

**WORK AUTHORIZATION # CM2287-WA09
NASSAU COUNTY
BOARD OF COUNTY COMMISSIONERS
RFQ/BID NO. NC14-027**

Consultant:	Peters and Yaffee, Inc.
Contract Number:	CM2287-WA09
Contact Name:	Dow Peters
Contact Number:	904-265-0751
Email:	dpeters@petersandyaffee.com

CURRENT WORK AUTHORIZATION			
Project Short Title: Roadway Improvements for Henry Smith Road			
		CONTRACT OVERVIEW	
Date Submitted	10/10/19	Total of Previous Authorizations	\$414,424.92
Amount	\$284,991.23	This Work Authorization	\$284,991.23
Scheduled Completion	TBD	Current Contract Total	\$699,416.15

This Work Authorization is to the AGREEMENT between Nassau County and the Consultant known as the Continuing Contract for Construction Engineering Inspection (CEI) Services for Nassau County, Florida, dated May 9, 2016. The services to be provided under this Work Authorization are as follows:

ARTICLE 1. Services Described as:

Peters and Yaffee, Inc. shall provide final construction documents and all required permits for the proposed roadway improvements for Henry Smith Road in accordance with the proposal dated October 10, 2019, attached hereto as Exhibit "A".

ARTICLE 2. Time Schedule

Peters and Yaffee, Inc. shall begin upon written notification to proceed by County and will continue through completion of the construction phase of the project. A revised project schedule will be provided to the County no later than 10 days after notice to proceed.

ARTICLE 3. Budget

Peters and Yaffee, Inc. and its subconsultants will perform the scope of services outlined herein for the lump sum amount of \$284,991.23. Prime Consultant and Subconsultant fee amounts are detailed further in Section E of Exhibit "A". Peters and Yaffee, Inc. will be using billing rates established under Continuing Contract CM2287.

Article 4. Other Provisions

The Services covered by this Work Authorization will be performed in accordance with the provisions set forth in the AGREEMENT referenced above and any of its attachments

or schedules. Additional terms or contract provisions whether submitted purposely or inadvertently, shall have no force or effect. This Work Authorization will become a part of the referenced AGREEMENT when executed by both parties.

In presenting this Work Authorization, Consultant agrees that:

Unless detailed herein, all drawings, data, electronic files and other information required for this Work Authorization has been accepted by Consultant. Specifically, all electronic files have been reviewed and accepted for the purposes of this Work assignment. Any additional information, including detailed scope of services are attached.

AGREED TO BY:

BY: 
Print Name: Dow W. Peters III
Title: President
Date: October 31, 2019

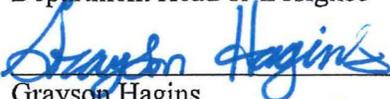
RECOMMENDED AND APPROVED BY NASSAU COUNTY:

County Engineer:



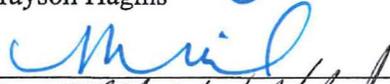
Department Head or Designee

Contract Management:



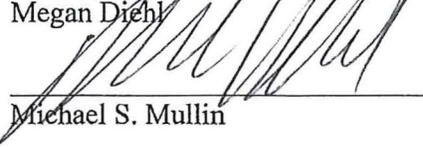
Grayson Hagins

Office of Management & Budget:



Megan Diehl

County Manager:



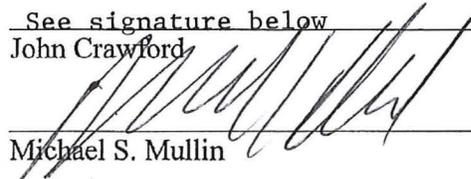
Michael S. Mullin

Ex-Officio Clerk:

See signature below

John Crawford

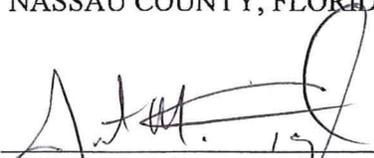
County Attorney:



Michael S. Mullin

APPROVED by the BOARD OF COUNTY COMMISSIONERS, this 20th day of
November, 2019.

BOARD OF COUNTY COMMISSIONERS
NASSAU COUNTY, FLORIDA



Justin M. Taylor
Chairman

ACCOUNT NO.: 63470541-563365 HSMTH

Attestation: Only to Authenticity as to
Chairman's Signature:



John Crawford
Ex-Officio Clerk

MES
11.20.19

EXHIBIT A
SCOPE OF SERVICES
ENGINEERING SERVICES
FOR

Proposed Improvements for Henry Smith Road Improvement Project

NASSAU COUNTY, FLORIDA

October 10, 2019

A. PROJECT DESCRIPTION

1. The intent of this project is to provide final construction documents and all required permits for the proposed roadway improvements for Henry Smith Road, which is a two lane rural roadway in Callahan, Florida.
2. The project limits are from CR 108 to SR 15 (US 1) in eastern Nassau County for approximately 1.8 miles.
3. The scope of this project includes:
 - a. Design for the milling and resurfacing of existing pavement for Henry Smith Road.
 - b. Design for the signing and pavement marking for Henry Smith Road.
 - c. Minor drainage improvements within project limits.
 - d. Design of Temporary Traffic Control Plans (TTCP) for the Henry Smith Road Project.
 - e. Development of Construction Specifications, Front-End Documents and provide Bid Phase Services.

B. PROJECT SCOPE

1. Data Collection
 - a. *Geotechnical* - These services include pavement cores at ten locations along the roadway alternating left and right of the painted centerline. The cores will continue through the asphalt surface course and base course, followed by a hand auger boring to a depth of 2 feet into the subgrade.

Also included in these services are six Standard Penetration Test (SPT) borings. These will be divided evenly among three existing cross drains. The SPT borings will be a maximum of ten feet deep.

The groundwater level will be measured and the depth recorded, if encountered. The thickness of the asphalt surface and base course will be measured. As shown in the separate estimated fee sheet for the pavement coring operations, right of way permits and TTCP will be required to facilitate a lane closure for this work. Laboratory classification and index property tests will be performed as necessary on selected soil and pavement core samples obtained at the test locations. An engineering report will be prepared that will include a review of available project information, a discussion and results of the conducted field and laboratory services, a discussion of site and subsurface conditions, table of pavement section thickness and photos of asphalt core samples.

- b. *Survey / Right-of-Way Mapping* - The Consultant shall provide survey services within the projects limits as follows:
 - i. Establish Horizontal and Vertical Control based on North American Vertical Datum of 1988 (NAVD 88).
 - ii. Establish Baseline of survey.
 - iii. Establish project Benchmarks and Reference Points.
 - iv. Locate existing right-of-way lines.
 - v. Prepare a topographic 3D DTM route survey with cross sections at 100-foot intervals and 50-foot intervals through the horizontal curve.
 - vi. Provide survey data by electronic files.
 - vii. Provide survey data for the two cross drains including upstream and downstream flowlines, pipe size, pipe material and orientation.
- c. *SUE Services* - The Consultant shall provide SUE services within the project limits as follows:
 - i. Provide horizontal and vertical location information for utilities at two culvert locations within project limits.
 - ii. Provide a maximum of 10 additional utility test holes outside the active roadway as directed by the Engineer of Record (EOR).

2. Project General Tasks

- a. *Notice to Proceed (NTP) Meeting* - The Consultant team shall prepare for and attend one NTP Meeting with Nassau County staff. The Consultant shall prepare and distribute meeting minutes following this meeting.
- b. *Project Status Meetings* - The appropriate members of the Consultant team shall attend progress meetings at each major submittal with County staff to discuss project status, upcoming events and activities. The purpose of these meetings is to maintain clear communication between the County and the Project Team. The Consultant shall prepare and distribute meeting minutes following each of these meetings.
- c. *Other Coordination Meetings* - The appropriate members of the Consultant team shall attend other additional meetings for purposes of project submittals with the appropriate agencies as necessary. The Consultant shall prepare and distribute meeting minutes following each of these meetings.
- d. *Project Schedule* - The Consultant shall prepare and submit a project schedule for this project identifying major tasks, their duration and task relationships. The schedule shall be updated monthly and at other appropriate intervals.
- e. *Invoices/Progress Report* - Invoices shall be prepared in the format prescribed by the County. Progress reports shall be submitted with each monthly invoice.
- f. *Quality Assurance/Quality Control* - The Consultant shall designate appropriate staff to conduct Quality Assurance/Quality Control (QA/QC) reviews of all work products prior to submittals to the County.

3. Roadway Analysis and Plans

The Consultant will perform the necessary roadway analyses and prepare construction plan sheets, notes and details for a complete set of roadway construction documents to convey the intent and scope of the project for the purposes of construction. The Consultant will develop a pavement design based on the existing traffic data provided by the County and pavement cores obtained as part of this scope. Included herein are also the analyses, plans and design details necessary for a safe and effective TTCP to move vehicular and pedestrian traffic during all phases of construction. The design will be prepared in accordance with the FDOT Design Criteria for Resurfacing, Restoration and Rehabilitation (RRR) Chapter of the Florida Design Manual (FDM), the FDOT "Green Book" and applicable County Standards. This task will also include the preparation of Standard Specifications and Special Provisions.

4. Utility Coordination

The Consultant shall be responsible for coordinating all design with the affected utility companies in order to minimize utility conflicts. The following services will be included:

- a. *Utility Coordination* - The Consultant shall coordinate with the known private and public utility companies within the project corridor and obtain plans of their existing facilities (horizontally) within the project limits. The Consultant shall re-contact these utilities and submit 60% design plans that include all known existing utilities. The Consultant shall make a final contact with these utilities to submit 90% plans that show all proposed roadway and drainage improvements. The Consultant shall provide a list of utility contacts at the preliminary and final design. The Consultant will coordinate one Utility Design Meeting and prepare and distribute meeting minutes following this meeting.

5. Signing and Pavement Marking Analyses and Plans

The Consultant will perform the necessary signing and pavement marking analyses and prepare construction plan sheets, notes and details for a complete set of signing and pavement marking documents to convey the intent and scope of the project for the purposes of construction.

6. Permitting

The Consultant will provide all services (data collection, field surveys, coordination, agency meetings, permit and associated exhibit preparation, etc.) necessary to develop and apply for a General Permit with the St. Johns River Water Management District (SJRWMD) pursuant to Section 62-330.447 F.A.C. and a Nationwide Permitting (NWP) 14 through the US Army Corps of Engineers. Ideally the proposed project can be designed and authorized through the General Permit and the NWP permitting processes, however should the project exceed the thresholds of these authorizations, additional services provided under a future scope of services will be required for the preparation and submittal of an Individual Environmental Resource Permit through the SJRWMD.

7. Construction Cost Estimate

The Consultant will provide four construction cost estimates. The first will be a preliminary cost estimate to be provided one week following the NTP date. The other three will be provided at the 60%, 90% and Final design development stages.

8. Bid Phase Services

The Consultant will prepare a bid package including front end documents and specifications for the bidding of this project. The Consultant will also formally respond to

questions during the bidding phase of the project and prepare a recommendation of the lowest qualified bidder based on the County prepared bid tabulations.

9. Post Design Services

The Consultant will provide services necessary to assist the County during the construction phase of this project. The consultant will respond to contractor requests for information, review and approve shop drawings, attend meetings as necessary and revise plans as necessary. This effort also includes the review and approval of as-built drawings to provide certification to the SJRWMD and any other regulatory agencies, as required.

C. PROJECT DELIVERABLES

The Consultant shall contact the County prior to making a submission to verify the number of copies to submit. Up to five draft copies of the construction plans and required supporting documents (utility certifications, drainage and permit certifications, QC certifications, design calculations, letters, memos, etc.) will be submitted at the 60%, 100% and Final stages of design.

D. PROJECT SCHEDULE

The Consultant will provide a revised project schedule to the County no later than 10 days after the NTP date and meet all permitting requirements of this scope. However, timeliness of receipt of permits is out of the Consultant's control.

E. COMPENSATION

Peters and Yaffee, Inc. and its subconsultants will perform the scope of services outlined herein for a lump sum fee of \$284,991.23. Prime Consultant and Subconsultant fee amounts are indicated in the table below.

Fee Estimate:

Firm Name	Role	Fee Amount
Peters and Yaffee	Prime Consultant	\$210,710.23
Meskel and Associates	Subconsultant	\$13,200.00
ETM Surveying and Mapping	Subconsultant	\$61,081.00

TOTAL \$284,991.23

F. COUNTY RESPONSIBILITIES

1. Documents – The County shall provide access to any available plans, maps, survey data and other pertinent information under its control essential to the satisfactory completion of the work indicated herein.
2. Reviews – The County will provide timely reviews of the Consultant's work in accordance with the schedule agreed upon between the County and the Consultant. Each review period by the County shall be two weeks, at which time all comments will be forwarded to the Consultant.

G. ASSUMPTIONS

1. This effort does not include any contamination investigations or analysis. If areas are identified during the design, requiring further analysis, they will be addressed separately.
2. Utility relocation design services are not included in this scope of work. If relocations and/or upgrades are identified as necessary by utility agencies, the relocation design work will be addressed separately.
3. Wetland mitigation and/or threatened and endangered species mitigation efforts and/or designs are not included in this scope of services. If necessary, efforts will be addressed separately.
4. The County will be responsible for all agency permitting and/or application fees. These costs are not part of the Consultant's scope and proposal.

Distribution of Staff Hours For - PY																
Staff Classification	Hours from "Summary" sheet	Project Principal	Senior Engineer	Project Engineer	Engineering Intern	CADD Designer	Clerical	Staff Class 7	Staff Class 8	Staff Class 9	Staff Class 10	Staff Class 11	Staff Class 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		\$214.29	\$182.88	\$113.27	\$76.23	\$69.91	\$62.80	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
3. Project General and Project Common Tasks	150	60	15	60	8	8	0	0	0	0	0	0	0	150	\$23,493	\$156.62
4. Roadway Analysis	729	73	146	219	146	146	0	0	0	0	0	0	0	729	\$88,368	\$121.22
5. Roadway Plans	264	26	53	79	53	53	0	0	0	0	0	0	0	264	\$32,001	\$121.22
6a. Drainage Analysis	34	3	7	10	7	7	0	0	0	0	0	0	0	34	\$4,121	\$121.22
6b. Drainage Plans	44	4	9	13	9	9	0	0	0	0	0	0	0	44	\$5,334	\$121.22
7. Utilities	101	10	20	30	20	20	0	0	0	0	0	0	0	101	\$12,243	\$121.22
8. Environmental Permits, Compliance & Clearanc	43	4	9	13	9	9	0	0	0	0	0	0	0	43	\$5,212	\$121.22
9. Structures - Misc. Tasks, Dwg, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	255	26	51	102	51	26	0	0	0	0	0	0	0	255	\$32,016	\$125.55
20. Signing & Pavement Marking Plans	64	6	13	26	13	6	0	0	0	0	0	0	0	64	\$8,035	\$125.55
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LiDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	1,684	213	322	552	314	282	0	0	0	0	0	0	0	1,684		
Total Staff Cost		\$45,643.77	\$58,890.58	\$62,525.04	\$23,836.22	\$19,714.62	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$210,710.23	\$125.12

Survey Field Days by Subconsultant
4 - Person Crew:

- Notes:
1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.
2. Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

SALARY RELATED COSTS:			\$210,710.23
OVERHEAD:	0.000%		\$0.00
OPERATING MARGIN:	0.000%		\$0.00
FCCM (Facilities Capital Cost Money):	0.000%		\$0.00
EXPENSES:	0.000%		\$0.00
	4-man crew		
Survey (Field Days - if by Prime)	0	days @	\$ / day
SUBTOTAL ESTIMATED FEE:			\$210,710.23
Subconsultant: ETM			\$61,081.00
Subconsultant: MAE			\$13,200.00
Subconsultant: D			\$0.00
SUBTOTAL ESTIMATED FEE:			\$284,991.23
Geotechnical Field and Lab Testing (automatically pulls from Tab 35b)			\$0.00
SUBTOTAL ESTIMATED FEE:			\$284,991.23
Optional Services - (Describe)			\$0.00
Optional Services - Plans Update			\$0.00
GRAND TOTAL ESTIMATED FEE:			\$284,991.23



Loaded Billing Rates

SUBCONSULTANT: Peters and Yaffee, Inc.
COUNTY: Nassau County
DESCRIPTION: Continuing Engineering Contract

Employee Name	Hourly Rate	Employee Classification	Average Classification Rate	Loaded Billing Rate
Dow Peters, PE	\$71.15	Project Principal	\$70.81	\$214.29
Russell Yaffee, PE, PTOE	\$70.46			
Mike Molkenbur, PE	\$64.37	Project Manager / Senior Engineer	\$60.43	\$182.89
Wayne Petrone, PE	\$56.49			
Brett Manzie, PE	\$41.20	Project Engineer	\$37.43	\$113.27
Rusty Snider, PE	\$33.65			
Abid Virani, EI	\$26.25	Engineering Intern	\$25.19	\$76.23
Kelsey Cox, EI	\$25.45			
Whitney Anderson, EI	\$23.86			
Julius Catagan	\$23.10	CADD Designer	\$23.10	\$69.91
April Luttrell	\$20.75	Clerical	\$20.75	\$62.80

Henry Smith Road - CR 108 to SR 15/US 1 (New Kings Road)

Nassau County, Florida

ENGINEER'S ESTIMATE OF PROBABLE COST

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY TOTAL	UNIT PRICE	TOTAL PRICE
1	ROADWAY ITEMS				\$764,905
2	SIGNING AND PAVEMENT MARKING ITEMS				\$34,227
	SUBTOTAL				\$799,132
	CONSTRUCTION GRAND TOTAL (WITH 15% CONTINGENCY)				\$919,002
	CONSTRUCTION ENGINEERING INSPECTION SUBTOTAL (25% OF CONSTRUCTION COST)				\$229,750
	GRAND TOTAL				\$1,148,752
DISCLAIMER: THIS ESTIMATE OF PROBABLE COST IS APPROXIMATE. ACTUAL CONSTRUCTION BIDS MAY VARY SIGNIFICANTLY FROM THIS STATEMENT OF PROBABLE COSTS DUE TO TIMING OF CONSTRUCTION, CHANGED CONDITIONS, LABOR RATE CHANGES, OR OTHER FACTORS BEYOND THE CONTROL OF THE ESTIMATORS.					
ROADWAY ITEMS					
101-1	MOBILIZATION	LS	1	\$72,648.40	\$72,648.40
102-1	MAINTENANCE OF TRAFFIC	LS	1	\$66,044.00	\$66,044.00
104-10-3	SEDIMENT BARRIER	LF	1,500	\$3.82	\$5,730.00
107-1	LITTER REMOVAL	AC	7	\$75.00	\$525.00
107-2	MOWING	AC	5	\$425.00	\$2,125.00
110-1-1	CLEARING & GRUBBING	AC	3	\$5,000.00	\$15,000.00
120-1	REGULAR EXCAVATION	CY	1,000	\$3.15	\$3,150.00
120-6	EMBANKMENT	CY	1,500	\$5.48	\$8,220.00
160-4	TYPE B STABILIZATION	SY	250	\$12.50	\$3,125.00
285-701	OPTIONAL BASE, BASE GROUP 01	SY	250	\$24.86	\$6,215.00
285-706	OPTIONAL BASE, BASE GROUP 06	SY	25	\$29.86	\$746.50
327-70-1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	SY	500	\$6.13	\$3,065.00
327-70-5	MILLING EXIST ASPH PAVT, 2 1/2" AVG DEPTH	SY	25,344	\$3.85	\$97,574.40
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	TN	1,394	\$115.00	\$160,310.00
337-7-83	ASPH CONC FC, TRAFFIC C, FC-12.5	TN	2,091	\$127.50	\$266,602.50
400-2-2	CONC CLASS II, ENDWALLS	CY	3	\$1,505.00	\$4,515.00
425-1-541	INLETS, DT BOT, TYPE D, <10'	EA	2	\$4,116.83	\$8,233.66
425-2-71	MANHOLES, J-7, <10'	EA	2	\$6,200.06	\$12,400.12
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	LF	50	\$127.56	\$6,378.00
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	EA	2	\$1,644.87	\$3,289.34
570-1-2	PERFORMANCE TURF, SOD	SY	5,280	\$3.60	\$19,008.00
SIGNING AND PAVEMENT MARKING ITEMS					
700-1-11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	4	\$391.18	\$1,564.72
700-1-12	SINGLE POST SIGN, F&I GROUND MOUNT, 12-20 SF	AS	1	\$1,446.36	\$1,446.36
708-3	RETRO-REFLECTIVE PAVEMENT MARKERS	EA	476	\$3.39	\$1,613.64
711-11-125	THERMOPLASTIC, STD., WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	24	\$4.49	\$107.76
711-14-160	THERMOPLASTIC, PREFORMED, WHITE, MESSAGE	EA	4	\$260.24	\$936.86
711-14-170	THERMOPLASTIC, PREFORMED, WHITE, ARROWS	EA	2	\$98.77	\$197.54
711-16-101	THERMOPLASTIC, STD.-OTHER SURFACES, WHITE, SOLID, 6"	GM	3,600	\$4,005.26	\$14,418.94
711-16-201	THERMOPLASTIC, STD.-OTH, YELLOW, SOLID, 6"	GM	3,000	\$4,218.21	\$12,654.63
711-16-231	THERMOPLASTIC, STD.-OTHER SURFACES, YELLOW, SKIP, 6"	GM	1,000	\$1,287.04	\$1,287.04