



**TECHNICAL SPECIFICATIONS  
(100% SUBMITTAL)**

**RESTORE ACT  
WASTEWATER COLLECTION SYSTEM IMPROVEMENTS  
FLORIDA MHP**

**PID NO. 005015A**

**PREPARED BY:**

**WRIGHT-PIERCE** 

**February 2024**

# **INFRASTRUCTURE ENGINEERING STANDARD SPECIFICATIONS**

## **DIVISION 1 GENERAL REQUIREMENT**

00 75 00	SPECIAL PROVISIONS AND SUPPLEMENTAL TECHNICAL SPECIFICATIONS (S)
01 20 00	MEASUREMENT AND PAYMENT (S)
01 32 33	COLOR AUDIO-VIDEO CONSTRUCTION RECORDS
01 33 00	SUBMITTALS (S)
01 35 00	SPECIAL PROJECT PROCEDURES
01 42 01	REFERENCE STANDARDS AND DEFINITIONS
01 55 26	TRAFFIC REGULATION
01 57 00	CONTROL OF WORK
01 57 13	EROSION AND SEDIMENTATION CONTROL
01 58 01	PROJECT IDENTIFICATION SIGNS
01 78 39	PROJECT RECORD DOCUMENTS

## **DIVISION 3 CONCRETE**

03 10 01	CONCRETE MATERIALS
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## **DIVISION 9 PAINTING**

09 91 00	PAINTING AND PROTECTIVE COATINGS
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## **DIVISION 31 EARTHWORK**

31 23 33	EXCAVATION AND BACKFILL FOR PIPES
31 23 34	EXCAVATION AND BACKFILL FOR STRUCTURES

## **DIVISION 32 EXTERIOR IMPROVEMENTS**

32 12 01	STABILIZED AND ASPHALT ROADWAY RESTORATION
32 13 01	CONCRETE SIDEWALKS, DRIVEWAYS AND GUTTERS
32 92 01	SEEDING AND SODDING

## **DIVISION 33 UTILITIES**

33 01 32	SANITARY SEWER CLEANING AND TELEVISIONING
33 01 39	CALCIUM ALUMINATE MANHOLE LINER SYSTEM
33 33 01	GRAVITY SEWERS
33 39 00	SANITARY SEWER STRUCTURES

## **ROADWAY AND GENERAL CONSTRUCTION**

005-0900	AS-BUILT SURVEY REQUIREMENTS (UTILITY) BY CONTRACTOR
101-0100	MOBILIZATION
102-1000	MAINTENANCE OF TRAFFIC
121	FLOWABLE CONCRETE FILL
334	SUPERPAVE ASPHALT CONCRETE
380	MILLING AND RESURFACING OF EXISTING ASPHALTIC CONCRETE PAVEMENT AND ROADWAY BASE
990-000	UNSPECIFIED WORK (ALLOWANCE)

1 SECTION 00 75 00

2  
3 SPECIAL PROVISIONS AND SUPPLEMENTAL TECHNICAL SPECIFICATIONS

4  
5 These Special Provisions provide additional information and modify the Pinellas County  
6 Standard Technical Specifications (PC-STC) for Utilities Construction. Unless noted  
7 herein, all conditions of the (STC) apply.

8  
9 Please reference Section D - Specifications of the Invitation to Bid (ITB) for project  
10 document hierarchy.

11  
12 ARTICLE SP-1 SUMMARY OF WORK

13  
14 This project involves the installation of gravity sewer mains and associated  
15 manholes within the Florida Mobile Home Park (MHP) located at 8667 Seminole  
16 Blvd. in Seminole, Florida. The new gravity sewer system includes the open cut of  
17 approximately 1,600 linear feet (LF) of 8-inch C900 DR 18 PVC gravity sewer main,  
18 12 manholes, 1 connection to an existing County manhole, and approximately 57  
19 service lateral connections. The existing private sewer system will be abandoned in  
20 place, except where removal is required for the installation of the new system.

21  
22 Additional improvements include the milling and paving of the existing roads and  
23 surface restoration of driveways and landscaping where disturbed by the  
24 construction of the sanitary sewer system.

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27 ARTICLE SP-2 SPECIAL PROVISIONS

- 28  
29 1. **Abandonment of Sanitary Sewers – this section must be considered for**  
30 **the abandonment of all private sanitary sewers and laterals.**  
31  
32 a. All existing laterals, gravity sewer mains, and manholes shall be flushed  
33 prior to abandonment.  
34  
35 b. Existing sanitary sewer laterals will be disconnected from each dwelling  
36 unit or building and the lateral will be removed to a point no closer than  
37 five (5) feet off the nearest point outside the dwelling unit or building.  
38  
39 c. Sections of sanitary sewers and laterals will need to be plugged. The  
40 grout plug at the end of an abandoned sewer shall extend a minimum  
41 of five (5) feet inside the pipe to be abandoned.  
42  
43 d. All private manholes and terminal clean-outs shall be abandoned by  
44 removing the structure a minimum of 8 to 10 inches below final grade,  
45 cleaning/flushing, backfilling with clean fill, compacting, and testing.  
46 Surface restoration shall match the existing adjacent area.

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- e. Existing lateral connections shall be grouted a minimum of 5 linear feet toward the existing sewer main prior to placing out of service.
- f. All new sewers and laterals shall be installed, inspected, tested, cleared by permitting agencies, and operational prior to abandonment of the existing system.
- g. All existing private sewer main connections to County owned manholes shall be plugged and filled with a minimum of 5 linear feet of grout. Plugged connections shall be patched flush with inside of manhole wall. All existing private sewer connections may not be shown in the Drawings.
- h. The surface within the project limits shall be restored to match surrounding conditions.

**2. Sanitary Sewer Design Stipulations:**

- a. All elevations are approximate and shall be field verified by the Contractor.
- b. All existing utilities may not be shown on the Drawings.
- c. All potential conflicts may not be shown on the Drawings.
- d. The location of all existing utilities and proposed utility crossings are approximate and shall be field verified prior to construction.

**3. The Work set forth within these bid documents includes the following requirements:**

- a. The Contractor shall hand excavate any areas of special concern such as between existing homes, power poles, drainage structures, etc., as required by field conditions.
- b. In addition to testing new main lines and manholes, the Contractor shall also conduct a leakage test for each new lateral.
- c. Once construction starts within a manufactured housing community, work shall continue within that community until complete and demobilizing to another manufactured housing community.
- d. No holes or trenches shall be allowed to be left open overnight.

- e. Excavations shall not exceed 500 linear feet without the installation of temporary roadway surfacing.
- f. The Contractor shall coordinate sewer lateral locations with each homeowner, including services from the main line to the property line and all connection points from the existing housing unit to the new sewer laterals. More than one lateral may exist for each housing unit. The Contractor shall keep records of contact and communication with property owners.
- g. The Contractor shall coordinate with all services (police, fire, County / City EMS, waste collection, mail delivery, etc.) when working within the communities.
- h. The Contractor shall maintain access to all residences, to the greatest extent possible. Prior to crossing or blocking any ingress / egress a minimum of 48 hours' notice shall be provided to residents.
- i. The Contractor shall obtain all necessary permits (dewatering, tree removal, etc.) prior to the start of construction.
- j. It shall be the Contractor's responsibility to provide staging areas for storage of equipment, materials, supplies, etc. The Contractor shall not use the right-of-way for storage of materials, other than what will be installed during the workday.

ARTICLE SP-3      ADDITIONAL INFORMATION AND STUDIES

- 1.      REPORT OF GEOTECHNICAL EXPLORATION  
           Arehna Engineering, Inc., Arehna Project No. B-22-007.002,  
           November 28, 2022

ARTICLE SP-4      SUPPLEMENTAL TECHNICAL SPECIFICATIONS

Note: The Supplemental Technical Specifications presented herein are project specific, are only related to this project and are not part of Pinellas County Standard Technical Specifications (STS). All STS will be designated as such in lower right hand corner of document by Pinellas County-STS. All Supplemental Technical Specifications will have a (S) designation following the section title in the Table of Contents and each specification will be designated in lower right hand corner as PCU-XXXX, where XXXX designates the specific Project Job Number.

- 00 75 00 Special Provisions & Supplemental Technical Specifications **(S)**
- 01 20 01 Measurement and Payment **(S)**
- 01 33 00 Submittals **(S)**

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2 ARTICLE SP-5 MODIFICATIONS TO THE STANDARD TECHNICAL  
3 SPECIFICATIONS

4  
5 01 32 33 COLOR AUDIO-VIDEO CONSTRUCTION RECORDS

6  
7 1.01 DESCRIPTION, Paragraph M, Add:

8 Video within each manufactured housing community shall include all driveways,  
9 sidewalks, and all private property including but not limited to homes, decks, sheds,  
10 carports, front, side and back yards.

11  
12 01 57 00 CONTROL OF WORK

13  
14 Part 3 – Execution, Add:

15 Working hours: 7am to 6pm, Monday through Friday. Saturday work requires  
16 verbal approval and a 24-hour notice. Work on Sunday and holidays shall require  
17 written approval from the County. The Contractor shall make the request to work  
18 weekends and/or holidays at least 48 hours in advance. Weekday (M-F) overtime  
19 work is acceptable with County approval and if the work performed does not require  
20 immediate inspection.

21  
22 33 33 01 GRAVITY SEWERS

23  
24 3.02 INSPECTIONS OF LINES AND MANHOLES, Add:

25  
26 F. Air testing of gravity sewer PVC pipe shall be performed in accordance with  
27 ASTM F-1417, Standard Practice for Installation Acceptance of Plastic Non-  
28 pressure Sewer Lines Using Low-Pressure Air.

29  
30 G. Vacuum testing of concrete manholes shall be performed in accordance with  
31 ASTM C-1244, Standard Test Method for Concrete Sewer Manholes by the  
32 Negative Air Pressure (Vacuum) Test Prior to Backfill.

33  
34 H. Smoke testing of the new gravity sewer system shall be performed to identify  
35 inflow connections and to remove any remaining cross connections between  
36 the new and old private sewer system. Testing shall be completed in  
37 accordance with the NASSCO Smoke Testing Performance Specification  
38 Guideline for Sanitary Sewer, latest edition.  
39

1 TECHNICAL SPECIFICATIONS CHECKLIST

Project Name: Restore Act Wastewater Collection System Improvements Florida MHP
Project Number: 005015A

2  
3 The following sections of the Standard Technical Specifications will apply to this  
4 contract if marked "X" as shown below:

5

00 75 00	X	Special Provisions and Supplemental Technical Specifications
01 32 33	X	Color Audio-Video Construction Records
01 35 00	X	Special Project Procedures
01 42 01	X	Reference Standards and Definitions
01 45 17		Pipeline Pressure and Leakage Testing Requirements
01 55 26	X	Traffic Regulation
01 57 00	X	Control of Work
01 57 13	X	Erosion and Sedimentation Control
01 58 01	X	Project Identification Signs
01 78 39	X	Project Record Documents
03 10 01	X	Concrete Materials
09 91 00	X	Painting and Protective Coatings
31 23 33	X	Excavation and Backfill for Pipes
31 23 34	X	Excavation and Backfill for Structures
32 12 01	X	Stabilized and Asphalt Roadway Restoration
32 13 01	X	Concrete Sidewalks, Driveways and Gutters
32 92 01	X	Seeding and Sodding
33 01 31		Sanitary Sewer Cured in Place Pipelining
33 01 32	X	Sanitary Sewer Cleaning and Televising
33 01 33		Manhole Rehabilitation
33 01 34		Sanitary Sewer Pipe Repairs
33 01 35		Multi-Component Stress Panel Manhole Liner System
33 01 36		Urethane/Epoxy, Polyurea Manhole Liner System
33 01 37		Polyurethane Manhole Liner System
33 01 38		Polymorphic Resin Manhole Liner System
33 01 39	X	Calcium Aluminate Manhole Liner System
33 01 40		CIPP Structural Lateral Connection Lining
33 01 41		Epoxy Manhole Liner
33 05 20		Jacking and Boring
33 05 22		Horizontal Directional Drilling and Subaqueous Crossings
33 11 01		Potable Water Main Piping and Appurtenances
33 13 01		Disinfection of Potable Water Mains
33 32 00		Submersible Wastewater Pumping Stations

33 33 01	X	Gravity Sewers
33 34 00		Sanitary Sewage Force Mains and Appurtenances
33 35 01		Reclaimed Water Main Piping and Appurtenances
33 39 00	X	Sanitary Sewer Structures
40 95 01		Wastewater Pump Station SCADA Remote Telemetry Unit (RTU)
48 11 30		Standby Diesel Generators

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END OF SECTION



1 SECTION 01 20 01

2 MEASUREMENT AND PAYMENT

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6 **SPECIFICATIONS**  
7 **ROAD AND STREET CONSTRUCTION**

8 P.I.D. No. 005015A

9 **Restore Act Wastewater Collection System Improvements**  
10 **Florida MHP**

11 In Pinellas County, Florida

12  
13  
14 **TO ACCOMPANY PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS STANDARD**  
15 **TECHNICAL SPECIFICATIONS FOR ROADWAY AND GENERAL CONSTRUCTION (APRIL**  
16 **2022), PINELLAS COUNTY UTILITIES DEPARTMENT STANDARD TECHNICAL**  
17 **SPECIFICATIONS FOR UTILITIES AND RELATED CONSTRUCTION (JUNE 2018), AND**  
18 **FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR**  
19 **ROAD AND BRIDGE CONSTRUCTION – DIVISION II AND III ONLY (FY 2023-24):**  
20

21 PART 1 - GENERAL

22 1.01 SUMMARY

- 23 A. There are numerous incidental items of work that are required to complete the Project. While  
24 these items may not be specifically mentioned or illustrated by the Contract Documents and  
25 there may be no specific pay items listed for them, the Contractor will be required to perform  
26 those incidental tasks that can be anticipated through inspection of the Contract Documents,  
27 inspection of the construction areas, and experience in this class of construction.
- 28 B. Unless specifically called out as a separate Pay Item, no separate payment will be made for  
29 the following items and the cost of such work shall be included in the applicable Pay Items  
30 or work:

- 31 1. Safety Precautions  
32 2. Permits  
33 3. Project sign(s) – up to 2 signs at locations directed by the Owner  
34 4. Temporary utility connections  
35 5. Coordination with utilities for relocations or support services (including relocations,  
36 removal, and replacement of ancillary appurtenances).  
37 6. Clearing and grubbing/tree removal.  
38 7. Stakeout and surveying.  
39 8. Site security.  
40 9. Temporary lighting.  
41 10. Coordination with homeowners.  
42 11. Bedding materials as detailed (Excluding materials required to replace trench  
43 undercutting).

- 1 12. Handling, placing, manipulating, and compacting excavated material suitable as
- 2 backfill material.
- 3 13. Temporary pipe thrust restraint.
- 4 14. Maintenance of pipeline operations during pipe shutdowns.
- 5 15. Testing materials, equipment, media, and execution.
- 6 16. Offsite disposal of surplus and unsuitable excavated material.
- 7 17. Offsite disposal of pipe and appurtenances removed.
- 8 18. Daily site cleanup.
- 9 19. Allaying of dust.
- 10 20. Site cleanup and restoration
- 11 21. Recordkeeping.
- 12 22. Project meetings
- 13 23. Submittals
- 14 24. Grading
- 15 25. Sheeting and shoring
- 16 26. Excavation
- 17 27. Pavement/concrete removal
- 18 28. Dewatering
- 19 29. Backfill
- 20 30. Compaction and grading
- 21 31. Testing
- 22 32. Appurtenant work and materials required for a complete and operable system

23 C. The prices included in the Schedule of Prices will be full compensation for all labor,  
 24 materials, tools, equipment and incidentals, permit fees, bonds, taxes, insurance, overhead  
 25 and profit, temporary access roads and facilities, and other miscellaneous costs necessary  
 26 to complete the construction as shown on the Drawings and/or as specified in the Contract  
 27 Documents to be performed under this Contract. Actual quantities of each item bid on a unit  
 28 price basis will be determined upon completion of the construction in the manner set up for  
 29 each item in this section of the specifications. Payment for all items listed in the Schedule of  
 30 Prices will constitute full compensation for all work shown and/or specified and required to  
 31 accomplish the intent of this Contract.

32 D. The actual amounts of work done, and materials furnished under unit price items may differ  
 33 from the estimated quantities. In some cases, a unit price item has been added to the bid  
 34 schedule to establish a cost basis in the event work associated with that item is required. No  
 35 guarantee is expressed or implied that the quantities shown in the bid schedule shall be  
 36 required to fulfill the Contract.

37 E. Payment for any stored material or equipment shall not imply that the material or equipment  
 38 meets the Contract Specifications or that it will be found acceptable when incorporated into  
 39 the Work.

40 F. Retainage and other payment conditions apply to all payments.

41 1.02 ITEM NO. 1 – Mobilization

42 Description: The work consists of the preparatory work and operations in mobilizing to begin  
 43 work on the project, including but not limited to those operations necessary for the movement of  
 44 personnel, equipment, supplies and incidentals to the project site(s), and for the establishment  
 45 of temporary offices, buildings, safety equipment and first aid supplies, sanitary and other

1 facilities as required by these specifications, special provisions, and state and local laws and  
2 regulations.

3 The cost of bonds and any required insurance, consideration for indemnification to the County  
4 and the Engineer, and any other preconstruction expenses necessary for the start of the work,  
5 excluding the cost of construction materials, must also be included in this Section.

6 Pay item for Mobilization must include photographic documentation and a high-definition video  
7 (minimum 1280 x 720 resolution) of the project by the Contractor, prior to construction  
8 beginning, for the purpose of documenting existing conditions. The pictures and video must be  
9 provided to the Engineer prior to beginning construction. Unless otherwise approved by the  
10 Engineer, the pay item for Mobilization must also include the furnishing and placement of door  
11 hanger notifications on the doors of all affected residents adjacent to the project, prior to the  
12 start of construction. Notifications shall inform residents of the construction time frame and any  
13 anticipated impact to properties at least two (2) weeks prior to construction commencing  
14 adjacent to the property. Notification content must be pre-approved by the Engineer.

15 Measurement: The work and incidental costs specified as being covered under this Section  
16 must be paid for at the contract lump sum (LS) price paid on a pro-rated amount based on the  
17 contract time and in accordance with the Contract Documents.

18 Payment shall be made under:

19 Item No. 1 Mobilization

20 1.03 ITEM NO. 2 – Maintenance of Traffic

21 Description: The work consists of maintaining of vehicular, bicycle and pedestrian traffic within  
22 the limits of the project for the duration of the construction period, in accordance with the  
23 requirements of Section 102 of the FDOT Specifications, as amended herein.

24 Measurement: Measurement for payment consist of all materials and labor necessary for the  
25 Contractor to furnish, erect and maintain all necessary traffic control and safety devices, in  
26 accordance with the Plans and FDOT Design Standards, latest edition, and the State of Florida  
27 Roadway and Traffic Design Standards for Design, Construction, Maintenance and Utility  
28 Operations for Streets and Highways on the State Maintained Systems, latest edition, and must  
29 take all necessary precautions for the protection of the work and the safety of the public for the  
30 duration of the construction period The pay quantity for the work under this pay item shall be  
31 one lump sum (LS) paid on a pro-rated monthly amount based on the contract time and in  
32 accordance with the Contract Documents.

33 Payment shall be made under:

34 Item No. 2 Maintenance of Traffic

35 1.04 ITEM NO. 3 – As-Built Survey

36 Description: The work consists of all materials and labor necessary to complete all required as-  
37 built survey requirements for Pinellas County Utility facilities and appurtenances specifically  
38 listed in these specifications, to the satisfaction of the Engineer. The work for this pay item also

1 includes the cost of providing Final As-Built Drawings per specification 01 78 39 in DWG and  
2 PDF format and Other Record Documents.

3 Measurement: Measurement for payment consists of all materials and labor necessary to  
4 complete the utility as-built survey requirements by the Contractor in connection with the  
5 construction of the project, performed to the satisfaction of the Engineer. The pay quantity for  
6 the work under this pay item shall be one lump sum (LS) in accordance with the Contract  
7 Documents.

8 Payment shall be made under:

9 Item No. 3                      As-Built Survey

10 1.05    ITEM NO. 4 – PVC Pipe, C900 DR 18 (Gravity Sewer)

11 Description: The work consists of furnishing all labor, equipment and materials for installing  
12 PVC pipe according to the size and depths as shown on the plans or directed by the Engineer,  
13 including C900 DR 18 PVC. The unit price shall include all costs necessary to install the pipe  
14 including survey layout (based upon property monuments established by others), tracer wire,  
15 locator tape, clearing and grubbing, excavation, sheeting and shoring, bracing, temporary  
16 bypass pumping, dewatering, structural fill, material, testing, pavement cutting, trenching, utility  
17 crossings, barricades, clearing of the right-of-way, protection of property, backfilling, field layout,  
18 etc. Restoration will be paid for under separate pay items.

19  
20 Measurement: The quantities of pipe to be paid for under this item shall be according to the  
21 size, depth, and length in linear feet of pipe measured along the centerline of the pipe through  
22 manholes in place, completed, tested, and accepted.

23  
24 Payment shall be made under:

25 Item No. 4                      8" PVC Pipe C900 DR 18 (Gravity Sewer), 0' – 6' Depth

26 1.06    ITEM NO. 5 – Remove Out of Service Gravity Sewer Pipe, 6" or 8"

27 Description: The work consists of furnishing all labor and equipment to remove and dispose of  
28 out of service mains. Unless otherwise indicated by the Engineer or Engineer's representative,  
29 the pipe removed becomes the property of the Contractor. The unit price shall include all costs  
30 necessary to remove the pipe including pavement cutting, trenching, replacement of base  
31 material, dewatering, sheeting and shoring, bracing, utility crossings, barricades, clearing of the  
32 right-of-way, protection of property, backfilling, compaction, and testing.

33  
34 Measurement: The quantities of pipe removal to be paid for under this Item shall be the length  
35 in linear feet (LF) of pipe measured along the centerline of the pipe actually removed.

36  
37 Payment shall be made under:

38 Item No. 5                      Remove Out of Service Gravity Sewer Pipe, 6" or 8"

1 1.07 ITEM NOS. 6 AND 7 – Install or Adjust Service Lateral All Depths

2 Description: The work consists of furnishing all labor, equipment, bypass operations,  
3 homeowner coordination, and materials for installation of a new or relocating a sanitary sewer  
4 service lateral found to be in conflict with proposed improvement or as directed by the Engineer.  
5 The unit price shall include all costs necessary to install sewer service pipe including survey  
6 layout (based upon property monuments established by others), material, pipe cutting, tap, wye  
7 unit on main, tracer wire, fittings, installation of riser pipe and cleanout 5' from edge of  
8 pavement, pavement cutting, trenching, dewatering, sheeting and shoring, bracing, utility  
9 crossings, barricades, clearing of the right-of-way, protection of property, backfilling, field layout,  
10 etc.

11  
12 Measurement: The quantities of pipe to be paid for under this item shall be according to the  
13 size and length in linear feet (LF) of installed and adjusted pipe measured along the centerline,  
14 completed, tested, and accepted.

15 Payment shall be made under:

16  
17 Item No. 6 Install or Adjust 4" Service Lateral, All Depths

18 Item No. 7 Install or Adjust 6" Service Lateral, All Depths

19 1.08 ITEM NO. 8 – Sewer Line Manhole Connection

20 Description: The work consists of all labor, equipment, investigative digging, and materials for  
21 connection of the new sewer system into an existing manhole wall. All core drills shall be of  
22 sufficient diameter to accommodate pipe connection. Manhole connections may be either  
23 gravity sewer or sewer force main. All connections shall include a manhole boot connector or  
24 water stop. Payment shall also include cleaning, preparation, temporary bypass pumping, core  
25 drills, masonry or concrete patching, grout, interior coating or lining repair, interior surface  
26 patching, excavation, sheeting and shoring, dewatering, backfill, refill, compaction operations,  
27 compaction testing and re-testing, and all other incidentals necessary to complete the manhole  
28 connection installation.

29  
30 Measurement: The quantity of connections into existing manholes to be paid under this item  
31 shall be per size of each measured in place, completed, inspected, and accepted.

32  
33 Payment shall be made under:

34 Item No. 8 8" Sewer Line Manhole Connection

35 1.09 ITEM NOS. 9 AND 10 – Precast Manhole

36 Description: The work consists of furnishing all labor, equipment, by-pass operations, customer  
37 coordination and materials for constructing a sanitary sewer manhole at location shown on  
38 plans or as directed by the Engineer. The unit price shall include all costs necessary to  
39 construct the manhole including survey layout (based upon property monuments established by  
40 others), pavement cutting, trenching, excavation, dewatering, sheeting and shoring, bracing,  
41 precast manhole, interior calcium aluminate coating, exterior asphaltic coating, construction of  
42 inverts, inside drop connections where indicated, pipe connection to manhole, manhole boot  
43 connectors, concrete ballast, inflow protector, ring and cover, grade adjustment rings, clearing  
44 of the right-of-way, protection of property, backfilling, CCTV inspection, and testing. The depth

1 of the manhole will be measured from the top of the cover down to the invert of the outlet sewer  
2 pipe.

3  
4 Measurement: The quantities of manholes to be paid under this item shall be according to the  
5 type, size and depth of per each measured in place, completed, inspected, and accepted.

6  
7 Payment shall be made under:

8 Item No. 9 4' dia. - Precast Manhole Standard, up to 6' Deep

9 Item No. 10 5' dia. - Precast Manhole Inside Drop, up to 6' Deep

10 1.10 ITEM NO. 11 – Abandon Existing Manhole

11 Description: The work consists of furnishing all labor, equipment, and materials for abandoning  
12 existing private sanitary sewer manholes and clean outs at locations shown on plans or as  
13 directed by the Engineer. The unit price shall include clearing and grubbing, pavement cutting,  
14 sawcutting, sheeting and shoring, excavation, dewatering, removing a minimum of 8 to 10  
15 inches of the structure below final grade including the frame, ring and cover, and adjustment  
16 rings; cleaning/flushing, backfilling, compaction, and testing.

17  
18 Measurement: The quantities of manholes to be abandoned under this item shall be per each  
19 abandoned manhole measured in place, completed, inspected, and accepted.

20  
21 Payment shall be made under:

22 Item No. 11 Abandon Existing Manhole

23 1.11 ITEM NO. 12 – Disconnect Existing Service Lateral

24 Description: The work consists of furnishing all labor, equipment, by-pass operations,  
25 homeowner coordination and materials to disconnect and plug sewer laterals that will be placed  
26 out of service and abandoned. The unit price shall include pavement cutting, trenching,  
27 excavation, dewatering, sheeting and shoring, bracing, protection of property, cutting existing  
28 pipe, removal of existing lateral, grouting 5 linear feet of the abandoned lateral, backfilling,  
29 compaction, and testing.

30  
31 Measurement: The quantity of disconnecting existing service laterals to be paid for under this  
32 item shall be per each lot, completed, inspected, and accepted. Lots may have more than one  
33 lateral to be disconnected.

34  
35 Payment shall be made under:

36 Item No. 12 Disconnect Existing Service Lateral

37 1.12 ITEM NO. 13 – Disconnect and Plug Sewer Main

38 Description: The work consists of furnishing all labor, equipment and materials to disconnect  
39 and plug sewer mains that will remain out of service. The unit price shall include pavement  
40 cutting, excavation, dewatering, sheeting and shoring, bracing, protection of property, cutting  
41 existing pipe, all caps/plugs, brick, non-shrink grout, manhole patching, interior manhole coating

1 or liner to match existing, bitumastic coating of manhole exterior at patch, backfilling,  
2 compaction, testing, and all other operations required to disconnect and plug the sewer mains.

3  
4 Measurement: The quantity of disconnect and plug sewer mains to be paid for under this item  
5 shall be per each (EA) of the diameter specified measured in place, completed and accepted.

6  
7 Payment shall be made under:

8 Item No. 13                      Disconnect and Plug Sewer Main, 4" to 8" Pipe

9 1.13 ITEM NO. 14 – Erosion Control

10 Description: The work consists of furnishing all labor, equipment, tools, and materials  
11 necessary for the installation, maintenance, and removal of erosion control facilities including  
12 but not limited to silt fences, storm or culvert pipe protection, geotextile fabric, soil tracking  
13 prevention pads and any erosion water pollution control facilities as indicated in the Plans.

14  
15 Measurement: Measurement for payment consists of all materials and labor necessary for  
16 installation, maintenance, and removal of erosion control facilities. The pay quantity for the work  
17 under this pay item shall be one lump sum in accordance with the Contract Documents.

18  
19 Payment shall be made under:

20 Item No. 14                      Erosion Control

21 1.14 ITEM NO. 15 – Conflict Structure

22 Description: The work consists of furnishing all labor, equipment, by-pass operations, materials,  
23 and tools for constructing a conflict structure at locations shown on the plans or as directed by  
24 the Engineer. The unit price shall include all costs necessary to construct the conflict structure  
25 including precast structure or manhole, manhole ring and cover, casing pipe, casing end seals,  
26 pavement cutting, excavation, trenching, replacement of base material, dewatering, sheeting  
27 and shoring, bracing, utility crossings, barricades, clearing of the right-of-way, protection of  
28 property, and backfilling.

29  
30 Measurement: The quantity of conflict structures to be paid for under this item shall be per each  
31 measured and inspected in place, completed, inspected, and accepted.

32  
33 Payment shall be made under:

34 Item No. 15                      Conflict Structure

35 1.15 ITEM NO. 16 – Asphalt Pavement Restoration

36 Description: The work consists of furnishing all labor, materials, equipment, and tools required  
37 for temporary asphalt pavement restoration associated with trench installation of the new sewer  
38 system including but not limited to removal of existing asphalt roadway and/or driveway, grading  
39 and compaction of base material, reinstallation of asphalt pavement and markings in  
40 accordance with Pinellas County standards where necessary, and all ancillary items unless  
41 indicated elsewhere.

1 Measurement: The quantity of asphalt restoration to be paid for under this item shall be per  
2 square yards of asphalt measured in place, completed, inspected, and accepted.

3 Payment shall be made under:

4 Item No. 16 Asphalt Pavement Restoration

5 1.16 ITEM NO. 17 – Driveway Restoration, In Kind, Concrete and Decorative

6 Description: The work consists of furnishing all labor, materials, equipment, and tools required  
7 for the restoration of driveways in-kind including but not limited to excavation, sawcutting,  
8 stockpiling, decorative block, pavers, joint filler, 6-inch minimum thickness concrete, paint, stain,  
9 texturing, stamping, compaction, finishing, and all other incidentals required for the driveway  
10 restoration.

11 Measurement: The quantity of driveway restoration to be paid for under this item shall be per  
12 square yard of restored driveway measured, installed, inspected, and accepted.

13 Payment shall be made under:

14 Item No. 17 Driveway Restoration, In Kind, Concrete and Decorative

15 1.17 ITEM NO. 18 – Milling Existing Asphalt Pavement, 1” Average Thickness

16 Description: The work consists of furnishing all labor, materials, equipment, tools, sweeping  
17 and dust abatement, hauling and disposal of milled materials necessary for asphalt milling at an  
18 average depth of 1-inch within the limits defined in the Plans and directed by the Engineer.

19 Measurement: The quantity of asphalt milling to be paid for under this item shall be per square  
20 yard of 1” average thickness milled asphalt measured, completed, inspected, and accepted.

21 Payment shall be made under:

22 Item No. 19 Milling Existing Asphalt Pavement, 1” Average Thickness

23 1.18 ITEM NO. 19 – Superpave Asphalt Concrete, Type SP 9.5, Fine, Traffic Level C, 1” Min.  
24 Thickness

25 Description: The work consists of furnishing all labor, materials, equipment, and tools for  
26 installing superpave asphalt concrete pavement, and shall include pavement markings, striping,  
27 testing and all other incidentals necessary to complete the surface course. Payment will not be  
28 made for installation of asphalt paving where existing asphalt is disturbed by the Contractor  
29 outside of the paving limits indicated in the Contract Documents.

30 Measurement: The quantity of superpave asphalt to be paid for under this item shall be per  
31 square yards of 1-inch thick superpave asphalt measured in place, completed, inspected and  
32 accepted.

33 Payment shall be made under:

34 Item No. 19 Superpave Asphalt Concrete, Type SP 9.5, Fine, Traffic Level C, 1” Min.  
35 Thickness



1 1.19 ITEM NO. 20 – Cosmetic Restoration (Skirting, Underpinning, etc)

2 Description: The work consists of furnishing all labor, materials, equipment, and tools required  
3 for the restoration and replacement of disturbed manufactured home skirting and underpinning  
4 associated with the connection of new laterals. The skirting and pinning shall be replaced in kind  
5 and restored to a condition that is as good as or better than pre-construction conditions.  
6 Damage to skirting or underpinning caused by the Contractor outside the limits of Work shall be  
7 restored or replaced at no expense to the Owner.

8 Measurement: The quantity of cosmetic restoration to be paid for under this pay item shall be  
9 one lump sum (LS) in accordance with the Contract Documents.

10 Payment shall be made under:

11 Item No. 20                      Cosmetic Restoration (Skirting, Underpinning, etc)

12 1.20 ITEM NO. 21 – Landscape Restoration

13 Description: The work consists of furnishing all labor, materials, equipment, and tools required  
14 for the restoration of landscaping disturbed as a result of the sanitary sewer system installation.

15 Measurement: The quantity of landscape restoration to be paid for under this pay item shall be  
16 one lump sum (LS) in accordance with the Contract Documents.

17 Payment shall be made under:

18 Item No. 21                      Landscape Restoration

19 1.21 ITEM NO. 22 – Sodding

20 Description: The work consists of furnishing all labor, materials, equipment, and tools  
21 necessary for the placement of sod including rolling and tamping, disposal of surplus material,  
22 watering and fertilizing to assure sod takes root and maintains coverage throughout the  
23 maintenance period. Areas to be sodded shall match the existing adjacent sod.

24 Measurement: The quantity of sodding to be paid for under this item shall be per square yard of  
25 sodded area measured, completed, inspected, and accepted.

26 Payment shall be made under:

27 Item No. 22                      Sodding

28 1.22 ITEM NO. 23 – Excavation, Unsuitable Material

29 Description: The work consists of furnishing all labor, equipment, and materials necessary for  
30 additional earth excavation which may be ordered by the Engineer in writing for the removal of  
31 unsuitable material. The work includes all clearing and grubbing, sheeting and shoring, bracing,  
32 dewatering, hauling, and disposal of excavated unsuitable material at an approved location.  
33

1 Measurement: The quantity of excavated unsuitable material shall be in cubic yards of actual  
2 volume of unsuitable material excavated and removed as ordered and approved by the  
3 Engineer in writing.

4  
5 Payment shall be made under:

6 Item No. 23                      Excavation, Unsuitable Material

7 1.23 ITEM NO. 24 – Select Bedding and Backfill Material

8 Description: The work consists of furnishing all labor, equipment, and materials necessary for  
9 installation of select bed and backfill material. The work includes all labor and equipment for  
10 storing, furnishing, transporting, installing, and compacting the select bed and backfill material.  
11 Excavation for placement of select fill will be paid for under other Bid Items.

12  
13 Measurement: The quantity of select bed and backfill material shall be the compacted volume  
14 in cubic yards installed and accepted.

15  
16 Payment shall be made under:

17 Item No. 24                      Select Bedding and Backfill Material

18 1.24 ITEM NO. 25 – Grouting Out of Service Pipe

19 Description: The work consists of furnishing all labor, equipment and materials necessary for  
20 additional grouting of sewer mains which may be required by the project or ordered by the  
21 Engineer in writing.

22  
23 Measurement: The quantity of grout to be paid for under this Item shall be the actual volume in  
24 cubic yards of additional grout placed in the work, as approved by the Engineer in writing.

25  
26 Payment shall be made under:

27 Item No. 25                      Grouting Out of Service Pipe

28 1.25 ITEM NO. 26 – Flowable Fill

29 Description: The work consists of furnishing all labor, equipment, and materials necessary for  
30 flowable fill which may be required by the project or ordered by the Engineer in writing.

31  
32 Measurement: The quantity of flowable fill to be paid for under this Item shall be the actual  
33 volume in cubic yards of flowable fill placed in the work, as approved by the Engineer in writing.

34  
35 Payment shall be made under:

36 Item No. 26                      Flowable Fill

1 1.26 ITEM NO. 27 – Smoke Testing of Newly Constructed System

2 Description: The work consists of furnishing all labor, materials, equipment, public notifications,  
3 and documentation necessary for smoke testing the newly constructed sewer system.

4  
5 Measurement: The quantity of smoke testing to be paid for under this Item shall be per linear  
6 foot of sewer main installed and smoke tested as measured from the center of the upstream  
7 manhole to the center of the downstream manhole. Remaining connections to the private sewer  
8 system and sources of inflow identified outside of the limits of the new sewer system, including  
9 roof leader connections shall immediately be brought to the attention of the Engineer. Defects  
10 identified within the new sewer system identified by the smoke testing shall be repaired at no  
11 additional cost to the Owner.

12  
13 Payment shall be made under:

14 Item No. 27 Smoke Testing of Newly Constructed System

15 1.27 ITEM NO. 28 – Concrete Class IV, Miscellaneous

16 Description: The work consists of furnishing all labor, equipment, and materials necessary for  
17 miscellaneous Class IV concrete not specifically shown on the Plans, specified, or included  
18 under other Bid Items, but which may be ordered by the Engineer in writing. The work includes  
19 all materials, mixing, placing, forming, and curing of the concrete, and work incidental thereto.

20  
21 Measurement: The quantity of additional Class IV concrete shall be in cubic yards as ordered  
22 and approved by the Engineer in writing and shall be the actual volume of concrete placed in  
23 the work, measured in place, within the lines and grades as ordered. All concrete placed outside  
24 these lines and grades to fill unauthorized excavation or replace defective work shall be at the  
25 expense of the Contractor. Concrete specifically included under other Items will not be  
26 measured, or paid for, under this Item.

27  
28 Payment shall be made under:

29 Item No. 28 Concrete Class IV, Miscellaneous

30 1.28 ITEM NO. 29 – Replace Existing Speed Bumps In-Kind, Concrete

31 Description: The work consists of furnishing all labor, materials, equipment, tools, and  
32 incidentals necessary for the replacement of existing speed bumps in-kind including cleaning,  
33 sawcutting, asphalt or concrete, compaction, sealing, paint, and pavement markings.

34 Measurement: The quantity of speed bumps to be paid for under this item shall be per each  
35 measured, completed, inspected, and accepted.

36 Payment shall be made under:

37 Item No. 29 Replace Existing Speed Bumps In-Kind, Concrete

1 1.29 ITEM NO. 30 – Unspecified Work (Allowance) – Relocation of Existing Utilities (15% of  
2 Work Items)

3 Description: The work under this Section includes an allowance amount for any unspecified  
4 work including relocation of existing utilities that may be associated with the work in this contract  
5 or as otherwise identified by the Engineer. Any amount of extra work and/or alterations to this  
6 contract charged to this pay item shall be fully documented and approved in writing, in advance,  
7 by the Engineer. All work performed under this pay item shall be completed in accordance with  
8 all conditions and requirements of this contract and shall include the work to be done by all  
9 necessary subcontractors and/or suppliers. Authorized materials listing can be retrieved from:  
10 [http://www.pinellascounty.org/utilities/PDF/eng\\_tech\\_specs.pdf](http://www.pinellascounty.org/utilities/PDF/eng_tech_specs.pdf)

11  
12 “Unspecified Work” shall mean the stated fixed sum of money to be used only at the Engineer’s  
13 specified direction. The particular requirements and items for the allowances will be provided to  
14 the Contractor at the appropriate time and allowance amounts shall apply only to additional  
15 items cover and above those specified/indicated in the plans for this contract.

16  
17 Measurement: The work in this Section shall be paid for by a portion of the allowance under the  
18 Schedule of Values of this contract. Use of any portion of this pay item shall require written  
19 approval by the Engineer.

20  
21 The basis of negotiated prices and subcontractor’s invoices will be included in the Contractor’s  
22 pay application. Copies of invoices, equipment costs, and other supporting documentation shall  
23 be included.

24  
25 Payment shall be made under:  
26 Item No. 30 Unspecified Work (Allowance) – Relocation of Existing Utilities

27  
28  
29

END OF SECTION

SECTION 01 33 00

SUBMITTALS

PART 1 – GENERAL

1.01 REQUIREMENTS INCLUDED

- A. The CONTRACTOR shall submit to the ENGINEER for review and approval: working drawings, shop drawings, test reports and data on materials and equipment (hereinafter in this section called data), and material samples (hereinafter in this section called samples) as are required for the proper control of work, including, but not limited to those working drawings, shop drawings, data and samples for materials and equipment specified elsewhere in the Specifications and in the Contract Drawings.
- B. Within ten (10) calendar days after the effective date of the Agreement, the CONTRACTOR shall submit to the ENGINEER, a complete list of preliminary data on items for which Shop Drawings are to be submitted. Included in this list shall be the names of all proposed manufacturers furnishing specified items and the date on which each Shop Drawing shall be submitted. Review of this list by the ENGINEER shall in no way relieve the CONTRACTOR from submitting complete Shop Drawings and providing materials, equipment, etc., fully in accordance with the Specifications. This procedure is required in order to expedite final review of Shop Drawings.
- C. The CONTRACTOR is to maintain an accurate updated submittal log and will bring this log to each scheduled progress meeting with the OWNER and the ENGINEER.

1.02 CONTRACTOR'S RESPONSIBILITY

- A. It is the responsibility of the CONTRACTOR to check all drawings, data and samples prepared by or for him before submitting them to the ENGINEER for review. Each and every copy of the Drawings and data shall bear CONTRACTOR's stamp showing that they have been so checked. Shop drawings submitted to the ENGINEER without the CONTRACTOR's stamp will be returned to the CONTRACTOR for conformance with this requirement. Shop drawings shall indicate any deviations in the submittal from requirements of the Contract Documents.
- B. The CONTRACTOR shall not begin any of the work covered by a drawing, data, or a sample returned for correction until a revision or correction thereof has been reviewed and returned to him, by the ENGINEER.
- C. The CONTRACTOR shall submit to the ENGINEER all drawings and schedules sufficiently in advance of construction requirements to provide no less than (14) calendar days for checking and appropriate action from the time the ENGINEER receives them.

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- 1  
2 D. The CONTRACTOR shall submit electronically copies of descriptive or  
3 product data submittals to complement shop drawings for review by the  
4 ENGINEER.  
5  
6 E. The CONTRACTOR shall be responsible for and bear all cost of damages  
7 which may result from the ordering of any material or from proceeding with  
8 any part of work prior to the completion of the review by ENGINEER of the  
9 necessary Shop Drawings.

10  
11 1.03 ENGINEER'S REVIEW

- 12  
13 A. The ENGINEER's review of drawings, data and samples submitted by the  
14 CONTRACTOR shall cover only general conformity to the Specifications,  
15 external connections and dimensions which affect the installation.  
16  
17 B. The review of drawings and schedules shall be general and shall not be  
18 construed:  
19  
20 1. As permitting any departure from the Contract requirements.  
21 2. As relieving the CONTRACTOR of responsibility for any errors, including  
22 details, dimensions and materials.  
23 3. As approving departures from details furnished by the ENGINEER,  
24 except as otherwise provided herein.  
25  
26 C. If the drawings or schedules as submitted describe variations and show a  
27 departure from the Contract requirements which the ENGINEER finds to be in  
28 the interest of the OWNER and to be so minor as not to involve a change in  
29 Contract Price or time for performance, the ENGINEER may return the  
30 reviewed drawings without noting any exception.  
31  
32 D. When reviewed by the ENGINEER, each of the Shop and Working Drawings  
33 shall be identified as having received such review being so stamped and dated.  
34 Shop Drawings stamped "REJECTED" and with required corrections shown  
35 shall be returned to the CONTRACTOR for correction and resubmittal.  
36  
37 E. Resubmittals will be handled in the same manner as first submittals. On  
38 resubmittals, the CONTRACTOR shall direct specific attention, in writing or on  
39 resubmitted Shop Drawings, to revisions other than the corrections requested  
40 by the ENGINEER on previous submissions. The CONTRACTOR shall make  
41 any corrections required by the ENGINEER.  
42  
43 F. If the CONTRACTOR considers any correction indicated on the drawings to  
44 constitute a change to the Contract Drawings or Specifications, the  
45 CONTRACTOR shall give written notice thereof to the ENGINEER.  
46  
47 G. The ENGINEER shall review a submittal/resubmittal a maximum of two (2)  
48 times after which cost of review shall be borne by the CONTRACTOR. The  
49 cost of engineering shall be equal to the ENGINEER's actual payroll cost.

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H. When the Shop and Working Drawings have been completed to the satisfaction of the ENGINEER, the CONTRACTOR shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions from the ENGINEER.

I. No partial submittals shall be reviewed. Incomplete submittals shall be returned to the CONTRACTOR and shall be considered not approved until resubmitted.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION



Standard Technical Specifications  
For Roadway and General Construction

*(Revised July 2019)*



# AS-BUILT SURVEY REQUIREMENTS (UTILITY) BY CONTRACTOR

005-0900

The work specified under this Section consists of all materials and labor necessary to complete all required as-built survey requirements for Pinellas County Utility facilities and appurtenances specifically listed in these specifications, to the satisfaction of the Engineer.

The Contractor must employ or retain the services of a Florida registered Professional Land Surveyor to satisfy all the requirements related to this as-built survey.

The Contractor must be responsible to perform all survey operations in acceptable standard methods.

The Contractor must thoroughly familiarize themselves with the plans, specifications and on-site field conditions to submit bid that will include all means and methods necessary to satisfy the utility as-built requirements of this project.

The Contractor must provide the utility as-built survey to the County, signed and sealed by a Florida registered Professional Land Surveyor, within thirty (30) days after receiving written or verbal request from the Engineer. Contractor's Surveyor must make all field books and calculations available for review by the Engineer or his designee.

***Contractor must refer to the Utility Company's Specifications for items that require as-built surveying.***

## **DELIVERABLES**

All Survey activities and deliverables are to be in accordance with the PINELLAS COUNTY CADD MANUAL FOR LAND SURVEYING AND CIVIL ENGINEERING (formerly known as PINELLAS COUNTY GUIDE FOR PROFESSIONAL SURVEY AND MAPPING SERVICES), and Rule 5J-17.050 through 5J-17.052 Florida Administrative Code, and Chapter 472 Florida Statutes and must include ten (10) Signed and Sealed As-built Surveys, (5J-17.052). Deliverables will also include all Autodesk Civil 3D (latest edition) project files; fieldbook files; digital data files of all surveyed points in the standard ASCII format; and an electronic copy of the signed and seal survey in ADOBE (.pdf) format.

The PINELLAS COUNTY CADD MANUAL FOR LAND SURVEYING AND CIVIL ENGINEERING can be found on the Pinellas County website.

## ***Basis of Payment:***

The pay quantity must consist of all materials and labor necessary to complete the utility as-built survey requirements by the Contractor in connection with the construction of the project, performed to the satisfaction of the Engineer. The pay quantity for the work specified under this Section must be one Lump Sum quantity.

# MOBILIZATION

101-0100

The work specified under this Section consists of the preparatory work and operations in mobilizing to begin work on the project, including but not limited to those operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site(s), and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, sanitary and other facilities as required by these specifications, special provisions, and state and local laws and regulations.

The Contractor must furnish, install, and maintain station boards (every 100 ft) on one side of the project for the duration of the project. The station boards must be 48 inch long, 1" x 4" lumber, painted white with 3 inch black stenciled numbers. If damaged, they will be restored at no additional cost to the County. Station boards must be removed by the Contractor upon written notice of the Engineer.

Unless there is a separate pay item for Survey and Layout by the Contractor, Mobilization pay item must include the cost of maintaining a plans contract set with redlines that depict any construction deviations to dimensions, measurements, stations, offsets, etc., shown on the plans. The Contractor must provide one original Record Drawing set (in color) and eight (8) additional color copies to the ENGINEER after construction is completed on 11" x 17" or 24" x 36" paper drawings.

The cost of bonds and any required insurance, consideration for indemnification to the County and the Engineer, and any other preconstruction expenses necessary for the start of the work, excluding the cost of construction materials, must also be included in this Section.

Pay item for Mobilization must include photographic documentation and a high definition video (min 1280 x 720 resolution) of the project by the Contractor, prior to construction beginning, for the purpose of documenting existing conditions. The pictures and video must be provided to the County prior to beginning construction.

Pay item for Mobilization must also include the furnishing and placement of notification to all affected residents adjacent to the project, prior to start of construction, informing them of construction time frame and any anticipated impact to properties.

The contractor must provide notification to affected residents at least two weeks prior to construction commencing adjacent to the property. Notification content must be pre-approved by the Engineer.

## ***Basis of Payment***

The work and incidental costs specified as being covered under this Section must be paid for at the contract lump sum price, for Mobilization, in accordance with Section 101 of the FDOT Specifications.

# MAINTENANCE OF TRAFFIC

102-1000

The work specified under this Section consists of the maintaining of vehicular, bicycle and pedestrian traffic within the limits of the project for the duration of the construction period, in accordance with the requirements of Section 102 of the *FDOT Specifications*, as amended herein. The road must be kept open to two-way traffic for the duration of the construction period, except that, during non-peak traffic periods, one lane of traffic will be permitted provided that flagmen are used and prior approval is obtained from the County. The Contractor will not be permitted to isolate residences or places of business. Access must be provided to all residences and all places of business whenever construction interferes with the existing means of access. Any proposed closure of side streets to local traffic requires County pre-approval on each occasion and notification by Contractor to affected property owners and emergency services 14 days in advance, unless otherwise approved by the County Traffic Engineer or Public Works Director.

The Contractor must furnish, erect and maintain all necessary traffic control and safety devices, in accordance with the Plans and *FDOT Design Standards*, latest edition, and the *State of Florida Roadway and Traffic Design Standards for Design, Construction, Maintenance and Utility Operations for Streets and Highways on the State Maintained Systems*, latest edition, and must take all necessary precautions for the protection of the work and the safety of the public for the duration of the construction period.

The work specified under this Section must include all Maintenance of Traffic (M.O.T) pay items with prefix 102, and all work shown in the Plans including, but not limited to, removal of existing pavement markings, installation and removal of pavement striping, markings and reflective markers, and all materials and construction necessary to create temporary connections for street, driveways and pedestrian traffic. The pay item for "Maintenance of Traffic – Lump Sum" must include all work necessary for maintenance of vehicular traffic and pedestrian traffic, unless otherwise specified to be paid for under other items of work. Payment for **pavement markings** to be used during maintenance of traffic must be paid included in the Maintenance of Traffic Lump Sum pay item.

Temporary Curb (Asphaltic or Concrete) must not be used, with the following exception: Portable Temporary Low Profile Barrier For Roadside Safety, in accordance with FDOT Indexes, can be used in lieu of barrier walls for design speeds of 45 mph or less, where a low profile is desired to maintain sight distance at intersections and driveways. Portable Temporary Low Profile Barrier For Roadside Safety must be paid for under the contract unit value for Barrier Wall (Temporary) Low Profile Concrete (Linear Foot), and will be full compensation for furnishing, installing, maintaining, relocating and removing the barrier wall. The contractor must not receive additional compensation for relocating the barrier wall (i.e., from one construction phase to another). The approved "Portable Temporary Low Profile Barrier For Roadside Safety" is a proprietary design by the University of Florida. Only those barrier units cast by producers licensed by the University of Florida will be allowed for installation. Availability of this device may be limited as a result of demand; this should be considered in establishing project schedules calling for this device. The applicable edition of the documents referenced herein must be that edition of the respective documents specified in the Plans.

The Contractor may propose an alternate MOT plan to the one presented in the Plans. If so, the Contractor must have their Engineer be the Engineer of Record for the alternate plan and must have said Engineer sign and seal the alternate plan. Additionally, the contractor must provide documentation showing that their Engineer has professional liability insurance and that their Engineer must indemnify and hold harmless the County and its officers and employees, same as required of the Contractor in this contract.

The work specified under this Section must include all work shown in the Plans including, but not limited to, installing and removing temporary inlets, temporary manholes, temporary pipes, temporary outlet structures, temporary inlet grates, and all materials and construction necessary to maintain temporary drainage during construction operations and temporary signalization. There must be no modifications to existing signalization mast arms or strain poles unless approved by the County. The pay item for "Maintenance of Traffic - Lump Sum" must include all work necessary for maintenance of drainage during construction operations. Any drainage structure or pipe that is part of the permanent drainage plan will be paid for under other items of work.

## ***Basis of Payment***

The work specified under this Section must be paid for in accordance with the following pay items:

### **Maintenance of Traffic (lump sum)**

The lump sum MOT must be paid on a pro-rated monthly amount based on the contract time.

Asphalt pavement (Temporary) (install & remove) (per square yard)

Asphalt pavement (Temporary) for pedestrian (install & remove) (per square yard)

Asphalt Curb (Temporary) (per linear feet) (includes paint & delineators)

Commercial Materials for Driveway Maintenance (per Cubic Yard)

Concrete Barrier Wall (Temporary) (per linear foot)

Note: The pay item for Concrete Barrier Wall (Temporary) must include  
Mounted Lights – Type C Steady Burn.

Panels Arrow Advance Warning (per day)

Traffic Control Signal (Temporary) (per day)

Off Duty Law Enforcement Officer (per man hour)

Vehicle Impact Attenuator (Temporary) (per day)

Variable Message Sign (Temporary) (per day)

**Note:** If a pay item for one of the items above is not provided in the “Schedule of Values”, then the cost for said item/work must be included in the “Maintenance of Traffic” (Lump Sum) pay item.

# FLOWABLE CONCRETE FILL

121

All work specified under this Section must conform to the requirements of Section 121 of the *FDOT Specifications*, except as amended herein. The work specified under this Section consists of the furnishing and application of Flowable Concrete Fill, as shown on the Plans, and as directed by the Engineer. The unit price must include all excavation to the springline of pipe, disposal of excess excavated soil, formwork if required, placement of flowable fill and all other operations required to protect the pipe. This Section must include all cost of the mixture, any ad-mixtures, cost for delivery, labor and finishing for Excavatable or Non-Excavatable Flowable Concrete Fill, as specified for the project. Any clean fine aggregate with 100% passing a 3/8 inch mesh sieve and not more than 10% passing the 200 mesh sieve may be used for the Fine Aggregate. High air generators or foaming agents may be used in lieu of conventional Air Entraining Admixtures and may be added at jobsite and mixed in accordance with manufacturer's recommendation.

## ***Mix Design***

Flowable Concrete Fill is a mixture of Portland cement, fly ash, fine aggregate, air entraining admixture and water. Flowable Concrete Fill contains a low cementitious content for reduced strength development. Submit mix designs to the Engineer for approval. If conditions warrant, an anti-washout admixture must be added to the mix design at the dosage rate of 3 gallons per cubic yard. This is an add-on product and must be specified when ordering.

## ***Production and Placing***

Deliver Flowable Concrete Fill using concrete construction equipment. Place Flowable Concrete Fill by chute, pumping or other methods approved by the Engineer. Revolution counter requirements are waived.

## ***Construction Requirements***

Use straps, soil anchors or other approved means of restraint to assure correct alignment when Flowable Concrete Fill is used as backfill for pipe or where flotation or misalignment may occur. Place Flowable Concrete Fill to the designated fill line without vibration or other means of compaction. Do not place Flowable Concrete Fill during inclement weather, e.g. rain or ambient temperatures below 40° F. Take all necessary precautions to prevent any damages caused by the hydraulic pressure of the fill during placement prior to hardening. Provide the means to confine the material within the designated space.

## ***Acceptance***

Leave the fill undisturbed until the material obtains sufficient strength. Sufficient strength is 35 psi penetration resistance as measured using a hand held penetrometer with FM 1-T 197. Provide a hand held penetrometer to measure the penetration resistance of the hardened Flowable Concrete Fill.

## ***Basis of Payment***

When the item of Flowable Concrete Fill is included in the Contract, payment will be made at the contract unit price per cubic yard. Such price and payment will include all cost of the mixture, in place and accepted, determined as specified above. No measurement and payment will be made for material placed outside the neat line limits or outside the adjusted limits, or for unused or wasted material.

# SUPERPAVE ASPHALT CONCRETE

The work specified under this Section consists of the construction of asphaltic concrete surface course, including, but not limited to, quality assurance, general construction requirements, and acceptance procedures, utilizing Superpave Asphaltic Concrete, Type SP-9.5, Type SP-12.5 or Type SP-19.0, in accordance with the applicable provisions of the Pinellas County, Florida, "SPECIFICATIONS FOR HOT BITUMINOUS MIXTURES, PLANT METHODS, EQUIPMENT AND CONSTRUCTION METHODS", latest edition. Reference in said document to fuel price adjustments are not applicable. For composition and physical test properties and all other parameters not covered by the above referenced Pinellas County Specifications, the SP mixes must comply with requirements of the **FDOT Specifications**, Section 334.

Asphaltic concrete surface course must be constructed in conformity with the lines, grades, notes and typical cross sections shown in the Plans, and as directed by the Engineer. Unless otherwise directed by the Engineer, installation of signal loops must be placed prior to final surface course. Loops must not be cut into the final surface course. After loop installation is complete, MEG readings must be performed according to **FDOT Specifications**. Payment for signal loops must be included in this Section, unless otherwise provided for in a different Section of this Contract.

All proposed asphalt patch and surfacing overlaid on existing pavement must be feathered smoothly (no irregular surface elevation differentials) into the existing pavement and requires a milled butt-joint, or as directed by the engineer.

The Contractor must be required to supply the County and its authorized representative testing laboratory the daily quality control test data immediately as it becomes available by facsimile or e-mail to both parties. The Bulk Specific Gravity ( $G_{mb}$ ) of the mixture supplied by the Contractor may be utilized by the County and its authorized representative testing laboratory to determine the volumetric properties of each production lot for acceptance purposes.

If directed by the Engineer, the Contractor may be required to supply the County (or its authorized representative testing laboratory) a test sample from each daily production lot. The sample must be taken whenever possible from the same truck that the Contractor obtains his daily quality control test sample. The County's sample must be a minimum of twenty thousand (20,000) grams, and must be stored in a minimum of four (4) separate containers designed to protect the sample from loss of material during transport. Each container must be clearly labeled with the following information: Producer's Name, Mix Type, and Date of Production. Immediately after the sample is obtained, the County's sample will be transported to the job site by the Contractor and delivered to the County Engineer on site. The Contractor (or his asphalt supplier) must mark the back of the delivery ticket of the tested truck, "TEST SAMPLE".

When the Bid Item Number specifies the quantity of the item in Square Yards, the "overlay" exception referenced in "Pinellas County Specifications for Hot Bituminous Mixtures, Plants Methods, Equipment and Construction Methods", latest edition," Section 3-15.8 does not apply to acceptance and payment for asphaltic concrete under this section.

The work specified under this Section includes the furnishing of material for, and the application of, all required tack coats. The tack coat requirements specified further below must take precedence over other specifications that may be found elsewhere in these specifications or in the plans, unless directed or approved by the engineer.

Tack Coat: The work under this Section must cover the furnishing and placing of a bituminous tack coat on an existing surface which is to be covered by a hot bituminous plant mix material. The work must include the cleaning of the existing surface prior to application of the tack coat. The area of treatment and the rate of application of a tack coat must be based on the plans and specifications after evaluating the actual surface condition on which the plant mix overlay is to be placed.

Recycled Asphalt Pavement – The recycled asphalt pavement (RAP) is restricted to twenty-five percent (25%), as shown in the Hot Bituminous Specifications located online at <http://www.pinellascounty.org/technical/>

**Materials:** The material must be an anionic emulsion (NTSS-1HM) blended to meet the following minimum requirements:

**TEST ON EMULSIFIED ASPHALT**

PARAMETER	TEST METHOD	MIN	MAX
VISCOSITY, SF @ 77° F, SEC	AASHTO T 59	25	500
STORAGE STABILITY 1 DAY	AASHTO T 59	-----	1.0 %
STORAGE STABILITY 5 DAY	AASHTO T 59	-----	5.0 %
RESIDUE BY EVAPORATION	AASHTO T 59	50%	-----
RESIDUE BY DISTILLATION	AASHTO T 59	50%	-----
NAPHTA CONTENT	AASHTO T 59	-----	1.0 %
SIEVE TEST	AASHTO T 59	*	*

\* The Sieve result is tested for reporting purpose only. Sieve test may be waived if no application problems are present in the field.

**TEST ON RESIDUE FROM DISTILLATION OF EMULSION**

PARAMETER	TEST METHOD	MIN	MAX
PENETRATION @ 77° F	AASHTO T 49	5	20
SOFTENING POINT	AASHTO T 53	65° C	-----
ORIGNAL DSR @ 86° C	AASHTO T 315	1.0	-----

**Construction Requirements**

(a) **EQUIPMENT.** It must be the Contractor's responsibility to select the proper size and amount of equipment to provide the desired results.

(b) **WEATHER AND TEMPERATURE LIMITATIONS.**

The bituminous tack material must be applied in conformity with the following:

**WEATHER -** Tack material must not be applied on an extremely wet surface or when weather conditions are determined not suitable by the Engineer.

**2. TEMPERATURE -** The atmospheric temperature should be 40° F and rising. This tack material must not be used for cold applied Asphalt pavements. This tack can be used with warm mix asphalt with lay down temperatures over 200F.

(c) **PREPARATION OF EXISTING SURFACE.**

Loose material, dust, dirt, and all foreign matter must be removed from the surface to be treated. Approval of

the surface before application of the tack material is required.

(d) APPLICATION.

Tack coat material must be applied in an amount from 0.04 gallons per square yard up to a maximum of 0.08 gallons per square yard for emulsified asphalt unless altered by the Engineer. Application temperature is 150° F to 180° F. An asphalt distributor must be provided for use on all accessible areas; inaccessible areas such as around manholes, etc. may be coated by other approved methods. When applying tack coat, it must be applied to all contact surfaces of curbs, gutters, manholes, and adjacent pavement edges, whenever and to the extent directed. Adjacent surfaces, such as gutters and the like, that is not to be in contact with the mix, must be adequately protected from the spray, by means of heavy paper securely fastened in place or other satisfactory means. Any such surface soiled by tack coat material must be cleaned and restored to its previous condition without additional compensation. Tack coat material must be spread only far enough in advance to permit the construction to progress consistently, uniformly, and continuously after the curing period. Tack coat must be fully cured not showing wet surface prior to placement of hot mix. Tack coat that has been damaged or worn off must be replaced without extra compensation.

SPECIAL NOTE: Pervious asphalt pavement shall be used only if specifically required in the construction drawings/plans. If so, the contractor shall abide by the dimensions, mix design and required properties specified in the plans.

***Basis of Payment:***

When the quantity for a pay item under this Section is shown in the Schedule of Values to be paid for per square yard, the pay quantity must be the number of square yards of Asphaltic Concrete, Type SP, at the thickness specified in the applicable pay item, actually constructed and accepted by the Engineer.

When the quantity for a pay item under this Section is to be paid for per ton, the weight of the mixture must be determined from batch weights, truck scale weights or other methods approved by the Engineer. Delivery tickets, in duplicate, signed by a sworn weigher, must accompany each load of material to the project site. One copy of the delivery ticket must be retained by the Contractor and one copy must be delivered to the Engineering Inspector. The total number of tons reflected in one set of all delivery tickets collected by the Inspector must be the measured pay quantity.

Basis of Payment Adjustment for Asphaltic Cement:

The bid unit price for asphaltic concrete materials will be adjusted in accordance with applicable provisions and requirements of the Florida Department of Transportation, Standard Specifications for Road and Bridge Construction, Section 9-2.1.2 and FDOT Road and Bridge Supplemental Specifications as amended herein.

For the purposes of unit price adjustment determination, the following conditions must be applicable:

1. The Bituminous Material, Asphalt Price Index (herein referenced (API) published monthly by the FDOT must be used for the adjustment of unit prices in accordance with FDOT Specification 9-2.1.2. The FDOT API in effect at the bid opening date will be used for initial determination of asphaltic material price.

2. The formula referenced in FDOT Section 9-2.1.2, Paragraph (d) must be modified as follows:

$P_a = AC_q (I_d - 1.05 I_b)$  during a period of increasing prices

$P_a = AC_q (I_d - 0.95 I_b)$  during a period of decreasing prices.

$P_a$  = Price adjustment for bituminous material, in dollars.

$AC_q$  = Quantity of Asphalt Cement, in gallons.

$I_b$  = API during the month in which bids were opened for this contract.

$I_d$  = API during the month material is incorporated into the project.

3. Asphaltic Concrete, for which the unit price is per square yard, must be assumed to weigh one hundred (100) pounds per inch of thickness per square yard and asphaltic cement to weigh 8.58 pounds per gallon. With



concurrence from the Contractor, in order to simplify calculations, the Engineer must have the option of determining the Price Adjustment based on either Square Yards of actual installed material or Tons of actual installed material.

4. Calculation of AC<sub>q</sub> (Quantity of Asphalt Cement) must be based on the Contractor's approved mix design Asphalt Content, percentage by weight of total mix.

No adjustment in bid prices will be made for either tack coats or prime coats.

The contractor must not be paid for quantities surpassing the "Maximum Yield" in the following table.

Specified Thickness (Inches)	Target Yield (Lb/Sq. Yd)	Maximum Yield (Lb/Sq. Yd)
1	100	110
1.25	125	137.5
1.5	150	165
1.75	175	193
2	200	220

7. Price adjustment must be calculated and recorded as the bituminous material is incorporated into the project, however, the actual price adjustments will be processed on the contract's final pay request that is reviewed and approved by the County.

# **MILLING AND RESURFACING OF EXISTING ASPHALTIC CONCRETE PAVEMENT AND ROADWAY BASE**

380

The work specified under this Section consisting of the removal of existing asphaltic concrete pavement and roadway base, and the application of new surface course(s), must conform to the requirements of Section 327 of the *FDOT Specifications*, as amended herein.

## ***MILLING OPERATIONS***

### **A. Equipment**

The equipment for the milling operation must include a machine capable of maintaining a depth of cut and cross slope which will achieve the results specified herein. The machine must be equipped with automatic grade controls which operate by sensing from one or more skids moving along the pavement surface, and which must produce, where required, a skid-resistant surface texture. The machine must be equipped with a means to effectively limit the amount of dust escaping from the removal operation. Special attention is directed to the fact that, if the machine is equipped with preheating devices, local environmental and other regulations governing operation of this type of equipment may vary considerably from place to place. It must be the Contractor's responsibility to be familiar with, and to comply with, all such local regulations, as well as State and Federal rules, and to obtain all permits required for the operation of such equipment.

### **B. Construction**

The existing pavement and base must be removed to varying depths in a manner which will restore the pavement surface to a uniform longitudinal profile and cross-section as specified herein. Where indicated in the Plans, removal must be to a specified depth and must produce a specified cross slope. The longitudinal profile of the milled surface must be established by skid sensor on the side of the cut nearest the centerline of the road. The cross slope of the milled surface must be established by a second skid sensing device near the outside edge of the cut or by an automatic cross slope control mechanism. The Engineer may waive the requirements for the automatic grade or cross slope controls where the situation warrants such action. The milling pattern, in conjunction with the pavement lay-down operation, must be approved by the Engineer prior to starting each phase.

If approved by the Engineer, the Contractor may elect to make multiple cuts to achieve the required pavement configuration or depth of cut.

The forward speed of the milling machine may be restricted by the Engineer to assure an acceptable finished surface.

Existing signal loops are to be located in the field prior to milling. Installation of signal loops must be placed prior to final resurfacing course. Loops must not be cut into the final surface course. After loop installation is complete, MEG readings must be performed according to *FDOT Specifications*. Payment for signal loops must be included in this Section, unless otherwise provided for in a different Section of this Contract.

Replacement of existing traffic loops must immediately follow milling operations. Any cut loops must be replaced within two (2) calendar days. For each day after the two (2) day period that the cut loops are not replaced, the Contractor must be assessed the amount of one thousand (\$1,000.00) dollars per day. Payment to the County of such sums as may become payable under the provisions of this article must be made by identifying the said sums as a credit item on the Contractor's final pay estimate.

The County will have the right to apply as payment on such damages any money which is due to the Contractor by the County.

The milling machine must be operated to effectively minimize the amount of dust being emitted from the machine. Pre-wetting of the pavement may be required.

Prior to opening to traffic an area which has been milled (except for areas in which the roadway base is temporarily exposed), the pavement must be thoroughly swept with a power broom or other approved equipment to remove to the greatest extent practicable, fine material which will dust under traffic. This operation must be conducted in a manner such as to minimize the potential for traffic hazards and pollution to the air.

Sweeping of the milled surface with a power broom must be required prior to the placement of new surface course.

At the time of paving operations, immediately prior to placement operations, the use of a pick-up sweeper will be required in areas as directed by the Engineer. Special care must be taken to clean all loose material from the area adjacent to the curb and gutter prior to paving operations.

### **C. Finished Surface**

If the milled surface is to be the final surface of the pavement, it must have either continuous or intermittent striations or any other preapproved pattern which will provide an acceptable level of skid resistance. If pavement is to be constructed over the milled surface it must have a texture which will produce good bonding.

The finished surface must have a reasonably uniform texture, must be within 1/4 inch of a true profile grade, and must have no deviation in excess of 1/4 inch from a straight edge applied to the pavement perpendicular to the centerline. Areas varying from a true surface in excess of the above stated tolerance may be accepted without correction if the Engineer determines that they were caused by preexisting conditions which could not reasonably have been corrected by the milling operations. Any unsuitable texture or profile, as determined by the Engineer, must be corrected by the Contractor at no additional expense to the County.

The Engineer may require the re-milling of any area in which a surface lamination causes a non-uniform texture to occur.

### **D. Salvageable Materials**

All surplus existing materials resulting from milling operations, except those materials designated by the Engineer as deleterious materials, must remain the property of the County, unless otherwise specified for the project.

All salvageable materials claimed by the County must be transported to and stockpiled at locations specified for the project.

The transporting and stockpiling of salvageable materials must be performed by the Contractor and included in the unit cost of milling pay items. The method of handling and stockpiling of salvageable materials must be pre-approved by the Engineer.

**E. Disposable Materials**

All surplus materials not claimed by the County must become the property of the Contractor, and must be disposed of by the Contractor in off-site areas provided by the Contractor.

**F. Coordination of Milling Operations and Paving Operations**

No milled surface must be left open to vehicular traffic for a period greater than five (5) consecutive calendar days. For each day after the five (5) day period that the milled surface is left open to vehicular traffic, the Contractor must be assessed the amount of two thousand (\$2,000.00) dollars per day. Payment to the County of such sums as may become payable under the provisions of this article must be made by identifying the said sums as a credit item on the Contractor's final pay estimate.

**ADJUSTMENT OF UTILITIES**

All utilities and related structures requiring adjustment must be adjusted by their owners at the owner's expense. The Contractor must arrange his schedule to allow utility owners the time required for such adjustments. All utility adjustments must be completed prior to the commencement of milling and resurfacing operations. Contractor must confirm, prior to commencing milling operations that proposed milling does not negatively affect a utility.

**RESURFACING**

After the milled areas are declared by the Engineer to be suitably prepared for resurfacing operations, and all utility adjustments have been completed to the satisfaction of the Engineer, the areas must be resurfaced in accordance with the materials and thicknesses specified in other applicable Sections of these Specifications.

Prior to installation of the resurfacing material, the milled surfaces must be thoroughly cleaned of all dust and loose material, and a uniform application of tack must be applied as specified in the *Pinellas County Specifications for Hot Bituminous Mixtures, Plant Methods, Equipment and Construction Methods*, latest edition, Section 3-7, at a rate of 0.04 to 0.06 gallons per square yard.

The "overlay" exception referenced in *Pinellas County Specifications for Hot Bituminous Mixtures, Plants Methods, Equipment and Construction Methods*, latest edition, Section 3-15.8 does not apply to acceptance and payment for asphaltic concrete under this section.

**Basis of Payment**

The pay quantity for work specified under this Section must be the number of square yards of milling, of the various materials and the thicknesses thereof specified in the applicable pay items shown in the Schedule of Values, completed and accepted. For milling and resurfacing work order contracts, the total milling and asphalt quantities being used in each individual work order (i.e., roads, turnouts, driveways, etc.) will be totaled, and only one asphalt pay item and one milling pay item must be used for the entire work required for completion of the work order. The specific roadways, turnouts and driveways to be milled and paved in a work order must be decided on a case-by-case basis in the field as directed by the Engineer.

The work specified under this Section for milling operations must be paid for under the various pay items shown in the Schedule of Values for:

Mill Existing Asphalt Pavement

Mill Existing Asphalt Pavement and Shell Base

No payment must be made under this Section for work related to resurfacing operations. All payment for

# **UNSPECIFIED WORK (ALLOWANCE)**

999-0000

The work under this Section includes an allowance for any unspecified work that may be associated with the work in this contract or as otherwise identified by the Engineer. Any amount of extra work and/or alterations to this contract charged to the allowance "Unspecified Work" must be fully documented and approved in writing, in advance, by the Engineer. All work performed under the allowance of "Unspecified Work" must be completed in accordance with all conditions and requirements of this contract and must include the work to be done by all necessary subcontractors and/or suppliers.

"Unspecified Work" must mean the stated fixed sum of money to be used only at the Engineer's specified direction. The particular requirements and items for the allowances will be provided to the Contractor at the appropriate time and must apply only to additional items over and above those specified/indicated in the plans for this contract.

For equipment under the control of the Contractor through direct ownership, leasing, renting or other method of acquisition not included in the bid, the Contractor must furnish cost data, which may assist the Engineer in the establishment of an equitable rate.

## ***Time Frame***

When Contractor is requested, in writing by the County, to provide a cost for unspecified work, the Contractor will provide a submittal of the cost to the County within 21 calendar days of receiving written request. After receipt of the Contractor's cost submittal, the County will have 21 calendar days to negotiate, approve or reject the Contractor's cost for proposed work in accordance with the contract specifications. If the County provides to the Contractor written approval of Contractor's cost submittal for proposed unspecified work, then the Contractor may proceed with commencing the unspecified work.

## ***Basis of Payment:***

The work in this Section must be paid for by a portion of the allowance under "Unspecified Work" in the Schedule of Values of this contract. Use of any portion of this pay item must require written pre-approval by the Engineer. This work, materials, and equipment, when required, will be ordered in writing by the Engineer, at a lump sum price or at a non lump sum price. Price negotiations will consider reasonable market values (at the time of construction) for proposed items.

## **Lump Sum**

When a lump sum price is used, the lump sum price will be determined by negotiation, and only require written pre-approval by the Engineer as backup documentation for payment purposes.

## **Non Lump Sum**

When a non lump sum price is used, compensation must be limited to the Contractor's reasonable costs plus markup percentages stipulated in this contract. The basis of the non lump sum negotiated prices and subcontractor invoices will be included in pay application; Copies of invoices, equipment cost estimations and other supporting documentation will be included.

## **Payment Item**

Item No. 999-0000      Unspecified Work – per each