

October 5, 2020

FOOD TERMINAL INCORPORATED

Taguig City

TERMS OF REFERENCE

- A. Project Name : **ROAD REPAIR/IMPROVEMENT OF CUCUMBER AND LANGKA ROADS, INCLUDING RE-BLOCKING, WIDENING, INSTALLATION OF STEEL RAILING, REPAIR OF STEEL GATE, SIDEWALK/DRAINAGE**
- B. Implementing Agency : Food Terminal, Inc.
- C. Location : Langka and Cucumber Road, FTI-Special Economic Zone, Taguig City
- D. Project Description

The project is about the supply of labor and materials, tools, equipment and technical supervision required to complete the remaining portion of the project which include the removal of existing concrete sidewalk, drainage culvert, concrete pavement to give way on the widening of roads at Cucumber and Langka Roads. The project also include the excavation, laying of new drainage pipe, construction of drainage manhole, concreting of road, sidewalk, curb, gutter and slope protection in accordance with the plans and specification specified herein.

E. Objectives:

- To widen the roadway and maximize its use to resolve the traffic congestion.
- To do repair works on existing concrete pavement, side walk and drainage line.
- To enhance safety measures through improvement/ repair of damaged roadway, manholes and construction of retaining wall to prevent soil erosion.

- F. Expected Completion/Commissioning Time : 4th Quarter of CY 2019
- G. Project Estimated Cost : P17,836,896.09 VAT
Inclusive
- H. Registration Particulars : GE-1, Category C&D Small B
- I. Time Frame/Project Duration : 150 Calendar Days
- Terms of Payment: : 15% Mobilization
Monthly Progress Billing
And 100% Final Billing

J. Scope of Work:

1. Mobilization of equipment, manpower, materials, tools.
2. Installation of concrete barricades (SPL-1)
3. Item 101 (3), Removal of existing sidewalk located at:
 - a. Left Station 0+501 to 0+960
 - b. Left Station 1+320 to 1+480
 - c. Right Station 0+000 to 0+500Total =1120 linear meters.
4. Item 101 (4)b, Removal of existing curb and gutter located at:
 - a. Left Station 0+501 to 0+960
 - b. Left Station 1+320 to 1+480
 - c. Right Station 0+000 to 0+500Total =1120 linear meters.

5. Item 101 (2)a, Removal of RCPC and Storm Drain (24") located at :
 - a. Left Station 0+501 to 0+960
 - b. Left Station 1+320 to 1+480
 - c. Right Station 0+000 to 0+500
 - d. Left Station 0+200-0+210
 Total =1130 linear meters.

6. Construction of drainage system.
 - a. Excavation work.
 - b. Item 500-1a, Laying of Pipe Culverts 610mmØ (24Ø")

Toal number = 1690 units to be installed complete with concrete collar and sand bedding located at:

 - b.1 Left Station 0+440 to 0+960
 - b.2 Left Station 1+320 to 1+480
 - b.3 Right Station 0+000 to 0+1000
 - b.4 left Station 0+200 to 0+210
 - c. Backfilling.
 - d. Item 502-1, Construction of CIM for 610mmØ RCPC (24" diameter)

Total number to be constructed+ 134 sets. See attached plan.

7. Item 601(b), Construction of Side Walk (100mm thick) to include but not limited to the following:
 - a. Base preparation/embankment, laying of 50mm thick gravel bedding.
 - b. Construction of concrete sidewalk on the following areas:
 - b.1 Left side Station 0+000 to 0+960
 - b.2 Left side Station 1+320 to 1+480
 - b.3 Right side Station 0+000 to 1+460
 Total =2580 linear meters.

8. Item 600(3), Construction of concrete curb and gutter, type A cast in place located at:
 - a. Left side Station 0+100 to 0+960
 - b. Left side Station 1+320 to 1+480
 - c. Right side Station 0+000 to 1+460
 Total =2480 linear meters.

9. Item 101(3), Removal of existing pavement (t=0.23m).

Approximate area = 814.50m²

 - a. Station 0+480 to 0+510
 - b. Station 0+540 (3.5mx3.0m)
 - c. Station 0+560 to 0+590
 - d. Station 0+940 to 0+980
 - e. Station 1+300 to 1+320

10. Road excavation (Surplus common) (Item 102-(2)a).
11. Item 201, Preparation/laying of 150mm thick aggregate base course to include spreading and compaction as per plan.
12. Field density testing.
13. Item 311(3), Pouring of 0.23 meters thick ready mixed concrete.(3500 psi, 3 days)

Length and Width are shown in the plan. Approximate area= 4,161.90m².

 - a. Left Station 0+000 to 0+180 $\{(3.20+1.41)/2*180\}$
 - b. Left Station 0+180 to 0+480 $\{(3.30+1.41)/2*300\}$
 - c. Left Station 0+620 to 0+840 $\{(0+1.90)/2*220\}$
 - d. Left Station 0+840 to 0+960 $\{(1.90+1.10)/2*120\}$
 - e. Left Station 1+320 to 1+480 $\{(2.60+2.30)/2*670\}$
 - f. Right Station 0+500 to 0+840 $\{(0+2.60)/2*340\}$
 - g. Right Station 0+840 to 0+960 (.30*150)

- h. Right Station 0+980 to 1+320 $\{(3.20+4.0)/2 \times 340\}$
- i. Re-blocking Station 0+480 to 0+510
- j. Re-blocking Station 0+560 to 0+590
- k. Re-blocking Station 0+940 to 0+980
- l. Re-blocking Station 1+300 to 1+320
- m. Station 0+540 (3.5m x 3.0m)

14. Slope Protection (80 linear meters):

- a. Laying of 150mm thick concrete hollow block with 12mm diameter deformed bar vertical reinforcement spaced at 0.60m distance and horizontal reinforcement, 12mm diameter deformed bar at every 3 layers of concrete hollow block.
 - b. Plastering of wall (rough finish).
 - c. Base preparation, laying of gravel bedding, and pouring of 0.10m thick by 80 linear meters upper ground level {side walk Item No. 601(b)}.
- NOTE: The contractor must inspect the existing un finish work.

15. Transfer of Triumph Gate.

- a. Repair and installation of steel gates as per plan.
- b. Fabrication/installation of 3"Ø BI Pipe horizontal frame w/ 3mmØ 2"x2" hole cyclone wire fence w/ 10mmØ plain round bar stiffener (see detailed plan).
- c. Application of rust converter/ concrete neutralizer.
- d. Application of 1 coat primer and 2 coats gloss latex paint for all concrete surfaces.
- e. Painting of cyclone wire and all exposed steel surfaces as per plan.
- f. Demolition of concrete pedestal (former location)
- g. Hauling of debris, and Cleaning.

NOTE: The contractor must inspect the existing un finish work.

16. Re-alignment of concrete inner fence.

- a. Supply and installation of ½" thick base plate & 3/8" thick x 4" x 4" WF column as per plan.
- b. Supply and installation of 4 layer pre-fabricated concrete wall panel (0.075m thick x 0.50m width x 2.0m length).
- c. Supply and installation of 3mmØ w/50mmx50mm hole cyclone wire on 10mm plain round bar framed on 2"Ø b.i pipe schedule 40 installed on top pf the pre-fabricated concrete wall panel (see detailed plan).
- d. Painting works:
 - d.1. Application of rust converter/concrete neutralizer.
 - d.2. Painting of cyclone wire and all exposed steel surface

NOTE: The contractor must inspect the existing un finish work.

17. Repair of un-affected Concrete curb and gutter, sidewalk.

18. Removal of steel gate and portion of concrete fence along CRB road (maharlika gate)

19. Cleaning and reconditioning of existing drainage structure (24"Ø).

- a. Left Station 0+960 to 1+320
- b. Right Station 1+320 to 1+460


Total length= 500 linear meters

20. Painting of pedestrian lane at seven (7) location using high quality traffic paint (minimum thickness is 20 mils).

21. Fabrication and installation of steel railing using 2"Ø galvanized iron pipe schedule 20 along portion of Lanka road to be painted with 1 coat primer and 2 coats quick dry enamel paint color yellow (see plan and shop detail).

22. Cleaning & demobilization.

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