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August 20, 2021

ADDENDUM NO. 02
TO
SPECIFICATIONS AND CONTRACT DOCUMENTS
FOR
INVITATION TO BID
SSA JACKSONVILLE CONTAINER TERMINAL
CONTAINER YARD IMPROVEMENTS
JPA CONTRACT NO. C-1772

The item(s) of this Addendum shall modify and become a part of the contractual documents for this project as of this date. (Failure to acknowledge this addendum will be grounds for rejection of proposal.)

PHYSICAL CHANGES TO CONTRACT SPECIFICATIONS

Item No. 01
ADD Drawing Sheet 74 of 115 001-C-4001

Item No. 02
Reference to Drawing 001-C-5301, Sheet 79 of 115 **DELETE** and **REPLACE** with **REVISED** Drawing 001-C-5301, Sheet 79 of 115

Item No. 03
Reference to Specifications, Section 32 12 16 Asphalt Paving **DELETE** and **REPLACE** with **REVISED** Specifications, Section 32 12 16 Asphalt Paving

ATTACHMENTS TO CONTRACT SPECIFICATIONS

Attachment No. 01
Response to Questions

Attachment No. 02
Drawing Sheet 001-C-4001

Attachment No. 03
"Revised" Specifications, Section 32 12 16 Asphalt Paving

Attachment No. 04
"Revised" Drawing 001-C-5301

Attachment No. 05
Specifications, Section 01 29 00 Payment Procedures

Attachment No. 06
Schedule of Value (SOV) Form

Attachment No. 07
Specifications, Section 01 50 00 Temporary Facilities and Controls

Acknowledgment of the following addenda is hereby made:

Addendum #2, Dated: _____ Initials _____

Company _____

NOTE: THIS ADDENDUM SHALL BE ACKNOWLEDGED IN YOUR BID SUBMISSION, FAILURE TO ACKNOWLEDGE ADDENDUM WILL BE GROUNDS FOR REJECTION OF BID.

PLEASE VISIT http://www.jaxport.com/procurement/active-solicitations OR CALL THE PROCUREMENT DEPARTMENT AT (904) 357-3017, PRIOR TO THE BID OPENING TO DETERMINE IF ANY ADDENDA HAVE BEEN RELEASED ON THIS CONTRACT.

Attachment No. 1

Post Office Box 3005
2831 Talleyrand Avenue
Jacksonville, Florida 32206-0005

INVITATION TO BID

JPA CONTRACT NO.: C-1772
SSA JACKSONVILLE CONTAINER TERMINAL – CONTAINER YARD IMPROVEMENTS

RESPONSE TO QUESTIONS

1. Per the project plans, 2 FDOT mix designs are needed.
   1) 19.0mm with 67
   2) FC 12.5 with 76

   Per the project specs,

   Design Criteria: (page 9 of the workbook)
   1. Superpave Method, AI SP-2, AASHTO R35:
   a. Design Gyrations, NDES: 125 average for PG 76M and
   100 average for PG70.
   Is the 12.5 surface mix with 76, considered 76M? FDOT does not spec any mixes at 125 gyrations @ Ndesign, 100 is their max.

   ANSWER:
   The two mixes shall be FC 19.0 with PG-67 and FC 12.5 with PG-76M. The 'M' designates that AASHTO R35 max N_{design} value of 125 shall be used for gyratory compaction instead of the FDOT max value. Specification Section 32_12_16B is updated as attached.

2. D. Aggregate: (page 14 of the workbook)
   1. As specified in the Standard Specifications. RAP material may be used
   up to a maximum of 25 percent by total weight
   FDOT allows a maximum of 15% RAP in mixes with 67-22 binder.
   FDOT allows a maximum of 20% RAP in surface mixes.
   4. Natural Sand: Shall not be used (page 14 of the workbook)
   FDOT allows natural sand as long as F.A.A is 45 or above. (same as what these specs require)
   If natural sand is out, can a commercial sand be used?

   ANSWER:

   1. Regarding use of RAP, the provisions of the FDOT Standard Specifications shall apply. The Project Specification Section 32_12_16B has been updated accordingly.
   4. Natural sand with FAA of 45 or above is acceptable. The Project Specifications Section 32_12_16B has been updated accordingly.

3. (page 15 of the workbook)
   B. Asphalt Concrete: As shown, the mix shall be an open graded mix with a 100 percent passing the 19 mm sieve. Florida Mix SP 19 with a PG-67 binder
   An SP 19 is not an open graded mix, an SP 19 with 100% passing the 19mm sieve would be an SP 12.5. Please clarify.

   ANSWER:
   For clarity, the Section of the Project Specification referred to in this question is 32_12_16B and Paragraph 2.03 refers to the resin modified pavement. Paragraph 2.03 has been updated to include SP 12.5 with a PG 76-22 binder.

4. Are the CAD files available for this project? If so, could you please upload them to E-Builder for us to download.
   ANSWER:
   As noted on Drawing 000-G-0006, "SITE SURVEY CAD FILES WITH EXISTING SITE LAYOUT WILL BE PROVIDED TO CONTRACTOR UPON ENGINEER'S RECEIPT OF SIGNED DISCLAIMER." It is expected that the survey drawings will be of greatest value to the successful bidder. CAD drawings are not available to all bidders and requestees to protect intellectual property.

5. Is there an engineer's estimate to go with this job?
   ANSWER:
   This question will be addressed in Addendum No. 03.

6. What is the anticipated schedule for this job? What milestones for each phase are you trying to achieve?
   ANSWER:
   All seven (7) phases of the project shall be completed within three (3) years of notice to proceed, as stated in the Invitation to Bid. Refer to Item 1 of the Special Conditions for the duration of each phase; and Article 3 of The Agreement. Per the BUILD Grant Agreement, project substantial completion milestone is defined as December 30, 2024.

7. With current market conditions in mind, is there a plan to cover increased material prices over the life of the job?
   ANSWER:
   The project is lump sum. Refer to Article 4 of The Agreement for how asphalt will be indexed and how to reflect indexed pricing on the Bid Form. The attached Specification 01_29_00B and accompanying Schedule of Values (submitted to the Construction Manager) will support your bid assumptions.

8. What is the engineer's estimate for the project?
   ANSWER:
   See response to question 5.

9. How do we obtain the CAD files for the project?

ANSWER:
See response to question 4.

10. The specifications for the RMP (Resin Modified Pavement) as per the UNIFIED FACILITIES GUIDE SPECIFICATIONS are not included. They were provided to designer and waiting to have them posted. Will the specifications be posted?

    ANSWER:
    The specifications for the resin modified pavement are included in updated Specification Section 32_12_16B attached. The UFGS is not included in the Project Specifications, but reference is made to it. Compliance with UFGS shall be based on resin manufacturer's recommendations, as noted in the Project Specifications.

11. Are there any additional specifications, gradations, and/or thickness for the Resin Modified Asphalt that can be provided?

    ANSWER:
    See response to question 11. Revised Drawing 001-C-5301 attached provides further clarification.

12. Will JAXPORT keep any of the millings on the project?

    ANSWER:
    JAXPORT has no intention of keeping excess or waste materials. These shall be disposed of in accordance with the Project Specifications.

13. Regarding the insurance requirements, will all subcontractors of the Prime be required to carry the same insurance as the Prime , (i.e. OCP, Pollution Liability, Umbrella), along with the same limits?

    ANSWER:
    The Prime contractor should evaluate each subcontractor's work and set insurance coverage and limits as the Prime decides is necessary before work begins at JAXPORT. JAXPORT should be added as an additional insured with a waiver of subrogation endorsement on all subcontractors general liability policies. The insurance limits identified in contract C-1772 are the minimum insurance limits needed by the Prime contractor.

14. The OCP policy has a $5M per occurrence limit. What is the aggregate limit?

    ANSWER:
    $10M is the aggregate

15. Details 1 and 2 on drawing 001-S-5005 require the collars to extend 24"-48" outside of the edge of the existing drainage structure. Please provide outside dimensions for the existing drainage structures as this information is required in order to calculate the correct collar size and adjustments. If this information is unavailable please provide an assumed dimension for bidding purposes.

    ANSWER:
    Drawing 001-S-5005 standardizes the sizes of frames and grates as shown in the table 'Structure Dimensions' on same drawing. The collars extend from the perimeter of the new frames as shown

in Section A on same drawing. The correct collar size can be estimated from the dimensions given in the aforementioned table.

16. Are the existing structure collars the same thickness as the proposed collars (1'-6)?

    ANSWER:
    There are a variety of drainage structures on the Project site installed at various times during the terminal's life. Therefore, the thickness of the existing collars is unknown. The intent of the project is to replace existing collars with new collars with a consistent thickness of 18 inches.

17. Can new drainage structure collars be precast in lieu of cast in place as long as the same specifications are met?

    ANSWER:
    Precast is acceptable if performed at no additional cost to Owner and seated properly on foundation materials. The intent of the collar details is to standardize the size of frames and grates.

18. Will the contractor be responsible for cleaning/removal of existing situation and debris from the storm drainage system?

    ANSWER:
    As noted in the Contract Conditions and the Technical Specifications, the Contractor is required to substantially complete each phase by leaving the phase in a cleaned condition satisfactory to the Owner and Tenant. This shall be partially achieved by implementing a robust sediment protection plan as is required by Specifications and is standard practice. Thus, the Contractor is responsible for minimizing accumulation of sediments in the storm water drainage system and for removal of siltation and debris at the completion and handover of each phase. Clean up of existing conditions, if necessary, shall be included in the bid price as stated in the Technical Specifications.

19. Some of the structure dimensions provided on drawing 001-S-5005 do not match the dimensions for the grate specified on drawing 001-C-5803 (i.e. inlet #5 calls for a Neenah R-3475-F which has outside frame dimensions of 44-1/8"x57", the dimensions on drawing 001-S-5005 are 38"x50-7/8"). Please confirm that collars are to be constructed to match grate/cover dimensions.

    ANSWER:
    The dimensions shown on the Drawings are correct and there is a mistake in the Neenah catalogue for the R-3475-F grate assembly. For example:

    R-3475-E is single grate; 38" x 26 7/8"
    R-3475-F is a double grate but dimensioned incorrectly in catalogue
    R-3475-G is a triple grate; 38" x 74 7/8"
    Thus R-3475-F should be 38" x 50 7/8"

    The Neenah webpage shows the correct detail.
    https://www.nfco.com/products/airport-castings/inlets/r-3475-f/

20. Notes EN-3, EN-4, EN-6 and EN-7 on drawing 000-G-0003 direct the contractor to stockpile excavated limerock and suitable/unsuitable excavated material. Is the intent that Jaxport will retain all excess material generated?

    ANSWER:

JAXPORT has no intention of keeping excess or waste materials. These shall be disposed of in accordance with the Technical Specifications.

21. Note EN-3 states that excavated limerock base may be reused to improve subgrade if specified compaction cannot be achieved. Will Jaxport establish a separate allowance for removal of unsuitable material and replacement with excavated limerock?

    ANSWER:
    Refer to the Geotechnical Report (Reference B) for guidance on expectations for subgrade improvement. Contractor shall include allowance in lump sum price.

22. Section 32 11 23 Part 2.01A of the specification states that the base course shall have a minimum LBR of 160. Per the FDOT specifications Group 1 graded aggregate base is required to have a minimum LBR of 100. Please clarify what the LBR requirements are for the base course.

    ANSWER:
    LBR 100 is the correct value.

23. In Jacobs plans the drawings go from page 73 which shows DWG 001-C-3006. The next drawing in the downloaded plans is DWG 001-C-4002. Drawing Page 74, which would be DWG 001-C-4001 seems to be missing?

    ANSWER:
    Drawing 001-C-4001 is attached and shall be deemed included in the bid set of Drawings.

24. In regard to the demolition portions of the scope, will the buildings/structures be empty of all material and debris?

    ANSWER:
    The buildings identified for demolition will be emptied of materials required by Owner and/or Tenant including fixtures, equipment, stored materials and debris. All material remaining shall be disposed of by the Contractor.

25. Please refer to the Bidders Minimum Requirements portion of the bid package. Item 6 calls for the Bidder to list a minimum of eight (8) projects similar in nature to this project with a contract value over $30,000,000.00. Based on that criterial, we will not be able to meet this requirement. Please consider reducing the number of $30,000,000.00 projects to three (3) and require Bidders or their Subcontractor be FDOT qualified for Grading, Hot Plant-Mixed Bitum. Courses, Electrical, and Drainage and require Bidders to submit a letter from their bonding agency stating they meet a minimum single project bonding capacity of $100,000.00 and that they will bond the project.

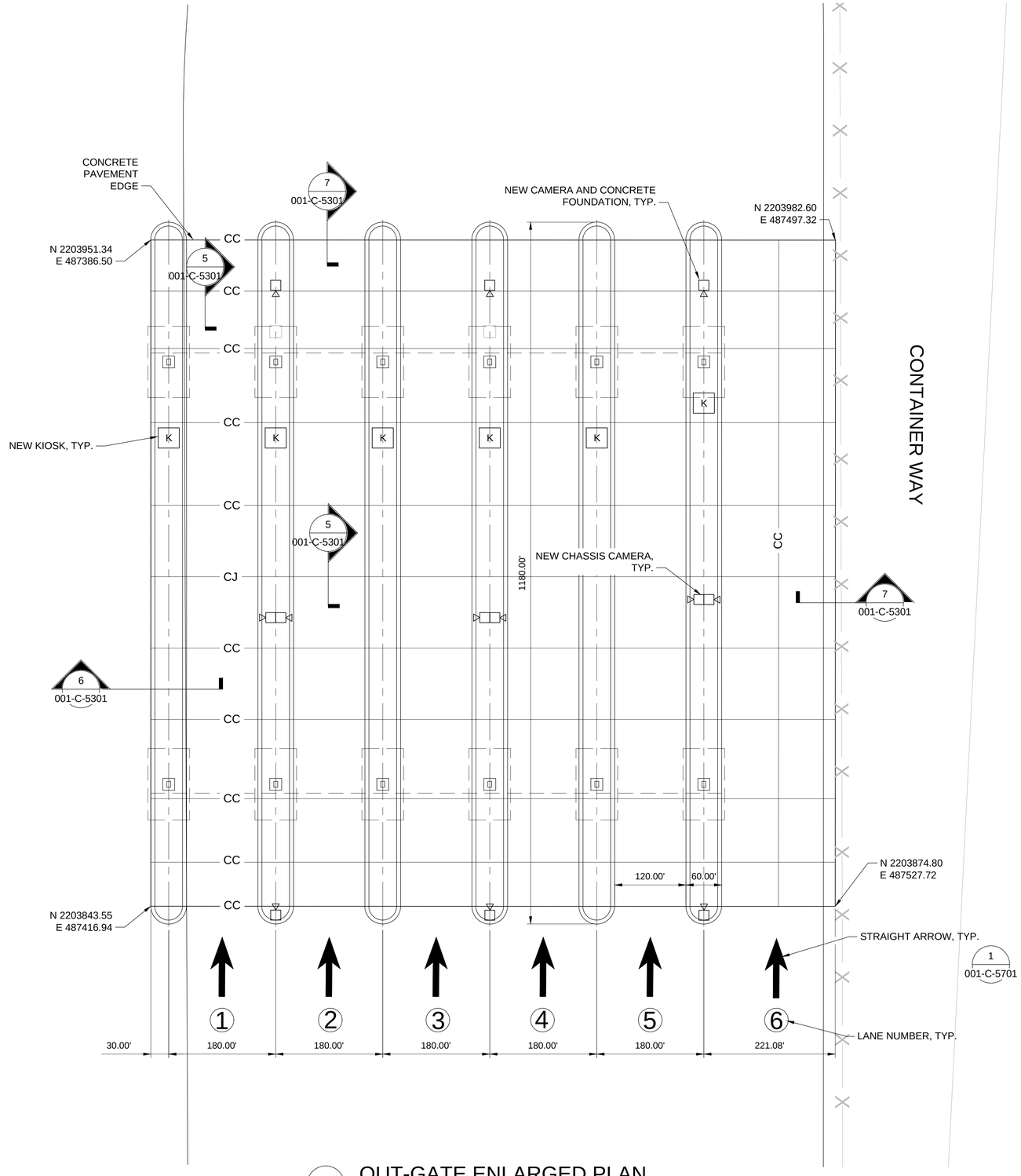
    ANSWER:
    JAXPORT agrees to reduce the number of projects of a similar nature to a minimum of three (3) with a contract value over $30,000,000. Bonding requirements and capacity will remain unchanged.

26. Are there any stabilization requirements for the subgrade?

    ANSWER:
    There are no stabilization requirements for the subgrade. Refer to Specifications for preparation of the subgrade.

NOTES:

1. SEE DRAWINGS 001-E-3001 THROUGH 001-E-3004 FOR OUTGATE ELECTRICAL AND COMMUNICATION INFORMATION.
2. KIOSK AND CAMERA EQUIPMENT BY OTHERS (TIDEWORKS).



1 OUT-GATE ENLARGED PLAN
1" = 10'-0"

ABBREVIATIONS

CC	CONTRACTION JOINT
CJ	CONSTRUCTION JOINT

N

0 10 20 30
1"= 10'

NO.	DATE	DSGN	DR	CHK	APVD
0	05/26/2021	C. DORANG	T LUEHRS	M HOLMQUIST	P STARR
	ISSUED FOR BID		REVISION		
		PS	BY	Y	APVD

CONTAINER YARD IMPROVEMENTS
SSA JACKSONVILLE CONTAINER TERMINAL
SSA ATLANTIC - JAXPORT
JACKSONVILLE, FLORIDA

Jacobs

CIVIL

ENLARGED OUT-GATE PLAN

1"=10'
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	05/26/2021
PROJ	EGXL5900
DWG	001-C-4001
SHEET	74 OF 115

ISSUED FOR BID

SECTION 32 12 16
ASPHALT PAVING

PART 1 GENERAL

1.01 REFERENCES

A. The following is a list of standards which may be referenced in this section:

1. American Association of State Highway and Transportation Officials (AASHTO):
   a. M17, Standard Specification for Mineral Filler for Bituminous Paving Mixtures.
   b. M81, Standard Specification for Cut-Back Asphalt (Rapid Curing Type).
   c. M82, Standard Specification for Cut-Back Asphalt (Medium Curing Type).
   d. M140, Standard Specification for Emulsified Asphalt.
   e. M156, Standard Specification for Requirements for Mixing Plants for Hot-mixed, Hot-laid Bituminous Paving Mixes.
   f. M208, Standard Specification for Cationic Emulsified Asphalt.
   g. R35, Standard Practice for Superpave Volumetric Design for Hot Mix Asphalt.
   h. T166, Standard Method of Test for Bulk Specific Gravity (Gmb) of Compacted Hot Mix Asphalt (HMA) Mixtures Using Saturated Surface-Dry Specimens.
   i. T176, Standard Method of Test for Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test.
   j. T209, Standard Method of Test for Theoretical Maximum Specific Gravity (Gmm) and Density of Hot Mix Asphalt (HMA).
   k. T247, Standard Method of Test for Preparation of Test Specimens of Hot Mix Asphalt (HMA) by Means of California Kneading Compactor.
   l. T283, Standard Method of Test for Resistance of Compacted Hot Mix Asphalt (HMA) to Moisture-Induced Damage.
   m. T304, Standard Method of Test for Uncompacted Void Content of Fine Aggregate.
   n. T312, Standard Method of Test for Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of a Superpave Gyratory Compactor.

2. Asphalt Institute (AI):
   a. Manual Series No. 2 (MS-2), Mix Design Methods for Asphalt Concrete.
   b. Superpave Series No. 2 (SP-2), Superpave Mix Design.
3. ASTM International (ASTM):
   a. C150/C150M, Standard Specification for Portland Cement.
   b. C618, Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.
   c. D75, Standard Method of Test for Sampling of Aggregates.
   d. D140, Standard Method of Test for Sampling Bituminous Materials.
   e. D979, Standard Method of Test for Sampling Bituminous Paving Mixtures.
   f. D2041, Standard Test Method for Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures.
   g. D2489, Standard Method of Test for Determining Degree of Particle Coating of Asphalt Mixtures.
   h. D4318, Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
   i. D4791, Standard Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate.
   j. D5821, Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate.
   k. E329 REV A, Standard Specification for Agencies Engaged in Construction Inspection Testing, or Special Inspection.
4. Florida Department of Transportation: Standard Specifications for Road and Bridge Construction, January 2021.
~~4.~~5. Unified Facilities Guide Specifications: UFGS-32 12 18 Resin Modified Surfacing Material, August 2008.

1.02 DEFINITIONS

A. Combined Aggregate: All mineral constituents of asphalt concrete mix, including mineral filler and separately sized aggregates.

B. Macadam: A mixture of soil aggregate and coarse aggregate.

C. Maximum Aggregate Size: One sieve size larger than the nominal aggregate size.

D. Nominal Aggregate Size: One sieve size larger than the first sieve that retains more than 10 percent aggregate.

E. Prime Coat: Low viscosity cutback or emulsified asphalt applied to granular base in preparation of paving to coat and bond loose materials, harden the surface, plug voids, prevent moisture migration, and provide adhesion.

F. Reclaimed asphalt pavement (RAP): Removed and/or processed pavement materials containing binder and aggregate.

G. Resin Modified Pavement: Pavement modified with epoxy resin and epoxy grout applied to an open graded asphalt mix.

H. Seal Coat: Term used for various applications of emulsified asphalt, with or without sand or aggregate, to protect the asphalt surface from aging due to wear, degradation from the sun, wind, and water. Also used to improve skid resistance and aesthetics. The term seal coat can be used to define fog seal, slurry seal, chip seal or sand seal, depending on application.

I. Standard Specifications: When referenced in this section, shall mean Florida Department of Transportation Standard Specifications for Road and Bridge Construction, January 2021.

J. Tack Coat: Thin layer of emulsified asphalt applied to hard surfaces, including new pavement lifts, to promote adhesion and bonding.

1.03 DESIGN REQUIREMENTS

A. Prepare asphalt concrete mix design, meeting the following design criteria, tolerances, and other requirements of this Specification.

B. Design Criteria:

1. Superpave Method, AI SP-2, AASHTO R35:
   a. Design Gyrations, NDES: 125 average for PG 76M and 100 average for ~~PG70~~PG67.
   b. Coarse Aggregate Angularity, ASTM D5821: One or more fractured faces 95 percent minimum; two or more fractured faces 90 percent, minimum.
   c. Fine Aggregate Angularity, AASHTO T304: 45 percent below 4 inches (100 mm) from surface and 45 percent above 4 inches (100 mm) from surface.
   d. Flat and Elongated Particles, ASTM D4791: 8 percent, maximum.
   e. Clay Content, AASHTO T176: Minimum sand equivalent of 45 percent.
   f. Voids in Mineral Aggregate: See Table 1.
   g. Voids Filled with Asphalt: 70 percent to 80 percent.

h. Mixture Density as a Percentage of Theoretical Maximum Density at Initial Gyration Level: 89 percent, maximum.
i. Mix Density at Maximum Number of Gyrations: Less than 98 percent of theoretical maximum density.
j. Dust Proportion: 0.8 to 1.6.
k. Air Voids: 4 percent.
l. Tensile Strength Ratio, AASHTO T283: 80 percent, minimum.

Table 1
Voids in Mineral Aggregate (VMA) Criteria

Nominal Maximum Aggregate Size (mm)	Minimum VMA, Percent
1/2" (12.5)	14
3/4" (19.0)	13
1-1/2" (37.5)	11

C. Furnished Mix Tolerances:

1. Conform to asphalt concrete mix formula within the following, plus or minus:
   a. Aggregate Passing No. 4 (4.76 mm) and Larger Sieves: 5 percent.
   b. Aggregate Passing the No. 8 (2.38 mm) to No. 100 (150 μm) Sieves: 4 percent.
   c. Aggregate Passing the No. 200 (75 μm) Sieve: 2 percent.
   d. Bitumen Content: 0.3 percent of volume or batch weight of aggregate.
   e. Temperature Leaving Mixer: Plus or minus 20 degrees F (11 degrees C).
   f. Temperature in Paving Machine Hopper: Plus or minus 20 degrees F (11 degrees C).

1.04 SUBMITTALS

A. Informational Submittals:

1. Asphalt Concrete Mix Formula:
   a. Submit minimum of 15 days prior to start of production.
   b. Submittal to include the following information:
      1) Gradation and portion for each aggregate constituent used in mixture to produce a single gradation of aggregate within specified limits.
      2) Bulk specific gravity for each aggregate constituent.

3) Measured maximum specific gravity of mix at optimum asphalt content determined in accordance with ASTM D2041.
4) Properties as stated in this section for at least four different asphalt contents other than optimum, two below optimum, and two above optimum.
5) Percent of asphalt lost due to absorption by aggregate.
6) Index of Retained Strength (TSR) at optimum asphalt content as determined by AASHTO T283.
7) Percentage of asphalt cement, to nearest 0.1 percent, to be added to mixture.
8) Optimum mixing temperature.
9) Optimum compaction temperature.
10) Temperature-viscosity curve of asphalt cement to be used.
11) Brand name of any additive to be used and percentage added to mixture.

2. Resin Modified Pavement Mix:
   a. Submit minimum of 15 days prior to start of production.
   b. Submittal to include the following information:
      1) Gradation and portion for each aggregate constituent used in mixture to produce a single gradation of aggregate within specified limits.
      2) Bulk specific gravity for each aggregate constituent.
      3) Measured maximum specific gravity of mix at optimum asphalt content determined in accordance with ASTM D2041.
      4) Properties as stated in this section for at least four different asphalt contents other than optimum, two below optimum, and two above optimum.
      5) Percent of asphalt lost due to absorption by aggregate.
      6) Index of Retained Strength (TSR) at optimum asphalt content as determined by AASHTO T283.
      7) Percentage of asphalt cement, to nearest 0.1 percent, to be added to mixture.
      8) Optimum mixing temperature.
      9) Optimum compaction temperature.
      10) Temperature-viscosity curve of asphalt cement to be used.
      11) Brand name of any additive to be used and percentage added to mixture.
      12) Cement used in the slurry.
      13) Fly ash.
      14) Sand for slurry grout.
3. Test Report for Asphalt Cement:
   a. Submit minimum 10 days prior to start of production.

b. Show appropriate test method(s) for each material and the test results.

4. Manufacturer's Certificate of Compliance, in accordance with Section 01 61 00, Common Product Requirements, for the following materials:
   a. Aggregate: Gradation, source test results as defined in the Standard Specifications.
   b. Asphalt for Binder: Type, grade, and viscosity-temperature curve.
   c. Prime Coat: Type and grade of asphalt.
   d. Tack Coat: Type and grade of asphalt.
   e. Additives.
   f. Mix: Conforms to job-mix formula.
   g. Polymer resin.
   h. Slurry grout.
   i. Cement.
   j. Curing compound.
5. Statement of qualification for independent testing laboratory.
6. Test Results:
   a. Mix design.
   b. Asphalt concrete core.
   c. Gradation and asphalt content of uncompacted mix.
   d. Field density.
7. Quality control.
8. Experience of Resin Modified Pavement:
   a. Ten years of experience in resin modified pavement manufacturing and placement.
   b. Five successful port/airport applications within the last 5 years.

1.05 QUALITY ASSURANCE

A. Qualifications:

1. Independent Testing Laboratory: In accordance with ASTM E329 REV A.
2. Asphalt concrete mix formula shall be prepared by approved certified independent laboratory under the supervision of a certified asphalt technician.

B. Compaction Control Strip:

1. General:
   a. Construct to approximately 400 square yards in area and at location that will become a portion of completed paved area.
   b. Thickness: Typical of thickness to be paved on Project.

2. Rollers Used for Compaction:
   a. Steel Wheel Rollers: Minimum static weight 10 tons (9 mg).
   b. Pneumatic Rollers: Capable of exerting pressure of 80 psi (550 kPa) on bituminous surface.
   c. Vibratory Rollers: Static weight minimum 6 tons (5.5 mg), capable of applying a 10-ton (9-mg) impact force equipped with amplitude and frequency control specifically designed for compaction of bituminous mixtures.
3. Compaction:
   a. Compact bituminous mat, using a standard rolling pattern that covers entire control strip. Request that independent testing laboratory performs final density test.
   b. Continue rolling until no further compaction can be obtained as determined by field density testing.
   c. Temperature and condition of bituminous mat shall be considered workable when further compaction can no longer be obtained.
4. Target Density Determination:
   a. Select test point near center of normal roller pass, but no closer than 2 feet (600 mm) from edge of mat and 50 feet (15 m) from either end of control strip. Mat thickness at this point shall be at least depth of finished pavement.
   b. Point at which no further densification can be obtained.
5. Establish new target density if change is made in mix design, nominal depth of mat being placed, aggregate source, or material properties.

1.06 ENVIRONMENTAL REQUIREMENTS

A. Temperature: Do not apply asphalt materials or place asphalt mixes when ground temperature is lower than 50 degrees F (10 degrees C) or air temperature is lower than 40 degrees F (4 degrees C). Measure ground and air temperature in shaded areas away from heat sources or wet surfaces.

B. Moisture: Do not apply asphalt materials or place asphalt mixes when application surface is wet.

PART 2 PRODUCTS

2.01 MATERIALS

A. Tack Coat: Emulsified Asphalt for Tack Coat or Seal Coat: Conform to Section 300, Prime and Tack Coats of the Standard Specifications.

2.02 ASPHALT CONCRETE MIX

A. General:

1. Mix formula shall not be modified except with written approval of Construction Manager.
2. Source Changes:
   a. Should material source(s) change, establish new asphalt concrete mix formula before new material(s) is used.
   b. Perform check tests of properties of plant-mix bituminous materials on first day of production and as requested by Construction Manager to confirm that properties are in compliance with design criteria.
   c. Make adjustments in gradation or asphalt content as necessary to meet design criteria.

B. Asphalt Concrete: As shown.

C. Composition: Hot-plant mix of aggregate, mineral filler if required, and paving grade asphalt cement. The several aggregate fractions shall be sized, uniformly graded, and combined in such proportions that resulting mixture meets grading requirements of mix formula.

D. Aggregate:

1. As specified in the Standard Specifications. RAP material may be used up to a maximum of ~~25~~ 15 percent by total weight for PG 67-22 binder and 20 percent by total weight for PG 76-22 binder.
2. Coarse: In accordance with Section 901, Course Aggregate of the FDOT Standard Specifications.
   a. Material retained on a No. 8 (2.36-mm) sieve.
   b. Minimum 90 percent by weight of individual pieces having two or more fractured faces, and 95 percent by weight having at least one fractured face.
3. Fine: In accordance with Section 902, Fine Aggregate of the FDOT Standard Specifications.
   a. Material passing a No. 8 (2.36-mm) sieve.
   b. Clean, sound, durable, angular shaped particles produced by crushing.
   c. Plasticity Index: Maximum 6.
   d. Liquid Limit: Maximum 25, when tested in accordance with ASTM D4318.
4. Natural Sand: Shall not be used.

5. Asphalt Cement: Grade as shown and as specified in Section 916, Bituminous Materials of the Standard Specifications.

2.03 RESIN MODIFIED PAVEMENT MIX

A. General:

1. Mix formula shall not be modified except with written approval of Construction Manager.
2. Source Changes:
   a. Should material source(s) change, establish new asphalt concrete mix formula before new material(s) is used.
   b. Perform check tests of properties of plant-mix bituminous materials on first day of production and as requested by Construction Manager to confirm that properties are in compliance with design criteria.
   c. Make adjustments in gradation or asphalt content as necessary to meet design criteria.

B. Asphalt Concrete: ~~As shown, the~~The mix shall be an open graded mix with a 100 percent passing the 19 mm sieve. Florida Mix SP~~-19~~12.5 with a PG-~~67~~76-22 binder shall be the basis of the resin modified pavement section.

C. Portland Cement: Unless otherwise specified, conform to requirements of ASTM C150/C150M.

D. Filler: Fly ash shall have at least 95 percent by weight of material passing the 0.075 mm sieve (No. 200). Fly ash must conform to ASTM C618, Class F.

1. Shall not be produced from process that has utilized hazardous or potentially hazardous materials.
2. ASTM C618, Table 1, Loss on Ignition: Unless permitted otherwise, maximum 3 percent.

E. Cross Polymer Resin: The cross polymer resin shall be Prosalvia L7 as manufactured/distributed by Alyan Corporation, or approved equal. The use of resin shall comply with manufacturer's recommendations and instructions. The detailed methodology of incorporating resin into the asphalt mix shall comply with Unified Facilities Guide Specifications: UFGS-32 12 18 Resin Modified Surfacing Material, August 2008.

~~E.~~F. Composition: Hot-plant mix of aggregate, mineral filler if required, and paving grade asphalt cement. The several aggregate fractions shall be sized, uniformly graded, and combined in such proportions that resulting mixture meets grading requirements of mix formula.

~~F.~~G. Aggregate:

1. As specified in the FDOT Standard Specifications. RAP material may be used up to a maximum of 25 percent by total weight.
2. Coarse: In accordance with Section 901, Course Aggregate of the Standard Specifications.
   a. Material retained on a No. 8 (2.36 mm) sieve.
   b. Minimum 90 percent by weight of individual pieces having two or more fractured faces, and 95 percent by weight having at least one fractured face.
3. Fine: In accordance with Section 902, Fine Aggregate of the Standard Specifications.
   a. Material passing a No. 8 (2.36 mm) sieve.
   b. Clean, sound, durable, angular shaped particles produced by crushing.
   c. Plasticity Index: Maximum 6.
   d. Liquid Limit: Maximum 25, when tested in accordance with ASTM D4318.
4. Natural Sand: Shall not be used.

~~G.~~H. Asphalt Cement: Grade as shown and as specified in Section 916, Bituminous Materials of the Standard Specifications.

PART 3 EXECUTION

3.01 LINE AND GRADE

A. Provide and maintain intermediate control of line and grade, independent of underlying base, to meet finish surface grades and minimum thickness.

3.02 APPLICATION EQUIPMENT

A. In accordance with Section 330, Hot Mix Asphalt – General Construction Requirements of the Standard Specifications.

3.03 PREPARATION

A. Prepare subgrade as specified in Section 31 23 13, Subgrade Preparation.

B. Existing Terminal:

1. Modify profile by grinding, milling, or overlay methods as approved, to provide meet lines and surfaces and to produce smooth riding connection to existing facility.
2. Remove existing material to a minimum depth of 1 inch (25 mm).

3. Paint edges of meet line with tack coat prior to placing new pavement.

C. Thoroughly coat edges of contact surfaces (curbs, manhole frames) with emulsified asphalt or asphalt cement prior to laying new pavement. Prevent staining of adjacent surfaces.

3.04 PAVEMENT APPLICATION

A. General: Place asphalt concrete mixture on approved, prepared base in conformance with this section.

B. Prime Coat:

1. Apply uniformly to clean, dry surfaces avoiding overlapping of applications.
2. Do not apply when moisture content of upper 3 inches (75 mm) of base exceeds optimum moisture content of base, or if free moisture is present.
3. Application Rate: 0.15 gallon to 0.50 gallon per square yard (70 liters to 2.28 liters per square meter) of surface area. Construction Manager will determine amount to be applied within range specified.
4. Remove or redistribute excess material.
5. Allow a minimum of 5 full days for curing of primed surface before placing asphalt concrete.

C. Tack Coat:

1. Prepare material, as specified in Section 300, Prime and Tack Coats of the Standard Specifications, prior to application.
2. Apply uniformly to clean, dry surfaces avoiding overlapping of applications.
3. Do not apply more tack coat than necessary for the day’s paving operation.
4. Touch up missed or lightly coated surfaces and remove excess material.
5. Application Rate:
   a. 0.05 gallon per square yard to 0.15 gallon per square yard (0.25 liter per square meter to 0.70 liter per square meter) of asphalt (residual if diluted emulsified asphalt).
   b. Apply at rate, within range specified, sufficient to assure good bonding, but not so heavy that surplus asphalt flushes into asphalt concrete being placed.

D. Pavement Mix:

1. Prior to Paving:
   a. Sweep primed surface free of dirt, dust, or other foreign matter.
   b. Patch holes in primed surface with asphalt concrete pavement mix.
   c. Blot excess prime material with sand.
2. Place asphalt concrete pavement mix in two equal lifts.
3. Compacted Lift Thickness:
   a. Minimum: Twice maximum aggregate size, but in no case less than 1 inch (25 mm).
   b. Maximum: 4 inches (100 mm).
4. Total Compacted Thickness: As shown on construction Standard Details.
5. Sequence placement so that meet lines are straight and edges are vertical.
6. Collect and dispose of segregated aggregate from raking process. Do not scatter material over finished surface.
7. Joints:
   a. Offset edge of each layer a minimum of 6 inches (150 mm) so joints are not directly over those in underlying layer.
   b. Offset longitudinal joints in roadway pavements so longitudinal joints in wearing layer coincide with pavement centerlines and lane divider lines.
   c. Form transverse joints by cutting back on previous day’s run to expose full vertical depth of layer.
8. Succeeding Lifts: Apply tack coat to pavement surface between each lift.
9. After placement of pavement, seal meet line by painting a minimum of 6 inches (150 mm) on each side of joint with cutback or emulsified asphalt. Cover immediately with sand.

E. Compaction:

1. Roll until roller marks are eliminated and minimum density of 97 percent of mix design unit weight at optimum asphalt content is obtained.
2. Joint Compaction:
   a. Place top or wearing layer as continuously as possible.
   b. Pass roller over unprotected end of freshly laid mixture only when placing of mix is discontinued long enough to permit mixture to become chilled.
   c. Cut back previously compacted mixture when Work is resumed to produce slightly beveled edge for full thickness of layer.

d. Cut away waste material and lay new mix against fresh cut.

F. Tolerances:

1. General: Conduct measurements for conformity with crown and grade immediately after initial compression. Correct variations immediately by removal or addition of materials and by continuous rolling.
2. Completed Surface or Wearing Layer Smoothness:
   a. Uniform texture, smooth, and uniform to crown and grade.
   b. Maximum Deviation: 1/8 inch (3 mm) from lower edge of a 12-foot (3.6-m) straightedge, measured continuously parallel and at right angle to centerline.
   c. If surface of completed pavement deviates by more than twice specified tolerances, remove and replace wearing surface.
3. Transverse Slope Maximum Deviation: 1/4 inch (6 mm) in 12 feet (3.6 m) from rate of slope shown.
4. Finished Grade:
   a. Perform field differential level survey on maximum 50-foot (15-m) grid and along grade breaks.
   b. Maximum Deviation: 0.02 foot (6 mm) from grade shown.

G. Seal Coat:

1. General: Apply seal coat of paving grade or emulsified asphalt to finished surface at longitudinal and transverse joints, joints at abutting pavements, areas where asphalt concrete was placed by hand, patched surfaces, and other areas as directed by Construction Manager .
2. Preparation:
   a. Surfaces that are to be sealed shall be maintained free of holes, dry, and clean of dust and loose material.
   b. Seal in dry weather and when temperature is above 35 degrees F (2 degrees C).
3. Application:
   a. Fill cracks over 1/16 inch (1.5 mm) in width with asphalt-sand slurry or approved crack sealer prior to sealing.
   b. When sealing patched surfaces and joints with existing pavements, extend minimum 6 inches (150 mm) beyond edges of patches.

3.05 RESIN MODIFIED PAVEMENT

A. General: Place asphalt concrete mixture on approved, prepared base in conformance with this Ssection.

B. Prime Coat:

1. Apply uniformly to clean, dry surfaces avoiding overlapping of applications.
2. Do not apply when moisture content of upper 3 inches (75 mm) of base exceeds optimum moisture content of base, or if free moisture is present.
3. Application Rate: 0.15 gallon to 0.50 gallon per square yard (70 liters to 2.28 liters per square meter) of surface area. Construction Manager will determine amount to be applied within range specified.
4. Remove or redistribute excess material.
5. Allow a minimum of 5 full days for curing of primed surface before placing asphalt concrete.

C. Tack Coat:

1. Prepare material, as specified in Section 300, Prime and Tack Coats of the Standard Specifications, prior to application.
2. Apply uniformly to clean, dry surfaces avoiding overlapping of applications.
3. Do not apply more tack coat than necessary for the day's paving operation.
4. Touch up missed or lightly coated surfaces and remove excess material.
5. Application Rate:
   a. 0.05 gallon per square yard to 0.15 gallon per square yard (0.25 liter per square meter to 0.70 liter per square meter) of asphalt (residual if diluted emulsified asphalt).
   b. Apply at rate, within range specified, sufficient to assure good bonding, but not so heavy that surplus asphalt flushes into asphalt concrete being placed.

D. Pavement Mix:

1. Prior to Paving:
   a. Sweep primed surface free of dirt, dust, or other foreign matter.
   b. Patch holes in primed surface with asphalt concrete pavement mix.
   c. Blot excess prime material with sand.
2. Place asphalt concrete pavement mix in two equal lifts.
3. Compacted Lift Thickness:
   a. Minimum: Twice maximum aggregate size, but in no case less than 1 inch (25 mm).
   b. Maximum: 4 inches (100 mm).

4. Total Compacted Thickness: As shown on ~~construction Standard Details~~Drawings.
5. Sequence placement so that meet lines are straight and edges are vertical.
6. Collect and dispose of segregated aggregate from raking process. Do not scatter material over finished surface.
7. Joints:
   a. Offset edge of each layer a minimum of 6 inches (150 mm) so joints are not directly over those in underlying layer.
   b. Offset longitudinal joints in roadway pavements so longitudinal joints in wearing layer coincide with pavement centerlines and lane divider lines.
   c. Form transverse joints by cutting back on previous day's run to expose full vertical depth of layer.
8. Succeeding Lifts: Apply tack coat to pavement surface between each lift.
9. After placement of pavement, seal meet line by painting a minimum of 6 inches (150 mm) on each side of joint with cutback or emulsified asphalt. Cover immediately with sand.

E. Compaction: Small (1.8 to 2.0 metric ton) tandem steel wheel vibratory rollers shall be used to smooth over the surface of freshly placed open graded bituminous mixture. The vibratory unit shall be turned off during smoothing of the bituminous mixture. The open graded mixture shall be smoothed with one to three passes of the roller without vibration. The temperature of the freshly placed open graded bituminous mixture shall be low enough to prevent excessive shoving or cutting of the asphalt under the roller.

F. Protection of Ungrouted Pavement: The Contractor shall protect the ungrouted pavement from traffic and against contamination from mud, dirt, wind-blown debris, waterborne material, or any other contamination which could enter the void spaces of the open graded bituminous mixture before grout applications. Protective materials shall consist of rolled polyethylene sheeting. The sheeting may be mounted on either the paver or a separate movable bridge from which it can be unrolled without dragging over the pavement surface.

G. Preparation of Slurry Grout: The slurry grout shall be mixed using a batch plant, portable mixer and/or ready-mix truck in accordance with the approved mixture. When using ready-mix trucks for transporting slurry grout, the grout mixture shall be thoroughly mixed at the Job Site immediately before application for a minimum of 10 minutes. Thorough mixing shall be accomplished by rotating the mixing drum at the maximum allowable revolutions per minute.

H. Placing Slurry Grout:

1. Temperature of the bituminous mixture shall be less than 100 degrees F before applying grout. The slurry grout shall be spread over the bituminous mixture using a spreader or squeegee. The application of the slurry grout shall be sufficient to fill the internal voids of the open graded bituminous mixture. The grouting operation shall begin at the low side to the high side. The direction of the grouting operation shall be the same as used to pave the open graded mixture. The small tandem steel wheel roller in vibratory mode shall be passed over the grout covered bituminous mixture to promote full penetration of the slurry grout into the void spaces.
2. Wearing Layer Smoothness:
   a. Uniform texture, smooth, and uniform to crown and grade.
   b. Maximum Deviation: 1/8 inch (3 mm) from lower edge of a 12-foot (3.6-m) straightedge, measured continuously parallel and at right angle to centerline.
   c. If surface of completed pavement deviates by more than twice specified tolerances, remove and replace wearing surface.
3. Transverse Slope Maximum Deviation: 1/4 inch (6 mm) in 12 feet (3.6 m) from rate of slope shown.
4. Finished Grade:
   a. Perform field differential level survey on maximum 50-foot (15-m) grid and along grade breaks.
   b. Maximum Deviation: 0.02 foot (6 mm) from grade shown.

3.06 PAVEMENT OVERLAY

A. Preparation:

1. Remove fatty asphalt, grease drippings, dust, and other deleterious matter.
2. Surface Depressions: Fill with asphalt concrete mix, and thoroughly compact.
3. Damaged Areas: Remove broken or deteriorated asphalt concrete and patch as specified in Article Patching.

4. Portland Cement Concrete Joints: Remove joint filler to minimum 1/2 inch (12 mm) below surface.

B. Application:

1. Tack Coat: As specified in this section.
2. Place and compact asphalt concrete as specified in Article Pavement Application.
3. Place first layer to include widening of pavement and leveling of irregularities in surface of existing pavement.
4. When leveling irregular surfaces and raising low areas, the actual compacted thickness of any one lift shall not exceed 2 inches (50 mm).
5. Actual compacted thickness of intermittent areas of 120 square yards (100 square meters) or less may exceed 2 inches (50 mm), but not 4 inches (100 mm).
6. Final wearing layer shall be of uniform thickness, and meet grade and cross-section as shown.

3.07 PATCHING

A. Preparation:

1. Remove damaged, broken, or unsound asphalt concrete adjacent to patches. Trim to straight lines exposing smooth, sound, vertical edges.
2. Prepare patch subgrade as specified in Section 31 23 13, Subgrade Preparation.

B. Application:

1. Patch Thickness: 3 inches (75 mm) or thickness of adjacent asphalt concrete, whichever is greater.
2. Place asphalt concrete mix across full width of patch in layers of equal thickness.
3. Spread and grade asphalt concrete with hand tools or mechanical spreader, depending on size of area to be patched.

C. Compaction:

1. Roll patches with power rollers capable of providing compression of 200 pounds per linear inch to 300 pounds per linear inch (350 Newtons per linear centimeter to 525 Newtons per linear centimeter). Use hand tampers where rolling is impractical.
2. Begin rolling top course at edges of patches, lapping adjacent asphalt surface at least one-half the roller width. Progress toward center of patch overlapping each preceding track by at least one-half width of roller.

3. Make sufficient passes over entire area to remove roller marks and to produce desired finished surface.

D. Tolerances:

1. Finished surface shall be flush with and match grade, slope, and crown of adjacent surface.
2. Tolerance: Surface smoothness shall not deviate more than plus 1/4 inch (6 mm) or minus 0 inch when straightedge is laid across patched area between edges of new pavement and surface of old surfacing.

3.08 FIELD QUALITY CONTROL

A. General: Provide services of approved certified independent testing laboratory to conduct tests.

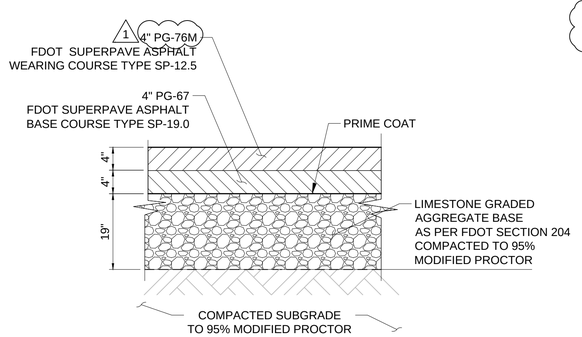
B. Field Density Tests:

1. Perform tests from cores or sawed samples in accordance with AASHTO T166.
2. Measure with properly operating and calibrated nuclear density gauge in accordance with ASTM D2950.
3. Maximum Density: In accordance with ASTM D2041, using sample of mix taken prior to compaction from same location as density test sample.

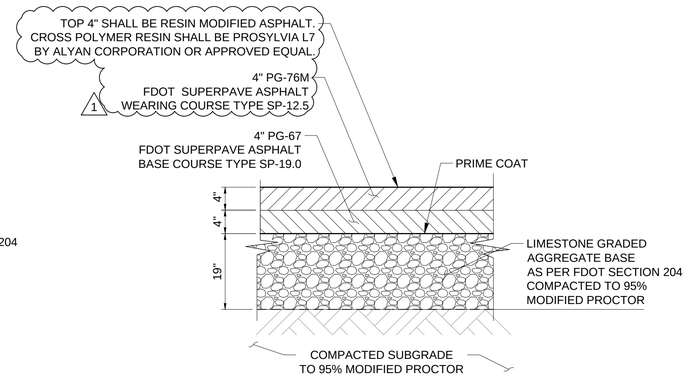
C. Testing Frequency:

1. Quality Control Tests:
   a. Asphalt Content, Aggregate Gradation: Once per every 500 tons (400 mg) of mix or once every 4 hours, whichever is greater.
   b. Mix Design Properties, Measured Maximum (Rice's) Specific Gravity: Once every 1,000 tons (900 mg) or once every 8 hours, whichever is greater.
2. Density Tests: Once every 500 tons (450 mg) of mix or once every 4 hours, whichever is greater.

END OF SECTION



1 ASPHALT PAVEMENT - TYPE 1
NTS



2 RESIN MODIFIED ASPHALT PAVEMENT
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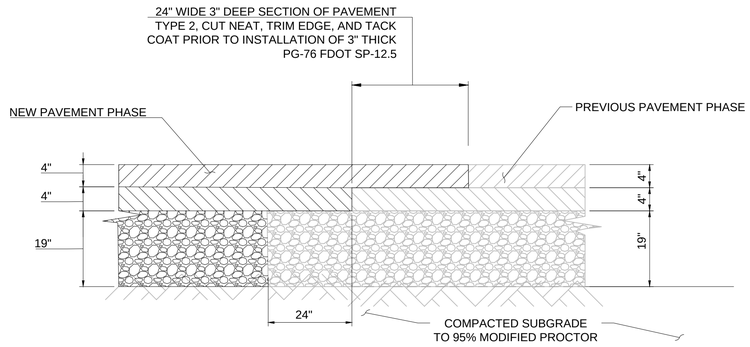

3 JOINT - BETWEEN PHASES
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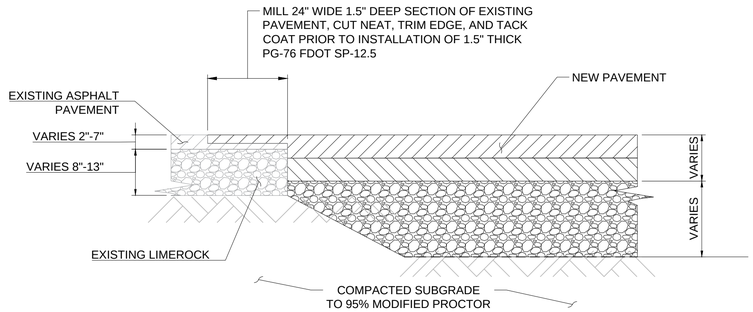

4 JOINT AT EXISTING PAVEMENT
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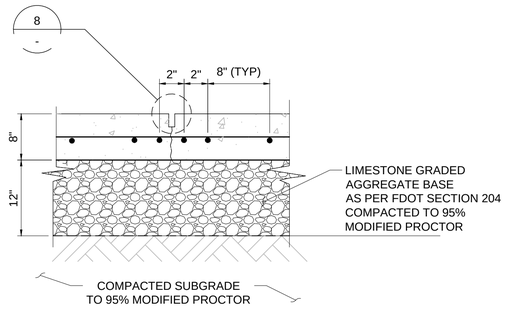
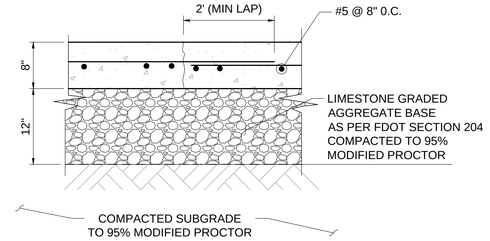


CONTRACTION JOINT



CONSTRUCTION JOINT

5 OUT-GATE CONCRETE PAVEMENT SECTION
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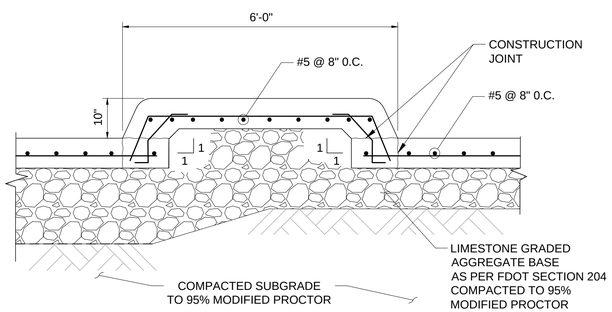

6 MEDIAN REINFORCEMENT
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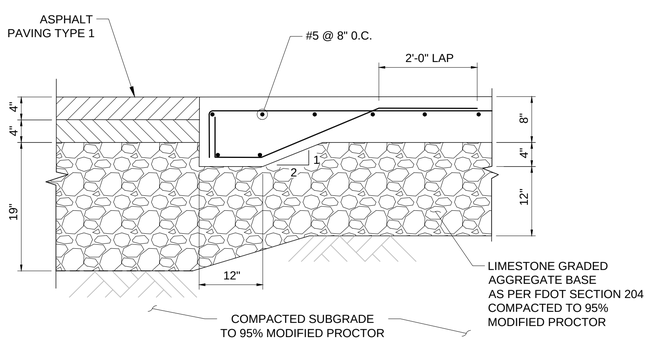

7 CONCRETE EDGE DETAIL
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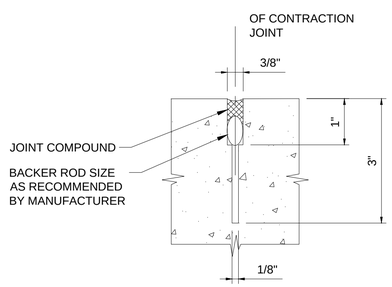

8 SAW CUT JOINT
NTS

NO.	DATE	DSGN	DR	CHK	APVD
1	08/19/2021	REVISED PER ADDENDUM NO. 2	PS	BY	APVD
0	05/26/2021	ISSUED FOR BID	PS	BY	APVD
		REVISION	A DUBOSE	L MARTIN	M HOLMQUIST

P STARR

CONTAINER YARD IMPROVEMENTS
SSA JACKSONVILLE CONTAINER TERMINAL
SSA ATLANTIC - JAXPORT
JACKSONVILLE, FLORIDA

Jacobs

CIVIL
PAVEMENT DETAILS

NTS
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	05/26/2021
PROJ	EGXL5900
DWG	001-C-5301
SHEET	79 OF 115

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ISSUED FOR ADDENDUM NO. 2

SECTION 01 29 00
PAYMENT PROCEDURES

PART 1 GENERAL

1.01 SUBMITTALS

A. Informational Submittals:

1. Schedule of Values: Submit on Contractor's standard form.
2. Schedule of Estimated Progress Payments:
   a. Submit with initially acceptable Schedule of Values.
   b. Submit adjustments thereto with Application for Payment.
3. Application for Payment.
4. Final Application for Payment.

1.02 SCHEDULE OF VALUES

A. Contractor shall prepare and submit to the Construction Manager a Schedule of Values using the form provided in the contract documents, which includes each phase of the Work under the Agreement. The form shall be submitted before commencement of construction activities.

B. The values in the Schedule of Values shall include labor, materials, overheads, fees and any other costs included in the Contract Price.

C. Shop Drawings and Submittals shall be deemed to be included in the overheads of each activity and shall not be a line item in the Schedule of Values.

D. Record Documents shall be identified as a line item in each phase of the Project in Schedule of Values. As noted in Section 01 77 00, Closeout Procedures, the Contractor shall maintain markups of the Record Documents throughout construction. Payments for Record Documents will be made monthly based on progress approved by the Construction Manager.

E. Upon request of Construction Manager, provide documentation to support the accuracy of the Schedule of Values.

F. Lump Sum Work:

1. Reflect specified allowances and alternates, as applicable.
2. List bonds and insurance premiums, mobilization, demobilization, preliminary and detailed progress schedule preparation, equipment testing, facility startup, and contract closeout separately.
3. Break down by Specification Division 02 through Division 49 with appropriate subdivision of each specification.

G. An unbalanced or front-end loaded Schedule of Values will not be acceptable.

H. Summation of each phase and the complete Schedule of Values representing all the Work shall equal the Contract Price.

I. Submit Schedule of Values on a thumb drive, in a spreadsheet format compatible with latest version of Microsoft Excel.

1.03 SCHEDULE OF ESTIMATED PROGRESS PAYMENTS

A. The approved Schedule of Values shall be the basis for all progress payments.

B. Show estimated payment requests throughout Contract duration aggregating initial Contract Price.

C. Base estimated progress payments on initially acceptable progress schedule. Adjust to reflect subsequent adjustments in progress schedule and Contract Price as reflected by modifications to the Contract Documents.

1.04 APPLICATION FOR PAYMENT

A. Transmittal Summary Form: Attach one Summary Form with each detailed Application for Payment for each schedule and include Request for Payment of Materials and Equipment on Hand as applicable. Execute certification by authorized officer of Contractor.

B. Use detailed Application for Payment Form suitable to Construction Manager.

C. Provide separate form for each schedule as applicable.

D. Include accepted Schedule of Values for each schedule or portion of lump sum Work and the unit price breakdown for the Work to be paid on a unit priced basis.

E. Include separate line item for each Change Order and Work Change Directive executed prior to date of submission. Provide further breakdown of such as requested by Construction Manager.

F. Preparation:

1. Round values to nearest dollar.
2. Submit Application for Payment, including a Transmittal Summary Form and detailed Application for Payment Form(s) for each schedule as applicable, a listing of materials on hand for each schedule as applicable, and such supporting data as may be requested by Construction Manager.

1.05 PAYMENT

A. Payment for all Lump Sum Work shown or specified in Contract Documents is included in the Contract Price. Payment will be based on a percentage complete basis for each line item of the accepted Schedule of Values.

B. Payment for Lump Sum Work covers all Work specified or shown within the limits or Specification sections as follows:

1. Limits of Work are shown on Drawings.
2. All Work is shown on Drawings and described in Specification sections.

1.06 NONPAYMENT FOR REJECTED OR UNUSED PRODUCTS

A. Payment will not be made for following:

1. Loading, hauling, and disposing of rejected material.
2. Quantities of material wasted or disposed of in manner not called for under Contract Documents.
3. Rejected loads of material, including material rejected after it has been placed by reason of failure of Contractor to conform to provisions of Contract Documents.
4. Material not installed in the Works.
5. Defective Work not accepted by Construction Manager.
6. Material remaining on hand after completion of Work.

1.07 PARTIAL PAYMENT FOR STORED MATERIALS AND EQUIPMENT

A. Partial Payment: No partial payments will be made for materials and equipment delivered or stored unless Shop Drawings and preliminary operation and maintenance data is acceptable to Construction Manager.

B. Final Payment: Will be made only for products incorporated in Work; remaining products, for which partial payments have been made, shall revert to Contractor unless otherwise agreed, and partial payments made for those items will be deducted from final payment.

1.08 PARTIAL PAYMENT FOR UNDELIVERED, PROJECT-SPECIFIC MANUFACTURED OR FABRICATED EQUIPMENT

A. Notwithstanding above provisions, partial payments for undelivered (not yet delivered to Site or not stored in the vicinity of Site) products specifically manufactured for this Project, excluding off the shelf or catalog items, will be made for products listed below when all following conditions exist:

1. Partial payment request is supported by written acknowledgment from Suppliers that invoice requirements have been met.
2. Equipment is adequately insured, maintained, stored, and protected by appropriate security measures.
3. Each equipment item is clearly marked and segregated from other items to permit inventory and accountability.
4. Authorization has been provided for access to storage Site for Construction Manager and Tenant.
5. Equipment meets applicable Specifications of these Contract Documents.

B. Payment of 15 percent of manufacturer’s quoted price for undelivered, Project-specific manufactured equipment will be made following Shop Drawing approval. Thereafter, monthly payments will be made based on progress of fabrication as determined by Construction Manager, but in no case will total of payments prior to delivery exceed 75 percent of manufacturer’s quoted price.

C. Failure of Contractor to continue compliance with above requirements shall give cause for Owner to withhold payments made for such equipment from future partial payments.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

ATTACHMENT NO. 06

SSA Jacksonville Container Terminal, Container Yard Improvements
Schedule of Values Form

Item	Discription	Qty	Units	Unit Price	TOTAL
BASE BID ITEMS					$ -
1	Mobilization/Demobilization Includes contractor temporary offices, utilities, etc.	1.0	LS		
2	Environmental BMP	1.0	LS		
3	Payment & Performance Bond	1.0	LS		
4	Safety	1.0	LS		
5	As-Built Drawings	1.0	LS		
6	All Remaining Work, such as: all testing, misc excavation, adjusting of grades/rim elevations, layout & surveying, valves, fittings and spurs, misc electrical work & grounding, access to sites, and the like, to complete all works to final acceptance	1.0	LS		
PHASE 1					$ -
7	Staging and phasing of temporary fencing and barrier at phase boundary	1.0	LS		
8	Demolition and Disposal - Roadability Building	1.0	LS		
9	Demolition and Disposal - Pre-Gate	1.0	LS		
	Allowance for storm drainage cleanout and repair	1.0	LS		
10	Existing Asphalt, Limerock & Sand Removal Includes Asphalt/Limerock Disposal	48,300.0	SY		
11	Pavement (Type 1), including new asphalt transportation and base	48,300.0	SY		
12	New Manhole Covers (airport rated)	9.0	EA		
13	Fire Hydrants	4.0	EA		
14	Hydrant Network, includes pipes, spurs, tees, elbows and valves	1.0	LS		
15	Asphalt Striping	1.0	LS		
16	Electrical, including wires and duct banks	1.0	LS		
17	High Mast Lights, including all components	4.0	EA		
PHASE 2					$ -
18	Staging and phasing of temporary fencing and barrier at phase boundary	1.0	LS		
19	Existing Asphalt, Limerock & Sand Removal Includes Asphalt/Limerock Disposal	42,300.0	SY		
20	Allowance for storm drainage cleanout and repair	1.0	LS		
21	Pavement (Type 1), including new asphalt transportation and base	42,300.0	SY		
22	New Manhole Covers (airport rated)	5.0	EA		
23	Fire Hydrants	1.0	EA		
24	Hydrant Network, includes pipes, spurs, tees, elbows and valves	1.0	LS		
25	Asphalt Striping	1.0	LS		
26	Electrical, including wires and duct banks	1.0	LS		
27	High Mast Lights, including all components	1.0	EA		
PHASE 3					$ -

28	Staging and phasing of temporary fencing and barrier at phase boundary	1.0	LS		
29	Existing Asphalt, Limerock & Sand Removal Includes Asphalt/Limerock Disposal	42,100.0	SY		
30	Allowance for storm drainage cleanout and repair	1.0	LS		
31	Pavement (Type 1), including new asphalt transportation and base	42,100.0	SY		
32	New Manhole Covers (airport rated)	6.0	EA		
33	Fire Hydrants	2.0	EA		
34	Hydrant Network, includes pipes, spurs, tees, elbows and valves	1.0	LS		
35	Asphalt Striping	1.0	LS		
36	Electrical, including wires and duct banks	1.0	LS		
37	High Mast Lights, including all components	2.0	EA		
PHASE 4					$ -
38	Staging and phasing of temporary fencing and barrier at phase boundary	1.0	LS		
39	Existing Asphalt, Limerock & Sand Removal Includes Asphalt/Limerock Disposal	45,930.0	SY		
40	Allowance for storm drainage cleanout and repair	1.0	LS		
41	Pavement (Type 1), including new asphalt transportation and base	45,930.0	SY		
42	New Manhole Covers (airport rated)	16.0	EA		
43	Fire Hydrants	3.0	EA		
44	Hydrant Network, includes pipes, spurs, tees, elbows and valves	1.0	LS		
45	Asphalt Striping	1.0	LS		
46	Electrical, including wires and duct banks	1.0	LS		
47	High Mast Lights, including all components	3.0	EA		
PHASE 5					$ -
48	Staging and phasing of temporary fencing and barrier at phase boundary	1.0	LS		
49	New Out Gate	1.0	LS		
50	Existing Asphalt, Limerock & Sand Removal Includes Asphalt/Limerock Disposal	46,330.0	SY		
51	Allowance for storm drainage cleanout and repair	1.0	LS		
52	Pavement (Type 1), including new asphalt transportation and base	46,330.0	SY		
53	New Manhole Covers (airport rated)	11.0	EA		
54	Fire Hydrants	1.0	EA		
55	Hydrant Network, includes pipes, spurs, tees, elbows and valves	1.0	LS		
56	Asphalt Striping	1.0	LS		
57	Electrical demolition	1.0	LS		
58	Direct Drilling	1.0	LS		
59	Electrical, including wires, trenching, conc. Encasement, duct banks grounding, lightning protection, hand holes, panel boards	1.0	LS		

60	100 Amps Panel Board, MLO	2.0	EA		
61	HML Lighting Control Panel Include cabling	1.0	EA		
62	MPZ1/2 15KVA Mini Power Zone	2.0	EA		
63	Lithonia Lighting High Bay LED,Type C,Wet location	15.0	EA		
64	Raceway and Wiring for Kiosk connection	15.0	EA		
65	High Mast Lights, including all components	1.0	EA		
PHASE 6					$ -
66	Staging and phasing of temporary fencing and barrier at phase boundary	1.0	LS		
67	Demolish and remove existing reefer bunkers	80.0	EA		
68	Existing Asphalt, Limerock & Sand Removal Includes Asphalt/Limerock Disposal	40,490.0	SY		
69	Allowance for storm drainage cleanout and repair	1.0	LS		
70	Pavement (Type 1), including new asphalt transportation and base	40,490.0	SY		
71	New Manhole Covers (airport rated)	8.0	EA		
72	New Manhles (airport rated)	6.0	EA		
73	Fire Hydrants	1.0	EA		
74	Hydrant Network, includes pipes, spurs, tees, elbows and valves	1.0	LS		
75	Asphalt Striping	1.0	LS		
76	Electrical demolition	1.0	LS		
77	Electrical, including wires, duct banks, panel boards	1.0	LS		
78	Reefer Outlets, including connections testing	84.0	EA		
79	High Mast Lights, including all components	2.0	EA		
PHASE 7 A&B					$ -
80	Staging and phasing of temporary fencing and barrier at phase boundary	1.0	LS		
81	Existing Asphalt, Limerock & Sand Removal Includes Asphalt/Limerock Disposal	67,530.0	SY		
82	Allowance for storm drainage cleanout and repair	1.0	LS		
83	Pavement (Type 1), including new asphalt transportation and base	67,530.0	SY		
84	New Manhole Covers (airport rated)	19.0	EA		
85	New Manholes (airport rated)	2.0	EA		
86	Fire Hydrants	2.0	EA		
87	Hydrant Network, includes pipes, spurs, tees, elbows and valves	1.0	LS		
88	Asphalt Striping	1.0	LS		
89	Electrical, including wires and duct banks	1.0	LS		
90	High Mast Lights, including all components	1.0	EA		
91	Wash Station, including sewer, water, structure, Washbay Solutions equipment, installation and oil separator	1.0	LS		

Note: Contractor to validate/confirm quantities where shown

GRAND TOTAL **$ -**

SECTION 01 50 00
TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 REFERENCES

A. The following is a list of standards which may be referenced in this section:

1. American Association of Nurserymen (AAN): American Standards for Nursery Stock.
2. Federal Emergency Management Agency (FEMA).
3. National Fire Prevention Association (NFPA): 241, Standard for Safeguarding Construction, Alteration, and Demolition Operations.
4. Telecommunications Industry Association (TIA); Electronic Industries Alliance (EIA): 568B, Commercial Building Telecommunications Cabling Standard.
5. U.S. Department of Agriculture (USDA): Urban Hydrology for Small Watersheds.
6. U.S. Weather Bureau: Rainfall-Frequency Atlas of the U.S. for Durations from 30 Minutes to 24 Hours and Return Periods from 1 to 100 Years.

1.02 SUBMITTALS

A. Informational Submittals:

1. Copies of permits and approvals for construction as required by Laws and Regulations and governing agencies.
2. Temporary Utility Submittals:
   a. Electric power supply and distribution plans.
   b. Water supply and distribution plans.
3. Temporary Construction Submittals:
   a. Access Roads: Routes, cross-sections, and drainage facilities.
   b. Contractor’s field office, storage yard, and storage building plans, including gravel surfaced area. Contractor shall provide information on service hookups and coordinate with Tenant.
   c. Fencing and protective barrier locations and details.
   d. Contractor laydown location and layout plan (see Drawings for proposed location).
   e. Traffic and Pedestrian Control and Routing Plans: As specified herein, and proposed revisions thereto.

4. Temporary Control Submittals:
    a. Dust control plan.
    b. Plan for disposal of waste materials and intended haul routes.

1.03 MOBILIZATION

A. Mobilization includes, but is not limited to, these principal items:

1. Obtaining required permits.
2. Moving Contractor's field office and equipment required for first month operations onto Site.
3. Installing temporary construction power, wiring, and lighting facilities.
4. Providing onsite Internet service.
5. Providing onsite sanitary facilities and potable water facilities as specified and as required by Laws and Regulations, and governing agencies.
6. Arranging for and erection of Contractor's work and storage yard.
7. Posting OSHA required notices and establishing safety programs and procedures.
8. Having Contractor's superintendent at Site full time.

B. Use area designated for Contractor's temporary facilities as shown on Drawings.

C. No more than half of Schedule of Values mobilization line item will be approved.

1.04 PROTECTION OF WORK AND PROPERTY

A. Comply with Owner's and Tenant's safety rules while on Owner's and Tenant's property.

B. Keep Construction Manager informed of serious onsite accidents and related claims.

C. Use of Explosives: No blasting or use of explosives will be allowed onsite.

1.05 VEHICULAR TRAFFIC

A. Traffic Control Plan: Adhere to traffic control plan reviewed and accepted by Construction Manager. Changes to this plan shall be made only by written approval of Construction Manager. Secure approvals for necessary changes so as not to delay progress of the Work.

B. Traffic Routing Plan: Show sequences of construction affecting use of roadways, time required for each phase of the Work, provisions for decking over excavations and phasing of operations to provide necessary access, and plans for signing, barricading, and striping to provide passages for pedestrians and vehicles.

C. Drainage Swales: Under no circumstances shall vehicles of any type drive on the grassy swales within or on the perimeter of the Terminal.

PART 2 PRODUCTS

2.01 CONSTRUCTION MANAGER'S FIELD OFFICES

A. The Tenant will provide the Construction Manager with field office space.

B. The Contractor is not required to provide field offices for the Construction Manager.

2.02 CONTRACTOR'S FIELD OFFICES

A. Contractor shall provide own equipment and furniture for the Project.

B. Ownership of equipment and furniture furnished under this article will remain, unless otherwise specified, that of Contractor.

C. Equipment furnished shall be new or like new in appearance and function.

D. Minimum Features:

1. 110-volt lighting and wall plugs.
2. Fluorescent ceiling lights.
3. Electric heating and self-contained air conditioning unit, properly sized for Project locale and conditions. Provide ample electric power to operate installed systems.
4. Provide railed stairways, landings, and exterior lighting at entrances.
5. Sign on entrance door reading CONTRACTOR, letter height 4 inches minimum.
6. Exterior Door(s):
    a. Number: Two.
    b. Type: Solid core.
    c. Lock(s): Cylindrical keyed alike.
7. Number of Windows: Two.
8. Minimum Interior Height: 8 feet.

E. Floor Space: Minimum 1,000 square feet.

F. Rooms: Two private offices with minimum floor space of 100 square feet each, one meeting room for minimum 8 people, and remainder configured for open meeting or storage space.

G. Furniture: Plan table; plan rack; double desk; two 2-drawer, steel file cabinets; and overhead shelf. Conference table and chairs for eight people.

H. All-metal frame; all-metal exterior, sides, and roof; and insulated double walls, floor, and roof.

I. Security guard screens on windows.

J. Storage Room: Door with cylinder lock, keyed differently than exterior door locks.

K. Blinds or drapes on windows.

L. Office Equipment—General:

1. Provide office equipment for Contractor's resident staff sufficient to perform the work. Suggestions include:
    a. Bottled water service.
    b. Paper towel dispenser with towels.
    c. Desks.
    d. Desk chairs with the following characteristics:
        1) Five castor base.
        2) Adjustable height.
        3) Swivels.
        4) Locking back.
        5) Adjustable seat back for height and angle.
        6) Adjustable arms.
    e. Steel Folding Chairs: Five.
    f. Four-Drawer Steel File with Lock: One letter width.
    g. Drawing rack with drawing hangers.
    h. Bookcases.
    i. Wastepaper baskets.
    j. Clothes racks.
    k. First-aid kits.
    l. Tri-class (ABC), dry chemical fire extinguisher, 10-pound.

M. Computer Hardware: Provide computers and accessories necessary to efficiently perform the work in the Contract. Suggestions include:

1. Power Supply Surge Protector: Two; rated at 15 amps minimum.
2. Printer: HP LaserJet, or similar.

3. Printer Accessories: As required to allow black and white printing from computers.
4. Maintenance service agreements for all hardware for duration of Contract.

PART 3 EXECUTION

3.01 CONTRACTOR'S FIELD OFFICE

A. Make available for Contractor's use prior to start of the Work at Site and to remain on Site for minimum of 30 days after final acceptance of the Work.

B. Locate where directed by Drawings; level, block, tie down, skirt, provide stairways, and relocate when necessary and approved. Construct on proper foundations, and provide proper surface drainage and connections for utility services.

C. Provide sanitary facilities in compliance with state and local health authorities.

D. Exterior Door Keys: Furnish set(s) of keys to staff.

E. Computers: Provide required connecting cables and plugs.

F. Telecommunications:

1. Provide Internet connection and Wi-Fi Server.
2. Arrange and provide for telecommunication service for use during construction. Pay costs of installation, maintenance, and monthly service of internet connection.

G. Maintain in good repair and appearance, and provide weekly cleaning service and replenishment, as required, of paper towels, paper cups, hand soap, toilet paper, first-aid kit supplies, and bottled water.

H. Replenish, as needed, copy paper and toner.

3.02 TEMPORARY UTILITIES

A. Power:

1. Electric power will be available at Site.
2. Determine type and amount available and make arrangements for obtaining temporary electric power service.
3. Cost of electric power will be borne by Tenant.

B. Lighting: Provide temporary lighting to meet applicable safety requirements to allow erection, application, or installation of materials and equipment, and observation or inspection of the Work.

C. Heating, Cooling, and Ventilating:

1. Provide as required to maintain adequate environmental conditions to facilitate progress of the Work, to meet specified minimum conditions for installation of materials, and to protect materials, equipment, and finishes from damage because of temperature or humidity.
2. Provide adequate forced air ventilation of enclosed areas to cure installed materials, to dispense humidity, and to prevent hazardous accumulations of dust, fumes, vapors, or gases.
3. Pay costs of installation, maintenance, operation, removal, and fuel consumed.
4. Provide portable unit heaters, complete with controls, oil- or gas-fired, and suitably vented to outside as required for protection of health and property.
5. If permanent natural gas piping is used for temporary heating units, do not modify or reroute gas piping without approval of utility company. Provide separate gas metering as required by utility.

D. Water:

1. Hydrant Water:
   a. Is available from nearby hydrants. Coordinate with Owner and/or Tenant for access. Costs of site water from Hydrants will be borne by Owner.
   b. Hydrant water is suitable for construction and sanitary needs, but should not be considered potable.
   c. Use only special hydrant-operating wrenches to open hydrants. Make certain hydrant valve is open full, since cracking valve causes damage to hydrant. Repair damaged hydrants and notify appropriate agency as quickly as possible. Hydrants shall be completely accessible to fire department at all times.
   d. Include costs to connect and transport water to construction areas in Contract Price.
2. Provide temporary facilities and piping required to bring water to point of use and remove when no longer needed.
3. Provide means to prevent water used for testing from flowing back into source pipeline (backflow preventer).

E. Sanitary and Personnel Facilities:

1. Provide and maintain facilities for Contractor's employees, Subcontractors, and other onsite employers' employees. Service, clean, and maintain facilities and enclosures.
2. Use of Owner's or Tenant's existing sanitary facilities by construction personnel will not be allowed.

F. Fire Protection: Furnish and maintain on Site adequate firefighting equipment capable of extinguishing incipient fires. Comply with applicable parts of NFPA 241.

3.03 PROTECTION OF WORK AND PROPERTY

A. General:

1. Perform Work within right-of-way and easements in a systematic manner that minimizes inconvenience to property owners and the public.
2. No residence or business shall be cut off from vehicular traffic for a period exceeding 4 hours, unless special arrangements have been made.
3. Maintain in continuous service existing oil and gas pipelines, underground power, telephone or communication cable, water mains, irrigation lines, sewers, poles and overhead power, and other utilities encountered along line of the Work, unless other arrangements satisfactory to owners of said utilities have been made.
4. Where completion of the Work requires temporary or permanent removal or relocation of existing utility, coordinate activities with owner of said utility and perform work to their satisfaction.
5. Protect, shore, brace, support, and maintain underground pipes, conduits, drains, and other underground utility construction uncovered or otherwise affected by construction operations.
6. Keep fire hydrants and water control valves free from obstruction and available for use at all times.
7. In areas where Contractor's operations are adjacent to or near a utility, such as gas, telephone, television, electric power, water, sewer, or irrigation system, and such operations may cause damage or inconvenience, suspend operations until arrangements necessary for protection have been made by Contractor.
8. Notify property owners and utility offices that may be affected by construction operation at least 2 days in advance: Before exposing a utility, obtain utility owner's permission. Should service of utility be interrupted due to Contractor's operation, notify proper authority

immediately. Cooperate with said authority in restoring service as promptly as possible and bear costs incurred.

9. Do not impair operation of existing sewer system. Prevent construction material, pavement, concrete, earth, volatile and corrosive wastes, and other debris from entering sewers, pump stations, or other sewer structures.
10. Maintain original Site drainage wherever possible.

B. Site Security: Provide and maintain additional temporary security fences as necessary to protect the Work and Contractor-furnished products not yet installed.

C. Barricades and Lights:

1. Provide as required to isolate work areas and in sufficient quantity to safeguard public (terminal employees) and the Work.
2. Provide as necessary to prevent unauthorized entry to construction areas and affected roads, streets, and alleyways, inside and outside of fenced area, and as required to ensure public safety and the safety of Contractor's employees, other employer's employees, and others who may be affected by the Work.
3. Provide to protect existing facilities and adjacent properties, including swales, from potential damage.
4. Locate to enable access by facility operators and property owners.
5. Protect streets, roads, highways, and other public thoroughfares that are closed to traffic by effective barricades with acceptable warning signs.
6. Locate barricades at the nearest intersecting public thoroughfare on each side of blocked section.
7. Illuminate barricades and obstructions with warning lights from sunset to sunrise.

D. Signs and Equipment:

1. Traffic Cones: Provide to delineate traffic lanes to guide and separate traffic movements.
2. Provide appropriate signage at obstructions, such as material piles and equipment.
3. Use to alert terminal personnel and general public of construction hazards, which would include surface irregularities, unramped walkways, grade changes, and trenches or excavations in roadways and in other public access areas.

E. Existing Structures:

1. Where Contractor contemplates removal of small structures such as signposts, and culverts that interfere with Contractor's operations, obtain approval of Jaxport and Construction Manager.
2. Replace items removed in their original location and a condition equal to or better than original.

F. Finished Construction: Protect finished construction at all times.

G. Waterways: Keep river, swales, ditches, culverts, and natural drainages continuously free of construction materials and debris.

H. Dewatering: Construct, maintain, and operate cofferdams, channels, flume drains, sumps, pumps, or other temporary diversion and protection works. Furnish materials required, install, maintain, and operate necessary pumping and other equipment for the environmentally safe removal and disposal of water from the various parts of the Work. Maintain foundations and parts of the Work free from water.

3.04 TEMPORARY CONTROLS

A. Air Pollution Control:

1. Minimize air pollution from construction operations.
2. Burning of waste materials, rubbish, or other debris will not be permitted on or adjacent to Site.
3. Conduct operations of dumping rock and of carrying rock away in trucks to cause a minimum of dust. Give unpaved phases, areas, streets, roads, detours, or haul roads used in construction area a dust-preventive treatment or periodically water to prevent dust. Strictly adhere to applicable environmental regulations for dust prevention.
4. Contractor shall be responsible for complying with environmental regulations, and shall follow instructions from the Construction Manager should air pollution be an issue.

B. Water Pollution Control:

1. Divert sanitary sewage and nonstorm waste flow interfering with construction and requiring diversion to sanitary sewers. Do not cause or permit action to occur which would cause an overflow to existing waterway.
2. Prior to commencing excavation and construction, obtain Construction Manager's agreement with detailed plans showing procedures intended

to handle and dispose of sewage, groundwater, and dewatering pump discharges.

3. Comply with Section 01 57 13, Temporary Erosion and Sedimentation Control, for stormwater flow and surface runoff.
4. Do not dispose of volatile wastes such as mineral spirits, oil, chemicals, or paint thinner in storm or sanitary drains. Disposal of wastes into streams or waterways is prohibited. Provide acceptable containers for collection and disposal of waste materials, debris, and rubbish.

C. Erosion, Sediment, and Flood Control: Provide, maintain, and operate temporary facilities as specified in Section 01 57 13, Temporary Erosion and Sedimentation Control, to control erosion and sediment releases, and to protect the Work and existing facilities from flooding during construction period.

3.05 STORAGE YARDS AND BUILDINGS

A. Temporary Storage Yards: Construct temporary storage yards for storage of products that are not subject to damage by weather conditions.

B. Temporary Storage Buildings:

1. Provide environmental control systems that meet recommendations of manufacturers of equipment and materials stored.
2. Arrange or partition to provide security of contents and ready access for inspection and inventory.
3. Store combustible materials (paints, solvents, fuels) in a well-ventilated and remote building meeting safety standards.

3.06 ACCESS ROADS AND DETOURS

A. Construct access roads, if needed, within the Project or Phase limits. Use existing roads where shown. Alignments for new routes shall be approved by Construction Manager.

B. Maintain drainage ways. Install and maintain culverts to allow water to flow beneath access roads. Provide corrosion-resistant culvert pipe of adequate strength to resist construction loads.

C. Provide gravel, crushed rock, or other stabilization material to permit access by all motor vehicles at all times.

D. Maintain road grade and crown to eliminate potholes, rutting, and other irregularities that restrict access.

E. Swales may not be used for vehicular traffic or access routes at any time.

F. Upon completion of construction, restore ground surface disturbed by access road construction to original grade. Replace damaged or broken culverts with new culvert pipe of same diameter and material.

3.07 PARKING AREAS

A. Control vehicular parking to preclude interference with public traffic or parking, access by emergency vehicles, Owner's operations, or construction operations.

B. Provide parking facilities for personnel working on Project. No employee or equipment parking will be permitted on Owner's or Tenant's existing paved areas, except as specifically designated for Contractor's use.

C. Use area designated on Drawings for parking of Contractor's and Contractor's employees' vehicles.

D. Swales may not be used for parking at any time.

3.08 VEHICULAR TRAFFIC

A. Comply with Laws and Regulations regarding closing or restricting use of public streets or highways. No public or private road shall be closed, except by written permission of proper authority. Ensure the least possible obstruction to traffic and normal commercial pursuits.

B. Conduct the Work to interfere as little as possible with public travel or movements within Blount Island Marine Terminal, whether vehicular or pedestrian.

C. Whenever it is necessary to cross, close, or obstruct roads, driveways, and walks, whether public or private, provide and maintain suitable and safe bridges, detours, or other temporary expedients for accommodation of public and private travel.

D. Do not use vehicular traffic on swales.

E. Road Closures: Maintain satisfactory means of exit for persons residing or having occasion to transact business along route of the Work. If it is necessary to close off roadway or alley providing sole vehicular access to property for periods greater than 2 hours, provide written notice to each owner so affected 3 days prior to such closure. In such cases, closings of up to 4 hours may be

allowed. Closures of up to 10 hours may be allowed if a week's written notice is given and undue hardship does not result.

F. Maintenance of traffic is not required if Contractor obtains written permission from Owner and Tenant, or from authority having jurisdiction over public property involved, to obstruct traffic at designated point.

G. In making street crossings, do not block more than one-half the street at a time. Whenever possible, widen shoulder on opposite side to facilitate traffic flow. Provide temporary surfacing on shoulders as necessary.

H. Maintain top of backfilled trenches before they are paved, to allow normal vehicular traffic to pass over. Provide temporary access driveways where required. Cleanup operations shall follow immediately behind backfilling.

I. When flaggers and guards are required by regulation or when deemed necessary for safety, furnish them with approved orange wearing apparel and other regulation traffic control devices.

J. Notify fire department and police department before closing street or portion thereof. Notify said departments when streets are again passable for emergency vehicles. Do not block off emergency vehicle access to consecutive arterial crossings or dead-end streets, in excess of 300 linear feet, without written permission from fire department. Conduct operations with the least interference to fire equipment access, and at no time prevent such access. Furnish Contractor's night emergency telephone numbers to police department.

K. Coordinate traffic routing with that of others working in same or adjacent areas.

3.09 CLEANING DURING CONSTRUCTION

A. In accordance with General Conditions, as may be specified in other Specification sections, and as required herein.

B. Wet down exterior surfaces prior to sweeping to prevent blowing of dust and debris. At least weekly, sweep floors (basins, tunnels, platforms, walkways, roof surfaces), and pick up and dispose of debris.

C. Provide approved containers for collection and disposal of waste materials, debris, and rubbish. At least weekly, dispose of such waste materials, debris, and rubbish offsite.

D. At least weekly, brush sweep entry drive, roadways, and other streets and walkways affected by the Work and where adjacent to the Work.

E. Should swales be damaged due to construction activities, or for any reason attributable to the Contractor, the swales shall be repaired in accordance with instructions from the Construction Manager, and to the satisfaction of the Owner. All repairs to swales shall be at the Contractor's cost.

END OF SECTION