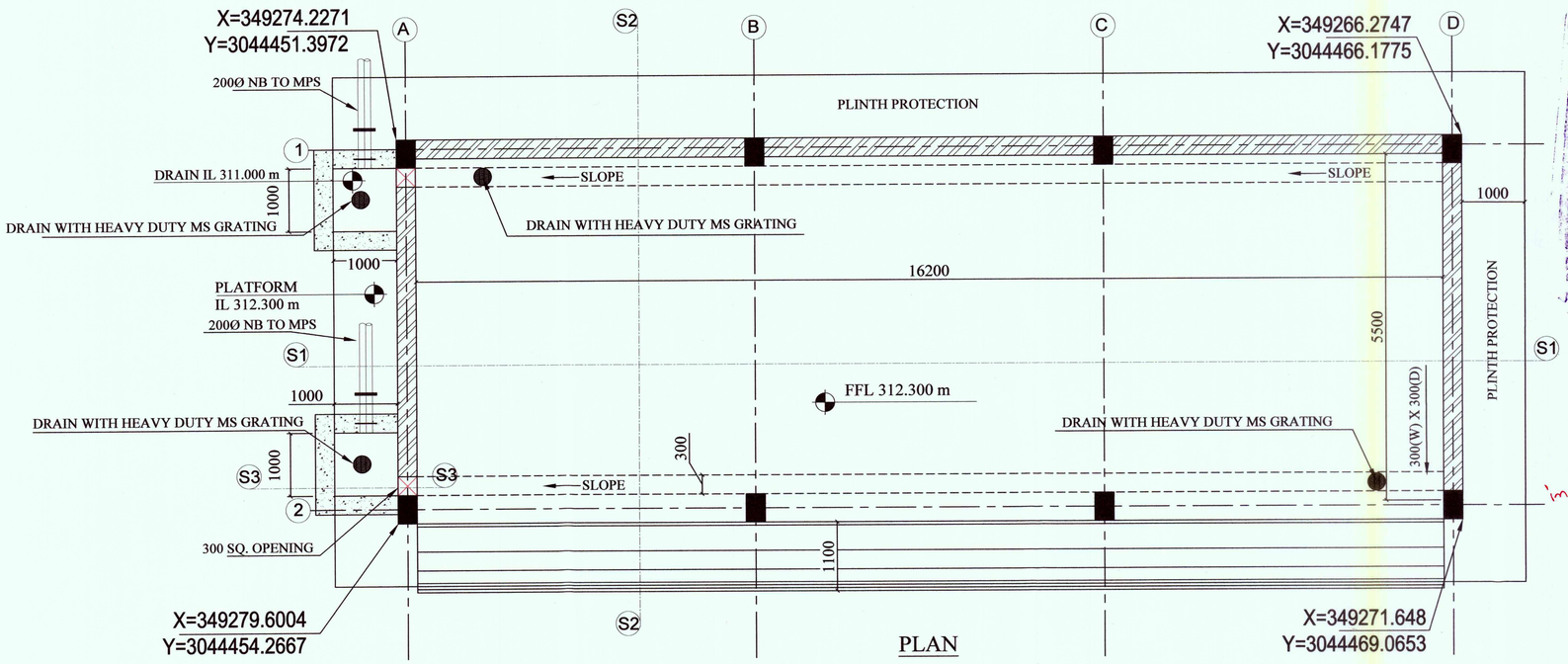


PLAN

Mechanical scrapper may be proposed to install in this yard by contractor for overturning of sludge

Ranj 31/March-23

PHGBC Rly NO-5462

PACKAGE NO: RSTDSP/NKH/01

RSTDSP (RUIDP PH-IV)

Reviewed only for general conformance with contract drawing & specifications. Contractor is responsible for any anomalies and for adherence to the contract obligations

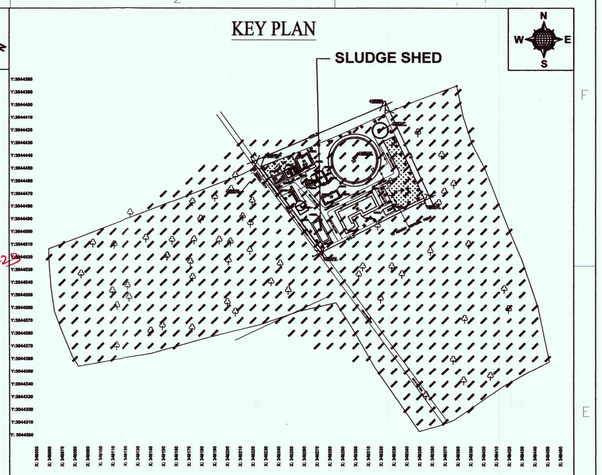
Category - 2 Date 31/3/2023

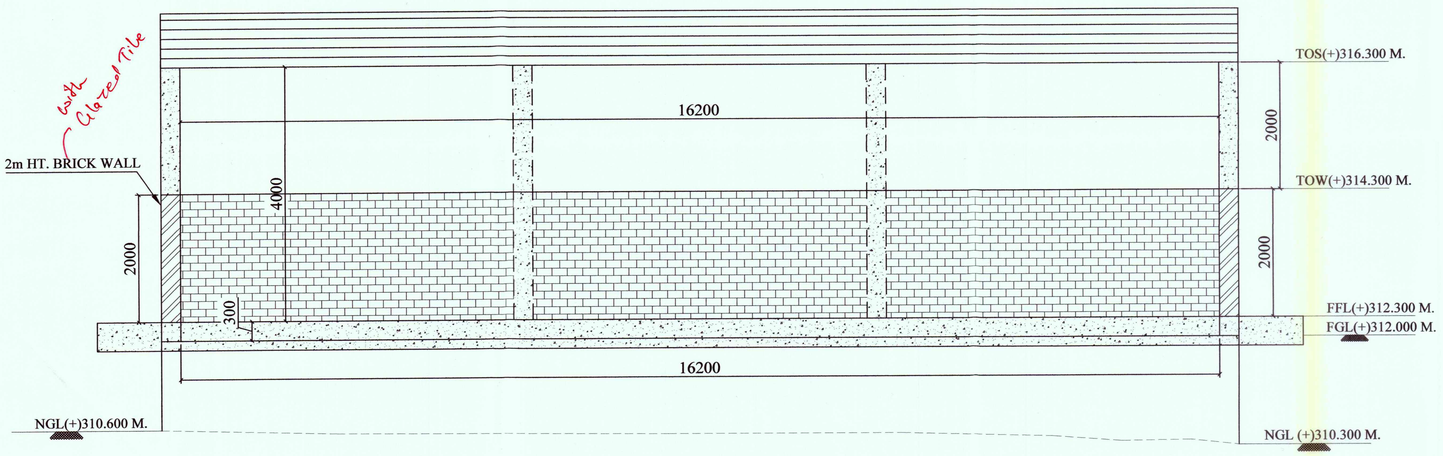
1. Recommended for Approval
2. Recommended for approval with Comments
3. Returned with Comments for Resubmission
4. Retained for Information only

ACM/TL (CMSC) — EXPERT/TL (PMCBC)

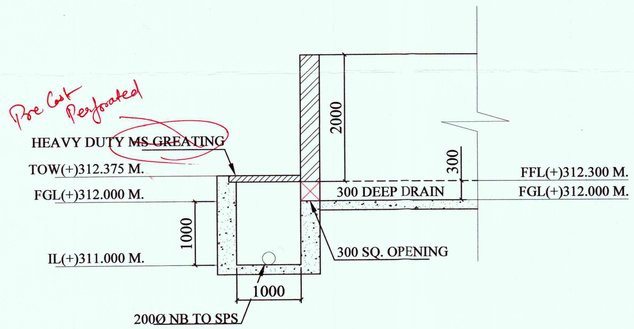
APPROVED : S.E./E.I.

KEY PLAN





SECTION S1-S1



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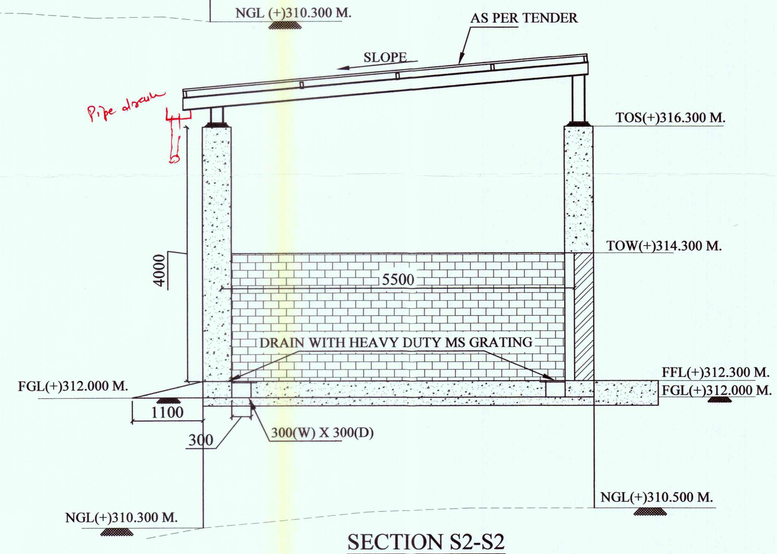


SECTION S2-S2

NOTES:

1. ALL DIMENSIONS ARE GIVEN IN MILLIMETERS AND LEVELS ARE IN METERS, UNLESS OTHERWISE SPECIFIED.
2. RCC SUPPORTS ARE INDICATIVE.
3. ALL PLASTER, FINISHING, ETC. SHALL BE AS PER CIVIL SPECIFICATIONS.
4. F.G.L. +312.00 M
5. F.F.L. +312.300 M
6. DRAIN CHAMBER SHALL BE AS PER SITE CONDITION.
7. ALL SIZES OF RCC ELEMENTS SHALL BE AS PER STRUCTURAL DRAWINGS.

REFERENCE DRAWINGS:

1. BASIC ENGINEERING PACKAGE FOR 5 MLD STP : MCPL/RUIDP/NKH/STP/5MLD/C/BEP/DOC/01
2. LAYOUT PLAN FOR 5 MLD STP - MCPL/RUIDP/NKH/STP/5MLD/C/LAY/DWG/03
3. PROCESS FLOW DIAGRAM FOR 5 MLD STP : MCPL/RUIDP/NKH/STP/5MLD/C/PFD/DWG/02

ABBREVIATIONS:

T.O.S : TOP OF STRUCTURE
F.G.L : FINISHED GROUND LEVEL
F.F.L : FINISHED FLOOR LEVEL
T.O.W : TOP OF WALL
HT : HEIGHT
N.G.L : NATURAL GROUND LEVEL
IL : INVERT LEVEL
MPS : MAIN PUMPING STATION

STAMPING AREA :

MCPL PRGL

REV.NO.	DESCRIPTION	DESIGNED	DRAWN	CHECKED	DATE
R0	FOR APPROVAL	SA	SA	DV	20.03.2023

REVISIONS

CLIENT : RUIDP RAJASTHAN URBAN INFRASTRUCTURE DEVELOPEMENT PROJECT

PMCBC : PROJECT MONITORING AND CAPACITY BUILDING CONSULTANTS
CMSC : II CONSTRUCTION MANAGEMENT AND SUPERVISION CONSULTANTS

PROJECT : "CONSTRUCTION OF WORKS OF DISTRIBUTION NETWORK IMPROVEMENTS WITH HOUSE SERVICE CONNECTIONS FOR NONREVENUE WATER REDUCTION AND CONTINUOUS WATER SUPPLY AND PROVIDING SEWER NETWORK, AND CONSTRUCTION OF SEWAGE TREATMENT PLANT, SEWAGE PUMPING STATION AND ALL ALLIED WORKS AND OPERATION SERVICES OF THE ENTIRE SYSTEM FOR 10 YEARS AT NOKHA (BIKANER)" RSTDSP/NKH/01

SUPPLIER / CONTRACTOR : M/S MCPL - PRGL (JV)
VILLAGE - BIKASAR, BIKANER ROAD, NOKHA, BIKANER - 334803

DATE : 20-03-2023

	NAME
DSGN	SA
DRWN	SA
CHKD	DV
APPD	

TITLE : GENERAL ARRANGEMENT DRAWING OF SLUDGE STORAGE YARD FOR 5 MLD STP, AT NOKHA, BIKANER
SHEET NO.- 1 of 1

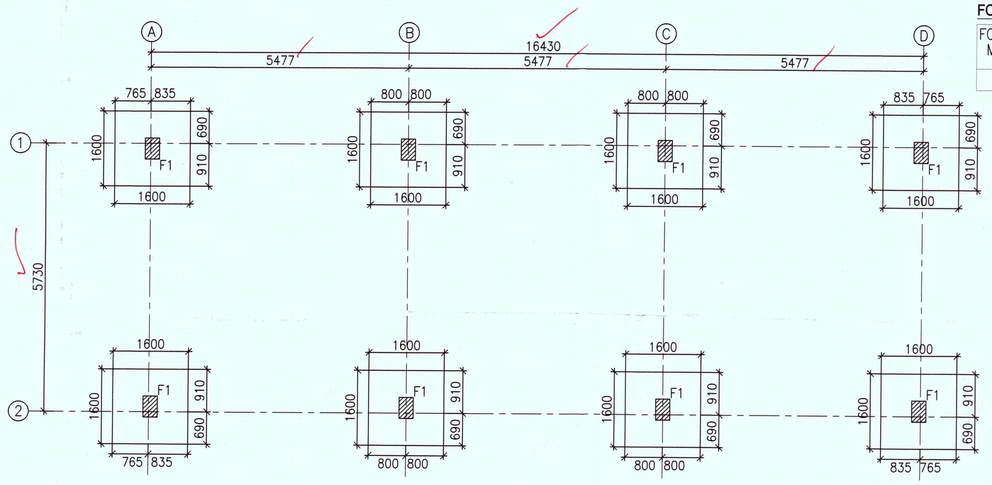
SCALE: AS SHOWN
PROJECTION

DRAWING. No. MCPL/RUIDP/NKH/STP/5MLD/C/SSY/DWG/09
SIZE A1
REV. R0

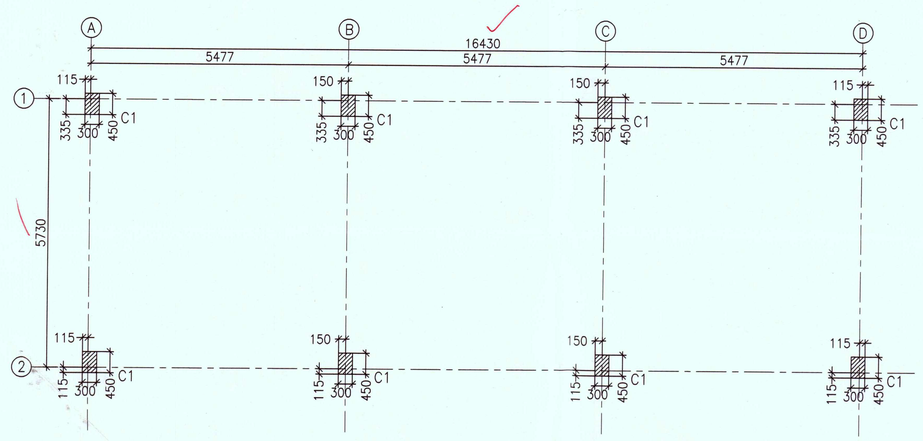
RELEASED FOR: ☐ PRELIMINARY ☐ TENDER ☐ INFORMATION ☑ APPROVAL ☐ CONSTRUCTION

FOOTING SCHEDULE

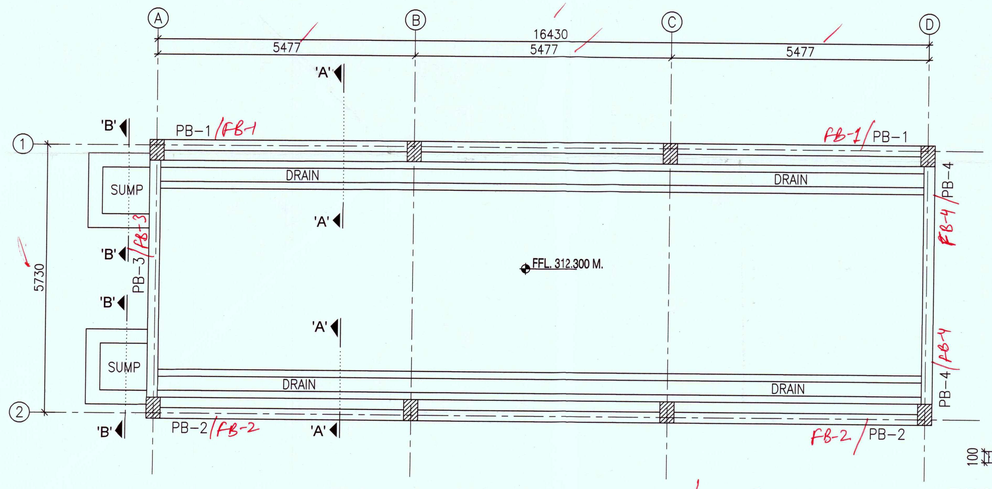
FOOTING MKD.	SIZE	DEPTH	REINFORCEMENT	
	LXB	D	(B1)	(B2)
F1	1600X1600	300	10ø@200 C/C	10ø@200 C/C



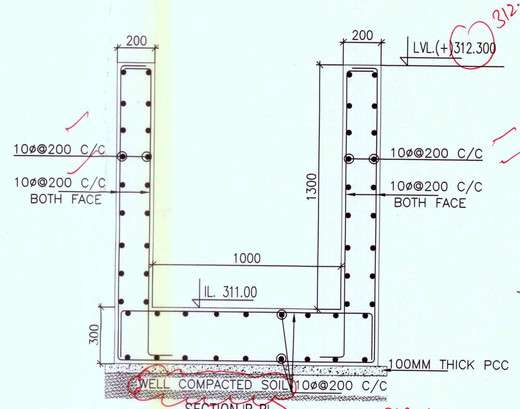
FOUNDATION & CENTER LINE PLAN



FOUNDATION & CENTER LINE PLAN



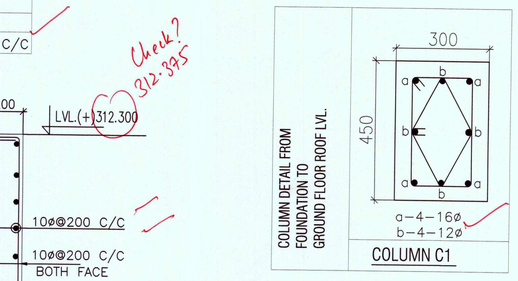
PLINTH BEAM LEVEL PLAN AT R.L. + 312.300 / FB @ 316.300



SECTION 'B-B'

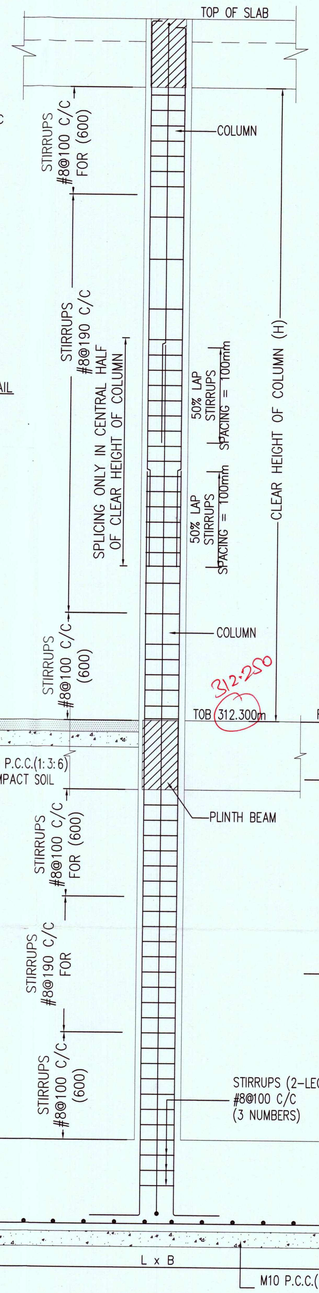
DRAIN PIT DETAILS

NATURAL EARTH OR PLUM CONCRETE AS PER CA

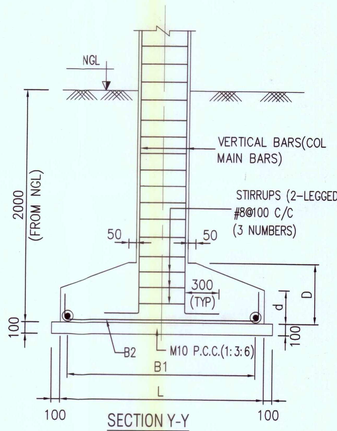


COLUMN DETAIL FROM FOUNDATION TO GROUND FLOOR ROOF LVL.

COLUMN C1

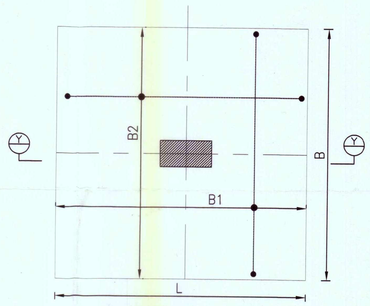


TYPICAL COLUMN SECTION

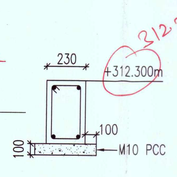


SECTION Y-Y

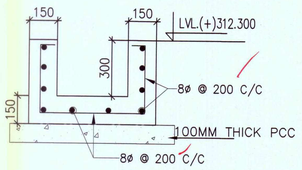
TYPICAL STIRRUP DETAIL



TYP. FOOTING PLAN



TYPICAL SECTION OF PLINTH BEAM



SECTION 'A-A'

DRAIN DETAILS

NOTES FOR RCC:-

1. ALL DIMENSIONS ARE IN MM & ALL LEVELS ARE IN METERS.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS.
3. PCC SHALL BE M10 & 100 mm THICK.
4. GRADE OF CONCRETE SHALL BE M25.
5. REINFORCEMENT BARS SHALL BE HYSD Fe 500 AND CONFIRMING TO IS:1786
6. CLEAR COVER TO MAIN REINFORCEMENT SHALL BE :-
   SLAB = 20MM
   FOUNDATION = 50MM
   BEAM = 30MM
   COLUMNS = 40MM
   RCC IN CONTACT WITH SEWAGE = 50MM
7. ALL LAPS AND DEVELOPMENT LENGTH SHALL BE 49 TIMES DIA OF BAR AND SHALL BE STAGGERED. LAPS SHALL BE CONSIDERED AS STAGGERED IF THE C/ C DISTANCE OF THE SPLICES IS NOT LESS THAN 1.3 TIMES THE LAP LENGTH.
8. SEQUENCE OF CONSTRUCTION BELOW GROUND LEVEL SHALL BE SUCH THAT FOUNDATIONS AT THE LOWERMOST LEVEL SHALL BE CONSTRUCTED FIRST.
9. GROUND WATER TABLE HAS NOT BEEN CONSIDERED FOR STRUCTURAL DESIGN . IF WATER TABLE IS ENCOUNTERED DURING EXECUTION, PLEASE INFORM THE DESIGN OFFICE.
10. ADOPTED GROSS SBC IN DESIGN 15.0 T/SQM AT FOUNDATION DEPTH. IT SHALL BE VERIFIED AT SITE.
11. STEEL CHAIRS SHALL BE PROVIDED TO KEEP TOP REINFORCEMENT OF SLAB IN PROPER POSITION.
12. CONSTRUCTION SHALL BE STRICTLY IN ACCORDANCE WITH IS 456 & IS 3370.
13. REINFORCEMENT DETAILING SHALL BE AS PER SP34.
14. ANY SOFT OR LOOSE STRATUM MET WITH UNDER FOUNDATION, BASE SLAB ETC. SHALL BE EXCAVATED AND MADE GOOD ~~WITH COMPACTED SOIL~~. AS PER CA .
15. BACK FILLING SHALL BE DONE IN UNIFORM LAYERS ALL AROUND THE STRUCTURE.
16. ~~FILLING UNDERNEATH THE STRUCTURAL ELEMENTS, WHEREVER REQUIRED, SHALL BE DONE IN LAYERS NOT EXCEEDING 200MM THICK. EACH LAYER SHALL BE DONE WITH EITHER SAND COMPACTED TO 90% RELATIVE DENSITY OR GOOD SOIL COMPACTED TO 95% PROCTOR DENSITY.~~
17. NGL AND CO-ORDINATES SHALL BE VERIFIED AT SITE BEFORE EXCAVATION.
18. ALL STRUCTURAL STEEL SHALL BE OF GRADE FY=250 MPa TESTED QUALITY CONFIRM TO IS 2062. 240 Check?
19. ALL WELDING SHALL CONFIRM TO IS 816 & 1323, ALL FABRICATION SHALL CONFIRM TO IS 800.
20. ALL WELDS TO BE 6mm FILLET WELD, UNLESS SPECIFIED OTHERWISE.
21. ALL THE MEMBERS MEETING AT JOINT ARE FILLET WELDED EXCEPT OTHERWISE STATED.
22. ALL WELDS WILL BE IN FULL LENGTH ALROUND THE MEMBER AT EACH JOINT.
23. ALL BOLTS ARE OF STEEL OF GRADE 4.6
24. ALL STRUCTURAL STEEL SHELL BE PAINTED WITH CORROSIVE RESISTANT PAINT.

~~FOR~~ SUBJECTED TO LIMIT APPROVAL

MCPL PRGL

PACKAGE NO.
RSTDSP (RUIDP PH-IV)
Reviewed only for general conformance with contract drawing & specifications. Contractor is responsible for any errors/omissions and for adherence to the contract obligations
Category Date
Recommended for Approval
Recommended for approval with Comments
Returned with Comments for Resubmission
Not Recommended for Approval
APPROVED

REFERENCE DRAWING –
GENERAL ARRANGEMENT DRAWING OF SLUDGE STORAGE YARD FOR 5 MLD STP, AT NOKHA, BIKANER
MCPL/RUIDP/NKH/STP/5MLD/C/SSY/DWG/05

ACM/TL (CMSC) — EXPERT/TL (PMCBC)

REV.NO.	DESCRIPTION	DESIGNED	DRAWN	CHECKED	APPROVED
R0	FOR APPROVAL	VA / SA	PC	PC	

CLIENT : RUIDP — RAJASTHAN URBAN INFRASTRUCTURE DEVELOPEMENT PROJECT — S.E./E.E.

PMCBC : PROJECT MONITORING AND CAPACITY BUILDING CONSULTANTS

CMSC : II CONSTRUCTION MANAGEMENT AND SUPERVISION CONSULTANTS

SUPPLIER / CONTRACTOR :
M/S MCPL - PRGL (JV)
VILLAGE - BIKASAR, BIKANER ROAD, NOKHA, BIKANER - 334803

PROJECT :
"CONSTRUCTION OF WORKS OF DISTRIBUTION NETWORK IMPROVEMENTS WITH HOUSE SERVICE CONNECTIONS FOR NONREVENUE WATER REDUCTION AND CONTINUOUS WATER SUPPLY AND PROVIDING SEWER NETWORK, AND CONSTRUCTION OF SEWAGE TREATMENT PLANT, SEWAGE PUMPING STATION AND ALL ALLIED WORKS AND OPERATION SERVICES OF THE ENTIRE SYSTEM FOR 10 YEARS AT **NOKHA (BIKANER)**"
RSTDSP/NKH/01

CONTRACTOR'S CONSULTANT :
BPDP ENGINEERSBAY PVT. LTD. , JAIPUR

	NAME	DATE
DSGN	VA	29.04.2023
DRWN	SA	
CHKD	PC	
APPD	PC	

TITLE : STRUCTURAL DRAWING OF SLUDGE STORAGE SHED FOR 5 MLD STP, AT NOKHA (SHEET.-1 of 2)

SCALE NTS

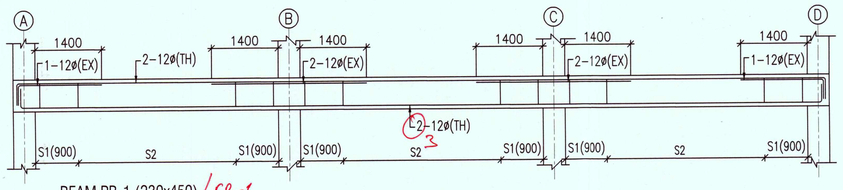
PROJECTION

DRAWING. No. MCPL/RUIDP/NKH/STP/5MLD/S/SSY/DWG/05

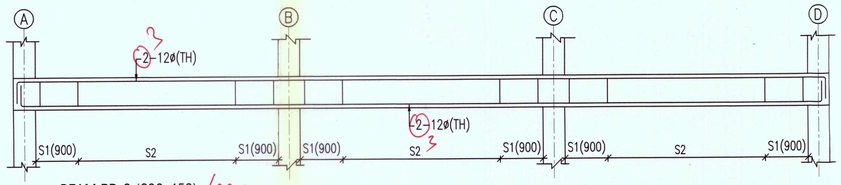
SIZE A2 REV. R0

RELEASED FOR: ☐ PRELIMINARY ☐ TENDER ☐ INFORMATION ☑ APPROVAL ☐ CONSTRUCTION

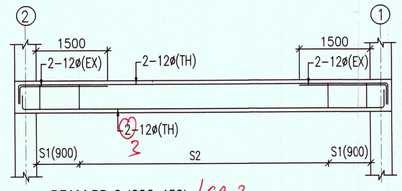
A O/c PMCBC Jaipur



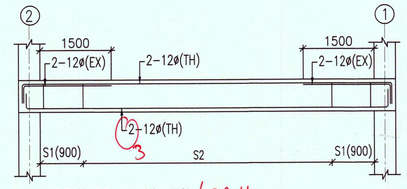
BEAM PB-1 (230x450) / FB-1



BEAM PB-2 (230x450) / FB-2



BEAM PB-3 (230x450) / FB-3



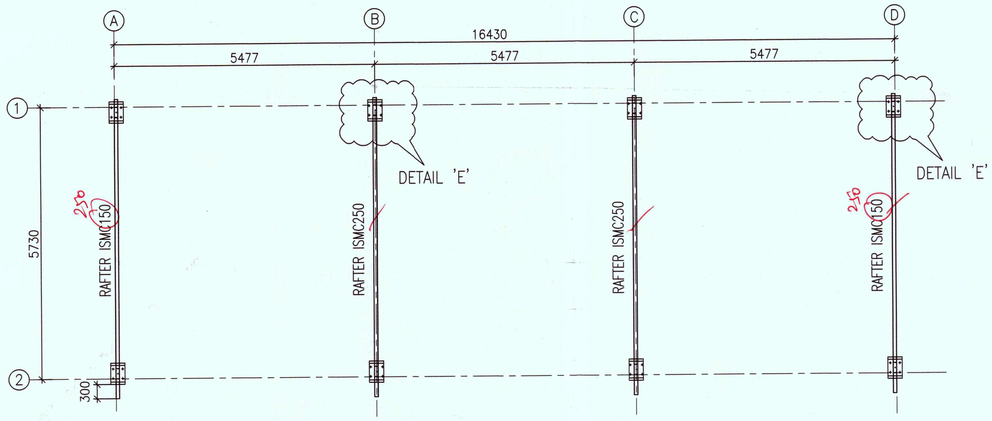
BEAM PB-4 (230x450) / FB-4

BAR MARKED SCHEDULE

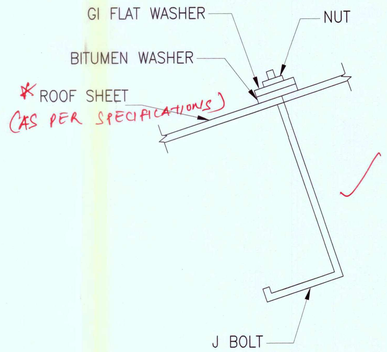
TH.	THROUGH
EX.	EXTRA

STIRRUP SCHEDULE

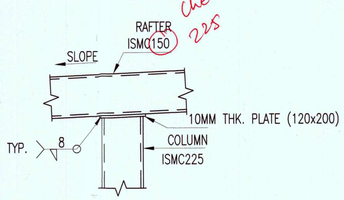
STRP. MKD.	DESCRIPTION
S1	8ø(2L)@100C/C
S2	8ø(2L)@140C/C



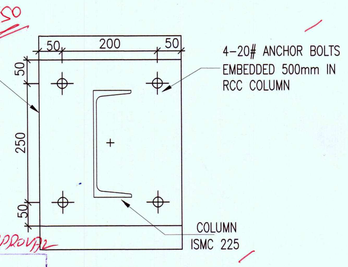
ANCHOR BOLT PLAN AT R.L. +316.300



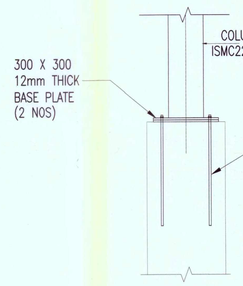
FIXING DETAILS OF PURLIN WITH SHEET



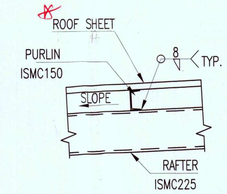
TYP.DETAIL-D



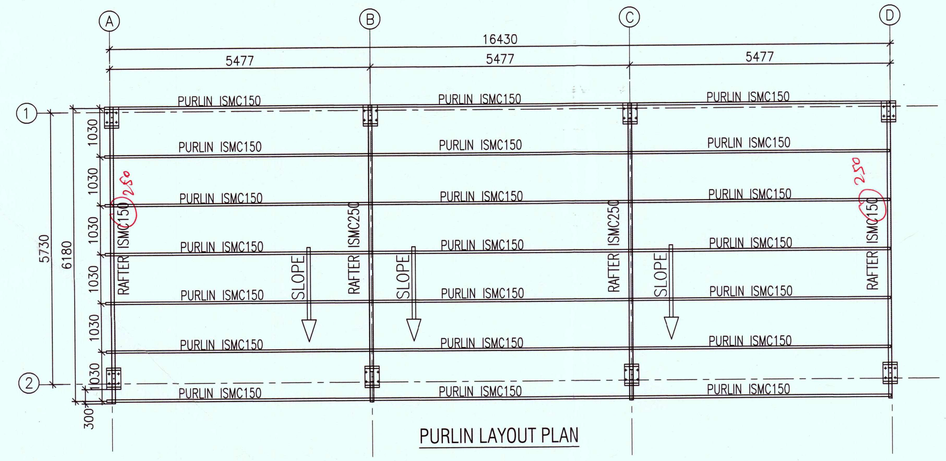
DETAIL 'E'



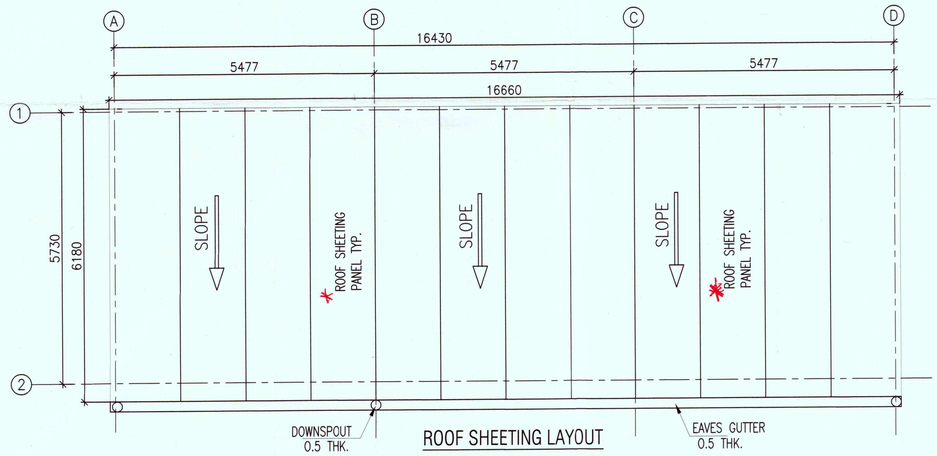
DETAIL-B



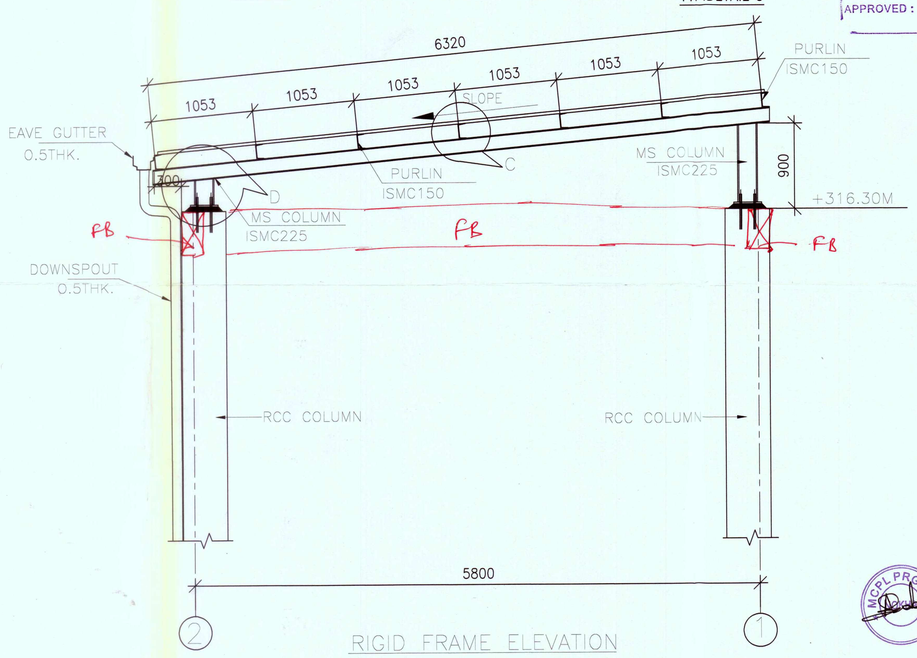
TYP.DETAIL-C



PURLIN LAYOUT PLAN



ROOF SHEETING LAYOUT



RIGID FRAME ELEVATION

SUBJECTED TO IIT/NIT APPROVAL

PACKAGE NO.
RSTDSP (RUIDP PH-IV)
Reviewed only for general conformance with contract drawing & specifications. Contractor is responsible for any anomalies and for adherence to the contract obligations.
Category | Date
1. Recommended for Approval
2. Recommended for approval with Comments
3. Returned with Comments for Resubmission
4. Retained for information only
ACM/TL (CMSC) | EXPERT/TL (PMCBC)
APPROVED : S.E./E.E.

REFERENCE DRAWING – GENERAL ARRANGEMENT DRAWING OF SLUDGE STORAGE YARD FOR 5 MLD STP, AT NOKHA, BIKANER
MCPL/RUIDP/NKH/STP/5MLD/C/SSY/DWG/05

REV.NO.	DESCRIPTION	DESIGNED	DRAWN	CHECKED	APPROVED
R0	FOR APPROVAL	VA	SA	PC	PC

CLIENT : RUIDP — **RAJASTHAN URBAN INFRASTRUCTURE DEVELOPEMENT PROJECT**

PMCBC : PROJECT MONITORING AND CAPACITY BUILDING CONSULTANTS

CMSC : II CONSTRUCTION MANAGEMENT AND SUPERVISION CONSULTANTS

SUPPLIER / CONTRACTOR :
M/S MCPL - PRGL (JV)
VILLAGE - BIKASAR, BIKANER ROAD, NOKHA, BIKANER - 334803

PROJECT :
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RSTDSP/NKH/01

CONTRACTOR'S CONSULTANT :
BPDP ENGINEERSBAY PVT. LTD. , JAIPUR

	NAME	DATE
DSGN	VA	29.04.2023
DRWN	SA	
CHKD	PC	
APPD	PC	

TITLE : STRUCTURAL DRAWING OF SLUDGE STORAGE SHED FOR 5 MLD STP, AT NOKHA (SHEET.-2 of 2)

SCALE: NTS
PROJECTION

DRAWING. No. MCPL/RUIDP/NKH/STP/5MLD/S/SSY/DWG/05 | SIZE A2 | REV. R0

RELEASED FOR ☐ PRELIMINARY ☐ TENDER ☐ INFORMATION ☑ APPROVAL ☐ CONSTRUCTION

O/C PMCBC Jaipur