending completion date, as in his judgment the findings justify.
- A. (All other Contracts) Quantities appearing in Bid Schedule are approximate only and are prepared for canvassing of bids.
 - 1. Payment to Contractor will be made only for actual quantities of work performed or materials furnished following Contract.
 - 2. Where actual quantity of pay item varies more than 25 percent above or below estimated quantity stated in Contract, an equitable adjustment will be considered upon request of either party.
 - 3. Adjustment : Based upon any increase or decrease in unit costs due solely to variation above 125 percent or below 75 percent of estimated quantity.
 - a. This adjustment shall only be applied to the quantity above 125 percent or below 75 percent of estimated quantity.
 - b. If quantity variation causes an increase in time necessary for completion, Engineer will, upon receipt of written request for extension of time, ascertain facts and make adjustment for extending completion date, as in his judgement the findings justify.

- B. The 25 percent above or below estimated quantities does not apply to fixed unit price contingent items.

1.11 LUMP SUM CONTRACTS

- A. All work required by the Contract Documents except for contingent items will be paid for by the Lump Sum item as provided in Bid Schedule.

1.12 CONTINGENT ITEMS

- A. Fixed quantity and unit price contingent items listed in Bid Schedule do not necessarily occur on Drawings.
- B. During course of Work, Engineer may direct incorporation of any or all of these items.
- C. Payment to Contractor in this case will be for quantities directed by Engineer and computed following Contract Documents based on unit prices listed in Bid Schedule.

1.13 INCIDENTAL ITEMS

- A. When no item is provided in Bid Schedule, no measurement and payment will be made, but the cost thereof considered incidental.

1.14 ARCHAEOLOGICAL ARTIFACTS AND HUMAN REMAINS

- A. Articles of historical or scientific value, including coins, fossils, and articles of antiquity, which may be uncovered or otherwise brought to attention of Contractor during course of Contract shall remain property of Owner of property on which articles reside.
 - 1. Report findings immediately to Engineer who will determine method of removal, where necessary.

1.15 ASBESTOS-BEARING ROCK

- A. Use of asbestos-bearing rock as an unbound surfacing material on roads, sidewalks, parking lots, road shoulders, trails, and other areas subject to traffic, vehicular or pedestrian, is prohibited.
- B. Health and Safety of Workers, Commission Employees, and the Environment: Following applicable Federal, State, and local laws and regulations including, but not limited to 29 C.F.R. 1910.1001, 29 C.F.R. 1926.1101, 40 C.F.R. 61 subpart m, 40 C.F.R. 302, 49 C.F.R. 171, 49 C.F.R. 172, and COMAR 26.11.21 Et Seq.
- C. Secure services to ensure compliance with all applicable Federal, State and local laws and regulations.
 - 1. Environmental Consultants and Contractors, Inc.

2. Apex Environmental, Inc.
 3. Or equal.
- D. Practice effective dust control at all times.
1. Use water suppression techniques to control dust as it is generated during construction.
 2. Keep excavated rock wet during operations that may generate dust, including, but not limited to blasting, excavations, loading, and hauling of rock.

1.16 MOBILIZATION

- A. (Area AC and RC Water Contracts) Measurement: By each.
- B. Payment: At fixed contingent unit price listed in Bid Schedule.
1. Payment will be made when:
 - a. Existing service connection is found and no other work is required.
 - b. Site has water or sewer house connection and the total of the water and sewer house connection on a site is less than 15 feet.
 - c. Directed by Engineer to mobilize from a site actively working to another site.
 - d. Installing outside meter setting only and no other work is required.
 - e. Abandoning water or sewer house connection only and no other work is required.

Or,

- A. (Area AC and RC Sewer Contracts) Measurement: By each.
- B. Payment: At fixed contingent unit price listed in Bid Schedule.
1. Payment will be made when:
 - a. Existing service connection is found and no other work is required.
 - b. Site has water or sewer house connection and the total of the water and sewer house connection on a site is less than 15 feet.
 - c. Abandonment of a sewer service is performed not in conjunction with any other work.
 - d. Directed by Engineer to mobilize from a site actively working to another site.
 - e. Installing cleanout only, and no other work is required.
 - f. Installing backwater valve only, and no other work is required.
 - g. Abandonment of a water house connection only is performed and no other work is required.

Or,

- A. (All other Contracts) Measurement: By Lump Sum.
- B. Payment: At fixed lump sum unit price as listed in Bid Schedule made in monthly payments, less retention, based on Contractor's approved progress schedule submitted (see Section 01330) and includes:
1. Cost of bonds and insurance.
 2. Clearing and preparing work areas.
 3. Providing sediment control devices.

4. Providing construction access roads.
5. Mobilization of construction equipment, assembly and delivery of plant, materials and supplies necessary for the prosecution of work but not intended to be incorporated into the work.

PART 2 PRODUCTS
NOT USED

PART 3 EXECUTION
NOT USED

PART 4 MEASUREMENT AND PAYMENT

- 4.1 Except as otherwise specified herein, providing for and complying with requirements in this Section will not be measured for payment, but cost will be considered incidental to Contract.

****WSSC****