WASHINGTON COUNTY, MARYLAND DIVISION OF ENGINEERING

BID DOCUMENT

August 13, 2019

WASHINGTON COUNTY PUBLIC SAFETY TRAINING CENTER (PHASE-1 - SITE DEVELOPMENT)

COUNTY CONTRACT NO. MS-TC-266-28 COUNTY PROJECT NO. 28-266

WASHINGTON COUNTY BOARD OF COUNTY COMMISSIONERS

Jeffrey A. Cline, President Terry L. Baker, Vice President Wayne K. Keefer Cort F. Meinelschmidt Randall E. Wagner

Robert Slocum, P.E., County Administrator

Scott Hobbs, P.E., Director, Division of Engineering

DESIGN ENGINEERS:

Crabtree, Rohrbaugh & Associates - Architect KCI Technologies – Civil Engineer ECS Mid-Atlantic, LLC – Geotechnical Engineer

SET NO.: _____

Table of Contents

WASHINGTON COUNTY PUBLIC SAFETY TRAINING CENTER <u>PHASE 1 – SITE DEVELOPMENT</u>

COUNTY CONTRACT NO. MS-TC-266-28

TABLE OF CONTENTS

Table of Contents	TOC1
Title Page – "The Project"	TP1-5
ITB – Invitation to Bid	ITB1-15
GC – General Conditions	GC1-100
SP – Special Provisions	SP1-69
PD – Project Details	PD-1-5
PE – Permits	PE-1-11

BF – Bid Forms:

Proposal Form	BF-2
Bid Affidavit	BF-3-5
Certification of Work Capacity	BF-6
Sub-Contractor Listing	BF-7
Proposal Guarantee	BF-8-9
Bid Letter	BF-10
Bid Bond	BF-11
Summary Schedule of Prices	BF-12
Schedule of Prices	BF-13

CF-Contract Forms:

Cover Sheet	CF-1
Instructions	CF-2
Contract	CF-3-7
Contract Affidavit	CF-8-11
Performance Payment Bond	CF-12-13
Labor and Material Payment Bond	CF-14-15
Insurance Policy P-4	CF-16-17
Addendum	Attached as Needed

Title Page "The Project"

TITLE PAGE "THE PROJECT"

WASHINGTON COUNTY PUBLIC SAFETY TRAINING CENTER PHASE 1 – SITE DEVELOPMENT IN WASHINGTON COUNTY, MARYLAND

The project involves site grading, utilities, and paving for the future Public Safety Training Center. Preparation of the site shall be performed as indicated in the construction drawings, per the specification and as indicated here.

Generally, construction shall consist of installation of a new entrance road, including improvements to create a deceleration lane and increased shoulder width on the south side of the proposed entrance road. Removal and relocation of existing culvert pipes along with road repair per SHA requirements including grading changes along Sharpsburg Pike. Base asphalt layer shall be installed for roadways and parking lots under this contract. Final top coat (surface) will be provided under separate contract except for work immediately adjacent to Sharpsburg Pike which shall have the final top coat (surface) installed under this contract. Concrete curb and gutter shall be provided as indicated on the civil plans except for curb and gutter located directly adjacent to the proposed building. See Project Detail section for further clarification. Concrete curb, gutter and sidewalks directly adjacent to the proposed building will be provided under separate contract.

Grading and the removal of trees and associated roots shall be performed per the drawings and specification for the installation of all roadways, parking lots, building pads (including Alternate GC-1), utilities and all stormwater management micro-bioretention facilities. Roof drain PVC piping shall be installed under a separate building contract. Parking lot light pole foundations and all associated underground electrical conduit required for providing power to future light poles shall be installed under this contract and shall be extended to within 5-feet of the future building foundation.

All existing foundations, retaining walls, wells, cisterns, septic tanks, piping and miscellaneous items associated with the remains of the existing structures along the north property line shall also be removed in their entirety.

Water and sewer lines shall be installed with all related appurtenances including but not limited to the water meter vault, manholes, fire hydrants and reducers. Both water and sewer lines shall be installed and inspected to within 5-feet of the proposed building foundation or as indicated on the plans. This work shall also include removal of the existing on-site water meter and all associated piping and devices back to the main as directed by the City of Hagerstown. It is understood that the contractor is responsible for providing and installing the water meter vault and for all trenching work. The City of Hagerstown is responsible for actually making the tap into the water main and for installing the water meter in the vault. The contractor shall core drill the water meter vault as directed by the City of Hagerstown. The sewer line tap shall be the

responsibility of the contractor and shall be made under the supervision of the Washington County Department of Water Quality.

Underground conduits shall be installed per the drawings and specification to provide power to the building transformer, three-phase load break and site signage. The three-phase load break shall be picked-up from Potomac Edison and installed by the contractor. Underground conduits for fiber, cable and telephone lines shall also be installed and extended to within 5-feet of the proposed building foundation. The electrical transformer equipment pad along with the secondary feeder conduits leading from the transformer to the building shall be provided under separate contract. The generator equipment pad along with associated power and data conduits will also be provided under separate contract.

Installation of conduit for the propane line including required trenching shall be installed as shown on the plans and shall extend from the mechanical room to the middle of the proposed propane tank foundation pad location. Propane tank foundation pad and privacy fencing shall be provided under separate contract.

All work on this project shall be done in accordance with the requirements of the Maryland Department of Transportation, State Highway Administration "Standard Specifications for Construction and Materials" (hereinafter referred to as "MSHA Specifications") dated 2019, as amended to the date of advertisement for this Proposal; revisions thereof, or additions thereto, and the Special Provisions included in this Invitation for Bids.

All standard details and standard plates referred to shall be those of Maryland State Highway Administration's Book of Standards – for Highway & Incidental Structures (hereafter referred to as the "Book of Standards") and the latest revision thereto.

All references to the State of Maryland, State, State Roads Commission, State Highway Administration, or Commission in the Special Provisions, the MSHA Specifications, or the Book of Standards shall be construed to refer to Washington County, Maryland.

All references to the Engineer shall be interpreted to refer to the County's assigned Project Representative within the Washington County Division of Engineering and Construction Management.

All references to officials of Maryland State government, or the Maryland State Highway Administration in the Special Provisions, the MSHA Specifications or the Book of Standards shall be interpreted to refer to the appropriate official in Washington County government.

The Invitation to Bid, the General Conditions, and the Special Provisions are supplemental to the MSHA Specifications and form part of the Contract. In case of a conflict between the MSHA Specifications and the Special Provisions, the Special Provisions shall govern.

In case of conflict between the Book of Standards and the plans, the plans shall govern. In case of conflict between the plans and the Special Provisions, the Special Provisions shall govern.

In addition to the above, the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control, Water Resources Administration Standard Details, Maryland 378 Pond Specifications, and AASHTO requirements for materials shall apply. And all stormwater management structures to be built as part of this project shall be constructed in strict accordance with the Stormwater Management Ordinance for Washington County, Maryland. (This document can be found on the Internet at http://www.washco-md.net/washco_2/pdf files/legan/fnlrwd2.pdf

PUBLIC UTILITIES

The utility companies listed below may have existing installations within the limits of "THE PROJECT". It is necessary that the Contractor notify the utility company(ies) a minimum fortyeight (48) hours in advance of working in the vicinity of any installation in order that the location of existing utilities may be staked and/or protected.

(1)	Potomac Edison P. O. Box 397 Williamsport, MD 21795 (301) 582-5270	(2)	Hagerstown Water & Sewer Dept. 1 Clean Water Circle Hagerstown, MD 21740 (301) 790-3200
(3)	Verizon 1710 Underpass Way Hagerstown, MD 21740 (301) 791-9950	(4)	Wash. Co. Dept. of Water Quality 16232 Elliott Parkway Williamsport, MD 21795 (240) 313-2600
(5)	Antietam Cable T.V. 1000 Willow Circle Hagerstown, MD 21740 (301) 797-5000	(6)	Columbia Gas of Maryland 55 Sycamore Street Hagerstown, MD 21740-6012 (240) 420-2020
(7)	Lumos Networks 1 Lumos Plaza Waynesboro, VA (800) 320-6144	(8)	Miss Utility (800) 257-7777

Also refer to General Conditions, Section 5 – Control Of The Work and Section 7 – Legal Relations And Responsibility To The Public

MATERIAL TESTING

All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with accepted standards. The Contractor shall be responsible for the field/laboratory testing as described below.

A. CONCRETE:

The Contractor shall be responsible for sampling, molding, curing, transporting, and testing concrete test specimen for compressive strength analysis in conformance with AASHTO/ASTM Specifications. As a minimum, the Contractor shall take four (4) concrete cylinders per pour for each mix design

and/or as directed by the Engineer. The field concrete testing shall include, slump test, air content test, and temperature information on freshly mixed concrete. All necessary paper work shall be prepared by the Contractor, and sent along with the concrete test cylinders to a laboratory approved by the Engineer. The specimens shall <u>not</u> be transported from field to laboratory before completion of the initial curing. During transportation, specimens shall be cured and protected with suitable cushioning material to prevent damage from jarring and damage by freezing temperature, or moisture loss.

For **compressive strength testing** each set of concrete cylinders shall be tested as follows:

One (1) concrete cylinder shall be broken at seven (7) days. One (1) concrete cylinder shall be broken at fourteen (14) days. Two (2) concrete cylinders shall be broken at twenty-eight (28) days.

The compressive strength test results report, for each concrete cylinder, shall be submitted to the Engineer no later than 48 hours after the actual break time period. The Engineer may change the test frequency for the concrete cylinder breaks as noted above.

All cast-in-place concrete quantities shall be computed using the as-planned dimensions shown on the plans or directed by the Engineer. There will be no increase allowed if the Contractor elects to construct the foundations larger than the planned dimensions for ease of construction. The Contractor shall submit all concrete tickets to the Engineer along with the request for payment.

B. SOILS:

All soil samples (on and off-site) shall be tested by the Contractor in a laboratory approved by the Engineer. This includes but is not limited to, sieve analysis with hydrometer, Atterburg limits, moisture-density relationship test (AASHTO T-180), and any other pertinent test necessary for soil(s) classification. The testing shall apply to all Borrow Material(s), and all on-site suitable material(s) excavated which may be used in the construction of embankments. The Contractor shall submit all test results to the Engineer for approval prior to its placement. The test types shall be selected by the Engineer, and shall be performed in accordance with AASHTO/ASTM Standards.

The Contractor shall be responsible for in-place density testing by a nuclear gauge (test at every 500 LF per each lift as directed by the Engineer). Results shall be submitted to the Engineer for review.

The Contractor shall retain a Maryland licensed Geotechnical Engineer to verify the soil net bearing pressure prior to placement of the concrete footings. Should the actual allowable bearing pressure at the planned bottom of footing elevation be found to be less than assumed, the width or depth of the footing shall be adjusted at the direction of the Engineer. The Geotechnical Engineer must submit a report of the findings to the Engineer for review.

If the Contractor elects to use a borrow pit, he shall stakeout the area and provide the necessary soil analysis and test results from a maximum density test in accordance with AASHTO T180 by a Soils Laboratory approved by the Owner.

C. AGGREGATES:

The Contractor shall provide the Owner all laboratory tests for aggregates (fine & coarse) for quality control purposes prior to its placement. The tests shall include, but not be limited to, sieve analysis, moisture-density relationship, and specific gravity tests (if required by the Engineer). All tests shall be performed from a finished product at the quarry in accordance with AASHTO/ASTM Standards. The Contractor shall be responsible for in-place density testing by a nuclear gauge (test at every 500 LF per each lift as directed by the Engineer). Results shall be submitted to the Engineer for review. Testing shall be incidental to the other item(s) being tested.

D. ASPHALT:

The nuclear/core method shall be utilized with a minimum of four (4) nuclear density tests required. The Contractor shall comply with these testing standards established for the quality control and must submit the test results to the Owner for review within 24 hours after they are received. The Owner reserves the right to stop the paving operation and ask for corrections if the test results do not meet the Specification Standards.

Payment for all material testing and geotechnical engineering services shall be incidental to the pertinent pay items specified in the Contract.

GOVERNMENT DEBARMENT AND SUSPENSION (TITLE 40 PART 32)

OMB Guidance in 2 CFR part 180

Persons who receive award of a subgrant, contract, or subcontract exceeding \$25,000 must not award lower tier transactions to entities that are debarred, suspended, proposed for debarment, excluded or disqualified under the non-procurement common rule.

When a non-federal entity enters into a covered transaction with an entity at a lower tier, the non-federal entity must verify that the entity is not suspended or debarred or otherwise excluded. This verification may be accomplished by:

- (a) Checking the Excluded Party List System (EPLS) maintained by the General Services Administration (GSA);
- (b) Collecting a certification from that entity; or

(c) Adding a clause or condition to the covered transaction with that entity (2 CFR section 180.300).

The information contained in the EPLS is available in printed and electronic formats. The printed version is published monthly. Copies may be obtained by purchasing a yearly subscription from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, or by calling the Government Printing Office Inquiry and Order Desk at (202) 783-3238. The electronic version can be accessed on the Internet at http://epls.arnet.gov.

Invitation to Bid

INVITATION TO BID

<u>WASHINGTON COUNTY</u> <u>PUBLIC SAFETY TRAINING CENTER, PHASE I – SITE DEVELOPMENT</u>

<u>COUNTY CONTRACT NO. MS-TC-266-28</u> <u>COUNTY PROJECT NO. 28-266</u>

TABLE OF CONTENTS

Page Numbers

ITB 1.01	Bid Due Date	
ITB 1.02	Bid Documents	5
ITB 1.03	Preparation Of Bid	6
ITB 1.04	Receipt And Opening Of Bids	6
ITB 1.05	Bid Security	6/7
ITB 1.06	Pre-Bid Conference	7
ITB 1.07	Equal Opportunity	7
ITB 1.08	Equal Employment Opportunity	7/8
ITB 1.09	Qualifications Of Bidder	8
ITB 1.10	Time Of Completion And Liquidated Damages	8
ITB 1.11	Addenda And Interpretations	9
ITB 1.12	Conditions Of Work	9
ITB 1.13	Plans - Specifications - Contract Documents	10
ITB 1.14	Award	10
ITB 1.15	Minimum Wages	10
ITB 1.16	"Or Equal" Clause	
ITB 1.17	Patents	11
ITB 1.18	Superintendence By Contractor	
ITB 1.19	Separate Contracts	11
ITB 1.20	Mutual Responsibility Of Contractors	12
ITB 1.21	Land And Rights-Of-Way	12
ITB 1.22	Payment To Contractor	
ITB 1.23	Acceptance Of Final Payment As Release	13
ITB 1.24	General Guaranty	
ITB 1.25	Sales Tax	14
ITB 1.25	Notice of Political Contributions	14/15
ITB 1.25	Payment of County and Municipal Taxes	15

INVITATION TO BID

ADVERTISEMENT

<u>WASHINGTON COUNTY</u> <u>PUBLIC SAFETY TRAINING CENTER, PHASE I – SITE DEVELOPMENT</u>

<u>COUNTY CONTRACT NO. MS-TC-266-28</u> <u>COUNTY PROJECT NO. 28-266</u>

<u>The Board of County Commissioners of Washington County, Maryland, will accept</u> <u>sealed bids for the Washington County Public Safety Training Center, Phase 1 –</u> <u>Site Development, Contract No. MS-TC-266-28 until SEPTEMBER 11, 2019 at 2:00</u> <u>p.m.</u>

For further information, please refer to the Washington County website: <u>www.washco-md.net</u>, and click on "Engineering Department Bid Listing" or contact the Division of Engineering and Construction Management, County Project Manager, <u>Brennan Garrett at telephone 240-313-2460</u>.

BOARD OF COUNTY COMMISSIONERS OF WASHINGTON COUNTY, MARYLAND

BY:

Man

Robert Slocum, County Administrator

Publish: AUGUST 13, 2019

Invoice: Washington County Division of Engineering 80 W. Baltimore Street Hagerstown, MD 21740-6003

Telephone: 240-313-2460

<u>INVITATION TO BID</u> <u>WASHINGTON COUNTY</u> <u>PUBLIC SAFETY TRAINING CENTER, PHASE I – SITE DEVELOPMENT</u>

The Board of County Commissioners of Washington County, Maryland, will accept sealed bids for the **Washington County Public Safety Training Center, Phase 1 – Site Development, <u>Contract No. MS-TC-266-28</u>. Bids will be received and time-stamped in the Division of Engineering**, County Administrative Annex, 80 West Baltimore Street, Hagerstown, MD 21740-6003, until <u>2:00 P.M. Wednesday, SEPTEMBER 11, 2019</u> after which time they will be publicly opened in a conference room of the County Administrative Annex. Bids received after this time will be returned unopened.

The <u>Washington County Public Safety Training Center, Phase 1 – Site Development</u> project is generally described as follows: <u>site grading, including removal of trees and</u> <u>debris; installation of entrance road, including improvements to create a deceleration</u> <u>lane, cast-in-place concrete end and head walls; storm drain network consisting of</u> <u>precast concrete arch and HDPE pipes, bio-retention facilities, sewer and water line</u> <u>installation, precast concrete manholes, reinforced concrete pipe culverts; and road</u> <u>work, including grading and drainage, asphalt paving, and pavement markings</u>. All work on this project shall be done in accordance with the MSHA Specifications. This Project Classification is Cost Group Letter Class "D," \$1,000,001 to \$2,500,000.

Qualified Contractors may obtain the Bid documents from the Washington County website, go to <u>www.washco-md.net</u> and access "Divisions & Departments/Engineering/Engineering ITB/RFP/RFQ List." When accessing the Bid documents from the Washington County website, please enter accurate contact information on the Solicitation Registration Form. To ensure receipt of subsequent addenda to this document, a VALID e-mail address must be provided. All addenda are issued via e-mail to the recipient's e-mail address provided on the Solicitation Registration Form.

Bid security in the form of a cashier's check, certified check, or bid bond in the amount of five percent (5%) of the total bid amount shall be submitted with Contractor's bid. Bid bonds shall be made payable to the Board of County Commissioners of Washington County, Maryland. The successful Bidder will be required to furnish satisfactory Payment and Performance Bonds for the full amount of the Contract. Bids shall be executed on bid forms provided with the bidding documents in accordance with the Instructions to Bidders.

The County may make such investigations as deemed necessary to determine the ability of the Bidder to perform the work, and prospective Bidders shall be required to furnish to the County's representative all such information as may be requested. The County reserves the right to reject any bid if the evidence submitted by, or investigation of, such Bidder fails to

satisfy the County that such Bidder is properly qualified to carry out the obligation of the Contract and to complete the work contemplated therein.

A Pre-Bid Conference for the project will be held <u>Wednesday, AUGUST 21, 2019 at</u> <u>10:00 A.M.</u> local time in a conference room at the **Division of Engineering, County** Administrative Annex, 80 West Baltimore Street, Hagerstown, MD. All prospective Bidders are encouraged to attend.

Washington County shall make positive efforts to utilize Disadvantaged Business Enterprises for its supplies and services and shall allow these sources the maximum feasible opportunity to compete for contracts. The Board of County Commissioners does not discriminate on the basis of race, color, national origin, sex, religion, age and disability in employment or the provision of services. Individuals requiring special accommodations are requested to contact the Washington County Division of Engineering and Construction Management at 240-313-2460 Voice, TDD Dial 711, to make arrangements no later than seven (7) calendar days prior to the Pre-Bid Conference and/or Bid Opening.

The County Commissioners of Washington County, Maryland, reserve the right to reject any and/or all bids, to waive any informalities or irregularities in the bidding, and to take whatever action is in the best interest of Washington County.

BOARD OF COUNTY COMMISSIONERS OF WASHINGTON COUNTY, MARYLAND

ITB 1.01 BID DUE DATE

The Board of County Commissioners of Washington County, Maryland, will accept sealed bids for the <u>Washington County Public Safety Training Center, Phase 1 – Site</u> <u>Development, Contract No. MS-TC-266-28</u>. Bids will be received and time-stamped in the Division of Engineering and Construction Management, County Administrative Annex, 80 West Baltimore Street, Hagerstown, MD 21740-6003, until <u>2:00 P.M, Wednesday,</u> <u>SEPTEMBER 11, 2019</u>, after which time they will be publicly opened in a conference room of the County Administrative Annex. Bids received after this time will be returned unopened. Inquires regarding this bid should be directed to the County's Project Manager, <u>Brennan Garrett</u> at telephone 240-313-2474, Fax 240-313-2401 or email ecbidquestions@washco-md.net.

Also refer to General Conditions, Section 2 – Bidding Requirements and Conditions

ITB 1.02 BID DOCUMENTS

Bona fide Contractors, licensed in the State of Maryland, may obtain the Bid documents from the Washington County website, go to <u>www.washco-md.net</u> and access "Divisions & Departments/Engineering/Engineering ITB/RFP/RFQ List." When accessing the Bid documents from the Washington County website, please enter accurate contact information on the Solicitation Registration Form. To ensure receipt of subsequent addenda to this document, a VALID e-mail address must be provided. All addenda are issued via e-mail to the recipient's e-mail address provided on the Solicitation Form.

Neither the County nor any Representative of the County has any responsibility for the accuracy, completeness or sufficiency of any bid documents obtained from any source other than the source indicted in these documents. Obtaining these documents from any other source(s) may result in obtaining incomplete and inaccurate information. Obtaining these documents for any source other than directly from the source listed herein may also result in failure to receive any addenda, corrections, or other revisions to these documents that may be issued.

Also refer to General Conditions, Section 2 – Bidding Requirements and Conditions

ITB 1.03 PREPARATION OF BID

Bids shall be executed on the separate copy of BID FORMS provided with the bid document. This bid document includes a sample set of BID FORMS. These are for the

INVITATION TO BID

convenience of Bidders and are not to be detached from the Specifications, filled out, or executed. Separate copies of the BID FORMS are furnished for that purpose. Each bid proposal shall be submitted on the BID FORMS as set forth in these Specifications, complete with bid security made payable to the Board of County Commissioners of Washington County, Maryland.

Also refer to General Conditions, Section 2 – Bidding Requirements and Conditions

ITB 1.04 RECEIPT AND OPENING OF BIDS

Each bid must be submitted in a sealed envelope bearing on the outside the name of the Bidder, the Bidder's address, and the name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified.

The envelopes containing the bids must be sealed and addressed to the Division of Engineering and designated as <u>Washington County Public Safety Training Center</u>, <u>Phase 1 – Site Development, Contract No. MS-TC-266-28</u>.

The County may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities. After opening of bids, but before award, the County reserves the right to reject in whole or part, any or all bids if it is determined that this action is fiscally advantageous or otherwise in the County's best interest. The County reserves the right to seek additional funding and/or redesign the project and seek new bids. A notice of rejection shall be sent to all Bidders that submitted rejected bids.

Any bid may be withdrawn prior to the scheduled time for the opening of the bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No Bidder may withdraw a bid within ninety (90) calendar days after the actual date of the BID opening.

Also refer to General Conditions, Section 2 - Bidding Requirements and Conditions and Section 3 - Award and Execution of Contract

ITB 1.05 BID SECURITY

Each bid must be accompanied by bid security in the form of a bond, bank certified check, bank cashier's check, or a bank treasurer's check in the amount of five percent (5%) of the total bid made payable to the Board of County Commissioners of Washington County, Maryland.

All Bid Securities, except those of the three (3) lowest Bidders, will be returned immediately following the bid opening and review of the bids. The Bid Security of the three (3) lowest Bidders will be returned promptly after the execution of the Contract and submission and approval of the Performance and Payment bonds.

If no award has been made within ninety (90) calendar days after the date of the opening of the bids, Bid Security will be returned to the three (3) lowest Bidders. The successful Bidder will be required to furnish satisfactory Payment and Performance Bonds for the full amount of the Contract.

Also refer to General Conditions, Section 2 - Bidding Requirements and Conditions and Section 3 - Award and Execution of Contract

ITB 1.06 PRE-BID CONFERENCE

A Pre-Bid Conference for the project will be held <u>Wednesday, AUGUST 21, 2019</u> at <u>10:00 A.M.</u> in a conference room at the County Administrative Annex, 80 West Baltimore Street, Hagerstown, MD 21740-6003. All prospective Bidders are encouraged to attend.

ITB 1.07 EQUAL OPPORTUNITY

Washington County shall make positive efforts to utilize Disadvantaged Business Enterprises for its supplies and services and shall allow these sources the maximum feasible opportunity to compete for contracts. The Board of County Commissioners does not discriminate on the basis of race, color, national origin, sex, religion, age and disability in employment or the provision of services. Individuals requiring special accommodations are requested to contact the Washington County Engineering Department at 240-313-2400 Voice, TDD Dial 711, to make arrangements no later than seven (7) calendar days prior to the Pre-Bid Conference and/or Bid Opening.

ITB 1.08 EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this Contract, the Contractor agrees as follows:

The Contractor shall not discriminate on the basis of race, color, national origin or sex or sexual orientation in the performance of this contract. The contractor shall carry out applicable requirements of 40 CFR Part 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the contractor to carry out these requirements is a material breach of this contract which may result in the termination of this contract or other legally available remedies.

The Contractor will take affirmative action to ensure the applicants are employed, and that employees are treated, during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this non-discrimination clause.

The Contractor will, in all solicitations or advertisement for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

ITB 1.09 QUALIFICATIONS OF BIDDER

The County may make such investigations as deemed necessary to determine the ability of the Bidder to perform the work, and the Bidder shall furnish to the County all such information and data for this purpose as the County may request. The County reserves the right to reject any bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the County that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein. Conditional bids will not be accepted.

Also refer to General Conditions, Section 2 – Bidding Requirements and Conditions

ITB 1.10 TIME OF COMPLETION AND LIQUIDATED DAMAGES

Bidder must agree to commence work within ten (10) calendar days of receipt of written "Notice to Proceed" by the County and to fully complete the project within <u>180</u> consecutive calendar days thereafter.

Bidder must also agree to pay as liquidated damages, the sum of \$500.00 for each consecutive calendar day thereafter as hereinafter provided in the General Conditions.

Also refer to General Conditions, Section 2 – Bidding Requirements and Conditions, Section 3 – Award and Execution of Contract, and Section 8 – Prosecution and Progress

DISREGARD AND STRIKE from General Conditions, GC-8.05 "Limitations of Operation", Item (c) "Work on Legal Holidays", Page GC-77 in its entirety.

ITB 1.11 ADDENDA AND INTERPRETATIONS

No interpretations of the meaning of the Plans, Specifications, or other pre-bid documents will be made to any Bidder orally. Every request for such interpretation shall be made to the County in writing, addressed to the Division of Engineering, County Administrative Annex, 80 West Baltimore Street, Hagerstown, MD 21740-6003, and to be given consideration must be received, in writing **no later than 4:30 p.m.** <u>Wednesday, September 4, 2019</u>. Faxed and email inquiries are acceptable, if received by the date and time for the deadline for questions.

The County will maintain a list of "Plan Holders" throughout the bidding phase, complete with the full mailing address, contact person with e-mail address, and phone / fax numbers of those Contractor's requesting and being in possession of the bid documents. If addenda is issued, any and all addenda will be in written format and e-mailed not later than three (3) calendar days prior to the date fixed for the opening of bids to all Plan Holders pursuant to the County's Plan Holders List.

The County will also publish any issued addenda and keep current the County's Plan Holders List on the County's web site. Click on "Engineering Department Bid Listing" to ascertain this information.

Failure of any Bidder to receive any such addendum or interpretation shall not relieve such Bidder from any obligation under the bid as submitted. All addenda so issued shall become part of the Contract Documents.

Also refer to General Conditions, Section 2 – Bidding Requirements and Conditions

ITB 1.12 CONDITIONS OF WORK

At the time of the opening of bids, each Bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the Plans and Contract Documents (including all addenda). The failure or omission of any Bidder to examine any form, instrument, or document shall in no way relieve any Bidder from any obligation with respect to its bid.

Also refer to General Conditions, Section 2 – Bidding Requirements and Conditions, Section 3 - Award and Execution of Contract, and Section 4 – Scope of Work

ITB 1.13 PLANS - SPECIFICATIONS - CONTRACT DOCUMENTS

Upon award, the successful Contractor will receive up to five (5) sets of Contract Documents (drawings, plan sheets and specifications) free of charge.

INVITATION TO BID

Also refer to General Conditions, Section 3 – Award and Execution of Contract

ITB 1.14 AWARD

The total base bid will be used as a basis for evaluation of the bids and award of the Contract. If an award of contract is made, it will be made to the lowest, responsive, responsible Bidder within the time specified for bids to remain irrevocable.

Also refer to General Conditions, Section 2 – Bidding Requirements and Conditions and Section 3 – Award and Execution of Contract

ITB 1.15 MINIMUM WAGES

Nothing in this contract shall be construed as waiving the applicable requirements of the Federal Minimum Wage as established in the Fair Labor Standards Act. (*Refer to General Conditions, Section 8 – Prosecution and Progress*).

ITB 1.16 "OR EQUAL" CLAUSE

Whenever a material, article or piece of equipment is identified on the Plans or in the Specifications by reference to manufacturers' or vendors' names, trade names, catalog numbers, etc., it is intended merely to establish a standard; and, any material, article, or equipment of other manufacturers and vendors which will perform adequately the duties imposed by the general design will be considered equally acceptable provided the material, article, or equipment so proposed is, in the opinion of the Engineer, of equal substance and function. It shall not be purchased or installed by the Contractor without the Engineer's written approval.

Also refer to General Conditions, Section 6 – Control of Material and Section 8 – Prosecution and Progress

ITB 1.17 PATENTS

The Contractor shall hold and save the County and its officers, agents, servants, and employees harmless from liability of any nature or kind, including cost and expenses for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the Contract, including its use by the County, unless otherwise specifically stipulated in the Contract documents.

ITB 1.18 SUPERINTENDENCE BY CONTRACTOR

The Contractor shall employ a competent Superintendent or Foreman who shall be in attendance at the Project site during performance of the Work. The Superintendent shall represent the Contractor, and communications given to the Superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communications shall be similarly confirmed on written request in each case. The Superintendent shall be satisfactory to the County, and the County shall have the right to require the Contractor to dismiss from the project any Superintendent and replace with personnel satisfactory to the county, at no additional costs. The Contractor shall not replace the Superintendent without the consent of the County except with personnel satisfactory to the County in all respects.

Also refer to General Conditions Section 7 – Legal Relations and Responsibility to the Public

ITB 1.19 SEPARATE CONTRACTS

The Contractor shall coordinate its operations with those of other Contractors. Cooperation will be required on the arrangement for the storage of materials and in the detailed execution of the work. The Contractor, including its subcontractors, shall keep informed of the progress and the detail work of other Contractors and shall notify the Engineer immediately of lack of progress or defective workmanship on the part of other Contractors. Failure of a Contractor to keep informed of the work progressing on the site and failure to give notice of lack of progress or defective workmanship by others shall be construed as acceptance by it of the status of the work as being satisfactory for proper coordination with its work.

Also refer to General Conditions Section 5 – Control of the Work and Section 6 – Control of Material

ITB 1.20 MUTUAL RESPONSIBILITY OF CONTRACTORS

If, through acts of neglect on the part of the Contractor, any other contractors or any subcontractor shall suffer loss of damage on work, the Contractor agrees to settle with such other contractor or subcontractor by agreement or arbitration if such other contractor or subcontractor will so settle. If such other contractor or subcontractor shall assert any claim against the County on account of any damage alleged to have been sustained, the County shall notify the Contractor, who shall indemnify and save harmless the County against any such claim.

Also refer to General Conditions Section 5 – Control of the Work and Section 6 – Control of Material

ITB 1.21 LAND AND RIGHT-OF-WAYS

The County has obtained necessary easements and right-of-ways for the area occupied by the proposed improvements.

Also refer to General Conditions Section 4 – Scope of Work, Section 6 – Control of Material, and Section 7 – Legal Relations and Responsibility to the Public

ITB 1.22 PAYMENT TO CONTRACTOR

The County shall make a Progress Payment to the Contractor on the basis of a duly certified and approved estimate of the work performed during the preceding calendar month under the Contract. To insure proper performance of the Contract, the County shall retain ten percent (10%) of the amount of each estimate until final completion and acceptance of all work covered by the Contract.

The Contractor shall submit the pencil copy of each monthly estimate to the County for review and approval. The hard copies shall be submitted to the Project Manager, Washington County Division of Engineering, along with all necessary attachments supporting his claim. The Contractor shall also provide an update of the project schedule to the County with the submission of each monthly request for payment.

The County reserves the right to withhold all or any part thereof of monies due, if in the opinion of the County, the completed work is found not to be in conformance with the Plans and Specifications, defective and/or damaged by negligence by the Contractor and/or his employees. The above shall also apply to previously approved work by the Inspector, which may require correction/replacement or become defective due to negligence and/or workmanship by the Contractor. This shall also include unsatisfactory prosecution of the work, failure to furnish required submittals, and/or unapproved testing procedures. In preparing estimates, the material delivered on the site and preparatory work done may be taken into consideration.

All material and work covered by partial payments made shall thereupon become the sole property of the County, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of materials and work upon which payments have been made or the restoration of any damaged work, or as a waiver of the right of the County to require fulfillment of all the terms of the Contract. The Contractor agrees that it will indemnify and save the County harmless from all claims growing out of the lawful demands of subcontractors, laborers, workmen, mechanics, materialmen, and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in the furtherance of the performance of this Contract. The Contractor shall, at the County's request, furnish satisfactory evidence that all obligations of the nature hereinabove designated have to be paid, discharged, or waived. If the Contractor fails to do so, then the County may, after having served written notice on the said Contractor, either pay unpaid bills, of which the County has written notice, direct, or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the Contractor shall be resumed, in accordance with the terms of this Contract, but in no event shall the provisions of this sentence be construed to impose any obligations upon the County to either the Contractor or its Surety.

In paying any unpaid bills of the Contractor, the County shall be deemed the agent of the Contract, and any payment so made by the County, shall be considered as a payment made under the Contract by the County to the Contractor, and the County shall not be liable to the Contractor for any such payment made in good faith.

Also refer to General Conditions Section 2 – Bidding Requirements and Conditions, Section 3 – Award and Execution of Contract, Section 4 – Scope of Work, Section 8 – Prosecution and Progress, and Section 9 – Payment

ITB 1.23 ACCEPTANCE OF FINAL PAYMENT AS RELEASE

The acceptance by the Contractor of final payment shall be and shall operate as a release to the County of all claims and all liability to the Contractor for all things done or furnished in connection with this work and for every act and neglect of the County and others relating to or arising out of this work. No payment, however, final or otherwise, shall operate to release the Contractor or its Sureties from any obligation under this Contract or the Performance and Payment Bond. The assessment of liquidated damages (if any) shall be deducted from the Contractor's Final Payment.

As a condition precedent to final payment, the Contractor shall execute a general release of all claims arising out of the contract. (*Refer to GC-9.04 Substantial Completion and Final Payment*).

Also refer to General Conditions Section 2 – Bidding Requirements and Conditions, Section 3 – Award and Execution of Contract, Section 4 – Scope of Work, and Section 9 – Payment

ITB 1.24 GENERAL GUARANTY

Neither the final payment nor any provision on the Contract documents nor partial or entire occupancy of the premises by the County shall constitute an acceptance of work not done in accordance with the Contract documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall remedy any defects in the work and pay for any damage to other work resulting there from, which shall appear within a period of one (1) year from the date of final acceptance of work unless a shorter period is specified. The County will give notice of observed defects with reasonable promptness.

Also refer to General Conditions Section 4 – Scope of Work, Section 8 - Prosecution and Progress, and Section 9 – Payment

ITB 1.25 SALES TAX

The County is exempt from State of Maryland Sales Tax. The County's Maryland Sales Tax Exemption Number is 3000129 2. However, the Bidder is responsible for making any necessary inquiries and investigations with regulating state agencies to obtain a determination of tax exemptions in his/her bid.

Also refer to General Conditions Section 2 – Bidding Requirements and Conditions, Section 3 – Award and Execution of Contract, Section 7 – Legal Relations and Responsibility to the Public

ITB 1.26 NOTICE OF POLITICAL CONTRIBUTIONS

In accordance with Maryland Code, <u>State Finance and Procurement Article</u>, §17-402, the Bidder shall comply with Maryland Code, <u>Election Law Article</u>, Title 14, which requires that every person that enters into contracts, leases, or other agreements with the State, a county, or any incorporated municipality, or their agencies during a calendar year in which the person receives in the aggregate \$100,000 or more, shall file with the State Administrative Board of Election Laws a statement disclosing contributions in excess of \$500 made during the reporting period to a candidate for elective office in any primary or general election. The statement shall be filed with the State Administrative Board of Election Laws: (1) before a purchase or execution of a lease or contract by the State, a county, an incorporated municipality or their agencies, and shall cover the proceeding two (2) calendar years; and (2) if the contribution is made after the execution of a lease or contract, then twice a year, throughout the contract term, on: (a) February 5, to cover the 6-month period ending January 31; and (b) August 5, to cover the 6 month period ending July 31.

INVITATION TO BID

Also refer to General Conditions Section 2 – Bidding Requirements and Conditions

ITB 1.27 PAYMENT OF COUNTY AND MUNICIPAL TAXES

Effective October 1, 1993, in compliance with Section 1-106(b)(3) of the Code of the Public Local Laws of Washington County, Maryland, "If a bidder has not paid all taxes owed to the County or a municipal corporation in the County, the County Commissioners may reject the bidder's bid."

Also refer to General Conditions Section 2 – Bidding Requirements and Conditions

General Conditions

WASHINGTON COUNTY, MD



GENERAL CONDITIONS

FOR

CONSTRUCTION

October 2008

023

GENERAL CONDITIONS (GC) TABLE OF CONTENTS

Section

Item

Page

GC-SECTION 1 DEFINITIONS AND TERMS

1.01	General	GC-1
1.02	Organizational Definitions	GC-1
1.03	Definitions	GC-2
1.04	Metric System	GC-11
1.05	Language	GC-11

GC-SECTION 2 BIDDING REQUIREMENTS AND CONDITIONS

2.01	Bid Irrevocable	GC-11
2.02	Contents of Bid Forms	GC-12
2.03	Interpretation of Quantities in Bid Schedule	GC-12
2.04	Site Investigation	GC-12
2.05	Taxes-Responsibility for Payment, Exemptions,	
	Form to be Filed, Etc.	GC-13
2.06	Preparation of Bid	GC-14
2.07	Bid Security	GC-15
2.08	Delivery of Bids	GC-15
2.09	Communications and Interpretations – Prior to Bid	
	Opening	GC-15
2.10	Addenda to Invitations for Bids	GC-16
2.11	Pre-Opening Modification or Withdrawal of Bids	GC-16
2.12	Late Bids, Late Withdrawals, and Late Modification	GC-16
2.13	Opening and Recording of Bids	GC-16
2.14	Mistakes in Bids	GC-17
2.15	Irregularities	GC-18
2.16	Cancellation of Invitations for Bids	GC-19
2.17	Rejection of Individual Bids or Proposals	GC-19
2.18	Rejection of all Bids	GC-21
2.19	Bid Evaluation and Award	GC-21
2.20	Tie Bids	GC-22
2.21	Multiple or Alternate Bids	GC-23
2.22	Bid Protests	GC-23
2.23	Political Contributions	GC-23

Item

Page

Section

GC-SECTION 3 AWARD AND EXECUTION OF CONTRACT

3.01	Award of Contract	GC-23
3.02	Return of Bid Security	GC-23
3.03	Performance Bond and Payment Bond Requirements	GC-24
3.04	Execution of Contract	GC-24
3.05	Failure to Execute Contract	GC-25
3.06	W-9 Vendor Information	GC-25

GC-SECTION 4 SCOPE OF WORK

4.01	Intent of Contract	GC-26
4.02	General Conditions Controlling	GC-27
4.03	Entire Contract	GC-27
4.04	Variations in Estimated Quantities	GC-27
4.05	Differing Site Conditions	GC-28
4.06	Changes	GC-28
4.07	Payment Provisions – Changes, Equitable	
	Adjustments, Delays	GC-31
4.08	Unauthorized Work	GC-33
4.09	Final Clean Up	GC-33
4.10	Warranty of Construction	GC-34
4.11	Value Engineering Change Proposals	GC-35
4.12	Contingent Items	GC-37

GC-SECTION 5 CONTROL OF THE WORK

5.01	Authority of the Engineer	GC-38
5.02	Conformity with Contract Requirements	GC-38
5.03	Discrepancies in the Contract Documents	GC-38
5.04	Cooperation by the Contractor	GC-39
5.05	Cooperation with Utilities	GC-39
5.06	Cooperation between Contractors	GC-40
5.07	Authority and Duties of Inspectors	GC-40
5.08	Inspection of Work	GC-41
5.09	Removal of Defective Work	GC-42
5.10	Load Restrictions	GC-42
5.11	Maintenance of Work During Construction	GC-42
5.12	Failure to Maintain Entire Project	GC-43

ii

Section	Item	Page
5.13	Claims	GC-43
5.14	Shop Drawings	GC-46

GC-SECTION 6 CONTROL OF MATERIAL

6.01	General	GC-49
6.02	Approval of Material Sources	GC-49
6.03	Approval of Plants and Shops	GC-51
6.04	Samples, Tests, Cited Specifications	GC-51
6.05	Certification of Compliance	GC-52
6.06	Project Control Testing	GC-52
6.07	Storage and Handling of Materials	GC-53
6.08	Unacceptable Materials	GC-53
6.09	Material Furnished by the County	GC-54

GC-SECTION 7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

7.01	Compliance with Laws	GC-54
7.02	Permits and Licenses	GC-55
7.03	Restoration of Surfaces Opened by Permit	GC-56
7.04	Patented Devices, Materials and Health Standards	GC-56
7.05	Federal Participation	GC-56
7.06	Construction Safety and Health Standards	GC-57
7.07	Public Convenience and Safety	GC-57
7.08	Maintenance of Traffic	GC-58
7.09	Maintenance of Traffic for Private and Commercial	
	Properties	GC-61
7.10	Access to Railroad Rights-of-Way	GC-62
7.11	Preservation and Restoration of Property	GC-63
7.12	Land, Air and Water Pollution	GC-64
7.13	Indemnification and Insurance	GC-65
7.14	Use and Possession Prior to Completion	GC-68
7.15	Contractor's Responsibility for Work	GC-69
7.16	Contractor's Responsibility for Utility Property and	
	Services	GC-70
7.17	Personal Liability of Public Officials	GC-70
7.18	Notices and Waiver of Legal Rights	GC-70
7.19	Choice of Law, Forum	GC-71
7.20	Audit and Retention of Records	GC-72
7.21	Use of Explosives	GC-72

iii

Section

Item

GC-SECTION 8 PROSECUTION AND PROGRESS

8.01	Subcontracting	GC-73
8.02	Notice to Proceed	GC-75
8.03	Prosecution of the Work – Commencement – Time	GC-75
8.04	Progress Schedule	GC-76
8.05	Limitations of Operation	GC-77
8.06	Character of Workmen, Methods and Equipment	GC-77
8.07	Illegal Immigrants	GC-78
8.08	Suspension of Work	GC-79
8.09	Termination for Default – Damages for Delay – Time	
	Extensions	GC-79
8.10	Liquidated Damages	GC-81
8.11	Termination for the Convenience of the County	GC-81
8.12	Successful Termination of Contractor's	
	Responsibility	GC-86

GC-SECTION 9 PAYMENT

9.01	Scope of Payment	GC-86
9.02	Force Account Work	GC-89
9.03	Progress Payments	GC-92
9.04	Substantial Completion and Final Payment	GC-94
9.05	Measurements of Quantities	GC-98

WASHINGTON COUNTY, MD GENERAL CONDITIONS FOR CONSTRUCTION CONTRACTS

GENERAL CONDITIONS

GC-SECTION 1 DEFINITIONS AND TERMS

These General Conditions include certain basic conditions and standard specifications common to all construction projects.

GC-1.01 GENERAL

Wherever in these General Conditions or in other Contract Documents the following terms or abbreviations are used, the meaning shall be as follows:

GC-1.02 ORGANIZATIONAL DEFINITIONS

- (a) **County** The County of Washington County, Maryland, a body corporate and politic.
- (b) **Deputy Director** The Washington County Deputy Director of Public Works (Capital Projects) or the Deputy Director of Environmental Management (Engineering Services) whichever has responsibility for the Contract.
- (c) **Director** The Washington County Director of Public Works or Director of Environmental Management, whichever has responsibility for the Contract.
- (d) **Division** The word Division shall mean the Washington County Division of Public Works or the Division of Environmental Management, whichever has responsibility for the Contract.
- (e) **Engineer** the word Engineer will refer to the County's assigned Project Representative within the Washington County Division of Public Works or the Division of Environmental Management or his/her duly authorized representative.
- (f) **Inspector** The authorized field representative of the Engineer assigned to make detailed inspection for compliance with the Contract Documents of any or all

GC - 1

portions of the work, or materials thereof. Unless otherwise specifically stated in the Contract documents, the Inspector is not authorized to make code inspections.

(g) **Purchasing Agent** – The Director of the Washington County Purchasing Department or his/her designee.

GC-1.03 DEFINITIONS

- 1. Advertisement The public announcement, as required by law, inviting Bids for work to be performed or materials to be furnished.
- 2. Agencies/Agency Whenever in the Contract Documents reference is made to any federal, state, or county agency or officer, such reference shall be deemed made to any agency or officer succeeding in accordance with law to the powers, duties, jurisdictions and authority of the agency or officer mentioned as it pertains to the Contract.
- **3. As-Built Plans** A set of contract drawings marked in red that clearly reflect the detailed differences between actual construction and those of the original Contract Documents as they existed at the time of award.
- 4. Award The acceptance by the County of the Bid of the lowest responsive and responsible Bidder for the Work subject to the execution and approval of a satisfactory Contract therefore and Bond when required to secure the performance thereof, and to such other conditions as may be specified or otherwise required by law.
- 5. **Base Course** The layer or layers of specified selected material of designed thickness placed on a subbase or a subgrade to support a surface course.
- 6. Bid A statement of price, terms of sale, and description of the supplies, services, construction or construction-related services offered by a Bidder to the County in response to an Invitation for Bids. Also referred to as Proposal.
- 7. Bid Security The security in the form required by the County in the Bid and executed by the Bidder and its Surety. The Bid Security (when required) shall be in the amount designated by the County as a guarantee on the part of the Bidder to enter into a Contract with the County, if the work of constructing the improvement is awarded to the Bidder, and to post acceptable Payment and Performance Bonds.
- 8. Bid Item An item of work specifically described in the Invitation for Bids and for which a price, either unit or lump sum, is provided. It includes the performance of all work and the furnishing of all labor, equipment and materials. A Bid Item is synonymous to a contract item or a pay item.
- **9. Bid Form** The approved form on which the County requires Bids to be set forth and submitted.

GC - 2

- **10. Bidder** A Person formally submitting a Bid for the Work contemplated, acting directly or through a duly authorized representative.
- 11. Bridge A bridge shall be any structure so defined under the FHWA Guidelines. It shall also include any bridge or highway grade separation structure and shall embrace the substructure and superstructure and the approaches thereto, and such entrance plazas, interchanges, overpasses, underpasses, connection highways and other structures which the County may deem necessary in connection therewith, together with all property rights, easements, franchises and interests acquired by the County for the construction and operation of such bridge.

For the convenience of and definition by the County, a bridge will also be known as a structure more than 20 feet in span. The County's definition of length shall be the out-to-out dimension of the floor or from back wall to back wall of abutments. Bridges less than 20 feet in span shall be considered culverts or small structures. Culverts may be designated as arches, box culverts, or pipes. For arches, the length shall be clear span. For box culverts and batteries of pipes, the length shall be out to out of outer walls and out to out of shells of outside pipes. For lengths, all dimensions shall be parallel to the centerline of the roadway. The dimensions of handrails will not be taken into account in measuring bridge lengths.

- **12.** Calendar Day Every day shown on the calendar, Saturdays, Sundays, and Holidays included.
- **13.** Change Order A written order issued by the Purchasing Agent and approved by the Deputy Director and the Director which changes the Contract Documents within the general scope of the Contract and establishes the basis of payment or credit and/or time adjustments for the work affected by the changes.
- 14. Claim A written demand or assertion by one of the parties seeking, as a legal right, an equitable adjustment including the payment of money, adjustment or interpretation of the Contract Documents, or other relief, arising under or relating to this Contract.
- **15. Contingent Item** Any item listed on the Plans or called for in the Special Provisions and included in the Bid merely for the purpose of obtaining a Contract price in case it may be needed.
- 16. Contract The written agreement executed between the County and the successful Bidder, covering the performance of the work and furnishing of labor, equipment and materials, by which the Contractor is bound to perform the work and furnish the labor, equipment and materials, and by which the County is obligated to compensate him/her, therefore, at the mutually established and accepted rate or price.
- 17. Contract Documents The Contract Documents consist of the Invitation for Bids, the Bid, the Contract, the Payment and Performance Bonds, General Conditions,

GC - 3

Specifications, all Special Conditions, all Drawings, all Addenda, Award Letter, Notice to Proceed, also any written Change orders and Supplemental Agreements that are issued to complete the construction of the work in an acceptable manner, including authorized extensions thereof.

- **18.** Contract Time or Completion Date the number of working or calendar days shown in the Bid indicating the time allowed for the completion of the work contemplated in the contract. In case a calendar date of completion is shown in the Bid, in lieu of the number of working or calendar days, such work shall be completed by that date.
- **19. Contractor** A person undertaking the execution of the Work under the terms of the Contract Documents acting directly or through its agents or employees.
- **20.** County Road The term "County Road" means any public road in Washington County, excluding State Highways, title to which, or the easement for the use of which, is vested in a public body or governmental agency by grant, condemnation, dedications, or operation of law.
- **21.** Culvert An arched drain for the passage of water under a roadway, driveway, entranceway or other passageway.
- 22. Day Every day shown on the calendar, Saturdays, Sundays and Holidays included.
- **23. Domestic Manufacture** When referring to metallic items such as structural steel, pipe, reinforcement, bridge rails, etc., the term "Domestic Manufacture" is intended to mean those metals whose final alloying has taken place within the confines of the Continental United States.
- 24. **Drainage Ditch** In general, any open water course other than gutters, constructed beyond the limits of cut or fill slopes for excavation or embankment as indicated by the typical section shown on the plans.
- **25.** Engineers Supplemental Information (ESI) A written notice or response containing information provided by the Engineer as a clarification or supplement to the Contract Documents.
- **26.** Equipment All machinery, tools, and apparatus necessary for the proper construction and acceptable completion of the Work, together with the necessary supplies for operation, transportation, storage, upkeep, and maintenance.
- 27. Estimate The measurement of quantities by the Engineer or the Inspector of various pay items and/or lump sum items of work based on the Contract definitions for method of measurement and basis of payment for each item.
- **28.** Extra Work Work that was not provided for in the original Contract. Extra Work is synonymous with additional work.

GC - 4

29. Fixed-Price Contingent Items - Bid Items for which unit prices are established by the County to compensate the Contractor for the cost of work and materials in the event that the item may be needed. In the event that a quantity is shown on the Bid sheet for a Fixed-Price Contingent Item, such quantity is intended solely for the purpose of generating a total price extension which will be added to the price totals of items Bid. No representation is made or intended to be made that the quantity shown, or any quantity, will be used.

30. Holidays

The County observes a five-day work week and the following holidays:

January 1	-	New Year's Day
January (3 rd Monday)	-	Martin Luther King Day
February (3 rd Monday)	-	Presidents Day
March/April	-	Good Friday
May (last Monday)	-	Memorial Day
July 4	-	Independence Day
September (1 st Monday)	-	Labor Day
November 11	-	Veterans Day
November (4 th Thursday)	-	Thanksgiving Day
November (4 th Friday)	-	Day after Thanksgiving Day
December 24	-	Christmas Eve
December 25	-	Christmas Day
December 31	-	New Year's Eve

(a) If any holiday occurs on Sunday, the following Monday shall be considered a holiday. If the holiday occurs on Saturday, the Friday immediately preceding shall be considered a holiday. The County reserves the right to adjust the holiday schedule.

(b) The Contractor will not be permitted to work on the above-mentioned holidays, or Saturdays unless requested 48 hours in advance by written notice. If the Engineer approves the request, he/she will authorize this in writing and the Contractor will not be charged for the inspector's time. In the event that the Contractor fails to work its forces as indicated in its written request, he/she shall be charged a minimum of $\frac{1}{2}$ day for inspection time at the overtime rate.

(c) The normal number of working hours per day on this contract will be limited to nine, unless otherwise specified or authorized by the Engineer in writing.

(d) In case of an emergency, which may require that work be done on Saturday's, Sundays, holidays, or longer than nine hours per day, the Contractor shall request permission of the Engineer to do so. If in the opinion of the Engineer the emergency is bona fide, he/she will grant permission to the Contractor to work such hours as may be necessary. Also, if in the opinion of the Engineer a bona fide emergency exists, he/she

GC - 5

may direct the Contractor to work such hours as may be necessary whether the Contractor requests permission to do so or not.

- **31. Invitation For Bids** The advertisement soliciting Bids for all work and/or materials on which Bids are required. Such advertisement or Invitation for Bids will indicate with reasonable accuracy the location and magnitude of the work to be done and/or the character and quantity of the material to be furnished and the time and place of the opening of Bids.
- **32.** Laboratory The testing laboratory of Washington County or any other testing laboratory that may be designated by the Engineer.
- **33.** Materials Any substances specified for use in the construction of the Project and its appurtenances.
- **34.** Median The portion of a divided highway separating the traveled ways for traffic in opposite directions.
- **35. Minority Business Enterprise (MBE)** Unless otherwise specifically addressed in the Special Provisions or other Contract Documents, any legal entity, other than a joint venture, organized to engage in commercial transactions which is at least 51 percent owned and controlled by one or more minority persons, or a nonprofit entity organized to promote interest of the physically or mentally disabled.
- **36. Minority or Minority Person** Unless otherwise specifically addressed in the Special Conditions or other Contract documents, a member of one of the following socially and economically disadvantage groups:

(a) African American – An individual having origins in any of the Black racial groups of Africa;

(b) American Indian/Native American – An individual having origins in any of the original peoples of North America and who is a documented member of a North American tribe, band, or otherwise organized group of native people who are indigenous to the continental United States or who otherwise have a special relationship with the United States or a state through treaty, agreement, or some other form of recognition. This includes an individual who claims to be an American Indian/Native American and who is regarded as such by the American Indian/Native American community of which he/she claims to be a part, but does not include an individual of Eskimo or Aleutian origin;

(c) Asian – An individual having origins in the far East, Southeast Asia, or the Indian Subcontinent and who is regarded as such by the community of which the person claims to be a part;

GC - 6

(d) Hispanic – An individual of Mexican, Puerto Rican, Cuban, Central or South American, Portuguese or other Spanish culture or origin regardless of race, and who is regarded as such by the community of which the person claims to be a part;

(e) Women – This category shall include all women, regardless of race or ethnicity, although a woman who is also a member of an ethnic or racial minority group may elect that category in lieu of the gender category; or

(f) Physically or Mentally Disabled – An individual who has an impairment that substantially limits one or more major life activity, who is regarded generally by the community as having such a disability, and who disability has substantially limited his or her ability to engage in competitive business.

- **37.** Notice To Proceed A written Notice to the Contractor of the date on or before which it shall begin the prosecution of the work to be done under the Contract.
- **38. Payment Bond** The security in the form approved by the County and executed by the Contractor and his/her Surety, and paid for by the Contractor, as a guarantee that he/she will pay, in full, all bills and accounts for materials and labor used in the construction of the work, as provided by law.
- **39. Performance Bond** The security in the form approved by the County and executed by the Contractor and his/her surety and paid for by the Contractor, guaranteeing complete performance of the Contract including indemnification, warranties and repair of latent defects.
- **40. Person** any individual, partnership, firm, corporation, association, or joint venture authorized to conduct business in Maryland.
- **41. Plans or Drawings** The official plans and drawings issued by the County as part of the Contract Documents, including those incorporated in the Contract Documents by reference. These include the official approved drawings, profiles, typical cross sections, working drawings and supplemental drawings or exact reproduction thereof which show the location, character, dimensions and details of the work to be done. Plans are synonymous with contract drawings.
- **42. Profile Grade** The trace of a vertical plane intersecting the top surface of the proposed wearing surface usually along the longitudinal centerline of the roadbed. Profile grade means either elevation or gradient of such trace according to the context.
- **43. Project** The construction of, reconstruction of, relocation of, or the major maintenance of any County facility, or portion thereof.
- **44. Project Representative** The executive representative of the Contractor authorized to receive and execute instructions from the Engineer and who shall manage and direct the Project.

GC - 7

- **45. Questionnaire** the approved form or forms upon which the Bidder shall furnish the information as to his/her ability to perform the work, his/her experience in similar work, the equipment to be used, and its financial condition as related to his/her ability to finance the work.
- **46. Record Counterpart Document** Contract Documents that have been compiled by the County and formally executed by the parties to the Contract and shall be the governing document for the project.
- **47. Request For Information (RFI)** A written request for information or clarification by one of the Contract parties often pertaining to the Contract documents.
- **48. Request for Payment** The Contractor's formal submittal for payment for work completed, usually on a monthly basis and at the conclusion of the Contract, to the Engineer using the format specified by the Engineer.
- **49. Right-of-Way** Includes roadway surfaces, roadway subgrades, shoulders, median dividers, drainage facilities and structures, roadway cuts, roadway fills, guardrails, bridges, highway grade elimination structures, tunnels, overpasses, underpasses and other structures forming an integral part of a road or highway, pipeline, or utility appurtenances.
- **50. Roadside** A general term denoting the area adjoining the outer edge of the roadbed within the right-of-way. Extensive areas between the roadways of a divided highway may also be considered roadside.
- **51. Roadside Development** Those items necessary to the complete Road or Highway which provide for the preservation of landscape materials and features; the rehabilitation and protection against erosion of all areas disturbed by construction through seeding, sodding, mulching and the placing of other ground covers; such suitable planting and other improvements as may increase the effectiveness and enhance the appearance of the Road or Highway.
- **52. Road or Street** Both the word "Road" and the word "Street" include rights of way, roadway surfaces, roadway subgrades, shoulders, median dividers, drainage facilities, roadway cuts, roadway fills, traffic barriers, bridges, highway grade elimination structures, tunnels, overpasses, underpasses and other structures forming an integral part of a road or highway.
- **53.** Seal Coat An application to pavement surfaces of bituminous material followed by an application of cover coat aggregate. Also referred to as chip seal.
- **54.** Shoulder The portion of the roadbed contiguous with the traveled way for accommodation of stopped vehicles, or emergency use and for lateral support of base and surface courses.

GC - 8

- **55. Shop Drawings** All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for the Contractor to illustrate some portion of the work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a supplier and submitted by the Contractor to illustrate material or equipment for some portion of the Work.
- 56. Sidewalk, Pathway, or Walkway A surface primarily constructed for the use of pedestrians, usually at the side of a roadway.
- **57. Slopes** The inclined graded area beyond the shoulder and extending from the shoulders to the natural undisturbed surface of the ground.
- **58. Special Conditions** Special directions, provisions, or requirements applicable to the Project.
- **59. Standard Details** Detailed drawings with dimensions of components which have been established for general application and repetitive use.
- **60. Standard Specifications** A book of Specifications intended for general application and repetitive use.
- **61. State** The State of Maryland acting through its authorized agency or representative.
- **62. State Highway System** That system of roads which is from time to time owned by the State and which the State by resolution from time to time designates as State roads to be maintained and operated by the State Highway Administration.
- **63. State Road** Any public road included in the State Highway System.
- 64. Structures Bridges, culverts, catch basins, drop inlets, retaining walls, cribbing, manholes, vaults, endwalls, buildings, sewers, service pipes, underdrains, foundation drains and other features which may be encountered in the work and not otherwise classed herein.
- **65. Subbase** The layer or layers of specified selected material of designed thickness placed on subgrade to support a base course.
- **66. Subcontractor** Any Person undertaking the construction of a part of the work by virtue of an agreement with the Contractor, who, prior to such undertaking, received the consent of the Surety and the approval of the County.
- **67. Subgrade** The material in any excavation (cuts) and embankments (fills) immediately below any subbase, base, pavement, shoulder, or other improved course.

GC - 9

- **68. Substructure** All of that part of the structure below bottoms of bearings of simple and continuous spans, skewbacks of arches, and tops of footings of rigid frames, together with the back walls and wing walls.
- **69. Superstructure** All of that part of the structure above bottoms of bearings of simple and continuous spans, skewbacks of arches and tops of footings of rigid frames, except as noted for Substructure.
- **70. Supplemental Agreement** A written agreement covering added or changed work which is beyond the scope of the Contract and the Changes Section of these General Conditions. A Supplemental Agreement becomes a part of the Contract when approved and properly executed by all parties to the Contract.
- **71. Supplemental Specifications** Additions and revisions to the Standard Specifications. Generally include new or improved procedures, construction items or materials developed subsequent to the publication of Standard Specifications.
- 72. Surety The approved corporate body bound with and for the Contractor, for the full and complete performance of the Contract, and for the payment of all debts pertaining to the work. When applying to the Bid Bond, it refers to the corporate body that engages to be responsible in the execution by the Bidder of a satisfactory Contract and the posting of Payment and Performance Bonds.
- **73. Surface Treatment** The application of one or more seal coats, each over a layer of specified aggregate, exclusive of shoulders and auxiliary lanes.
- **74. Temporary Easement** An area, adjacent to the right-of-way or easement, temporarily acquired for the use of the Contractor during the execution of the work. This area is only present when shown on the plans.
- **75. Trench** An excavation made for the purpose of installing or removing pipes, drains, catch basins, etc.
- **76.** Unbalanced Bid A bid based on prices significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable doubt that the bid will result in the lowest overall cost to the County even though it may be the low evaluated bid, or if it is so unbalanced as to be tantamount to allowing an advance payment.
- 77. Utilities Storm drain, sanitary sewers, water mains, gas, electric and communication equipment and all appurtenances thereto.
- **78.** Work The furnishing of all labor, materials, equipment and other incidentals necessary to the successful completion of the Project and the carrying out of all the duties and obligations imposed by the Contract Documents.

GC - 10

79. Written Notice – Any letter, memorandum, hand-written document, telegram, or other written instrument, formal or informal, signed and dated by its author and transmitted by hand-delivery, facsimile, U.S. Postal Service or other special delivery courier. The Written Notice may be sent to the mailing address of the parties identified in the Record Counterpart Document or the authorized on-site representative of one of the Contracting parties. A bona fide email messages between known addresses identified by the Contracting parties may also constitute a written notice.

GC-1.04 METRIC SYSTEM

The County recognizes the attempts of gradual transition in the construction and other industries to the use of the International System of Units (SI). In keeping with this trend, these General Conditions frequently show approximate equivalencies between U.S. Customary Units and the International System of Units. Selection of units and symbols, conversion, rounding and other matters relating to the equivalencies have been carried out in accordance with The American Association of State Highway and Transportation Officials (AASHTO) R-I. Should the necessity for additional conversion arise, the same practice shall be followed.

It is the intent of these General Conditions that where values in both systems are shown in describing a single requirement, the first named will govern regardless of the system from which it is derived.

GC-1.05 LANGUAGE

In order to avoid cumbersome and confusing repetition of expressions in these General Conditions, it is provided that whenever anything is, or is to be, done, if, as, or, when, or where "contemplated, required, determined, directed, specified, authorized, ordered, given, designated, indicated, considered necessary, deemed necessary, permitted, reserved, suspended, established, approval, approved, disapproved, acceptable, unacceptable, suitable, accepted, satisfactory, sufficient, insufficient, rejected, or condemned," it shall be understood as if the expression were followed by the words "by the Engineer" or "to the Engineer" unless the context clearly indicates otherwise.

GC-SECTION 2 BIDDING REQUIREMENTS AND CONDITIONS

GC-2.01 BID IRREVOCABLE

Unless otherwise provided in the Invitation for Bids, Bid prices are irrevocable for ninety (90) days following Bid opening.

GC - 11

GC-2.02 CONTENTS OF BID FORMS

(a) After the date is fixed for the bidding of the Work, the County will give notice of such bid to Bidders. The Invitation for Bids will contain a description of the proposed Work, the time and place where Sealed Bids will be received, together with information regarding access to information to the Contract Documents, the price of these documents, and the reservation of the right of the County to reject any or all Bids.

(b) All papers included in, bound thereto or attached to the Bid Form are necessary parts thereof and shall not be detached, separated, or altered. Where pay items are unit price items, the Bid Forms will further show an estimate of quantities expected to occur in such unit price items. All Contract Documents with the exception of subsurface data and borings will be considered a part of the Bid Form whether attached thereto or not. Any subsurface data and borings are provided for informational purposes only, and are not part of the Contract Documents.

(c) The Invitation for Bids shall describe location and types of work contemplated by the Contract. The invitation for bids will also set forth the place, date and time of opening Bids, the requirements of a bid Bond and the time to be allowed for completing the Contract. The County may charge a fee for each set of Invitation for Bids and Contract Documents. The amount of such charge will be set forth in the Invitation for Bids. The fee charged for Invitation for Bids and the Contract Documents is not returnable.

(d) Should one or more addenda be issued during the bidding period of this Contract, a certificate of receipt shall accompany such addenda. All certifications of receipts of addenda must be signed by the Bidder and accompany his/her Bid Form, otherwise his/her Bid shall not be accepted. If certificates of receipts are not provided by the County, the addenda must be acknowledged in the appropriate space provided for on the bid form.

GC-2.03 INTERPRETATION OF QUANTITIES IN BID SCHEDULE

(a) Where designated as estimated quantities, the quantities appearing in the prepared Bid Schedule are approximate only and are prepared for the canvassing of Bids. Payment to the Contractor will be made only for the actual quantities of work performed or materials furnished in accordance with the Contract and as provided for in GC-4.04, Variations in Estimated Quantities. It is understood that the scheduled quantities of work to be done and materials to be furnished may each be increased, diminished or omitted without in any way invalidating prices Bid, except as hereinafter provided.

GC-2.04 SITE INVESTIGATION

(a) The Bidder acknowledges that he/she has investigated and satisfied him/herself as to the conditions affecting the Work, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric

GC - 12

power, roads and uncertainties of weather, river stages, tides or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities needed preliminary to and during prosecution of the Work. The Bidder further acknowledges that he/she has satisfied him/herself as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the County, as well as from information presented by the drawings and Specifications made a part of this Contract.

(b) Available subsurface data and the results of subsurface investigations shall be made available to the Contractor. Unless the Contract Documents expressly state otherwise, this data is not guaranteed, warranted, or represented as accurate by the County. Geological conditions should be independently investigated and/or verified by the Bidder prior to submission of his/her Bid. No adjustment in contract price will be allowed by the County for differing subsurface conditions, unless otherwise provided for in the Contract Documents.

(c) Where subsurface conditions are indicated in the Contract Documents, they have been so indicated from the best information available and for the information of all parties concerned. The County assumes no responsibility for the accuracy of such information and should any Bidder or Contract rely solely on such information in the preparation of his/her Bid for the performance of the work, he/she does so at his/her own risk. Whether or not subsurface conditions are shown in the Contract Documents, the Bidder or Contractor is not relieved of the responsibility of making his/her own investigation to determine for themselves the conditions present and in what quantity. The presence or absence of a material, or the increase or decrease in quantities indicated, shall not entitle the Contract to additional compensation above or beyond the stipulated contract sum.

GC-2.05 TAXES-RESPONSIBILITY FOR PAYMENT, EXEMPTIONS, FORMS TO BE FILED, ETC.

(a) The Contractor is responsible for and by submitting a Bid agrees to pay all retail sales, income, real estate, sales and use, transportation and special taxes applicable to and assessable against any materials, equipment, processes and operations incident to or involved in the Project. The Contractor is responsible for ascertaining and acquainting his/herself with such taxes and making all necessary arrangements to pay same.

(b) The Contractor shall complete a W-9 Vendor Information form (provided by the County) and return it to the Purchasing Agent.

(c) The County hereby reserves the right to withhold payment under this Contract until the Contractor and any subcontractor performing any duties under this Contract have furnished or caused to be furnished the Comptroller of the State of Maryland with all properly completed forms required by the said Comptroller and until all of said retail sales and/or use taxes due the State of Maryland by the Contractor have been paid and the Contractor exhibits a release or receipt from the Comptroller evidencing such payment.

GC - 13

(d) The Contractor is hereby advised of Section 1-106(b)(3) of the Code of Public Local Laws of Washington County, MD: "If a bidder has not paid all taxes owed to the County or a municipal corporation in the County, the County Commissioners may reject the bidder's bid."

GC-2.06 PREPARATION OF BID

(a) The Bidder shall submit his/her single Bid set upon the Bid Form(s) furnished by the County. The Bidder shall specify a price in dollars and cents, for each pay item given, and shall show the products of the respective unit prices and quantities written in figures in the column provided for that purpose, together with the total amount of the Bid obtained by adding the amounts of the several items, Bidders must not change any item in the Bid for which a price has been stipulated by the County. Any such change will cause rejection of the Bid.

(b) The Bid Form(s) shall be filled out in ink or typed. All Bids shall be signed in ink. All erasures or alterations shall be initialed by the signer in ink. The Bid, if submitted by an individual, shall be signed by the individual; if submitted by a partnership, shall be signed by such member or members of the partnership as have authority to bind the partnership; if submitted by a corporation, the same shall be signed by an officer and attested by the corporate secretary or an assistant corporate secretary; if submitted by a joint venture, the same shall be signed by such member or members of the joint venture as have authority to bind the joint venture. If not signed by an officer, as aforesaid, there must be attached a copy of that portion of the Bylaws or a copy of a Board resolution, duly certified by the corporate secretary, showing the current authority of the person so signing on behalf of the corporation. In lieu thereof, the corporation may file such evidence with the County, duly certified by the corporate secretary, together with a list of the names of those officers having authority to execute documents on behalf of the corporation, which listing shall remain in full force and effect until such time as the County is advised in writing to the contrary. In any case where a Bid is signed by an Attorney in Fact, the same must be accompanied by a copy of the appointing document, duly certified.

(c) If the Invitation for Bids requires the Bidder to furnish samples or descriptive literature, it shall be submitted with the Bid, unless the Invitation for Bids provides otherwise.

(d) Bidders shall identify those portions of their Bids that they deem to be confidential, proprietary information or trade secrets and provide any justification of why such materials should not be disclosed by the County under the Maryland Public Information Act, Section 10-611 et seq. of the County Government Article of the Annotated Code of Maryland.

(e) The County will attempt to cooperate in making available to the Bidders for his/her use various documents in their original form or electronic data format.

(1) The County will not be responsible for providing the electronic data in any format or versions other than those used by the County nor will the County make available any equipment, hardware, or other devices to examine or reproduce the data.

GC - 14

(2) Washington County makes no warranty as to the accuracy of drawings, specifications, reports and other electronic data nor will the County accept any responsibility for errors and omissions which may arise as a result of the Bidder having relied upon them.

(3) The Bidder is in no way authorized to manipulate, alter, or reformat documents for use during bidding such as proposal forms, bonds, and other bid documents. At any point subsequent to receiving bids or award and execution of a Contract, should the County discover that the bidder has done so, the County reserves the right to reject the bid and/or terminate the Contract and pursue whatever action may be in the best interest of the County.

GC-2.07 BID SECURITY

(a) No Bid will be considered unless accompanied by a Bid Security of the character and in an amount not less than the specific dollar value indicated in the Bid Form, and made payable to the Washington County Treasurer.

(b) Acceptable forms of security for Bid Security shall be:

(1) A bond in a form satisfactory to the County underwritten by a surety company authorized to do business in this State and which is on the United State Department of Treasury Approved List; or

- (2) A bank certified check, bank cashier's check, or bank treasurer's check.
- (c) All costs of the Bid Security shall be paid by the Bidder.

GC-2.08 DELIVERY OF BIDS

Each Bid must be submitted in a sealed opaque envelope plainly marked to indicate its contents or in an envelope furnished by the County. The blank spaces on the County envelope should be filled in so as to clearly indicate its contents. When sent by mail, the sealed Bid must be addressed to the Washington County agency and exact address specified in the Invitation for Bids. All bids shall be filed prior to the time and at the place specified in the Invitation for Bids, as amended by any applicable addenda. Bids received after the time for opening of Bids will be returned to the Bidder unopened.

GC-2.09 COMMUNICATIONS AND INTERPRETATIONS— PRIOR TO BID OPENING

Any information regarding the requirements or the interpretation of any provision of the General Conditions, Specifications, Supplemental Specifications, or any part of the Contract Documents shall be requested, in writing, from the County agency listed in the Invitation for

GC - 15

Bids, and delivered no later than the number of date and time specified in the Invitation for Bids. Responses to questions or inquires having any material effect on the Bids shall be made by written addenda, or by written notice sent to all prospective Bidders. DO NOT MAKE VERBAL INQUIRIES. Any verbal interpretations or oral pre-Bid statements made by County employees or their representatives shall not be binding upon the County.

GC-2.10 ADDENDA TO INVITATIONS FOR BIDS

(a) Form – Each addendum to an Invitation for Bids shall be in written form and identified as such.

(b) Acknowledgments – Unless otherwise provided, the Bidder shall acknowledge receipt of all addenda.

GC-2.11 PRE-OPENING MODIFICATION OR WITHDRAWAL OF BIDS

(a) **Procedure** – Bids may be modified or withdrawn by written notice on official company stationery received in the office designated in the Invitation for Bids before the time and date set for Bid opening. A notice of withdrawal or modification to a Bid must be signed in accordance with the requirements of GC-2.06(b). The requirements of this subparagraph may be satisfied by a FAX.

(b) No withdrawal or modifications shall be accepted after the time for Bid opening except as expressly permitted in the Invitation for Bids.

(c) **Disposition of Bid Security** – If a Bid is withdrawn in accordance with this Section, the Bid Security, if any, shall be returned to the Bidder.

GC-2.12 LATE BIDS, LATE WITHDRAWALS, AND LATE MODIFICATION

(a) **Policy** – Any Bid received at the place designated in the Invitation for Bids after the time and date set for receipt of Bids is late. **Any** request for withdrawal or request for modification received after the time and date set for receipt of Bids will not be honored.

(b) **Treatment** – A late Bid, late request for modification, or late request for withdrawal shall not be considered. Late Bids will be returned to the Bidder unopened.

GC-2.13 OPENING AND RECORDING OF BIDS

(a) **Opening and Recording** – Bids and modifications shall be opened publicly, at the time, date, and place designated in the Invitation for bids. The name of each Bidder, the total Bid price, and such other information as is deemed appropriate shall be read aloud or otherwise

GC - 16

made available. This information also shall be recorded at the time of Bid opening. The Bids shall be tabulated or a Bid abstract made. The opened Bid shall be available for public inspection at a reasonable time after Bid opening but in any case before Contract award except to the extent the Bidder designates trade secrets or other proprietary data to be confidential. Material so designated shall accompany the Bid and shall be readily separable from the Bid in order to facilitate public inspection of the non-confidential portion of the Bid. Prices, makes, and model or catalog numbers of the items offered, deliveries, and terms of payment shall be publicly available at a reasonable time after Bid opening but in any event before Contract award regardless of any designation to the contrary at the time of Bid opening.

(b) Confidential Data – The Engineer shall examine the Bids to determine the validity of any requests for nondisclosure of trade secrets and other proprietary data identified in writing. Confidential, proprietary information, and trade secrets furnished by a Bidder may be disclosed to another County agency if there is a need for the information and may not be disclosed outside of County government except as provided by the Public Information Act or other applicable laws of the State of Maryland.

GC-2.14 MISTAKES IN BIDS

(a) Mistakes Discovered Before Opening – A Bidder may correct mistakes discovered before the time and date set for Bid opening by withdrawing or correcting the Bid as provided in GC-2.11.

(b) Confirmation of Bid – If the Engineer knows or has reason to conclude that a mistake may have been made, the Bidder may be required to confirm the Bid. Situations in which confirmation may be requested include obvious, apparent errors on the face of the Bid or a Bid unreasonably lower than the other Bids submitted. If the Bidder alleges mistake, the Bid may be corrected or withdrawn upon written approval of the County Attorney's Office if any of the following conditions are met:

(1) If the mistake and intended correction are clearly evident on the face of the Bid form, the Bid shall be corrected to the intended correct Bid and may not be withdrawn. Examples of mistakes that may be clearly evident on the face of the Bid form are typographical errors, errors in extending unit prices, transposition errors, and arithmetical errors.

(2) A Bidder may be permitted to withdraw a low Bid if:

(A) A mistake is clearly evident on the face of the Bid form but the intended correct Bid is not similarly evident; or

(B) The Bidder submits proof of evidentiary value that clearly and convincingly demonstrates that a mistake was made.

(3) In situations where the Purchasing Agent determines that the low Bid submitted is so low due to a demonstrable mistake other than a mistake in judgment, such that

GC - 17

the bidder may incur severe loss if awarded the Contract, and that a potential unconscionable contract would be made, the Bidder may be allowed to withdraw the Bid, subject to forfeiture of the Bid deposit.

(c) Mistakes Discovered After Award – Mistakes may not be corrected after award of the Contract except when the Engineer and the Purchasing Agent make a determination that it would be unconscionable not to allow the mistake to be corrected. Changes in price are not permitted.

GC-2.15 IRREGULARITIES

(a) Bids having one or more of the following faults will be considered irregular and may be rejected:

(1) If the Bid Form furnished by the County is not used or is altered;

(2) If not prepared as directed in GC-2.06;

(3) If there is an omission of a necessary word(s) or numeral(s) required to make a price unmistakably clear, as well as any other omission; addition of item(s) not called for;

(4) Failure to include a price for each item required except in the case of designated alternate pay item(s) or contrary to the conditions of the advertisement;

(5) If there are additions, conditions or unauthorized alternate Bids;

Award;

(6) If the Bidder adds any provisions reserving the right to accept or reject the

(7) If not accompanied by a Bid Security when required from Surety guaranteeing that the Payment and Performance Bonds will be furnished if the Bidder is determined to be the low Bidder; or

(8) If all the required Bid certifications and/or documents are not duly executed.

(**b**) Minor irregularities –

(1) Minor irregularities or informalities in Bids, as defined below, may be waived if the County determines that it shall be in the County's best interest. The County may either give a Bidder an opportunity to cure any deficiency resulting from a technicality or minor irregularity in his/her Bid, or waive the deficiency where it is to the County's advantage to do so.

GC - 18

(2) When at any public opening of Bids, a Bid appears to be irregular, as herein specified, this fact may be announced when read. Said Bid shall be read as other Bids and then referred to the Engineer for consideration and appropriate action thereon in accordance with these General Conditions, and applicable laws and regulations.

(3) A minor irregularity is one that is merely a matter of form and not of substance or pertains to some immaterial or inconsequential defect or variation of a Bid from the exact requirement of the Invitation for Bids, the correction or waiver of which would not be prejudicial to other Bidders or offerors. The defect or variation in the Bid is immaterial and inconsequential when its significance as to price, quantity, quality or delivery is trivial or negligible when contrasted with the total cost or scope of the supplies or services being procured and the intent and meaning of the entire Bid is clear.

GC-2.16 CANCELLATION OF INVITATIONS FOR BIDS

(a) Before bid opening, an Invitation for Bids may be canceled in whole or in part when the County determines this action is fiscally advantageous or otherwise in its best interest.

(b) When an Invitation for Bids is canceled before Bid opening, the Bids shall be returned unopened to the Bidders submitting them and notice of cancellation shall be included.

(c) When it is determined before an award but after opening that the Invitation for Bids contains inadequate, deficient or ambiguous specifications; does not provide for consideration of all factors; or the scope of the work needs to be modified; then the bid shall be rejected.

(d) Each Bidder shall be notified of the cancellation/rejection. The notice shall state the reason for such action.

GC-2.17 REJECTION OF INDIVIDUAL BIDS OR PROPOSALS

(a) A Bid opened and read at any Bid opening may be subsequently rejected if found to be irregular for any of the reasons specified in GC-2.14 and 2.15.

(b) A Bid opened and read at any Bid opening will be subsequently rejected if there is found to be interest by the same individual, partnership, firm or corporation in more than one Bid on a Contract, except that any individual, partnership, firm or corporation may have an interest in a Contract as a Bidder and also be named in other Bids as a Subcontractor.

(c) Any Bid may be rejected in whole or in part when it is in the best interest of the County to do so.

(d) Reasons for rejection of a Bid may include but are not limited to:

GC - 19

(1) The Bid is not responsive i.e., it does not conform in all material respects to the Invitation for Bids;

- (2) Unreasonable price(s);
- (1) The Bidder submitting the Bid is determined to be non-responsible, or

(2) The Bidder fails to supply information to the Engineer promptly after notification from the Engineer that such information is required in connection with a determination to be made pursuant to this section.

(e) A determination of non-responsibility may be made for, but is not limited to, any of the following reasons:

(1) Bidder debarred by any public body or ineligible to Bid to any public body and the period of debarment or ineligibility has not expired.

- (2) The unit prices contained in a Bid are unbalanced.
- (3) The omission of a unit price for a bid item.
- (4) Evidence of collusion among Bidders.

(5) Inadequate quantity and/or quality of experience, plant, equipment, financing, manpower or other resources required to perform the Contract.

(6) Bidder's workload, which, in the judgment of the County, might hinder or prevent the prompt completion of the subject work if awarded.

(7) Default by the Bidder on other contracts with the County.

(8) Failure to pay or satisfactorily settle all reasonable and just bills due for labor and material on prior or current contracts with the County.

(9) The same person has an interest in more than one Bid on a Contract exclusive of being named by another Bidder as a subcontractor.

(10) Failure to perform satisfactorily on other contracts awarded, and the conditions leading to unsatisfactory performance remain unresolved.

(11) The Bidder is not authorized to conduct business in Maryland.

(12) Any other reason affecting the Bidder's ability to perform or record of business integrity.

GC - 20

(13) Bidder not otherwise qualified and eligible to receive an award under applicable laws and regulations.

(f) Refusal or failure by the Bidder to comply with the County's request for the submission of a Contractor's Qualifications Questionnaire will be cause for rejection of the Bid and for the forfeiture of the Bid Security, which shall become the property of the County not as a penalty but in liquidation of damages sustained.

GC-2.18 **REJECTION OF ALL BIDS**

(a) After Bid opening but before award, all Bids may be rejected in whole or in part when the Engineer, with the approval of the Director, determines that this action is fiscally advantageous or otherwise in the County's best interest.

(b) A notice of rejection of all Bids shall be sent to all Bidders, Bids that have been opened shall be retained by the County.

GC-2.19 BID EVALUATION AND AWARD

(a) General – The Contract is to be awarded to the lowest responsive and responsible Bidder whose Bid meets the requirements and evaluation criteria set forth in the Invitation for Bids, and is either the lowest Bid or lowest evaluated Bid. After Bids have been publicly opened and read, the Bids will be audited and reviewed for mathematical accuracy to determine that there are no irregularities as outlined in GC-2.14 and 2.15.

(b) **Sub-Contractor Approval** – The three (3) lowest bidders shall submit a written list of all subcontracts within 48 hours after the bid opening for review for approval by the County.

(c) **Determination of Lowest Bidder** – Bids shall be evaluated to determine which Bidder offers the lowest cost to the County in accordance with the evaluation criteria set forth in the Invitation for Bids. Except as otherwise provided under GC-2.14 Mistakes in Bids:

(1) The written words will govern in the event of a discrepancy between the prices written in words and the prices written in figures.

(2) The unit price will govern in the event of a discrepancy between the unit price Bid and the extended price (product of unit price multiplied by the quantity).

(3) The sum of the extended prices will govern in the event of a discrepancy between the total amount Bid and the extended prices.

(4) If a unit price has been omitted and an extended price is provided, the unit price will be determined by dividing the extended price by the quantity.

GC - 21

(d) The County reserves the right to make the award by Bid Item, or groups of Bid Items, or total Bid if it is in the best interest of the County to do so unless the Bidder specifies in its Bid that a particular or progressive award is not acceptable.

(e) Before any Contract is awarded, the Bidder may be required to furnish a complete statement of the origin, composition and manufacture of any or all materials to be used in the construction of the Work together with samples, which samples may be subjected to the tests provided for in the Specifications to determine their quality and fitness for the Work.

(f) Award – Upon determination of the lowest Bidder, review of the Bid for responsiveness and satisfaction that the Bidder is responsible, the Contract may be awarded to that Bidder. A Contract may be awarded to a Bidder offering a higher quality item than that designated in the Invitation for Bids if that Bidder is also the lowest responsive and responsible Bidder. The successful Bidder will be notified (by letter mailed to the address shown on the Bid Form) that his/her Bid has been accepted and that he/she has been awarded the Contract.

(g) A Notice of Award may be rescinded by the County at any time prior to execution of the Contract. After Notice of Award, the County shall forward the formal Contract and other appropriate forms and certifications to the bidder for execution. The Bidder will then execute the Contract and return same, together with fully executed Payment and Performance Bonds, insurance certificates, and any other forms required by the Contract Documents, to the County within ten (10) days after the Notice of Award is sent. After receipt of the properly executed Contract and acceptable Payment and Performance Bonds, the County will execute the Contract and forward a copy to the Bidder. The County will issue a Notice to Proceed followed by the Purchase Order signed by the County Purchasing Agent, which is the official statement that the obligation of funds for construction has been authorized. No Bidder shall withdraw his/her Bid within the time specified in the Bid.

GC-2.20 TIE BIDS

(a) **Definition** – Tie Bids are responsive Bids from responsible Bidders that are identical in price, terms, and conditions and which meet all the requirements and evaluation criteria set forth in the Invitation for Bids.

(b) Award – Unless otherwise specified, if identical low Bids are received from an in-County and out-of-County Bidder, the award shall be made to the in-County Bidder. If identical low Bids are received from in-County Bidders or from out-of-County Bidders, a drawing shall be conducted, and a witness shall be present to verify and certify the result.

GC - 22

GC-2.21 MULTIPLE OR ALTERNATE BIDS

Unless multiple or alternate Bids are requested in the Invitation for Bids, these Bids may not be accepted. However, if a Bidder clearly indicates a base Bid, it shall be considered for Award as though it were the only Bid submitted by the Bidder.

GC-2.22 BID PROTESTS

(1) A Bidder may deliver a written protest to the Purchasing, within ten (10) days of issuance of award notifications. The written protest shall set forth all particulars supporting the protest and enclose all supporting exhibits and evidence.

(2) The Purchasing Agent shall review the protested decision; examine any additional information provided by the Bidder and respond to the Bidder within seven (7) days of receipt of the protest. The decision of the Purchasing Agent shall be final and not subject to appeal to the fullest extent allowed by law.

GC-2.23 POLICTICAL CONTRIBUTION DISCLOSURE

The Proposer, in accordance with Md. Code Ann., State Finance and Procurement Article, Section 17-402, as amended from time to time, shall comply with the political contribution reporting requirements under Title 14 of the Election Law Article, Md. Code Ann., as amended from time to time, to which the Proposer may be subject.

GC-SECTION 3 AWARD AND EXECUTION OF CONTRACT

GC-3.01 AWARD OF CONTRACT (See GC-2.19)

(a) Written Notice of Award shall be sent to the successful Bidder.

(b) The County reserves the right to cancel the award of any Contract at any time before the execution of the said Contract by all parties without any liability against the County.

(c) Unless otherwise specified, the successful Bidder on each Contract advertised by the Department will receive upon award up to five (5) sets of Drawings and Specifications free of charge. Any additional sets required by the Contractor may be purchased at the price stated in the Invitation for Bids.

GC-3.02 RETURN OF BID SECURITY

GC - 23

(a) All Bid Securities, except those of the three (3) lowest Bidders, will be returned immediately following opening and the review of the Bids. The Bid Securities of the three (3) lowest Bidders will be returned following the execution of the Contract and submission and approval of the Payment and Performance Bonds. The Contractor has the right to substitute a Bid Bond for other Bid Security, acceptable to the County, at any time prior to return of the Bid Security.

GC-3.03 PERFORMANCE BOND AND PAYMENT BOND REQUIREMENTS

(a) **Performance and Payment Bonds** – The successful Bidder shall provide to the County a Performance Bond and a Payment Bond, each in an amount equal to at least 100 percent of the Contract price. The form of the Bonds and the security shall be as prescribed by the County. The name of the underwriting agency for said Bond as well as the local contact and phone number shall be shown thereon. The Bonds shall be delivered by the Bidder to the County no later than the time the Contract is to be executed. If the Bidder fails to deliver the required Bonds, his/her Bid shall be rejected, his/her Bid Security shall be enforced, and award of the Contract may be made to the next lowest responsive and responsible Bidder.

(b) Corporations executing Payment and/or Performance Bonds as sureties must appear on the United States Department of Treasury's most current list of approved sureties and must act within the limitations listed therein. In the event that during the performance of the Contract the corporate surety is removed from the Department of Treasury's most current list of approved sureties or its limitation is reduced below the amount of the Payment and Performance Bonds, the Contractor will be in default and will immediately obtain additional or replacement Bonds to the satisfaction of the County.

(c) The Bonds shall be on forms provided by the County.

GC-3.04 EXECUTION OF CONTRACT

(a) The Contract shall be effective only upon receipt by the County of the proper, executed Contract and Performance and Payment Bonds (if required), and execution of the Contract by the County.

(b) After a Notice of Award, as provided in GC-3.01, has been issued to a Bidder, the County shall forward the formal Contract form and the appropriate forms for the Payment and Performance Bonds (if any) to the Bidder for execution. The Bidder will execute the Contract form and return same, together with fully executed Payment and performance Bonds (if any), to the County within ten (10) days after receipt of same. After receipt of properly executed Contract form and Payment and Performance Bonds, (if any), the County will execute the Contract within ninety (90) days and forward the Bidder a copy; provided, however, that the Board has approved the Contract (if such approval is required). If the County fails to execute the Contract and the period of irrevocability has expired, the Bidder may, as his/her sole remedy, withdraw his/her Bid(s).

GC - 24

(c) If the lowest responsible Bidder is not notified of the County's acceptance of his/her Bid within ninety (90) calendar days of Bid opening or the time or date otherwise specified in the contract documents, the Bidder shall have the right to withdraw his/her Bid without penalty.

(d) By executing the Contract, the Contractor represents that he/she understands the Contract Documents, has obtained clarification as to the intent of these documents, has visited the site, familiarized himself with the local conditions under which the Work is to be performed, and correlated his/her observations with the requirements of the Contract Documents. It is assumed the Contractor has obtained, before award of the Contract, clarification of all questions as to the intent of the Contract Documents, and any conflict between two or more items in Contract Documents. Should Contractor fail to obtain such clarification, then the Engineer shall direct work to proceed by the method indicated, specified or required by Contract Documents which will produce the best results, as judged by the Engineer. Such direction by Engineer shall not constitute a basis for any claim for extra cost by Contractor.

GC-3.05 FAILURE TO EXECUTE CONTRACT

Failure of the Bidder to execute the Contract and file acceptable Performance and (a) Payment Bonds within the time aforesaid shall be just cause for the annulment of the Award. The County may then issue an Award to the next lowest responsive, responsible Bidder or the work may be re-advertised and constructed under Contract or otherwise, as the County may decide. The Contractor shall immediately upon demand pay over to the County the difference between the amount of his/her Bid and such larger amount for which the County may, in good faith contract with another party to perform the work covered by Contractor's bid, plus an additional sum of Two Thousand Dollars (\$2,000.00) representing the reasonable approximation of damages suffered by the County for administrative expenses arising out of the Contractor's failure to execute the Contract and/or file acceptable Performance and Payment Bonds. In the event the Contractor fails to make said payment, the County may proceed against the Bid Security and liquidate said Bid Security to the extent necessary to satisfy the demand. In the event the Bid Security is insufficient to fully compensate the County for its demand, the Contractor shall be liable for the unpaid portion of the demand and the County may proceed against the Contractor for the deficiency.

GC-3.06 W-9 VENDOR INFORMTION

(a) Prior to issuing a purchase order or check, the Internal Revenue Service (IRS) requires the County to obtain the Contractor's Taxpayer Identification Number (TIN), which is the Contractor's Social Security number or his/her company Employer Identification Number (EIN).

(b) Upon award of the Contract to Contractors doing business with the Washington County Board of County Commissioners for the first-time, the County Purchasing Department

GC - 25

will transmit a request for completion and return of an IRS Form W-9, Request for Taxpayer Identification Number and Certification. The information will be required for processing Requests for Payment as set forth in GC-9.01(e).

GC-SECTION 4 SCOPE OF WORK

GC-4.01 INTENT OF CONTRACT

(a) The Contractor shall (within specified tolerances) perform all work in accordance with the lines, grades, typical cross sections, dimensions, and other data shown on the Drawings or as modified by written orders including the furnishing of all materials, implements, machinery, equipment, tools, supplies, transportation, labor, and all other things necessary to the satisfactory prosecution and completion of the Project in full compliance with the Contract Documents.

(b) The documents composing the Contract Documents are intended to be complementary, and to describe the construction and completion of the Work. Anything mentioned in the Specifications and not shown on the Drawings and not mentioned in the Specifications shall have like effect as if it is shown or mentioned in both. The intention of the Contract Documents is to include all labor, materials, equipment and other items necessary for the proper execution and completion of the Work and which is reasonably inferable from the Contract Documents to produce the intended results. The terms and conditions of the Contract Documents control over any conflicting terms and conditions of any Purchase Order issued to fund the payments under this Contract.

(c) Words which have well-known technical or trade meanings are used herein in accordance with such recognized meanings. Omissions from the Drawings or Specifications or the incorrect description of details of work that are manifestly necessary to carry out the intent of the Drawings and Specifications or that are customarily performed shall not relieve the Contractor from performing such omitted or incompletely described details of work, but they shall be performed as if fully and correctly set forth and described in the Drawings and Specifications.

(d) In the event the Contractor discovers any discrepancies in the Contract Documents, he/she shall immediately notify the Engineer. The Engineer will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the Contract. In the event of any irreconcilable discrepancy between the drawing and figures written thereon, the figures, unless obviously incorrect, will govern over scaled dimensions. In the case of any irreconcilable discrepancy between the Drawings and Specifications, the Drawings govern.

(e) The organization of the Specifications into divisions, sections and articles and the arrangement of the Drawings shall not control the Contractor in dividing the Work among Subcontractors, or in establishing the extent of Work to be performed by any trade.

GC - 26

(f) Written interpretations necessary for the proper execution or progress of the Work, in the form of drawings or otherwise, will be issued with reasonable promptness by the Engineer and in accordance with any schedule agreed upon.

(g) All decisions, corrections and interpretations made by the Engineer pursuant to this paragraph GC-4.01 shall be final.

GC-4.02 GENERAL CONDITIONS CONTROLLING

In the event of a conflict between these General Conditions and any other provision of the Contract Documents that cannot be reconciled in accordance with GC-4.01, the Special Provisions of the Contract Documents shall be controlling.

GC-4.03 ENTIRE CONTRACT

(a) The Contract Documents represent the entire and integrated agreement between the parties hereto and supersede all prior negotiations, representations, or agreements either written or oral. The Contract may only be amended or modified in accordance with these General Conditions.

(b) Unless otherwise expressly set forth herein, the parties hereto do not intend to and do not create any third party beneficiaries to this Contract.

GC-4.04 VARIATIONS IN ESTIMATED QUANTITIES

(a) Where the quantity of a pay item in this Contract is an estimated quantity and where the actual quantity of such pay item varies more than 25 percent above or below the estimated quantity stated in this Contract, an equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 125 percent or below 75 percent of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Engineer shall, upon receipt of a written request for an extension of time within 10 days from the beginning of the delay, or within a further period of time which may be granted by the Engineer before the date of final settlement of the Contract, ascertain the facts and make the adjustment for extending the Completion Date as in his/her judgment the findings justify.

(b) When the Engineer directs adjustments to pay item quantities for normal prosecution of work in pursuing the original scope, a Change Order will be executed prior to exceeding contract quantities for that pay item. The Change Order will be based upon the unit prices Bid for that pay item except that when quantities vary more than 25 percent above or below the estimated quantity stated in this Contract, an equitable adjustment shall be made upon demand of either party as set forth above.

GC - 27

(c) Should any Pay Items contained in the Bid be found unnecessary for the proper completion of the Work contracted, the Engineer may, upon written Change Order to the Contractor, eliminate such Pay Items from the Contract under the terms and conditions described above. Such action will in no way invalidate the Contract, and no allowance will be made for items so eliminated in making final payment to the Contract except as stipulated in this section and/or for such work as may have been done, materials actually delivered and bona fide equipment costs prior to notification of the elimination of the items.

GC-4.05 DIFFERING SITE CONDITIONS

(a) The Contractor shall within seven (7) days of encountering, and before such conditions are disturbed, notify the Engineer in writing of:

(1) Unknown physical conditions at the site of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract and not discoverable in the Contractor's site investigation required under GC-2.04. Subject to the limitations of 2.04 regarding subsurface conditions, the Engineer shall promptly investigate the conditions, and if he/she finds that such conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the Work under this Contract, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the Contract modified in writing accordingly.

(b) The Contractor shall immediately notify the Engineer upon encountering hazardous waste.

(c) No claim of the Contractor under this section shall be allowed unless the contractor has given notice as required in (a) above. Any claim for an equitable adjustment arising out of said condition shall be furnished to the Engineer within thirty (30) days from the date of the notice under (a) above and shall proceed in accordance with GC-4.06.

(d) No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this Contract.

(e) Failure to provide notice or to submit a claim within the time prescribed herein shall operate as a waiver of any such claim regardless of whether the County incurred or demonstrates any prejudice by the failure to give such notice or to submit such claim.

GC-4.06 CHANGES

(a) The Engineer may unilaterally, at any time, without notice to the Surety, if any, by written order designated or indicated to be a change order, make any change in

GC - 28

the Work within the general scope of the Contract Documents, including but not limited to changes:

- (1) In the Specifications (including drawings and designs);
- (2) In the sequence, method or manner of performance of the Work;
- (3) In the County-furnished facilities, equipment, materials, services, or site;

or

(4) Requiring expedition in the performance of the Work.

An order of the Engineer by virtue of being called or referred to as a "change order" does not necessarily constitute a change in the scope of the Contract or in the work required under the Contract. The Contractor should not be entitled to additional compensation, a time extension or other relief for complying with an order of the Engineer if the Contract otherwise requires the Contractor to perform as stated in the order.

(b) Any other act or event or written or oral order including a direction, instruction, interpretation, or determination from the Engineer shall not entitle Contractor to additional compensation unless the Contractor gives the Engineer written notice stating within seven (7) days of the act or event or of the Contractor's receipt of said order, the date, circumstances, and source of the act or event or of the order and that the Contractor believes that he/she is entitled to additional compensation. Failure to timely provide said notice shall operate as a waiver of any claim by the Contractor for an equitable adjustment, regardless of whether the County incurred or demonstrates any prejudice by the failure to give timely notice. In the event of a dispute between the Engineer and the Contractor as to whether any work was included in the scope of the Contract such that the Contractor would be obligated to provide that Work at no additional cost to the County, the Engineer may order the Contractor under this Section to perform the Work. If the Contractor considers such an order to be a change in the scope of the Contract entitling the Contractor to additional compensation, a time extension, or other relief, the Contractor must provide the notice required by this subparagraph and initiate a claim therefore in accordance with this Section and other contract requirements.

(c) Any proposal for changed work offered by or requested from the Contractor for which a Change Order is necessary shall include a complete breakdown of labor, materials and equipment along with justification for any increase requested in the contract time. When changed work is to be performed by a subcontractor, a copy of the subcontractor's proposal shall also be included in the submission. When requested by the Engineer, proposals and supporting documentation shall be sent to the Engineer within a reasonable time for his/her review. Any delay resulting from the failure of the Contractor to submit a complete price proposal within a reasonable time shall not be excused or compensated. The Engineer will process a Change Order upon approval of the Contractor's Bid.

(d) If the Engineer deems that a bona fide emergency exists, he/she may direct in writing that work proceed prior to issuing an executed Change Order. The Engineer will

GC - 29

estimate the quantities and prepare a Change Order for the appropriate contract items. The work shall proceed and the Contractor may file a request for an equitable adjustment as provided by this section.

(e) Except as herein provided, no order, statement, or conduct of the County shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment in the Contract Documents.

(f) Subject to paragraph (g), if any change or order under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the Work under this Contract, an equitable adjustment shall be made and the Contract modified in writing accordingly. Provided, however, that no claim for any change under (b) above shall be allowed for any costs incurred more than seven (7) days before the Contractor gives written notice as therein required.

If the Contractor intends to assert a claim for an equitable adjustment under this **(g)** section, he/she shall, within 30 days after receipt of a written Change Order under (a) above, or a directive under (d) above, submit to the Engineer a written statement setting forth the nature and monetary extent of such claim, including the submission of full particulars of the claim, including a full breakdown of all labor, material, equipment, and subcontractor costs, and full justification for any extension of the Completion Date. As to claims under (b) above supporting data shall be provided with the notice of a claim. As to any supporting data which is not available at the time of the notice, Contractor shall provide with the notice his/her best estimate of the total cost of the claim and further supporting data shall be provided as soon as he/she becomes available. As to any claim for Equitable Adjustment asserted under this Contract, the Contractor shall certify that the claim was made in good faith, that the supporting data are accurate and complete to the best of his/her knowledge and belief, and that the amount requested accurately reflects the contract adjustment for which Contractor believes the County is liable. The failure to timely submit the written statement with full particulars will be deemed a waiver by the Contractor of any right to an equitable adjustment, regardless of whether the County incurred or demonstrates any prejudice by the failure to timely submit the written statement and full particulars, unless this period is extended by the County in writing by the Engineer. The statement of claim hereunder may be included in the notice under (b) above.

(h) When changes involve work for which a Pay Item is included in the Contract, the changed work shall be paid for or a credit provided to the County at the price bid subject to GC-4.04. When changes involve work for which a Bid Item is not included in the Contract, the changed work shall be paid or a credit provided to the County at the unit or lump sum price agreed upon in writing by the Contractor and the Engineer in accordance with GC-4.07. No changed work, except for emergency work, shall be performed until the Contractor has received an executed Change Order. If the Engineer and contractor cannot agree on the amount of the equitable adjustment, the work shall be done in accordance with GC-9.02.

(i) Each Change Order that affects the Contract price shall be subject to the prior written approval of the Purchasing Agent and other appropriate authorities and to prior certification of the appropriate fiscal authority of fund availability and the effect of the Change

GC - 30

Order on the project budget or the total construction cost. If, according to the certification of the fiscal authority, the Change Order will cause an increase in cost that will exceed budgeted and available funds, the Change Order may not be made unless sufficient additional funds are made available or the scope of the Project is adjusted to permit its completion within the project budget.

(j) No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this Contract.

(k) Unauthorized work prohibited. Any unauthorized work shall be at the expense of the Contractor and shall not be measured or paid for by the County. At the Engineer's discretion, unauthorized work may be removed and/or replaced within a reasonable time at the Contractor's expense. "Unauthorized work" includes, but is not limited to:

(1) Work performed by the Contractor before receipt of the Notice to Proceed;

(2) Work contrary to or in disregard of the instructions of the Engineer;

(3) Work performed beyond the lines and grades described in the Drawings and Specifications; or

(4) Extra work performed without written authority.

(I) Contractor may not unilaterally "reserve his rights" to file any claims or requests for extensions of time. The Contractor's rights to additional compensation or time extensions are contingent upon Contractor strictly complying with the Notice, Filing and Certification requirements of the Contract Documents.

GC-4.07 PAYMENT PROVISIONS – CHANGES, EQUITABLE ADJUSTMENTS, DELAYS

(a) Unless the Contractor has been directed to proceed under GC-9.02 (Force Account), if the Contractor is entitled to an equitable adjustment, the cost or credit to the County shall be determined in one or more of the following ways:

(1) By mutual acceptance of a lump sum properly itemized;

(2) By unit prices stated in the Contract Documents or subsequently agreed upon; or

ipoli, or

(3) By cost plus a fixed percentage fee.

(b) Under (a) (3) above, the Contractor shall be allowed to add the following maximum percentages for overhead and profit to his/her costs for labor and materials:

GC - 31

(1) Twenty percent may be added by the Contractor for overhead and profit for work performed by his/her own forces.

(2) Fifteen percent may be added by the subcontractor for overhead and profit for work performed by the subcontractors; the Contractor may add an additional five percent of the subcontractor's costs for labor and materials.

(3) The County may require the Contractor to produce independent audits to verify overhead and profit rates claimed by the Contractor.

(4) The provisions of (a) and (b) above do not apply to Variations In Estimated Quantities as provided for in GC-4.04.

- (c) Payment for materials and equipment shall be in accordance with GC-9.02.
- (d) Delay Damages

(1) In the event the Contractor asserts a claim for delay damages it is agreed and understood that the Contactor's compensation shall be limited to direct costs of any such delay. Direct costs may include extended field overhead costs, idle equipment costs as allowed in GC-9.02(c)(6), and the costs of any directed accelerations and/or material escalations, with an allowance of an additional 10% for Contractor's overhead and profit on all direct costs allowed herein. No other damages or compensation or loss whether consequential, direct or indirect shall be allowed, including but not limited to damages for:

- (A) Lost profits;
- (**B**) Lost business opportunities;

(C) Extended home office or other overhead other than that specified under this subparagraph;

- (**D**) Loss of bonding capacity;
- (E) Lost income;
- (**F**) Lost productivity;
- (G) Consequential damages;
- (**H**) Punitive damages;
- (I) Interference with contractual relations;
- (**J**) Any like tort damages;

GC - 32

- (**K**) Claim preparation; or
- (L) Attorney's fees.

(2) Costs claimed, agreed to, or determined pursuant to this section must be allowable, reasonable, lawful, and allocable to the Work and accounted for in accordance with generally accepted accounting principles. Guidance for any determination of whether the costs allowable, reasonable, lawful, allocable, and accounted for in accordance with generally accepted accounting principles will be provided by the Contract Cost Principles and Procedures of the Code of Maryland Regulations currently in effect, which as of July 2008 were located at COMAR 21.09.01.

(e) In no event shall any dispute over the amount to be paid by the County to the Contractor be cause for the Contractor to cease performance of the Work and in all events the Work shall proceed expeditiously pending the resolution of any such dispute as provided for in the Contract Documents.

(f) All requirements for notices of claim and timely submission of, and certification of, claim statements and full particulars found in GC-4.06 and elsewhere in the Contract Documents are a condition precedent to the Contractor's right to delay or any other type of damages or compensation regardless of whether the County has incurred or demonstrates any prejudice by the Contractor's failure to comply with these requirements.

GC-4.08 UNAUTHORIZED WORK

(a) Unauthorized work shall be at the expense of the Contractor and shall not be measured or paid for by the County. At the Engineer's discretion, unauthorized work may be ordered removed and/or replaced within a reasonable time at the Contractor's expense.

(b) Unauthorized Work includes, but is not limited to:

- (1) Work performed by the Contractor before receipt of the Notice to Proceed;
- (2) Work contrary to or in disregard of the instructions of the Engineer;

(3) Work performed beyond the lines and grades described in the Plans and Specifications; or

(4) Extra Work performed without written authority.

GC-4.09 FINAL CLEAN UP

(a) Upon completion of the work specified in the Contract and before final payment will be made, the Contractor shall, without charge therefore, disassemble (or demolish) and

GC - 33

remove all temporary buildings and other structures built by him/her. The construction area and all other adjoining areas, occupied by the Contractor during the construction of said Contract, shall be cleaned of all surplus and discarded materials, spilled materials, excess materials left deposited on the Work as a result of the Contractor's operations, false work, and rubbish. The adjoining areas mentioned above, outside the normal pay limits for seeding, will be reshaped, seeded and mulched, according to the Contract Documents at the Contractor's expense. If the disturbed area was part of an established lawn or was maintained as such, the Contractor shall sod the area in accordance with the Contract Documents at his/her own expense.

GC-4.10 WARRANTY OF CONSTRUCTION

(a) In addition to any other warranties at law or set out elsewhere in this Contract, the Contractor warrants for one year after final acceptance of the Work, that all Work performed under this Contract conforms to the Contract Documents and is free of any defect of equipment, material, or design furnished, or workmanship performed by the Contractor or any of his/her subcontractors or suppliers at any tier. With respect to any part of the Work, which the County takes possession of prior to final acceptance, the warranty on that Work shall run for a period of one year from the date the County takes possession and has beneficial use of that part of the Work. Under this warranty, the Contractor shall remedy at his/her own expense any such failure to conform or remedy any such defect. In addition, the Contractor shall remedy at his/her own expense any damage to County owned or controlled real or personal property, when that damage is the result of the Contractor's failure to conform to the Contract Documents or any defect of equipment, material, workmanship, or design. The Contractor shall also restore any work damaged in fulfilling the terms of this section. The Contractor's warranty with respect to work repaired or replaced hereunder will run for one year from the date of such repair or replacement.

(b) The County shall notify the Contractor in writing within a reasonable time after the discovery of any failure, defect, or damage.

(c) Should the Contractor fail to remedy any such failure, defect or damage described in (a) above within 15 days after receipt of notice thereof or such longer time as specified in writing by the Engineer, the County shall have the right to replace, repair, or otherwise remedy such failure, defect, or damage at the Contractor's expense.

(d) In addition to the other rights and remedies described in this section, all subcontractors', manufacturers', and suppliers' warranties, express or implied, respecting any work and materials shall, at the direction of the County, be enforced by the Contractor for the benefit of the County. In such case, if the Contractor's warranty under (a) above has expired, any suit directed by the County to enforce a subcontractor's manufacturer's or supplier's warranty shall be at the expense of the county.

(e) The Contactor shall obtain any warranties that the subcontractors, manufacturers, or suppliers would give in normal commercial practice. If directed by the Engineer, the Contractor shall require any such warranties to be executed in writing to the County.

GC - 34

(f) Notwithstanding any other provision of this section, unless such a defect is caused by negligence of the contractor or his/her subcontractors or suppliers at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the County nor for the repair of any damage which results from any such defect in County furnished material or design.

(g) The warranty specified herein shall not limit the County's rights under the Contract Documents and is only intended to create the right and obligation of the Contractor to correct defective items during the warranty period. Nothing contained in the warranty shall be construed to establish a period of limitation with respect to other obligations which the Contractor has under the Contract and shall not be construed to waive or limit any claims against Contractor or his/her Surety arising after the expiration of the warranty period, including without limitation, faulty or defective work, indemnification obligations, and failure of the Work to conform to the Contract Documents. Moreover, nothing contained herein is intended to waive or limit any claim the County has or may have against the Contractor or Surety for latent defects appearing in the Work after the expiration of the warranty period.

(h) To secure the County against the nonpayment of such costs resulting from the Contactor's failure to make repairs during the warranty period as set forth herein, the County may require the Contractor, as a line item, to post a guarantee bond, in a form acceptable to the County, in the amount of five (5) percent of the total value of the Contract, or \$10,000.00 whichever is greater. The guarantee bond shall be posted prior to Final Payment. The guarantee bond must be executed by a surety satisfactory to the County and shall be effective for the longest guarantee period called for in the Contract Documents.

GC-4.11 VALUE ENGINEERING CHANGE PROPOSALS

(a) The contractor may submit to the Engineer, in writing, Value Engineering Change Proposals (VECP) for modifying the contract Documents for the purpose of reducing the total cost of construction without reducing design capacity or quality of the finished product. The Engineer will then forward the proposal to the Deputy Director with recommended action. The decision to accept or deny the proposal will be made by the Director. The Director will be the sole judge of the acceptability of a VECP. The decision will be final. The County will not consider appeals once the final decision is made. If accepted by the County, net savings resulting from a VECP will be equally divided by the County and the Contractor.

The Contractor may elect to pursue one of the following options.

Option 1 – Submit the detailed Plans, Specifications and estimate of savings;

Option 2 – Submit a written concept of the VECP for tentative approval and if accepted, submit the detailed plans, Specifications, and estimate of savings along with all design calculations, reports, studies, etc. for final approval at a later date.

GC - 35

(b) Each VECP shall result in a net savings to the Contract cost without impairing essential functions and characteristics of the items or of any other part of the project, including but not limited to service life, reliability, and economy of operation, ease of maintenance, desired aesthetics and safety.

(c) As a minimum, the Contractor shall submit the following information before receiving final approval of a VECP.

(1) A statement that the proposal is submitted as a VECP.

(2) A statement concerning the basis for the VECP and benefits to the County together with an itemization of the Contract items and requirements affected by the VECP.

(3) A detailed estimate of the cost under the existing Contract and under the VECP.

(4) Proposal Plans, Specifications and recommendations as to how the VECP changes shall be accomplished.

(5) A statement as to the time by which an extra work order adopting the VECP must be issued so as to obtain the maximum cost effectiveness. Typically, the County will require four weeks to review and approve a VECP.

(6) The Contractor's engineering cost for the VECP.

(d) The County will process the VECP in the same manner as prescribed for any other proposal that would necessitate issuance of a Change Order. The County may accept in whole or in part any VECP by issuing a Change Order which will identify the VECP on which it is based. The County will not be liable to the Contractor for failure to accept or act upon any VECP submitted pursuant to these requirements nor for any delays to the work attributable to any VECP PROPOSAL. Until a proposal is effected by Change Order, the Contractor shall remain obligated to the terms and conditions of the existing Contract. If an executed Change Order has not been issued by the date upon which the Contractor's proposal specifies that a decision thereon should be made, or any other date as the Contractor may subsequently have specified in writing, the proposal shall be deemed rejected.

(e) The Change Order effecting the necessary Contract modification will establish the net savings agreed upon, will provide for adjustment in the Contract prices and/or Contract time and will indicate the net savings to be equally divided between the Contractor and the County. The Contractor's costs for preparation of the VECP and the County's costs to review and administer the VECP will be deducted from the gross savings. The County reserves the right to include in the Change Order any conditions it deems appropriate for consideration, approval and implementation of the proposal. The Contractor's 50 percent share of the net savings shall constitute full compensation for effecting all changes pursuant to the Change Order.

GC - 36

(f) Acceptance of the VECP and performance of the work therein will not change the Contract time limit as a result of the VECP, unless specifically provided for in the Change Order authorizing the VECP.

(g) The County expressly reserves the right to adopt a VECP for general use in Contracts administered by the County when it determines that the proposal is suitable for application to other contracts. VECPs identical or similar to previously submitted proposals will be eligible for consideration and compensation under this section if such proposals were not previously adopted for general application to other contracts administered by the County. When a VECP is adopted for general use, compensation pursuant to these requirements will be applied only to those contracts awarded and for which the subject VECP has been submitted prior to the date of adoption of the specific VECP.

(h) Proposed changes in the basic design of a bridge or pavement type, or requiring modification to the right-of-way limits, will not normally be considered as an acceptable VECP. Quantity decreases or elimination of any Contract pay items as a result of changing field conditions, errors, etc. will not be considered as an acceptable VECP. If a VECP is based upon or similar to a change in the Plans, Specifications or Special Provisions adopted by the County prior to submission of the VECP, the Director will not accept the proposal.

(i) The requirements herein apply to all VECPs initiated and developed by the Contractor and which are identified as such by the Contractor at the time of his/her submission to the agency; however, nothing herein shall be construed as requiring the Director to consider or approve a VECP submitted by the Contractor.

(j) Subject to the provisions contained herein, the County or any other public agency shall have the right to use all or part of any accepted VECP on other projects without obligation or compensation of any kind to the Contractor.

(k) In the event a VECP is accepted by the County, the provisions of the Contract Documents that pertain to adjustment of Contract unit prices due to alterations of Contract quantities will not apply to the items adjusted or deleted as a result of making the VECP effective by Change Order.

GC-4.12 CONTINGENT ITEMS

(a) Construction items for which quantities are identified in the "Contingent Fixed Price Items Unit Schedule" or listed in the "Invitation for Bids Form" are established for the purpose of obtaining bids on one or more pay items that may be incorporated into the Project.

(b) The Engineer shall have sole discretion in determining whether and to what extent such items will be incorporated into the Project. The Engineer may order incorporation of such items at any location within the Contract and at any time during the Work. These items may not be located on the Plans. The estimated quantities set out in the Invitation for Bids for such items are presented solely for the purpose of obtaining a representative bid price. The actual quantities

GC - 37

employed may be only a fraction of, or many times the estimated quantity. The requirements of GC-4.04 (Variations in Estimated Quantities) shall apply.

GC-SECTION 5 CONTROL OF THE WORK

GC-5.01 AUTHORITY OF THE ENGINEER

(a) The Engineer shall decide all questions that may arise as to the quality and acceptability of materials furnished and work performed and as to the rate of progress of said work; all questions that may arise as to the interpretation of any or all Drawings and Specifications; and all questions as to the acceptable fulfillment of the Contract on the part of the Contractor.

(b) The Engineer shall determine the amount and quantity of work performed and materials that are to be paid for under the Contract.

(c) The Engineer shall have the authority to suspend the work wholly or in part due to the failure of the Contractor to carry out provisions of the Contract.

GC-5.02 CONFORMITY WITH CONTRACT REQUIREMENTS

(a) All work performed and all materials furnished shall be in conformity with the Contract Documents.

(b) In the event the Engineer finds that the materials or the finished product in which the materials are used or the work performed are not in conformity with the Contract Documents and have resulted in an inferior or unsatisfactory product, the Engineer may order that the work or materials be removed and replaced or otherwise corrected within a reasonable time by and at the expense of the Contractor.

(c) In the event the Engineer finds the materials or the finished project in which the materials are used on the work performed are not in conformity with the Contract Documents but that acceptable work has been produced, the Engineer shall then make a determination if the work shall be accepted. In this event, the Engineer will document the basis of acceptance by a Change Order that will provide for an appropriate equitable adjustment in the Contract price. Any action taken pursuant to this section may not result in an increase of the Contract price.

GC-5.03 DISCREPANCIES IN THE CONTRACT DOCUMENTS

In the event the Contractor discovers any discrepancies in the Contract Documents, he/she shall immediately notify the Engineer. The Engineer will then make such instructions, corrections, and/or interpretations as may be deemed necessary for fulfilling the intent of the

GC - 38

Contract Documents. The decision of the Engineer shall be rendered within a reasonable time and shall be final.

GC-5.04 COOPERATION BY CONTRACTOR

(a) The Contractor will keep a copy of the Record Counterpart Document and a complete set of all other Contract Documents and shop drawings available on the project site at all times.

(b) The Contractor shall give the work the constant attention necessary to facilitate the progress thereof, and shall cooperate with the Engineer and the Inspectors in every way possible.

(c) The Contractor shall assign to the contract as his/her agent, a competent Project Representative capable of communicating in fluent English, capable of reading and thoroughly understanding the contract Documents, and thoroughly experienced in the type of work being performed, who shall receive instructions from the Engineer or the Engineer's authorized representatives. The Project Representative shall be satisfactory to the Engineer and shall not be changed or replaced except with the written consent of the Engineer, unless the Project Representative proves to be unsatisfactory to the Contractor and/or ceases to be employed by the Contractor. The Project Representative shall have full authority to execute the orders or instructions of the Engineer without delay, and to promptly supply such materials, equipment, tools, labor, and incidentals as may be required. Such management personnel shall be furnished irrespective of the amount of work sublet. Said Project Representatives shall be available at all times when the work is in progress on the project site.

GC-5.05 COOPERATION WITH UTILITIES

(a) The Contractor shall consider in his/her Bid all of the permanent and temporary utility appurtenances in their present or relocated positions and that no additional compensation will be allowed for delays, inconvenience, or damage sustained by him/her due to any interference from the said utility appurtenances or the operation of moving them.

(b) The Contractor shall have responsibility for notifying all affected utility companies prior to the necessity of performing any work on their utilities and shall cooperate with them in achieving the desired result. All damage to utility facilities caused by the Contractor's operations shall be the responsibility of the Contactor.

(c) Approximate locations of existing utilities are shown on the Drawings. The Contractor shall take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage incurred due to the Contractor's operation shall be repaired immediately at the Contactor's expense.

(d) The Contractor shall locate existing utilities well in advance of construction activities, clear all utilities by a minimum of six (6) inches, and maintain adequate clearance for utility poles, brace for tunnel as required.

GC-5.06 COOPERATION BETWEEN CONTRACTORS

(a) Separate Contractors on adjoining or overlapping work shall cooperate with each other as necessary. It is the responsibility of all Contactors to ensure that contiguous work is joined in an acceptable manner. Such cooperation shall include:

(1) Arrangement and conduct of work;

(2) Storage and disposal of materials, etc., by each in such manner as to not unnecessarily interfere with or hinder the progress of the work being performed by other Contractors.

(b) The County and Division shall have the right, at any time, to contract for and perform other work on, near, over or under the work covered by this Contract. In addition, other work may be performed under the jurisdiction of another County agency. In such cases, when a dispute arises among Contractors, the Director will decide which of the Engineers will have jurisdiction over said dispute. The Contractor shall cooperate fully with such other Contractors and carefully fit his/her own work to such other work as may be directed by the Engineer.

(c) In the event of dispute as to cooperation the Director will act as referee. The Contractor will make no claims against the County for any inconvenience, delay, inefficiency, costs, expenses, additional overhead, damages, or loss experience because of the presence and operations of other Contractors.

GC-5.07 AUTHORITY AND DUTIES OF INSPECTORS

(a) Inspectors shall be authorized to inspect all work done and all material furnished. Such inspection may extend to all or any part of the Work and to the preparation, fabrication, or manufacture of the materials to be used. The Inspector is not authorized to revoke, alter, or waive any requirements of the Contract Documents, nor is the Inspector authorized to approve or accept any portion of the Work. The Inspector is authorized to call the attention of the Contractor to any failure of the Work or materials to conform to the Contract Documents. The Inspector shall have the authority to reject materials or suspend the Work until any questions at issue can be referred to and decided by the Engineer. Inspectors shall perform their duties at such times and in such manner as will not unnecessarily impede progress on the Contract.

(b) The Inspector shall in no case act as foreman or perform any duties for the Contractor, nor interfere with the management of the Work by the latter. Any advice, instruction, direction, or other order which the Inspector may give the Contractor shall not be

GC - 40

construed as binding the Engineer in any way, or releasing the Contractor from fulfilling all of the terms of the Contract Documents.

(c) Where there is disagreement between the Contractor (or his/her representative) and the Inspector, such as refusal by the Contractor to use properly approved material, performing work not in compliance with Plans and Specifications, and/or refusing to suspend work until problems at issue can be referred to and decided by the Engineer, the Inspector will immediately direct the Engineer's attention to the issues of disagreement. If the Contractor still refuses to make corrections, comply, or suspend work (as the case may be), the Engineer will prepare and deliver in writing to the Contractor, by mail or otherwise, a written order suspending the Work or any portion thereof and explaining the reason for such shutdown. As soon as the Inspector is advised of the delivery of the shutdown order, the Inspector shall immediately leave the site of the Work and any work performed during the inspector's absence will not be accepted or paid for and may be required to be removed and disposed of at the Contractor's expense.

GC-5.08 INSPECTION OF WORK

(a) All materials and each part or detail of the work shall be subject at all times to inspection by the Engineer or his/her authorized representatives and the Contractor will be held strictly to the materials, workmanship, and the diligent execution of the Work in conformity with the Contract Documents. Such inspection may include mill, plant, or shop inspection, and any material furnished under the Contract is subject to inspection at any time. The Engineer or his/her representatives shall be allowed access to all parts of the Work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

(b) At the Engineer's request, The Contractor, at any time before acceptance of the Work, shall remove or uncover such portions of the Work as may be directed. After examination, the Contractor shall restore said portions of the Work to the standards required by the Contract Documents. Should the Work thus exposed or examined prove acceptable, adjustments in Contract time and price will be made pursuant to Section GC-4.06 for the uncovering or removing and the replacing of the covering or making good of the parts removed. Should the Work so exposed or examined provide unacceptable, the uncovering, or removing and replacing, shall be at the Contractor's expense.

(c) When the United States Government, the State, or any railroad, corporation, or other public body is to pay a portion of the cost of the Work, their respective representatives shall have the right to inspect the Work under the same conditions as apply to the Engineer and/or the Inspector.

(d) The Contractor is not relieved of any obligation under the Contract because of the approval of non-conforming work by the Inspector, or the failure of an Inspector to detect work that is not performed in accordance with the Contract Documents.

GC - 41

GC-5.09 REMOVAL OF DEFECTIVE WORK

(a) All work and materials that do not conform to the requirements of the Contract Documents will be considered unacceptable, unless otherwise determined acceptable under the provisions in GC-5.02.

(b) Any unacceptable work found to exist, whether the result of poor workmanship, use of defective materials, or damage through carelessness or any other cause, shall be removed and replaced within a reasonable time with work and materials that shall conform to the Contract Documents or shall be remedied otherwise in an acceptable manner authorized by the Engineer.

(c) Upon failure on the part of the Contractor to comply promptly with any order of the Engineer made under these General Conditions, the Engineer shall have authority to cause defective work to be remedied or removed and replaced and unauthorized work to be removed and to deduct the costs from any monies due or to become due the Contractor under this Contract.

GC-5.10 LOAD RESTRICTIONS

(a) The Contractor shall comply with all State, County, and local requirements pertaining to speed, size and weight of motor vehicles.

(b) The County may specify in the Contract load restrictions on any road or structure within the vicinity of the Project.

(c) The Contractor shall take into account any and all posted bridges, the crossing of which might be contemplated by the Work. No loads in excess of posted limits will be allowed in the prosecution of the Work on any Contract, unless the required permits are obtained from the appropriate State, County, and local government agencies.

(d) The Contractor shall consider possible detrimental effects of operating heavy paving and grading equipment contiguous to retaining walls, pipe culverts, arches, forms for concrete work, or construction existing prior to this Contract.

(e) The Engineer shall have the right to limit passage of heavy equipment (plus loads) when such passage or usage is causing apparent or visible damage to embankments, paving, structures or any other property.

GC-5.11 MAINTENANCE OF WORK DURING CONSTRUCTION

(a) The Contractor shall maintain the work during construction and until Final Acceptance. This maintenance shall constitute continuous and effective work prosecuted as required with adequate equipment and forces to the end that all parts of the work be kept in satisfactory condition at all times.

GC - 42

(b) Particular attention shall be given to drainage, both permanent and temporary. The Contractor shall use all reasonable precautionary measures to avoid damage or loss that might result from accumulations and concentrations of drainage water, and material carried by such water and such drainage shall be diverted or removed when necessary to prevent damage to excavation, embankments, surfacing, structures and/or property. Suitable measures shall be taken by the Contractor to prevent the erosion of soil in all construction areas where the existing ground cover has been removed.

(c) The Contractor shall maintain and coordinate his/her activities to the extent necessary to maintain operations of all existing infrastructure affected by the Contract. All cost of maintenance work during construction and before Final Acceptance shall be included in the price Bid (or in the unit price Bid on the various Bid Items as the case may be) and the Contractor will not be paid additional amounts for such work, except as otherwise provided in the Contract Documents.

(d) In the event that the Work is ordered shut down, the Contractor shall maintain the entire Project as provided herein, and shall provide such ingress and egress for local residents or tenants adjacent to the Project, for occupants of the Project, for the County, the Engineer, the Inspectors, and for the general public as may be necessary during the period of suspended work or until the Contract has been terminated for convenience or for default.

(e) On Projects where traffic flow is maintained, the Contractor shall be responsible for repair of all traffic damages to the Work, either partially or totally completed, until such time as the work is accepted by the Engineer. Responsible, as used here, shall mean the responsibility for restoration and the cost thereof unless otherwise expressly provided for in the Contract Documents.

(f) Should the Engineer deem that a bona fide emergency exists and directs Changes in accordance with GC-4.06(d), the Contractor shall continue to maintain the entire Project to every extent necessary to minimize disruptions to all affected infrastructure. The Contractor may file a request for an equitable adjustment as provided for in GC-4.06.

GC-5.12 FAILURE TO MAINTAIN ENTIRE PROJECT

If the Contractor, at any time, fails to comply with the provisions of GC-5.11 above, the Engineer may immediately notify the Contractor to comply with the required maintenance provisions. In the event that the Contractor fails to remedy unsatisfactory maintenance within 24 hours after receipt of such notice, the Engineer may at his/her sole option immediately proceed with adequate forces and equipment from any source to maintain the Project, and the entire cost of this maintenance will be the responsibility of the Contractor and may be deducted from any monies due the Contractor.

GC-5.13 CLAIMS

(a) All disputes arising under or as a result of a breach of this contract and all requests for an equitable adjustment in the terms of the Contract Documents that are not resolved by mutual agreement shall be resolved in accordance with this section. All requirements for notices of claims and timely submission of, and certification of, claim statements and full particulars found elsewhere in the Contract Documents are a condition precedent to the Contractor's right to proceed under this section regardless of whether the County has incurred or demonstrates any prejudice by the Contractor's failure to comply with these requirements.

(b) As used herein, "Claim" means a written demand or assertion by one of the parties seeking, as a legal right, an equitable adjustment including the payment of money, adjustment or interpretation of the Contract Documents, or other relief, arising under or relating to this Contract.

(1) A voucher, invoice, or request for payment that is not in dispute when submitted is not a Claim under this Section. However, where the submission is subsequently not acted upon in a reasonable time, or is disputed either as to liability or amount, it may be converted to a claim for the purpose of this section.

(2) A Claim by a Contractor shall be made in writing and submitted to the Engineer for decision. A claim by the County shall be set forth in a decision by the Director.

(c) Any Claim of the Contractor against the County for an equitable adjustment, including extensions of time, extra compensation, or damages, whether under this Contract or otherwise, shall be conclusively deemed to have been waived by the Contractor, regardless of whether the County has incurred or demonstrates any prejudice, if not submitted with the following documents and within the time specified:

(1) The Claim shall be set forth in writing describing the specific fact or event that is the basis of the Claim.

(2) The Claim must be accompanied by itemized supporting data supporting the Claim and specifically identifying the actual cost, both direct and indirect, that the Contractor has incurred or will incur by reason of the fact or event that is the basis of the claim for an equitable adjustment.

(3) The accuracy of the supporting data shall be certified under GC-4.06 and signed by an officer or principal of the Contractor.

(4) Unless an extension has been granted the County, the Claim must be received by the Engineer within thirty (30) calendar days after the fact or event to which the Claim is attributed became known or should have become known to the Contractor.

(d) Review and Response – The Engineer will have thirty (30) calendar days from receipt of the Claim to review and respond to the Claim, provided the Contractor has complied with (c) above. In the event that the Engineer does not provide the Contractor with a response

GC - 44

within thirty (30) calendar days of receipt to a properly submitted Claim, the Claim shall be considered denied and the contractor shall proceed with an appeal to the Deputy Director as set forth below or the claim will be forever waived and barred.

(e) Appeal to the Deputy Director

(1) The Contractor may appeal the decision of the Engineer to the Deputy Director, in writing, provided the Contractor has complied with GC-5.13(b) and (c) above. The appeal shall contain the complete package of information submitted to the Engineer for consideration and must be filed with the Deputy Director within fourteen (14) calendar days after the Engineer's decision or deemed denial. Unless specifically requested by the Deputy Director, in writing, the Contractor shall not be permitted to submit information that was not offered to the Engineer for review.

(2) The Deputy Director will have thirty (30) calendar days from the actual receipt of a properly submitted appeal as provided for herein to review and respond to the appeal and the Deputy Director shall issue a written decision. In the event that the Deputy Director does not issue a written decision within thirty (30) calendar days of the receipt of a properly submitted appeal, the appeal shall be considered denied and the Contractor shall proceed with an appeal to the Director as set forth below or the Claim shall be forever waived and barred.

(f) Appeal to the Director

(1) All references to the "Director" shall be deemed to include the Director or his/her Designee.

(2) The Contractor may appeal the decision of the Deputy Director to the Director, in writing, provided the Contractor has complied with the provisions of GC-5.13 as contained herein. The Contractor's appeal shall contain the complete package of information submitted to the Deputy Director for consideration and must be filed with the Director within fourteen (14) calendar days after the Deputy Director's written decision. Unless specifically requested by the Director, in writing, the Contractor shall not be permitted to submit information that was not offered to the Deputy Director for review.

(3) The Director will have thirty (30) calendar days from the actual receipt of the Contractor's properly submitted appeal as provided for herein to review and respond to the appeal and the Director shall issue a written decision. In the event that the Director does not issue a written decision within thirty (30) calendar days of the receipt of a properly submitted appeal, the appeal shall be considered denied and the Contractor shall proceed to the Circuit Court of Washington County, Maryland as set forth below or the Claim shall be forever waived and barred.

(4) The Director's decision as referenced above shall be the final decision of the County.

GC - 45

(g) The Contractor may appeal the County's final decision by filing a complaint in the Circuit Court for Washington County, Maryland within fourteen (14) calendar days of the County's final written decision. The applicable provisions of the Annotated Code of Maryland and the Maryland Rules shall govern the conduct of the proceedings before the Circuit Court and shall govern all further appeals.

(h) The failure of the Contractor to timely file any appeal described herein shall forever bar and waive the Claim regardless of whether the County incurred or demonstrates any prejudice resulting from the Contractor's failure to timely file any such appeal.

(i) Pending resolution of the Claim, the Contractor shall proceed diligently with the performance of the Contract in accordance with the Engineer's decision.

GC-5.14 SHOP DRAWINGS

(a) General – The Contractor shall provide for review and approval submittals such as shop drawings, product data and samples to determine compliance with all applicable laws, statutes, ordinances, codes, orders, rules and regulations; and to determine whether the work, when completed, will be in compliance with the requirements of the Contract Documents. Reviews by the Engineer and/or his/her designated Consultant are for general compliance with the Contract Documents. The reviewer will not assume responsibility for correctness of dimensions or details. The responsibility for dimensions, application and guarantee to conform with the drawings and specifications rest with the Contractor.

(1) Shop drawing review shall be as set forth below to ensure that the equipment, materials and installation methods are in accordance with the construction contract documents.

(2) The Drawings will be supplemented by such drawings as are necessary to adequately control the work. All authorized alterations affecting the requirements and information given on the Drawings shall be in writing and approved by the Engineer. When at any time reference is made to the plans, the interpretations shall be based on the Drawings as affected by all authorized alterations then in effect.

(3) The Contractor shall provide at his/her expense all necessary and required shop drawings and shall have them adequately checked, after which they shall be submitted to the Engineer for review. The Engineer may reject or disapprove such drawings and return them for revisions, in which case the Contractor shall submit new additional or revised drawings as required. No items involving such drawings shall be incorporated in the Work until those drawings have been accepted for use by the Engineer in connection therewith.4

(4) Unless otherwise required by the County, all shop drawings shall have a standard title block at lower right corner approximately 4 inches by 8 inches (2 inches for revision column on left side and remaining 6 inches for title) indicating the following information in the order named:

GC - 46

- (A) Name of Contractor (and subcontractor, if applicable)
- (**B**) Address of above
- (C) Sheet Title (reinforcing details, etc.)
- (**D**) Name of Facility
- (E) For (Washington County, Maryland)

(F) By (indicate name of Contractor's official or engineer, or other parties authorized to sign official documents

(5) The Contractor shall list all County contract numbers and the date the drawings were completed. The left portions of the title block shall be headed "Revisions" and the space used as needed.

(b) At the discretion of the Engineer, shop drawings, and/or calculations for other aspects of the work shall be stamped and signed by a Professional Engineer (P.E.) registered in the State of Maryland who has a minimum of five years of experience in the relevant discipline. The submittal shall include the P.E.'s resume showing evidence of the required experience. The P.E.'s Drawings and design calculations shall evaluate and quality all products and components including manufactured products and proprietary items for their intended service. Acceptance by the Engineer of such drawings and/or calculations shall not in any way relieve the Contractor of the responsibility for the safety and adequacy of the design and construction for the falsework systems and operations, including all components.

(c) Submittal Process – The Contractor shall submit the specified number of copies of each shop drawing, submittals and final approval data to the Engineer and his designated consultant for review and approval prior to incorporating materials and/or equipment into the work. Unless otherwise specified, the Contractor shall submit six (6) copies for each item submitted plus the number of copies the Contractor desires to have returned.

(1) Each submittal package shall be accompanied with a formal Letter of Transmittal listing the submittal(s), quantity, date, brief description, and whether the items are transmitted for approval, as requested, etc.

(2) Details of shop drawings, data, and literature for fabricated materials or equipment to be incorporated in the Work shall be submitted to the Consultant for review for general compliance with the Contract Documents before fabrication. The Contractor shall obtain manufacturer's shop drawings, certifications, and other pertinent data for conformance with all requirements of the Drawings and Specifications, and in ample time to permit satisfactory progress of the Work. After completion of such checking and verification by the Contractor, the Contractor shall sign and stamp the drawings, which stamp shall state as follows:

GC - 47

CHECKED BY: ____

(Checker's Name) (Date)
SIGNED BY: ________(Contractor's Name) (Date)

(3) All data, drawings and correspondence from subcontractors, manufacturers or suppliers shall be routed through the Contractor. The Contractor is further advised that the Engineer and his designated representatives will not act as coordinators between suppliers and subcontractors. All required coordination shall be the complete responsibility of the contractor.

(4) At the time of each submission, the Contractor shall call to the Engineer's attention, in writing, any deviations that the shop drawings may have from the requirements of the Drawings and Specifications. The Contractor shall also provide a list prioritizing the submittals for review. In the event that such a list is not furnished by the Contractor, the Engineer shall exercise discretion regarding the order in which submittals are reviewed. This list shall be attached to each applicable submittal.

(5) The Engineer and his designated consultant will review, stamp, and sign each copy of the accepted shop drawings and submittals with "NO EXECPTIONS TAKEN" or "MAKE CORRECTIONS NOTED".

(6) No extra measurement or payment shall be made for compliance with the requirements of this section of these General Conditions. All costs shall be included in the applicable items.

(7) Corrections or comments made on the shop drawings during review do not relieve the Contractor from compliance with the requirements of the Drawings and Specifications. The County will not be responsible to Contractor for errors or omissions on drawings furnished by the Contactor even though drawings containing such errors or omissions are inadvertently accepted. The Contractor is responsible for confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; and in performing his work in a safe manner. If the shop drawings deviate from the Contract Documents, the Contractor shall request a deviation from the Contract Documents by submitting a written request accompanying the shop drawings to the Engineer. If this data is not provided with the shop drawings, or is not adequate, the shop drawings shall be rejected and returned to the Contractor.

(8) The Contractor's attention is specifically directed to the fact that no items shall be fabricated, nor equipment or materials ordered nor any construction performed, prior to acceptance of shop drawings and submittals applicable thereto. However, to expedite the project, the contractor may request, in writing, authorization from the Engineer to order critical items before formal acceptance of the shop drawings but not prior to shop drawing submittals. NO items unless so authorized shall be ordered until the Engineer has accepted the drawings.

GC - 48

(9) It shall be the Contractor's responsibility to make all the necessary changes in other items, which result from deviations or changes requested by the Contractor and accepted by the Engineer or his/her consultant, so that all items perform the original requirements and intent of the Contract Documents.

(d) A maximum of two (2) submissions of each submittal will be reviewed, checked, and commented upon without charge to the Contractor. The cost to review submittals (over two submissions) may be deducted from the Contractor's monthly invoice, or from monies retained under the provisions of the Specifications; amounts will be based upon actual additional costs to the County for the additional reviews. It is, therefore, incumbent upon the Contractor to make all modifications and/or corrections as may be required by the Engineer in an accurate, complete, and timely fashion.

GC-SECTION 6 CONTROL OF MATERIAL

GC-6.01 GENERAL

All materials shall meet all quality requirements of the Contract. In order to expedite the inspection and testing of materials, the Contractor shall notify the Engineer in writing of the materials and the sources from which he/she proposes to obtain all materials requiring approval, testing, inspection or certification prior to incorporation into the Work. This submittal shall be made within ten (10) days after receipt of the Notice to Proceed. State and/or Federal funded projects may require approval from one or more State and/or Federal agencies prior to delivery of the material. Such requirements will be set forth in the Special Provisions of the Contract.

GC-6.02 APPROVAL OF MATERIAL SOURCES

(a) **Approval** – The Engineer will inform the Contractor as to the acceptability of each material and his/her source as soon as an evaluation of the sources proposed can be made. No material may be incorporated into the Work until approval of the source has been given. Where delivery of materials to the job site is made prior to approval, such delivery is made at the Contractor's risk and subject to immediate removal, at no cost to the County, if he/she is determined that the source or the material is not acceptable.

(b) **Rejection** – Material sources may be rejected even though prior samples meet the applicable Specifications. Where it is evident to the Engineer that the material tends to be of marginal quality, as compared to the Specification tolerances in one or more of its properties, the material source may be rejected.

(c) Approval Withdrawn – All source approvals are made subject to continuing production of materials meeting the Specifications. If the materials do not continue to meet the specifications, the approval of any source may be withdrawn by the Engineer at any time. The

GC - 49

Contactor shall neither have nor assert any claim against the County for an equitable adjustment when such approvals are withdrawn because the materials fail to meet specifications.

(d) Substitutions.

(1) After execution of the Contract, the Engineer will consider a written request by the Contractor for the substitution of products in place of those specified, under the following conditions:

(A) The request is accompanied by complete data on the proposed substitution substantiating compliance with the Contract Documents, including project identification and description, performance and test data, references and samples where applicable, and an itemized comparison of the proposed substitution with the products specified or named by addenda, with data relating to contract time schedule, design and artistic effect where applicable, and its relationship to separate contracts.

(B) The request is accompanied by accurate cost data on the proposed substitution in comparison with the product specified, whether or not modification of the contract sum is to be a consideration.

(2) Request for substitution when forwarded by the Contractor to the Engineer, are understood to mean that the Contractor:

(A) Represents that he/she has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified;

(B) Will provide the same guarantee for the substitution as was required for that item originally specified;

(C) Certifies that the cost data presented is complete and includes all related cost under the contract, and that he/she waives all claims for additional costs related to the substitution that subsequently become apparent; and

(D) Will coordinate the installation of the accepted substitute, making such changes as may be required for the Work to be completed in all respects in conformity with the Contract Documents.

(3) Substitutions will not be considered if:

(A) They are indicated or implied on shop drawing submissions without written request as set forth above; or

GC - 50

(B) For their implementation they require a substantial revision of the Contract Documents in order to accommodate their use

(4) No substitution will be approved without the Contractor remitting to the County the difference between the cost to the Contractor of the substitution and the specified item. The substitution must be less expensive than the specified item. The County reserves the right to disapprove any substitution at its sole discretion.

GC-6.03 APPROVAL OF PLANTS AND SHOPS

(a) Five days after receipt of Notice to Proceed, the Contractor shall submit in writing for the Engineer's approval the location and ownership of those plants or fabricating shops at which materials for the project will be processed.

(b) The Engineer will inform the Contractor as to the acceptability of the proposed plants or shops within ten (10) days after receipt of the submittal specified in (a) above. No material is to be shipped from these sources until this approval has been given.

(c) Plant or shop approvals are made subject to continuing production of materials meeting the Specifications. Where this condition is not met, the approval of any plant or shop may be withdrawn by the Engineer at any time. The Contractor shall have or assert no claim against the County for damages or time extensions when such approvals are withdrawn.

GC.6.04 SAMPLES, TESTS, CITED SPECFICATIONS

(a) All materials used in the Work will be inspected, sampled, and tested in accordance with these requirements and such others as are set forth elsewhere in the Contract Documents where particular reference is made to a specific material. Unless otherwise designated, tests will be made in accordance with the most recently published cited standard tentative or interim methods of AASHTO, the American Society for Testing and Materials (ASTM), the American Water Works Association (AWWA), or others that are current on the date of the Invitation for Bids. These tests will be made by and at the expense of the County unless otherwise expressly required in the Contract Documents.

(b) Acceptance testing by the County as described here and elsewhere is not to be considered as a replacement for quality control testing conducted by the Contractor or a manufacturer producing materials for the Contractor. When the Contractor or manufacturer is not providing adequate quality control testing facilities in his/her own behalf, the Engineer may refuse to carry out re-sampling and testing of materials that have been shown to be defective by normal sampling and testing routines. The Engineer may also refuse to resample and test defective materials until and unless corrective action has been taken by the Contractor or manufacturer. The Contractor shall neither have nor assert any claim against the county for damages or time extensions when such approvals are withdrawn.

GC - 51

(c) While it is required that all materials will conform to the specified values for all properties, the Engineer may designate different points of sampling and different sampling intervals for separate characteristics of any material.

(d) The Contractor shall assist in the sampling of materials and make provision for safe and reasonable access.

(e) The Engineer may elect where possible to sample and test lots of material at the point of manufacture. In this case, lots may be given approval and where practical so marked by the Engineer. This procedure assumes that consistent production and appropriate storage, handling and shipping practices shall be maintained by the manufacturer, the hauler and the Contractor. Such approval does not preclude subsequent inspection, sampling and/or testing of materials at the job site with acceptance or rejection being predicated on the results of these later procedures.

GC-6.05 CERTIFICATION OF COMPLIANCE

(a) The Engineer may permit use prior to sampling and testing of a particular material or assembly accompanied by a Certificate of Compliance from the manufacturer stating that such materials or assembly fully comply with the requirements of the Contract. The Certificate shall be signed by the manufacturer and notarized, and submitted to the Engineer for review and approval prior to the material being incorporated into the Work.

(b) A Material or assembly used on the basis of the manufacturer's Certificate of Compliance may be sampled and tested at any time and, if found not be in conformity with the Contractor requirements, will be subject to rejection whether in place or not, at no cost to the County.

(c) The form and distribution of the manufacturer's Certificate of Compliance will be as approved by the Engineer.

(d) The County reserves the right to refuse permission for use of a material or assembly on the basis of failure to produce a Certificate of Compliance in accordance with the Contract Documents.

GC-6.06 PROJECT CONTROL TESTING

(a) Materials from approved sources, plants, or shops will be subject to control tests by the Engineer at such locations and with such frequency as he/she deems appropriate.

(b) The point or points of sampling will be those at which materials must meet required physical or chemical properties. It is intended that insofar as is practical, these points will be those in the production process just prior to inclusion into the Work or into combination with other materials. It is also intended that sampling and testing be conducted in such manner

GC - 52

and at such points as to minimize interference with the maintenance of an efficient schedule by the Contractor. Where the nature of the work precludes the attainment of both of these ends simultaneously, the Engineer will designate the points of sampling in a manner so as to ensure compliance with the Contract Documents.

(c) While all materials are required to conform to the specified values for all properties, the Engineer may designate different points of sampling and different sampling intervals for separate characteristics of any material.

(d) The Contractor shall assist in the sampling of materials and make provision for safe and reasonable access.

(e) The Engineer may elect where possible to sample and test lots of material at the point of manufacture. In this case, lots may be given approval and where practical so marked by the Engineer. This procedure assumes that the manufacturer, the hauler and the Contractor shall maintain consistent production and appropriate storage, handling and shipping practices. Such approval does not preclude subsequent inspection, sampling and/or testing of materials at the job site with acceptance or rejection being predicated on the result of these later procedures.

GC-6.07 STORAGE AND HANDLING OF MATERIALS

(a) Materials shall be so stored as to assure the preservation of their quality and acceptability for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the Work. Stored materials shall be located so as to facilitate their prompt inspection. Approved portions of the right-of-way, easement and/or project site may be used for storage purposes and for the placing of the Contractor's plant and equipment; such storage areas must be restored to their original condition by the Contractor at his/her expense. The Contractor will be required to furnish the appropriate traffic control devices to warn and protect the public. Any additional space required must be provided by the Contractor at his/her expense.

(b) Materials shall be handled in such a manner as to preserve their quality and acceptability for the work. Handling equipment and hauling vehicles shall be so constructed as to prevent loss, contamination or segregation of materials during or after loading.

GC-6.08 UNACCEPTABLE MATERIALS

(a) Materials represented by samples taken and tested in accordance with the specified tests and failing to meet required values shall be considered to be defective regardless of prior tests or approvals.

(b) Unless otherwise allowed by the Engineer as set forth below, defective materials shall be removed from the site with any tags, stamps or other markings implying conformance with Specifications removed or obliterated.

GC - 53

(c) Where defects can be corrected, the Contractor may propose such corrective action, as he/she deems appropriate to the Engineer. The Engineer may approve the corrective action but in so doing does not assume responsibility for the success thereof. Retests will be made at the Contractor's expense to determine the acceptability of the material after corrective measures have been taken. No person other than the Engineer may change any provision of the Specifications or the contract without written authorization. The County reserves the right not to accept damaged materials for use in the Work.

(d) The cost of replacing, correcting, and/or removal of defective material will be the responsibility of the Contractor and the Contractor shall not assert a Claim for an equitable adjustment for this cost.

(e) The cost of repairing or replacing other materials damaged by the installation, correction, and/or removal of defective materials will be the responsibility of the Contractor and the Contractor shall not assert a Claim for an equitable adjustment for this cost.

GC-6.09 MATERIAL FURNISHED BY THE COUNTY

(a) The Contractor shall furnish all materials required to complete the Work, except those specified to be furnished by the County. Materials furnished by the County will be delivered or made available to the Contractor at the point or points specified in the Contract Documents. The cost of handling and placing all materials, after they are delivered to the Contractor, shall be considered as included in the Contract price for the item in connection with which they are used.

(b) The Contractor shall be held responsible for all material delivered to him/her, and deductions will be made from any monies due him/her to make good any shortages and deficiencies, from any cause whatsoever, and for any damage that may occur after such delivery, and for any demurrage charges.

(c) In cases where materials are supplied by the County and incorporated in the Contract Work by the Contractor, materials inspection and acceptance will not be prerequisite for acceptance of the final product as the product pertains to these items.

GC-SECTION 7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

GC-7.01 COMPLIANCE WITH LAWS

The Contractor hereby represents and warrants that:

GC - 54

(a) He/she is qualified to do business in the State of Maryland and that he/she will take such action as, from time to time hereafter, may be necessary to remain so qualified;

(b) He/she is not in arrears with respect to the payment of any monies due and owing the State of Maryland, or the County, or any department or unit thereof, including, but not limited to the payment of taxes and employee benefits, and that he/she shall not become so in arrears during the term of this Contract;

(c) The Contractor shall keep fully informed of all Federal, State, and local laws, ordinances, rules and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. The Contractor shall at all times observe and comply with all such laws, rules, ordinances, regulations, orders and decrees; he shall protect and indemnify the County and its representatives against any such claim or liability arising from or based on the violation of any law, ordinance, regulation, order or decree, whether by Contractor or his/her employees, subcontractors or suppliers and any tier.

(d) All requirements set forth in Federal and State assistance instruments applicable to this Contract shall be satisfied.

GC-7.02 PERMITS AND LICENSES

(a) Except as provided in Section 7.02(b), the Contractor shall procure such permits and licenses as may be necessary in order to comply with Federal, State, County, and local laws, ordinances and regulations in performance of the work. All permits issued by the County will be at no charge. The Contractor will be responsible for securing and paying for all other permits, governmental fees, landfill fees and licenses necessary for the proper execution and completion of the Work. He/she shall further give all notices necessary and incidental to the due and lawful prosecution of the Work, including notification to appropriate code enforcement agencies.

(b) Federal permits from the U.S. Corps of Engineers and/or the Environmental Protection Agency will be obtained by the County, and the Contractor shall comply with the requirements of such permits. Permits required from the Maryland State Highway Administration (SHA) and the Maryland Department of the Environment (MDE) will also be obtained by the County and the Contractor shall comply therewith. However, any permits required by these Federal or State agencies which are not required by the Specifications but are desired by the Contractor for temporary structures or other such uses must be applied for and obtained by the Contractor.

(c) The Contractor will not be permitted to move over or operate on any road (except on the road under construction) any power shovels, rollers, concrete mixers, cranes, tractors or any other heavy equipment of weight or dimensions in excess of Maryland Motor Vehicle Law and regulations without first obtaining all necessary permits.

(d) Soil borings or test pits for soil determination in improved roads are not to be excavated by the Contractor, unless permission is obtained from the Washington County Division of Public Works.

GC-7.03 RESTORATION OF SURFACES OPENED BY PERMIT

(a) The right to construct or reconstruct any utility in the road/street and/or to grant permits for same at any time is hereby reserved by Washington County.

(b) Upon the presentation of a duly authorized and satisfactory permit which provides that all necessary repair work shall be paid for by the party to whom such permit is issued, the Contractor shall allow parties bearing such permits to make openings in the highway.

(c) When ordered by the Engineer, the Contractor shall make all necessary repairs due to such openings in an acceptable manner. If such necessary work is part of this Contract, all costs associated with these repairs shall be borne by the Contractor. If it is determined that the costs for such repairs are not the Contractor's responsibility, they will be paid for as extra work under the appropriate unit price items provided for in the Contract. When no such unit price items are provided in the Contract, the costs shall be determined as set forth in GC-4.06.

GC-7.04 PATENTED DEVICES, MATERIALS AND HEALTH STANDARDS

If the Contractor is required or desires to use any design, device, material, or process covered by letters of patent or copyright, it shall provide for such use by suitable legal agreement with the patentee or owner and a copy of such agreement shall be filed with the County. If such agreement is made or filed as noted, the Contractor and the surety shall indemnify and save harmless the County, any affected third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, materials or process, or any trademark or copyright, and shall indemnify, protect and save harmless the County, its officers, agents and employees with respect to any claim, action, cost, expense, attorney's fees, damages or judgment for patent, trademark or copyright infringement, arising out of purchase or use of materials, construction, supplies, equipment or services covered by this Contract.

GC-7.05 FEDERAL AND/OR STATE PARTICIPATION

When the United States Government and/or the State of Maryland pays all or any portion of the cost of a Project, the Work shall be subject to the inspection of the appropriate federal and/or state agency. Such inspection shall in no sense make the federal and/or state governments a party to this Contract, shall not constitute approval of Work not in conformity with the Contract Documents and will not interfere, in any way, with the rights of either party hereunder.

GC - 56

GC-7.06 CONSTRUCTION SAFETY AND HEALTH STANDARDS

(a) It is a condition of this Contract, and shall be made a condition of each subcontract entered into pursuant to this Contract, that the Contractor and any subcontractor shall not require any laborer or mechanic employed in performance of the Work to work in surroundings or under working conditions that are unsanitary, hazardous, or dangerous to his/her health or safety, as determined under construction safety and health standards and regulations under Federal, State or local law.

(b) The Contractor shall be responsible for posting all appropriate safety notifications such as hard hat requirements, etc.

(c) The Contractor and each subcontractor shall permit inspection without delay and at any reasonable time on any premises where the Work is being performed by a federal or state inspector authorized to investigate compliance with the above-mentioned federal and state statutes and regulations.

(d) The Contractor further agrees to correct any violations found to exist during such inspection within a reasonable time after the issuance of any citation, unless he/she contests the validity thereof through the appropriate administrative and judicial process.

(e) Should the Engineer question the safety of trench shoring(s), he/she may require the Contractor to produce calculations or other supporting documentation and information to satisfy the Engineer's concerns.

GC-7.07 PUBLIC CONVENIENCE AND SAFETY

(a) The Contractor shall at all times conduct the work in such a manner as to ensure the least practicable obstruction to all forms of traffic. Except where required to do so as part of the Contract, he/she shall refrain from disrupting utility operations and service to the least extent reasonable. It shall be provided for the convenience of the general public, tenants and of the residents along and/or adjacent to the improvement.

(b) Equipment and/or materials stored upon the Project shall be placed so as to cause a minimum of obstruction to the public and surrounding operations.

(c) The Contractor shall perform sprinkling or other measure of dust control at the direction of the Engineer.

(d) Unless otherwise specified, the Contractor shall provide and maintain in passable condition such temporary access, roads and bridges as may be necessary to accommodate traffic diverted from the Project under construction, or using the Project under construction and shall provide and maintain in a safe condition temporary approaches to, and crossings of the Project.

GC - 57

October 2008

084

(e) All footways, gutters, sewer inlets, water valves and portions of the project adjoining the work under construction shall not be obstructed more than is absolutely necessary.

(f) In the case of utility projects, the Contractor shall provide and maintain such temporary or existing water lines, wastewater lines, and by-pass systems as may be necessary to continue uninterrupted service.

(g) Existing County facilities planned for removal, but which might be of service to the public during construction are not to be disturbed until other and adequate provisions are made. Existing mailboxes shall be maintained or reset in positions accessible to the public and to mail deliveries during construction and subsequent to construction in their final locations in a satisfactory condition.

(h) On County facilities occupied by railroad tracks, temporary platforms for the entrance and exit of passengers to and from the railway cars shall be provided and maintained in an approved manner by the Contractor.

(i) With the exception of fire hydrants marked out-of-service, fire hydrants on or adjacent to the project shall be kept accessible to fire apparatus at all times, and no material or obstruction shall be placed within fifteen (15) feet of any such hydrant. Work closed down for the winter or at any other times shall be left entirely accessible at all points to fire apparatus.

(j) Where the construction lies within rights-of-way, the County has or will obtain permission from the owner of the property to occupy, during construction, Temporary Easements outside the limits of the rights-of-way as shown on the drawings. The Contractor shall not move any equipment or materials in the rights-of-way or Temporary Easements and shall not commence any clearing within rights-of-way until authorized to do so by the Engineer.

(k) Should the Contractor require any temporary easements beyond those shown on the drawings, it shall be his/her obligation to obtain it. Such acquisition shall be in writing and at the Contractor's expense and shall require the Engineer's approval.

GC-7.08 MAINTENANCE OF TRAFFIC

(a) The purpose of this section of the General Conditions is to provide for the safe and continuous maintenance of traffic (both vehicular and pedestrian) through the project site and to minimize accidents and accident severity while at the same time minimizing inconvenience to the traveling public and the Contractor.

(b) The Contractor will be required to adhere to the Traffic Control Plans, and to the Maryland Manual on Uniform Traffic Control Devices (MMUTCD), latest edition at the time of design. In lieu of complying with the above, the Contractor has the option of preparing and submitting a Traffic Control Plan (TCP) of his/her own design. The TCP developed by the Contractor may not be employed until it is approved, in writing, by the Deputy Director.

GC - 58

October 2008

085

(c) The Contractor shall perform all maintenance of traffic work in accordance with the approved Traffic Control Plan (TCP) where applicable, MMUTCD, and Special Provisions to the Contract together with Section 104 of the SHA Standard Specifications for Construction and Materials.

(d) All provisions and methods for maintaining traffic shall comply with the requirements of the Manual of Uniform Traffic Control Devices (MMUTCD), current edition. Also, all materials, devices and flagging procedures shall conform to the requirements of MMUTCD. The Contractor shall provide, maintain in first class condition, and move when necessary and/or directed, all traffic control devices used for the guidance and protection of vehicles.

(e) Traffic must be maintained at all times through the entire length of the Project, and travel lane(s) of the Road may be closed with the approval of the Deputy Director of Public Works (Capital Projects) and/or the SHA District Engineer.

(f) The Contractor shall provide a sufficient number of flagmen and take all necessary precautions for the protection of the Work and safety of the public, all as indicated in the MMUTCD.

(g) Marking for Work Areas.

(1) All existing and new signs that may cause driver confusion during various stages of construction shall be removed, covered, or altered subject to the approval of the Engineer.

(2) All existing and new pavement markings that may cause driver confusion during various stages of construction may be removed by any method that the Engineer approves, provided that they are removed and not painted over.

(3) The entire signing and marking procedures shall be reviewed by the Engineer prior to its initiation and shall not be utilized until approved by the Engineer.

(4) No temporary paint striping will be permitted. The Contractor will be required to furnish, install and maintain temporary pavement marking tape which shall delineate lane configuration through each stage of construction.

(5) Pavement marking tape used on this project shall be a type similar to "Scotchlane Highway Grade" for temporary pavement marking or approved equal. The Engineer will determine which tape is to be used for each stage of construction and may limit the Contractor to a specific type at his/her discretion.

(6) The Contractor will continually monitor the condition of the tape and shall direct the immediate removal and replacement of any tape which becomes deteriorated under the use of traffic. The Contractor will be responsible to install the tape in accordance with manufacturer's specifications, and will continually monitor the condition, of the tape. Except in

GC - 59

emergency situations, he/she shall notify the Engineer to approve the immediate removal and replacement of any tape that becomes deteriorated under the use of traffic. Manufacturer's specifications for tape installation shall be submitted to the Engineer for his/her approval.

(7) All pavement markings used shall be temporary and removable along points of traffic lane shifts and detours caused by construction activities. All such markings shall be placed at the time traffic patterns are actually altered and promptly removed at such time traffic patterns are restored to normal lines.

(h) Signs on Windmaster-type sign supports within the limits of the work zone shall be mounted in such manner that the bottom of the sign is at least one foot off the ground.

(i) The channelization devices shall be a minimum of Type II barricades or plastic reflective drums with Type C steady burn lights (2 faces) attached to the inner barricades. The first barricade in either direction a Type "A" low intensity flashing light (2 faces) will have attached to it. All Type III barricades will have 2 Type "A" low intensity flashing lights attached to them.

(j) Traffic cones used in Work areas shall be a minimum of 28" in height with the predominant color being orange in accordance with the MMUTCD. The County will not accept improvisations. Nighttime use of traffic cones shall require two (2) white reflective sleeves 6" on top, 4" on bottom with 2" of separation.

(k) No equipment or materials shall be stored or permitted to stand unprotected where traffic is maintained, or where they would restrict adequate intersection sight distance. At the conclusion of each working day, the Contractor shall store all equipment and materials in protected areas (behind traffic barriers) or remove them to a minimum distance of 30 feet from where traffic is maintained.

(1) Any earth or surfacing material that may be dropped on the surface where traffic is being maintained shall be removed immediately to avoid creating a slippery or hazardous condition.

(m) The Contractor will be required to designate a traffic manager prior to any work being done. The traffic manager will be responsible for the proper implementation of the TCP and for maintaining a regular surveillance over all aspects of traffic control and safety.

(n) The cost of maintenance of traffic shall be included in the appropriate lump sum and unit prices bid. Where no unit prices or lump sum items are provided, the cost will deemed incidental to the project and is to be provided for in other items in the contract. This would include all costs associated with the maintenance of traffic including, but not limited to, the furnishing, placement, maintenance, removal, related labor, tools, equipment and incidentals such as lights, cones, flags, vests, flaggers, traffic manager, and temporary traffic signs, etc.

(o) Unless otherwise expressly stated within the written provisions of the Contract, the Contractor will be permitted to work with the appropriate traffic control and appurtenances

GC - 60

normal working hours with the following exceptions: there will be no work allowed that requires a traffic lane to be closed between the hours of 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m., unless the Engineer grants written permission. Lane closure is strictly prohibited within three days prior to or following a County Holiday. Also, full traffic capacity must be restored at the end of each workday, unless approved by the Engineer. See also GC-1.03 – Holidays.

(**p**) The County reserves the right to modify or explain the methods of traffic control specified herein and to restrict the working hours if, in the opinion of the Engineer, the Contractor's operations are a detriment to traffic.

(q) Failure to comply with this section will result in an immediate order to stop work at no expense to the County.

GC-7.09 MAINTENANCE OF TRAFFIC FOR PRIVATE AND COMMERCIAL PROPERTIES

(a) The County has obtained various permits, rights-of-way, and construction easements along the line of work as indicated on the Drawings. The Contractor will schedule his/her work so as to cause the least amount of inconvenience to commercial and private properties. Where such properties have more than one entrance to the establishment, the Contractor may close one entrance to the establishment with the approval of the Engineer. Work on the second entrance shall not proceed until the first closed entrance is fully completed, all trenches are capped with crusher run and two (2) inches of cold patch material, and the entrance is opened to traffic. At locations where only one entrance exists, the Contractor will confine his/her work to not more than one-half (1/2) of the entrance. The Contractor will bring the first half to completion before work continues through the remainder of the entrance. The Contractor will maintain at all times continuous vehicular ingress and egress to commercial properties.

(b) Once work is started through a private driveway or entrance, the Contractor will be required to complete the work before ending operations for the day, unless otherwise approved by the Engineer in writing. Unless the Contractor has submitted to the Engineer written approval from the property owner, private driveways or entrances shall not remain closed overnight. Written approval must be provided to the Engineer prior to commencement of work through the driveway or entrance.

(c) There will not be any measurement and payment for this item; the cost will be included in the unit prices Bid for other appropriate Bid Items and considered incidental to the contract.

GC - 61

GC-7.10 ACCESS TO RAILROAD RIGHTS-OF-WAY

(a) **County's Responsibilities** – Where the contractor is required to perform work within the rights-of-way of any railroad, the County has made arrangements with that railroad authority for written approval.

(b) **Contractor's Responsibilities** – Where the Contractor desires to enter onto railroad property or establish a temporary crossing of the railroad property for his/her own convenience and operation, the Contractor shall make his/her own arrangements with the railroad and provide written approval from the railroad authority for the use of any private crossing.

All work on portions of structures over railroad rights-of-way shall conform to all rules and regulations of the owners of the rights-of-way. The Contractor is hereby made responsible for acquiring full knowledge of these rules and regulations and complying therewith with the satisfaction of the owners of the railroad rights-of-way. Where the County has entered into a license agreement or other written arrangement with the railroad authority pertaining to work within the railroad's right-of-way, the Contractor acknowledges the terms and conditions of the agreement and agrees to be bound by these terms and conditions as if fully set forth herein.

(c) Coordination of Work – All work to be performed by the Contractor within the railroad right-of-way shall be done in a manner satisfactory to the railroad company and shall be performed at such times and in such manner as not to unnecessarily interfere with the movement of trains or traffic upon the track of the railroad company. The Contractor shall exercise all care and precaution in order to avoid accidents, damage, unnecessary delay or interference with the railroad company's trains or other property, and the Contractor shall indemnify and hold harmless the County for the Contractor's failure to exercise such care and precaution.

(d) Insurance Requirements – Prospective Bidders on contracts crossing railroad rights-of-way are advised that the Contractor will be required to obtain, pay for and have approved by the railroad, certain broad forms of public liability and property damage insurance policies as set forth in the Special Provisions, before entering upon the railroad property. In situations where the Contractor requires access to railroad property for convenience, the Contractor shall communicate directly with the railroad authority for written approval. As a general rule, details of such policies are set forth in the Special Provisions; but in the event of an omission from the Special Provisions, the Contractor shall communicate directly with the railroad authority so as to ascertain type of insurance required, if any, and make provisions for same in the proposal.

Unless otherwise provided in the Proposal, costs of insurance policies whether described in the Special Provisions or ascertained by the Contractor will not be provided for in any special item and the cost shall be considered incidental to the several items set forth in the proposal.

GC - 62

GC-7.11 PRESERVATION AND RESTORATION OF PROPERTY

(a) The Contractor shall not enter upon public or private property (outside of the right-of-way or construction easement) for any purpose without obtaining written permission and he/she shall be responsible for the preservation of all public and private property, trees, monuments, signs and markers and fences thereon, and shall use every precaution necessary to prevent damage or injury thereto.

(b) All County signs and markers that are affected by the Work shall be carefully removed when grading operations begin and delivered to the Engineer or stored and protected on-site. The Contractor shall take suitable precautions to prevent damage to underground or overhead public utility structures; shall protect carefully from disturbances or damages all land monuments and property markers until the Engineer has referenced their location; and shall replace them as directed by the Engineer.

(c) The Contractor shall be responsible for all damage or injury to property of any character during the prosecution of the work, resulting from any act, omission, neglect or misconduct in his/her manner or method of executing the Work, or at any time due to defective work or materials, and the responsibility shall not be released until the Work shall have been completed and accepted. When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect or misconduct in the execution of the Work or in consequence of the non-execution thereof on the part of the Contractor, he/she shall restore, at his/her own expense, such property to a condition similar to, or equal to, that existing before such damage or injury, in an acceptable manner. In case of the failure on the part of the Contractor to restore such property or make good such damage or injury, the Engineer may, upon 48 hours notice, proceed to repair, rebuild or otherwise restore such property as may be deemed necessary and the cost thereof will be deducted from any monies due or which may become due the Contractor under this Contract.

(d) **Protection of Geodetic Control Monuments** – It shall be the Contractor's responsibility to protect all geodetic monuments within the limits of Work. The Contractor shall carefully protect all geodetic control monuments from disturbance or damage until such time as the Washington County Engineering Department has referenced or relocated the monuments. All geodetic control monuments damaged or disturbed by the Contractor shall be replaced by the County at the Contractor's expense. The Contractor shall coordinate the preservation of all geodetic control monuments with the Washington County Engineering Department.

(e) **Protection of Property Corners** – All property corners not shown on the drawings that are encountered by the Contractor during the course of construction shall be protected from disturbance or damage until the Engineer has referenced their locations. All property corners shown on the plans that are disturbed or damaged by the Contractor shall be reestablished by a licensed surveyor at the Contractor's expense. Any property corners found during the course of construction which were not shown on the drawings, shall be replaced by the County if disturbed during construction.

GC - 63

(f) **Discovery of Historical Objects** – Whenever historical objects and burial sites of archaeological or paleontological value are encountered during the course of construction, such objects shall not be disturbed. Work shall be stopped and rescheduled in such a manner as to avoid the objects and the Engineer notified, immediately. The Engineer will arrange for an evaluation by the appropriate authorities and for the ultimate disposition of the objects.

(g) **Protection of Existing Landscape Features** – Special attention shall be given to the landscape features of the Work and special care taken to protect the natural surroundings unless otherwise noted on the Drawings. The Contractor shall not disturb, damage, destroy, remove or cut trees or shrubs without authorization. The roots of trees or shrubbery which are not to be cleared, shall not be cut and no heavy equipment of any type shall be allowed to stand under such trees or shrubbery.

(h) **Removal of Trees, Roots and Stumps** – Selected trees within the right-of-way or construction easement, which in the opinion of the Engineer can be saved, shall be protected by the Contactor with boards or planks so that they will not be defaced, bruised, or damaged by the Contractor's equipment or operations. Unless otherwise indicated in the Contract Documents, all trees may be felled in the rights-of-way, utility or drainage easements and construction easements. Trees marked on the Drawings to be protected in the right-of-way or construction easement shall be protected in the manner described above. Stumps, roots, branches and other debris shall be removed from the site unless otherwise noted or directed by the Engineer.

GC-7.12 LAND, AIR AND WATER POLLUTION

(a) The Contractor shall incorporate all permanent sediment and erosion control features into the Work at the earliest practicable time as required by the Contract Documents. Temporary pollution control measures will be used by the Contractor to correct conditions that develop during construction that were not foreseen during design; that are needed prior to installation of permanent pollution control features; or that are needed temporarily to control erosion that develops during normal construction practices, but are not associated with permanent control features on the Project.

(b) The Contractor's attention is directed to the fact that temporary pollution control may include control measures outside the right-of-way or project site where such work is necessary as a direct result of project construction. The Engineer shall be kept advised of all such off-site control measures taken by the Contractor. This shall not relieve the Contractor of the basic responsibilities for such work.

(c) In case of failure on the part of the Contractor to control erosion, pollution, or siltation, the Engineer reserves the right to employ outside assistance or to use his/her own forces to provide the necessary corrective measures. All expenses incurred by the Engineer or the County in the performances of such duties for the Contractor will be the responsibility of the Contractor and may be withheld from monies due to the Contractor. The Contractor will be liable for fines and penalties imposed on the County as a result of his failure to maintain pollution control as set forth in the Contract Documents.

GC - 64

(d) Contractors and suppliers must submit evidence to the County that the governing Federal, State, and local air pollution criteria will be met. This evidence and related documents will be retained by the County for on-site evaluation.

GC-7.13 INDEMNIFICATION AND INSURANCE

(a) Indemnification

(1) The Contractor shall be responsible for all damage to life and property due to his/her activities or those of his/her subcontractors, agents or employees in connection with the services required under this contract.

Further, to the extent permitted by law, the Contractor shall indemnify, defend and hold harmless the County, its officials, agents, employees, successors and assigns against and with respect to any and all losses, damages, suits, claims, judgments and expenses whatsoever ("losses"), including without limitation cost of investigation, litigation and attorney's fees, arising directly or indirectly from performance of this contract by the Contractor, his/her officers, employees, agents, or subcontractors, or otherwise arising directly or indirectly from the work, except only when such losses are attributable to and proximately caused by the negligence of the County or its officials, employees or agents with no negligence on the part of the Contractor, his/her officers, employees, agents or subcontractors. The foregoing shall apply, without limitation, to losses of all types including destruction or degradation of the environment and all clean-up costs, fines, penalties and other pollution-related items. This indemnification is not to be deemed as a waiver of any immunity, which may exist in any action against Washington County, MD.

(2) In any and all claims against the County or any of its agents or employees or any employee of the Contractor, or any subcontractor, or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under subsection 1 above shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under workers' compensation laws, disability benefits acts, or other employee benefits.

(3) Unless otherwise stated within this Agreement, any property or work to be provided by the Contractor under this Contract will remain at the Contractor's risk until written acceptance by the County. Until that time, the Contractor will replace, at Contractor's expense, all property or work damaged or destroyed by any cause whatsoever.

(4) The Contractor shall not disclose any work product created by the Contractor under this Contract to any other parties except as may be authorized in writing by the County as required or permitted by public law.

GC - 65

(5) The Contractor shall be considered for all purposes of this Agreement as an independent contractor, shall not be an agent of the County and shall have no right or authority to enter into any agreements or otherwise bind the County or create any obligations on behalf of the County with other parties whatsoever.

(b) Insurance Requirements

(1) **Certificate(s) of Insurance.** The Contractor shall not commence work under the Contract until satisfactory evidence of all required coverage is received by the County. The Contractor shall provide certificates of insurance requiring a 30 day notice of cancellation to the Board of County Commissioners of Washington County in care of the Risk Management Administrator prior to the start of the applicable project.

Approval of the insurance by the County shall not in any way relieve or decrease the liability of the Contractor. It is expressly understood that the County does not in any way represent that the specified limits of liability or coverage or policy forms are sufficient or adequate to protect the interest or liabilities of the Contractor.

All responsibility for payment of any sums resulting from any deductible provisions, corridor, or self-insured retention conditions of the policy or policies shall remain with the Contractor.

(2) Further, the Contractor shall not reduce or cancel or change any of the required insurance coverage without 30 days notice of such change to the Board of County Commissioners of Washington County in care of the Risk Management. Failure to maintain required insurance shall be viewed as a material breach of the Contract by the Contractor.

(3) Insurance Coverage Required

Unless otherwise stated in the Special Provisions, the Contractor shall purchase and maintain, at his/her expense until final acceptance of the work by the County, insurance as hereinafter enumerated in policies written by insurance companies admitted in the State of Maryland, having an A.M. Best rating of 'A' or better or its equivalent, and acceptable to the County:

(A) Workers' Compensation – The Contractor agrees to comply with Workers Compensation laws of the State of Maryland and to maintain a Workers Compensation and Employers Liability Policy. <u>Minimum Limits Required</u>:

- (1) Workers Compensation Statutory
- (2) Employers Liability \$100,000 (Each Accident) \$150,000 (Disease - Policy Limit) \$100,000 (Disease - Each Employee)

GC - 66

(B) Comprehensive General Liability Insurance – The Contractor shall provide Comprehensive General Liability including Products and Completed Operations. <u>Minimum Limits Required</u>: \$1,000,000 combined single limit for Bodily Injury and Property Damage.

Such insurance shall protect the County, its agents, elected and appointed officials, commission members and employees, and name Washington County on the policy as additional insured against liability, loss or expense due to damaged property (including loss of use), injury or death of any person or persons and for care and loss of services arising in any way, out of, or in connection with or resulting from the work or services performed on behalf of Washington County.

The Contractor is ultimately responsible that Subcontractors, if subcontracting is authorized, procure and maintain, at their sole expense and until final acceptance of the work by the County, insurance as hereinafter enumerated in policies written by insurance companies admitted in the State of Maryland, having an A.M. Best rating of 'A' or better or its equivalent, and acceptable to the County.

(C) Business Automobile Liability – The Contractor shall provide Business Auto Liability including coverage for all leased, owned, nonowned and hired vehicles. <u>Minimum Limits Required</u>: \$1,000,000 combined single limit for Bodily Injury or Property Damage.

(D) General Indemnity – The Contractor shall indemnify, defend and save harmless the Board of County Commissioners of Washington County, its appointed or elected officials, commission members, employees and agents for any and all suits, legal actions, administrative proceedings, claims, demands, damages, liabilities, interest, attorneys fees, costs and expenses of whatsoever kind of nature, whether arising before or after final acceptance and in any manner directly or indirectly caused, occasioned or contributed to in whole or in part by reason of any act, error or omission, fault or negligence whether active or passive by the Contractor, or any one acting under his/her direction, control or on his/her behalf in connection with or incident to his/her performance of the Contract.

(E) Builder's Risk Insurance – The Contractor shall provide Builder's Risk Insurance with a limit of coverage equal to the construction cost on a replacement cost basis and written on an all-risk policy form. Insurance shall be maintained until the <u>entire project</u> is fully and finally accepted by the County. The Builder's Risk Policy shall include the County as an additional insured.

GC - 67

- (1) The County is not responsible for any damage or loss of materials stored on or within County-owned facilities. The Contractor shall provide necessary insurance coverage for such losses or shall assume full risk for replacement cost for his/her own materials and those of all subcontractors.
- (2) If the Contract includes the installation of a boiler or heating, ventilating or air conditional equipment, the Contractor shall purchase and maintain from the point of delivery of such equipment onto the site until the project is accepted by the County, a Boiler and Machinery Insurance policy at a limit of not less than the purchase price of such equipment, covering all equipment not covered by the Builders' Risk Insurance described in 'E' before.

(4) **Professional Liability Insurance.** IF ANY ARCHITECTURAL, ENGINEERING, DESIGN, INSPECTION OR PLANNING SERVICES ARE RENDERED, INCLUDING APPROVAL OF SUCH ACTIVITIES OF OTHERS, the following insurance is also required: Professional Liability/Errors and Omissions coverage appropriate to the profession with limits of at least \$1,000,000.00 per occurrence. Such coverage shall contain a retroactive date not later than the effective date of the Consultant's services in relation to this Agreement and shall contain, an agreement to maintain identical insurance, covering incidents occurring or claims made, for a period of three (3) years after substantial completion of the project.

GC-7.14 USE AND POSSESSION PRIOR TO COMPLETION

(a) The County shall have the right to take possession of or use any completed or partially completed part of the Work. Such possession of or use shall not be deemed an acceptance of any work not completed in accordance with the Contract. While the County is in possession, the Contractor shall be relieved of the responsibility for loss or damage to that portion of the work in possession of the County, other than that resulting from the Contractor's fault or negligence. If such prior possession or use by the County will delay the progress of the work or causes additional expense to the Contractor, the Contractor shall proceed in accordance with GC-4.06 for an equitable adjustment.

(b) At the option of the Engineer, certain completed sections of the work may be opened to traffic or made available for use. In such cases, the completed section will be inspected, tentatively accepted in writing, and the same turned over to the County for maintenance. Such action shall not in any way be construed as Final Acceptance of the Work, or any part of it. No such action shall be construed as a waiver of any of the provisions of these Specifications or the Contract. Upon written authorization by the Engineer, the Contractor may open the Road to traffic and will be relieved of further maintenance of barriers and lights on that portion of the Road.

GC - 68

(c) In the event that the Contractor, with written authorization from the Engineer, suspends work for prolonged periods of time, as a result of winter weather or other reasons, the County, upon written notification by the Engineer, may open a section or sections of a Road in advance of completion or in advance of the Contractor turning the section or sections over to the County for maintenance. Such actions may be taken either for the convenience of the traveling public, or during the winter season, while the work is suspended. The Contractor shall restore the shoulder areas, surfacing, or any portion of the Work which might be disturbed or damaged by use. The restoration work shall be performed at the respective contract unit prices for the items involved. Where unit prices have not been provided for, the work shall be performed in accordance with GC-4.06.

(d) Builder's Risk Insurance – The Contractor shall provide "All Risks" Builder's Risk Insurance on the Project, as provided in GC-7.13.

GC-7.15 CONTRACTOR'S RESPONSIBILITY FOR WORK

(a) Except as otherwise provided in the Contract Documents, until Final Acceptance, the Contractor shall have the charge and care of the Work and shall take every reasonable precaution against injury or damage to any part of the Work or other property by the action of the elements, or from any other cause, whether rising from the execution or from the non-execution of the Work. The Contractor, except as herein elsewhere provided, shall rebuild, repair, restore, and make good all injuries or damages to any portion of the Work or other property occasioned by any of the above causes before Final Acceptance and shall bear the expense thereof. Material lost or structures damaged as a result of faulty temporary drainage during construction or the action of the elements shall be replaced or repaired by the Contractor at no cost to the County. The Contractor shall make good or replace at his/her own expense and as required any County furnished material which may be broken, lost through fire, theft or otherwise damaged, or in any way made useless for the purpose and use intended subsequent to delivery to the Contractor by the County and prior to Final Acceptance of the Work even though such breakage, damage, loss, or uselessness may result from causes beyond the control of the Contractor.

(b) In case of suspension of the Work for any cause whatever, the Contractor shall be responsible for the Project and shall take such precautions as may be necessary to prevent damage to the Work, provide for normal drainage and shall erect any necessary temporary structures, signs, or other facilities at his/her expense. During such period of suspension of Work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established plantings, seeding and sodding furnished under this Contract, and shall take adequate precautions to protect new growth and other important vegetative growth against injury.

(c) The Contractor shall be responsible to the County for the acts and omissions of all his/her employees and all Subcontractors, their agents and employees and all other persons performing any of the Work under a contract with the Contractor.

(d) The Contractor shall supervise and direct the Work, using his/her best skill and attention. It shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract Documents.

GC-7.16 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES

(a) At points where the Contractor's operations are adjacent to properties of railway, telegraph, telephone and power companies, public/private utilities, or are adjacent to other property, damage to which might result in expense, loss or inconvenience, the Contractor shall not commence work until he/she has made all arrangements necessary for the protection thereof.

(b) The Contractor shall cooperate with the owners of any underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable manner, that duplication or rearrangement work may be reduced to a minimum and that services rendered by those parties will not be unnecessarily interrupted.

(c) In the event of interruption to utility services as a result of accidental breakage or as a result of being exposed or unsupported, the Contractor shall promptly notify the proper authority and shall cooperate with the said authority in the restoration of service. No work shall be undertaken around fire hydrants until provisions for continued service have been approved by the Washington County Division of Emergency Services and the utility owner.

GC-7.17 PERSONAL LIABILITY OF PUBLIC OFFICIALS

In carrying out any of the provisions of the Contract Documents, or in exercising any power or authority granted by the County to the Engineer and other authorized representatives by or within the scope of the Contract Documents, there shall be no liability upon the County's authorized representatives either personally or as officials of the County, it being understood that in all such matters they act solely as agents and representatives of the County.

GC-7.18 NOTICES AND WAIVER OF LEGAL RIGHTS

(a) The County shall not be precluded or stopped by any measurement, estimate, or certificate made either before or after completion and acceptance of the Work payment therefore, from showing the true amount and character of the Work, nor from showing that any such measurement, estimate, or certificate is untrue or is incorrectly made, nor from showing that the Work does not in fact conform to the Contract Documents. The County shall not be precluded or stopped, notwithstanding any such measurement, estimate or certificate and payment in accordance therewith, from recovering from the Contractor or the surety, or both, such damage as it may sustain by reason of the Contractor's failure to comply with the terms of the Contract Documents. Neither the acceptance by the County, or any representative of the County, nor any

GC - 70

payment for or acceptance of the whole or any part of the Work, nor any extension of time, nor any possession taken by the County, shall operate as a waiver of any portion of the Contract Documents or of any power herein reserved, or of any right to damages.

(b) A failure to provide a required notice or to submit a claim or appeal within the time prescribed in the Contract Documents shall operate as a waiver of any such claim regardless of whether the County incurred or demonstrates any prejudice by the failure to give such notice or to submit such claim or appeal.

(c) The waiver of any breach of the Contract Documents shall not be held to be a waiver of any other or subsequent breach. Any waiver by the County of a requirement of the Contract Documents, including without limitation a requirement that a notice be made in writing or a submission be made within a certain time, shall not operate as a waiver of the same or any other requirement of the Contract Documents in any other circumstance or at any other time. The County need not incur or demonstrate prejudice in order to assert that a waiver of the Contractor's rights or claims results from the Contractor's failure to comply with any provision of the Contract Documents when the Contract Documents provide for such waiver of any right or claim.

GC-7.19 CHOICE OF LAW, FORUM

The Parties hereby agree that:

(a) This Contract was made and entered into in Maryland, and under the laws of Maryland.

(b) The law of Maryland (exclusive of its choice of laws rules) shall govern the resolution of any issue arising in connection with this Contract, including, but not limited to, all questions concerning the validity of this Contract, the capacity of the parties to enter therein; any modification or amendment thereto; and the rights and obligations of the parties hereunder.

(c) The exclusive venue and jurisdiction for any litigation arising out of or related to the Contract Documents is the Circuit Court for Washington County, Maryland. Prior to commencing litigation, the Contractor must exhaust all remedies and appeals applicable to the claim or dispute as provided in the Contract Documents as a condition precedent to proceeding with litigation. The Contractor's failure to exhaust all remedies and appeals applicable to the claim or dispute will operate as a waiver of said claim or dispute and will forever bar said claim or dispute, regardless of whether the County incurred or demonstrates any prejudice by the failure to exhaust the remedies and appeals.

(d) Notwithstanding anything in these General Conditions to the contrary, all appeals or litigation arising out of or related to the Contract Documents must be commenced within fourteen (14) calendar days after the County's final decision giving rise to the Contractor's claim. The failure of the Contractor to timely file any appeal or litigation shall forever bar and waive the claim regardless of whether the County incurred or demonstrates any prejudice resulting from the Contractor's failure to timely file the appeal or litigation.

GC - 71

GC-7.20 AUDIT AND RETENTION OF RECORDS

(a) The Contractor and his/her subcontractors and suppliers at any tier shall retain and maintain all records and documents relating to this Contract, including, but not limited to, estimates, cost or pricing data, payrolls, reports and inspections, relating to this Contract for three years after Final Acceptance, and shall make such documents available for inspection and audit by authorized representatives of the County, including the Engineer or his/her designee, at all reasonable times, including during the time of performance of the Contract as may be necessary for any purpose including pricing and cost verification of any Contractor claim.

(b) In the event the County or the Contractor initiates a claim, Contractor and his/her subcontractors or suppliers at any tier shall retain the records set forth in (a) above until the expiration of the aforesaid three-year period or until final, non-appealable resolution of the claim, which ever is later.

(c) The Contractor shall include the provisions of paragraph (a) in every subcontract for the Work.

(d) If Contractor, or his/her subcontractors or suppliers, fail to retain the records set forth herein for the period of time required by this Section, Contractor shall not be entitled to any damages, compensation or equitable adjustment (including time extensions) for any claims based upon information available from or which might be verified by records that have not been retained.

GC-7.21 USE OF EXPLOSIVES

(a) The use of explosives will not be permitted adjacent to or on any existing structures unless authorized in writing by the Engineer. When the use of explosives is permitted, the Contractor shall use the utmost care so as not to endanger life or property. He/she shall exercise extreme caution with the number and size of the charges. The Contractor shall provide for the safeguarding of the traveling public and adjacent properties while using explosives. Such precautions shall include, but not be limited to, a sufficient number of watchpersons, flag persons, signs, etc., to warn motorists during periods of blasting. All explosives shall be stored in a secure manner, and all such storage places shall be marked clearly – "Dangerous Explosives"- and shall be in care of competent watchpersons at all times. Explosives shall be stored and handled in conformity with the provisions of the statutes of the State of Maryland and local laws and ordinances.

(b) Notifications – The Contractor shall notify each public utility company having structures in proximity to the site of the Work of his/her intention to use explosives, and such notice shall be given sufficiently in advance to enable the companies to take such steps as they may deem necessary to protect their property from damage. Such notice shall not relieve the Contractor of his/her responsibility for any damage resulting from his/her blasting operations. The Contractor shall notify the Engineer of his/her intention to use explosives, in sufficient time for that agency to schedule its operations.

GC - 72

(c) Licensed Employees – Expert powder men licensed by the State Fire Marshall or authority having jurisdiction shall be employed by the Contractor for the handling and use of explosives, and all their work shall conform to the requirements of the State Fire Marshall. The authorization by the Engineer for the use of explosives shall not relieve the Contractor of his/her full responsibility for damages that may occur.

GC-SECTION 8 PROSECUTION AND PROGRESS

GC-8.01 SUBCONTRACTING

(a) All subcontractors are subject to the County's written approval as specified in Section GC-2.19 BID EVALUATION AND AWARD.

(b) The Contractor shall incorporate by reference or otherwise include these General Conditions in every subcontract issued pursuant to or under the Contract.

(c) The Subcontractors who are named by the Contractor subsequent to the Bid opening and approved by the County and those approved when subsequently submitted shall perform the portions of the Work for which approval has been given by the County. Requests for permission to sublet, assign or otherwise dispose of any portion of the Contract shall be in writing and include the item number or numbers, the dollar value, and the percentage of the original contract value. Each request for permission to sublet, assign or otherwise dispose of any portion of the Contract must be accompanied by written consent from the Contractor's Surety. The Contractor shall give assurance that the minimum wage for labor, as stated in his/her Bid, shall apply to labor performed on all work sublet, assigned or otherwise disposed of in any way.

(d) The County will not approve subletting portions of items except in the case of specialty items such as the erection of structural steel, painting, or such portions of items that are distinct and identifiable and that have been approved by the Engineer.

(e) Once a Subcontractor has been approved by the County and Surety for the performance of certain contract items of Work, the Contractor shall not substitute another Subcontractor, unless the Contractor requests a change in writing giving the reasons the change is sought and the substitute proposed. If a Subcontractor does not perform to the satisfaction of the Contractor, the Contractor may perform the Work with his/her own forces or request that another Subcontractor, mentioned by name, be substituted. The County will approve the change if the County determines that the change is in the best interest of the County.

(f) Roadside production of materials shall be considered as "subcontracting", unless performed by the Contractor. This is construed to include the production of crushed stone, gravel and/or other materials by means of portable or semi-portable crushing, screening or

GC - 73

washing plants, established or reopened in the vicinity of the Work, for the purpose of supplying materials to be incorporated into the Work on a designated project or projects.

(g) Anti-Kickback Regulations

(1) The Anti-Kickback Regulations issued by any department, agency, or branch of the federal, state or local government are applicable to this Contract. The Contractor shall comply with these regulations, and any amendments or modifications thereof and shall cause appropriate provisions to be inserted in subcontracts to ensure compliance therewith by all Subcontractors, and shall be responsible thereunder, except as the applicable department, agency, or branch may specifically provide for reasonable limitations, variations, tolerances and exemptions from the requirements thereof. In lieu of mailing affidavits required by the Anti-Kickback Regulations to the department, agency, or branch furnishing financial aid on this Project, the Contractor shall submit all such affidavits promptly, as specified, to the County or to a representative designated by the County.

(2) The County, or its representative, may withhold or cause to be withheld from the Contractor so much of the accrued payments or advance as may be considered necessary to pay laborers and mechanics employed by the Contractor or any Subcontractor on the work the full amount of wages to which they are entitled under their contracts of employment. In the event of failure to pay any laborer or mechanic employed or working on the site of the Work, all or part of the wage to which he/she is entitled under this contract of employment, the County, or its representative, may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payroll records shall contain the information and be preserved as required by the Anti-Kickback Regulations. The Contractor shall make his/her employment records available for inspection by authorized representatives of any federal, state, or local government and shall permit such representatives to interview employees during working hours on the job.

(4) The Contractor shall insert in each of his/her subcontracts the provisions set forth in the foregoing clauses and such other stipulations as any federal, state, or local government may require by appropriate instructions.

(5) A breach of stipulations (1) through (4) may be grounds for termination of the Contract.

(h) The Contractor shall not require as a condition to any executed agreement to provide labor and/or materials to the Project, that a Subcontractor waive the right to sue on or collect from the Payment Bond. The Contractor shall prohibit his/her Subcontractor from requiring, as a condition to any executed agreement to provide labor and/or materials to the Project, that any lower tier Subcontractor waive the right to sue on or collect from any Subcontractor's bond and/or the Payment Bond. The parties expressly intend for all Subcontractors to be third party beneficiaries of this subsection and all Subcontractors can enforce this provision in any appropriate proceedings.

GC - 74

GC-8.02 NOTICE TO PROCEED

After the Contract has been executed, the County will issue to the Contractor a "Notice to Proceed," which will stipulate when the Contractor is expected to begin work. The specified Contract Time shall begin on the date stipulated in the Notice to Proceed or, if an earlier start is authorized in the Notice to Proceed, on the day work (other than the erection of the inspection office, construction stakeouts, and/or mobilization) actually starts. Work done prior to receipt of the Notice to Proceed, including erection of traffic control, is unauthorized and may not be measured, inspected, or paid for.

GC-8.03 PROSECUTION OF THE WORK – COMMENCEMENT – TIME

(a) The Contractor shall begin work promptly within the time specified by the Engineer and shall notify the Engineer at least five (5) days before starting work.

(b) After commencing work, the Contractor shall prosecute the Work continuously on all acceptable days without stoppage until Final Acceptance.

(c) Should the prosecution of the Work for any reason be discontinued, the Contractor shall notify the Engineer of his/her intention to stop and shall also notify the Engineer at least 24 hours in advance of resuming operations. Said notification shall be confirmed in writing.

(d) The Contractor shall do all the work and furnish all the labor, materials, tools and appliances necessary or proper for performing the Work, in the manner called for by the Contract Documents within the Contract Time; except such as are hereinafter specified as being furnished by the County. He/she shall complete the entire Work, including any work included in Change Orders, at the prices established therefore, to the satisfaction of the Engineer, in accordance with the Contract Documents.

(e) The Contractor shall complete the Work contracted for in an acceptable manner within the number of working days or calendar days as stated in the Contract Documents.

(f) In the unusual event that a Contract is based on Working Days, the Engineer will make available each week to the Contractor a record showing the number of days charged to the Contract for the preceding week and the number of days specified for completion of the Contract. The Contractor will be allowed one week in which to protest and thirty (30) days in which to file a written statement, setting forth in what respects the time charged by the Engineer is incorrect for the week in question. Otherwise, the record will be deemed to have been accepted by the Contractor.

(g) The number of days for performance allowed in the Contract as awarded is based on the Bid quantities. If satisfactory fulfillment of the Contract with extensions and increases authorized under the Contract Documents shall require the performance of work in greater quantities than those set forth in the Bid, the Contract Time allowed for performance shall be

GC - 75

adjusted in an equitable manner based on the quantities, costs and the nature of the work involved pursuant to the procedures in GC-4.06.

(h) Under certain conditions, the Contractor may be granted permission or ordered to suspend operations as noted in Section GC-8.08. During such periods, if the Contractor elects and is permitted to do any work, the time charged shall bear the same ratio to the total time allowed for the completion of the Work, as the value of the work done during such time bears to the total value of the original Contract value. However, the resultant number of days to be charged for any particular month will not exceed the number of calendar days for that month, excluding Saturdays, Sundays or official holidays on which no work was performed by the Contractor.

(i) Time used in performing work of an emergency nature ordered by the Engineer for the convenience of the traveling public or for the production or delivery of materials for storage, if performed during the period of suspension, will not be charged as working days against the Contract Time.

(j) An exception to GC-8.10(b) will be those landscaping items on which work is restricted to specified seasons. When Final Acceptance is being deferred pending completion of those landscaping items on which work is not permissible at the time because such work is currently out of season, and for no other reason, no time will be charged against the Contractor until such time as he/she is again permissible to proceed with such work.

GC-8.04 PROGRESS SCHEDULE

(a) Within fifteen (15) days after Notice to Proceed, the Contractor shall furnish a "Progress Schedule" for the Engineer's review and acceptance in the form required by the Contract Documents showing the proposed order of work and indicating the time required for the completion of the Work. The progress schedule shall be used to establish major construction operations and to check on the progress of the Work. The Engineer's acceptance of any schedule shall not be deemed to modify any time requirements in the Contract Documents. The Contractor shall submit revised progress schedules on a monthly basis thereafter with each the request for payment. If the Engineer does not accept the submitted progress schedule, the Contractor, within ten (10) days of receipt of written notice of non-acceptance, shall submit a revised progress schedule for review and acceptance.

(b) If the Contractor fails to submit the progress schedule or revised progress schedule within the required time or if the progress schedule is not accepted, the Engineer may withhold approval of progress payment estimates until such time as the Contractor submits the required progress schedules or may recommend termination of the Contract for default.

(c) If, in the opinion of the Engineer, the Contractor falls significantly behind the approved progress schedule, the Contractor shall take any and all steps necessary to improve his/her progress. This may require the Contractor to increase the number of shifts, initiate or increase overtime operations, increase days of work in the work week, or increase the amount of

GC - 76

construction plants, or all of them. The Engineer may also require the Contractor to submit for approval supplemental progress schedules detailing the specific operational changes to be instituted to regain the approved schedule, all without additional cost to the County.

(d) Failure of the Contractor to comply with the requirements of the Engineer under this provision shall be grounds for determination by the County that the Contractor is not prosecuting the Work with such diligence as will insure completion within the time specified. Upon such determination, the Director may terminate the Contractor's right to proceed with the Work, or any separable part thereof, in accordance with GC-8.09.

(e) Acceptance by the County of a progress schedule showing completion of the Work on an accelerated basis shall not be construed as a waiver of the Contract time specified in the Contract Documents. Any accelerated progress schedule accepted by the County shall not form the basis of a delay or acceleration claim by the Contractor.

GC-8.05 LIMITATIONS OF OPERATION

(a) Sequence of Work – The Contractor shall conduct the Work at all times in such a manner and in such sequence as will assure the least interference with the public. The Contractor shall begin work at such points as may be specified in the Contract Documents and shall thereafter prosecute the Work at such points and in such order as may be prescribed therein.

(b) No Work Without Inspection – No work requiring the presence of an Inspector will be permitted on Sunday or on legal holidays, except in cases of emergency, without written permission of the Engineer.

(c) Work On Legal Holidays – If the Contractor desires to work upon any Sunday or legal holiday he/she shall provide written notification to the Engineer at least two (2) week days in advance. He/she shall indicate the nature of the work and the location where the work will be conducted.

(d) **Emergency Work** – In the event of an emergency, the Contractor may work provided verbal consent is obtained from the Engineer prior to performing the work.

GC-8.06 CHARACTER OF WORKMEN, METHODS AND EQUIPMENT

(a) The Contractor shall employ personnel with sufficient command of the English language to comprehend spoken instructions and communicate with all parties involved.

(b) The Contractor shall employ sufficient labor and equipment for prosecuting the several classes of Work to full completion in the manner and time required by the Contract.

(c) Workmen must have sufficient skill and experience to perform properly the work assigned to them. All workmen engaged in special work or skilled work shall have sufficient

GC - 77

experience in such work and in the operation of the equipment required to perform all work properly and satisfactorily.

(d) Any person employed by the Contractor or by any Subcontractor who, in the opinion of the Engineer, does not perform his/her work in a proper manner or is intemperate or disorderly shall, at the written direction of the Engineer, be removed forthwith by the Contractor or Subcontractor employing such person, and shall not be employed again in any portion of the Work without the written approval of the Engineer.

(e) Should the Contractor fail to remove such person or persons as required above, or fail to furnish suitable and sufficient personnel for the proper prosecution of the Work, the Engineer may withhold requests for payment that are or may become due on the Contract until a satisfactory understanding has been reached.

(f) Equipment to be used on the Work shall meet the requirements of the Work and produce a satisfactory product in conformity with the Contract Documents. The Engineer may order the removal and require replacement of any unsatisfactory equipment.

(g) When the methods and equipment to be used by the Contractor in accomplishing the Work are not prescribed in the Contract Documents, the Contractor is free to use any methods or equipment that he/she demonstrates to the satisfaction of the Engineer will accomplish the Work in conformity with the Contract Documents.

(h) When the Contract Documents specify that the construction be performed by the use of certain methods and equipment, such methods and equipment shall be used unless others are authorized by the Engineer in writing. If the Contractor desires to use a method or type of equipment other than those specified in the Contract, he/she may request authorization from the Engineer to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed to be used and an explanation of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor will be fully responsible for producing construction work in conformity with the Contract Documents. If, after trial use of the substituted methods or equipment, the Engineer determines that the Work produced does not meet Contract Documents, the Contractor shall discontinue the use of the substituted method or equipment and shall complete the remaining construction with the specified methods and equipment. The Contractor shall remove all deficient Work and replace it with Work of specified quality, or take such other corrective action as the Engineer may direct. Unless approved under GC-4.11, no equitable adjustment to the Contract will be made as the result of authorizing a change in methods or equipment under these provisions.

GC-8.07 ILLEGAL IMMIGRANTS

(a) The Contractor shall comply with the Immigration and Nationality Act (INA) which includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, the Contractor may hire only persons who may legally work in the United States (i.e., citizens and nationals of the U.S.) and aliens authorized to work in the

GC - 78

U.S. The Contractor shall verify the identity and employment eligibility of anyone employed or to be employed, including completion of the Employment Eligibility Verification Form (I-9). The Contractor shall establish appropriate procedures and controls to insure that no services under this Contract will be performed by any worker who is not legally eligible to perform such services or for employment.

(b) Failure by the Contractor or his/her Sub-Contractors to comply with the provisions of GC-8.07 (a) will be grounds for termination of the Contract.

GC-8.08 SUSPENSION OF WORK

(a) The Engineer may unilaterally order the Contractor in writing to suspend, delay, or interrupt all or any part of the Work for a period of time as he/she may determine to be appropriate for the convenience of the County.

(b) If the performance of all or any part of the Work is suspended, delayed, or interrupted for an unreasonable period of time by an act of the Engineer or the County, or by a failure of the Engineer or County to act within the time specified in this Contract (or if not time is specified, within a reasonable time), subject to the provisions of GC-4.06 and 4.07 an adjustment shall be made for any increase in the cost of performance of this Contract necessarily caused by an unreasonable suspension, delay, or interruption. However, no adjustment shall be made under this provision for any suspension, delay or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor.

(c) By issuance of a written notice of suspension of work, the Engineer may order the Contractor to suspend, delay, or interrupt any part of the Work as a result of code violations or deviation from the Contract Documents. Should the violation or deviation persist, the Engineer may extend the suspension to all Work. The Engineer will enforce the suspension until such time as the Contractor completes the necessary correction. No equitable adjustment in the Contract Documents will be allowed for actions by the Engineer under this provision.

(d) If it should become necessary to suspend, delay, or interrupt all or part of the Work for an indefinite period, the Contractor shall store all materials in such manner that they will not obstruct or impede the traveling public unnecessarily nor become damaged in anyway. The Contractor shall take every precaution to prevent damage or deterioration of the work performed, provide suitable drainage by opening ditches, shoulder drain, etc. and erect temporary structures where necessary.

GC-8.09 TERMINATION FOR DEFAULT-DAMAGES FOR DELAY – TIME EXTENSIONS

(a) If the Contractor refuses or fails to prosecute the Work, or any separable part thereof, with such diligence as shall ensure its completion within the Contract Time, or any

GC - 79

extension thereof, or if the Contractor fails to complete said Work within the Contract Time, persistently fails to comply with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction, or otherwise materially breaches any of his/her obligations under the Contract Documents, the County may, in its sole discretion and without prejudice to any right or remedy against the Contractor and the Surety, by written notice to the Contractor, terminate for default the Contractor's right to proceed with the Work, or the part of the Work as to which there has been delay. In this event the County may take over the Work and prosecute the same to completion, by Contract or otherwise, and may take possession of and utilize the materials, appliances, and plant as may be on the site of the Work and necessary therefore in completing the Work.

(b) Liquidated damages as set forth in GC-8.10 are not intended to compensate the County after the Contractor's default for any additional expenses to complete the Work in accordance with the Contract Documents. If the County terminates the Contractor's right to proceed for default, the Contractor and the Surety are liable to the County and will pay within 30 days after demand by the County all additional costs incurred in completing the Work in excess of the Contract Sum (as modified by approved Change Orders) together with liquidated damages assessed in accordance with GC-8.10.

(c) If liquidated damages are provided in the Contract and if the County does not so terminate the Contractor's right to proceed under subsection (a) above, the resulting damage shall consist of the liquidated damages as outlines elsewhere in the Contract Documents.

(d) The Contractor's right to proceed may not be terminated nor the Contractor charged with resulting damages if:

(1) The delay in the completion of the Work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God, acts of the public enemy, acts of the County in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes, unusually severe weather, or delays of subcontractors or suppliers arising from unforeseeable causes beyond the control and without the fault or negligence in whole or in part of either the Contractor or the subcontractors or suppliers; and

(2) The Contractor, within ten (10) days from the beginning of any such delay (unless the Engineer grants in writing a further period of time before the date of final payment under the Contract), notifies the Engineer in writing of the causes of delay. The Engineer shall ascertain the facts and the extent of the delay and extend the time for completing the Work when, in his/her judgment, the findings of fact justify such an extension, and his/her findings of fact shall be final and conclusive on the parties, subject only to appeal as provided in GC-5.13.

(e) If, after notice of termination for default, it is determined for any reason that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to GC-8.11

GC - 80

(f) The rights and remedies of the County provided in this provision are in addition to any other rights and remedies provided by law or under this Contract.

(g) As used in paragraph (d) (1) of this provision, the term "subcontractors or suppliers" means subcontractors or suppliers at any tier.

GC-8.10 LIQUIDATED DAMAGES

(a) Time is an essential element of the Contract and it is important that the Work be vigorously prosecuted until Final Acceptance. The Contractor understands and agrees that the County and the general public will suffer financial loss and/or inconvenience if the Project is not substantially complete on the date set forth in the Contract Documents. The County and the Contractor agree that the amount of financial loss and/or inconvenience is not subject to accurate estimation and the actual damages are not easily ascertained. Therefore, the County and the Contractor agree that the amount of liquidated damages set forth in the Contract Documents is a reasonable forecast of the just and fair compensation for the harm that would result from the Contractor's failure to timely complete the Work.

(b) For each calendar day that the Work shall remain uncompleted beyond the Contract Time, the Contractor and/or the Surety shall be liable for liquidated damages in the amount provided for in the Contract Documents, provided, however, that due account shall be taken of any adjustment of the Contract time for completion of work as granted by approved equitable adjustments.

GC-8.11 TERMINATION FOR THE CONVENIENCE OF THE COUNTY

(a) The performance of Work may be terminated by the County in accordance with this provision in whole, or from time to time in part, whenever the Director shall determine that such termination is in the best interest of the County. Any such termination shall be effected by delivery to the Contractor of a Notice of Termination specifying the extent to which performance of the Work is terminated, and the date upon which such termination becomes effective.

(b) After receipt of Notice of Termination, and except as otherwise directed by the Engineer, the Contractor shall:

(1) Stop the Work on the date and to the extent specified in the Notice of Termination;

(2) Place no further orders or subcontracts for materials, services or facilities, except as may be necessary for completion of the portion of the Work as is not terminated;

(3) Terminate all orders and subcontracts to the extent that they relate to the performance of the Portion of the Work terminated by Notice of Termination;

GC - 81

(4) Assign to the County in the manner, at the times, and to the extent directed by the Engineer, all of the right, title, and interest of the Contractor under the orders and subcontracts so terminated, in which case the County shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;

(5) Settle all outstanding liabilities and all claims arising out of the termination of orders and subcontracts, with the approval or ratification of the Engineer, to the extent he/she may require, which approval or ratification shall be final for all the purposes of this provision;

(6) Transfer title and deliver to the County, in the manner, at the times and to the extent, if any, directed by the Engineer, (a) the fabricated or non-fabricated parts, work in process, completed work, supplies, and other material produced as a part of, or acquired in connection with the performance of the Work terminated by the Notice of Termination, and (b) the completed or partially completed, drawings, information, warranties, and other property which, if the Contract had been completed, would have been required to be furnished to the County;

(7) Use his/her best effort to sell, in the manner, at the times, to the extent, and at the price or prices directed or authorized by the Engineer, any property of the types referred to in (6) above; provided, however, that the Contractor (a) may not be required to extend credit to any purchaser, and (b) may acquire any such property under the conditions prescribed by and at a price or prices approved by the Engineer; and provided further that the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the County to the Contractor under this Contract or shall otherwise be credited to the price or cost of the Work covered by this Contract or paid in such other manner as the Engineer may direct;

(8) Complete performance of such part of the Work as may not have been terminated by the Notice of Termination; and

(9) Take any action that may be necessary, or as the Engineer may direct, for the protection and preservation of the property related to this Contract that is in the possession of the Contractor and in which the County has or may acquire an interest. The Contractor shall submit to the Engineer a list, certified as to quantity and quality, of any or all items of termination inventory not previously disposed of, exclusive of items the disposition of which has been directed or authorized by the Engineer, and may request the County to remove such items or enter into a storage agreement covering them. Not later than fifteen (15) calendar days thereafter, the County shall accept title to such items and remove t hem or enter into a storage agreement covering the same; provided, that the list submitted shall be subject to verification by the Engineer upon removal of the items, or if the items are stored, within 45 days from the date of submission of the list, and any necessary adjustment to correct the list as submitted shall be made prior to final settlement.

(c) After receipt of a Notice of Termination, the Contractor shall submit to the Engineer his/her termination claim, in the form and with the certification required under GC-4.06 and GC-5.13 or as otherwise prescribed by the Engineer. This claim shall be submitted promptly

GC - 82

but in no event later than ninety (90) calendar days from the effective date of termination, unless one or more extensions in writing are granted by the Engineer, upon request of the Contractor made in writing within the ninety (90) calendar-day period or authorized extension thereof. Failure to submit the claim within the time specified herein shall operate as a waiver of claim regardless of whether the County incurred or demonstrates any prejudice by the failure to timely submit the claim. However, if the Engineer determines that the facts justify such action, he/she may receive and act upon any such termination claim at any time after the ninety (90) calendarday period or any extension thereof. Upon failure of the Contractor to submit his/her termination claim within the time allowed or any extension thereof, the Engineer may determine, on the basis of information available to him/her, the amount, if any, due to the Contractor by reason of the termination and shall thereupon pay to the Contractor the amount, if any, so determined.

(d) Subject to the provisions of paragraph (C), the Contractor and the Engineer may agree upon the whole or any part of the amount or amounts to be paid to the Contractor by reason of the total or partial termination of the Work pursuant to this provision, which amount or amounts may include a reasonable allowance for profit on work done; provided, that such agreed amount or amounts, exclusive of settlement costs; shall not exceed the total Contract price as reduced by the amount of payments otherwise made and as further reduced by the price of work not terminated. The Contract shall be amended accordingly pursuant to GC-4.06. Nothing in paragraph (e) of this provision, prescribing the amount to be paid to the Contractor in the event of failure of the Contractor and the Engineer to agree upon the whole amount to be paid to the Contractor by reason of the termination of work pursuant to this provision, shall be deemed to limit, restrict, or otherwise determine or affect the amount or amounts that may be agreed upon to be paid to the Contractor pursuant to this paragraph.

(e) In the event of the failure of the Contractor and the Engineer to agree as provided in paragraph (d), upon the whole amount to be paid to the Contractor by reason of the termination of work pursuant to this provision, the Engineer shall pay to the Contractor the amounts determined by the Engineer as follows, but without duplication of any amounts agreed upon in accordance with paragraph (d):

(1) For completed supplies or services accepted by the County (or sold or acquired as provided in paragraph (b)(7) above) and for which payment has not theretofore been made, a sum equivalent to the aggregate price for the supplies or services computed in accordance with the price or prices specified in the Contract, appropriately adjusted for any saving of freight or other charges;

(2) The total of:

(A) The costs incurred in the performance of the terminated portion of the Work, including initial costs and preparatory expense allocable thereto, but exclusive of any costs attributable to supplies or services paid or to be paid for under paragraph (e)(1) hereof;

(B) The cost of settling and paying claims arising out of the termination of work under subcontracts or orders, as provided in

GC - 83

paragraph (b)(5) above, which are properly chargeable to the termination portion of the Contract (exclusive of amounts paid or payable on account of supplies or materials delivered or services furnished by subcontractors or vendors before the effective date of the Notice of Termination, which amounts shall be included in the costs payable under (a) above); and

(C) A sum, as profit on (a) above, determined by the Engineer to be fair and reasonable; provided, however, that if it appears that the Contractor would have sustained a loss on the entire Contract had it been completed, no profit shall be included or allowed under this subdivision (c) and an appropriate adjustment shall be made reducing the amount of the settlement to reflect the indicated rate of loss; and

(D) The reasonable cost of settlement accounting, legal, clerical, and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the Work and for the termination and settlement of subcontracts thereunder, together with reasonable storage, transportation, and other costs incurred in connection with the protection or disposition of property allocable to the Contract; but

(E) No payment shall be allowed for any anticipated profit or overhead on work not performed.

(3) The total sum to be paid to the Contractor under (1) and (2) of this paragraph shall not exceed the total Contract price as reduced by the amount of payments otherwise made and as further reduced by the Contract price of work not terminated. Except for normal spoilage, and except to the extent that the County shall have otherwise expressly assumed the risk of loss, there shall be excluded from the amounts payable to the Contractor as provided in (e) (1) and (a) above, the fair value, as determined by the Engineer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the County or to a buyer pursuant to paragraph (b) (7).

(f) Costs claimed, agreed to, or determined pursuant to this provision must also be allowable, reasonable, lawful, and allocable to the Work and accounted for in accordance with generally accepted accounting principles. Guidance for any determination of whether the costs are allowable, reasonable, lawful, and allocable, will be provided by the "Contract Cost Principles and Procedures", Title 21, Subtitle 09 of the Code of Maryland Regulations (COMAR 21.09.01), as may be amended from time to time.

(g) The Contractor shall have the right of appeal under GC-5.13 from any determination made by the Engineer under paragraph (c), (e), or (i) hereof, except that if the Contractor has failed to submit his/her claim within the time provided in paragraph (c) or (i) hereof, and has failed to request extension of such time, he/she shall have no such right of appeal. In any case where the Engineer has made a determination of the amount due under paragraph (d), (e), or (i) hereof, the County shall pay to the Contractor the following:

GC - 84

(1) If there is no right of appeal hereunder or if no timely appeal has been taken, the amount so determined by the Engineer; or,

(2) If an appeal has been taken, the amount finally determined on such appeal

(h) In arriving at the amount due the Contractor under this provision there shall be deducted:

(1) All non-liquidated advance or other payments on account theretofore made to the Contactor, applicable to the terminated portion of this Contract;

(2) Any claim that the County may have against the Contractor in connection with this Contract; and

(3) The agreed price for, or the proceeds of sale of, any materials, supplies, or other things acquired by the Contractor or sold, pursuant to this provisions, and not otherwise recovered by or credited to the County.

(i) If the termination hereunder is partial, the Contractor may file a claim with the Engineer for an equitable adjustment of the price or prices specified in the Contract relating to the continued portion of the Contract (the portion not terminated by the Notice of Termination), within the time limits and under the procedures set forth in GC-4.06 and GC-5.13.

(j) The County may, from time to time, under such terms and conditions as it may prescribe, make partial payments and payments on account against costs incurred by the Contractor in connection with the terminated portion of this Contract whenever, in the opinion of the Engineer, the aggregate of such payments shall be within the amount to which the Contractor shall be entitled hereunder. If the total of such payments is in excess of the amount finally agreed or determined to be due under this provision, such excess shall be payable by the Contractor to the County upon demand, together with interest computed at the prime rate established by the County Budget and Finance Office for the period of the date such excess payment is received by the Contractor to the date on which the excess is repaid to the County; provided, however, that no interest shall be charged with respect to any such excess payment attributable to a reduction in the Contractor's claim by reason of retention or disposition, or a later date as determined by the Engineer by reason of the circumstance.

(k) Unless otherwise provided for in this Contract, or by applicable statute, the Contractor shall, from the effective date of termination until the expiration of three (3) years after final settlement (including the expiration and conclusion of all appeals and rights of appeal) under this Contract, preserve and make available to the County at all reasonable times at the office of the Contractor but without direct charge to the County, all his/her books, records, documents and other evidence bearing on the costs and expenses of the Contractor under this Contract and relating to the Work terminated hereunder, or, to the extent approved by the Engineer, photographs, microphotographs, or other authentic reproductions thereof.

GC - 85

GC-8.12 SUCCESSFUL TERMINATION OF CONTRACTOR'S RESPONSIBILITY

(a) A contract will be considered as successfully fulfilled when all of the following conditions have occurred: (1) the Work has been completed in accordance with the terms of the Contract; (2) final Acceptance by the County has occurred; (3) the County authorizes Final payment; (4) the Contractor and the Surety have complied with all of their obligations; and (5) final payment has been made. Nothing herein will relieve the Contractor and the Surety from any future obligation such as a warranty, guarantee, guarantee bond, or indemnity obligation, or from responsibility for repair of latent defects discovered or appearing after final payment.

GC-SECTION 9 PAYMENT

GC-9.01 SCOPE OF PAYMENT

(a) If so identified in the Contract, payment to the Contractor will be made for the actual quantities of Contract items performed in accordance with the Contract Documents and if, upon completion of the work, these actual quantities show either an increase or decrease from the quantities given in the Bid form, the Contract unit prices will still prevail, except as provided in GC-4.04 Variations in Estimated Quantities.

(b) The payment of any partial estimate or of any retained percentage, except by and under the approved final estimate and voucher, in no way shall affect the obligation of the Contractor and the Surety to repair or renew any defective parts of the construction or to be responsible for all damages due to such defects.

(c) When requested in writing by the Contractor and approved by the Engineer, payment allowance will be made for nonperishable material to be incorporated in the Work delivered and stockpiled at the work site or other approved site. The Contractor must submit with the request a list of all such materials and their location. The Contractor shall submit back-up invoices, bills of lading, title documents, or such other documentation, satisfactory to the County, as will establish the County's title to the materials upon payment to the Contractor under the request. The Contractor must submit with the request proof of insurance in the amount of the payment requested to be maintained on the materials until such time as the materials are incorporated into the Work. Only those materials for which the Contractor can transfer clear title to the County will be qualified for payment. Payment for stored materials will be made in accordance with paragraph (f) below.

(d) When the Contractor requests payment allowance for stored materials under (c) above, the following terms and conditions will apply:

(1) For superstructure members delivered on the Project site, an allowance of one hundred (100) percent of the material cost plus freight charges as invoiced may be made

GC - 86

provided, however, that all such material will have been tested by the County and found to have met the Specifications or have been accepted under an approved certification program prior to such an allowance. The allowance will be based upon validated invoices or bills for such material including freight charges, and a copy thereof shall be made a part of the documented records for the Project.

(2) For reinforcing steel, piling, pipe, traffic barriers, signs and sign assemblies, and other nonperishable material in storage on the Project, but excluding aggregates, cement, seed, plants, fertilizer or other perishable items, an allowance of one hundred (100) percent of the invoiced cost of the material plus freight charges to the Contractor may be made when such material is delivered and stockpiled at the Project site, provided, however, that all such material will have been tested by the County and found to have met the Specifications or have been accepted under an approved certification program prior to such an allowance.

(3) No allowance will be made for fuels, form lumber, falsework, temporary structures or other materials of any kind, which will not become an integral part of the finished construction.

(4) Material for which an allowance is requested shall be stored in an approved manner in areas where damage is not likely to occur. If any of the stored materials are lost, stolen, or become damaged in any manner, the Contractor shall be responsible for repairing or replacing of such damaged materials. The Contractor expressly agrees to assume and bear the risk of all loss, theft, or damage to the materials. The value of the lost, stolen or damaged material will be deducted from the Contractor's subsequent requests for payment until replacement has been accomplished.

(5) When it is considered impractical to store materials on the actual project, the Engineer may approve storage areas in the vicinity of the actual project that will be considered at the Project site.

(6) When storage of the materials within Washington County is not practical, written approval must be obtained from the Engineer for storage elsewhere. Storage of materials outside of Washington County will be subject to the conditions set forth in this provision and, limited to materials exceeding twenty-five thousand dollars (\$25,000), which are designed and fabricated exclusively for use on a specific project.

(7) The request for allowances for any materials stored on property outside of Washington County shall be accompanied by a release and waiver from the owner and/or tenant of such property agreeing to permit verification by the Inspector that the material is stored at the approved location, to allow the removal of the material from the property without cost to Washington County, and waiving to the fullest extent possible any lien in favor of the owner and/or tenant for payment of any fees for access, storage, care, handling, or the like.

(8) Material, for which payment has been made, either wholly or partially, shall not be removed from the approved location until such time that it is to be incorporated into the Work, unless authorized by the Engineer.

GC - 87

(9) The following prerequisites must also accompany the written request for

payment:

(A) Consent of Surety specifying the material type and the Item(s) in which the material is to be used;

(B) Validated invoices showing that payment for the material has been made by the Contractor;

(C) A notarized statement from the Contractor attesting that the invoices, as submitted do not include charges and/or fees for placing, handling, erecting or any other charges and/or markups other than the actual material cost, sales tax(s), if applicable, and freight charges;

(**D**) Bills of lading showing delivery of the material; and

(E) Inspection test reports, certifications and/or a written statement from the Inspector attesting to the inspection and approval of the material.

(10) Upon receipt of the above by the Engineer and verification by the Inspector that the material is stored at the approved location, the Engineer may authorize payment by a unit of measure based upon the receipted invoices under the appropriate existing items of the Contract. A ratio will be established by the Engineer between the dollar amount of the material as invoiced and the quantity the material represents from the appropriate Bid Items.

(11) Copies of all pertinent data shall be made and distributed to the Inspector for retention as part of the documented records for the Project.

(12) No payment will be made for stored materials when it is anticipated they will be incorporated into the Work within thirty (30) days of receipt by the Engineer of the written request.

(13) Unless otherwise stated by the Engineer in writing, payment on account of a request for payment for stored materials transfers title to the County but does not constitute an acceptance by the Engineer or the County of the materials nor does it constitute an agreement that the materials conform to the Contract Documents. Notwithstanding the fact that payment has been made on account of the request for payment for stored materials, the Contractor and the Surety continue to be responsible to ensure at all times that the materials are in full conformance with the Contract Documents and are free from defect. Moreover, payment on account of a request for payment for stored materials does not begin the running of any applicable warranty or guaranty.

(14) Final payment shall be made only for materials actually incorporated in the Work and, upon final acceptance, title to all materials remaining for which advanced payment have been made shall revert to the Contractor, unless otherwise agreed, and the

GC - 88

payments made for these items shall be deducted from the final payment due to the Contractor for the Work.

(15) The Contractor agrees to indemnify and save harmless the County and all of its representatives from all suits, actions, or claims of any character brought on account of or arising out of the storage of materials for which the County has made payment on account of a request for payment for stored materials, including any claims of a warehouseman's or garageman's lien for cost of storage of the equipment and for claims arising out of damage or injury caused by the materials and their shipping and handling.

(e) Contractor shall indicate his/her Federal Taxpayer Identification Number on the face of each invoice billed to the County. The Contractor may also be required to provide additional information as determined by federal and/or state funding agencies.

(f) Along with each request for payment, the Contractor shall furnish the following certification signed by an officer or principal of the Contractor, or payment shall not be made:

I hereby certify, to the best of my knowledge and belief, that –

(1) The amounts requested are only for performance in accordance with the Specifications, terms and conditions of the Contract Documents;

(2) Payments to all subcontractors and suppliers have been made from previous payments received under the Contract, and timely payments will be made from the proceeds of the payment covered by this certification; and

(3) This request for progress payments does not include any amounts that the Contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract.

(Name)

(Title)

(Date)

GC-9.02 FORCE ACCOUNT WORK

When the Contractor is required to perform work as a result of additions or changes to the Contract for which there are no applicable unit prices in the Contract, the County and Contractor shall make every effort to come to an agreed upon price for the performance of such work. If an

GC - 89

agreement cannot be reached, the County may require the Contractor to do such work on a force account basis to be compensated in accordance with the following:

(a) Labor – For all labor and for foremen in direct charge of the specific operations, the Contractor shall receive the actual wages for each and every hour that labor and foremen are actually engaged in the force account work.

In addition, an amount equal to sixty-five (65) percent of the wages will also be paid the Contractor which shall include, but not limited to the following as full compensation for all cost paid to, or in behalf of, workman by reason of subsistence and travel allowances, health and welfare benefits, pension fund benefits, or other benefits that may be required by collective bargaining agreement or other employment contract generally applicable to property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and Social Security taxes on the force account work.

To substantiate labor cost for the force account, the Contractor shall submit copies of certified payrolls showing name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman.

(b) Materials – For materials accepted by the Engineer and used, the Contractor shall receive the actual cost of such materials delivered on the force account work, including transportation charges paid by him (exclusive of machinery rentals as hereinafter set forth).

In addition to the actual cost of materials and transportation charges, the Contractor may charge a fee of twenty (20) percent of the actual costs. To substantiate materials and transportation costs, the Contractor shall submit original receipted invoices. The County reserves the right to furnish materials as it deems appropriate and the Contractor shall have no claim for any costs, overhead, or profit on these materials.

(c) Equipment.

(1) For any machinery or special equipment (other than small tools, whether rented or owned), the use of which has been authorized by the Engineer, the Contractor shall receive the rates agreed upon in writing before such work is begun, or the Contractor shall receive those rates which may be specified elsewhere in the Contract Documents. For the purpose of definition, equipment with a new cost of \$500 or less will be considered small tools.

(2) In the event no agreement is reached and if the Contract Documents do not indicate the applicable rate(s), the Contractor shall use the current rental rates recommended in the Rental Rate Blue Book for Construction Equipment published by Data Quest, Inc. using the applicable Blue Book rate adjustment tables in effect at the time of the authorization of the force account work for the use of any machinery or special equipment authorized by the Engineer. Rental rates must be agreed upon in writing before work is begun, except in those cases where the Engineer finds that an emergency exists. Payment will be made for the actual number of hours the equipment is required to work at the site. The maximum number of hours allowed for each working day will be eight (8) or the number of hours in operation, whichever is greater. The

GC - 90

rate to be paid per hour will be computed by dividing the monthly rate by one hundred and seventy-six (176). Premium rates shall not be allowed.

(3) Approved transportation charges will be paid from and to the nearest source if the equipment is brought to the Project specifically for use on the force account work and is not used on any other work.

- (4) The rental rate will consist of the sum of the following:
 - (A) the rate for the basic piece of equipment;
 - (B) the rate for attachments (where applicable); and
 - (C) the estimated hourly operating cost (where applicable).

(5) These component parts of the rate are to be obtained from the Rental Rate Blue Book when listed in that book. If a piece of equipment is not listed in the Rental Rate Blue Book, then the rate will be the prevailing rate being paid in the area where the force account work is being performed. When equipment is used in excess of eight hours per day or forty (40) hours per week, the excess time will be considered as overtime. The rental rates for this overtime will be the sum of (A), fifty (50) percent of (B) and one hundred (100) percent of (C) above.

(6) Whenever equipment is ordered by the Engineer to be held on the Project on a standby basis, or when the County is obligated for other reasons to pay for idle equipment, then the rate will be 75 percent of the monthly rental rate with no allowance for operating costs calculated as set forth in Paragraph (c)(2) above. Standby or idle time cannot exceed eight (8) hours per day and will not be allowed for Saturday and Sunday. Non-operating time for equipment required for force account work is not considered standby or idle time if the equipment is operated and used at least once during each working day.

(d) Materials and Supplies Not Incorporated in the Work – For materials and supplies expended in the performance of the force account work (excluding those required for rented equipment) and approved by the Engineer, the Contractor shall receive the actual cost of such materials and supplies used. The Contractor shall receive a reasonable allowance for materials used but not expended in the performance of the force account work.

(e) **Subcontractors** – The Contractor shall receive the actual cost of the force account work performed by a subcontractor. Subcontractor's cost is to be determined as in (a), (b), (c), and (d) above, plus the fixed fee for overhead and profit allowance computed as in (g), below.

(f) **Superintendence** – No additional allowance shall be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.

GC - 91

(g) **Compensation** – The compensation as set forth above shall be received by the Contractor as payment in full for change order work done on a force account basis. At the end of each day, the Supervisor and the Engineer shall compare records of the cost of work as ordered on a force account basis.

(h) Statements – No payment will be made for work performed on a force account basis until the Contractor furnishes the Engineer duplicate itemized statements of the cost of such force account work detailed as to the following:

(1) Name, classification, date, daily hours, total hours, rate, and extension for such laborer or foreman.

(2) Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.

- (3) Quantities of materials, prices and extensions.
- (4) Transportation of materials.

(5) Payments of items under (h) (1) shall be accomplished by copies of certified payrolls. Under (h) (2) original receipted invoices for rentals must be provided if requested by the Engineer. Paragraphs (h) (3) and (h) (4) shall be accompanied by original receipted invoices for materials used and transportation charges. If, however, the materials used in the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the original invoices the statements shall contain or be accompanied by an affidavit of the Contractor which shall certify that such materials were taken from his/her stock, that the quantity claimed was actually used and that the price and transportation of the material as claimed represent actual cost. Any request for payment under this provision shall be submitted in the order outlined by the above.

(i) Costs claimed, agreed to, or determined pursuant to this provision must also be allowable, reasonable, lawful, and allocable to the Work and accounted for in accordance with generally accepted accounting principles. Guidance for any determination of whether the costs are allowable, reasonable, lawful, and allocable, will be provided by the "Contract Cost Principles and Procedures", Title 21, Subtitle 09 of the Code of Maryland Regulations (COMAR 21.09.01) or as may be amended from time to time.

GC-9.03 PROGRESS PAYMENTS

(a) Within ten (10) calendar days after the date of the Notice to Proceed and prior to commencing work, the Contractor shall submit a breakdown of all lump sum items (a "Schedule of Values") within the Bid for review and approval as may be required by the Engineer. No partial payments will be made for lump sum items if the Contractor fails to provide a Schedule of Values. If the Engineer does not approve the Schedule of Values submitted by the Contractor, within ten (10) days of receipt of written notice of disapproval, the Contractor shall submit a revised breakdown for review and approval.

GC - 92

(b) Monthly Estimates – Each month the County will pay the Contractor for the Contract value of the work satisfactorily performed as determined from the approved Schedule of Values during the preceding calendar month, including authorized extras and additions less ten percent (10%), if the Contractor submits a request for payment on the form approved by the County. Unless otherwise reduced in the discretion of the Engineer and approved by the Director, the ten (10) percent of the total Contract value retained by the County will not be released until final payment (unless partially released in a semi-final payment), except as described in (d), below. Current estimates will be based upon the Engineer's estimate of quantity (including materials and equipment complete in place) satisfactorily performed for each item contained in the Contractor's approved Schedule of Values. In the instance of lump sum items, the Engineer's estimate shall be the proper fraction of the lump sum items satisfactorily performed during the preceding month. All quantities, estimates and fractions will be reasonably accurate approximations and are subject to correction (a) in subsequent current estimates, (b) in any semi-final estimate and, (c) in final payment. Should either the Engineer or the Contractor be of the opinion that any estimates, quantities and/or fractions (either as to an individual current estimate or accumulations thereof) do not represent a reasonably accurate approximation of actual work, then details questioned shall be reviewed and then any corrections adjusted for in the next current estimate.

(c) The Engineer may decline to approve a monthly request for payment and may withhold his/her semi-final approval in whole or in part, to the extent reasonably necessary to protect the County, from loss because of:

(1) Defective work not remedied;

(2) Third party claims filed or reasonable evidence indicating the probability of filing of such claims;

(3) Failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;

(4) Reasonable doubt that the Work can be completed for the unpaid balance of the Contract Sum;

(5) Damage to another contractor;

(6) Reasonable indication that the Work will not be completed within the Contract Time; or

(7) Unsatisfactory prosecution of the Work by the Contractor.

(d) Upon completion of fifty percent (50%) of the Contract value, the Contractor may request reduction in the monthly retainage to no less than five percent (5%) if, in the opinion of the Director, the following conditions apply:

GC - 93

(1) The Contractor has diligently pursued the work and is on-time or ahead of the approved schedule,

(2) Work completed to date is satisfactory and acceptable to the County,

(3) The Contractor has made reasonable payment and compensation to all subcontractors and suppliers,

(4) There are no outstanding claims against the County precipitated by the Contractor's work or that of his subcontractors and suppliers,

(5) There are no conditions imposed by grant funding agencies that preclude such reductions,

(6) The Contractor's surety provides written consent to the reduction.

If the Contractor is granted a reduction in retainage, it is to be expressly understood that the Director reserves the right to reconsider the reduction in retainage.

(e) Progress payments requesting more than seventy-five percent (75%) of scheduled values in Mechanical and Electrical Trades will be reduced to include only seventy-five percent (75%) on the Mechanical and Electrical line items if the Contractor fails to submit preliminary Maintenance Manuals with contents specified by Contract Documents and of quality acceptable to the County.

(f) Within seven (7) calendar days of the receipt of a progress payment, the Contractor shall make payment to all Subcontractors in the amount for which payment has been received by the Contractor for the portion of the Work performed by the Subcontractor as reflected on the Request for Payment. The Contractor shall require all Subcontractors to make payment to any further Subcontractors within seven (7) calendar days of the Subcontractor's receipt of payment from the Contractor for the portion of the Work performed by the lower tier Subcontractor. The parties expressly intend for all Subcontractors to be third party beneficiaries of this provision and all Subcontractors can enforce this provision in any appropriate proceedings.

GC-9.04 SUBSTANTIAL COMPLETION AND FINAL PAYMENT

(a) Verification of Final Quantities

(1) When the Contractor has completed the Work, and it has been accepted as substantially complete, the Engineer will proceed:

(A) To make any necessary final surveys;

GC - 94

(B) To complete any necessary computation of quantities; and

(C) To submit a tabulation of the proposed final quantities to the Contractor for his/her consideration, within thirty (30) calendar days after final completion and acceptance of the Work by the Engineer for maintenance. This tabulation shall be accompanied by a statement setting forth: (a) the additional work performed under change orders and/or supplemental agreements; (b) the authorized extension of time; (c) the number of days that have been charged against the Contractor as having been used to complete the Contract, and (d) any deductions, charges or liquidated damages that have been made or imposed.

(2) The Contractor shall then have a period of ten (10) calendar days, dating from the date upon which he/she received the aforementioned tabulation from the County, in which:

(A) To decide whether or not it will accept final payment upon such a basis; and

(B) To notify the County, in writing, of its decision. The Contract may request an additional period up to ten (10) calendar days in which to notify the County of its decision. In the event the Contractor notifies the County that he protests final payment on such a basis, that notification shall outline the reason(s) for said protest.

(3) Upon receipt of a notification of acceptance as provided for in paragraph (a) (2) above, the Contractor shall prepare the final estimate and final payment forms and submit them to the County for execution and payment. These forms shall show all data noted in paragraph (a) (1) above, together with deductions for all prior payments. Such action by the County shall be deemed to constitute acceptance and final payment.

(4) In the event the Contractor does not accept the data submitted to him as described in paragraph (a)(1) above and/or has outstanding a claim filed in accordance with GC-5.13, the Engineer and the Contractor shall confer at mutually convenient times and endeavor to expeditiously reconcile all points of disagreement. If such reconciliation is accomplished, the County will promptly proceed with acceptance and final payment on the reconciled basis and in accordance with the provisions of paragraph (a) (3), above. If reconciliation is not accomplished within thirty (30) calendar days, the decision of the Engineer is deemed to be the final action. The Engineer shall promptly furnish a copy of the final decision to the Contractor by certified mail, return receipt requested. The decision may be appealed by the Contractor as set forth in GC-5.13.

(5) All prior partial estimates and payments shall be subject to correction at the time of acceptance and final payment and if the Contractor has been previously overpaid, the amount of such overpayment shall be set forth in the Final Payment forms and the Contractor

GC - 95

hereby agrees that he/she will reimburse the County for such overpayment within thirty (30) calendar days of receipt of such advice.

(6) Payment for the full apparent value of the Contract shall become due and payable to the Contractor within ninety (90) calendar days after determination of final quantities under this section. As a condition precedent to final payment, the Contractor shall be required to execute a general release of all claims against the County arising out of, or in any way connected with, this Contract.

(b) Substantial Completion

(1) Substantial completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the County can occupy or utilize the Work for its intended use.

(2) When the Contractor considers that the Work, or a portion thereof which the County agrees to accept separately, is substantially complete, the Engineer shall prepare and submit to the Contractor a comprehensive list of items to be completed or corrected. The Contractor shall proceed promptly to complete and correct items on the list. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. Upon receipt of the Contractor's list, the Engineer will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Engineer's inspection discloses any item, whether or not included on the Contractor's list, which is not in accordance with the requirements of the Contract Documents, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Engineer. The Contractor shall then submit a request for another inspection by the Engineer to determine Substantial Completion. When the Work or designated portion thereof is substantially complete, the Engineer will prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion, shall establish responsibilities of the County and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and shall fix the time within which the Contractor shall finish all items on the list accompanying the Certificate.

(3) Upon issuance of the Certificate of Substantial Completion, the Engineer shall determine a reasonable sum of money for completion of the items on the list accompanying the Certificate. The County, upon application by the Contractor for a substantial completion payment for the apparent estimated final value of the Contract deducting the total of all amounts previously paid to the Contractor as current estimates and sums deemed chargeable against the Contractor properly deductible, including liquidated damages and the amount determined by the Engineer as a reasonable cost of completing the items on the list accompanying the Certificate of Substantial Completion and as a retainage a sum not less than five percent (5%) of the total value of the Contract.

(4) **Partial Acceptance for Maintenance**. If at any time during the performance of the Work the Contractor substantially completes a unit or portion of the Work, he/she may request the Engineer to make final inspection of that unit. If the Engineer finds upon

GC - 96

inspection that the unit has been satisfactorily completed in compliance with the Contract, he/she may accept that unit as being completed and the Contractor may be relieved of further maintenance responsibility for that unit. Generally, partial acceptance for maintenance will only be considered when the County feels that such action is in the public interest. Such partial acceptance for maintenance shall in no way void or alter any of the terms of the Contract.

(c) Final Completion, Final Acceptance and Final Payment.

(1) Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Engineer will promptly make such inspection and, when the Engineer finds the Work acceptable under the Contract Documents and the Contract fully performed, the Engineer will promptly issue a Certificate of Final completion stating that to the best of the Engineer's knowledge, information and belief, the Work has been completed in accordance with terms and conditions of the Contract Documents. After the Certificate of Final Completion has been issued by the Engineer, the County will assume responsibility for maintenance of the Work except as expressly provided elsewhere in the Contract Documents. The Contractor shall then submit a final payment requisition to the Engineer, along with the items set forth in subparagraph (c) (2).

(2) Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Engineer (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the County, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of Surety, if any to final payment and (5), if required by the County, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the County.

(3) If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Engineer so confirms, the County shall, upon application by the Contractor and certification by the Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of Surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contract to the Engineer prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

(d) The making of final payment shall constitute a waiver of all claims by the County except those arising from:

GC - 97

- (1) Any indemnity obligations of the Contractor;
- (2) Faulty or defective Work appearing after Substantial Completion

(3) Failure of the Work to comply with the requirements of the Contract Documents;

(4) Terms of any special guarantees required by the Contract Documents; or

(5) Failure of the Contractor to procure or maintain any insurance required by the Contract Documents.

(e) The acceptance of final payment shall constitute a waiver of all claims by the Contractor.

GC-9.05 MEASUREMENTS OF QUANTITIES

(a) Measurements of Quantities By The Engineer – With the exception of those items of work to be paid by lump sum, after the Work is completed and before final payment is made therefore, the Engineer will make final measurements to determine the quantities of various items of work performed as the basis for final settlement for all items of work. In the case of unit price items, the Contractor will be paid for the actual amount of work performed and for the actual amount of materials in place, in accordance with the Specifications as shown by the Engineer's final measurement. All work completed under the Contract will be measured by the Engineer according to the standards of weights and measures recognized by the National Bureau of Standards.

(b) Longitudinal/Transverse Measurements – All longitudinal measurements for area will be made along the actual surface and not horizontally, and no deductions will be made for individual fixtures in the payment having an area of nine (9) square feet or less. For all transverse measurements for area of base course and pavements, the dimensions to be used in calculating the pay area will be the neat dimensions shown on the as-built Plans or ordered in writing by the Engineer.

(c) Structures – Structures will be measured according to neat lines shown on the Plans or as ordered in writing, unless otherwise provided for elsewhere in the Contract Documents.

(d) Measurements by Volume – Volumes of excavation, tamped fill, and borrow pits will be calculated from cross sections and the use of average end area formulae. Volumes of other work such as masonry, removal of masonry, etc. will be calculated by using arithmetic formulae. Where the volume is bounded by varying dimensions and there are no simple volumetric formulae applicable, frequent cross sections will be taken and the volume computed from average end area formulae.

GC - 98

(e) **Cement** – Cement will be measured by weight in hundredweight (cwt) units.

(f) Measurements By The Linear Foot – All items which are measured by the linear foot, such as pipe culverts, traffic barriers, underdrains, etc., will be measured parallel to the base or foundation centerline upon which such structures are placed, face of manhole to face of manholes, unless otherwise shown on the Plans.

(g) Measurements By Gage – The term "gage" when used in connection with the measurement of uncoated steel sheet and light plates shall mean the U.S. Standard Gage, except that when reference is made to the measurements of galvanized or aluminum sheets used in the manufacture of corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing, the term gage shall mean that specified in AASHTO M 36, M 167, M 196, or M 197. When the term gage refers to the measurement of wire, it shall mean the wire gage specified in AASHTO M 32.

(h) Measurements By The Ton – The term "ton" shall mean the short ton consisting of 2,000 pounds avoirdupois. All materials that are specified for measurement by the ton shall be weighed on accurate, approved scales meeting the requirements of National Bureau of standards Handbook 44. A digital recorder and printout shall be required on all truck scales. The digital recorder shall produce a printed record of the gross, tare, net weights, the time, date, truck identification and project number. Provisions shall be made so that the scales may not be manually manipulated during the printing process. The system shall be interlocked so as to allow printing only when the scale has come to rest. Except for computer-operated scales, all weights shall be certified by a bonded weigh person supplied by the Contractor, producer, or supplier. The security bond shall be one hundred thousand dollars (\$100,000). If material is shipped by rail, the car weight may be accepted but the payment will be limited to the actual weight of material. Car weights will not be acceptable for material to be passed through mixing plants.

(i) Measurements By The Cubic Yard – All materials for which measurements are obtained by the cubic yard, loose measurement or measured in the vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. No allowance will be made for the settlement of material in transit. Approved vehicles for this purpose shall be of any size or type acceptable to the Engineer, provided that the body is of such shape that the actual contents may be readily and accurately determined. Unless all approved vehicles are of uniform capacity, each approved vehicle must bear a plainly legible identification mark indicating the specific approved capacity. All vehicles shall be loaded to at least their water level capacity, and all loads shall be leveled when the vehicles arrive at the point of delivery.

When requested by the Contractor and approved by the Engineer in writing, material specified to be measured by the cubic yard may be weighed, and such weights will be converted to cubic yards for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the laboratory and shall be agreed to by the Contractor before such method of measurement of pay quantities will be approved by the Engineer.

GC - 99

(j) **Bituminous Material** – Bituminous material will be measured by volume in the railroad tank car, tank truck, distributor tank or drums in which it is delivered. Each railroad tank car, tank truck, drum or distributor tank of bituminous material delivered for the Project will be measured. The measurements will be taken when the bituminous material is of a uniform temperature and free from air bubbles, and the temperature of the material will be recorded. The volumetric measurement of the bituminous material for these Specifications will be based upon temperature of 60° F. Reference is made to ASTM D1250, Petroleum Measurement Tables, and ASTM D633, Volume correction Table for Tars. Only the quantity of bituminous material actually placed in the Work and accepted will be considered in determining the amount due the Contractor.

(k) **Timber** – Timber will be measured by the thousand feet board measure (MBM) actually incorporated in the structure. Measurement will be based on nominal widths and thickness and the extreme length of each piece.

(1) **Lump sum** – The term "lump sum" when used as an item of payment will mean complete payment for the unit of work described. When a complete element, structure of structural unit (in effect, lump sum work) is specified as the unit measurement, the unit will be construed to include all necessary fittings and accessories.

(m) Equipment Rental – Rental of equipment will be measured by time in hours of actual working time, moving in and moving out costs, if any, and necessary traveling time of the equipment within the limits of the project except when special conditions make some other method of measurement desirable.

(n) Sanitary Sewer and Water Mains And Accessories – Measurement of sanitary sewer and water mains and their accessories shall be as noted elsewhere in the Contract Documents.

GC - 100

Special Provisions

TABLE OF CONTENTS

Categ	<u>ory 1000</u>	
1001	CLEARING AND GRUBBING	
1002	TYPE B ENGINEER'S OFFICE	
1003	MAINTENANCE OF TRAFFIC	
1004	TEMPORARY TRAFFIC SIGNS	
1005	5 INCH WHITE TEMPORARY PAVEMENT MARKING PAINT LINES	.7
1006	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS-ANY WIDTH	. 8
1007	DRUMS FOR MAINTENANCE OF TRAFFIC	.9
1008	CONTINGENT: TEMPORARY ORANGE CONSTRUCTION FENCE	.9
1009	CR-6 FOR MAINTENANCE OF TRAFFIC	.9
1010	CONSTRUCTION STAKEOUT	.9
1011	MOBILIZATION	. 10
1012	AS-BUILT DRAWINGS	
1013	CRITICAL PATH METHOD PROJECT SCHEDULE	. 11
1014	CONSTRUCTION SITE SIGN	. 11
Categ	ory 2000	
2001	UNCLASSIFIED EXCAVATION	. 12
2002	COMMON BORROW – TYPE 1	. 13
2003	TEST PIT EXCAVATION	. 14
2004	CONTINGENT: UNSUITABLE MATERIAL EXCAVATION	. 14
2005	CONTINGENT: GEOSYNTHETIC STABILIZED SUBGRADE USING GRADED AGGR BASE	
Categ	ory 3000	
3001	12 INCH HDPE STORM PIPE (DUAL WALL)	. 16
3002	15 INCH HDPE STORM PIPE (DUALWALL).	
3003	18 INCH HDPE STORM PIPE (DUAL WALL)	
3004	44 INCH SPAN BY 27 INCH RISE REINFORCED CONCRETE ARCH PIPE	. 16
3005	15 INCH CORRUGATED METAL PIPE	
3006	15 INCH CONCRETE END SECTION (ON END OF HDPE PIPE)	
3007	18 INCH CONCRETE END SECTION (ON END OF HDPE PIPE)	
3008	YARD INLET	.17
3009	REMOVAL OF EXISTING STORM DRAIN, ANY SIZE	
3010	TEMPORARY STONE OUTLET STRUCTURE	. 18
3011	SILT FENCE	. 18
3012	DIVERSION FENCE	
3013	INLET PROTECTION	
3014	STABILIZED CONSTRUCTION ENTRANCE	. 18
3015	SUPER SILT FENCE	
3016	CONTINGENT: STONE FOR SEDIMENT CONTROL	. 18
3017	CLASS I RIPRAP OUTLET PROTECTION	. 18
3018	CLASS II RIPRAP OUTLET PROTECTION	. 18
3019	SPECIAL CONCRETE END WALL	
3020	CONTINGENT: SELECT BACKFILL USING NO. 57 AGGREGATE	. 18
3021	CONTINGENT: FLOWABLE BACKFILL	. 19
3022	SWM - MICRO-BIORETENTION - NYLOPLAST INLETS	. 19
3023	SWM - MICRO-BIORETENTION - 30 MIL PVC LINER	
3024	SWM - MICRO-BIORETENTION - 4 INCH PVC PERFORATED PIPE	. 19
3025	SWM - MICRO-BIORETENTION - 4 INCH PVC CLEANOUT W/ WATERTIGHT SCREW LID	
3026	SWM – MICRO-BIORETENTION - MULCH	
3027	SWM – MICRO-BIORETENTION – SOIL MIX	
3028	SWM – MICRO-BIORETENTION – NO. 8 STONE	
~~~		• • •

## **SPECIAL PROVISIONS**

3029	SWM - MICRO-BIORETENTION - NO. 2 STONE	
3030	CONTINGENT: MISCELLANEOUS – CONCRETE MIX NO. 2	
3031	GEOTECHNICAL SERVICES FOR SWM AS-BUILT CERTIFICATION	
3032	UNDERDRAINS, SUBGRADE DRAINS, AND SPRING CONTROL	
3032	NO. 57 GRAVEL DIAPHRAM	
3033		
SPI 31	16 STORMWATER MANAGEMENT (SWM) FILTRATION FACILITIES	
Categ	<u>ory 5000</u>	
	6 INCH GRADED AGGREGATE BASE COURSE, ROADWAY	
5002	SUPERPAVE ASPHALT MIX FOR SURFACE 12.5MM (PG64H-22)	
5003	SUPERPAVE ASPHALT MIX FOR BASE 19.0MM (PG-64S-22)	
5004	PRICE ADJUSTMENT FOR ASPHALT BINDER	
5005	PAYMENT ADJUSTMENT FOR PAVEMENT DENSITY	
5006	PAYMENT ADJUSTMENT FOR ASPHALT MIXTURE	
5007	0-2 INCH MILL	
5008	FULL DEPTH SAW CUTS	
5009	5 INCH WHITE LEAD FREE REFL THERM PVMT MARKING LINES	
5010	24 INCH WHITE THERM PAVEMENT MARKINGS, STOP BAR	
<u>Categ</u>	<u>ory 6000</u>	
6001	STANDARD TYPE A COMBINATION CURB AND GUTTER	
6002	STANDARD TYPE D CURB COMBINATION CURB AND GUTTER	
6003	DEPRESSED CURB FOR COMBINATION CONCRETE CURB AND GUTTER	
6004	CONCRETE SIDEWALK	
6005	DETCTABLE WARNING SURFACE	
6006	CHAIN LINK FENCE	
Cata	7000	
	ory 7000	27
7001	PLACING SALVAGED TOPSOIL, 4" DEPTH	
7001 7002	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH	
7001 7002 7003	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH	
7001 7002 7003 7004	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING	
7001 7002 7003 7004 7005	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT	
7001 7002 7003 7004 7005 7006	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD	
7001 7002 7003 7004 7005 7006 7007	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED	
7001 7002 7003 7004 7005 7006 7007 7008	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS	
7001 7002 7003 7004 7005 7006 7007 7008 7009	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS LOBELIA CARDINALS / CARDINAL FLOWER	37 37 38 45 45 45 45 45 45 45 45
7001 7002 7003 7004 7005 7006 7007 7008 7009 7010	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS LOBELIA CARDINALS / CARDINAL FLOWER PANICUM VIRGATUM 'HEAVY METAL' / SWITCHGRASS	37 37 38 45 45 45 45 45 45 45 45 45
7001 7002 7003 7004 7005 7006 7007 7008 7009 7010 7011	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS LOBELIA CARDINALS / CARDINAL FLOWER PANICUM VIRGATUM 'HEAVY METAL' / SWITCHGRASS BETULA NIGRA / RIVER BIRCH	37 37 38 45 45 45 45 45 45 45 45 45 45
7001 7002 7003 7004 7005 7006 7007 7008 7009 7010 7011 7012	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS LOBELIA CARDINALS / CARDINAL FLOWER PANICUM VIRGATUM 'HEAVY METAL' / SWITCHGRASS BETULA NIGRA / RIVER BIRCH MAGNOLIA VIRINGIANA / SWEETBAY MAGNOLIA	37 37 38 45 45 45 45 45 45 45 45 45 45 45 45
7001 7002 7003 7004 7005 7006 7007 7008 7009 7010 7011 7012	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS LOBELIA CARDINALS / CARDINAL FLOWER PANICUM VIRGATUM 'HEAVY METAL' / SWITCHGRASS BETULA NIGRA / RIVER BIRCH	37 37 38 45 45 45 45 45 45 45 45 45 45 45 45
7001 7002 7003 7004 7005 7006 7007 7008 7009 7010 7011 7012 7013	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS LOBELIA CARDINALS / CARDINAL FLOWER PANICUM VIRGATUM 'HEAVY METAL' / SWITCHGRASS BETULA NIGRA / RIVER BIRCH MAGNOLIA VIRINGIANA / SWEETBAY MAGNOLIA	37 37 38 45 45 45 45 45 45 45 45 45 45 45 45
7001 7002 7003 7004 7005 7006 7007 7008 7009 7010 7011 7012 7013	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS LOBELIA CARDINALS / CARDINAL FLOWER PANICUM VIRGATUM 'HEAVY METAL' / SWITCHGRASS BETULA NIGRA / RIVER BIRCH MAGNOLIA VIRINGIANA / SWEETBAY MAGNOLIA VIBURNUM DETATUM 'BLUE MUFFIN' / ARROWWOOD	37         37         38         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45
7001 7002 7003 7004 7005 7006 7007 7008 7009 7010 7011 7012 7013 Categ	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS LOBELIA CARDINALS / CARDINAL FLOWER PANICUM VIRGATUM 'HEAVY METAL' / SWITCHGRASS BETULA NIGRA / RIVER BIRCH MAGNOLIA VIRINGIANA / SWEETBAY MAGNOLIA VIBURNUM DETATUM 'BLUE MUFFIN' / ARROWWOOD	37         37         38         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         61
7001 7002 7003 7004 7005 7006 7007 7008 7009 7010 7010 7011 7012 7013 Categ 8001	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS LOBELIA CARDINALS / CARDINAL FLOWER PANICUM VIRGATUM 'HEAVY METAL' / SWITCHGRASS BETULA NIGRA / RIVER BIRCH MAGNOLIA VIRINGIANA / SWEETBAY MAGNOLIA VIBURNUM DETATUM 'BLUE MUFFIN' / ARROWWOOD	37         37         38         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         61         61
7001 7002 7003 7004 7005 7006 7007 7008 7009 7010 7011 7012 7013 <u>Categ</u> 8001 8002	PLACING SALVAGED TOPSOIL, 4" DEPTH         CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH         CONTINGENT: TEMPORARY SEED AND MULCH         TYPE A SOIL STABILIZATION MATTING         TURFGRASS ESTABLISHMENT         CORNUS SERICEA / REDOSIER DOGWOOD         ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED         CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS         LOBELIA CARDINALS / CARDINAL FLOWER         PANICUM VIRGATUM 'HEAVY METAL' / SWITCHGRASS         BETULA NIGRA / RIVER BIRCH         MAGNOLIA VIRINGIANA / SWEETBAY MAGNOLIA         VIBURNUM DETATUM 'BLUE MUFFIN' / ARROWWOOD         ory 8000         SHEET ALUMINUM SIGNS         WOOD SIGN SUPPORTS	37         37         38         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         45         61         61         61         61
7001 7002 7003 7004 7005 7006 7007 7008 7009 7010 7011 7012 7013 <b>Categ</b> 8001 8002 8003	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS LOBELIA CARDINALS / CARDINAL FLOWER PANICUM VIRGATUM 'HEAVY METAL' / SWITCHGRASS BETULA NIGRA / RIVER BIRCH MAGNOLIA VIRINGIANA / SWEETBAY MAGNOLIA VIBURNUM DETATUM 'BLUE MUFFIN' / ARROWWOOD SHEET ALUMINUM SIGNS WOOD SIGN SUPPORTS REMOVE/RELOCATE EXISTING GROUND MOUNTED SIGN (1) 3 - INCH SCHEDULE 40 PVC CONDUIT TRENCHED	$\begin{array}{c} 37\\ 37\\ 38\\ 38\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45$
7001 7002 7003 7004 7005 7006 7007 7008 7009 7010 7011 7012 7013 <u>Categ</u> 8001 8002 8003 8004	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS LOBELIA CARDINALS / CARDINAL FLOWER PANICUM VIRGATUM 'HEAVY METAL' / SWITCHGRASS BETULA NIGRA / RIVER BIRCH MAGNOLIA VIRINGIANA / SWEETBAY MAGNOLIA VIBURNUM DETATUM 'BLUE MUFFIN' / ARROWWOOD SHEET ALUMINUM SIGNS WOOD SIGN SUPPORTS REMOVE/RELOCATE EXISTING GROUND MOUNTED SIGN (1) 3 - INCH SCHEDULE 40 PVC CONDUIT TRENCHED (1) 3 / 4 - INCH SCHEDULE 40 PVC CONDUIT TRENCHED	$\begin{array}{c} 37\\ 37\\ 38\\ 38\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45$
7001 7002 7003 7004 7005 7006 7007 7008 7009 7010 7010 7011 7012 7013 <b>Categ</b> 8001 8002 8003 8004 8005	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS LOBELIA CARDINALS / CARDINAL FLOWER PANICUM VIRGATUM 'HEAVY METAL' / SWITCHGRASS BETULA NIGRA / RIVER BIRCH MAGNOLIA VIRINGIANA / SWEETBAY MAGNOLIA VIBURNUM DETATUM 'BLUE MUFFIN' / ARROWWOOD SHEET ALUMINUM SIGNS WOOD SIGN SUPPORTS REMOVE/RELOCATE EXISTING GROUND MOUNTED SIGN CONCRETE FOR LIGHT POLE FOUNDATIONS (1) 3 - INCH SCHEDULE 40 PVC CONDUIT TRENCHED (1) 3/4 - INCH SCHEDULE 40 PVC CONDUIT TRENCHED (2) 1 - INCH SCHEDULE 40 PVC CONDUIT TRENCHED	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
7001 7002 7003 7004 7005 7006 7007 7008 7009 7010 7010 7011 7012 7013 Categ 8001 8002 8003 8004 8005 8006 8007 8008	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS LOBELIA CARDINALS / CARDINAL FLOWER PANICUM VIRGATUM 'HEAVY METAL' / SWITCHGRASS BETULA NIGRA / RIVER BIRCH MAGNOLIA VIRINGIANA / SWEETBAY MAGNOLIA VIBURNUM DETATUM 'BLUE MUFFIN' / ARROWWOOD SHEET ALUMINUM SIGNS WOOD SIGN SUPPORTS REMOVE/RELOCATE EXISTING GROUND MOUNTED SIGN (1) 3 - INCH SCHEDULE 40 PVC CONDUIT TRENCHED (1) 3/4 - INCH SCHEDULE 40 PVC CONDUIT TRENCHED (2) 1 - INCH SCHEDULE 40 PVC CONDUIT TRENCHED  (2) 2 - INCH SCHEDULE 40 PVC CONDUIT TRENCHED  (2) 2 - INCH SCHEDULE 40 PVC CONDUIT TRENCHED	$\begin{array}{c} 37\\ 37\\ 38\\ 38\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45$
7001 7002 7003 7004 7005 7006 7007 7008 7009 7010 7010 7011 7012 7013 Categ 8001 8002 8003 8004 8005 8006 8007	PLACING SALVAGED TOPSOIL, 4" DEPTH CONTINGENT: PLACING FURNISHED TOPSOIL, 4" DEPTH CONTINGENT: TEMPORARY SEED AND MULCH TYPE A SOIL STABILIZATION MATTING TURFGRASS ESTABLISHMENT CORNUS SERICEA / REDOSIER DOGWOOD ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS LOBELIA CARDINALS / CARDINAL FLOWER PANICUM VIRGATUM 'HEAVY METAL' / SWITCHGRASS BETULA NIGRA / RIVER BIRCH MAGNOLIA VIRINGIANA / SWEETBAY MAGNOLIA VIBURNUM DETATUM 'BLUE MUFFIN' / ARROWWOOD SHEET ALUMINUM SIGNS WOOD SIGN SUPPORTS REMOVE/RELOCATE EXISTING GROUND MOUNTED SIGN CONCRETE FOR LIGHT POLE FOUNDATIONS (1) 3 - INCH SCHEDULE 40 PVC CONDUIT TRENCHED (1) 3/4 - INCH SCHEDULE 40 PVC CONDUIT TRENCHED (2) 1 - INCH SCHEDULE 40 PVC CONDUIT TRENCHED	$\begin{array}{c} 37\\ 37\\ 38\\ 38\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45\\ 45$

8011	(2) 5 - INCH SCHEDULE 40 PVC CONDUIT TRENCHED	
8012	(3) 5 - INCH SCHEDULE 40 PVC CONDUIT TRENCHED	
8013	CONCRETE VAULT (7'W X 9'L X 7'-6" H)	
	10 INCH DIP WATERLINE	
	6 INCH DIP WATERLINE	
8016	8 INCH SDR26 SEWERLINE	
8017	SEWER MANHOLE ADJUSTMENT	
8018	STANDARD PRECAST 48 INCH SEWER MANHOLE	
8019	FIRE HYDRANT ASSEMBLY	
8020	BOLLARD PROTECTION	
8021	ELECTRICAL HAND HOLE	
8022	EXTERIOR JUNCTION BOX	
8023	THREE-PHASE JUNCTION BOX	
8024	GROUND ROD 3 /4 INCH DIAMETER X 10 FT LENGTH	
8025	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	

## **SPECIFICATIONS**

All work on this project shall conform to the Maryland Department of Transportation, State Highway Administration's Specifications entitled, "Standard Specifications for Construction and Materials" dated July 2019 revisions thereof, or additions thereto, and the Special Provisions included in this Invitation for Bids.

Wherever the wording Administration or Engineer is used in these specifications, it shall be construed to mean the Washington County Division of Engineering.

## SPECIAL PROVISIONS

## **CATEGORY 1000 – PRELIMINARY**

## 1001 CLEARING AND GRUBBING

- **.1 DESCRIPTION:** Adhere to Section 101.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Not Applicable
- **.3 CONSTRUCTION:** Adhere to Section 101.03.01 of the MDOT SHA Standard Specifications.

**ADD:** the following to the end of 101.03.07(a). Burning shall only be permitted at an approved offsite location. No burning shall take place on site.

.4 MEASUREMENT AND PAYMENT: Adhere to Section 101.04 of the MDOT SHA Standard Specifications and the following: The removal of existing chain link fence, posts, gates, and any other fencing will not be measured but the cost will be incidental to the Contract lump sum price for Clearing and Grubbing.

## **1002 TYPE B ENGINEER'S OFFICE**

- **.1 DESCRIPTION:** Adhere to Section 103.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Not Applicable
- **.3 CONSTRUCTION:** Adhere to Section 103.03 of the MDOT SHA Standard Specifications.

**DELETE:** 103.03.06 Microcomputer System for all Offices in its entirety.

**INSERT**: The following.

## 103.3.6 Computer System. Furnish <u>1 printer</u>.

## General Requirements.

- (a) Printer. When an Engineers Office is specified, furnish a color all-in-one laser printer/scanner/copier/fax with at least 64 MB of RAM and meeting the following minimum requirements:
  - (1) Input paper capacity of 150 sheets.
  - (2) Automatic document feed of 35 page capacity.
  - (3) Printer resolution up to 600 X 2400 dpi, and a print speed (color) of at least 15 ppm.

- (4) Scanner resolution must be capable of 1200 x 2400 dpi optical. Built in Copier resolution must be capable of up to 600 X 600 dpi. Copier speed of at least 15 ppm.
- (5) Fax speed of at least 2 sec / page.
- (6) Able to print on 8 ¹/₂"x11" and 11"x17" paper.
- (7) For security reasons a printer with an internal hard drive installed is not allowed.
- (**b**) Internet Access. Provide unlimited internet service approved by the Engineer. Provide internet high-speed service (DSL or cable). With DSL or cable internet service, provide an

external router device. Provide firewall software to protect the computer from security intrusions.

- (c) Accessories.
  - (1) When an Engineers office is specified, provide a standard computer workstation with minimum desk space of 60 X 30 in. and a padded swivel type chair with armrests.
  - (2) 8-1/2 X 11 in. and 11 X 17 in. xerographic paper as needed.
  - (3) Toner and ink as needed.
  - (4) Maintenance agreement to provide for possible down time.
  - (5) Physical security system to deter theft of the computer and components.
  - (6) Three 4-GB USB flash drive storage devices.
  - (7) Blank recordable CD-RW media as needed.

Have the computer system completely set up and ready for use on or before the day the Engineers office is to be occupied. When an Engineers office is not specified, have the computer system furnished complete and ready for use at least five days prior to beginning any work on the project.

The computer system is for the sole use of the Engineer. The engineer will have complete access to the system. After all specified software is satisfactorily installed by the contractor an SHA technician/ representative will ensure that no user accounts exist on the computer system except those used by the Engineer

If for any reason the system fails to operate, is stolen, or is otherwise unavailable for use, it shall be replaced or repaired within 48 hours.

Any remote access to the computer system by the contractor may be performed only with the permission and supervision of the Engineer.

.4 **MEASUREMENT AND PAYMENT:** Adhere to Section 103.04 of the MDOT SHA Standards and Specifications and add the following as a fourth paragraph:

**Computer.** The computer system will not be measured but the cost will be incidental to the Contract price for the Engineers Office item.

## **1003 MAINTENANCE OF TRAFFIC**

**.01 DESCRIPTION:** Adhere to Section 104.02.01 of the MDOT SHA Standards and Specifications and

## **SPECIAL PROVISIONS**

**<u>DELETE</u>**: The fourth paragraph sentence "Refer to contract Documents for Work Restrictions." in its entirety.

**INSERT**: The following.

## Work Restrictions.

Work is not permitted on the following holidays indicated below with an "X", nor is work permitted on the day immediately preceding and immediately following the holidays indicated below with an "X".

- New Year's Day, January 1
- Martin Luther King's Birthday, the third Monday in January
- President's Day, the third Monday in February
- 🔀 Good Friday
- Easter Weekend
- Memorial Day, the last Monday in May
- Independence Day, July 4
- $\boxtimes$  Labor Day, the first Monday in September
- Columbus Day, the second Monday in October
- Veterans Day, November 11
- Thanksgiving Day, the fourth Thursday in November
- Christmas Day, December 25

Work is not permitted on the following weekend days indicated below with an "X".

Saturdays, unless prior written approval is given by the Engineer

Sundays, unless prior written approval is given by the Engineer

TEMPORARY LANE OR SHOULDER CLOSURE SCHEDULE				
ROADWAY	# LANE(S) /	DAY OF	CLOSURE	
	SHOULDER CAN	THE	PERIOD	
	BE CLOSED	WEEK	(TIME OF DAY)	
Sharpsburg Pike	0/1	Any	Any	
	1/1	Mon-Fri	9am – 4pm	

**ADD:** The following after the last paragraph, "Any monetary savings.and the Administration."

When closing, or opening a lane or shoulder on freeways, expressways, and roadways with posted speed  $\geq 55$  mph, ensure a work vehicle is closely followed by a protection vehicle (PV) during installation and removal of temporary traffic control devices. The PV shall

## **SPECIAL PROVISIONS**

consist of a work vehicle with approved flashing lights, either a truck-mounted attenuator (TMA) with support structure designed for attaching the system to the work vehicle or a trailer truck-mounted attenuator (TTMA) designed for attaching the system to the work vehicle by a Pintle hook and an arrow panel (arrow mode for multilane roadways and caution mode on two-lane, two-way roadways).

Temporary Traffic Control for work along freeways, expressways, and roadways with posted speed  $\geq 55$  mph shall include the use of a PV. The PV shall be outfitted with a TMA or TTMA as noted above and be positioned on the shoulder to protect the work area throughout the duration of the shoulder work operation.

The work vehicle size and method of attachment shall be as specified in the TMA/TTMA manufacturer's specification as tested under NCHRP and/or MASH Test Level 3.

When a temporary lane or shoulder closure is in effect, begin work within one hour after the lane is closed. For any delay, greater than one hour and no work in progress, remove the lane/shoulder closure. Ensure the Traffic Manager attends the Pre-Construction, Pre-Structural Steel Erection, Pre-Concrete Placement, Pre-MOT Shift, and Pre-Paving Meetings and is prepared to competently discuss traffic control, the Traffic Control Plan (TCP), and the procedures to be implemented for lane closures.

All closures shall be in conformance with the approved TCP and at the direction of the Traffic Manager and the Engineer.

Workers and equipment, including temporary traffic control devices needed for setting up a lane closure or restriction, are prohibited in the lane/shoulder to be closed or restricted before the time permitted in the Contract Documents unless otherwise approved by the Engineer.

Temporary traffic control devices to be used for lane/shoulder closure may be placed on the shoulder of the roadway by workers no earlier than 30 minutes prior to the actual time lane/shoulder closure or restriction is permitted. When temporary traffic control devices are being installed, ensure that all work vehicles involved in the installation display flashing lights that provide a 360-degree visibility of the vehicles. These lights shall remain on until the full installation of TTC devices is complete. Temporary traffic signs may be displayed to traffic at this time.

Workers shall not enter any lane open to traffic. Workers may be present on shoulders to prepare for lane closure setup no earlier than 30 minutes prior to the actual time lane/ shoulder closures or restrictions are permitted. During preparation for the lane closure, ensure that all work vehicles at the site and involved in the installation of the lane closure or restriction display flashing lights that provide 360-degree visibility of the vehicles, as required by MD 104.01-18B. These lights shall remain on while the vehicle remains in the work zone and until the full implementation of the road closure or restriction is complete.

Restore all temporary lane or shoulder closures at the end of the closure period and ensure that no travel lane has been reduced to less than 11 ft on expressways, freeways and 10 ft on other roadways. Prior to opening the closed lane or shoulder, clear the lane or shoulder of

all material, equipment, and debris.

This is in addition to the requirements specified in TC-4.02.

To modify the work restrictions, submit a request to the Engineer in writing with at least 72 hours notice. Do not implement any changes until written approval from the Engineer is received. Include a copy of the original work restrictions with the written request. The Engineer also reserves the right to modify or expand the methods of traffic control or working hours as specified in the Contract Documents.

- **.2 MATERIALS**: Adhere to Section 104.02.02 of the MDOT SHA Standard Specifications
- **.3 CONSTRUCTION:** Adhere to Section 104.02.03 of the MDOT SHA Standard Specifications and

**INSERT:** The following:

The recommended TCP's for this project are:

Standard No.	MD - 104.00-01 thru 18, General Notes
	MD - 104.01-01 thru 32, TTCT Applications
	MD - 104.02-01/02, Shoulder Work
	MD - 104.02-03/04, Lane Shift
	MD - 104.02-09/10, Flagging
	MD - 104.02-13/14, Intersection Flagging

Road Work Ahead signs shall be displayed on all entrance ramps and intersections in advance of active work areas.

.4 **MEASUREMENT AND PAYMENT:** Maintenance of Traffic, Traffic Control Plan will not be measured but will be paid at the Contract Lump Sum price and any Assessed Deductions.

## **1004 TEMPORARY TRAFFIC SIGNS**

- **.1 DESCRIPTION:** Adhere to Section 104.08.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 104.08.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 104.08.03 of the MDOT SHA Standard Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Adhere to Section 104.08.04 of the MDOT SHA Standard Specifications.

## 1005 <u>5 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT</u> MARKING PLAN

**DELETE:** Section 104.11 TEMPORARY PAVEMENT MARKINGS in its entirety.

**INSERT**: The following.

## 104.11 TEMPORARY PAVEMENT MARKINGS.

**104.11.01 DESCRIPTION.** Furnish, install, and remove temporary pavement markings as specified in the Contract Documents or as directed by the Engineer. These markings shall include lines, letters, numbers, arrows, and symbols.

## **104.11.02 MATERIALS.**

Removable Preformed Pavement Marking Material Nontoxic Lead Free Waterborne Pavement Markings Black Out Tape Refer to the Contract Documents QPL

## 104.11.03 CONSTRUCTION.

**104.11.03.01 Quality Assurance/Quality Control.** Quality control testing shall be completed by the Contractor's Administration certified technicians. The Engineer will complete the quality assurance checks in conformance with MSMT 729 by performing the Nighttime Visibility Evaluations.

**104.11.03.02** Warranty Period. The Contractor shall maintain and be responsible for any defects in the pavement markings for a period of 180 days from the date of application. The Contractor shall replace the pavement markings as necessary within this period as directed by the Engineer at no additional cost to the Administration. Refer to GP-5.11.

**104.11.03.03 Application and Removal.** The pavement markings shall be applied in conformance with the manufacturer's recommendations and the Contract Documents. Markings shall be applied in the same direction as the flow of traffic. The markings shall be located as specified in the Contract Documents or as directed by the Engineer.

Pavement markings may be applied to either new or existing paved surfaces. When applied to newly paved surfaces, the markings shall be placed before traffic is allowed on the pavement. Nontoxic lead free waterborne pavement markings shall be used for all temporary pavement markings except for the final surface. However, the Contractor may use removable preformed pavement markings at no additional cost to the Administration.

When at the "end of season", the temperatures are too low to allow the placement of removable tape on the final surface, a written exception request may be submitted to the Engineer to allow the use of nontoxic lead free waterborne paint in lieu of removable tape until the following striping season.

When it is appropriate to shift lanes, all nonapplicable pavement markings within the travel way and adjacent to the travel way as directed by the Engineer shall be completely removed.

**Surface Condition**. Prior to application of pavement markings, the pavement surface shall be clean, dry, and free of all contaminants, including curing compound, dirt, and loose particles. Residual pavement markings shall be removed. Loose or poorly constructed markings shall also

be removed.

**Pavement Marking Removal**. All removable preformed pavement markings shall be completely removed prior to application of the permanent markings. On stage construction or final surfaces of portland cement concrete pavements, any objectionable adhesive residue shall be removed by water blasting or other methods as may be approved by the Engineer. Open flame is prohibited to remove adhesive residue, or any pavement markings. The Contractor shall remove all nonapplicable pavement markings so that there is no damage to the existing or final surface.

**Retroreflectance.** The initial retroreflectance readings for temporary pavement markings shall be a minimum of 250 and 150 millicandellas/lux/square meter for white and yellow, respectively. The Engineer will monitor the pavement markings in conformance with MSMT 729 during the Contractor's 180 day period of responsibility.

**104.11.04 MEASUREMENT AND PAYMENT.** Payment for Nontoxic Lead Free Waterborne Pavement Marking Paint, Removable Preformed Pavement Markings, Removal of Removable Preformed Pavement Markings, and the Removal of Existing Pavement Markings will be measured and paid using one or more of the items listed below and as specified in the Contract Documents.

The payment will be full compensation for furnishing, placing, complete removal of lines, letters, numbers, arrows, symbols, and the removal of all residue. In addition, payment will cover maintenance and replacement during the 180 day period, and for all material, labor, equipment, tools, and incidentals necessary to complete the work. Removal and replacement of temporary pavement markings required beyond the 180 day period will be measured and paid at the Contract unit price for the pertinent temporary pavement marking item.

Temporary markings replaced during the 180 day period as a result of plowing (as determined by the Engineer) will be paid at the Contract unit price for the pertinent temporary marking item.

- (a) Nontoxic Lead Free Waterborne Pavement Marking Paint-in width specified-per striped linear foot.
- (b) Removable Preformed Pavement Line Markings-in width specified-per striped linear foot.
- (c) Removable Performed Letters, Symbols, Arrows, and Numbers per each.
- (d) Removal of Removable Preformed Pavement Markings-any width-per striped linear foot.
- (e) Removal of Removable Preformed Letters, Symbols, Arrows and Numbers per each.
- (f) Removal of Existing Pavement Line Markings-any width per striped linear foot.
- (g) Removal of Existing Letters, Symbols, Arrows, and Numbers per each.
- (h) Black Out Tape Lines-any width per striped linear foot.
- (i) Removal of Black Out Tape Lines-any width-per linear foot.

#### **1006 REMOVAL OF EXISTING PAVEMENT LINE MARKINGS-ANY WIDTH**

- **.1 DESCRIPTION:** Adhere to Section 104.11.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 104.11.02 of the MDOT SHA Standard Specifications.
- **3. CONSTRUCTION:** Adhere to Section 104.11.03 of the MDOT SHA Standard Specifications.
- 4. **MEASUREMENT AND PAYMENT:** Adhere to Section 104.11.04 of the MDOT

SHA Standard Specifications.

#### **1007 DRUMS FOR MAINTENANCE OF TRAFFIC**

- **.1 DESCRIPTION:** Adhere to Section 104.12.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 104.12.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 104.12.03 of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 104.12.04 of the MDOT SHA Standard Specifications

#### 1008 CONTINGENT: TEMPORARY ORANGE CONSTRUCTION FENCE

**.1 DESCRIPTION:** Adhere to Section 104.20.01 of the MDOT SHA Standard Specifications.

- .2 MATERIALS: Adhere to Section 104.20.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 104.20.03 of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 104.20.04 of the MDOT SHA Standard Specifications.

#### **1009** CR-6 FOR MAINTENANCE OF TRAFFIC

- .1 **DESCRIPTION:** Adhere to Section 105.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 105.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 105.03 of the MDOT SHA Standard Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Adhere to Section 105.04 of the MDOT SHA Standard Specifications.

#### **1010 CONSTRUCTION STAKEOUT**

**1 DESCRIPTION:** Adhere to Section 107.01 of the MDOT SHA Standard Specifications.

- .2 MATERIALS: Adhere to Section 107.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 107.03 of the MDOT SHA Standard Specifications.

**DELETE**: 107.03.01 in its entirety.

**INSERT**: The following:

**107.03.01 Line and Grade**. The County will provide control points, bench marks, and a one-time stakeout of the baseline of construction. The contractor shall utilize these points to generate stakeout as needed. All construction stakeout shall be managed and directed by a registered land surveyor or property line surveyor who represents the Contractor, and who has a current unexpired license to practice surveying in the State of Maryland. The Contractor shall provide the name and contact information of the licensed surveyor who will oversee the survey work prior to the start of construction.

.4 MEASUREMENT AND PAYMENT: Adhere to Section 107.04 of the MDOT SHA Standard Specifications.

# 1011 MOBILIZATION

- .1 **DESCRIPTION:** Adhere to Section 108.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 108.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 108.03 of the MDOT SHA Standard Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Adhere to Section 108.04 of the MDOT SHA Standard Specifications.

#### 1012 AS-BUILT DRAWINGS

- .1 **DESCRIPTION.** Upon conclusion of the Project construction and the acceptance by the County the Contractor shall provide the County, an electronic copy of the Project based on the construction as noted in construction logs and records documenting deviations from the original construction document. The County will provide pdf electronic copies of the original Contract Documents.
- .2 MATERIALS. Not applicable.
- .3 **CONSTRUCTION.** Not applicable.
- .4 **MEASUREMENT AND PAYMENT.** Furnish As-Built Drawings will not be measured but will be paid at the Contract lump sum price. The payment will be full

compensation for all work, labor, equipment, tools, and incidentals necessary to complete the work to the satisfaction of the Engineer.

#### **1013** CRITICAL PATH METHOD PROJECT SCHEDULE

- .1 **DESCRIPTION:** Adhere to Section 109.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 109.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 109.03 of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 109.04 of the MDOT SHA Standard Specifications.

#### **1014 CONSTRUCTION SITE SIGN**

- .1 **DESCRIPTION:** 8 ft x 6 ft painted construction sign.
- .2 MATERIALS: See project detail section.
- .3 **CONSTRUCTION:** See project detail section.
- .4 **MEASUREMENT AND PAYMENT:** Payment for furnishing and installing the sign will not be measured but will be paid at the contract lump sum price. The payment will be full compensation for all work, labor, equipment, tools, and incidentals necessary to complete the work to the satisfaction of the Engineer.

#### CATEGORY 2000 – GRADING

#### 2001 UNCLASSIFIED EXCAVATION

.1 **DESCRIPTION:** This work shall consist of all excavation and grading to the lines and grades specified in the Contract Documents. All excavation on this project shall be unclassified and shall include all material regardless of type.

All suitable material from excavation operations shall be used for construction of embankments and restoration of existing grades throughout the limits of the work. Such work shall be performed in accordance with Section 204 of the MDOT SHA Specification Booklet. The Contractor shall be responsible for providing all required testing prior to placing material.

#### **.2 MATERIALS:** Not applicable.

#### .3 CONSTRUCTION:

- A. Within fifteen (15) calendar days of the Notice to Proceed the Contractor shall provide written verification of all excavation quantities. Failure to dispute the excavation quantities within fifteen (15) calendar days of the Notice to Proceed, shall imply the Contractor's acceptance of the quantities being accurate.
- B. Section 201.03.01 through 201.03.08, inclusive shall apply to this project, with the exception of Section 201.03.04 (b) **Blasting, which will not be permitted on this project**.
- C. The limit of Unclassified Excavation shall include all material below the limits of clearing and grubbing and above the subgrade. Unclassified Excavation will include the removal and disposal of all existing concrete curb, sidewalk, median, and asphalt paving as specified on the construction drawings.
- D. Moisture and compaction requirements shall conform to Section 204.03.04.
- .4 MEASUREMENT AND PAYMENT: Unclassified Excavation shall be measured based on the average end area method using cross sections, and paid at the Contract unit price bid per cubic yard. In areas without cross section, the Contractor shall perform survey prior to and after excavation. No adjustments will be made for material swelling. The payment will be full compensation for all excavation and hauling, formation and compaction of embankments and backfills; disposing of excess and unsuitable materials; removal and disposal of existing rock, removal and disposal of existing pavement, removal and disposal of existing curbing, removal and disposal of existing sidewalk or median, etc.; topsoil stripping and stockpiling; preparation and completion of subgrade and shoulders except as otherwise specified; serrated slopes; rounded and transition slopes and for all material, labor, equipment, tools and incidentals necessary to complete the work. Payment will not be made for excavation of any material that is used for purposes other than those designed.

#### 2002 <u>COMMON BORROW – TYPE 1</u>

.1 **DESCRIPTION:** This work shall consist of furnishing, excavating, hauling, and depositing approved materials for embankments and backfill when sufficient quantities of suitable materials are not available on site. It shall include all work prescribed for backfill, embankments, subgrade, and earth shoulders, all necessary clearing and grubbing, the removal and disposal of overburden or other unsuitable spoil material and the trimming, shaping, dressing, draining, and reclamation of the pit or location from which borrow material is secured.

#### .2 MATERIALS:

- A. Materials shall conform to Section 916.01.04 of the MDOT SHA Specifications.
- B. Dirty Crusher Run (DCR) may be acceptable for use as Borrow with prior approval by the Engineer.
- **.3 CONSTRUCTION:** Refer to Section 204.03 and Section 210.03 of the MDOT SHA Specifications and the following:
  - A. When project excavation is insufficient to complete the embankments or backfill, or does not meet the physical requirements, obtain material under this item to complete the work.
  - B. Do not use material from borrow excavation until all suitable and available project excavation is used, unless otherwise directed in writing by the Engineer. If satisfactory material is available on the project, the Engineer may, upon request, authorize in writing widening areas adjacent to slopes to obtain a portion or all of the excavation in place of borrow.
  - C. If the Contractor elects to use a borrow pit, he shall stakeout the area and provide the necessary soil analysis and test results from a maximum density test in accordance with AASHTO T-180 by a Soils Laboratory approved by the County.
  - D. The Contractor shall provide the County at least two (2) weeks notice of opening of any borrow pit so that measurements of the existing ground may be made.
  - E. It will be the Contractor's responsibility to obtain all necessary approvals and permits as required.
- .4 MEASUREMENT AND PAYMENT: Common Borrow will be measured on the basis of volume by survey of the site where material is to be placed, prior to and after compaction. Payment will be at the Contract unit price bid per cubic yard and shall be full compensation for furnishing, excavating, hauling, placing, compacting, testing, and all labor, materials, equipment, tools and incidentals necessary to complete the work.

When requested by the Contractor in writing, the Engineer may approve an alternate method of measurement for the computation of borrow excavation quantities. This alternate method will not be considered for approval unless the Contractor can show that the above is not a feasible method of measurement. When approved in writing by the Engineer, this alternate method shall consist of measuring the Borrow Excavation in approved hauling vehicles in the following manner:

- A. The Contractor shall submit prior to the start of hauling operations, a list of vehicles to be used (including rented). The identification number and hauling capacity for each vehicle shall be provided. The Engineer will determine the capacity of each vehicle designated by using the following method: while loaded and leveled (filling all voids), the inside bed of each hauling unit shall be measured for length, width, and depth. Depth shall be determined by marking the upper limits of the material on the bed of the truck (upper limit not to include any portion of the running boards). Once emptied, the depth shall be measured from the floor of the truck bed to the marked upper limit. As well, the hydraulic hoist cover shall be measured and deducted from the overall measured capacity. The measured capacity shall be multiplied by a factor of 0.85 to determine the pay volume.
- B. The Contractor shall furnish a delivery ticket to the Engineer for each load of borrow material delivered to the project. Any ticket not signed by the Engineer to acknowledge receipt will not be used in the computation of the borrow quantity.
  - The ticket shall include the following information:
    - 1. The supplier's name.
    - 2. The County's Contract number.
    - 3. The date and ticket number.
    - 4. Vehicle identification number.
    - 5. Type of material delivered.
    - 6. Pay volume computed as specified in (a).

The County reserves the right to verify the borrow quantities being hauled by dumping the material and measuring quantities on site, or by random visual inspection of the loaded hauling units.

#### **2003 TEST PIT EXCAVATION**

- .1 **DESCRIPTION:** Adhere to Section 205.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 205.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 205.03 of the MDOT SHA Standard Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Adhere to Section 205.04 of the MDOT SHA Standard Specifications.

#### 2004 CONTINGENT: UNSUITABLE MATERIAL EXCAVATION

.1 **DESCRIPTION:** This work shall consist of the removal of Unsuitable Material encountered at or below the normal limit for Unclassified Excavation as described

for that item or as shown on the Plans. Unsuitable material to be removed shall be based upon the judgment of the Engineer and shall be removed to the extent directed by the Engineer.

.2 MATERIALS: Common Borrow and/or Select Backfill are acceptable for use as backfill in place of unsuitable materials.

# .3 CONSTRUCTION:

- A. All voids created by the removal of unsuitable material shall be backfilled with Common Borrow and/or Select Backfill as directed by the Engineer.
- B. Prior to placing backfill in the above-described area, the County will take crosssections and/or field measurements to determine the amount of Common Borrow and/or Select Backfill required performing this item of work.
- C. Failure on the part of the Contractor to give the County the required notice or placing backfill prior to taking of cross-sections is at his own risk and expense.
- .4 **MEASUREMENT AND PAYMENT:** Contingent Unsuitable Material Excavation will be measured as described in B above and paid at the Contract Unit price bid per cubic yard of excavation. The payment shall be full compensation for the excavation and disposal of unsuitable materials including all labor, materials, equipment, tools, and incidentals necessary to complete this item of work.

# 2005 <u>CONTINGENT: GEOSYNTHETIC STABILIZED SUBGRADE USING GRADED</u> <u>AGGREGATE BASE</u>

- .1 **DESCRIPTION:** Adhere to Section 211.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 211.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 211.03 of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 211.04 of the MDOT SHA Standard Specifications.

## CATEGORY 3000 - DRAINAGE

# **<u>3001</u> <u>12 INCH HDPE STORM PIPE (DUAL WALL)</u>**

# 3002 15 INCH HDPE STORM PIPE (DUAL WALL)

# **<u>3003</u> <u>18 INCH HDPE STORM PIPE (DUAL WALL)</u>**

# **<u>3004</u> <u>44 INCH SPAN BY 27 INCH RISE REINFORCED CONCRETE ARCH PIPE</u>**

# 3005 15 INCH CORRUGATED METAL PIPE

- .1 **DESCRIPTION:** Adhere to Section 303.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 303.02 of the MDOT SHA Standard Specifications.

**AND:** Polypropylene Pipe

- **.3 CONSTRUCTION:** Adhere to Section 303.03 of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 303.04 of the MDOT SHA Standard Specifications.

#### <u>3006</u> <u>15 INCH PRECAST STANDARD CONCRETE END SECTION</u>

- .1 **DESCRIPTION:** Adhere to Section 305.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 305.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 305.03 of the MDOT SHA Standard Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Adhere to Section 305.04.02 of the MDOT SHA Standard Specifications.

#### <u>3007</u> <u>18 INCH PRECAST STANDARD CONCRETE END SECTION</u>

- .1 **DESCRIPTION:** Adhere to Section 305.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 305.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 305.03 of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 305.04.02 of the MDOT SHA Standard Specifications.

#### 3008 YARD INLET

- .1 **DESCRIPTION:** Adhere to Section 305.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 305.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 305.03 of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 305.04.01 of the MDOT SHA

#### 3009 REMOVAL OF EXISTING STORM DRAIN, ANY SIZE

.1 **DESCRIPTION:** This work shall consist of complete removal and disposal of existing storm drains at the locations shown on the Plans and/or as directed by the Engineer. Incidental to this work shall be all saw cutting, excavation, removal and disposal of pipe and metal or concrete end sections, backfill, topsoil, and seed.

#### .2 MATERIALS:

- A. Unless otherwise directed, backfill material shall be CR-6, compacted to 95% maximum density (T-180 method). Placement of loose lifts shall not exceed 6" thickness.
- B. Refer to Section 904.04 of the MD SHA Specifications for paving requirements.
- C. Refer to Section 920 of the MD SHA Specifications for topsoil requirements.

#### .3 CONSTRUCTION:

- A. Unless specified elsewhere or directed by the Engineer, all pipe culverts shall be disposed of at an approved disposal area.
- B. When multiple pipes are to be removed, each pipe will be measured for payment.
- C. Unless otherwise specified, the Owner will obtain all necessary permits and establish a sequence for removal. The Contractor shall, therefore, stage his work in strict accordance with the sequence.
- D. The Contractor shall comply with all trench safety and confined space entry requirements or specified in MOSH and OSHA specifications.
- E. Appropriate traffic control devices shall be in place and functional prior to commencing any work on this item.
- .4 **MEASUREMENT AND PAYMENT:** Measurement of existing pipe culverts satisfactorily removed will be from end to end. The payment will be paid at the Contract unit price bid per linear foot. The payment will be full compensation for all labor, equipment, saw cutting, excavation, removal and disposal of pipe, metal or concrete end sections and headwalls, backfill and compaction, topsoil, seed and incidentals necessary to complete the work.

Restoration of asphalt pavement at pipe removals will be measured and paid at the

Contract unit price bid per square yard of pavement patching. In milling areas, the Contractor shall place asphalt to match the existing pavement section and in areas requiring reconstruction, the Contractor shall provide a full depth pavement section as shown on the plans and directed by the Engineer.

# 3010 TEMPORARY STONE OUTLET STRUCTURE

## 3011 SILT FENCE

- **3012 DIVERSION FENCE**
- 3013 INLET PROTECTION
- 3014 STABILIZED CONSTRUCTION ENTRANCE
- 3015 SUPER SILT FENCE
- 3016 CONTINGENT: STONE FOR SEDIMENT CONTROL
- **3017** CLASS I RIPRAP FOR OUTLET PROTECTION
- **<u>3018</u>** CLASS II RIPRAP FOR OUTLET PROTECTION
- .1 **DESCRIPTION:** Adhere to Section 308.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 308.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 308.03 of the MDOT SHA Standard Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Adhere to Section 308.04 of the MDOT SHA Standard Specifications.

# 3019 SPECIAL CONCRETE END WALL

- .1 **DESCRIPTION:** This work will consist of constructing the end walls in accordance with the details shown in the Contract documents.
- .2 MATERIALS: Adhere to Section 305.02 of the MSHA Specification Book.
- **.3 CONSTRUCTION:** Adhere to Section 420 for portland cement concrete and Section 305.03 of the MSHA Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 305.04 and Section 305.04.03 of the MSHA Standard Specifications.

# 3020 CONTINGENT: SELECT BACKFILL USING AASHTO NO. 57 AGGREGATE

- .1 **DESCRIPTION:** Adhere to Section 302.01 of the MSHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 302.02 of the MSHA Standard Specifications.
- .3 **CONSTRUCTION:** Adhere to Section 302.03 of the MSHA Standard Specifications.

.4 **MEASUREMENT AND PAYMENT:** Adhere to Section 302.04 of the MSHA Standard Specifications.

#### 3021 CONTINGENT: FLOWABLE BACKFILL

.1 **DESCRIPTION:** Adhere to Section 314.01 of the MDOT SHA Standard Specifications.

#### .2 MATERIALS:

- **DELETE:** Section 314.02 of the MDOT SHA Standard Specifications in its entirety.
- INSERT:The following:<br/>Controlled Low Strength Material902.16
- **.3 CONSTRUCTION:** Adhere to Section 314.03 of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 314.04 of the MDOT SHA Standard Specifications.

#### <u>3022 SWM – MICRO-BIORETENTION - NYLOPLAST INLETS</u>

3023 SWM – MICRO-BIORETENTION – 30 MIL PVC LINER

3024 SWM – MICRO-BIORETENTION – 4 INCH PVC PERFORATED PIPE

<u>3025 SWM – MICRO-BIORETENTION – 4 INCH PVC CLEANOUT WITH WATERTIGHT</u> <u>SCREW LID</u>

3026 SWM – MICRO-BIORETENTION – MULCH

3027 SWM – MICRO-BIORETENTION – SOIL MIX

3028 SWM – MICRO-BIORETENTION – NO. 8 STONE

- **3029** SWM MICRO-BIORETENTION NO. 2 STONE
- .1 **DESCRIPTION:** This work shall consist of construction of ten (10) Micro-Bioretention facilities in accordance with the plan and details as shown on the contract drawings.

#### .2 MATERIALS:

Bioretention Soil Mix (BSM) 920.01.05 Geotextile, Class PE, Type III 921.09 PVC Pipe, Schedule 40 D1785 30 mil U/V Resistant Polyethylene **ASTM D4397** Coarse Sand 920.01.05(a)(1) No. 2 Aggregate M-43, No.2 No. 7 Aggregate 901.01 No. 57 Aggregate 901.01 Concrete 902.10 Topsoil 920.01.01 and 920.01.02

Fertilizer	920.03.01
Shredded Hardwood Bark (SHB) Mulch	920.04.03
Soil Stabilization Matting (SSM)	920.05
Seed and Turfgrass Sod	920.06

- .3 CONSTRUCTION: Excavate bioretention facility to the specified length, width, and depth. Cut side slopes as steep as soil conditions will allow. When grading and paving operations have been completed and vegetation has been established to the satisfaction of the Engineer, install 30 mil polyethylene liner, refill excavated area with the materials in accordance with Contract details.
- .4 **MEASUREMENT AND PAYMENT:** Bioretention Facilities will be measured and paid for at the Contract unit price per specific item as follows:

3047	PVC Liner	Square Yard
3048	4 Inch PVC Perf Pipe	Linear Foot.
3049	Mulch	SY, 3 Inch Depth
3050	Soil Mix	CY
3051	Sand	CY
3052	No. 7 Stone	CY
3053	No. 57 Stone	CY

The payment will include all excavation, sheeting and shoring, 30 mil polyethylene liner, 4 inch perforated PVC underdrain pipe, 6 inch PVC pipe cleanout and cap, 6 inch circular underdrain outlet pipe, geotextile, stone, bioretention soil mix, aggregates and all testing, material, labor, equipment, tools, and incidentals necessary to complete the work. Precast curb opening inlet, riprap erosion control and plantings will be paid separately using items listed elsewhere in this document. Any other materials required but not listed by item number are to be considered incidental to the work.

#### 3030 CONTINGENT: MISCELLANEOUS - CONCRETE MIX NO. 2

- .1 **DESCRIPTION:** Adhere to Section 305.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 305.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 305.03 of the MDOT SHA Standard Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Adhere to Section 305.04 of the MDOT SHA Standard Specifications.

#### 3031 GEOTECHNICAL SERVICES FOR SWM AS-BUILT CERTIFICATION

.1 **DESCRIPTION:** The various stages of construction of each stormwater management facility shall be documented according to the pertinent checklist included in the Contract Documents. Upon completion of the stormwater management facilities an as-built certification, including the pertinent checklist, signed by a Professional Engineer or Professional Land Surveyor licensed in the State of Maryland shall be submitted to the Engineer to certify that the constructed stormwater management facilities comply with

the Contract Documents and as-built plans.

#### .2 MATERIALS: Not Applicable

.3 CONSTRUCTION: Each stage of the construction of the stormwater management facilities shall be documented according to the pertinent checklist in the Contract Documents. Upon completion of the construction of the stormwater management facilities, the Contractor shall submit to the Engineer two sets of as-built drawings along with all pertinent as-built inspection checklists and a signed as-built certification that

each of the stormwater management facilities has been constructed according to the Contract Documents. The as-built certificate shall be signed by a Professional Engineer or Professional Land Surveyor licensed in the State of Maryland. A copy of the as-built certification and inspection checklist shall be sent to:

Mr. Brennan Garrett Washington County Division of Engineering 80 West Baltimore Street Hagerstown, Maryland, 21740

## .4 **MEASUREMENT AND PAYMENT**: Stormwater Management As-Built Certification will not be measured but paid at the Contract lump sum price. The

payment will be

full compensation for all labor, inspections, plan reviews, meetings, recommendations, documentation, and all materials, equipment, tools, and incidentals necessary to complete the work.

#### 3032 UNDERDRAINS, SUBGRADE DRAINS, AND SPRING CONTROL

- .1 **DESCRIPTION:** Adhere to Section 306.01 of the MSHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 306.02 of the MSHA Standard Specifications.
- .3 **CONSTRUCTION:** Adhere to Section 306.03 of the MSHA Standard Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Adhere to Section 306.04 of the MSHA Standard Specifications.

#### 3033 NO. 57 GRAVEL DIAPHRAM

- .1 **DESCRIPTION:** Install No. 57 gravel diaphragm to the widths and depths shown on the Contract Documents.
- .2 MATERIALS: No. 57 Aggregate Section 901.01 of the MSHA Standard Specifications.
- .3 **CONSTRUCTION:** Install after the asphalt is placed.
- .4 **MEASUREMENT AND PAYMENT:** Gravel diaphragm will be measured at the Contract Unit Price per cubic yard. The payment will be full compensation for all labor, equipment, excavation, removal and disposal of excavation, backfill and compaction, and any incidentals necessary to complete the work.



# SPI 316 – STORMWATER MANAGEMENT (SWM) FILTRATION FACILITIES CATEGORY 300 DRAINAGE

#### SECTION 316 — STORMWATER MANAGEMENT (SWM) FILTRATION FACILITIES

**316.01 DESCRIPTION.** Construct stormwater management (SWM) filtration facilities as specified.

**SWM Filtration Facilities Identification.** SWM filtration facilities are identified by unique sixdigit inventory numbers and include the following designations.

- (a) Bioretention.
- (**b**) Micro-Bioretention.
- (c) Organic Filters.
- (d) Surface Sand Filters.
- (e) Submerged Gravel Wetlands.
- (f) Landscape Infiltration.
- (g) Rain Gardens.
- (h) Infiltration Berms.
- (i) Bio-swales.
- (j) Gravel Diaphrams

#### **316.02 MATERIALS.**

No. 57 Aggregate	901.01
No. 7 Aggregate	901.01
No. 2 Aggregate	M-43, No. 2
Concrete	902.10
Topsoil	920.01.01 and 920.01.02
Bioretention Soil Mix (BSM)	920.01.05
Coarse Sand	920.01.05(a) (1)
Fertilizer	920.03.01
Shredded Hardwood Bark (SHB) Mulch	920.04.03
Soil Stabilization Matting (SSM)	920.05
Seed and Turfgrass Sod	920.06
Plant Materials	920.07
Water	920.09.01
Geotextile, Class PE, Type III	921.09
Securing Pins or Staples	921.09



Aggregate. Ensure aggregate has been adequately washed and is free of soil and fines.

**Subdrain Pipe, Fittings and Geotextile Sock.** Perforated and solid-wall polyvinyl chloride profile wall drain pipe (PPWP) meeting M-304 or corrugated polyethylene drainage pipe (CPP) meeting M-252, Type S and Type SP. Perforated pipe shall have two rows of slotted perforations with an opening area of  $20 \text{ cm}^2/\text{m}$  to  $21 \text{ cm}^2/\text{m}$ . When specified, use the geotextile sock recommended and supplied by the subdrain pipe manufacturer.

#### **316.03 CONSTRUCTION.**

**316.03.01 Site Protection.** Prior to constructing SWM filtration facilities, ensure that the SWM facility site areas are protected from vehicular traffic and is not used for erosion and sediment controls, stockpiles or equipment storage.

**316.03.02 Site Preparation.** Unless facilities are off-line and will receive no runoff, construct facilities only after all surrounding and adjacent areas are permanently stabilized. Divert flow from entering the SWM filtration facility areas unless same-day stabilization is specified for the SWM filtration facility location. Prevent trash, debris and sediment from entering SWM filtration facilities during construction.

**316.03.03 Schedule.** Perform SWM filtration facility activities during dry weather and when soil moisture conditions are suitable and unless the facility is off-line or flow diversions are in place. Only work with soil that is friable and not in a muddy or frozen condition. Cease operations when soil and overall conditions are otherwise unsuitable.

**316.03.04 Excavation.** Use methods of excavation that minimize compaction of the underlying soils. Where feasible, operate equipment from locations adjacent to SWM filtration facilities rather than within the facility area. Use only wide-track or marsh-track equipment, or light equipment with turf-type tires to excavate, grade, and place materials. Do not use equipment with narrow tracks or narrow tires, rubber tires with large lugs, or high-pressure tires.

**310.03.05 Excavation Area Bottom Preparation**. Only work with soil that is friable and not in a muddy or frozen condition. When present, remove any standing water from the excavation area. Prepare the bottom of the excavated area as follows.

- (a) Submerged Gravel Wetlands. Rake surface to loosen soil.
- (b) All Other SWM Filtration Facilities. Till to a minimum depth of 8 in. to loosen soil.

**316.04.06 Geotextile.** Place tightly against the vertical sides of the excavation area, pulling tight to eliminate wrinkles and folds and pin securely. Eliminate any voids between the geotextile and



the underlying soil and avoid wrinkling and folding the geotextile. Maintain a minimum 12 in. overlap at the geotextile joint ends or breaks. Pin longitudinal joints, overlaps and edges securely with pins spaced no greater than 10 ft on center. Do not place geotextile on the bottom of the excavated area.

**316.03.07 Miscellaneous Structures.** Furnish and install according to Section 305.

**316.03.08** Aggregate. Place aggregate in layers as specified. Prevent soil, fines, and other debris from contaminating the aggregate. Remove contaminated aggregate and replace with clean aggregate.

**316.03.09 Subdrain Pipe.** Cap the ends of all subdrain pipe not terminating in a cleanout, vent, or drainage structure unless otherwise specified. Ensure perforations are placed on the bottom of the horizontal subdrain pipe runs.

- (a) **Cleanouts.** Install solid-wall pipe vertically and connect to horizontal subdrain with approved manufactured connections. Provide a counter-sunk screw cap on the exposed ends.
- (b) Vents. Install solid-wall pipe vertically and connect to the horizontal subdrain with approved manufactured connections. Provide a ventilated screw cap on the exposed ends. Ventilation holes or slots shall be no larger than 1/4 in. in diameter or width. The sum total area of the openings shall be no less than 1 in². Ensure that the ventilation openings are above the maximum specified water surface elevation.
- (c) Observation Wells. Use perforated and solid-wall pipe. Place the geotextile sock over the perforated pipe portion and secure at both ends. Provide a screw cap on the exposed end extending 2 in. above the surface. When a concrete collar is specified, ensure the top of the well is flush with the surface of the concrete collar.

**316.03.10** Coarse Sand. Place coarse sand in horizontal layers not exceeding 12 in. After each lift, spread the course sand to provide a uniform surface then spray or sprinkle water to saturate the lift until water flows from the subdrain outlet. Use an appropriate sediment control device to capture any discharged sediment-laden water from the subdrain outlet. Place, spread, and water course sand to uniform surface true to depth, line, cross section and elevation to ensure the completed work is as specified after settlement. Prevent soil, fines and other debris from contaminating the coarse sand. Remove contaminated coarse sand and replace with clean coarse sand.



**316.03.11Bioretention Soil Mix (BSM).** Place BSM in horizontal layers not exceeding 12 in. After each lift, spread the BSM to provide a uniform surface and spray or sprinkle water to saturate the entire area of BSM until water flows from the subdrain outlet. Use an approved sediment control device to capture any discharge sediment-laden water. Place, spread, and water BSM to uniform surface true to depth, line, cross section and elevation to ensure the completed work is as specified after settlement. Prevent soil, fines, and other debris from contaminating the BSM. Remove contaminated BSM and replace with uncontaminated BSM.

**316.03.12 Topsoil.** Place topsoil as specified. Do not blend topsoil into BSM when topsoil is placed on top of BSM.

#### 316.03.13 Check Dams.

- (a) **Topsoil Check Dams.** Construct topsoil check dams to the dimensions, grades, and depths specified.
- (b) Concrete Check Dams. Furnish and install concrete check dams as specified and according to Section 305.
- 316.03.14 Soil Stabilization Matting (SSM). As specified in Section 709.

**316.03.15 Vegetation Installation and Establishment.** Unless facilities are off-line or flow diversions are in place, , install seed, sod, trees, shrubs, perennials, and annuals within SWM filtration facility areas immediately after final grading. In the event that vegetation cannot be installed and established due to time-of-year or weather restrictions, keep diversion controls in place until such time that permanent vegetation may be established. Do not use machinery other than hand held within the BSM footprint.

- (a) Turfgrass Establishment. As specified in Section 705.
- (b) Meadow Establishment and Wildflower Seeding. As specified in Section 707.
- (c) Turfgrass Sod Establishment. As specified in Section 708.
- (d) Tree, Shrubs and Perennial Installation and Establishment. As specified in Section 710.
- (e) Annuals & Bulb Installation and Establishment. As specified in Section 711.



**316.03.16 Soil Amendments and Fertilizer**. Apply according to Section 705, 706, 707, 708, 710, or as specified. Use the following for plant materials installed in BSM.

- (a) Non-Vegetated BSM. Do not apply compost, other soil amendments, or fertilizer to non-vegetated BSM.
- (b) Trees, Shrub, and Perennials in BSM. Do not apply compost or other soil amendments to backfill soil or to planting beds.

Apply fertilizer to each planting pit per 710.03.04 when trees, shrubs, perennials, perennial plugs, or other plant materials are installed in BSM per Section 710.

(c) Seeded or Sodded BSM. Do not apply compost or other soil amendments.

Uniformly apply either of the fertilizers in Table 1 at the rate specified over the installed surface of the BSM when BSM will be permanently vegetated with Turfgrass Establishment, Shrub Seeding Establishment, Meadow Establishment, Turfgrass Sod Establishment, or other seeded or sodded vegetation establishment as specified.

BIORETENTION SOIL MIX TABLE 1 - FERTILIZER APPLICATION RATES			
FERTILIZER PER PE		LB PER ACRE	
<b>20-16-12</b> (83% UF with MAP and SOP)	0.052	200	
14-14-14 polymer coated or granular	0.062	275	

- (d) Nutrient Management Reporting. Record the fertilizer analysis, the square yards covered, and the pounds of fertilizer applied on the Nutrient Management Reporting Form. Submit the Form within 24 hours after applying fertilizer.
- (e) Fertilizer. Refer to (b). Rake fertilizer that is broadcast over the surface of the BSM for seeding or sodding to a depth of 1/8 to 1/2 in. Raking may be performed as part of seeding or sodding operations. Complete raking before soil stabilization matting or sod is installed.

#### 316.03.17 Shredded Hardwood Bark (SHB) Mulch. As specified in 710.03.13.



**316.03.18 Inspection and SWM Facility As-Built Certification.** Inspect and document each step of construction of SWM filtration facilities and complete the applicable checklists and furnish the SWM facility as-built certification as specified.

**316.04 MEASUREMENT AND PAYMENT.** Payment will be full compensation for all control of discharge from subdrain pipe, geotextile, watering, sheeting, shoring, dewatering, hauling, storing, re-handling of material, removal and disposal of excess and unsuitable material, tilling, grading and slope adjustments and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

Excavation. Excavation will be measured and paid for as specified in Section 201.

**Miscellaneous Structures.** Miscellaneous Structures will be measured and paid for per cubic yard of the specified mix concrete.

**Aggregate.** Aggregate will be measured and paid for at the Contract unit price for one or more of the following.

(a) No. 2 Aggregate for Stormwater Management Facilities per cubic yard.

(b) No. 7 Aggregate for Stormwater Management Facilities per cubic yard.

(c) No. 57 Aggregate for Stormwater Management Facilities per cubic yard.

Removal of contaminated aggregate and replacement with clean aggregate will be at no additional cost to the Administration.

Geotextile. Geotextile will not be measured but the cost will be incidental to the excavation.

**Subdrain Pipe.** Perforated and solid-wall subdrain pipe will be measured and paid for at the Contract unit price per linear foot for the specified size of subdrain pipe. Fittings, caps, geotextile sock, cleanouts, vents, observation wells, and other incidentals will not be measured but the cost will be incidental to the subdrain pipe.

**Coarse Sand.** Coarse Sand will be measured and paid for at the Contract unit price per cubic yard for Coarse Sand for Stormwater Management Facilities.

Removal of contaminated coarse sand and replacement with uncontaminated coarse sand will be at no additional cost to the Administration.



**Check Dams.** Check dams will be measured and paid for at the Contract unit price for one or more of the following.

- (a) Topsoil Check Dams per each.
- (**b**) Concrete Check Dams per each.

**Bioretention Soil Mixture (BSM).** BSM will be measured and paid for at the Contract unit price per cubic yard.

Removal of contaminated BSM and replacement with clean BSM will be at no additional cost to the Administration.

**Water.** Water used for saturation of coarse sand and BSM will not be measured but the cost will be incidental to the pertinent items.

**Shredded Hardwood Bark (SHB) Mulch.** SHB Mulch will be measured and paid for at the Contract unit price per square yard for Shredded Hardwood Bark Mulching, 3 in. depth.

Sediment Control for Discharge from Subdrain Pipe Outlets. Control for any sediment-laden discharge from subdrain pipe outlets will not be measured but will be incidental to the pertinent Erosion and Sediment Control items.

Topsoil. As specified in 701.04.

**Vegetation Installation and Establishment.** Vegetation installation and establishment will be measured and paid for at the Contact unit price for the pertinent landscaping items as specified in 705.04, 707.04, 708.04, 710.04 and 711.04.

Soil Stabilization Matting. As specified in 709.04.

Stormwater Management (SWM) Facility As-Built Certification. As specified.

#### **CATEGORY 5000 – PAVING**

#### 5001 6 INCH GRADED AGGREGATE BASE COURSE

- .1 **DESCRIPTION:** Adhere to Section 501.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 501.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 501.03 of the MDOT SHA Standard Specifications.
- **ADD:** Graded aggregate base shall extend 6-inches beyond the edge of the road.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 501.04 of the MDOT SHA Standard Specifications.

# 5002SUPERPAVE HOT MIX ASPHALT FOR SURFACE 12.5MM (PG64H-22)5003SUPERPAVE HOT MIX ASPHALT FOR BASE 19.0MM (PG64S-22)

- .1 **DESCRIPTION:** Adhere to Section 504.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 504.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 504.03 of the MDOT SHA Standard Specifications and the following.

#### ADD:

- A. Prior to any asphalt placement, the Contractor, Engineer, Inspector, and Paving Foreman, the Foreman, and the Quality Control Technicians shall hold a meeting for the Contractor to outline the schedule of paving and to review the quality control plans for the production plant and field operations. Subsequent meetings may be held on a weekly basis, at the direction of the Engineer.
- B. The Contractor shall provide daily production reports to the County no later than 1:00 p.m. on the day prior to scheduled production.
- C. The Contractor shall provide a copy of the plant quality control testing results within 24 hours of placement of applicable HMA.
- D. At any time during the period of the Contract, the Engineer may increase, delete, or substitute asphalt or sealant tonnage, milling area or patching quantities as listed herein for Washington County, at his/her discretion. The Engineer may also change the limits of the work by adding or deleting roads as listed herein. A change in quantities shall be in accordance with the "Estimated Quantities" provision as stated in Washington County General Conditions, Section 4.04, page GC-27.
- E. Contractor shall record the size, location, and orientation of all pavement markings with sketches and photographs of each roadway in a neat and legible manner. Documentation

of each roadway shall be submitted and approved by the Engineer prior to the performance of any work on said roadway.

- F. Driveway tie-ins shall be constructed so that the minimum pavement depth is maintained. Prior to placing new pavement, the entire affected surface area of the existing pavement shall be 100% covered with tack coat. After new pavement has been placed, all joints shall be filled with approved hot applied joint sealer.
- G. Roadway tie-ins shall be constructed in accordance with Washington County Standard Plate No. 503 on Sheet 13 and MDOT SHA Specifications Section 504.03.09.
- H. For each roadway, all necessary tie-ins shall be prepared and approved by the Engineer before the Contractor may begin the final surface overlay operation.
- I. At the direction of the Engineer, the Contractor shall perform proof rolling in each lane on all roadways scheduled for HMA base patch. Proof roll shall be performed a minimum of twenty-four (24) hours prior to work on the subject road. Proof roll shall be performed using a fully loaded dump truck that meets maximum legal load.
- J. The Engineer, via random sampling method, shall determine all mixture sample and pavement core locations.
- K. All Raised Pavement Markers shall be removed prior to the paving operation.
- L. All construction joints and cores shall be sealed with an approved hot applied joint sealer within two (2) working days after the surface course has been completed.
- M. All compaction of HMA shall take place while in place temperature is above 185 degrees. HMA shall be compacted to an in place density of 92.0 to 97.0 percent of the maximum density.
- N. The Paver speed shall not be in excess of 35 feet per minute. The Engineer may require a lesser speed if it is deemed that the rollers are not able to achieve the required compaction at that speed.
- O. At the direction of the Engineer, the Contractor shall perform density testing and obtain three verification cores. Results of these tests shall be delivered to the Engineer within 24 hours. Calibration cores shall not be taken without receiving prior approval from the Engineer.
- P. Testing frequency will be one box sample taken per 1000 cumulative tons, per mix throughout the project. Additional random testing may be performed at the direction of the Engineer.
- Q. Roadway surface must be completely dry before placement of any tack coat or HMA.
- R. Where an overlay section is adjacent to curb or combination curb and gutter, the existing pavement shall be milled to ensure the pavement is flush with the gutter or the curb reveal is not decreased. Shall be in accordance with Section 508 Milling Hot Mix Asphalt Pavement Measurement and Payment.
- S. When applying the tack coat to a vertical surface, a wand may be used. While applying tack coat to a horizontal surface (mainline or shoulder), the tack coat shall be applied using a controlled application method. Application to horizontal surfaces with a wand is considered unacceptable.
- T. Prior to applying the tack coat, remove all loose and foreign materials from the surface. Apply using full circulation spray bars that are laterally and vertically adjustable and that provide triple fanning and overlapping action. The tack coat distributing equipment shall have a computerized rate control for adjusting and controlling the application from the cab, this application rate shall be a minimum of .04 gal/sq yd.

# .4 **MEASUREMENT AND PAYMENT:** Adhere to Section 504.04 of the MDOT SHA Standard Specifications and the following.

- A. Superpave Asphalt Mix (HMA) pavements will be measured and paid at the Contract unit price bid per ton for the respective types of HMA. The payment will be full compensation for furnishing, hauling, placing, field and plant quality control, field and laboratory testing, tack coat, labor, equipment, tools and incidentals necessary to complete the work.
- B. All costs for constructing and removal of tie-ins, final or temporary shall be considered incidental and included in the price bid per ton for HMA courses.
- C. An adjustment will be made to the final Contract unit price of HMA. If the price of liquid asphalt binder fluctuates significantly from the prevailing price to the price at the month of placement; adjustments will be in accordance with section 504.04.01 of the MDOT SHA Supplemental Specifications and Provisions provided herein and shall be determined and paid on a monthly basis. The Contractor shall submit his invoice for payment of bituminous pavement placed along with any corresponding price adjustment request for liquid asphalt binder for the affected material as well as calculations in order for a price adjustment to be recognized by the County.
- D. Removal of all Raised Pavement Markers and preparation of the surface for pavement activities shall be considered as incidental to the cost of the pertinent asphalt pay item.
- E. Joint Seal shall be considered incidental to the cost of the pertinent asphalt pay items. Joint Seal shall be used for any location that new pavement is adjacent to existing pavement surfaces and shall include, but not limited to, storm drain inlets, roadway tie-ins, driveway tie-ins, patches, and any Longitudinal and/or Transverse joints that are identified by the Engineer. Joint Seal shall be applied no later than two (2) working days after the final surface course or patch course has been completed.
- F. All proof rolling shall be considered incidental and included in the price bid per ton for HMA courses.
- G. The County reserves the right to reduce or refuse payment for any HMA which fails to meet quality assurance tests for in place density, mixture gradation and asphalt content for all quantities placed for the test period. When all testing results meet within the tolerances as submitted in the job mix formula and the inplace density meets on or within 92.0 to 97.0 percent, payment will be made at 100% of the Contract unit price bid per ton of the mix placed. When testing results do not meet the specified in place density or allowable tolerance for mixture gradation and asphalt content, reductions in payment will be made per the following:

When the in-place density is on or within 90.0 to 91.9 percent, payment will be made at 93% of the Contract unit price bid per ton of the mix placed. When the in place density is equal to or less than 89.9 percent or equal to or greater than 97.1 percent, the materials placed shall be removed and reinstalled at no additional

cost to the County.

For every 1.0 percent outside the gradation tolerance, one (1) dollar will be deducted from the Contract unit price bid per ton, for each sieve opening size. In those instances where the test results are outside the tolerance at a value that is more than the range of the tolerance (the difference between the maximum and minimum design value), payment will be refused.

For every 0.10 percent outside the asphalt content tolerance, one (1) dollar will be deducted from the Contract unit price bid per ton. In those instances where the test results are outside the tolerance at a value that is more than the range of the tolerance (the difference between the maximum and minimum design value), payment will be refused.

In those instances where quality assurance tests warrant reduced payment for in place density combined with gradation and/or asphalt content, the in place density reduction will be applied first.

Dismissal of the payment reduction or refusal will require the Contractor to submit acceptable test results by an approved independent laboratory or submission of a certified mix design that meets test criteria for consideration. The expense of any additional testing shall be the responsibility of the Contractor.

# 5004PRICE ADJUSTMENT FOR ASPHALT BINDER5005PAYMENT ADJUSTMENT FOR PAVEMENT DENSITY5006PAYMENT ADJUSTMENT FOR ASPHALT MIX

- **.1 DESCRIPTION:** Adhere to Section 504.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 504.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 504.03 of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 504.04 of the MDOT SHA Standard Specifications

#### 5007 0-2 INCH MILL

- .1 **DESCRIPTION:** Adhere to Section 508.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 508.02 of the MDOT SHA Standard Specifications.

- **.3 CONSTRUCTION:** Adhere to Section 508.03 of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 508.04 of the MDOT SHA Standard Specifications

#### 5008 FULL DEPTH SAW CUTS

- .1 **DESCRIPTION:** The Contractor shall saw cut the existing roadway pavement full depth to provide a clean joint to place the new construction adjacent to the existing pavement. The Contractor shall saw cut either hot mix asphalt or Portland cement concrete pavement to provide a line designated by the Engineer.
- .2 MATERIALS: Not applicable
- .3 **CONSTRUCTION:** Saw cuts shall be made with a power saw, to the width directed by the Engineer. Saw cuts shall be clean, dry, and free from dust, grit, oil and moisture to the satisfactory of the Engineer. This item shall be used only where and as directed by the Engineer.
- .4 **MEASUREMENT AND PAYMENT:** This item will be measured and paid at the Contract unit price bid per linear foot. Payment will be for full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work.

#### 5009 5-INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS

- .1 **DESCRIPTION:** Adhere to Section 554.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 554.02 of the MDOT SHA Standard Specifications.
- .3 CONSTRUCTION: Adhere to Section 554.03 of the MDOT SHA Standard Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Adhere to Section 554.04 of the MDOT SHA Standard Specifications.

#### 5010 24-INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS

- .1 **DESCRIPTION:** Adhere to Section 556.01 of the MDOT SHA Standard Specifications..
- .2 MATERIAL: Adhere to Section 556.02 of the MDOT SHA Standard Specifications.
- .3 CONSTRUCTION: Adhere to Section 556.03 of the MDOT SHA Standard Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Adhere to Section 556.04 of the MDOT SHA Standard Specifications.

#### CATEGORY 6000 - SHOULDERS

#### 6001 STANDARD TYPE 'A' COMBINATION CURB AND GUTTER

#### 6002 STANDARD TYPE 'D' COMBINATION CURB AND GUTTER

#### 6003 DEPRESSED CURB FOR COMBINATION CONCRETE CURB AND GUTTER

- .1 **DESCRIPTION:** Adhere to Section 602.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 602.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 602.03 of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 602.04.01 of the MDOT SHA Standard Specifications

#### 6004 CONCRETE SIDEWALK

- .1 **DESCRIPTION:** Adhere to Section 603.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 602.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 603.03 of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 603.04 of the MDOT SHA Standard Specifications

#### 6005 DETECTABLE WARNING SURFACE

- .1 **DESCRIPTION:** Adhere to Section 611.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 611.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 611.03 of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 611.04 of the MDOT SHA Standard Specifications

#### 6006 CHAIN LINK FENCE

- .1 **DESCRIPTION:** Adhere to Section 607.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 607.02 of the MDOT SHA Standard Specifications.

ADD: Posts/Rails – Black Powder Coated, 3 mil Fabric, 9 gauge – Black vinyl Coated Tie/Fasteners – Black Powder Coated, 3 mil. Hardware Section 914.03 Section 914.01, ASTM A392 Section 914.02 Section 914.03

**.3 CONSTRUCTION:** Adhere to Section 607.03 of the MDOT SHA Standard Specifications.

#### ADD:

- A. Chain link safety fence shall be 48-inches high and shall be constructed on endwall and headwalls at concrete culverts as shown on the plans and as directed by the engineer.
- B. The spacing of post, the method of attaching the post to the fence, and method of attaching the fence fabric shall be as shown on the plans and in a manner acceptable to the engineer.
- C. A temporary fence or barrier shall be provided to protect a potential fall hazard until the safety fence is installed.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 607.04 of the MDOT SHA Standard Specifications

## CATEGORY 7000 - LANDSCAPING

# 7001PLACING SALVAGED TOPSOIL, 4 INCH DEPTH7002CONTINGENT - PLACING FURNISHED TOPSOIL, 4" DEPTH

- .1 **DESCRIPTION:** Adhere to Section 701.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 701.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 701.03 of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 701.04.03 and Section 701.04.04 of the MDOT SHA Standard Specifications

ADD: Salvaging Subsoil and Topsoil will not be measured but the cost will be incidental to the Contract unit price for Unclassified Excavation.

#### 7003 CONTINGENT: TEMPORARY SEED AND MULCH

- .1 **DESCRIPTION:** Adhere to Section 704.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 704.02 of the MDOT SHA Standard Specifications.

- **.3 CONSTRUCTION:** Adhere to Section 704.03 of the MDOT SHA Standard Specifications and the following.
- ADD: The following after 704.03.06

**704.03.07** Mowing Areas located along roadways that have been seeded by the Contractor and are of 4 to 1 slope or flatter shall be mowed when the grass or vegetation exceeds 6 in. in height. Mowing shall take place until substantial completion has been reached.

.4 MEASUREMENT AND PAYMENT: Adhere to Section 704.04 of the MDOT SHA Standard Specifications and the following

**DELETE:** 704.04 in its entirety.

**INSERT**: The following:

**704.04 MEASUREMENT AND PAYMENT.** Temporary Seed and Mulch will be measured and paid for together for both items at the Contract unit price per square yard. Payment will be for full compensation for all material, labor, mowing, equipment, tools, and incidentals necessary to complete the work.

#### 7004 Type A Soil Stabilization Matting

- .1 **DESCRIPTION:** Adhere to Section 709.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 709.02 of the MDOT SHA Standard Specifications.

**<u>ADD</u>**: the following:

#### **DELETE: 920.05.01 Soil Stabilization Matting (SSM)** in its entirety.

**INSERT:** The following:

**920.5.1Soil Stabilization Matting (SSM).** SSM products shall be selected from the Office of Materials Technology's Qualified Products List (QPL) for Soil Stabilization Matting Manufacturers. SSM shall consist of machine-produced matting of uniform thickness, weave, or distribution of fibers, supplied in rolls at least 40 in. wide. SSM shall be smolder resistant.

The chemical components shall be non-leaching, nontoxic to vegetation and germinating seed, and non-injurious to the skin. SSM shall meet the following:

**Type A.** Degradable; excelsior or nonwoven coconut fibers with degradable, synthetic netting on top and bottom; netting shall not be permanent or quick break down.

CRITERIA [*]	METHOD	MEASUREMENT	
Thickness	D 6525	At least 0.25 in.	
Weight	D 6475	At least 7.9 oz per $yd^2$	
Tensile Strength – MD	D 6818	At least 6.25 lb per in.	

#### CONTRACT NO. MS-TC-266-28

Tensile Strength – TD	D 6818	At least 4.7 lb per in.
Light Penetration	D 6567	At least 5%
Slope Erosion – C Factor	D 6459	No more than 0.2
Shear for 0.5 in Soil Loss*	D 6460	At least 1.75 lb per ft ²
Netting Opening		No more than 2.0 x 1.0 in.
Thread		Degradable
Stitching and Spacing		No more than 4.0 in apart

^{*} Product shall be listed in the current AASHTO National Transportation

** Product Evaluation Program (NTPEP) Report for Erosion Control Products. Large scale results shall be obtained by a Geosynthetic Institute Accredited or other approved laboratory.

**Type B.** Permanent; non-woven, nondegradable, UV stabilized, synthetic fibers; with non-degradable, UV stabilized, synthetic netting on top and bottom.

CRITERIA*	METHO D	MEASUREMENT
Thickness	D 6525	At least 0.3 in.
Weight	D 6655	At least 10.0 oz per yd ²
Tensile Strength – MD	D 6818	At least 12.5 lb per in.
Tensile Strength – TD	D 6818	At least 12.5 lb per in.
Tensile Strength > 500 hr. exp.	D 4355	At least 80 % of original
Light Penetration	D 6567	At least 10 %
Slope Erosion – C Factor	D 6459	No more than 0.2
Shear for 0.5 in Soil Loss ^{**}	D 6460	At least 2.25 lb per ft ²
Netting Opening		No more than 1.0 x 0.75 in.
Thread		Nondegradable, UV stabilized, synthetic
Stitching and Spacing		No more than 4.0 in. apart

^{*} Product shall be listed in the current AASHTO National Transportation

** Product Evaluation Program (NTPEP) Report for Erosion Control Products. Large scale results shall be obtained by a Geosynthetic Institute Accredited or other approved laboratory.

Type C. Permanent; nondegradable, synthetic lattice; and easily filled with soil.

CRITERIA	METHOD	MEASUREMENT
Thickness	D 6525	At least 0.4 in.
Weight	D 6655	At least 7.0 oz per $yd^2$
Tensile Strength – MD	D 6818	At least 12.5 lb per in.
Tensile Strength – TD	D 6818	At least 9.5 lb per in.

Tensile Strength > 500 hr. exp.	D 4355	At least 80 % of original
Porosity or Open Area		At least 80 %

**Type D.** Degradable; woven coir.

CRITERIA	METHOD	MEASUREMENT
Thickness	D 6525	At least 0.30 in.
Weight	D 6475	At least 19.0 oz per yd ²
Porosity or Open Area		At least 35 %

**Type E.** Degradable; excelsior, straw, or straw/coconut blend fibers; with degradable, synthetic netting on top and bottom; netting shall not be permanent or quick break down.

<b>CRITERIA</b> [*]	METHOD	MEASUREMENT
Thickness	D 6525	At least 0.25 in.
Weight	D 6475	Excelsior - $6.0$ to $7.9$ oz per yd ² Straw and Straw / Coconut – At least 6.0 oz per yd ²
Tensile Strength – MD	D 6818	At least 6.25 lb per in.
Tensile Strength – TD	D 6818	At least 2.5 lb per in.
Light Penetration	D 6567	At least 5 %
Slope Erosion – C Factor	D 6459	No more than 0.2
Shear for 0.5 in Soil Loss ^{**}	D 6460	At least 1.5 lb per ft ²
Netting Opening		Excelsior – No more than 2.0 x 1.0 in. Straw and Straw / Coconut – No more than 0.75 x 0.75 in.
Thread		Degradable
Stitching and Spacing		Excelsior – No more that 4.0 in. apart Straw and Straw/Coconut – No more than 2.0 in apart

* Product shall be listed in the current AASHTO National Transportation Product Evaluation Program (NTPEP) Report for Erosion Control Products.

^{**} Large-scale results shall be obtained by a Geosynthetic Institute Accredited or other approved laboratory.

# 760 **DELETE: 920.05.02 Fasteners for Soil Stabilization Matting and Turfgrass Sod** in its entirety.

**INSERT**: The following.

#### 920.5.2 Fasteners for Soil Stabilization Matting and Turfgrass Sod.

Fasteners marked "X" shall be used as specified in 709.03.05 and meet the following:

# (a) Wood Peg.

WOOD PEG. Wood,		Soil Stat	oilization N	latting
biodegradable, untreated; single leg is driven into the soil so that wider top is flush with turfgrass sod and SSM.	Sod	Type A and E	Type B	Type C and D
Approx. 6 in. long, 3/8 in. thick; top 1 in. wide, tapered to base.	Х	Х		

## (b) Head Pin.

T-HEAD PIN. Molded plastic;		Soil Sta	bilization N	<b>Aatting</b>
biodegradable. Single leg with barbs is driven into the soil so that molded T-Head top is flush with turfgrass sod and SSM	Turfgra ss Sod	Type A and E	Type B	Type C and D
Approx. 6 in. long, 3/8 in. thick; head 1 in. wide.	Х	Х		

# (c) Circle-Top Pin.

CIRCLE-TOP PIN. Steel wire;	Turfgra	Soil Stabilization Matting		
single leg is driven into the soil so that coil or loop top is flush with turfgrass sod and SSM.	ss Sod	Type A and E	Type B	Type C and D
11 gauge; leg 6 in long.	Х	Х		
11 gauge; leg 8 in. long.	X	X		

# (d) Round-Head Pin.

ROUND-HEAD PIN. Molded		Soil Sta	bilization N	Aatting
plastic; biodegradable. Single leg with barbs is driven into the soil so that molded disk top is flush with turfgrass sod and SSM.	Turfgra ss Sod	Type A and E	Type B	Type C and D
Approx. 6 in long; head 1 in. diameter	Х	Х		
Approx. 8 in long; head 1 in. diameter	Х	Х		

# (e) U-Shape Staple.

U-SHAPE STAPLE. Steel wire;	Turfgra	Soil Stabilization Matting		
two main legs are driven into the soil so that the top of staple is flush with turfgrass sod and SSM.	ss Sod	Type A and E	Type B	Type C and D
11 gauge bent into U shape; legs 6 in. long; top 1 to 1-1/2 in. wide.	X	Х		
8 gauge bent into U shape; legs 8 in. long; top 1 to 1-1/2 in. wide.	X	Х	Х	Х
8 gauge bent into U shape.; legs 12 in. long; top 1 to 1-1/2 in. wide			Х	Х

#### (f) Fabric Pin.

<b>FABRIC PIN.</b> Steel nail; single	Turfara	Soil Stabilization Matting			
leg is driven into the soil so that steel washer top is flush with SSM.	Turfgra ss Sod	Type A and E	Type B	Type C and D	
11 gauge approx. 12 in. long.			Х	Х	
3/16 in. gauge. approx. 18 in.			Х	X	
long.					

.3 **CONSTRUCTION:** Adhere to Section 709.03 of the MDOT SHA Standard Specification and the following:

#### 709.03 CONSTRUCTION.

709.03.01 Soil Preparation and Seeding.

583 **<u>DELETE</u>**: (a) Type A and B.

**INSERT:** The following. (a) **Type A, B and E.** 

**<u>ADD</u>**: The following after "Install SSM......709.03.02 thru .05. "For Type A and Type B SSM, firm the soil with a roller as specified in 708.03.10 after seeding". **709.3.3 Overlapping.** 

<u>ADD</u>: The following after "Overlap SSM.....at least 6 in. "Avoid installation of longitudinal overlaps in channel bottoms". **709.3.4 Keying-in. (a) Trenching.**

584 **DELETE:** Table "AREAS OF MATTING TO KEY-IN".

## **INSERT**: The following.

AREAS OF MATTING TO KEYING-IN			
MATTING TYPE AREA OF MATTING			
A, B	Upper most or leading-edge.		
A, B	Edges adjacent to catch basins and structures.		
В	Lowermost or toe-edge.		
В	Folds of matting perpendicular to water flow every 40-45 ft.		
C, D	All edges		
С	Folds of matting perpendicular to water flow every 20-25 ft.		

#### 709.3.5 Fastening. (a) Fastener Selection.

## 584 **DELETE:** Table "FASTENER SELECTION".

**INSERT**: The following.

FASTENER SELECTION					
MATTING	FASTENER	APPROVED FASTENERS			
TYPE	SHAPE	6 in. Length	8 in. Length	12 in. Length	18 in. Length
	U-Shaped Staple	Х	Х		
	Circle-Top Pin	Х	Х		
A and E	Round Head Pin	Х	Х		
	T-Head Pin	Х			
	Wood Peg	Х			
P.C.D	U-Shaped Staple		Х	Х	
B, C, D	Fabric Pin			Х	Х

## 709.03.05 Fastening. (b) Placement of Fasteners.

#### **DELETE:** Table "FASTENER PLACEMENT".

**INSERT:** The following.

FASTENER PLACEMENT			
MATTING TYPE	AREA OF MATTING	MAXIMUM DISTANCE BETWEEN FASTENERS In.	
A, B, C, D	Uppermost or Leading-Edge of Matting	6	
A, B, C, D, E	Overlapping Edges of Matting	18	
A, B, C, D	Center of channel/ditch	18	
A, B, C, D	Lowermost or Toe-Edge of Matting	18	
A, B, C, D, E	Throughout Matting	24	
В	In Folds Every 40 to 45 ft	12	
С	In Folds Every 20 to 25 ft	12	

#### 709.03.10 Final acceptance.

- 586 **<u>CHANGE</u>**: The first sentence of the third paragraph, "....remove Type A, B or D SSM." to read, "....remove Type A, B, D or E SSM".
- .4 **MEASUREMENT AND PAYMENT:** Adhere to Section 705.04 of the MDOT SHA Standard Specifications and the following.
- **ADD:** The following after 709.04.04.

**709.04.05** Type E Soil Stabilization Matting per square yard.

### 7005 TURFGRASS ESTABLISHMENT

- .1 **DESCRIPTION.** Adhere to Section 705.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS. Adhere to Section 705.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION.** Adhere to Section 705.03 of the MDOT SHA Standard Specifications and the following:

**DELETE:** 705.03.09 "Mowing" paragraph.

**INSERT**: The following.

**705.03.09** Mowing. Areas located along roadways that have been seeded by the Contractor shall be mowed when the grass or vegetation exceeds 6 inches in height. Mowing shall take place until final completion has been reached.

.4 MEASUREMENT AND PAYMENT. Turfgrass Establishment including grade repair, preparing soil, applying fertilizer, soil amendments, seed mixes, seed additives, mulching, securing mulch, watering, overseeding, reseeding, and mowing, will be measured and paid for at the Contract unit price per square yard. The use of other materials in conformance with an approved Modification Request shall be incidental to the Contract unit price, and will not be measured or paid for.

- (a) **Payment Schedule.** Payments will be made according to Table 3 when construction requirements are met.
- 7006 CORNUS SERICEA / REDOSIER DOGWOOD
- 7007 ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
- 7008 CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS
- 7009 LOBELIA CARDINALS / CARDINAL FLOWER
- 7010 PANICUM VIRGATUM 'HEAVY METAL' / SWITCHGRASS
- 7011 BETULA NIGRA / RIVER BIRCH
- 7012 MAGNOLIA VIRINGIANA / SWEETBAY MAGNOLIA
- 7013 VIBURNUM DETATUM 'BLUE MUFFIN' / ARROWWOOD
- 587 **<u>DELETE</u>**: Section 710 Tree, Shrub, and Perennial Installation and Establishment in its entirety.

**INSERT**: The following.

### SECTION 710 — TREE, SHRUB, AND PERENNIAL INSTALLATION AND ESTABLISHMENT

**710.01 DESCRIPTION.** Install and establish trees, shrubs, perennials, vines, and grasses in topsoil or Bioretention Soil Mix. When it is not possible to perform this work, refer to Section 704 and perform Temporary Mulch, or as directed to provide temporary soil stabilization.

### 710.02 MATERIALS.

Furnished Subsoil	920.01.04
Limestone	920.02.01
Sulfur	920.02.02
Compost	920.02.05
Fertilizer	920.03
Shredded Hardwood Bark (SHB) Mulch	920.04.03
Plant Materials	920.07
Marking and Staking Materials	920.08
Water	920.09.01
Pesticides	920.09.03
Marking Dye	920.09.04
Spray Adjuvant and Wetting Agent	920.09.05

# 710.03 CONSTRUCTION.

### 710.03.01 General.

- (a) **Planting Seasons.** Perform operations when soil moisture and weather conditions are suitable, when the temperature is above 32 F, and the soil is not frozen. Cease operations when conditions are unsuitable.
- (b) Modification Request. Submit a written Modification Request to install plants of different species, cultivars, sizes, growth habits, or planting stock type. The Engineer in consultation with the Landscape Operations Division will evaluate the Request. If granted, a Notice of Approved Modification will be returned within 14 days afterwards.
- (c) **Pesticide Application.** Apply pesticides in conformance with the Maryland Pesticide Applicator's Law, OSHA and MOSH regulations, and the manufacturer's label and Material Data Safety Sheets (MSDS).

The Contractor shall possess a Maryland Department of Agriculture Commercial Pesticide Business License and a Pesticide Applicator Certificate for the pertinent pesticide application Category: (2) Forest; (3-A) Ornamental Plant Exterior; (3-C) Turf; (5) Aquatic; (6) Right-of-Way and Weed.

Pesticides shall be applied by a Maryland Certified Pesticide Applicator, or by a Registered Pesticide Applicator under the supervision of a Certified Pesticide Applicator.

- (d) **Pesticide Application Reporting.** Record the location, acreage treated, pesticide name and quantity applied on the Pesticide Application Reporting Form. Submit the Form within 24 hours after applying pesticide.
- (e) Nutrient Management Plan (NMP). The specified application rates of 14-14-14 fertilizer will be the NMP unless the Administration develops a substitute NMP. Replace application rates of 710.03.04 and .05 as required by the NMP.
- (f) Nutrient Management Reporting. Record the fertilizer analysis, the square yards covered, and the pounds of fertilizer applied on the Nutrient Management Reporting Form. Submit the Form within 48 hours after applying fertilizer.
- (g) Plant Storage and Handling. Refer to 920.07.05.
- 710.03.02 Submittals and Inspection. Submit the following items:
  - (a) Breakdown List of Contract Prices. Refer to 710.04.01 and develop a Breakdown List of Contract Prices for each plant in the Contract. Include the cost of all installation and establishment operations in the per plant price.

Submit the written Breakdown List within 14 days after Award of Contract. The Breakdown List will be reviewed by the Engineer and Landscape Operations Division for completeness and balance, and will be approved or returned for correction.

(b) Installation Phase Schedule. Develop a Schedule with dates for completing operations related to 710.03.01 thru .15 according to Table 1.

	TREE, SHRUB, AND PERENNIAL		
	TABLE 1 - OPERATIONS IN INSTALLATION PHASE SCHEDULE		
1	Layout, utilities review and marking.		
2	Undesirable vegetation removal and herbicide application.		
3	Planting pit excavation, soil preparation, and plant installation.		
4	Planting beds rototilling and soil preparation, applying shredded hardwood bark (SHB) mulch, and plant installation.		
5	Applying fertilizer solution after installation, and cleanup.		

Submit the written Schedule at least 30 days before beginning landscape work. The Schedule will be reviewed by the Engineer and Landscape Operations Division for completeness and feasibility, and will be approved or returned for correction.

- (c) Plant Material Inspection and Approval. The Inspection will be conducted by the Landscape Operations Division as specified in 920.07.03.
- (d) Establishment Phase Schedule & IPM Program. Develop a Schedule with dates for completing 710.03.22. Include an Integrated Pest Management (IPM) Plan with methods of pest monitoring (weeds, diseases, insects, mammals, etc.), pesticide selection, application rates, and scheduling.

Submit the written Establishment Phase Schedule & IPM Program at the Installation Phase Inspection.

The Schedule will be reviewed by the Engineer and the Landscape Operations Division, and will be approved or returned for correction.

**710.03.03 Utilities Marking, Layout, and Inspection.** Refer to Section 875 when included in the Contract Documents.

- (a) Utilities Marking. Contact 'Miss Utility' or another approved service to identify and mark utilities in the rights-of-way. Contact the District Utilities Engineer to mark utilities on Administration property.
- (b) Conflicts. Notify the Administration of conflicts that may involve design changes. Conflicts will be reviewed by the Landscape Operations Division and resolved within 14 days after notice.
- (c) **Planting Layout.** Provide the necessary materials and lay out the locations of planting pits and planting beds specified in the Contract Documents, or as adjusted by the Landscape Operations Division.
- (d) **Inspection.** At least 7 days notice will be required to schedule each stage of a layout inspection in consultation with the Landscape Operations Division. Proceed with operations after layout approval.

**710.03.04 Preparing Planting Pits.** Perform the following operations when preparing planting pits for individual plants:

(a) Undesirable Vegetation. Manually remove undesirable vegetation or refer to 710.03.01(c) and 710.03.01(d) and apply non-selective herbicide in water with wetting agent and dye according to Table 2 at least 14 days before plant installation. Cut and remove dead vegetation or debris that interferes with soil preparation, plant installation or future maintenance.

# TREE, SHRUB, AND PERENNIAL

# TABLE 2 - NON-SELECTIVE HERBICIDE APPLICATION

MATERIAL	RATE PER ACRE
Glyphosate Herbicide	5 lb of active ingredient
Marking Dye	6 to 15 oz
Water	40 to 50 gal

(b) Excavation. Excavate planting pits to the depth required for the placement of root collars as specified in 710.03.09(c). Retain the excavated soil for preparation as backfill soil. Remove excess soil from the site, or spread as directed.

For Expanded Tree Pits (ETP), refer to the detail provided in the Contract documents. Excavate additional depth and width as shown in the detail, place furnished subsoil to the dimensions shown in the detail, and complete tree installation using Table 3. Remove excess soil from the site, or spread as directed.

(c) **Planting Pit Diameter.** Use Table 3 to determine the diameter of the planting pit based upon the container or root ball diameter.

TREE, SHRUB, AND PERENNIAL TABLE 3 - PREPARING PLANTING PITS AND BACKFILL SOIL					
Container or Z60		Z60 Container Diameter Compost In Ft. ³		14-14-14 Fertilizer Oz.	Water per Event Gal.
3	#SP3	6	0.02	0.10	0.15
5	#SP4	10	0.02	0.12	0.2
6	#SP5 or #1	12	0.03	0.18	0.3
8	#2	17	0.09	0.30	0.5
10	#3	21	0.18	0.55	1.0
12	#5	24	0.28	0.75	1.5
14	#7	28	0.44	1.0	2.3
16	#10	32	0.65	1.3	3.5
18	#15	36	0.94	1.6	5.0
20	#20	40	1.27	2.0	6.8
24	#25	48	2.20	3.0	12
30	-	60	4.30	4.5	23
36	#45	72	7.40	6.5	40
42	#65	84	11.80	8.8	60

# Note:

When water is applied over the surface of planting beds where most plants are less than 36 in. apart, apply

water per plant in conformance with 'Water per Event', or apply at least 5 gallons of water per SY of planting bed.

(d) Compost and Fertilizer. Use Table 3 to determine the quantity of compost and 14-14-14 fertilizer to mix into backfill soil, based upon planting pit diameter. Uniformly mix compost and fertilizer into the backfill soil.

Use a scale with 0.01 oz or gram accuracy to calibrate measures and verify application rates of 14-14-14 fertilizer when directed.

(e) Water. Use Table 3 to determine the quantity of water to apply for each installed plant based upon planting pit diameter.

**710.03.05 Preparing Planting Beds**. Perform the following operations when preparing planting beds.

(a) Undesirable Vegetation. Remove undesirable vegetation as specified in 710.03.04(a). Cut or mow dead vegetation to a height of 1 in. and remove the debris.

# (b) Compost and Rototilling.

- (1) Areas Flatter than 4:1. Apply 2 in. layer of compost over the soil surface of the planting bed. Rototill to a depth of 6 in. to thoroughly mix compost and any materials specified in the NMP. Do not apply compost or rototill Bioretention Soil Mix (BSM) unless specified otherwise.
- (2) Slopes 4:1 and Steeper. Do not rototill.
- (c) Fertilizer. Mix 14-14-14 fertilizer into the backfill soil of each planting pit within the bed according to Table 3.
- (d) **Debris Removal.** Remove debris, stones, and soil clods with a length or width greater than 2 in. that are uncovered during rototilling.
- (e) Leveling. Level the soil surface after rototilling, and leave it in a condition ready for shredded hardwood bark (SHB) mulching and plant installation.

**710.03.06 Plant Acclimation.** Ensure that container grown plants are acclimated to prevailing weather conditions before installing. Install bare root plants while dormant when soil and air temperatures are above freezing.

**710.03.07 Plant Care.** Begin plant care at the time each plant is installed, and continue until Installation Phase Acceptance is granted.

**710.03.08 Pruning.** Remove dead branches, damaged branches, water sprouts, and other undesirable growth manually with pruners. Preserve the natural appearance of trees and shrubs. Remove branches or portions of branches over sidewalks to ensure 8 ft clearance for pedestrians.

**710.03.09 Installing.** Install plants vertically in planting pits and beds prepared as specified in 710.03.04 and .05, and as follows:

- (a) **Removing Containers, Burlap, Wire Baskets.** Remove containers. Remove twine, burlap or other fabric from the tops of root balls to a depth at least 6 in. below the surface of the backfilled planting pit. Cut and remove the tops of wire baskets from the upper half of the root ball. Discard containers and any removed twine, wire, burlap or other fabric.
- (b) **Preparing Roots.** Carefully remove the containers of container grown plants, and loosen the soil mass to eliminate girdling roots.

Spread the roots of bare root plants in a natural position, and firmly press backfill soil around the roots.

(c) **Placing Root Collar.** Place the root collar of plants at or above the average soil surface grade outside the planting pit according to Table 4.

TREE, SHRUB, AND PERENNIAL TABLE 4- ROOT COLLAR PLACEMENT			
SOIL CONDITIONS         HEIGHT OF ROOT COLLAR			
Normal, Well Drained	Place collar at same level to 1 in. above average surface grade.		
Compacted Place collar at 1 to 2 in. above average surface grade.			
Poorly Drained or WetPlace collar as needed to ensure 25% of root mass is above average surface grade.			

(d) **Backfilling.** Remove clods, stones and other foreign material with a length or width greater than 2 in. from soil used for backfilling.

Place backfill soil that has been mixed with compost and fertilizer as specified in 710.03.04 and .05 under and around roots to stabilize plants in upright position and restore the grade. Lightly firm and compact backfill soil to reduce air pockets.

**710.03.10 Soil Berming.** Form a 4 in. high berm of backfill soil around planting pits and planting beds as follows:

- (a) **Planting Pits.** On areas flatter than 4:1, form the berm around the entire planting pit. On slopes 4:1 and steeper, take soil from the upslope rim of the pit and place it on the downslope rim to form the berm.
- (b) **Planting Beds.** On slopes 4:1 and steeper, form the berm as a shoulder at the lower edge of the bed. Berm individual trees and shrubs installed within beds on slopes 4:1 and steeper as described in (a) above.

**710.03.11 Edging.** Cut edging at a steep angle into the mulched area to a 3 in. depth into the soil. On slopes 4:1 and steeper, cut edging outside of the bermed area on the lower edge of berm. Remove and discard excess soil.

- (a) **Planting Pits.** Edge entirely around all planting pits except planting pits within planting beds.
- (b) Planting Beds. Smoothly cut edging around all planting beds to the shapes specified.

710.03.12 Staking and Guying. Stake and guy trees the same day they are installed.

(a) **Installation.** When two or three stakes are specified for trees, install two stakes parallel to the direction of traffic, or as directed. Drive stakes vertically to a depth of 10 in. below the bottom of the pit, and 5 to 8 in. away from roots according to Table 5.

TREE, SHRUB, AND PERENNIAL					
TABLE 5 - STAKING AND GUYING					
TREE CALIPER HEIGHT SUPPOR			PORT		
TYPE	In.	Ft	No. of Stakes	Length, ft	
	Under 1	6 and 8	2	6	
	1 to 2	_	2	8	
Shade	2-1/2 to 3- 1/2	_	3	10	
	4 and over	_		3 guy wires attached to tree anchors	
	3/4 to 2-1/2	_	2	5-8	
Flowering	3 and over	_		3 guy wires attached to tree anchors	
<b>D</b>	—	5 and 6	2	5-6	
Evergreen	_	7, 8 and 9	3	7-8	

	_	10 and over	_	3 guy wires attached to tree anchors
--	---	-------------	---	--------------------------------------------

(b) Maintenance. Promptly straighten trees that become crooked after installation. Repair or replace stakes, guys, and other support materials as needed.

**710.03.13 Mulching.** Spread SHB mulch uniformly over the soil surface to a 3 in. depth. Promptly repair damage caused by washouts or construction activities.

- (a) **Planting Pits.** Spread SHB mulch the same day that plants are installed. Mulch around the base of each plant to cover the soil of the planting pit to its outside edge, including the soil berm. Do not allow mulch to touch the bark or main stem of the plant.
- (b) **Planting Beds.** SHB mulch may be spread before or after installing plants. Spread mulch over the entire bed and rake it to an even surface, including berms and shoulders. Ensure that mulch does not cover plants.

For rototilled beds, spread mulch the same day after rototilling. For non-rototilled beds, spead mulch within 3 days after plant installation. When installation is completed, ensure that mulch uniformly covers the soil to a uniform 3 in. depth.

# 710.03.14 Watering after Installation.

(a) **Application Equipment.** Watering equipment shall consist of sprinklers or hoses equipped with water breaker nozzles so the materials are applied with care to prevent damage to plants and minimize disturbance to SHB mulch.

For planting pits, refer to Table 4 and apply the required quantity of water to each plant.

For planting beds, apply water to the entire bed area to wet the soil to a depth of 3 in.

(b) Follow-Up Watering. Monitor and apply water during the Installation Phase to supply plant needs.

**710.03.15 Cleanup.** Remove growers tape, plant stakes, pot markers, field tags, and similar materials at the time of installation. Ensure that the Administration's Material Inspection Approval Seals and plant tags remain on trees and shrubs until the end of the Establishment Phase.

Keep turfgrass areas, paved surfaces, and sidewalks clean. Promptly remove excess and waste materials. Take precautions to avoid damage to existing structures, plants, and turfgrass. Repair damage caused to surrounding areas during installation, and fill ruts and reestablish turfgrass as necessary.

**710.03.16 Relocating Plants.** Begin plant relocation operations within 7 days after notice to relocate, and continue until work is completed. Remove plants installed in undesirable locations as directed by the Engineer, and reinstall these plants as specified in herein.

**710.03.17** Abandoned Planting Pits. Backfill abandoned planting pits when directed with excavated soil or approved backfill. Compact the backfill in 8 in. layers to the finished grade. Establish turfgrass as specified in Section 705.

710.03.18 Unacceptable Plants and Replacement Plants. **Promptly remove and replace plants that** are unacceptable at any time during the Installation Phase as specified in 920.07, or when requested.

Plants that are determined to be missing, dead, dying, damaged, diseased, deformed, underdeveloped, damaged by pesticides, or not true to species, cultivar, size or quality shall be replaced.

Refer to GP-5.09 regarding removal of defective work and materials, and GP-7.16 regarding Contractor responsibility for work, theft, damage, and loss.

	TREE, SHRUB, AND PERENNIAL				
	TABLE 6 - CRITERIA FOR UNACCEPTABLE PLANTS				
Item	Plant Type	Condition	Unacceptable		
1	Tree, Shrub, Vine, Perennial Grass	Dead or Missing	Any dead or missing plant, any cause.		
2	Tree, Shrub, Vine, Perennial Grass	Defoliation	More than 25% of leaf area dead, lost or dropped.		
3	Tree, Shrub, Vine	Bark Wound	More than 15% of bark circumference or 2 in. length.		
4	Shrub or Vine	Height Die- back	More than 25% of the shrub or vine height.		
5	Tree	Leader Die- back	More than 10% of tree height.		
6	Tree	Branch Die- back	More than 6 in. on 75% of branches.		

(a) Criteria. The criteria of Table 6 will be used to identify unacceptable plants.

(b) Replacement Plants. Replacement plants shall be true to species, cultivar, size, and quality

as specified in the Contract Documents unless a Substitution Request is approved.

Install replacement plants as soon as feasible during the current Planting Season, or if between Planting Seasons, during the next Planting Season. Promptly submit a Modification Request as specified in 710.03.01(b) when it is not possible to obtain plants that meet specifications.

Replacement plants shall meet the specifications of 920.07, and be installed and established as specified in Section 710 for 12 months, until Final Acceptance.

710.03.19 Installation Phase Inspection. Submit a request for Installation Phase Inspection when operations are completed, and provide the Establishment Phase Schedule as specified in 710.03.02(d).

The Installation Phase Inspection will be scheduled by the Engineer at the project with the Contractor and the Landscape Operations Division to verify completion. At least 14 days notice will be provided before the scheduled Inspection so that it may be completed in the company of the Contractor.

710.03.20 Installation Phase Punch List. The Engineer in consultation with the Contractor and the Landscape Operations Division will develop the Installation Phase Punch List and list of plants to be replaced. Complete the Punch List requirements and replace plants as required.

**710.03.21 Installation Phase Acceptance.** Re-inspection will be performed as needed. Installation Phase Acceptance will be granted when the Punch List and all Installation Phase requirements are completed according to Table 7.

	TREE, SHRUB, AND PERENNIAL			
Т	TABLE 7 - REQUIREMENTS FOR INSTALLATION PHASE ACCEPTANCE			
Item	Requirement Section			
Α	Submittals are accepted and Inspections are completed.	710.03.01(b), 710.03.02, 920.07		
В	Damaging pests are controlled.	710.03.02(c)		
С	Layouts are inspected and approved.	710.03.03		
D	Fertilizer and compost is mixed soil, as required.	710.03.04 and 710.03.05		
Е	Planting pits and planting beds are weed free.	710.03.04(a) and 710.03.05(a)		
F	Trees and shrubs are pruned.	710.03.08		
G	Trees are installed vertically and straightened.	710.03.09		

Н	Planting pits and beds are bermed and edged.	710.03.10 and 710.03.11
Ι	Staking and guying are repaired or replaced.	710.03.12
J	SHB mulch is uniformly spread to the specified depth.	710.03.13
K	Washouts in planting pits and beds are repaired.	710.03.13
1	Plants receive initial watering and follow up watering.	710.03.04 and 710.03.14
m	Clean up is completed, plant tags and ribbons are removed.	710.03.15
n	Plants are relocated to approved locations.	710.03.16
0	Abandoned planting pits are filled and seeded.	710.03.17
р	Unacceptable plants are replaced.	710.03.18
q	Damage repairs and Installation Phase Punch List is completed.	710.03.20
r	Pesticide Application and Nutrient Management Reporting Forms are completed.	710.03.01(d) and (f)
s	Plants are properly installed, are none are unacceptable or require replacement.	710.03.01 thru .18
t	Establishment Phase Schedule & IPM Program is accepted.	710.03.02 (e) and 710.03.21

**710.03.22 Establishment Phase.** The Establishment Phase begins upon Installation Phase Acceptance. Maintain plants and provide care and replacement as specified in 710.03.01 thru 0.21, and as follows:

- (a) **Period of Maintenance.** Maintain plants for 12 months after installation, until Final Acceptance.
- (b) **Plant Watering.** Monitor the soil moisture and water needs of plants. Promptly apply water as specified in 710.03.14 to planting pits and planting beds as needed, or as directed.
- (c) **Pest Management.** Monitor and promptly control weeds, insects and other pests in conformance with the IPM Program, or when requested. Control weeds in mulched areas in preparation for inspection. Remove dead weeds taller than 6 in. Refer to 710.03.01(d) and complete the Pesticide Application Reporting Form.
- (d) Unacceptable Plants and Replacement Plants. Refer to 710.03.18. Promptly remove and replace plants that have become unacceptable during the Establishment Phase as needed or as directed.
- (e) End-of-Season Foliage Removal. For perennials, remove the aboveground parts that have declined during the months of November and December, or as directed. For grasses, remove the aboveground parts that have declined and in February or March, or as directed.

(f) **Refertilizing.** Dissolve 40 lb of 20-20-20 water soluble fertilizer in 1 000 gal of water. Refer to 710.03.14 regarding application equipment. Apply fertilizer solution in the final 60 days of the Establishment Phase.

For planting pits, refer to Table 3 and apply gallons of fertilizer solution to each installed plant based upon the planting pit diameter and water per event gal.

For planting beds, apply 0.21 gal of fertilizer solution per SY of planting bed. Apply fertilizer solution to the entire bed area.

- (g) **Removing Supports and Seals.** Remove tree supports, hoses wires, guys and Material Inspection Approval Seals in the final 30 days of the Establishment Phase. Pull stakes from the soil or cut them to ground level.
- (h) Partial Establishment Phase Inspection. The Project Engineer will inspect plant establishment 6 months after Installation Phase Acceptance according to Table 8. The Inspection Report will include actions to perform before Partial Establishment Phase Acceptance is granted. Perform repairs, replacements, and other work as specified in the Contract Documents and Inspection Report.

**710.03.23 Establishment Phase and Final Acceptance.** The Engineer and the Landscape Operations Division will complete an Inspection Report 12 months after Installation Phase Acceptance. When it is not possible to perform the Inspection, Final Acceptance will be delayed until Inspection is possible.

Final Acceptance will be granted when the requirements of Table 8 are satisfactorily completed. The Inspection Report will be included in the Punch List requirements for the project. Complete the Punch List requirements as directed.

	TREE, SHRUB, AND PERENNIAL			
	TABLE 8 - REQUIREMENTS FOR ESTABLISHMENT PHASE AND FINAL ACCEPTANCE			
Item	n Requirement Section			
1	Water sprouts are manually pruned and removed.	710.03.08		
2	Trees are straightened.	710.03.09		
3	Staking and guying are repaired or replaced.	710.03.12		
4	Washouts in planting pits and beds are repaired.	710.03.13		
5	Plants are relocated to approved locations.	710.03.16		
6	Abandoned planting pits are filled and seeded.	710.03.17		
7	Plants are successfully established.	710.03.22(a) and (b)		

8	Damaging pests are controlled.	710.03.22(c)
9	Planting pits and planting beds are weed free.	710.03.22(c)
10	Unacceptable plants are replaced.	710.03.22(d)
11	Annual foliage dieback of perennials and grasses is cut and removed.	710.03.22(e)
12	Plants are refertilized.	710.03.22(f)
13	Pesticide Application and Nutrient Management Reporting Forms are completed.	710.03.01(d) and (f)
14	Staking, guying, and Material Inspection Seals are removed.	710.03.22(g)
15	Damage repairs and Establishment Punch List are completed.	710.03.22(h)

**710.04 MEASUREMENT AND PAYMENT.** Tree, Shrub, and Perennial Installation and Establishment will be measured and paid for at the Contract unit price for one or more of the specified items. The payment will be full compensation for all plants, material, labor, equipment, tools, disposal fees and incidentals necessary to complete the work.

**710.04.01 Tree, Shrub, and Perennial Installation and Establishment.** Tree, Shrub, and Perennial Installation and Establishment shall be measured per the Contract Unit Price per each and shall include the cost of trees, shrubs, perennials, vines, and grasses, layout, marking, pruning, planting pit excavation and disposal of excavated soil, fertilizer, compost, backfilling, staking, guying, berming, edging, watering, pest management, plant maintenance, refertilizing, and all operations related to the Installation and Establishment Phases of each plant, until Final Acceptance.

Tree, Shrub, and Perennial Installation and Establishment will be paid according to Table 9 based upon the approved Breakdown List of Contract Prices. Refer to 710.03.02(a). In the event of change in the quantities required, payment adjustments will be based on the approved Breakdown List of Contract Prices.

(a) **Payment Schedule.** Payments will be made according to Table 9 when construction requirements are met.

TREE, SHRUB, AND PERENNIAL TABLE 9 - PAYMENT SCHEDULE					
CONSTRUCTION REQUIREMENTS		PERCENT OF TOTAL CONTRACT PRICE	PAYMENT FOR COMPLETED WORK		
710.03.01 thru .21	Installation Phase	70	At Installation Phase Acceptance		
710.03.22(a) thru (e)	Establishment Phase	15	At Partial Establishment Phase Acceptance		

710.03.22(a) thru (h) and 710.03.23	Establishment Phase and Final Acceptance	15	At Final Acceptance
Total Payment		100%	

(b) Forfeiture. Failure to complete operations as required or directed in conformance with the Payment Schedule will result in forfeiture of that percentage of payment based upon the Breakdown List of Contract Prices.

**710.04.02** Constructing Planting Beds. Constructing Planting Beds will be measured and paid for at the Contract unit price per square yard. The price shall include the cost of layout, marking, fertilizer, soil amendments, rototilling, berming, edging, applying 3 in. of SHB mulch, refertilizing, and all operations related to construction of the planting bed.

Mulching individual planting pits of trees, shrubs, perennials, vines, and grasses within planting beds will not be measured but the cost will be incidental to 710.04.02.

**710.04.03 Expanded Tree Pit.** Expanded Tree Pit will be measured and paid for at the Contract unit price per each. The price shall include the cost of excavation to the specified dimensions, furnished subsoil, disposal of excavated soil, and all operations related to construction of the expanded tree pit.

710.04.04 Temporary Mulch will be measured and paid for at the Contract unit price.

# **CATEGORY 8000 – TRAFFIC**

### 8001 SHEET ALUMINUM SIGNS

- .1 **DESCRIPTION:** Adhere to Section 813.01 of the MDOT SHA Standard Specifications.
- **.2 MATERIALS:** Adhere to Section 813.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 813.03of the MDOT SHA Standard Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Adhere to Section 813.04 of the MDOT SHA Standard Specifications.

### 8002 WOOD SIGN SUPPORTS

- .1 **DESCRIPTION:** Adhere to Section 812.01 of the MDOT SHA Standard Specifications.
- **.2 MATERIALS:** Adhere to Section 812.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 812.03 of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 812.04 of the MDOT SHA Standard Specifications.

# 8003 REMOVE/RELOCATE EXISTING GROUND MOUNTED SIGN

- .1 **DESCRIPTION:** Adhere to Section 822.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 822.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 822.03 of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Relocate Existing Ground Mounted Signs will be measured and paid for at the Contract unit price per Each. Removal and disposal, or removal and relocation of the sign support will not be measured but the cost will be incidental to the Contract unit price for relocating the sign.

### 8004 CONCRETE FOR LIGHT POLE FOUNDATIONS

- .1 **DESCRIPTION.** Adhere to Section 801.01 of the MSHA Standard Specifications
- .2 MATERIALS. Adhere to Section 801.02 of the MSHA Standard Specifications
- .3 CONSTRUCTION. Adhere to Section 801.03 of the MSHA Standard Specifications
- .4 **MEASUREMENT AND PAYMENT.** Adhere to Section 801.04 of the MSHA Standard Specifications.

# 8005 (1) 3 INCH SCHEDULE 40 PVC CONDUIT TRENCHED

8006(1) 3/4-INCH SCHEDULE 40 PVC CONDUIT TRENCHED8007(2) 1-INCH SCHEDULE 40 PVC CONDUIT TRENCHED8008(2) 2-INCH SCHEDULE 40 PVC CONDUIT TRENCHED8009(6) 4-INCH SCHEDULE 40 PVC CONDUIT TRENCHED8010(4) 4-INCH SCHEDULE 40 PVC CONDUIT TRENCHED8011(2) 5-INCH SCHEDULE 40 PVC CONDUIT TRENCHED8012(3) 5-INCH SCHEDULE 40 PVC CONDUIT TRENCHED

- .1 **DESCRIPTION:** Adhere to Section 805.01 of the MSHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 805.02 of the MSHA Standard Specifications.

.3 **CONSTRUCTION:** Adhere to Section 805.03 of the MSHA Standard Specifications. **ADD:** Changes in direction shall be made with sweep diameters approved by the utility.

.4 MEASUREMENT AND PAYMENT: Schedule 40 PVC conduit will be measured and paid for at the Contract Unit price per linear feet of trench. All lengths of conduit within the same trench will be measured once and shall include all excavation, backfill, encasement concrete, hot mix asphalt, paint, pull ropes, sweep elbows, caps, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

### **8013 CONCRETE VAULT (7'W x 9'L x 7'-6" H)**

- .1 **DESCRIPTION:** Adhere to Section 2 of the City of Hagerstown Water and Waste Water Standards and Specifications as shown on the Contract Documents.
- .2 MATERIALS: Adhere to Section 2 of the City of Hagerstown Water and Waste Water Standards and Specifications. Contractor is responsible for obtaining all permits to the City of Hagerstown Water and Waste Water Department.
- .3 **CONSTRUCTION:** Adhere to Section 2 of the City of Hagerstown Water and Waste Water Standards and Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Payment for furnishing and installing the water meter vault will not be measured but will be paid at the Contract lump sum price. The payment will be full compensation for all work, labor, equipment, tools, and incidentals necessary to complete the work to the satisfaction of the Engineer.

### 8014 10-INCH DIP WATER LINE

- .1 **DESCRIPTION:** Adhere to Section 2 of the City of Hagerstown Water and Waste Water Standards and Specifications as shown on the Contract Documents.
- .2 MATERIALS: Adhere to Section 2 of the City of Hagerstown Water and Waste Water Standards and Specifications. Contractor is responsible for obtaining all permits to the City of Hagerstown Water and Waste Water Department.
- **.3 CONSTRUCTION:** Adhere to Section 2 of the City of Hagerstown Water and Waste Water Standards and Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Payment for furnishing and placing water lines complete, will be made at the Contract Unit Price per linear foot. No payment will be made under this item for utility lines for which payment is provided under other items in the Proposal Price and payment shall constitute full compensation for furnishing and placing all pipe and fittings, together with appurtenances including but not limited to reducers, valves, bends, jointing material, concrete anchors and buttresses, tie rods and clamps, removal of existing concrete and/or asphalt, all plugging or capping existing pipe, all excavation and refill operations, providing an approved spoil site and disposing of all spoil or excess material, trench bedding and backfill as per Contract Details, temporary paving with cold stone patch materials, including removing and disposing of cold patch material together with surplus stone material, sawcut paving and apply temporary paving over disturbed pavement areas; maintenance and repair of trench backfill during warranty period after final acceptance; all environmental, sediment and erosion control work including off site requirements; restoration of all disturbed areas, and all other work necessary for making connections to existing water mains; the sterilization and testing of water lines; and for all other labor, equipment, tools, and incidentals to satisfactorily complete the work.

# 8015 6- INCH DIP WATER LINE

- .1 **DESCRIPTION:** Adhere to Section 2 of the City of Hagerstown Water and Waste Water Standards and Specifications for tying into an existing waterline as shown on the Contract Documents.
- .2 MATERIALS: Adhere to Section 2 of the City of Hagerstown Water and Waste Water Standards and Specifications. Contractor is responsible for obtaining all permits to the City of Hagerstown Water and Waste Water Department.
- .3 **CONSTRUCTION:** Adhere to Section 2 of the City of Hagerstown Water and Waste Water Standards and Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Payment for furnishing and placing water lines complete, will be made at the Contract Unit Price per linear foot. No payment will be made under this item for utility lines for which payment is provided under other items in the Proposal Price and payment shall constitute full compensation for furnishing and placing all pipe and fittings, together with appurtenances including but not limited to reducers, valves, bends, jointing material, concrete anchors and buttresses, tie rods and clamps, removal of existing concrete and/or asphalt, all plugging or capping existing pipe, all excavation and refill operations, providing an approved spoil site and disposing of all spoil or excess material, trench bedding and backfill as per Contract Details, temporary paving with cold stone patch materials, including removing and disposing of cold patch material together with surplus stone material, sawcut paving and apply temporary paving over disturbed pavement areas; maintenance and repair of trench backfill during warranty period after final acceptance; all environmental, sediment and erosion control work including off site requirements; restoration of all disturbed areas, and all other work necessary for making connections to existing water mains; the sterilization and testing of water lines; and for all other labor, equipment, tools, and incidentals to satisfactorily complete the work.

# 8016 8- INCH SDR26 SEWER LINE

- .1 **DESCRIPTION:** Adhere to Washington County Division of Environmental Management, Department of Water Quality, Standard Specifications for Construction of Sanitary Sewage and Water Facilities Standards (<u>www.washco-md.net/wp-content/uploads/2018/11/demdwq-StdSpec.pdf</u>)
- .2 MATERIALS: Adhere to the Standards Specifications.
- .3 **CONSTRUCTION:** Adhere to the Standard Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Payment for furnishing and placing waste water lines, complete, will be measured and paid at the Contract Unit Price per linear foot. Coring the existing manhole, and standpipe termination will be incidental to this line item. The payment will be full compensation for all other labor, equipment, tools, and incidentals to satisfactorily complete the work. This includes, but is not limited to, furnishing and

placing all pipe, fittings, together with appurtenances, jointing material, concrete anchors and buttresses, tie rods and clamps, all plugging or capping existing pipe, all excavation and refill operations, providing an approved spoil site and disposing of all spoil or excess material, trench bedding, and backfill as per the Contract Documents.

# 8017 SEWER MANHOLE ADJUSTMENT

- .1 **DESCRIPTION:** Adhere to Washington County Division of Environmental Management, Department of Water Quality, Standard Specifications for Construction of Sanitary Sewage and Water Facilities Standards (<u>www.washco-md.net/wp-content/uploads/2018/11/demdwq-StdSpec.pdf</u>)
- .2 **MATERIALS:** Adhere to the standard and specifications.
- .3 **CONSTRUCTION:** Adhere to the standard specifications.
- .4 **MEASUREMENT AND PAYMENT:** Payment for furnishing and placing manhole grade rings, complete, will be measured and paid at the Contract Unit Price per each manhole. The payment will be full compensation for all other labor, equipment, tools, and incidentals to satisfactorily complete the work.

# 8018 STANDARD MANHOLE

- .1 **DESCRIPTION:** Adhere to Section 305.01 of the MSHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 305.02 of the MSHA Standard Specifications.
- .3 **CONSTRUCTION:** Adhere to Section 305.03 of the MSHA Standard Specifications.

# 305.03.06 Precast Drainage Structures.

**DELETE:** The third paragraph "Do not ship......untested precast unit" in its entirety.

**INSERT**: The following.

Do not ship any precast unit without complete documentation showing that all materials meet specifications per 305.02 or the Contract Documents; or without complete identification markings per Sections 440, 905 and 915.

.4 **MEASUREMENT AND PAYMENT:** Adhere to Section 305.04.01 of the MSHA Standard Specifications.

# 8019 FIRE HYDRANT ASSEMBLY

.1 **DESCRIPTION.** Fire hydrants shall be furnished and installed in locations as shown in the Contract Documents and as by the Engineer.

- .2 MATERIALS: Adhere to Section 2 of the City of Hagerstown Water and Waste Water Standards and Specifications.
- **.3 CONSTRUCTION:** Fire Hydrants shall be installed in accordance with the latest City of Hagerstown Water and Wastewater Standards and Specifications Section 2 and Plate W-005. Construction shall be prior to the final paving of new roadway.
- .4 MEASUREMENT AND PAYMENT: Payment to furnish and install fire hydrants will be measured and paid at the Contract Unit Price per each. No payment will be made under this item for utility lines for which payment is provided under other items in the Proposal Price and payment shall constitute full compensation for furnishing and placing all pipe, fittings, together with appurtenances, jointing material, concrete anchors and buttresses, tie rods and clamps, all plugging or capping existing pipe, polyethylene wrap, testing, all excavation and refill operations, providing an approved spoil site and disposing of all spoil or excess material, trench bedding and backfill as per Contract Details, temporary paving with cold patch materials, including removing and disposing of cold patch material together with surplus stone material, saw cutting pavement and apply temporary paving over disturbed pavement areas; all environmental, sediment and erosion control work including off site requirements; restoration of all disturbed areas, and all other work necessary for making connections from the existing water main to the final setting of the hydrant and for all other labor, equipment, tools, and incidentals to satisfactorily complete the work.

# 8020 BOLLARD PROTECTION

**DESCRIPTION:** This work shall consist of furnishing and installing steel pipe bollards as shown on the plans and directed by the Engineer.

# MATERIALS:

Concrete Mix No. 2 MSHA Section 902.10.03 8" diameter Schedule 40 Casing Pipe

# **CONSTRUCTION:**

- A. Steel Bollards shall be 8" diameter SCH 40 casing pipe filled with SHA Mix No. 2 concrete (3,000 psi min.). Top of concrete to be finished smooth and dome shaped.
- B. Apply one (1) coat of primer over non-rusted, clean metal and two (2) coats of yellow oil base exterior paint (or approved equal).
- C. Plumb and center casing pipe in fifteen (15) inch diameter hole three and one-half (3 1/2) feet deep. Pavement restoration shall be incidental to the bollard installation.

# MEASUREMENT AND PAYMENT:

Steel Pipe Bollards will be measured and paid for at the Contract unit price per each bollard. The payment will be full compensation for all excavation, construction, materials, labor, equipment, tools, and incidentals necessary to complete the work. Excavation and backfill below the normal subgrade will be measured and paid for as Contingent Unsuitable Material Excavation.

# 8021ELECTRICAL HAND HOLE8022EXTERIOR JUNCTION BOX

- .1 **DESCRIPTION:** Adhere to Section 811.01 of the MSHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 811.02 of the MSHA Standard Specifications.
- .3 **CONSTRUCTION:** Adhere to Section 811.03 of the MSHA Standard Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Adhere to Section 811.04 of the MSHA Standard Specifications.

# 8023 THREE-PHASE JUNCTION BOX

.1 **DESCRIPTION:** This work shall consist of picking-up the equipment from the utility and installing the equipment with the required foundation.

# .2 MATERIALS:

Concrete Mix No.2

- .3 **CONSTRUCTION:** Equipment and foundation shall be installed in accordance with utility requirements and as directed by the engineer.
- .4 **MEASUREMENT AND PAYMENT:** The payment will be full compensation for all excavation, construction, materials, labor, equipment, tools, and incidentals necessary to complete the work.

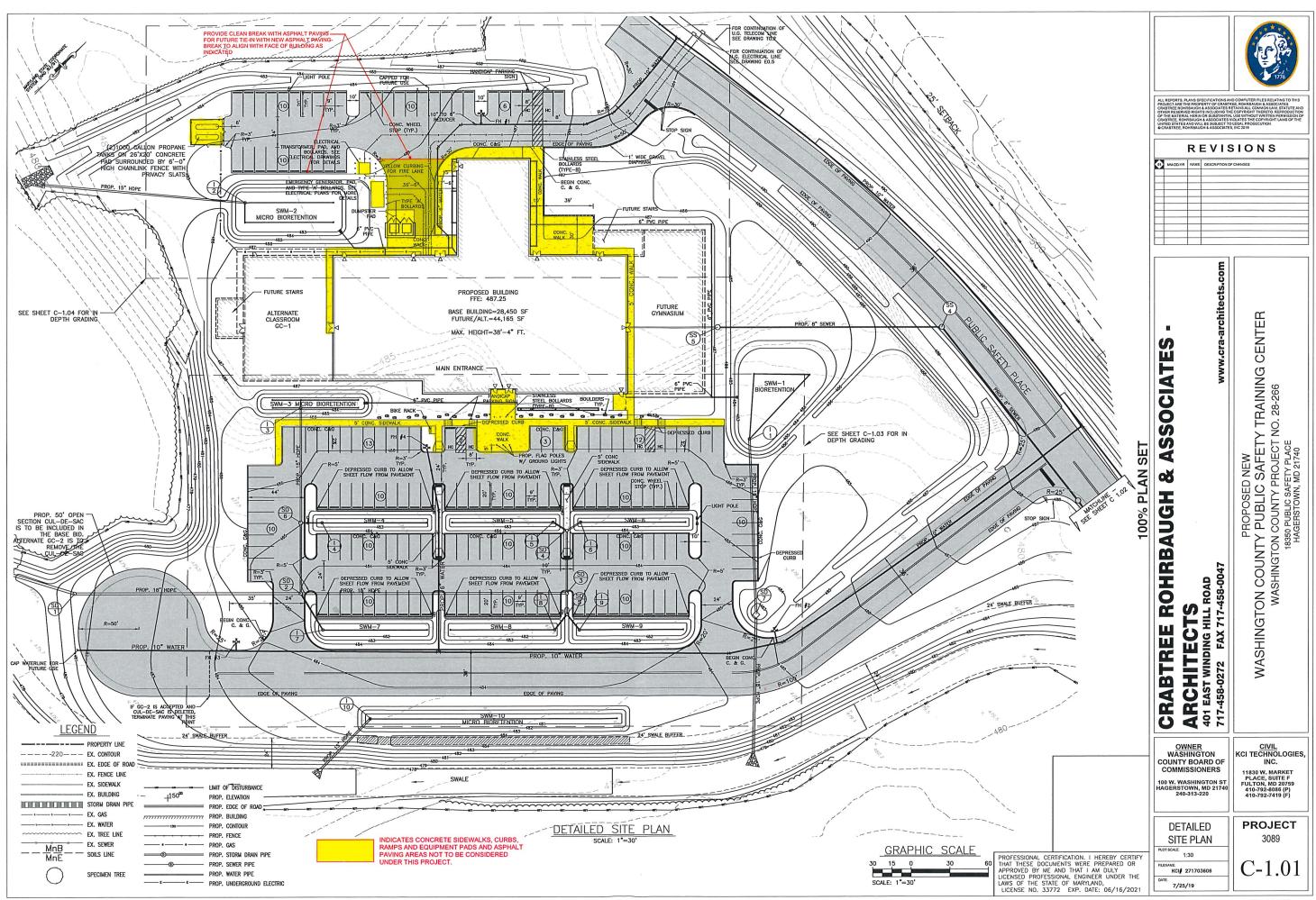
# 8024 GROUND ROD -3/4 INCH DIAMETER X 10 FT. LENGTH

- .1 **DESCRIPTION:** Adhere to Section 804.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 804.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 804.03of the MDOT SHA Standard Specifications.
- .4 **MEASUREMENT AND PAYMENT:** Adhere to Section 804.04 of the MDOT SHA Standard Specifications.

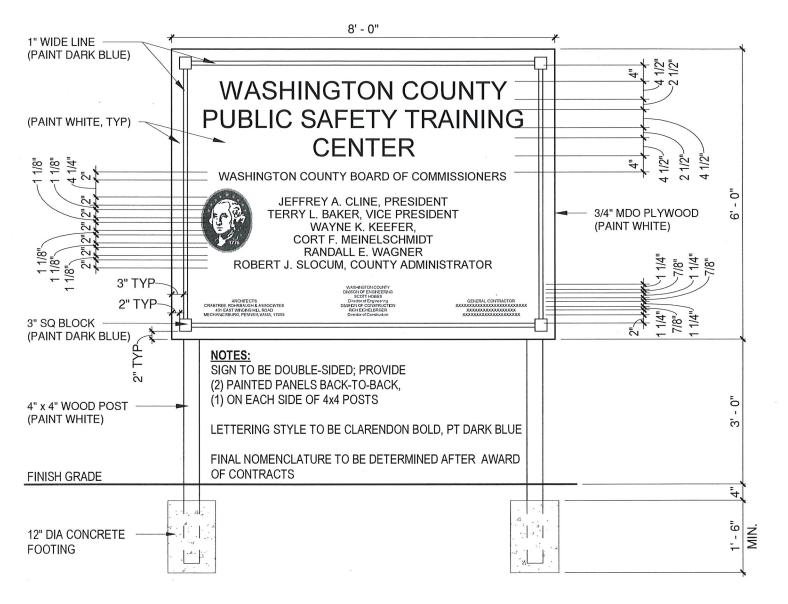
### 8025 NO. 6 AWG STRANDED BARE COPPER GROUND WIRE

- .1 **DESCRIPTION:** Adhere to Section 810.01 of the MDOT SHA Standard Specifications.
- .2 MATERIALS: Adhere to Section 810.02 of the MDOT SHA Standard Specifications.
- **.3 CONSTRUCTION:** Adhere to Section 810.03of the MDOT SHA Standard Specifications.
- .4 MEASUREMENT AND PAYMENT: Adhere to Section 810.04 of the MDOT SHA Standard Specifications.

# **Project Details**



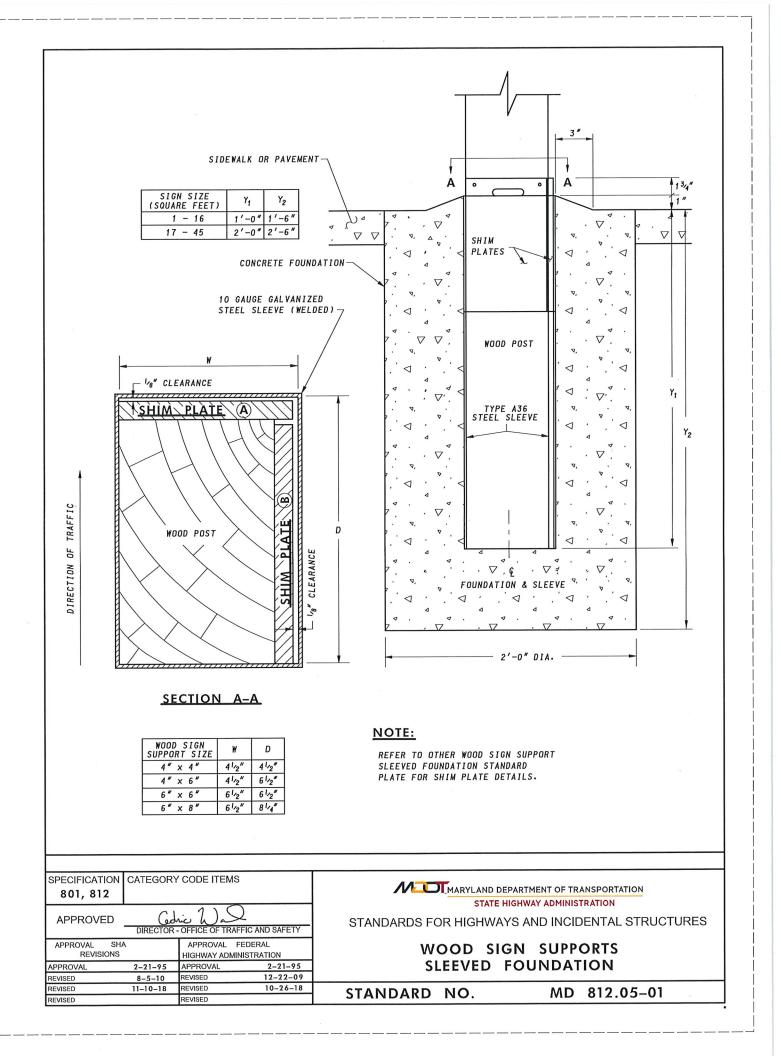
SP-18-044

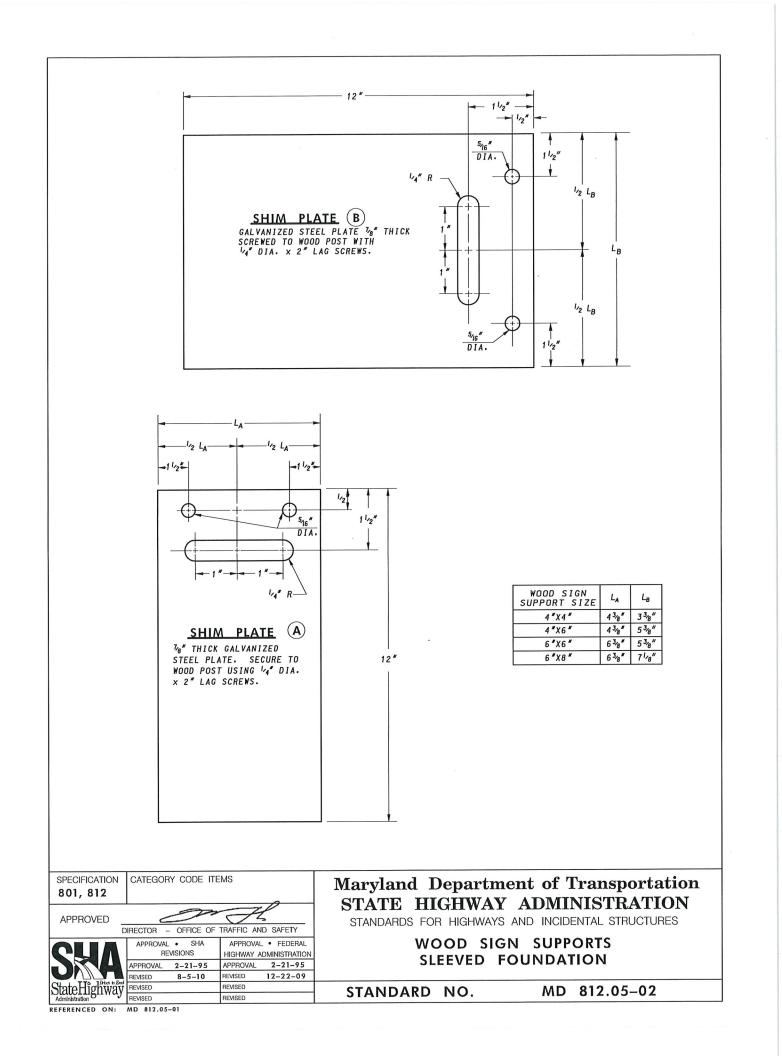


# **CONSTRUCTION SITE SIGN DETAIL**

	WOOD SUPP	OPTS			
	-				
	NUMBER & SIZE FOR Standard Blank				
SHAPE	SIZE (W × H)	POSTS	¹ /2 ¹ /2 W W		
	24 "	ONE (1)- 4" × 4"			
	30″	ONE (1)- 4" x 4"			
	36″	ONE (1)- 4" x 6"			
	48 ″	TWO (2)- 4" x 6"			
	30″	ONE (1)- 4" x 4"			
	36″	ONE (1)- 4" x 4"	<u>1 POST</u>		
	48 ″	TWO (2)- 4" x 4"			
	60″	TWO (2)- 4" x 4"	W		
	12" x 18"	ONE (1)- 4" x 4"			
	18" x 24"	ONE (1)- 4" x 4"			
	24" x 30"	ONE (1)- 4" x 4"	1/5   3/5   1/5		
	30" x 36"	ONE (1)- 4" x 6"	$ \begin{array}{c} W \\ - \end{array} \\ - \end{array} \\ - \end{array} \\ - \\ - \\ - \\ - \\ - \\$		
	36" x 48"	TWO (2)- 4" x 4"			
	48" x 60"	TWO (2)- 4" × 6"			
	21" x 15"	ONE (1)- 4" x 4"			
	24" x 12"	ONE (1)- 4" × 4"			
	24" x 18"	ONE (1)- 4" × 4"			
	30" x 15"	ONE (1)- 4" × 4"	2 POSTS		
	30" x 24"	ONE (1)- 4" x 4"			
	36" x 12"	ONE (1)- 4" x 4"	9″ MAX.		
	36" x 24"	TWO (2)- 4" × 4"	(TYP.)		
	48" x 24"	TWO (2)- 4" x 4"			
	48" x 36"	TWO (2) - 4" x 4"	1/6   1/3   1/3   1/6   30" MAX.		
	60" x 24"	TWO (2) - 4" $\times$ 4"			
	60" x 36"	TWO (2)- 4" x 4"			
	18"	ONE (1)- 4" x 4"			
	24"	ONE (1)- 4" x 4"			
	30"	ONE (1)- 4" x 4"			
	36"	TWO (2)- 4" x 4"			
	48 "	TWO (2) - 4" x 6"	<u>3 POSTS</u>		
	24 "	ONE (1)- 4" x 4"	<u>3 rosts</u>		
	30"	ONE (1)- 4" x 4"			
	36″	ONE (1)- 4" x 6"	GUIDE SIGN SUPPORT SPACING		
$\parallel$ $\setminus$ $\angle$	48 "	TWO (2)- 4" x 6"	NOTES:		
$\parallel$ $\checkmark$	₩ 60 [#]	$TWO (2) - 4'' \times 6''$	1. SPACING MAY BE VARIED TO MEET FHWA BREAKAWAY		
	24" x 24"	ONE (1)- 4" x 4"	REQUIREMENTS. (NO MORE THAN TWO 4" × 4" OR TWO		
ROUTE	30" x 24"	ONE (1)- 4" × 4"	DRILLED 4" x 6" POSTS WITHIN A 7'-0" DISTANCE. A MINIMUM 7'-0" SPACING BETWEEN ALL 6" x 6"		
MARKER DIMENSIONS	36" x 36"	ONE (1)- 4" x 6"	OR 6" × 8" POSTS.)		
(SEE NOTE 3)		TWO (2)- 4" × 4"	2. REFER TO WOOD SIGN SUPPORT FOUNDATIONS AND BREAKAWAY FEATURES FOR BREAKAWAY WOOD POST MODIFICATIONS.		
**	72" x 48"	TWO (2)- 4' x 6"	3. ROUTE MARKER DIMENSIONS REPRESENT THE DIMENSIONS OF THE		
	• 84" x 72"	TWO (2)- 6" x 6"	ROUTE SHIELD ONLY. ROUTE SHIELD MAY BE SUPPLEMENTED		
*HOLE SPACIN	GS VARY FROM FEDE	RAL BLANK STANDARDS	WITH CARDINAL DIRECTION AND DIRECTIONAL ARROW SIGN PANE Post sizes represent required support for complete		
** SEE WOOD	SIGN SUPPORTS RO	DUTE MARKER	ASSEMBLY, INCLUSIVE OF ROUTE SHIELD, CARDINAL DIRECTION		
ASSEMBLI	ES STANDARD PLATE	FOR DETAILS.	AND DIRECTIONAL ARROW SIGN PANELS.		
		E D	4. PROVIDE 2"X4" WOOD HORIZONTAL STIFFENERS WHEN SHEET ALUMINUM SIGN WIDTH EXCEEDS 48".		
L	IND TRAFFIC BARRI				
	SPECIFICATION CATEGORY CODE ITEMS		Maryland Department of Transportation		
812, 813		12	STATE HIGHWAY ADMINISTRATION		
		H	STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES		
APPROVED	6				
APPROVED	IRECTOR - OFFICE OF	TRAFFIC AND SAFETY			
	APPROVAL • SHA	APPROVAL • FEDERAL	WOOD SIGN SUPPORTS		
	APPROVAL • SHA REVISIONS	APPROVAL • FEDERAL HIGHWAY ADMINISTRATION	WOOD SIGN SUPPORTS		

REFERENCED ON: MD 812.03, MD 813.01





# Access Permit

### SHA Permit No. 19-AP-WA-001-19

ROUTE MD 65

# DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OF MARYLAND Baltimore, MD

DATE OF ISSUE August 6, 2019

MILEPOINT 7.85 EXPIRATION DATE August 6, 2020

### PERMISSION IS HEREBY GIVEN:

Board of County Commissioners for Washington Co., MD, c/o Mr. Scott Hobbs, 80 West Baltimore Street, Hagerstown, MD 21740 (Phone: 240-313-2460) so far as the State Highway Administration has the right and power to grant same, to construct one 36' wide commercial entrance as part of the proposed Washington County Public Safety Training Center, located on the west side of Sharpsburg Pike MD 65, 1,000 feet north of Roxbury Road.

Improvements include but are not limited to the following: full-depth pavement widening, resurfacing, curb and gutter, culverts, signing and pavement markings.

Unless otherwise specified below, construction of these improvements and/or modifications shall be in accordance with the latest version of the Maryland Department of Transportation State Highway Administration's Standard Specifications for Construction and Materials and the attached plan, copies of which are on file in this office. The plans and all of their additions and attachments are hereby incorporated in this permit.

It is agreed and understood that this permit constitutes a binding contract between you, your heirs, successors, and assigns, and the SHA, to adhere to the terms and conditions set forth in this permit.

### SPECIAL CONDITIONS OF APPROVAL AND PERMIT ISSUANCE

Not Applicable:

### **GENERAL PROVISIONS**

### I. Inspection and Pre-Construction Meeting

A. IMPORTANT: Prior to any work being performed in the State Highway Administration right-of-way, a pre-construction meeting shall be held with representatives of the Administration. In order to schedule the pre-construction meeting, all source of supply letters must be approved. Submit source of supply letters to SHA's Materials Management Division (Phone: 443-572-5020) at least two (2) weeks prior to the date you intend to begin construction. Once you have approved source of supply letters, you must notify the SHA Permit Inspector, Mr. Andy McKenzie, Hagerstown, Maryland (Phone: 301-707-7780) forty-eight (48) hours before the commencement of work, and prior to each successive stage of work. All work is subject to review and approval of the SHA Permit Inspector. Work deemed unacceptable shall be repaired and/or replaced to the satisfaction of the SHA Permit Inspector.

### AND

You must make notification in accordance with <u>Engineering Specifications</u> Section II: Utilities, Section III: Work Zone Traffic Control and Maintenance of Traffic, Section VIII:

### SHA Permit No. 19-AP-WA-001-19

Page 2

Permanent Signing, Pavement Marking and Traffic Control, and Section VII: Traffic Signals, prior to commencement of work.

# If this notice is not given, it will be necessary to suspend work for a minimum period of twenty-four (24) hours to allow time for notification of the proper agencies.

B. It shall be the responsibility of you and/or your contractor to notify the SHA Permit Inspector's office upon completion of the work, so that SHA can conduct a final inspection of the modifications and/or improvements. When SHA determines that all work required under the terms of this permit have been completed, SHA will release the permit. Release of this permit does not extinguish this agreement regarding continuing responsibilities of either party concerning maintenance, drainage, traffic signals, land use, etc.

### II. The Permittee's and/or Owner's Responsibility for Work

A. You and/or your contractor shall fully perform the modifications and/or improvements set forth in this permit in a manner satisfactory to SHA. Failure to complete the modifications and/or improvements within the allotted time, may result in one of the following actions:

(1) Permit may be revoked if entrance work is not started and property is not in commercial use.

(2) Completion of all or part of the work at your expense if work is not completed, or you fail to comply with the permit provisions. With no prior notice to you, the SHA may proceed to immediately fulfill the terms of this permit and all administrative, engineering, and construction costs shall be chargeable to you. You shall be responsible for any additional costs.

B. SHA shall have the right to enter upon the property of the Permittee to perform or complete the work. Such action shall not be deemed an acceptance of any work not completed in accordance with this permit. That does not relieve you and/or your contractor of liability for loss or damage resulting from your negligence or that of your contractor.

C. If, due to circumstances beyond your control (i.e. weather, strikes, etc.) you cannot complete the work within the allotted time, please write this office thirty (30) days before it is going to expire to request an extension. Your request will need to include a detailed justified reason as to why the work has not been performed and a construction timetable of when this work will be completed. SHA may grant an extension of the work completion date within which the terms and conditions of the permit are to be fulfilled. A copy of the extension will be forwarded to you. Your concurrence will be assumed if written objections are not received within ten (10) days of the issuance of the extension.

D. It shall be your responsibility to obtain and provide copies to SHA, any and all other permits, approvals, etc., from the appropriate parties or agencies that may be necessary for you to complete the necessary modifications and/or improvements.

### SHA Permit No. 19-AP-WA-001-19

Page 3

E. The personnel on the job site performing the modifications and/or improvements must have a copy of SHA's approved permit and plans at all times and they must have full knowledge of the contents of the permit. The SHA Permit Inspector shall have the option of closing down projects where the job site personnel do not have a copy of the approved permit and plans and/or are not complying with the contents of the permit and plans.

### III. Future Adjustments

A. It is agreed that any expansion and/or modification of the development, or change of use or occupancy of the property, will require the approval of the SHA and may require the owner, developer, or tenant to obtain a new access permit to remove, modify, or reconstruct the entrance in accordance with SHA requirements in effect at that time and deemed necessary by the Administration.

B. In the event that any State highway is modified to become a dual or divided highway containing a median, or if a median is already in place, SHA may decline to construct or allow the construction of a crossover through the median that would allow left turns to and from the property. SHA reserves the right to restrict or eliminate the use of existing crossovers and new crossovers established under this permit.

### IV. <u>Right-of-Way Requirements</u>

A. Vehicular access to and from the subject site by the public, for the purpose of conducting business for the permitted use of the property, shall not be allowed until such time as the work herein specified has been fully completed in accordance with the permit.

B. No obstructions shall be placed on or within the SHA right-of-way without written permission.

C. No signs or lights will be permitted on or above the State's right-of-way. (Except approved traffic control signs, traffic signals, intersection lighting, etc.).

D. If mailboxes are erected within the SHA right-of-way, they must be placed on a breakaway type post or support. The maximum size wooden post will be 4" x 4". The maximum size pipe support will be 2" in diameter. Any other type of support (ornamental) shall not have a structural strength greater than either of these. The owner and/or you will be directed to remove any mailbox support of a size greater than the aforementioned; and if not removed by the owner and/or you, it will be removed by SHA forces. SHA is not responsible for any damage to mailboxes regardless of how the damage may occur.

E. Fire hydrants on or adjacent to the project shall be kept accessible to fire departments at all times and no material or obstruction shall be placed within fifteen (15) feet of any such hydrant. All footways, gutters, sewer inlets adjoining the work under construction shall not be obstructed more than is absolutely necessary. Construction zones closed down for the winter or at any other times shall be left entirely accessible at all points to fire apparatus.

### SHA Permit No. 19-AP-WA-001-19

Page 4

F. Proposed removal, selective thinning, or pruning of any trees within SHA right-of-way must be reviewed and approved by SHA's Office of Environmental Design – Landscape Operations Division (Phone: 410-545-8590) prior to contacting the Maryland Department of Natural Resources – Forest Service (Phone: 301-791-4733), to determine whether that is permissible under the Annotated Code of Maryland, Title 08, Subtitle 07, Chapter 02.

G. As part of this permit, permission is hereby granted to plant in the area behind the roadside curb. You and/or your contractor shall maintain the plants at a maximum height of 18", and the plants shall be trimmed so they will not overhang the outside edge of the concrete curb. Where grass is planted, it shall be mowed and trimmed periodically to insure a neat appearance.

H. Graded cut and fill slopes in the public right-of-way are to be sodded or seeded and mulched.

I. In the fill areas where the cross slope of the embankment fill is steeper than 3:1 (horizontal : vertical), and the height of the fill exceeds 5', Standard "W" beam is required as directed by the SHA Permit Inspector.

J. It shall be the responsibility of you and/or your contractor to restore the right-of-way to its original condition if construction begins but is abandoned prior to completion.

K. All mud and debris tracked and/or spilled on the State highway shall be removed promptly to eliminate potential hazards and comply with sediment control requirements.

L. Maintenance of the area, beyond the roadside flowline, shall be the full responsibility of you and/or the Permittee or Lessee.

M. After construction is completed and prior to permit release, the Permittee must submit As-Built construction plans (two sets, plus digital copy) or certification from a licensed professional that the project was constructed as per the access permit plans with no changes.

### V. Responsibility for Damage Claims

Permittee shall, subject to the availability of appropriations and the limitations of the Local Government Tort Claims Act, Subtitle 4 of Title 5 of the Courts & Judicial Proceedings article of the Annotated Code of Maryland, indemnify, defend and save harmless SHA, and all its representatives from all suits, actions, or claims of any character brought on account of any injuries or damages sustained by any person or property due to acts or omissions on the part of employees, officers or agents of Permittee in connection with the work performed pursuant to this Permit. Permittee further agrees that it shall require its contractor(s) to purchase and maintain comprehensive general public liability and property damage insurance pursuant to Maryland Department of Transportation, State Highway Administration, Standard Specifications for Construction and Materials (July 2008), GP-7.14 and TC-5.01. Contractor will obtain a certificate of insurance naming SHA as additional insured, and will provide SHA and Permittee satisfactory documented proof thereof.

### SHA Permit No. 19-AP-WA-001-19

Page 5

### ENGINEERING SPECIFICATIONS

### I. <u>General Requirements</u>

A. All construction on the State highway right-of-way shall conform to the latest version of SHA's "Standard Specifications for Construction and Materials", which shall be construed to include all pertinent Interim Specifications Addenda and Special Provision Inserts. In addition, these Engineering Specifications and approved site-specific Special Provisions attached to this permit shall apply. All construction shall conform to the latest version of SHA's "Book of Standards for Highway and Incidental Structures", except where the use of nonstandard or modified designs is expressly noted and detailed on the approved plans.

B. If there is a discrepancy between the actual elevations and the elevations shown on the plans, the grades of the proposed curbing and paving shall be established by using the actual elevation of the road edge. If, in SHA's sole judgment, the discrepancy is substantial enough to warrant formal plan revisions, such revisions shall be made by the Permittee and submitted for review and approval by the SHA. The SHA Permit Inspector shall have the option of suspending work on the affected portions of the permitted work until the revisions have been approved and an Addendum to the permit has been issued.

C. Any deviations and/or adjustments as may be required at time of construction shall be constructed in accordance with the approval of and as directed by the SHA Permit Inspector. If, in SHA's sole judgment, the deviations and/or adjustments are substantial enough to warrant formal plan revisions, such revisions shall be made by the Permittee and submitted for review and approval by the SHA. The SHA Permit Inspector shall have the option of suspending work on the affected portions of the permitted work until the revisions have been approved and an Addendum to the permit has been issued.

D. If the access area is to be used for construction traffic prior to completion of the access, a standard stabilized construction entrance (SCE-1) shall be constructed at the direction of the SHA Permit Inspector. The construction entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto the SHA right-of-way. This may require periodic top dressing with additional stone as conditions demand, and repair and/or clean out of any sediment control measures.

### II. <u>Utilities</u>

A. You shall be responsible for the necessary relocation and/or adjustment of all existing utilities, as well as the installation of any new underground utilities to serve this development, prior to the construction of the improvements. All utility work shall be accomplished under a separate permit issued by the SHA District Utilities Engineer, Mr. David R. Felker, LaVale, Maryland, (Phone: 301-729-8439).

B. As indicated by your signature on the permit application, you acknowledge and agree to accept full financial responsibility regarding the relocation or adjustment of utilities.

#### SHA Permit No. 19-AP-WA-001-19

Page 6

C. You must notify **"MISS UTILITY" (Phone: 1-800-257-7777)** forty-eight (48) hours in advance of any construction so that all underground utilities can be identified in the field. Use **<u>BW996M82</u>** when initiating a "MISS UTILITY" request.

D. You must notify the **Maryland State Highway Administration Office of Traffic and Safety** at **410-787-7650** forty-eight (48) hours in advance of excavation operations to allow any State owned underground facility to be marked.

#### III. Work Zone Traffic Control and Maintenance of Traffic

A. You are responsible for proper work zone traffic control and maintenance of traffic in accordance with the terms of this permit. In the event that the SHA is required to provide traffic control due to the Permittee failing to provide same, all cost and applicable overhead shall be billed directly to the Permittee.

B. Any work related to lane markings, signage, and/or traffic control, as appropriate for this permit, must be coordinated with the SHA Assistant District Engineer – Traffic. The Permittee shall notify the SHA Assistant District Engineer – Traffic, Ms. Linda Puffenbarger, (Phone: 301-729-8444), at least five (5) days prior to taking any action. Note: All temporary warning signs shall be completely covered and/or removed when not applicable.

C. Traffic controls shall conform to the latest version of the Maryland Manual on Uniform Traffic Control Devices (MdMUTCD), the Standard Specifications for Construction and Materials, the Standard General Notes MD 104.00, and the Special Provisions (DEAP'S) for Traffic – 1 (revised 7/31/05).

D. Work within and adjacent to the traveled way once initiated, shall be completed in successive days. All work is to be accomplished week days between the hours of 9:00 AM and 3:00 PM or as determined by the SHA Assistant District Engineer – Traffic. No lane closures will be allowed during non-work periods, unless approved prior to permit issuance by the SHA Assistant District Engineer – Traffic.

E. All work accomplished under this permit shall be controlled using the appropriate SHA Standard Temporary Traffic Control Typical Applications (Standards No. MD 104.02-01, and MD 104.02-03) and in accordance with the Special Provisions Traffic – 1 (revised 7/31/05). The Permittee may request approval of a site-specific traffic control plan from the SHA Assistant District Engineer – Traffic to be used in lieu of the above-referenced standards. The SHA Book of Standards for Highway and Incidental Structures can be accessed at the following location: http://apps.roads.maryland.gov/BusinessWithSHA/bizStdsSpecs/desManualStdPub/publications online/ohd/bookstd/index.asp.

F. Traffic control required as a result of pavement elevation differences, during both work and non-work periods, shall be in accordance with SHA's current Pavement Drop-off Guidelines and/or as directed by the SHA Permit Inspector. Except as may otherwise be directed, the pertinent SHA Standard Temporary Traffic Control Typical Applications MD 104.06-15, MD 104.06-16, MD 104.06-17, MD 104.06-18, MD 104.06-19, and MD 104.01-28 shall be applied based on the height of the drop-off and proximity to the travel lane. For drop-off greater than five

#### SHA Permit No. 19-AP-WA-001-19

Page 7

(5) inches, closure of the adjacent travel lane or placement of temporary concrete traffic barrier with appropriate end treatments is required.

G. In the event that the SHA is required to provide traffic control due to the Permittee failing to provide same, all costs and applicable overhead shall be billed directly to the Permittee.

H. Boxing out the entrance and/or shoulder area in preparation for paving is to be accomplished in accordance with "Paving Instructions" outlined in the attached Special Provisions for Traffic Control.

#### IV. Grading and Paving

A. Grading for excavation, subgrade preparation, embankments, and roadside cut and fill areas shall conform to the lines and grades identified on the approved permit plans, and as may be directed by the SHA Permit Inspector. In no case shall any cut slope or fill slope be graded steeper than 2:1 (horizontal : vertical).

B. A full-depth vertical sawcut is required at the edge of all pavement removal and replacement and/or base widening, to form a neat, clean joint between new pavement and existing pavement. The vertical face shall be cleaned and tack-coated prior to placing the new pavement. All existing paving disturbed during construction of the work covered by this permit shall be replaced in kind, subject to approval of the SHA Permit Inspector.

C. Existing shoulders along the base widening shall be completely removed and replaced with new full-depth paving. The shoulders have not been deemed acceptable by SHA for supporting highway traffic.

D. Paving shall be established on a subgrade acceptable to the Chief Engineer or his representative. The prepared and compacted subgrade shall have a density of not less than 97% of maximum dry density as specified in T 180. Unsuitable material shall be removed and replaced as directed by the SHA Permit Inspector.

E. The permitted paving shall use the following full-depth section(s):

(a) 2" Hot Mix Asphalt Superpave 12.5 mm for Surface – PG 64-22, Level 2
 8" Hot Mix Asphalt Superpave 19.0 mm for Base – PG 64-22, Level 2 (2 – 4" lifts)
 6" Base Course Using Graded Aggregate or 12" Capping Borrow (2 – 6" lifts)

NOTE: The ESALs range for the above noted HMA Superpave mix(es) shall be from 0.3 million to 3 million ESAL (Category 2) for a 20-year Superpave design analysis period.

NOTE: At the sole discretion of the Permit Inspector, and/or the Resident Maintenance Engineer, cores may be required to verify the pavement depth prior to the construction and/or after the final paving. This is to allow the State Highway Administration's Permit Inspector/Resident Maintenance Engineer to determine if the pavement will need to be replaced by the Permittee.

## SHA Permit No. 19-AP-WA-001-19

Page 8

NOTE: The Asphalt Binder shall conform to AASHTO MP 1-93 Table 1, Standard Specification for Performance Graded Asphalt Binder. Superpave mix designs shall be in conformance with AASHTO PP28-95, Standard Practice for Superpave Volumetric Design for HMA. The Contractor shall submit certificates of analysis showing that the HMA is in conformance with MP 1-93 and PP28-95 Specifications. The Performance Grading shall be achieved by the use of Neat Asphalt with Polymer modification when needed.

Each course of the above paving section must be thoroughly compacted with a road roller of not less than eight (8) tons in weight, unless otherwise directed by SHA.

F. The permitted paving shall conform to the approved Access Permit Plans that are attached to this permit:

#### ENTRANCES, DECELERATION LANES AND ACCELERATION LANES

The sawcut shall be made along the edge of the existing traveled lane. The grade of the new paving must meet the existing edge of the traveled lane and slope at a rate of minus 1/4" per foot for 16', and a minus  $\frac{1}{2}$ " per foot for 1' of gutter pan, which point will be the flowline. The area along the property frontage from the edge of existing travel lane to the gutter pan and within the entrance (s) to the right-of-way line or as shown on the plan must be graded and paved with one of the above specifications. The area around the curb radii is to be graded and paved as to ensure positive drainage. New paved lane shall tie smoothly into the existing shoulder and/or lane. The existing pavement shall be sawcut or milled, as directed by the SHA Permit Inspector, to remove the existing edge line marking prior to placing the final surface course.

The 11' wide deceleration lane, 250' in length, is to be graded and paved with one of the above specifications, as directed by the SHA Permit Inspector. Where there are existing paved shoulders at the limits of the acceleration lane and deceleration lane, a gradual cross-slope transition shall be accomplished as noted below in this permit and as directed by the SHA Permit Inspector. The transition area shall be located on the first 50' of shoulder beyond the limits of the acceleration lane, unless specifically noted otherwise on the plans. The transition area shall either be paved full-depth with one of the above specifications or milled, wedge/leveled and resurfaced in accordance with the "Shoulder Slope Transition" section below, as acceptable to the SHA Permit Inspector.

#### SHOULDER SLOPE TRANSITIONS

The existing shoulders beyond the limits of full-depth paving shall be milled or carbide grinded for a depth equal to that of the specified paving surface course and cleaned. A gradual cross-slope transition from the existing shoulder cross slope to the cross-slope of the new full-depth paving shall be accomplished within 50' of the limits of full-depth paving. Adjustment to the required grades shall be made using wedge/level courses of HMA Superpave 9.5 mm - PG 64-22, Level 2. The thickness of each lift shall not exceed 1 ½", and no more than three (3) lifts shall be used. The surface course specified for the adjacent full-depth paving shall be placed across the built-up shoulder.

#### SHA Permit No. 19-AP-WA-001-19

Page 9

#### TRENCH BACKFILL

Trench backfill for storm drains and utilities shall conform to Standard Detail MD-578.01 or as detailed on the plans. If steel plates are used, they must be 1" thick minimum, properly secured with anchors and temporary pavement wedging, and extend 1 foot minimum beyond all edges of the trench. The trench shall be backfilled with Flowable Backfill for Utility Cuts or other approved material up to the bottom of the full depth pavement patching section. The full depth patching pavement section, consisting of the specified graded aggregate and hot mix asphalt, shall be placed and constructed to be flush with existing road surface grade. Following this, the pavement shall be resurfaced as shown on the plans. If resurfacing of the existing roadway is not shown on the plans, the existing pavement shall be milled and overlaid for twenty-five (25) feet in each direction (measured from the centerline of the trench) for the full width of the roadway. Mill or grind 2" and replace with 2" of the above-noted Hot Mix Asphalt Superpave mix.

#### V. Concrete Curb and Gutter, Islands, Monolithic Median, and Sidewalk

A. Existing curb and gutter, islands, monolithic median, and sidewalk shall be removed to the nearest construction joint. A saw-cut shall be made at the joint and an expansion joint established, unless the existing joint is an expansion joint.

B. Graded aggregate base course and/or capping borrow for the chosen paving option shall be extended underneath the curb and gutter, islands and monolithic median. It shall be your responsibility to have the SHA Permit Inspector inspect the forms prior to the pouring of any concrete.

C. Channelization along the site frontage and curbed island(s) shall consist of Standard Concrete Combination Curb and Gutter Type 'A' conforming to Standard No. MD 620.02 with a 1'-0" wide gutter pan, constructed as shown on the plans. Refer to the latest version of the Standard Specifications for joint spacing and construction practices.

D. The roadside face of curb shall be 16' from and parallel to the existing edge of traveled lane and 27' from and parallel to the existing highway centerline. The grade on top of the roadside curb shall be  $3\frac{1}{2}$ " above the aforementioned existing edge of traveled lane. All curbs shall have a minimum of  $3\frac{1}{2}$  compacted earth backing for support, sloping up  $\frac{1}{2}$ " per foot from top of curb for a minimum of  $3\frac{1}{2}$  thence on a slope not in excess of 2:1/4:1. The area behind the curb shall be graded, stabilized, and sodded, seeded, or paved.

## VI. <u>Traffic Barrier</u>

Not Applicable:

#### VII. Drainage

A. Positive and controlled flow of stormwater runoff to a suitable outfall, without ponding or erosion damage, shall be obtained. So that no increase in stormwater runoff is generated by this development into MD 65, proper stormwater management plans should be reviewed and approved by the County, Soil Conservation Districts and/or Maryland Department of the

#### SHA Permit No. 19-AP-WA-001-19

Page 10

Environment and implemented by you. SHA is not an approving authority for stormwater management or sediment and erosion control requirements associated with the work within State right-of-way.

B. Should proper "Stormwater Management" not be included by you in development of the property, and upon being damaged by increased stormwater runoff from the development, SHA will institute legal proceedings to prevent a recurrence of such situations to protect the public's safety and to seek reimbursement for any damages sustained.

C. You shall be responsible for the placement of any sediment and erosion control devices required by the approving authority or deemed necessary by the SHA Permit Inspector during the construction of the improvements outlined in this permit. All existing drainage systems (including, but not limited to ditches structures, inlets, pipes, outfalls, etc.) shall continue to function in an effective manner while work is in progress, as well as upon completion of work. Should any disturbance be made to existing drainage systems, you must restore them to their original condition and function using appropriate methods (including, but not limited to, structural replacement, cleaning out, resodding, stabilization practices and paving) as directed by the SHA Permit Inspector.

D. All drainage systems and construction incidental to drainage are a part of this permit, and the approved plans shall not be deviated from without written permission from this Administration. Storm drain structures, pipes and connections shall be constructed as indicated on the attached plan and as directed by the SHA Permit Inspector. In the event that the storm drainage or stormwater management facilities cannot be constructed according to plan due to utility conflicts, adverse site conditions or other factors discovered during construction, it is your responsibility to accomplish a functionally equivalent design and submit revised plans to SHA for approval.

E. All new or replacement drainage structures shall conform to the latest version of SHA's Book of Standards for Highway and Incidental Structures, except where the use of modified or non-standard structures is expressly noted on the approved plans. All new or replacement drainage pipes shall conform to approved materials listed in the latest version of Section 905 of the SHA Standard Specifications.

F. Clearance with any existing utility shall be in accordance with the criteria established by the utility owner. Underground utilities shall be located and clearances determined prior to submission of final design plans, using appropriate engineering methods including test pitting. Should utility conflicts arise during construction, an alternative design will be required that is functionally equivalent to the permitted design and will require approval from the Highway Hydraulics Division.

#### VIII. Permanent Signing, Pavement Marking and Traffic Control

A. A standard SHA stop sign (Standard Type R1-1 30" x 30"), is to be placed at the Public Safety Place intersection with the State highway, as directed by the SHA, at the sole expense of the Permittee/or others, but not the SHA.

## SHA Permit No. 19-AP-WA-001-19

Page 11

B. If it becomes necessary to adjust existing signs as part of the construction, they shall be removed, relocated and/or replaced as directed by the SHA Permit Inspector.

C. The existing lane markings on the State highway must be eliminated so that new lines compatible with the lane configurations to be established under this permit may be installed. You shall be responsible for the elimination of the lines by a method approved by the SHA Assistant District Engineer – Traffic, as well as the placement of new pavement markings (to include stop bars, crosswalks, turn arrows, etc.). You shall notify the SHA Assistant District Engineer – Traffic, at least five (5) days prior to the removal and/or application of new markings.

D. Permanent pavement markings shall comply with the latest version of the MdMUTCD, the SHA Standard Specifications, and the approved plans.

E. In the event that the SHA is required to provide traffic control due to the Permittee failing to provide same, all costs and applicable overhead shall be billed directly to the Permittee.

#### IX. <u>Traffic Signals</u>

Not Applicable:

X. Lighting

Not Applicable:

XI. <u>Surety</u>

Not Applicable:

XII. Signal Fee

Not Applicable:

#### STATE HIGHWAY ADMINISTRATION

Gregory Slater SHA Administrator

Anthony F.K. Crawford, PE District Engineer

SHA 60.0

Rev. 6/2015

# **Bid Forms**

## COUNTY CONTRACT NO. MS-TC-266-28

## **BID FORMS**

## <u>WASHINGTON COUNTY PUBLIC SAFETY TRAINING CENTER</u> <u>PHASE-1 SITE DEVELOPMENT</u>

## COUNTY CONTRACT NO. MS-TC-266-28

## **TABLE OF CONTENTS**

	Page Numbers
Proposal Form	BF-2
Bid Affidavit	BF-3-5
Certification of Work Capacity	BF-6
Sub-Contractor Listing	BF-7
Proposal Guaranty	BF-8-9
Bid Letter	BF-10
Bid Bond	BF-11
Summary Schedule of Prices	BF-12
Schedule of Prices	BF-13

## PROPOSAL FORM

## <u>WASHINGTON COUNTY</u> <u>PUBLIC SAFETY TRAINING CENTER</u> <u>PHASE-1 SITE DEVELOPMENT</u>

## COUNTY CONTRACT NO. MS-TC-266-28

## THE BOARD OF COUNTY COMMISSIONERS WASHINGTON COUNTY HAGERSTOWN, MARYLAND

Proposal of

(Name)

#### (Address)

to furnish and deliver all materials and to do and perform all work in accordance with Plans, Specifications, General Conditions, Special Provisions, Bid Documents and Contract Documents relating to the <u>WASHINGTON COUNTY PUBLIC SAFETY TRAINING CENTER</u> <u>PHASE-1 SITE DEVELOPMENT</u> in Washington County, State of Maryland, on which proposals will be received until <u>2:00 P.M., Wednesday, SEPTEMBER 11, 2019.</u>

TO: The Board of County Commissioners of Washington County, Maryland 100 W. Washington Street Hagerstown, MD 21740

Gentlemen:

Having carefully examined the Plans, Specifications, General Conditions, Special Provisions, Bid Documents and Contract Documents for the work herein before named, and in conformity with the Specifications, I/We hereby certify that I/We am/are the only person or persons interested in this proposal as principal(s), that it is made without collusion with any person, firm or corporation; that an examination has been made of the Plans, Specifications, General Conditions, Bid Documents and Contract Documents, including the Special Provisions contained herein, and of the site of the work, and propose to furnish all necessary machinery, plant, equipment, tools, labor and other means of construction, and furnish all materials specified, in the manner and at the time prescribed, and perform all work for the sum of

(Written Words)

_(Figures)

## COUNTY CONTRACT NO. MS-TC-266-28

## **BID AFFIDAVIT**

duly authorized on behalf of said firm to make this Affidavit.

2. Bribery:

I FURTHER DECLARE AND AFFIRM that neither I, nor, to the best of my knowledge, information and belief, the above firm, nor any officer, director or partner of the above firm, nor any employee of the above firm directly involved in obtaining contracts with the State of Maryland, or any county or other subdivision of the State of Maryland, has been convicted* of bribery, attempted bribery, or conspiracy to bribe under the laws of any state or the Federal Government; except as herein expressly stated (if any):

* As used herein, the word "convicted" includes an accepted plea of nolo contendere.

.

3. Non Collusion:

a. Said proposal has been independently prepared without collusion by any officer, director, partner, employee or other representative of this firm, with any other proposer, or with any competitor; that

In connection with the firm's price proposal for the above-captioned Contract, as submitted to Washington County, I HEREBY DECLARE AND AFFIRM, to the best of my knowledge, information and belief, that:

## COUNTY CONTRACT NO. MS-TC-266-28

- b. No attempt has been or, hereafter, will be made by any officer, director, partner, employee or other representative of this firm to induce any other person, firm or entity to submit or not submit a proposal; that
- c. Any unit or total price in this proposal has not been knowingly disclosed and will not be knowingly disclosed prior to its official opening, directly or indirectly, to any other bidder or to any competitor; and, that
- d. I have fully informed myself regarding the accuracy of the statements contained herein.

I acknowledge that this Affidavit is to be furnished to the Secretary of the Maryland Department of Transportation and may be distributed to boards, commissions, administrations, departments and agencies of the State of Maryland, counties or other subdivisions of the State of Maryland, other States and Federal Government. I further acknowledge that this Affidavit is subject to applicable laws of the State of Maryland, both criminal and civil, and that this Affidavit is to be attached to and become a part of the Contract when and if awarded and executed.

I FURTHER HEREBY DECLARE AND AFFIRM that I and the firm I herein represent, acknowledge and agree that if any misrepresentation is herein made, the Board of County Commissioners of Washington County, Maryland in their discretion, shall have the right to reject this proposal or terminate the Contract, without liability, as the case may be.

## COUNTY CONTRACT NO. MS-TC-266-28

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THE FOREGOING DOCUMENT ARE TRUE AND CORRECT, AND THAT I AM AUTHORIZED, ON BEHALF OF THE ABOVE FIRM, TO MAKE THIS AFFIDAVIT.

By:		_	Date
·	Signed Name of Affiant		
	Typed Name	-	
	Title		
For:	Firm		
State of	of	:	
Count	y (City) of	:	
On thi	is day of	, 20,	
before	e me,		, the undersigned officer, personally
appear	red		
knowi	n to me to be the person described in th	e foregoing	g Affidavit and acknowledged that he
(she) e	executed the same in the capacity therein	stated and f	or the purposes therein contained.
In wit	ness whereof, I hereunto set my hand and	official sea	1.
			SEALNotary Public

My Commission Expires _____

## COUNTY CONTRACT NO. MS-TC-266-28

## **CERTIFICATION OF WORK CAPACITY**

I do solemnly declare and affirm that the firm stated below has the equipment, labor, supervision and financial capacity to perform this Contract either with our organization or with Subcontractors, as provided in GP-Section 8 of the MSHA Specifications.

We shall supply such additional information as may be required in accordance with GP-Section 3 of the MSHA Specifications.

By:		Date
5	Signed Name of Affiant	
		_
	Typed Name	
	Title	_
	The	
For:		_
	Firm	
Sworn	to before me this day of	, 20
		SEAL
	Notary Public	
My Co	ommission Expires	

## COUNTY CONTRACT NO. MS-TC-266-28 SUB-CONTRACTOR LISTING

The Contractor will name below the Item or Items he proposes to sublet, their dollar value, the name of the subcontractor or subcontractors and check the "Minority Business Enterprise" column if the named subcontractor so considers itself as per the definition contained elsewhere herein these specifications.

ITEM NO.	DOLLAR VALUE	SUBCONTRACTOR	MINORITY BUSINESS ENTERPRISE

## COUNTY CONTRACT NO. MS-TC-266-28 PROPOSAL GUARANTY

The amount and type of the proposal guarantee which shall be attached to and submitted with the bid depends upon the amount of the bid as stated below:

A Bid Security of \$500.00 will be required on Contract Proposals under \$20,000.

A Bid Security totaling 5% of the bid amount will be required on Contract Proposals of \$20,000 or over.

Acceptable security for bids shall be as follows:

- 1. A bond in a form satisfactory to the County underwritten by a company licensed to issue bonds in this State;
- 2. A bank certified check, bank cashier's check, bank treasurer's check, or cash

I/We understand that the quantities of work as shown herein are approximate only and are subject to increase or decrease, and further understand that all costs in connection with the complete performance of the work as described in the Plans, Specifications, General Conditions Special Provisions, Bid Documents and Contract Documents shall be included in the Contract price bid for the entire work to be performed under this Contract.

## IT IS FURTHER PROPOSED:

To do all "Extra Work" which may be required to complete the work contemplated at unit prices or lump sums to be agreed upon in writing prior to starting such extra work, or, if such prices or sums cannot be agreed upon, to perform such work on a "Force Account" basis, as provided for in Section 9, GP-9.02, of the MSHA Specifications.

To begin work as specified in the "Notice to Proceed" and to prosecute said work so as to complete the Contract within <u>180</u> consecutive calendar days.

To furnish a Payment Bond, and a Labor and Material Payment Bond, in the full amount of Contract award, as security for the construction and completion of the Contract in accordance with the Plans, Specifications, General Conditions, Special Provisions, Bid Documents and Contract Documents.

To guarantee all of the work performed under this Contract to be done in accordance with the Plans, Specifications, General Conditions, Special Provisions, Bid Documents and Contract Documents in a good workmanlike manner and to renew or repair any work which may be rejected due to defective materials or workmanship, prior to final completion and acceptance of the work.

### COUNTY CONTRACT NO. MS-TC-266-28

the Form or Contract is not executed, if awarded to the undersigned), is based on the aggregate amount of the bid submitted.

(For execution by Individuals and Partnerships or Corporations)

FOR INDIVIDUALS AND PARTNERSHIPS:

Name:		
By:	(Member)	(Seal)
P	(Meniber)	(Sear)
By:	(Member)	(Seal)
Witness:		
FOR CORPORAT	IONS:	
Name:		
By:		
	(President)	(Seal)
Attest:	(Secretary)	

The Proposal Form shall be filled out in ink. The Proposal, if submitted by an individual, shall be signed by an individual; if submitted by a partnership, shall be signed by such member or members of the partnership as have authority to bind the partnership; if submitted by a corporation the same shall be signed by an officer and attested by the Secretary or an Assistant Secretary. If not signed by an officer, as aforesaid, there must be attached a copy of that portion of the by-laws, or a copy of a Board Resolution, duly certified by the Secretary, showing the authority of the person so signing on behalf of the corporation. In lieu thereof, the corporation may file such evidence with the Board of County Commissioners of Washington County, Maryland duly certified by the Secretary, together with a list of the names of those officers having authority to execute documents on behalf of the corporation, duly certified by the Secretary, which listing shall remain in full force and effect until such time as the Board of County Commissioners of Washington County. In any case where a Proposal is signed by an Attorney-in-Fact a copy of the appointing document, duly certified must accompany the same.

## COUNTY CONTRACT NO. MS-TC-266-28 BID LETTER

In order for a Proposal to be considered, it is necessary that the following guaranty from Surety be executed.

The

(Name of Bonding Company)

____ agrees to act as surety for ___

(Name of Bidder)

and to furnish the full amount of Proposal Guaranty as required by GP-Section 2 of the MSHA Specifications.

The aforementioned Bonding Company will also furnish the full amount of the Performance Bond and Labor and Material Payment Bond as required by GP-Section 3 of the MSHA Specifications.

The guaranty is effective for the 90 days following the bid opening date, as specified in GP-Section 3 of the MSHA Specifications, unless this time period is modified by the Special Provisions or extended by mutual agreement between the County, the Bonding Company, and the Contractor.

## WITNESS:

(Date)

(Typed Name of Surety)

(Typed Name and Title of Witness)

(Seal)

(Signed Name of Surety)

(Signed Name of Witness)

(Typed Name and Telephone Number of local agent)

- NOTE 1: Signatories other than Principals must attach "Power of Attorney". Failure to execute the Contract and file acceptable Performance and Payment Bonds shall preclude awarding the Contract and require forfeiture of the Proposal Guaranty, all as detailed in GP-Section 3 of the MSHA Specifications.
- NOTE 2: Failure of the Bidder to execute the Contract and file acceptable security shall be just cause for annulment of the award and the forfeiture of the proposal guaranty, which shall become property of the County as sustained liquidated damages. Award may then be made to the next lowest responsive, responsible Bidder or the work may be re-advertised. Failure to have this Bid Letter executed by Surety and submitted with Proposal will result in rejection of Bid.

# COUNTY CONTRACT NO. MS-TC-266-28 BID BOND

A Bid Bond shall be submitted on American Institute of Architects Document A310, February 1970 Edition; to be furnished by the bidder.

# COUNTY CONTRACT NO. MS-TC-266-28

## SUMMARY SCHEDULE OF PRICES

# <u>WASHINGTON COUNTY PUBLIC SAFETY TRAINING CENTER</u> <u>PHASE-1 SITE DEVELOPMENT</u>

Category 3000	.\$
Category 5000	
Category 6000	.\$
Category 7000	.\$
	¢
Category 8000	.\$

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE	ITEM TOTAL
1001		LUMP SUM	L.S.	CLEARING AND GRUBBING		
1002		LUMP SUM	L.S.	TYPE "B" ENGINEER'S OFFICE		
1003		LUMP SUM	L.S.	MAINTENANCE OF TRAFFIC		
1004		150	S.F.	TEMPORARY TRAFFIC SIGNS		
1005		300	L.F.	5 INCH WHITE TEMPORARY PAVEMENT MARKING PAINT LINES		
1006		300	L.F.	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS – ANY WIDTH		
1007		100	EA.	DRUMS FOR MAINTENANCE OF TRAFFIC		
1008		500	L.F.	CONTINGENT: TEMPORARY ORANGE CONSTRUCTION FENCE		
	Category <u>1000</u>				Total This Sheet	

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE	ΙΤΕΜ ΤΟΤΑ	L
1009		25	TON	CR-6 FOR MAINTENANCE OF TRAFFIC			
1010		LUMP SUM	L.S.	CONSTRUCTION STAKEOUT			
1011		LUMP SUM	L.S.	MOBILIZATION			
1012		LUMP SUM	L.S.	AS-BUILT DRAWINGS			
1013		LUMP SUM	L.S.	CRITICAL PATH METHOD PROJECT SCHEDULE			
1014		1	E.A.	CONSTRUCTION SITE SIGN PER DETAIL (SEE PROJECT DETAILS SECTION)			
	END Category <u>1000</u>				Total This Sheet		

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE	ITEM TOTAL
2001		29,100	C.Y.	UNCLASSIFIED EXCAVATION		
2002		58,500	C.Y.	COMMON BORROW – TYPE 1		
2003		50	C.Y.	CONTINGENT: TEST PIT EXCAVATION		
2004		2,000	C.Y.	CONTINGENT: UNSUITABLE MATERIAL EXCAVATION		
2005		1,000	C.Y.	CONTINGENT: GEOSYNTHETIC STABILIZED SUBGRADE USING GRADED AGGREGATE BASE		
	END Ca	tegory <u>2000</u>			Total This Sheet	—

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE	ITEM TOTAL
3001		90	L.F.	12-INCH HDPE STORM PIPE (DUAL WALL)		
3002		550	L.F.	15-INCH HDPE STORM PIPE (DUAL WALL)		
3003		630	L.F.	18-INCH HDPE STORM PIPE (DUAL WALL)		
3004		400	L.F.	44-INCH SPAN BY 27-INCH RISE (INSIDE DIMENSIONS) REINFORCED CONCRETE ARCH PIPE		
3005		175	L.F.	15-INCH CORRUGATED METAL PIPE		
3006		2	EA.	15-INCH CONCRETE END SECTION (ON END OF HDPE PIPE)		
3007		2	EA.	18-INCH CONCRETE END SECTION (ON END OF HDPE PIPE)		
3008		1	EA.	YARD INLET		
	Category <u>3000</u>				Total This Sheet	

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE	ITEM TOTAL
3009		175	L.F.	REMOVE EXISTING STORM DRAIN PIPE, ANY SIZE		
3010		10	TON	TEMPORARY STONE OUTLET STRUCTURE		
3011		3,000	L.F.	SILT FENCE		
3012		750	L.F.	DIVERSION FENCE		
3013		10	EA.	INLET PROTECTION		
3014		1	EA.	STABILIZED CONSTRUCTION ENTRANCE		
3015		2,600	LF	SUPER SILT FENCE		
3016		10	S.Y.	CONTINGENT: STONE FOR SEDIMENT CONTROL		
	Categ	gory <u>3000</u>			Total This Sheet	

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE	ITEM TOTAL
3017		45	S.Y.	CLASS I RIPRAP OUTLET PROTECTION		
3018		70	S.Y.	CLASS II RIPRAP OUTLET PROTECTION		
3019		2	EA.	CAST-IN-PLACE SPECIAL CONCRETE END/HEAD WALL		
3020		1,000	C.Y.	CONT. SELECT BACKFILL USING AASHTO NO 57 AGGREGATE		
3021		100	C.Y.	CONTINGENT: FLOWABLE BACKFILL		
3022		10	EA.	SWM – MICRO-BIORETENTION – NYPLOPLAST INLETS		
3023		2530	S.Y.	SWM – MICRO-BIORETENTION – 30 MIL PVC		
3024		1200	L.F.	SWM – MICRO-BIORETENTION - 4-INCH PVC SLOTTED PIPE		
	Categ	jory <u>3000</u>			Total This Sheet	

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE	ITEM TOTAL
3025		22	E.A.	4-INCH PVC CLEANOUT WITH WATERTIGHT SCREW LID		
3026		130	C.Y.	SWM – MICRO-BIORETENTION - MULCH		
3027		1050	C.Y.	SWM – MICRO-BIORETENTION – SOIL MIX		
3028		340	C.Y.	SWM – MICRO-BIORETENTION – NO. 8 STONE		
3029		340	C.Y.	SWM – MICRO-BIORETENTION – NO. 2 STONE		
3030		10	C.Y.	CONTINGENT: MISCELLANEOUS - CONCRETE MIX NO. 2		
3031		LUMP SUM	L.S.	GEOTECHNICAL SERVICES FOR SWM AS-BUILT CERTIFICATION		
3032		280	L.F.	UNDERDRAINS, SUBGRADE DRAINS, AND SPRING CONTROL		
3033		65	C.Y.	NO. 57 GRAVEL DIAPHRAGM		
END Category <u>3000</u>					Total This Sheet	

CONTRACT NO. MS-TC-266-28

ITEM CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRIC	E	ITEM TOTA	AL
5001	20,000	S.Y.	6 INCH GRADED AGGREGATE BASE COURSE				
5002	200	TON	SUPERPAVE ASPHALT MIX FOR SURFACE 12.5MM (PG 64H-22)				
5003	6,800	TON	SUPERPAVE ASPHALT MIX FOR BASE 19.0MM (PG-64S-22)				
5004	20,000	EA	PRICE ADJUSTMENT FOR ASPHALT BINDER	1	00	20,000	00
5005	5,000	EA	PAYMENT ADJUSTMENT FOR PAVEMENT DENSITY	1	00	5,000	00
5006	5,000	EA	PAYMENT ADJUSTMENT FOR ASPHALT MIX	1	00	5,000	00
5007	260	S.Y.	0-2 INCH MILL				
Category <u>5000</u>				Total This S	Sheet		

**BF-20** 

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE	ITEM TOTAL
5008		560	L.F.	FULL DEPTH SAW CUTS		
5009		1020	L.F.	5-INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS		
5010		30	L.F.	24-INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS		
END Category <u>5000</u>			1		Total This Sheet	

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE	ITEM TOTAL
6001		160	L.F.	STANDARD TYPE 'A' COMBINATION CURB AND GUTTER		
6002		1330	L.F.	STANDARD TYPE 'D' COMBINATION CURB AND GUTTER		
6003		625	L.F.	DEPRESSED CURB FOR COMBINATION CONCRETE CURB AND GUTTER		
6004		850	S.F.	CONCRETE SIDEWALK		
6005		40	S.F.	DETECTABLE WARNING SURFACE		
6006		100	L.F.	CHAIN LINK FENCE		
	END Category <u>6000</u>				Total This Sheet	

	Category <u>7000</u>				Total This S	heet	 
7008		80	EA	CHASMANTHIUM LATIFOLIUM / NORTHERN SEA OATS			 
7007		2,395	EA	ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED			 
7006		26	EA	CORNUS SERICEA / REDOSIER DOGWOOD			 
7005		5,500	S.Y.	TURFGRASS ESTABLISHMENT			 
7004		6,400	S.Y.	TYPE-A SOIL STABILIZATION MATTING			 
7003		6,800	S.Y.	CONTINGENT: TEMPORARY SEED AND MULCH			 
7002		1,000	S.Y.	CONTINGENT: PLACING FURNISHED TOPSOIL, 4-INCH DEPTH			
7001		14,500	S.Y.	PLACING SALVAGED TOPSOIL, 4-INCH DEPTH			 

CONTRACT NO. MS-TC-266-28

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE	ITEM TOTAL
7009		2,340	EA	LOBELIA CARDINALS / CARDINAL FLOWER		
7010		40	EA.	PANICUM VIRGATUM 'HEAVY METAL' / SWITCHGRASS		
7011		10	EA.	BETULA NIGRA / RIVER BIRCH		
7012		5	EA.	MAGNOLIA VIRINGIANA / SWEETBAY MAGNOLIA		
7013		5	E.A.	VIBURNUM DETATUM 'BLUE MUFFIN'/ARROWWOOD		
	END Category 7000				Total This Sheet	

**BF-24** 

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE	ITEM TOTAL
8001		20	S.F.	SHEET ALUMINUM SIGNS		
8002		5	EA	WOOD SIGN SUPPORTS		
8003		1	EA	REMOVE/RELOCATE EXISTING GROUND MOUNTED SIGN		
8004		5	C.Y.	CONCRETE FOR LIGHT POLE FOUNDATIONS		
8005		250	L.F.	(1) 3-INCH SCHEDULE 40 PVC CONDUIT TRENCHED (GAS LINE)		
8006		625	L.F.	(1) ¾-INCH SHEDULE 40 PVC CONDUIT TRENCHED (PARKING LOT LIGHTS)		
8007		200	L.F.	(2) 1-INCH SCHEDULE 40 PVC CONDUIT TRENCHED (ROAD SIGN DATA)		
8008		1080	L.F.	(2) 2-INCH SCHEDULE 40 PVC CONDUIT TRENCHED (ROAD SIGN POWER)		
	Category <u>8000</u>				Total This Sheet	

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE	ITEM TOTAL
8009		900	L.F.	(6) 4-INCH SCHEDULE 40 PVC CONDUIT TRENCHED (FIBER/TELEPHONE/CABLE/SPARE)		
8010		70	L.F.	(4) 4-INCH SCHEDULE 40 PVC CONDUIT TRENCHED (FUTURE TACTICAL VILLAGE)		
8011		990	L.F.	(2) 5-INCH SCHEDULE 40 PVC CONDUIT TRENCHED (POWER LINE)		
8012		5	L.F.	(3) 5-INCH SCHEDULE 40 PVC CONDUIT WITH CAP AND PULL STRING TRENCHED (POWER LINE EXTENSION)		
8013		1	EA.	CONCRETE VAULT (7'W X 9'L X 7'-6" H)		
8014		1875	L.F.	10-INCH DIP WATERLINE		
8015		300	L.F.	6-INCH DIP WATERLINE		
8016		875	L.F.	8-INCH SDR26 SEWER LINE		
	Category <u>8000</u>				Total This Sheet	

BID FORMS PUBL	IC SAFETY TR	AINING	CENTER - PHASE-1 SITE DEVELOPMENT	CONTRACT	NO. MS-TC-266-28
8017	5	EA.	SEWER MANHOLE ADJUSTMENT		
8018	5	EA.	STANDARD PRECAST 48-INCH SEWER MANHOLE		
8019	4	EA	FIRE HYDRANT ASSEMBLY		
8020	4	EA	BOLLARD PROTECTION		
8021	7	EA	ELECTRICAL HANDHOLE		
8022	3	EA	EXTERIOR JUNCTION BOX		
8023	1	E.A.	THREE PHASE JUNCTION BOX		
8024	9	E.A.	GROUND ROD-3/4 INCH DIAMETER X 10 FT LENGTH		
8025	90	L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE		
END Category 8000				Total This Sheet	

# **Contract Forms**

# **CONTRACT FORMS**

# <u>WASHINGTON COUNTY PUBLIC SAFETY TRAINING CENTER</u> <u>PHASE-1 SITE DEVELOPMENT</u>

## <u>COUNTY CONTRACT NO. MS-TC-266-28</u> <u>COUNTY PROJECT NO. 28-266</u>

## **TABLE OF CONTENTS**

	Page Numbers
Cover Sheet	CF-1
Instructions	CF-2
Contract	CF-3-7
Contract Affidavit	CF-8-11
Performance Payment Bond	CF-12-13
Labor and Material Payment Bond	CF-14-15
Insurance Policy P-4	CF-16-17
Addendum	Attached as Needed

# **BOARD OF COUNTY COMMISSIONERS**

# OF

# WASHINGTON COUNTY, MARYLAND

# **CONTRACT DOCUMENTS**

Contract No.:	County Contract No. MS-TC-266-28, Project No. 28-266
Project Name:	WASHINGTON COUNTY PUBLIC SAFETY TRAINING CENTER PHASE-1 SITE DEVELOPMENT
Project Location:	9238 Sharpsburg Pike, Hagerstown, Washington County, Maryland
Date Bid Opened:	
Date Bid Awarded:	
Contractor:	

# **INSTRUCTIONS**

## <u>WASHINGTON COUNTY PUBLIC SAFETY TRAINING CENTER</u> <u>PHASE-1 SITE DEVELOPMENT</u>

## EXECUTION OF CONTRACT FORM

This document shall form the basis of the Contract. The Board of County Commissioners of Washington County, Maryland (the "County"), will insert variable data in pertinent spaces and forward the form, in duplicate, with separate original Performance Bond and Labor and Material Payment Bond forms to the individual, corporation, or other legal entity that has been previously notified of the award of the subject contract (the "Contractor"). The Contractor and surety company shall fully complete the forms and return them to the County.

It is understood and acknowledged by all parties to the Contract that the Specifications referred to herein, the Special Provisions that were attached to the Proposal Form, and all approved drawings are incorporated herein as a part hereof, even though not physically attached hereto.

### **PARTNERSHIPS:**

If the principal is a partnership, the full names of all partners must be inserted in both the Contract and the bonds which must recite they are the partners composing the partnership (to be named), and all partners must execute the Contract and the bonds as individuals.

### **CORPORATIONS:**

The state in which the Contractor was organized must be inserted in the Contract and the bonds. The documents must be executed under the seal of the entity and attested to by the secretary or other appropriate officer. The execution must conform exactly with the correct legal name of the entity. If executed by an officer other than the President, evidence of authority to do so must be furnished, generally in the form of a resolution of the entity.

### **BONDS:**

The date of the bonds must be that of the Contract or subsequent thereto. A certified copy of the power of attorney of the attorney-in-fact executing the bonds must bear the same date as the bonds and must be attached to each copy of the bonds.

As required by Section 3, GP 3.03 of the MSHA Specifications, the name of the underwriting agency or agent must be shown in the space provided on both the Performance Bond and Labor and Material Payment Bond.

## CONTRACT

## WASHINGTON COUNTY PUBLIC SAFETY TRAINING CENTER **PHASE-1 SITE DEVELOPMENT**

THIS CONTRACT (the "Contract") is made this _____ day of _____, 20___, by and between the Board of County Commissioners of Washington County, Maryland, a body corporate and politic and a political subdivision of the State of Maryland (the "County"), and _____, a corporation authorized to do business in the State of Maryland, it successors and assigns (the "Contractor").

NOW, THEREFORE, in consideration of the covenants, conditions, terms, obligations, and the payment or payments herein specified, the parties hereby agree as follows:

1. The Contractor shall furnish and deliver all the materials and equipment and perform all the work and labor in the improvement of Contract No. MS-TC-266-28 the Washington County Public Safety Training Center-Phase-1 Site Development in Washington County, Maryland, at the unit prices bid by said Contractor for the respective estimated quantities, aggregating approximately the sum of (\$_____ ) and such

other items as are mentioned in the Proposal.

- 2. The completed Form of Proposal and the Contract Plans and Specifications for the Washington County Public Safety Training Center-Phase-1 Site Development improvement project are incorporated herein by reference and made a part hereof.
- 3. The said improvement project is described as follows: Site grading including removal of trees and debri, installation of entrance road including improvements to create a deceleration lane, cast-in place concrete end and head walls, installation of storm drain network consisting of pre-cast concrete arch and HDPE pipes, bio-retention facilities, sewer and water line installation, pre-cast concrete manholes, electrical conduit installation and reinforced concrete pipe culverts; road work including grading and drainage, asphalt paving and pavement markings.
- 4. All work and labor relating to this Washington County Public Safety Training Center-Phase-1 Site Development project shall be performed and completed in the best and most workmanlike manner and all of said materials and labor shall be in strict conformity with this Contract and shall be subject to the inspection and approval of the County's Director of Engineering or his duly authorized representative (the "Engineer"). In case any of said material or labor should be rejected by the Engineer as defective or unsuitable, then the materials shall be removed and replaced with other approved materials and the labor shall be done anew, to the satisfaction and approval of the Engineer at the sole expense of the Contractor.

- 5. The Contractor shall furnish and deliver said materials and perform and complete all said labor in every respect to the satisfaction and approval of the Engineer. Unless otherwise expressed in the Special Provisions in the Contract, the work shall commence within ten (10) calendar days after the Engineer issues the written notice to proceed, and shall be completed within the time prescribed.
- 6. In case of the failure on the part of the Contractor, for any reason, to complete the delivery of the materials and performance of said work within the specified contract time, except by written change order duly executed by the County, the County shall have the right to deduct from any monies due or which may become due the Contractor, or if no monies shall be due or may become due the Contractor, the County shall have the right to recover the amount of <u>Five Hundred Dollars</u> (\$500.00) per calendar day for each and every calendar day elapsing between the time stipulated for substantial completion and the actual date of substantial completion; said deduction to be made or said sum to be recovered, not as a penalty, but as liquidated damages. Provided, however, that upon receipt of written notice from the Contractor of the existence of causes over which said Contractor has no control and which must delay the completion of said work, the County may, at its sole discretion, extend the period hereinbefore specified for the completion of the said work, and in such case the Contractor shall become liable for said liquidated damages for delays commencing from the date on which said extended period shall expire.
- 7. The County shall not recognize any claims for extra work performed or materials furnished by the Contractor, nor shall the Contractor perform any work or furnish any materials not covered by the Plans and Specifications, without the prior written approval of the Engineer. Any such work performed or materials furnished by the Contractor without such prior written approval shall be at said Contractor's own risk, cost and expense, and the Contractor hereby agrees and acknowledges that without such prior written approval, no claim for compensation for work so performed or materials so furnished by the Contractor shall be a valid claim under the terms of this Contract.
- 8. The Contractor shall not assign this Contract or any part thereof, or any right to any of the monies to be paid hereunder, nor any part of the work performed or material to be furnished under this Contract, without the prior written consent of the Washington County Director of Engineering.
- 9. The acceptance of the final payment by the Contractor shall be a full release of all claims against the County or its members, elected officials or employees, arising out of, or by reason of, the work done and materials furnished under this Contract.
- 10. The Performance Bond and Labor and Material Payment Bond provided by the Contractor, each in a sum equal to the total contract price of the work to be performed, to secure a proper compliance with the terms and provisions of this Contract, are incorporated herein by reference and made a part hereof.

- 11. Receipt by the Contractor of the prices set forth in the Proposal shall be full compensation for furnishing all equipment, materials and labor that may be required under this Contract.
- 12. In accordance with Md. Code, <u>State Finance and Procurement Article</u>, § 17-402, Contractor shall comply with any of the political contribution reporting requirements under Md. Code, <u>Election Law Article</u>, Title 14, to which the Contractor may be subject.
- 13. Miscellaneous Provisions.
- a) <u>Assignment; Binding Effect</u>. Neither party may assign or transfer this Contract or any rights or benefits under this Contract to any person or entity without the prior written approval of the other party.
- b) <u>Remedies Not Exclusive</u>. The rights and remedies provided in this Contract are cumulative and not exclusive and are in addition to any other rights and remedies the parties may have at law or otherwise.
- c) <u>Waiver</u>. Neither party's waiver of the other's breach of any term, covenant or condition contained in this Contract shall be deemed to be a waiver of any subsequent breach of the same or any other term, covenant or condition in this Contract.
- d) <u>Headings</u>. The headings appearing in this Contract are inserted only as a matter of convenience and in no way define, limit, construe or describe the scope or intent of any section of this Contract.
- e) <u>Survival</u>. The covenants contained in or liabilities accrued under this Contract which, by their terms, require their performance after the expiration or termination of this Contract shall be enforceable notwithstanding the expiration or other termination of this Contract.
- f) <u>Governing Law</u>. This Contract shall be governed by and construed in accordance with the laws of the State of Maryland.
- g) <u>Severability</u>. If any provision of this Contract shall be determined to be invalid or unenforceable, the remaining provisions of this Contract shall not be affected thereby, and every provision of this Contract shall remain in full force and effect and enforceable to the fullest extent permitted by law.
- h) <u>Counterparts</u>. This Contract may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute the same instrument.

- i) <u>Entire Contract; Modification</u>. This Contract, and the materials and documents incorporated herein by reference, constitute the entire Contract between the parties. There are no promises or other agreements, oral or written, express or implied, between the parties other than as set forth in this Contract. No change or modification of, or waiver under, this Contract shall be valid unless it is in writing and signed by duly authorized representatives of the parties.
- j) <u>Force Majeure</u>. The failure of any party to perform its obligations hereunder shall be excused if the party's nonperformance is due to an act of God, flood, earthquake or similar natural occurrence, an act of the public enemy, war, insurrection, riot, strikes by persons not employed by or under control of the nonperforming party, fire, explosion or other casualty. Nonperformance shall not be excused for any reason if the event or condition causing the nonperformance is the result of one or more willful or negligent acts or omissions, or a lack of due diligence, on the part of the nonperforming party, or any of its employees, agents, or contractors.
- k) <u>Effectiveness</u>. This Contract shall become effective upon and only upon its execution and delivery by each party hereto, and upon receipt of formal approval by the Board of County Commissioners of Washington County, Maryland, which is the duly constituted executive and legislative body of the County.
- 1) <u>Notice</u>. Notice under this Contract shall be sufficient if sent to the following:

To the County: **Director of Engineering** 80 West Baltimore Street Hagerstown, Maryland 21740

With a copy to:

County Attorney 100 West Washington Street, Room 1101 Hagerstown, MD 21740

To: _____ _____ _____

Attn: _____

IN WITNESS WHEREOF, the parties hereto have executed and delivered this Contract under their respective seals under the day and year first written above.

Attest:

Name of Corporation

By:____

Corporate Secretary

Attest:

(SEAL)
Officer of Corporation

BOARD OF COUNTY COMMISSIONERS OF WASHINGTON COUNTY, MARYLAND

Krista L. Hart, County Clerk

By:_____(SEAL) Jeffrey A. Cline, President

Approved for Execution:

Scott Hobbs, P.E., Director of Engineering

Approved as to form and legal sufficiency:

Kirk C. Downey County Attorney

## **CONTRACT AFFIDAVIT**

# <u>WASHINGTON COUNTY PUBLIC SAFETY TRAINING CENTER</u> <u>PHASE-1 SITE DEVELOPMENT</u>

In connection with the above-captioned Contract:

I HEREBY DECLARE AND AFFIRM that I am the _____

and the duly authorized representative of ______

(Name of Corporation)

(Title)

whose address is_____

2. Corporate Registration: (Applicable to corporations only)

I FURTHER DECLARE AND AFFIRM that the firm named above is a domestic /____/ foreign /____/ corporation registered in accordance with the Corporations and Associations Article, Annotated Code of Maryland, and that it is in good standing and has filed all its annual reports together with its filing fees with the Maryland State Department of Assessments and Taxation, AND THAT THE NAME AND ADDRESS OF ITS RESIDENT AGENT FILED WITH THE MARYLAND DEPARTMENT OF ASSESSMENTS AND TAXATION IS:

(NAME) _____

(ADDRESS)

3. Contingent Fees:

I FURTHER DECLARE AND AFFIRM that neither I, nor to the best of my knowledge, information and belief, the above firm nor any of its other representatives I here represent have:

a. Employed, retained or otherwise engaged for a commission, percentage, brokerage, contingent fee, or other consideration, any person, partnership, corporation, or other entity, other that a bona fide employee or agent working solely for me or the above firm to solicit or secure this Contract;

- b. Agreed, as an express or implied condition for obtaining this Contract, to employ or retain the services of any person, partnership, corporation, or other entity, in connection with carrying out this Contract; or,
- c. Paid, or agreed to pay, to any person, partnership, corporation, or other entity, other than a bona fide employee or agent working solely for me or the above firm, any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out this Contract.

except as here expressly stated (if any):

4. Bribery:

I FURTHER DECLARE AND AFFIRM that neither I, nor, to the best of my knowledge, information and belief, the above firm, nor any officer, director or partner of the above firm, nor any employee of the above firm directly involved in obtaining Contracts with the State of Maryland, or any county or other subdivision of the State of Maryland, has been convicted* of bribery, attempted bribery or conspiracy to bribe, nor has engaged in conduct, or by any acts or omissions, made admissions in writing or under oath during the course of an official investigation or other proceedings, since July 1, 1977, which would constitute an offense or offenses of bribery, attempted bribery, attempted bribery, attempted bribery, attempted bribery state or the Federal Government; except as herein expressly stated if any:

* As used herein, the word "convicted" includes an accepted plea of nolo contendere.

## 5. Truth in Negotiation: (Applicable to consultant contracts

I FURTHER DECLARE AND AFFIRM that I am aware of, that the above firm will comply with and that this Contract is subject to the provisions of the Annotated Code of Maryland which require that any contract for architectural or engineering services costing over \$25,000 not be awarded unless the firm first executes a truth-in-negotiation certificate. It is understood that the terms and provisions hereof shall likewise apply to any future legislative changes made thereto. I further declare and affirm that wage rates and other factual unit costs supporting the compensation in this Contract are accurate, complete and current as of the time of contracting. Furthermore, I, on behalf of the above firm, acknowledge and agree that the original price of this Contract and any additions to this Contract will be adjusted to exclude any significant sums if the Maryland Board of Public Works determines that the price was increased due to inaccurate, incomplete or noncurrent wage rates or other actual unit costs; said adjustments to be made within one year after the end of the Contract.

6. Truth in Negotiations: (Applicable to construction contracts)

I FURTHER CERTIFY THAT I am aware of and that the above firm will comply with and that this Contract is subject to the provisions of the Annotated Code of Maryland, which requires that a negotiated or change order Contract for construction in excess of \$10,000 may not be awarded unless the contractor first executes a truth-in-negotiation certificate. It is agreed that the terms hereof shall likewise apply to any future legislative changes made thereto.

I FURTHER DECLARE AND AFFIRM that wage rates and other factual unit costs supporting the compensation in this Contract are accurate, complete and current as of the time of contracting. Furthermore, I, on behalf of the above firm, acknowledge and agree that the original price of this Contract and any additions to this Contract will be adjusted to exclude any significant sums if the Maryland Board of Public Works determines that the price was increased due to inaccurate, incomplete or non-current wage rates or other actual unit costs; said adjustments to be made within one year after the end of the Contract.

7. Mandatory Disclosure of Ownership:

I FURTHER DECLARE AND AFFIRM that I am aware of and that the above firm will comply with the provisions of the Annotated Code of Maryland, which requires that every business that enters into Contracts, leases, or other agreements with the State of Maryland or its agencies during a calendar year under which the business is to receive in the aggregate \$100,000 or more, shall within 30 days of the time when the aggregate value of these Contracts, leases or other agreements reaches \$100,000, file with the Maryland Secretary of State certain specified information to include disclosure of beneficial ownership of the business

I ACKNOWLEDGE that this Affidavit is to be furnished to the Secretary of the Maryland Department of Transportation and may be distributed to boards, commissions, administrations, departments and agencies of: (1) the State of Maryland; (2) counties or other subdivisions of the State of Maryland; (3) other states; and, (4) the Federal Government. I further acknowledge that this Affidavit is subject to applicable laws of the United States and the State of Maryland, both criminal and civil, and that nothing in this Affidavit or the Contract shall be construed to supersede, amend, modify or waive, on behalf of the Maryland Department of Transportation, the Maryland Board of Public Works and any other office or agency of the State of Maryland having jurisdiction, the exercise of any statutory right or remedy conferred by the Constitution and the Laws of Maryland in respect to any misrepresentation made or any violation of the obligations, terms and covenants undertaken by the above firm in respect to (1) this Affidavit, (2) the Contract.

# I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THE FOREGOING DOCUMENT ARE TRUE AND CORRECT, AND THAT I AM AUTHORIZED, ON BEHALF OF THE ABOVE FIRM, TO MAKE THIS AFFIDAVIT.

By:		Date
2	Signed Name of Affiant	
	Typed Name	
	Title	
For:		
	Firm	
State	of	:
Count	ty (City) of	;
On thi	is day of	, 2019,
before	e me,	, the undersigned officer, personally
appea	red	
know	n to me to be the person described	in the foregoing Affidavit and acknowledged that he
(she)	executed the same in the capacity the	erein stated and for the purposes therein contained.
In wit	ness whereof, I hereunto set my hand	and official seal.
		SEAL

Notary Public

My Commission Expires _____

### PERFORMANCE BOND

Board of County Commissioners of Washington County, Maryland

#### WASHINGTON COUNTY PUBLIC SAFETY TRAINING CENTER PHASE-1 SITE DEVELOPMENT

Bond No.: _____ Bond Date: _____ Contract No.: _____

KNOW ALL MEN BY THESE PRESENTS, that we

(Here insert full name and address or legal title of Contractor, including zip code)

a corporation of the State of ______ and authorized to do business in the State of Maryland, hereinafter called the "**Principal**" and

(Here insert full name and address or legal title of Surety, including zip code)

hereinafter called the "**Surety**", are held and firmly bound unto the Board of County Commissioners of Washington County, Maryland, hereinafter called the "**County**", Sum of ________) lawful money of the United States for the payment of which sum well and truly to be made, the Principal and the Surety bind themselves, their heirs, personal representatives, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into or will enter into a contract with the County, for <u>County</u> <u>Contract No. MS-TC-266-28</u>, the Washington County Public Safety Training Center-Phase-1 Site <u>Development project in Washington County</u>, Maryland; included in the work is, but not limited to, Site grading including removal of trees and debri, installation of entrance road including improvements to create a deceleration lane, cast-in place concrete end and head walls, installation of storm drain network consisting of pre-cast concrete arch and HDPE pipes, bio-retention facilities, sewer and water line installation, pre-cast concrete manholes, electrical conduit installation and reinforced concrete pipe culverts; road work including grading and drainage, asphalt paving and pavement markings.

The contract referenced above and all items incorporated into the contract, together with any and all changes, extensions of time, alterations, modifications, or additions to the contract or to the work to be performed thereunder or to the Plans, Specifications, and Special Provisions, or any of them, or to any other items incorporated into the contract shall hereinafter be referred to as the "**Contract**".

NOW, THEREFORE, during the original term of said Contract, during any extensions thereto that may be granted by the County, and during the guarantee and warranty period, if any, required under the Contract, unless otherwise stated therein, this Performance Bond shall remain in full force and effect unless and until the following terms and conditions are met:

- 1. Principal shall well and truly perform the Contract; and
- 2. Principal and Surety shall comply with the terms and conditions in this Performance Bond.

Whenever Principal shall be declared by the County to be in default under the Contract, the Surety may, within fifteen (15) days after notice of default from the County, notify the County of its election to either promptly proceed to remedy the default or promptly proceed to complete the contract in accordance with and subject to its terms and conditions. In the event the Surety does not elect to exercise either of the above stated options, then the County thereupon shall have the remaining contract work completed, Surety to remain liable hereunder for all expenses of completion up to but not exceeding the penal sum stated above.

The Surety for value received hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract or to the work to be performed thereunder of the Specifications accompanying the same shall in any way affect its obligations on this Performance Bond, and it does hereby waive notice of any

such change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder of the specifications accompanying the same.

This Performance Bond shall be governed by and construed in accordance with the laws of the State of Maryland and any reference herein to Principal or Surety in the singular shall include all entities in the plural who or which are signatories under the Principal or Surety heading below.

IN WITNESS WHEREOF, Principal and Surety have set their hands and seals to this Performance Bond. If any individual is a signatory under the Principal heading below, then each such individual has signed below on his or her own behalf, has set forth below the name of the firm, if any, in whose name he or she is doing business, and has set forth below, then all members of each such partnership or joint venture is a signatory under the Principal heading below, then each such individual has set forth below his or her title as a general partner, limited partner, or member of joint venture, whichever is applicable. If any corporation is a signatory under the Principal or Surety heading below, then each such corporation has caused the following: the corporation's name to be set forth below, a duly authorized representative of the corporation to affix below the corporation. If any individual acts as a witness to any signature below, then each such individual has signed below and has set forth below his or her title as a representative of the corporation. If any individual acts as a witness. All of the above has been done as of the Date of Bond shown above.

Signed, and sealed this _____day of _____, 20____, in four counterparts each of which shall without proof of accounting for the other counterparts be deemed an original hereof.

ATTEST:	PRINCIPAL:
(Typed Name and Title)	(Typed Name of Principal)
(Signed Name and Title)	By:(SEAL) (Signed Name of Principal)
	(Typed Name and Telephone Number of Contact)
ATTEST:	SURETY:
(Typed Name and Title)	(Typed Name of Surety)
(Signed Name and Title)	By:(SEAL) (SEAL)

(Typed Name and Telephone Number of Local Agent)

Revised 6/14//07

#### **LABOR AND MATERIAL PAYMENT BOND** Board of County Commissioners of Washington County, Maryland

#### Board of County Commissioners of Washington County, Maryland

#### WASHINGTON COUNTY PUBLIC SAFETY TRAINING CENTER PHASE-1 SITE DEVELOPMENT

Bond No.: _____ Bond Date: _____ Contract No.: _____

KNOW ALL MEN BY THESE PRESENTS, that we

(Here insert full name and address or legal title of Contractor, including zip code) hereinafter called the "**Principal**" and

(Here insert full name and address or legal title of Surety, including zip code)

a corporation organized and existing under the laws of the State of _______, and authorized to transact business in the State of Maryland, hereinafter called the "**Surety**", are held and firmly bound unto the Board of County Commissioners of Washington County, Maryland, a body corporate and politic, hereinafter called the "**County**", for the use and benefit of claimants as hereinafter defined, in the Penal Sum of _______ *Dollars and _______ Cents (\$______)* lawful money, for the payment of which Penal Sum we bind ourselves, our heirs, executors, administrators, personal representatives, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into or will enter into a contract with the County, for <u>County</u> <u>Contract No. MS-TC-266-28</u>, the <u>Washington County Public Safety Training Center-Phase-1 Site</u> <u>Development project in Washington County, Maryland; included in the work is, but not limited to, Site</u> <u>grading including removal of trees and debri, installation of entrance road including improvements to create</u> <u>a deceleration lane, cast-in place concrete end and head walls, installation of storm drain network consisting</u> <u>of pre-cast concrete arch and HDPE pipes, bio-retention facilities, sewer and water line installation, pre-cast</u> <u>concrete manholes, electrical conduit installation and reinforced concrete pipe culverts; road work including</u> <u>grading and drainage, asphalt paving and pavement markings.</u>

The contract referenced above and all items incorporated into the contract, together with any and all changes, extensions of time, alterations, modifications, or additions to the contract or to the work to be performed thereunder or to the Plans, Specifications, and Special Provisions, or any of them, or to any other items incorporated into the contract shall hereinafter be referred to as the "**Contract**".

WHEREAS, it is one of the conditions precedent to the final award of the Contract that these presents be executed.

NOW, THEREFORE, the condition of this obligation is such that if the Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and materials furnished, supplied and reasonably required for use in the performance of the Contract, then this obligation shall be null and void, otherwise it shall remain in full force and effect, subject to the following conditions:

1. A **Claimant** is defined to be any and all of those persons supplying labor and materials (including lessors of the equipment to the extent of the fair market value thereof) to the Principal or its subcontractors and sub-subcontractors in the prosecution of the work provided for the Contract, entitled to the protection provided by Md. Code Ann., State Finance and Procurement Article, §17-101, *et seq.*, as from time to time amended.

2. The above-named Principal and Surety hereby jointly and severally agree with the County that every claimant as herein defined, who has not been paid in full may, pursuant to and when in compliance with the provisions of the aforesaid State Finance and Procurement Article, §17-101, *et seq.*, sue on this Bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant and have execution thereon. The County shall not be liable for the payment of any costs or expenses of any such suit.

The Surety hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract or to the work to be performed thereunder of the Specifications accompanying the same shall in any way affect its obligations on this Payment Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or the Specifications.

This Payment Bond shall be governed and construed in accordance with the laws of the State of Maryland and any reference herein to the Principal or Surety in the singular shall include all entities in the plural who or which are signatories under the Principal or Surety heading below.

Signed, and sealed this _____day of _____, 20___, in four counterparts each of which shall without proof of accounting for the other counterparts be deemed an original hereof.

**PRINCIPAL:** 

(Typed Name and Title)

(Signed Name and Title)

(Typed Name of Principal)

(SEAL)

(Signed Name of Principal)

(Typed Name and Telephone Number of Contact)

ATTEST:

(Typed Name and Title)

SURETY:

(Typed Name of Surety)

By: _____(SEAL) (Signed Name of Surety)

(Typed Name and Telephone Number of Local Agent)

(Signed Name and Title)

# ATTEST:

By: ____

Revised 6/14/07

# **INSURANCE POLICY**

Certificate of Insurance to be Provided by Contractor

POLICY TITLE: Insurance Requirements for Independent Contractors

POLICY NUMBER: P-4

ADOPTION DATE: August 29, 1989

EFFECTIVE DATE: September 1, 1989

FILING INSTRUCTIONS:

#### I. <u>PURPOSE</u>

To protect Washington County against liability, loss or expense due to damaged property, injury to or death of any person or persons and for care and loss of services arising in any way, out of, or in connection with or resulting from the work or service performed on behalf of Washington County.

#### II. <u>ACTION</u>

The following should be inserted in all Independent Contractor Contracts:

The Contractor shall procure and maintain at his sole expense and until final acceptance of the work by the County, insurance as hereinafter enumerated in policies written by insurance companies admitted in the State of Maryland, have A.M. Best rating of A- or better or its equivalent, and acceptable to the County.

1. **Workers Compensation:** The Contractor agrees to comply with Workers Compensation laws of the State of Maryland and to maintain a Workers Compensation and Employers Liability Policy.

<u>Minimum Limits Required:</u> Workers Compensation-Employers Liability -

Statutory \$100,000 (Each Accident) \$500,000 (Disease - Policy Limit) \$100,000 (Disease - Each Employee)

2. **Comprehensive General Liability Insurance:** The Contractor shall provide Comprehensive General Liability including Products and Completed Operations.

Minimum Limits Required:

\$1,000,000 combined single limit for Bodily Injury and Property Damage.

Policy P-4 (con't)

#### 3. **Comprehensive General Liability Insurance (con't)**

Such insurance shall protect the County, its agents, elected and appointed officials, commission members and employees, and name Washington County on the policy as additional insured against liability, loss or expense due to damaged property (including loss of use), injury to or death of any person or persons and for care and loss of services arising in any way, out of, or in connection with or resulting from the work of service performed on behalf of Washington County.

The Contractor is ultimately responsible that Subcontractors, if subcontracting is authorized, procure and maintain, at their sole expense and until final acceptance of the work by the County, insurance as hereinafter enumerated in policies written by insurance companies admitted in the State of Maryland, have A.M. Best rating of A- or better or its equivalent, and acceptable to the County.

4. **Business Automobile Liability:** The Contractor shall provide Business Auto Liability including coverage for all leased, owned, non-owned and hired vehicles.

<u>Minimum Limits Required</u>: \$1,000,000 combined single limit for bodily Injury or Property Damage.

**Certificate(s) of Insurance:** The Contractor shall provide certificates of insurance requiring a 30 day notice of cancellation to the Insurance Department, Board of County Commissioners of Washington County prior to the start of the applicable project.

Approval of the insurance by the County shall not in any way relieve or decrease the liability of the Contractor. It is expressly understood that the County does not in any way represent that the specified limits of liability or coverage or policy forms are sufficient or adequate to protect the interest or liabilities of the Contractor.

All responsibility for payment of any sums resulting from any deductible provisions, corridor, or selfinsured retention conditions of the policy or policies shall remain with the Contractor.

**General Indemnity:** The Contractor shall indemnify, defend and save harmless the Board of County Commissioners of Washington County, its appointed or elected officials, commission members, employees and agents for any and all suits, legal actions, administrative proceedings, claims, demands, damages, liabilities, interest, attorneys fees, costs and expenses of whatsoever kind of nature, whether arising before or after final acceptance and in any manner directly or indirectly caused, occasioned or contributed to in whole or in part by reason of any act, error or omission, fault or negligence whether active or passive by the Contractor, or any one acting under its direction, control or on its behalf in connection with or incident to its performance of the Contract.

Revision Date: August 27, 1991 Effective Date: August 27, 1991 Revision Date: March 4, 1997 Effective Date: March 4, 1997