



Republic of the Philippines
CIVIL AVIATION AUTHORITY OF THE PHILIPPINES

SUPPLEMENTAL / BID BULLETIN NO. 7

PURCHASE / INSTALLATION OF ILS for ILOILO INTERNATIONAL AIRPORT
 (Bid No. 22-016-06)

29 September 2022

- I. Pre-Bid Conference is scheduled on **04 October 2022, 10:00 AM** through Video Conference Room via Google Meet.
- II. Deadline for the Submission and Opening of Bids will be on **20 October 2022 at 2:00 PM** at the CAAP Conference 4th Floor CAAP Compound, Pasay City.
- III. Please note the following amendments/ revisions/ clarifications to the Bidding Documents:

Reference	Remarks	Answer																								
<p>Query: Item No. 1.2.5 under Section VI. Schedule of Requirements Item No. VIII. Site Works- Provision of Powerline, Fiber Optic Link & ancillaries and other works**.</p> <p>Philcox understands that during the site survey conducted on August 2, 2022, the existing transformers are to be installed inside the shelters, therefore transformer cages are not needed.</p> <table><tr><td>1.2.5</td><td>Provision of Transformer cage (2 sets) for ILS and GP/GS Shelter</td></tr><tr><td></td><td>4" thk CHB</td></tr><tr><td></td><td>deformed bar 12mm x 6m</td></tr><tr><td></td><td>deformed bar 10mm x 6m</td></tr><tr><td></td><td>6' x 7.5mtrs cyclone wire #10</td></tr><tr><td></td><td>50mm G.I pipeS-40</td></tr><tr><td></td><td>Steel / G.I cross arm 10'</td></tr><tr><td></td><td>epoxy paint w color top coat</td></tr><tr><td></td><td>silver alum paint, QDE</td></tr><tr><td></td><td>Cement</td></tr><tr><td></td><td>Sand</td></tr><tr><td></td><td>Gravel</td></tr></table>	1.2.5	Provision of Transformer cage (2 sets) for ILS and GP/GS Shelter		4" thk CHB		deformed bar 12mm x 6m		deformed bar 10mm x 6m		6' x 7.5mtrs cyclone wire #10		50mm G.I pipeS-40		Steel / G.I cross arm 10'		epoxy paint w color top coat		silver alum paint, QDE		Cement		Sand		Gravel	Requirement	<p>The required transformer for the project is a dry-type transformer that may be housed securely within the new shelter in conformance with the electrical code of the Philippines or be provided by separate transformer cage as required in item 1.2.5.</p>
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<p>Query: Drawing Sheet No. 03/07 (Proposed location of GP20 shelter)</p> <p>The proposed location of GP Shelter is about 57meters from the existing shelter. We are submitting to you herewith OEM</p>	Requirement	<p>Shelter location can be placed within 20m to 57m from the existing shelter depending on OEM equipment operational characteristics that still maintains an optimal performance.</p>																								

<p>suggested information regarding the relocation of the new shelter, particularly item 1.1 and 1.2.</p> <p>The DME will have to be installed on a separate mast close to the equipment shelter, please refer to item 1.2 and 1.3 for information only.</p>		<p>However, DME antenna mast shall be collocated with the GP antenna to maintain the published ATC procedures.</p>
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This bid bulletin shall be an integral part of the Bidding Documents and the same shall be enclosed in the technical bid envelop/component and shall be marked/tabbed accordingly.

For the information and guidance of all concerned.



CAPTAIN EDGARDO G. DIAZ
Chairperson, Bids and Awards Committee

1. ILOILO RWY ILS Equipment location.

1.1 The issue with suggested change of shelter positions is the increased cable loss.

GP20



Figure 1-1 Shelter approximately 170m from centerline.

Figure 1-1 shows the suggested shelter location for GP20. The distance between shelter and mast approximately 50m.

The maximum allowed cable loss between electronic cabinet and antenna is 2dB (TX) and 2dB (mon).

To compensate for the increased distance, low loss cables are required. Due to the size of these cable (7/8"), these cable can not be connected inside the shelter or pulled up to each antenna.

One option is:

50m 7/8" cable between manhole and 1/2" cable between manhole and equipment, 1/2" cable between manhole and antennas.

Cable loss 50m 7/8" coax cable (330MHz): 1.04dB

Cable loss 25m 1/2" coax cable (330MHz): 1.00dB

Total cable loss between equipment and antennas: approximately 2.0dB and just on the limit.

- The 7/8" cable is rigid and pipes should be as straight as possible
- Including power cable minimum 3 pipes between equipment shelter and mast is required.
- Pipes have to cross a drainage ditch and service road.
- The 7/8" cable and 1/2" cable will have to be joined together in the manhole or at the foot of the mast, measures must be taken to avoid humidity and water inside the connectors.

- New "large" manhole close to the antenna mast and equipment shelter to reduce the distance as much as possible.

1.2 DME 20

The DME will have to be installed on a separate mast close to the equipment shelter. Total cable loss with suggested shelter location is approximately 4dB (at 1.3 GHz) with DME antenna installed in the GP mast (2dB allowed).

1.3 Localizer 20

Distance between antenna array and equipment shelter approximately 140m.

Type of cable: ½" for both TX and Mon

Antenna height: approximately 3m (mast and antenna)

1.4 Optional location

Equipment shelter approximately 140m from centerline (Fig 1-3 ICAO reference)



Figure 1-2 Shelter approximately 140m from centerline

GP20:

With a distance of 20m between shelter and antenna mast, the cable size can be reduced to ½" (cable loss approximately 1.6dB).

This location is less complicated and recommended if the existing location is no longer accepted.

DME20:

Separate mast close to the equipment shelter recommended. With location in the GP antenna mast, cable loss approximately 2.2dB (with 7/8" and ½" cable) and is just outside the recommended limit (2dB).