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MMRCL/Car Depot
November 16th, 2022

Sub: Construction of the Depot cum workshop buildings, Metro station building, sub-way, earthwork and all associated works at Aarey colony, for the Mumbai Metro Line-3, Project.

: Execution of OCC infrastructure & workshop building shed by appointing new agency due to unwillingness by car depot civil works contractor

Ref: i) GC letter No. GCC-MMR-DEP-D00-221038-A0 dt. 14/11/2022
ii) Pre-page note dt. 02/09/2022
iii) GC letter No. GCC-MMR-DEP-D00-220722-A0 dt. 10/08/2022

- GC vide referred letter dt. 10/08/2022 (Kept @ Pg 51 c/s) informed that it has become necessary to review items of construction at Aarey depot in order to optimize the construction time lines to achieve revenue operation dates. The recommendations of GC are deliberated by the senior officers of MMRC and the same are approved by the MD vide pre page noting.
- One of the recommendations (vide Sr No.(B)) was to convert structural steel roof for workshop building, infrastructural shed at OCC, heavy wash plant, Pit wheel lathe shed into PEB structure by issuing variation in the existing car depot civil works contract.
- As approved by Competent Authority, tender notice for the "PEB works for stabling shed-2 and station platform shed at Aarey Depot" was invited on 29/09/2022. Tender is opened and bid of M/s Zamil Steel Buildings India Pvt Ltd quoted rate at (-) 3.06 % below the estimated cost is found lowest one. Existing depot contractor M/s SAM (India) Builtwell Pvt Ltd has also participated in the tendering and found L3 with quoted rate at (+) 22.33 % above of cost put to tender.
- During site review meeting, car depot civil works contractor was requested to accept lowest quoted rate (i.e. (-) 3.06 % below of cost put to tender) for the proposed PEB work for workshop building, infrastructural shed at OCC, heavy wash plant, Pit wheel lathe shed. Contractor M/s SAM (India) Builtwell Pvt Ltd informed that the rate quoted by lowest agency is not workable for them and shown unwillingness to execute the PEB works.
- GC vide letter dt. 14/11/2022 (Kept @ Pg 57 c/s) has recommended for a fresh tender for workshop and OCC Infrastructure shed roof to achieve revenue operation dates. GC vide technical note of this letter mentioned that the cost of subject proposal would be adjusted against savings of relevant items for roofing system and roof structure from approved revised BOQ and overall, there would be saving in car depot civil works contract.

Proposal:

In view of above, as recommended by GC vide letter dt. 14/11/2022 (Kept @ Pg 75 c/s) it is proposed to accord approval for invitation of new tender for the "PEB works for OCC Infrastructure and Maintenance Workshop shed at Aarey depot" with an estimated cost of Rs. 36,33,46,340/-.

It is proposed to invite tenders on short notice of 15 days.
Submitted please.

[Signature]
(C. M. Jadhav)
ED (Civil)

Director (P):

These works, as structural steel work, are part of existing civil work of the Depot. As decided earlier these works are to be done in PEB to save time. These were to be assigned to existing contractor and rates negotiated.

As the civil contractor is not willing to undertake works at prevailing market price, ED/civil has proposed to carry out a bidding on short notice.
May kindly approve.

MS
[Signature]
16.11.22

[Signature]
16/11

3 NIS

MMRC/Car Depot
November 17th, 2022

Sub: Design, fabrication, supply and erection of Pre-Engineered steel buildings for OCC infrastructure and maintenance workshop shed at Aarey depot of Mumbai Metro Line-3 (Coloba-Bandra-SEEPZ) project

: Finance vetting to estimated cost Rs. 36,33,46,340/-

Ref: i) GC letter No. GCC-MMR-DEP-D00-221038-A0 dt. 14/11/2022
ii) MMRC's letter No: MMRC/ML-3/Car Depot/Restart/22/2069 dt. 02/09/2022
iii) MMRC's approval dt. 07/09/2022 to Mom dt. 29/08/2022
iv) GC letter No. GCC-MMR-DEP-D00-220722-A0 dt. 10/08/2022

A. Administrative approval:

Vide pre-page note, the MD has accorded administrative approval for an estimated cost of Rs. 36,33,46,340/- for invitation of new tender for the work of "PEB works for OCC Infrastructure and Maintenance Workshop shed at Aarey depot" by inviting short notice of 15 days.

B. GC's recommendations:

GC vide letter dt. 14/11/2022 (Kept @ Pg 55 c/s) has submitted detailed proposal for subject work. As mentioned in technical note, the brief scope of work is as below:

Section-I: PEB Structural works:

The OCC Infrastructure shed and Maintenance Workshop in Aarey Depot are designed to maintain the rolling stock during non-operational hours. OCC infrastructure contains 4 lines and Maintenance workshop contains 7 lines. The dimensions of OCC Infrastructure shed is 112.65 x 35.45 Rmt and Maintenance Workshop is 296.20 x 61.12 Rmt. OCC infrastructure shed and Maintenance workshop shall be covered under a roof at an approximate height of 10 meter from the formation level 25.400. Roof components include Structural steel members (ISMB, ISMC, etc. sections), Roof and Side cladding with Galvalume alloy material, Multi cell Polycarbonate panels for sun light, Sun louvers of Aluminum Alloy, naturally driven Turbo fans, MS Rain-water gutter and uPVC Down take pipes. Also, Provisions for OHE, LV fan and system requirements are considered in the design.

The work scope involves Designing, providing, fabricating, painting, transporting, erecting and securing in position structural steel work for OCC Infrastructure and Maintenance workshop roof as per specifications, approved shop drawings.

The structural items covered under this section are columns, stanchions, beams, rafters, purlins, runners for cladding, gantry girders, brackets, hangers/ suspenders, runner beams for under slung cranes, bracings, etc., along with attachment / provision for fixing E&M, OHE, LV Fan, ridge, gutter and S&T equipment's etc. in the building steel roof structures.

The structural steel quantities calculated by GC are tentative and estimated in consultation with their Structural expert. The areas of different structures & quantities considered under this contract are as follows:

Table No.1: Areas of different structures

Sr. No.	Structure	Plan Dimensions (L x B) (meters)	Roof Profile Area & cladding (sqm)	Quantity (Ton)
1	OCC Infrastructure Shed	112.65 x 35.45	5081.00	301.00
2	Maintenance Workshop with Cladding	296.20 x 61.12	21457.20	1820.30
3	Anchor Bolts and M.S. Gutters (2.75+14.95 MT)	-	-	17.70

Six coat painting system is considered in the design which consists of four layers of under coat and one intermediate and one layer of finish Acrylic Poly Urethane coating. The scope also covers providing, fabricating and supplying Hot - Dip Galvanized Holding down Bolts, washers, nuts, lock nuts and pins. Foundation bolts and its grouting with non-shrinkable cementitious material shall be done by PEB Contractor as approved by The Engineer.

Section-II: Roof system & cladding works:

The side cladding is provided in OCC Infrastructure shed and Maintenance workshop shed as per the tender drawings. Cladding is provided along the length of one side of OCC Infrastructure shed and Maintenance workshop shed. The width of cladding considered in tender drawings is 9.0m (approx.). For the OCC Infrastructure shed the area of cladding is $112.65 \times 9.0 = 1013.85$ Sq.M and for Maintenance Workshop shed is $(296.20 \times 9.0 = 2665.8$ Sq.M. and Bldg side $296.20 \times 2 = 592.4$ M2,) 3258.2 M2

Side Cladding Roofing system is made of Single Skin with 65/430 mm profile with 'Galvalume material' and Thickness 0.55mm manufacture from high tensile steel with minimum 550MPa yield strength, hot dipped coated with Aluminum Alloy with Paint system Super Durable Polyester (SDP) of approved color conforming to AS/NZS 2728 type-4 / IS15965 class 3.

For OCC Infrastructure shed and Maintenance workshop shed the roof material considered is single skin trapezoidal profile sheeting 0.55mm TCT, with 1015mm effective cover Roofing system Galvalume material etc.

C. Estimation as per GC:

GC vide letter dt. 14/11/2022 (Kept @ Pg 36 c/s) has submitted financial implications for execution of subject work. GC mentioned that recently in the month of June 2022, MMRDA has invited similar tender for PEB works at Mandale depot cum workshop of Mumbai Metro Rail project of MMRDA. GC has referred estimated rates, specifications of Mandale depot tender for working of proposed PEB works at Aarey colony depot (Kept @ Pg 44 c/s). The same rates are also considered for MMRCL previous tender of PEB for stabling shed 2 and Aarey station platform shed. GC has proposed to invite tender on tonnage basis like Mandale depot tender. The breakup of estimated cost is as below:

Table No.2: Breakup of estimated cost

Sr. No.	Item Description	Qty	Unit	Rate (Rs)	Amount (Rs)
1	Designing, providing, fabricating, painting, transportation, erecting & securing in position structural steel work	2,121.80	MT	1,49,321/-	31,68,29,297.80

2	Providing, fabricating and supplying holding down galvanized MS bolts as per the technical specifications	2.75	MT	2,01,920/-	5,56,107.87
3	Providing and fixing single skin trapezoidal profiled sheeting with 1015 mm effective covered width 28-35 mm crests @ 200 – 300 mm pitch manufactured out	26,538	Sqm	1,068/-	2,83,42,584.00
4	Supply & installation of polycarbonate profiled skylight sheets manufactured through online extrusion process.	1,666.40	Sqm	3,758/-	62,62,331.20
5	Designing, providing, fabricating and erection of; hot dipped galvanised "Rain water gutters" using 3.15 mm thick mild sheets including all accessories, connections	14.95	MT	1,51,770/-	22,68,961.50
6	Providing and fixing aluminium louvers made of frame with MS pipe 60x40x3mm inside frame of aluminium sheet 2m and	613.05	Sqm	4,100/-	25,13,505.00
7	Providing and fixing uPVC Rain water pipes of 160mm outer diameter and having wall thickness of 2.2 to 2.7 mm	1656	RM	1,670/-	27,65,520.00
8	Turbo Ventilators : Suppling & Fixing vertical Vane design 900mm dia turbo ventilators 'HURRICANE 900 model' or equivalent	96	Each	39,667/-	38,08,032.00
Total Amount (Rs)					36,33,46,339.37
Say					Rs. 36,33,46,340/-
(Inclusive of GST & all other taxes)					

The estimated cost of subject work at Aarey colony is amounting to **Rs. 36,33,46,340/-** (Inclusive of GST & all other taxes). The rates considered for estimation are same as per MMRDA's Mandale depot rates. The structural steel quantities calculated by GC are tentative. Actual quantity may increase or decrease after detail design submitted by PEB contractor & vetted by GC. For such increase or decrease in quantity, accepted rate of the items for variation in quantities will remain same as of contractual accepted price of BOQ. Necessary provisions shall be added in bid document. The tenderer shall be requested to provide break up of quoted price including GST, quoted price excluding GST and GST amount during financial submission. The subject work is scheduled to be completed in **9 months' time period including monsoon.**

Budget Provision:

The structural steel roof for OCC infrastructure & maintenance workshop shed is already a part of the present depot contract and also included in the revised DPR approved by the Board & the GoM. The estimated cost of subject proposal would be adjusted against savings of relevant items for roofing system and roof structure from approved revised BOQ of car depot civil works contract.

PROPOSAL:

In view of above, Finance is requested to vet the estimated cost of **Rs. 36,33,46,340/-** (Inclusive of GST and all other taxes) for the proposed work of "Design, fabrication, supply and erection of Pre-Engineered steel buildings for OCC Infrastructure and Maintenance Workshop shed at Aarey depot of Mumbai Metro Line-3 (Colaba-Bandra-SEEPZ) Project".

The SOP for MMRC Sr No. W4(a)(i) at page No. 6, Director (Projects) is the Competent Authority to sanction inviting of tenders for the work. Draft tender notice to be published in newspaper is kept @ Pg 83 c/s & detailed tender notice to be published in website is kept @ Pg 85 c/s. As approved, it is proposed to call short tender notice by giving 15 days' notice period.

GC has submitted 6 volumes of draft tender documents which are submitted for finance vetting (Kept below).

Submitted please.

R. A. Patil
17/11/2022
(R. A. Patil)
DGM

~~ED (Civil):~~

[Signature]
17/11/22

~~GM (Finance):~~

[Signature]
17/11/2022

A G M A L C



Director (P):

Date: 18/11/2022

In original depot contract there is a provision of structural steel roof for Stabling shed 1 &2, Maintenance workshop building, infrastructural shed at OCC, Heavy wash plant, Pit Wheel lathe shed was allotted to Package 8 – Civil Depot with M/s Sam India Builtwell Pvt Ltd.

Director Project has approved the estimated amounting to Rs 38.62 Cr (Incl 18% GST) for PEB Shed of stabling shed 2 and Aarey Station Shed dt 28/09/2022 (CS/ 21).

As per NS/ 1, last para, GC & Package team has mentioned that the cost of subject proposal would be adjusted against savings of relevant items for roofing systems and roof structure from approved revised BOQ and overall, **there would be saving in car depot civil contract.**

Now, the proposal comes for vetting of PEB shed of Maintenance workshop and OCC infrastructural shed for Rs 36.33 Cr (Incl 18% GST) and RFP documents for e tender.

The rates are taken by Package team & GC, as per tender invited at Mandale Depot by MMRDA in June-22. Rates verified and arithmetic calculation found in order and may be vet estimate for Rs 36,33,46,340/- (Incl 18% GST).

The RFP document (CS/ 35) is vetted with following observations,---

- a) **Bid security** – 0.5% estimated value.
- b) **Taxes -Estimated Value** is inclusive of all taxes, duties, cess, royalty, etc including GST rate. **(To be incorporate in all clauses in bid document)**
- c) **Price adjustment** – no price adjustment is payable as this is a fixed price contract. **(To be incorporate in GC/SC)**
- d) **PBG Value** – 3% of Estimated Value as per circular by GOI/MoF.
- e) **Stamp duty** is payable by the contractor.

As per SOP clause W (4) (i), Director Project is competent authority for approval.

H.M. 0006
18/11/22
AGM-Accounts

GM-Finance } the letter for the contractor regarding their unwillingness to execute the PEB can be obtained by Pkg. Team. } Pg 10505

Director (F) } AS proposed by GC by their letter No. GCC-MMR-(CS/55) DEP-D 00-221038-AO 14/11/22 and put up by Pkg Team at No. 356 the proposal can be concurred in Finance. }
22/11/22
18/11/2022

Director (P) } ~~Director~~ [Signature]

Approved: [Signature]
21/11
Dir/civil