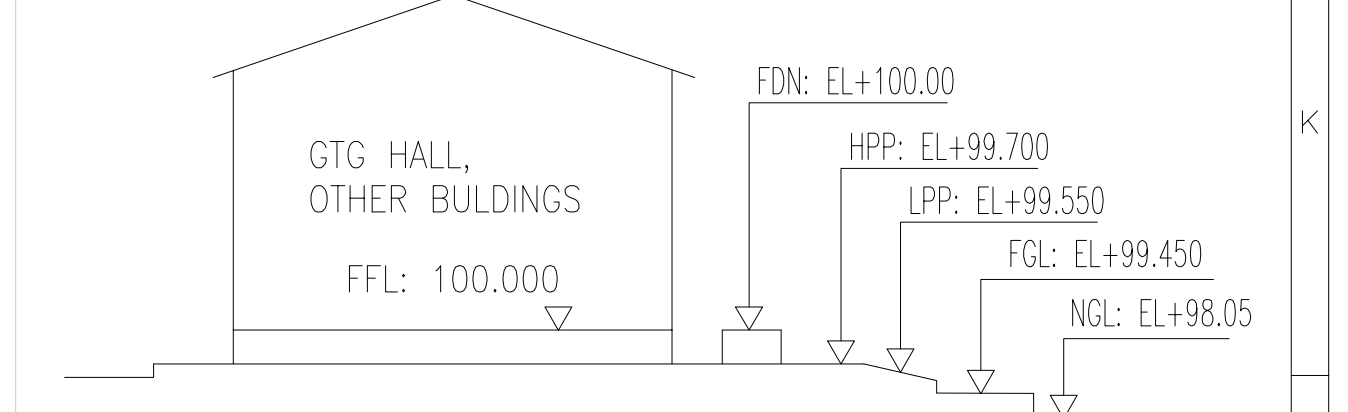


LIST OF EQUIPMENTS/BUILDINGS (PRELIMINARY)			
SL NO	DESCRIPTION	QTY.	SIZE (M X M)
1	GTG SHED	1	38.5X23.0
2	HRSG AREA	1	44.40X17.4
3	STG BUILDING	1	32X15
4	GT GENERATOR TRANSFORMER	1	15.9X11.79
5	ST GENERATOR TRANSFORMER	1	12.8X11.8
6A	GIS BUILDING (66KV)	1	38X13.5
6B	GIS BLDG (33KV), CONTROL ROOM	1	33X22
6C	TRANSFORMER BAY (220/ 66kv)	1	35.6X12
6D	TRANSFORMER BAY (220/ 33kv)	1	35.6X12
7	SWGR BLDG (SS94)	1	72X16
8	TRANSFORMER AREA (66/11/0.433) (4+6 NOS)	1	72X12.5
9	BFP AND DEAEATOR STRUCTURE	01	44X21
10A	LIQUID FUEL AREA (HSD)	01	15.1X8
10B	LIQUID FUEL AREA (NAPHTHA)	01	19X8
11	GAS CONDITIONING SKID AREA	1	34.1X18
12	DG SHED	1	51.5X17.2
13	DUMP CONDENSER, COND TANK, PUMP (2 NOS)	1	16.2X10.8
14	SWAS	1	12X6
15	AIR COMPRESSOR SHED	1	11.5X7
16	CEMS FOR HRSG	1	7X7.5
17	CBD TANK FOR HRSG	1	DIA 1.5M
18	IBD TANK FOR HRSG	1	DIA 2.0 M
19	SPACE FOR FEED WATER CONTROL VALVE STATION FOR HRSG	1	4.5X2.0
20	PLATE HEAT EXCHANGER, PUMP	2+2	6X8
21	CONDENSATE STORAGE TANK	1	DIA 5.5X7M HT
22	GT INLET AIR FILTER	1	12 X 9
23	GT BYPASS STACK	1	DIA 3.9
24	HRSG EXHAUST STACK	1	DIA 4.5
25	LP DOSING SKIDS 2 NOS, SAFETY SHOWER	2+2	4X4
26	TRAFO OIL PIT (NEAR FD FAN)	5(LX3.5(B)X3(H)	
27	TRAFO OIL PIT (NEAR SS-93)	8(LX3.8(B)X3(H)	
28	CAPACITOR BANKS	3+3	11.73X20.57
29	HSD, NAPHTHA DRAIN TANK	1+1	7.5X5.5
30	HSD, NAPHTHA FORWARDING PUMPS(EIL SUPPLY)	2+2	2X3.8 EACH
31	MANHOLE FOR OWS AND CRWS SYSTEM (CONT BY EIL/HPCL)	1+1	2X2 EACH
32	OWS COLLECTION PIT	1	2X2X3
33	CRWS COLLECTION PIT	1	2X2X3
34	STEAM TRAP DRAIN COLLECTION PIT	1	2X2
35	VENT SILENCER STRUCTURE	1	14.5X6

LIST OF EXISTING FACILITIES			
SL NO	DESCRIPTION	QTY.	SIZE (M X M)
E1	EXISTING TRANSFORMER BAY	1	22.3 X 9.2
E2	TRANSFORMER OIL PIT	1	5.8X5.8
E3	EXISTING TRAFO BAY (GT-5,6)	1	81.1 X 12.5
E4	TRANSFORMER OIL PIT	1	6.2X4.1
E5	EXISTING SWITCH YARD	1	58.5X39
E6	EXISTING CABLE TRENCH	1	--
E7	EXISTING PIT, FIRE DV STATION	3	

CPP INTERNAL PLANT/PLOT LEVELS			
LEVEL	ELEVATION	RL (OLD) UPTO REV-02	
FDN/FFL	100.000	4.80	
HPP	99.700	4.50	
LPP	99.550	4.35	
FGL	99.450	4.25	

LEGEND:
NGL : NATURAL GROUND LEVEL
FGL : FINISHED GROUND LEVEL
LPP : LOWEST PAVED POINT
HPP : HIGHEST PAVED POINT AND ROAD LEVEL
FDN : HALL/BUILDING/PIPERACK FOUNDATIONS LEVEL
FFL : FINISHED FLOOR LEVEL
RTL : ROAD TOP LEVEL



REFERENCE LEVELS OF FLOORS/FOUNDATIONS			
CUSTOMER	HP	HINDUSTAN PETROLEUM CORPORATION LIMITED	
CONSULTANT	ENGINEERS INDIA LIMITED (EIL), NEW DELHI	VISAKH REFINERY, VISHAKHAPATNAM	
PROJECT	75 MW CAPTIVE POWER PLANT (CPP) PACKAGE (1x 66kV GTG + 1 x 185 TPH HRSG + 1 x 15 MW BPTG) FOR VISAKH REFINERY MODERNIZATION PROJECT (VRMP)		
DEPT. / DESK	HYDERABAD		
UNCL. DMS.	OR C/W/F		
SCALE	1:350		
WEIGHT (KGS) REF. TO ASSY. DRG.	NA		
ITEM NO. OF ITEMS	NA		
REV.	04		
TITLE	OUTDOOR AREA CABLE TRAY TRENCH LAYOUT		
CARD CODE	NA		
SHR. No	01		
NO. OF SHR.	03		

DOCUMENT REVIEW DETAILS

REV.	DATE	ALTERED	CHD/APPD
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

NOTES:

- ALL CO-ORDINATES ARE IN METERS
- ALL DIMENSIONS ARE IN MM
- ALL ROADS INSIDE THE CPP BATTERY LIMIT SHALL BE SUITABLE FOR HYDRA/Crane MOVEMENT.
- EGL/NGL INSIDE CPP PLANT BOUNDARY RL: +2.85M
- * :: GRADING TO LEVEL RL+4.25, UPTO EDGE OF CPP PLANT BOUNDARY SHALL BE DONE BY EIL/HPCL. MICROGRADING SHALL BE BY BHEL.

PIPE RACK

EXISTING ROAD

PROPOSED ROAD

EXISTING FACILITIES ISBL OF CPP

CABLE TRENCH

EXISTING FENCE

REFERENCE DRAWINGS:

MECHANICAL

- EOP. LAYOUT & SCOPE FOR CPP
- EQUIPMENT LAYOUT OF GT & GENERATOR
- GENERAL ARRANGEMENT OF HRSG
- GENERAL ARRANGEMENT OF STG
- BFP & DEAEATOR AREA LAYOUT
- GAS CONDITIONING SKIDS AREA LAYOUT
- HAZARDOUS AREA LAYOUT
- PIPE RACK GENERAL ARRANGEMENT DRAWING

ELECTRICAL

- 33KV GIS LAYOUT (SS-93)
- SWGR (SS-94 SUB STATION)
- GTG & STG TRAFO YARD LAYOUT
- SAT & LV DIST. TRAFO YARD LAYOUT
- SWAS ROOM LAYOUT
- CONTROL ROOM LAYOUT

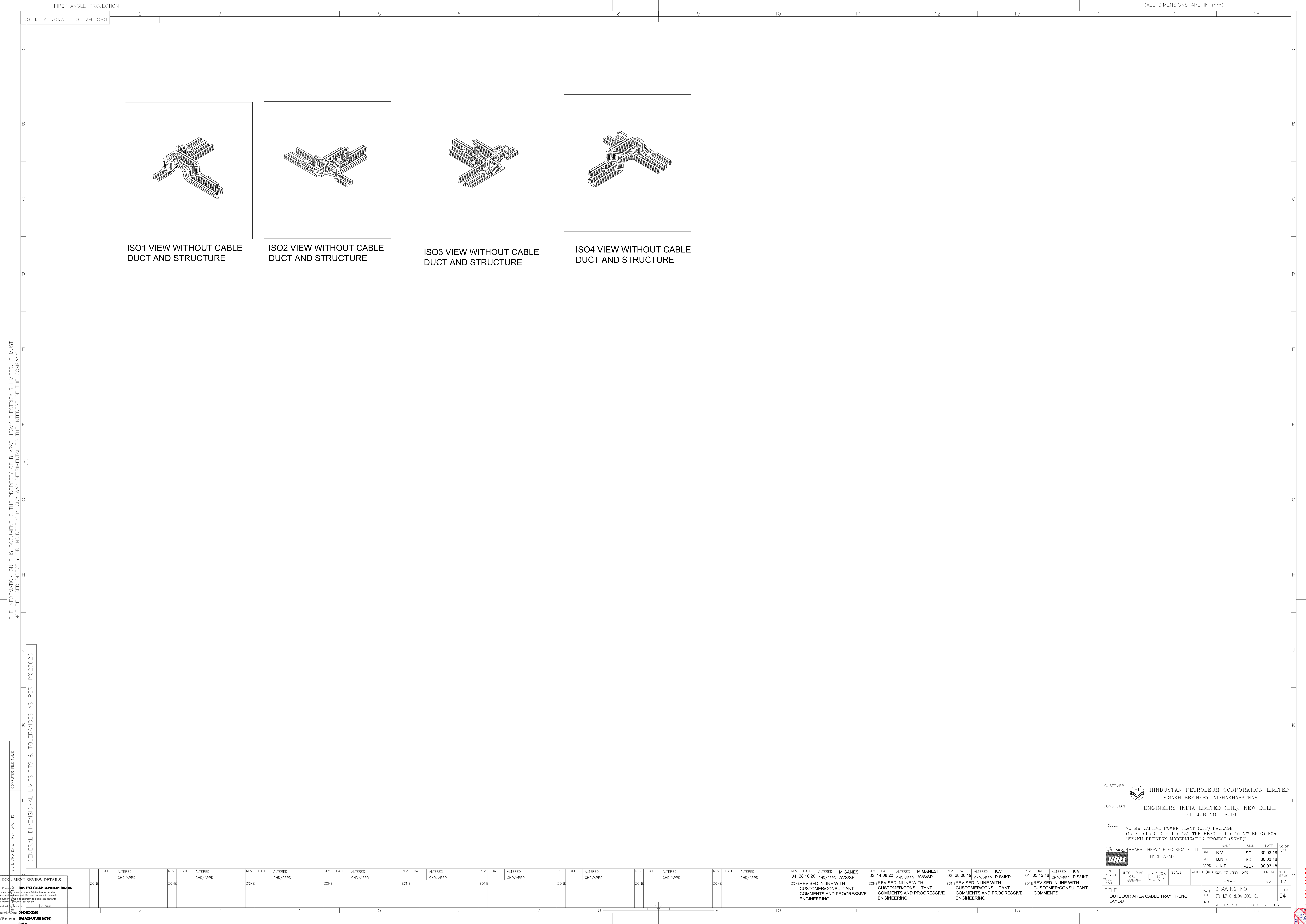
C&I

- SWAS ROOM LAYOUT
- CONTROL ROOM LAYOUT

REVISIONS:

REV.	DATE	ALTERED	BY	APPD.	REASON
04	28.10.20		M GANESH	AVS/SP	REVISED IN LINE WITH CUSTOMER/CONSULTANT COMMENTS AND PROGRESSIVE ENGINEERING
03	14.08.20		M GANESH	AVS/SP	REVISED IN LINE WITH CUSTOMER/CONSULTANT COMMENTS AND PROGRESSIVE ENGINEERING
02	28.08.19		K.V	P.S/UKP	REVISED IN LINE WITH CUSTOMER/CONSULTANT COMMENTS AND PROGRESSIVE ENGINEERING
01	05.12.18		K.V	P.S/UKP	REVISED IN LINE WITH CUSTOMER/CONSULTANT COMMENTS

Signature with Date: **SHASHI KUMAR (A738)** **10/8**



DOCUMENT REVIEW DETAILS			
1	Checked by	2	Reviewed by
3	Approved by	4	Accepted by
5	Signature with Date	6	Signature with Date
7	Signature with Date	8	Signature with Date
9	Signature with Date	10	Signature with Date
11	Signature with Date	12	Signature with Date
13	Signature with Date	14	Signature with Date
15	Signature with Date	16	Signature with Date

CUSTOMER		HINDUSTAN PETROLEUM CORPORATION LIMITED	
CONSULTANT		ENGINEERS INDIA LIMITED (EIL), NEW DELHI	
PROJECT		75 MW CAPTIVE POWER PLANT (CPP) PACKAGE	
DRAWING NO.		PY-LC-0-M104-2001-01	
TITLE		OUTDOOR AREA CABLE TRAY TRENCH LAYOUT	
DEPT.		HYDERABAD	
UNTO.		N.A.	
DIMS.		N.A.	
SCALE		N.A.	
WEIGHT (KG)		N.A.	
REF. TO ASSY. DRG.		N.A.	
ITEM NO.		04	
NO. OF ITEMS		04	
REV.		04	



DOCUMENT REVIEW DETAILS

☒ 1 No Comments. **Doc. PY-LC-0-M104-2001-01 Rev. 04**

☐ 2 Proceed with manufacture / fabrication as per the commented document. Revised document required.

☐ 3 Document does not conform to basic requirements as marked. Resubmit for review.

☐ R Retained for Records.

☒ V Void.

Signature with Date **03-DEC-2020**

Name of Reviewer **SAI ACHUTUNI (A738)**

Page No. **4 of 6**

BHEL'S REPLY TO EIL COMMENTS


CLIENT: M/s HPCL-Vizag
CONTRACTOR: M/s BHEL

PROJECT, VIZAG
PACKAGE: CPP package

DETAILS		COMMENT/ OBSERVATION	RESOLUTION / ACTION
DRAWING / DOCUMENT TITLE : <u>Outdoor Area Cable Tray/Trench Layout</u>			
DOCUMENT NUMBER: PY-LC-0-M104-2001-01 REV.03			
CATEGORY/CODE: 2			
1	Sheet-1, Assumed motorable trench cover		Motorable trench covers are already considered.
2	Sheet-1, Section 1-1 repeated. please check		Noted and corrected.
3	Sheet-1, Include section O		Noted and incorporated in the revised layout drawing
4	Sheet-1, Include section Q-Q		Noted and incorporated in the revised layout drawing
5	Sheet-2, 300x300 box type cable duct for ECS may not fit here.		Please note that, 600mm(W)X125mm(H) GI solid bottom cable tray with covers are considered for ECS cables. Accordingly 300mm spacing is sufficient.
8	Sheet-2, All trench thicknesses shall be as per the Civil design		Noted.
10	Sheet-2, Adequate gap shall be ensured between road and the cable		Noted
11.	Sheet-2, trefoil to wall distance is not in order. Please check and provide minimum 100mm		Noted and incorporated in the revised layout drawing
12.	Sheet-2, trefoil to wall distance is not in order. Please check and provide minimum 100mm		Noted and incorporated in the revised layout drawing
13.	Sheet-2, show 1 more trefoil. trefoil to wall distance is not in order. Please check and provide minimum 100mm		Noted and incorporated in the revised layout drawing
14.	Sheet-2, indicate dimensions		Noted and incorporated in the revised layout drawing
15.	Sheet-2, identify the cable trays. all the other details can be faded.		Noted and incorporated in the revised layout drawing
16.	Sheet 2, min 300mm shall be provided from trench cover		Noted and incorporated in the revised layout drawing
17.	Sheet 2, ECS may be applicable for entering the false flooring area below ECS room. Please check		Noted and incorporated in the revised layout drawing

DOC. NO.	B016	TR. NO.	--
	JOB NO.		S. NO.

Sheet 2, Control cable tray for Owner's use at the battery limit shall be 750mm wide	Please note that, At battery limit interface, 750mm wide customer cable tray will be joined with 600mm width cable tray through 750mm to 600mm width cable tray reducer.
Sheet 2, Walk Way	Noted and incorporated in the revised layout drawing



1

No Comments.

2

Proceed with manufacture / fabrication as per the commented document. Revised document required.

3

Document does not conform to basic requirements as marked. Resubmit for review.

R

Retained for Records.

Doc. PY-LC-0-M104-2001-01 Rev. 04

4

Void.

Signature with Date

03-DEC-2020

Name of Reviewer

SAI ACHUTUNI (A738)

Page No.

5 of 6

NOTE:

CONTRACTOR IS OBLIGED TO FURNISH THIS SHEET (DULY FILLED UP WITH RESOLUTION TO ALL EIL COMMENTS) ALONGWITH REVISED DRAWINGS

Based on confirmations in resolution sheet, the document is closed.



DOCUMENT REVIEW DETAILS

- ☒ 1 No Comments. **Doc. PY-LC-0-M104-2001-01 Rev. 04**
- ☐ 2 Proceed with manufacture / fabrication as per the commented document. Revised document required.
- ☐ 3 Document does not conform to basic requirements as marked. Resubmit for review.
- ☐ R Retained for Records. ☐ V Void.

Signature with Date **03-DEC-2020**

Name of Reviewer **SAI ACHUTUNI (A738)**

Page No. **6 of 6**