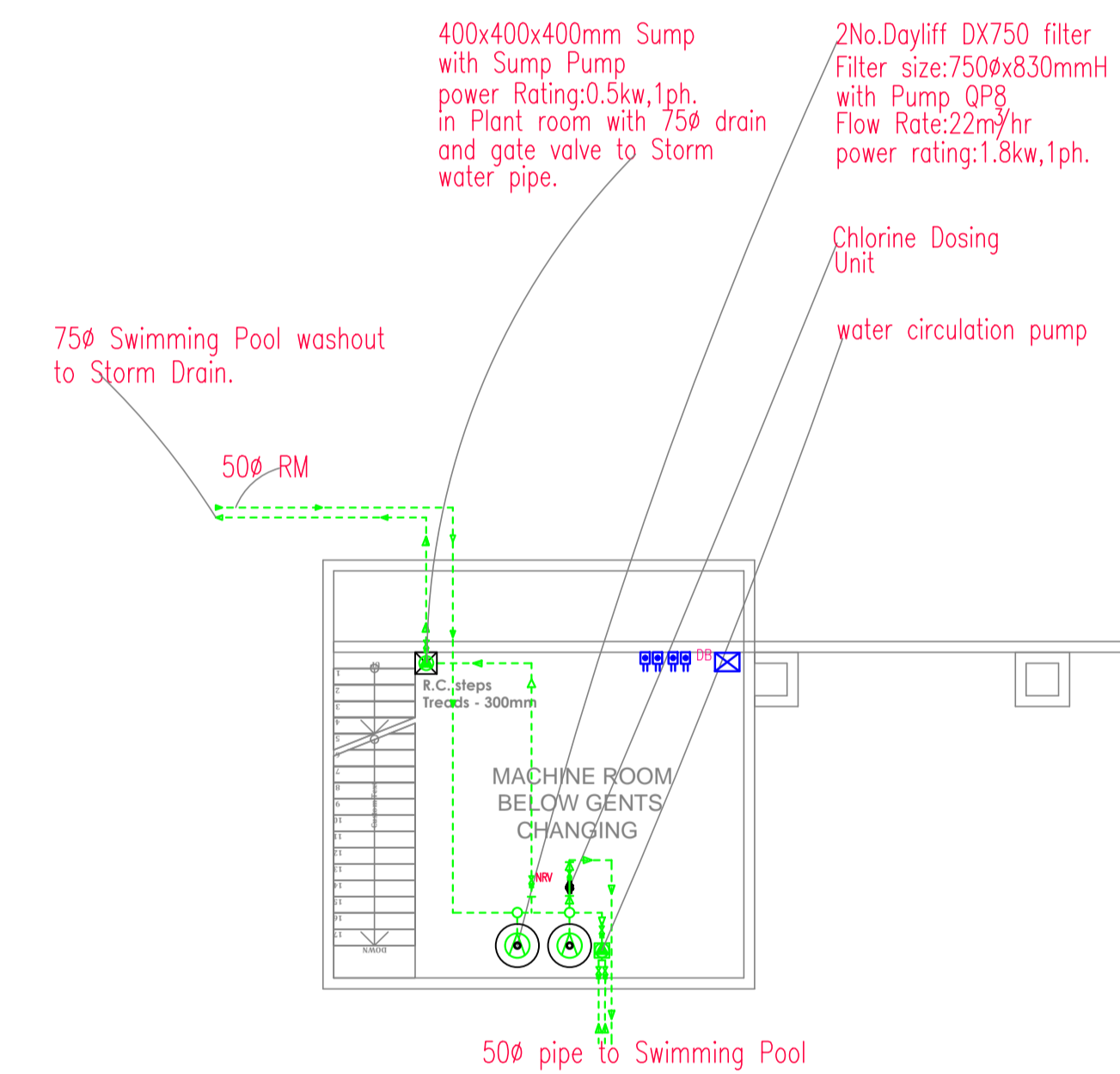


**Swimming Pool
Scale 1:200**

- | | |
|------------------------------|------------------|
| KEY | KEY |
| --- Drainage Pipe. | H/L -High Level. |
| --- Cold Water Service Pipe. | L/L -Low Level. |
| --- Hot Water Service Pipe. | FT - Floor Trap. |
| FB - From Below. | SP - Stand Pipe. |
| FA - From Above. | |
| TA - To Above. | |
| TB - To Below. | |
| IC - Inspection Chamber. | |
| GT - Gully Trap. | |
| SVP -Soil Vent Pipe. | |
| RM - Rising Mains. | |



**Swimming Pool
Machine Room Detail
Scale 1:200**

No.	NOTES
1.	All dimensions are in mm unless otherwise stated.
2.	All shower floor traps to be 150x150mm from each wall. Floor traps to be 150x50mm key terrain flush with tiles.
3.	All PPR pipes to be pressure tested at 4.8bars(70PSI) for 24hrs.
4.	All horizontal cold/hot water supply PPR pipes in washrooms to be cast in floor slab.
5.	All bathroom c/hws isolating valves to be under wc's, whb or kitchen sink cabinets as applicable.
6.	All PPR pipe routes in floors/walls to be marked in clear colour to avoid joinery puncture.

REVISIONS		
no.	date	descriptions
0.	04.03.2020	Original Issue.

Client _____

Signature _____ Date _____

Architects
Otto Mruttu+Partners Architects.
 P.O BOX:76382, 00508 Nairobi.
 TEL/FAX (020)3589334
 Cell: 0722554624 -NAIROBI.

M.U.S.T Sports Fields Meru

Drq. title
 Swimming Pool & Washrooms
 Lighting & Power Layout

Rex Consultants Building Services Engineers Top Plaza Office 3,3rd Floor Kindaruma Road,Off Ngong Road,Nairobi P.o box: 73878, tel: 2711037, fax: 2713041 Email:rexcons@wananchi.com	
scale	1:75
date	May:2018
drawn	G.M.G.
checked	S.N.M.
job no.	R533
sheet no.	005E

KEY:

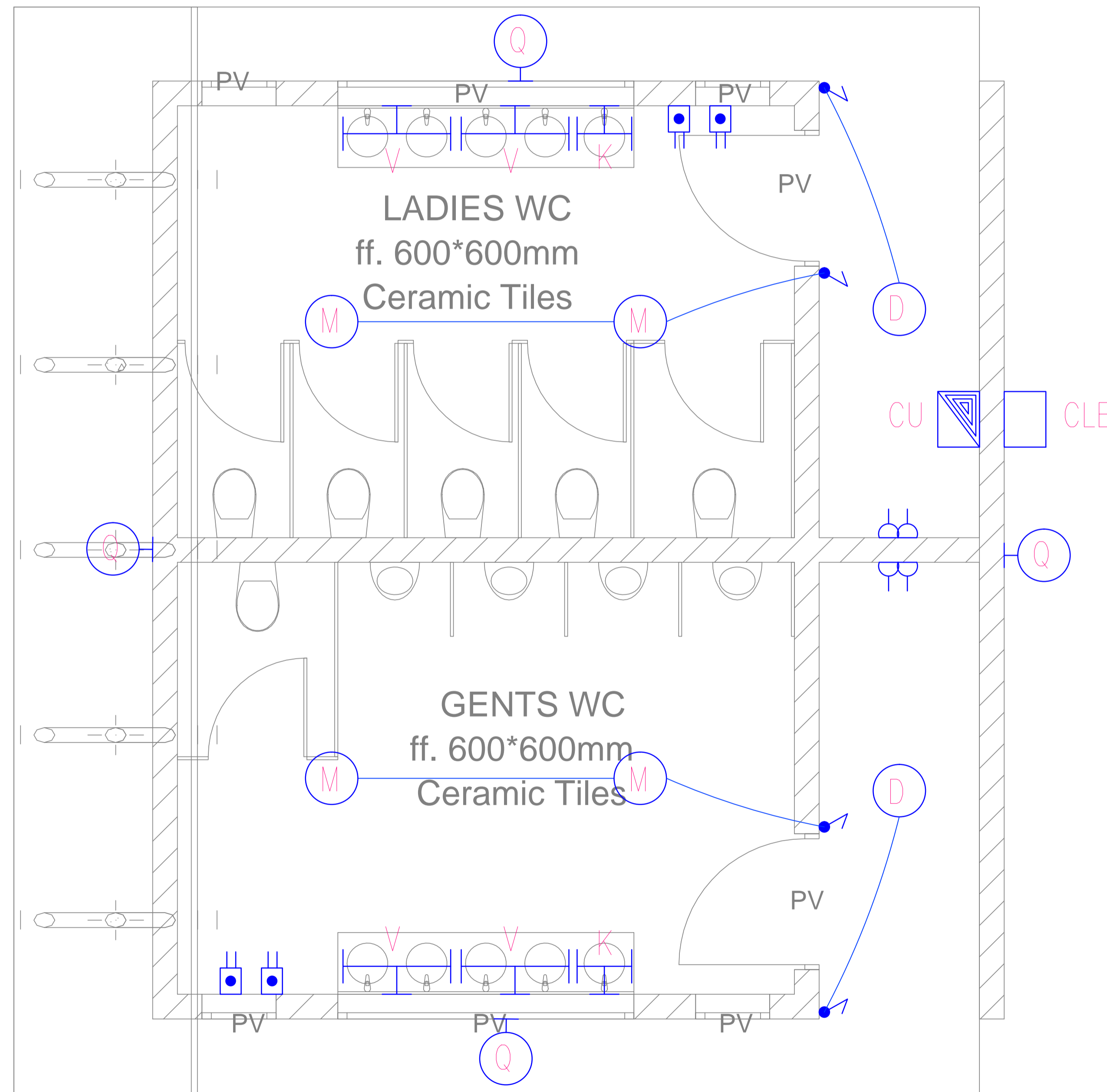
- 1 Way 1 gang switch
- 1 Way 2 gang switch
- 2 Way 1 gang switch
- 2 Way 2 gang switch
- Intermediate Switch
- Telephone outlet

- 13A Single socket outlet
- CCTV Camera
- Smoke Detector
- 13A Twin socket outlet
- TV outlet
- 20A DP Switch

- Fire Alarm Break Glass
- Fire Alarm Sounder Bell
- Meter board
- Distribution board
- Heat Detector

Lighting symbols

- H - Suspendend LED Light
- 5 - 1200mmx36w twin fluorescent fitting with Cover
- K - 600mmx18w Mirror light as thorn arrow slim
- V - Ditto but 1200mmx36W
- D - Circular ceiling fitting as thorn club CD.
- M - As D above
- 4 - 1200mmx36w Single battern fluorescent fitting



No.	NOTES
1.	All dimensions are in mm unless otherwise stated.

REVISIONS		
no.	date	descriptions
0.	04.03.2020	Original issue.

Client
Meru University

Signature _____ Date _____

Architects
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Cell: 0722554624 -Nairobi.

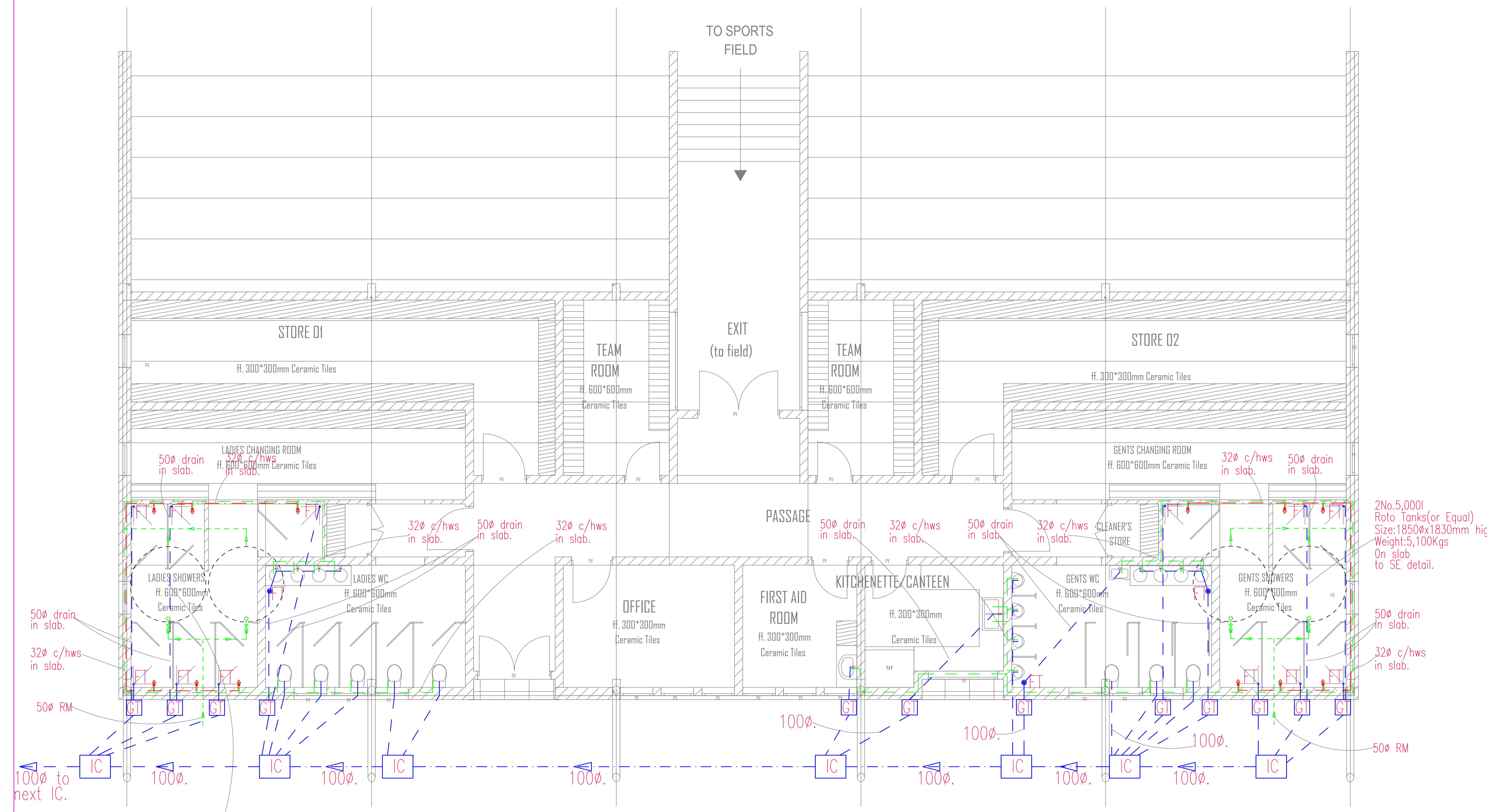
Project
M.U.S.T Sports Fields Meru

Drg. title.
WashRooms
Power and Lighting

Rex Consultants
Building Services Engineers
Top Plaza Office 3, 3rd Floor,
Kindaruma Road, Off Ngong Road, Nairobi
P.O. Box 73878-00200, Tel.: 020-5235093
E-mail: rex@rexcons.com
Website: www.rexcons.com

scale	1:50
date	May:2018
drawn	N.K.M
checked	S.N.M
job no.	R533
sheet no.	003E

- KEY**
- - Drainage Pipe.
 - - Cold Water Service Pipe.
 - - Hot Water Service Pipe.
 - FB - From Below.
 - FA - From Above.
 - TA - To Above.
- KEY**
- TB - To Below.
 - IC - Inspection Chamber.
 - GT - Gully Trap.
 - SVP - Soil Vent Pipe.
 - RM - Rising Mains.
- KEY**
- H/L - High Level.
 - L/L - Low Level.
 - FT - Floor Trap.
 - SP - Stand Pipe.



No.	NOTES
1.	All dimensions are in mm unless otherwise stated.
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3.	All PPR pipes to be pressure tested at 4.8bars(70PSI) for 24hrs.
4.	All horizontal cold/hot water supply PPR pipes in washrooms to be cast in floor slab.
5.	All bathroom c/hws isolating valves to be under wc's, whb or kitchen sink cabinets as applicable.
6.	All PPR pipe routes in floors/walls to be marked in clear colour to avoid joinery puncture.

REVISIONS		
no.	date	descriptions
0.	04.03.2020	Original Issue.

Client _____
 Signature _____ Date _____

Architects
Otto Mruttu+Partners Architects
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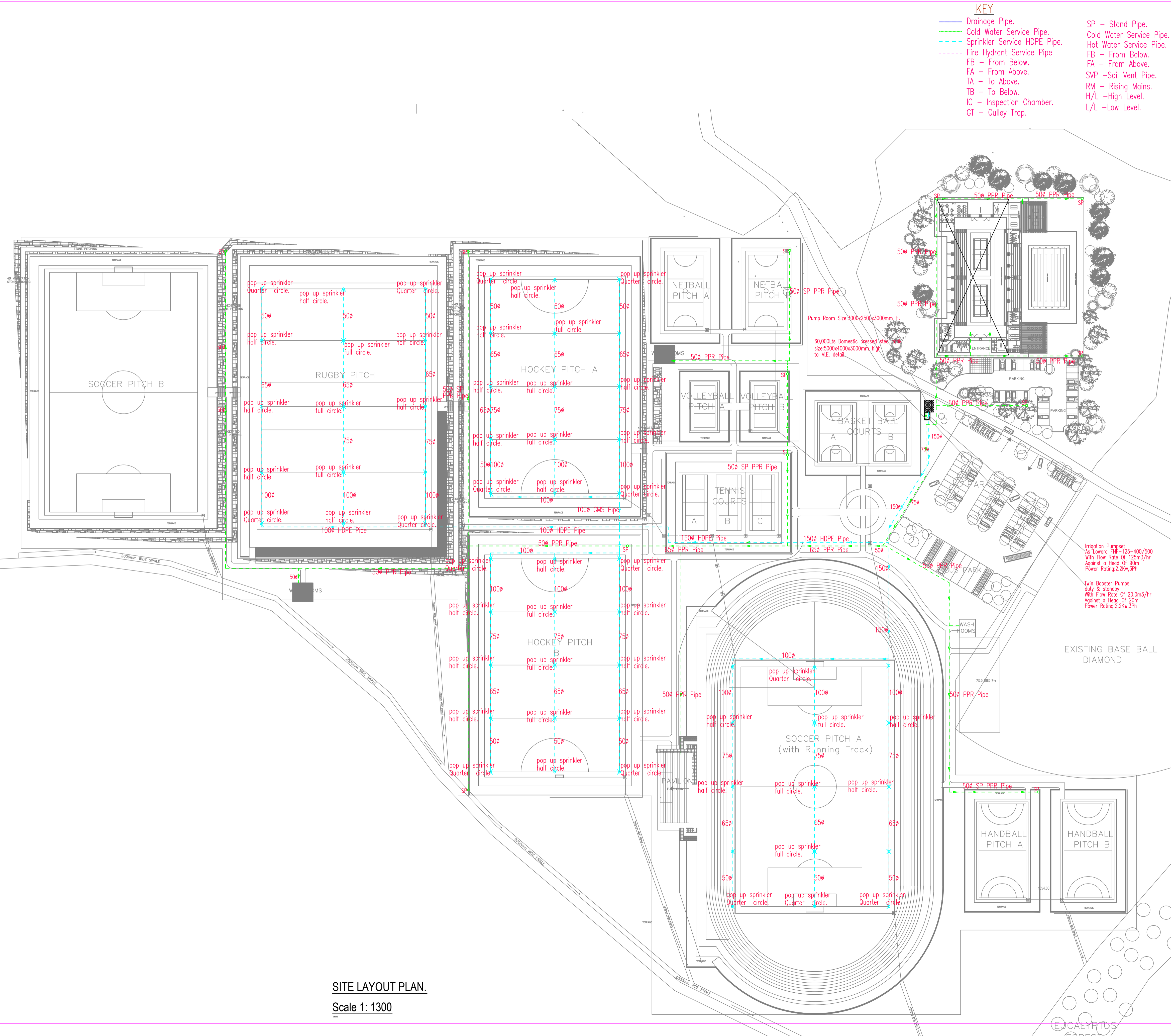
Proposed Sports Facility
 On Plot L.R No. 27425-(Chiru)
 Meru-Maua Road
 Meru County.

Drg. title
 Pavilion
 Plumbing/Drainage Layout.

Rex Consultants
 Building Services Engineers
 Top Plaza Office 3,3rd Floor
 Kindaruma Road,Off Ngong Road,Nairobi
 P.o box: 73878, tel: 2711037, fax: 2713041
 Email:rexcons@wananchi.com

scale	1:75
date	May:2018
drawn	G.M.G.
checked	S.N.M.
job no.	R533
sheet no.	004M

Pavilion
Scale 1:100



- KEY**
- Drainage Pipe.
 - Cold Water Service Pipe.
 - Sprinkler Service HDPE Pipe.
 - - - Fire Hydrant Service Pipe
 - FB - From Below.
 - FA - From Above.
 - TA - To Above.
 - TB - To Below.
 - IC - Inspection Chamber.
 - GT - Gully Trap.
- SP - Stand Pipe.
 - Cold Water Service Pipe.
 - Hot Water Service Pipe.
 - FB - From Below.
 - FA - From Above.
 - SVP - Soil Vent Pipe.
 - RM - Rising Mains.
 - H/L - High Level.
 - L/L - Low Level.

- NOTES**
- All dimensions are in mm unless otherwise stated.
 - All shower floor traps to be 150x150mm from each wall. Floor traps to be 150x50mm key terrain flush with tiles.
 - All PPR pipes to be pressure tested at 4.8bars(70PSI) for 24hrs.
 - All horizontal cold/hot water supply PPR pipes in washrooms to be cast in floor slab.
 - All bathroom c/hws isolating valves to be under wc's, whb or kitchen sink cabinets as applicable.
 - All PPR pipe routes in floors/walls to be marked in clear colour to avoid joinery puncture.
 - Hosereel to be at Ground and 3rd Floors only.

REVISIONS

no.	date	descriptions
0.	04.03.2020	Original Issue.

Client _____

Signature _____ Date _____

Architects
Otto Mruttu+Partners Architects
 P.O BOX:76382, 00508 Nairobi.
 TEL/FAX (020)3589334
 Cell: 0722554624 -NAIROBI.

Proposed Sports Facility
 On Plot L.R No. 27425-(Chiru)
 Meru-Maua Road
 Meru County.

Dr. title
 Site Plan
 Plumbing/Drainage Layout.

Rex Consultants
 Building Services Engineers
 p.o box: 73878, tel: 2711037, fax: 2713041
 Hurlingham - Nairobi.
 Email:rexcons@wananchi.com

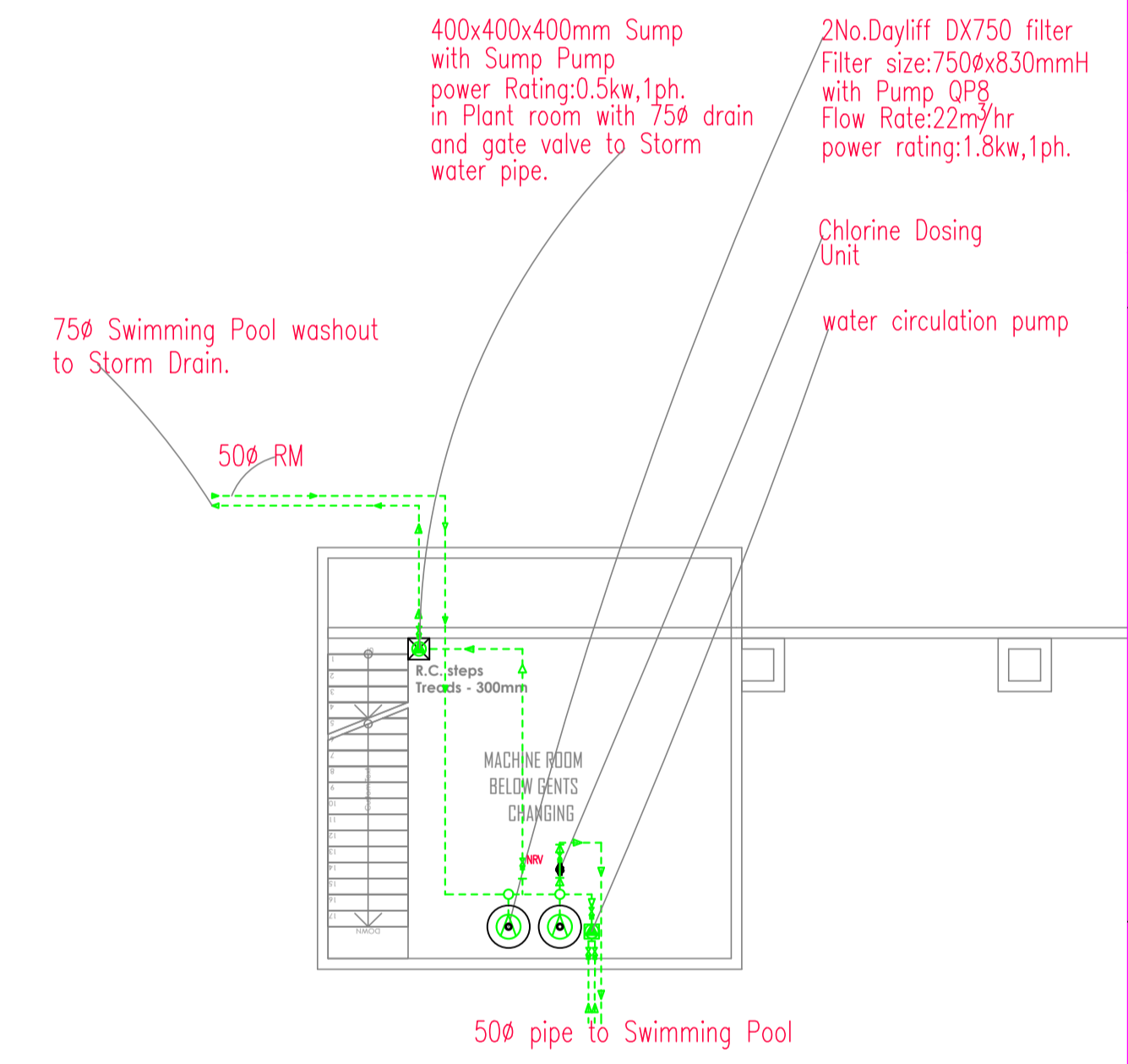
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date	May:2018
drawn	G.M.G. checked S.N.M.
job no.	R533 sheet no. 002M

SITE LAYOUT PLAN.
 Scale 1: 1300

- KEY**
- Drainage Pipe.
 - Cold Water Service Pipe.
 - Hot Water Service Pipe.
 - FB - From Below.
 - FA - From Above.
 - TB - To Below.
 - IC - Inspection Chamber.
 - GT - Gully Trap.
 - SVP - Soil Vent Pipe.
 - RM - Rising Mains.
- KEY**
- H/L - High Level.
 - L/L - Low Level.
 - FT - Floor Trap.
 - SP - Stand Pipe.

- | No. | NOTES |
|-----|---|
| 1. | All dimensions are in mm unless otherwise stated. |
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| 5. | All bathroom c/hws isolating valves to be under wc's, whb or kitchen sink cabinets as applicable. |
| 6. | All PPR pipe routes in floors/walls to be marked in clear colour to avoid joinery puncture. |

REVISIONS		
no.	date	descriptions
0.	04.03.2020	Original Issue.



**Swimming Pool
Machine Room Detail
Scale 1:200**

Client _____

Signature _____ Date _____

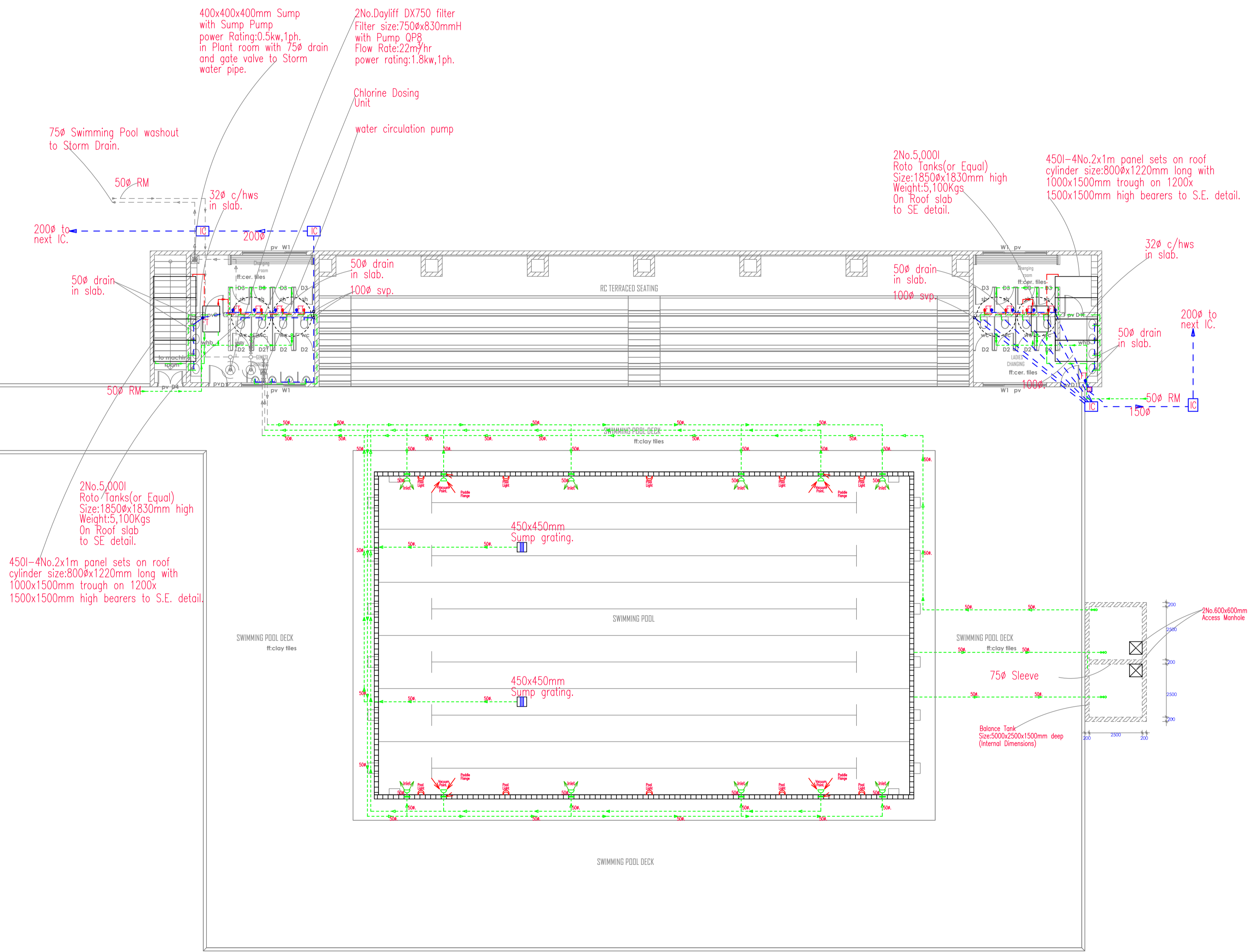
Architects
**Otto Mruttu+Partners
Architects.**
P.O BOX:76382, 00508 Nairobi.
TEL/FAX (020)3589334
Cell: 0722554624 -NAIROBI.

Proposed Sports Facility
On Plot L.R No. 27425-(Chiru)
Meru-Maua Road
Meru County.

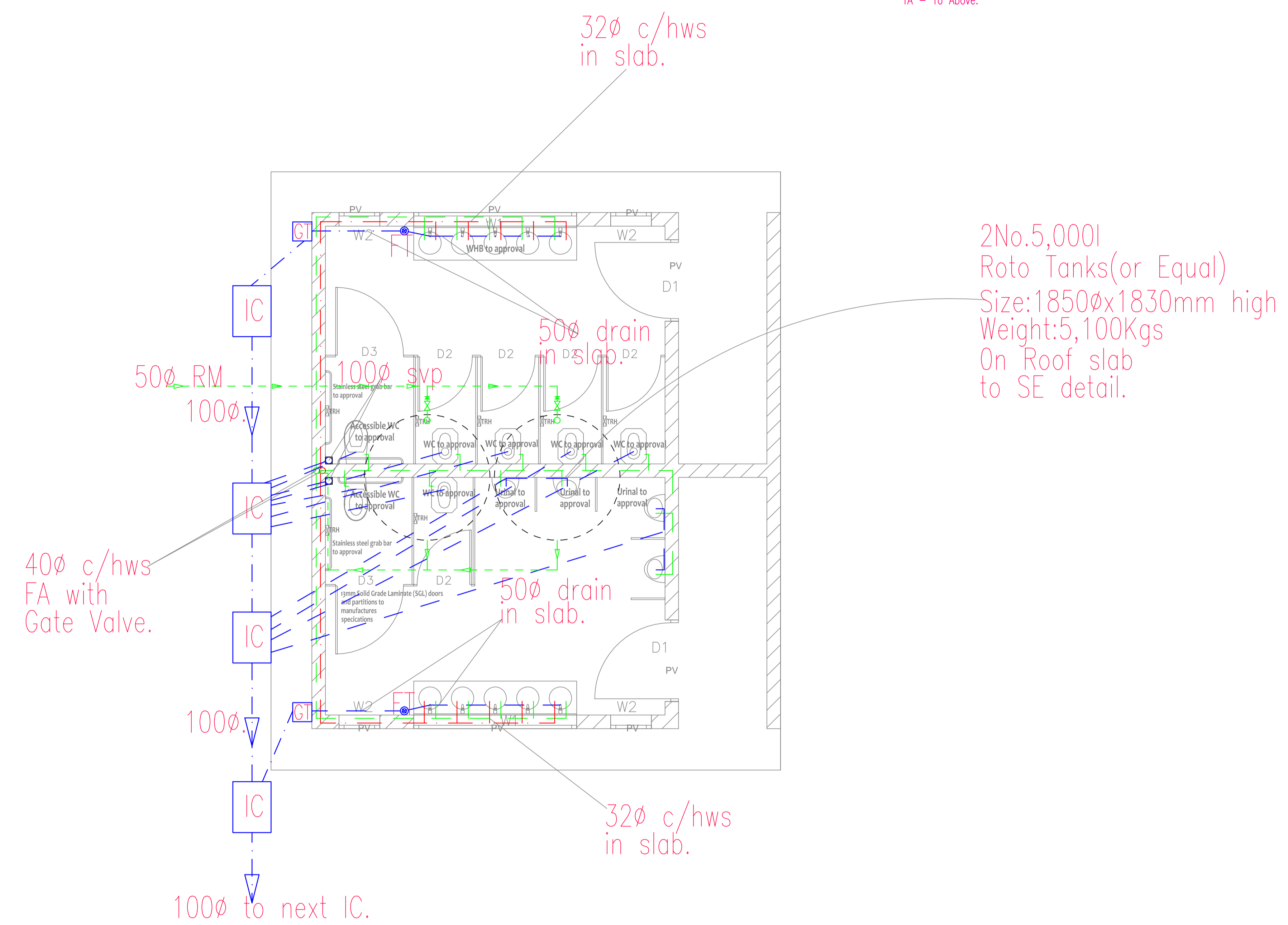
Drg. title
Sports Hall
Plumbing/Drainage Layout.

Rex Consultants Building Services Engineers Top Plaza Office 3,3rd Floor Kindaruma Road,Off Ngong Road,Nairobi P.o box: 73878, tel: 2711037, fax: 2713041 Email:rexcons@wananchi.com	
scale	1:75
date	May:2018
drawn	G.M.G. checked S.N.M.
job no.	R533 sheet no. 003M

**Swimming Pool
Scale 1:200**



- | | | |
|----------------------------|--------------------------|------------------|
| KEY | KEY | KEY |
| — Drainage Pipe. | TB - To Below. | H/L -High Level. |
| — Cold Water Service Pipe. | IC - Inspection Chamber. | L/L -Low Level. |
| — Hot Water Service Pipe. | GT - Gully Trap. | FT - Floor Trap. |
| FB - From Below. | SVP -Soil Vent Pipe. | SP - Stand Pipe. |
| FA - From Above. | RM - Rising Mains. | |
| TA - To Above. | | |



- | No. | NOTES |
|-----|---|
| 1. | All dimensions are in mm unless otherwise stated. |
| 2. | All shower floor traps to be 150x150mm from each wall. Floor traps to be 150x50mm key terrain flush with tiles. |
| 3. | All PPR pipes to be pressure tested at 4.8bars(70PSI) for 24hrs. |
| 4. | All horizontal cold/hot water supply PPR pipes in washrooms to be cast in floor slab. |
| 5. | All bathroom c/hws isolating valves to be under wc's, whb or kitchen sink cabinets as applicable. |
| 6. | All PPR pipe routes in floors/walls to be marked in clear colour to avoid joinery puncture. |

REVISIONS		
no.	date	descriptions
0.	04.03.2020	Original Issue.

Client _____

Signature _____ Date _____

Architects
Otto Muttu+Partners Architects
 P.O BOX:76382, 00508 Nairobi.
 TEL/FAX (020)3589334
 Cell: 0722554624 -NAIROBI.

Proposed Sports Facility
 On Plot L.R No. 27425-(Chiru)
 Meru-Maua Road
 Meru County.

Drg. title
 Washroom Detail
 Plumbing/Drainage Layout.

Rex Consultants
 Building Services Engineers
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scale	1:75	
date	May:2018	
drawn	G.M.G.	checked S.N.M.
job no.	R533	sheet no. 001M

Washroom Detail

Scale 1:75

KEY:

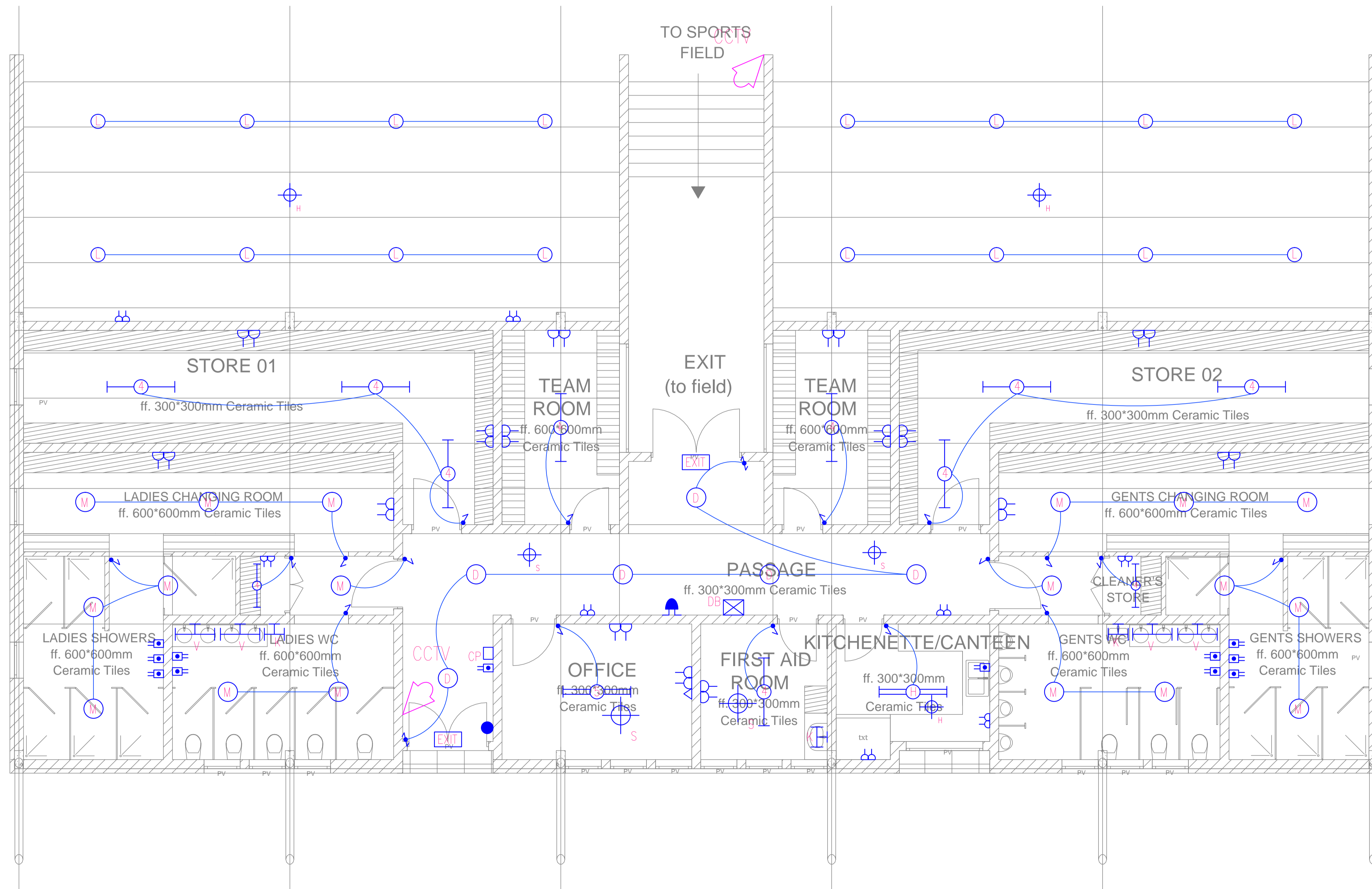
- 1 Way 1 gang switch
- 1 Way 2 gang switch
- 2 Way 1 gang switch
- 2 Way 2 gang switch
- Intermediate Switch
- Telephone outlet

- 13A Single socket outlet
- CCTV Camera
- Smoke Detector
- 13A Twin socket outlet
- TV outlet
- 20A DP Switch

- Fire Alarm Break Glass
- Fire Alarm Sounder Bell
- Meter board
- Distribution board
- Heat Detector

Lighting symbols

- H - Suspended LED Light
- 5 - 1200mmx36w twin fluorescent fitting with Cover
- K - 600mmx18w Mirror light as thorn arrow slim
- V - Ditto but 1200mmx36W
- D - Circular ceiling fitting as thorn club CD.
- M - As D above
- 4 - 1200mmx36w Single battern fluorescent fitting



No.	NOTES
1.	All dimensions are in mm unless otherwise stated.

REVISIONS		
no.	date	descriptions
0.	04.03.2020	Original issue.







Client	Meru University
Signature _____ Date _____	
Architects	Otto Mruttu+Partners Architects. P.O. BOX 76382, 00508 Nairobi. TEL: 020-2134392/3589334 Fax: 020-2305101 Cell: 0722554624 -Nairobi.
Project	M.U.S.T Sports Fields Meru
Drg. title.	Office, Kitchenette and WashRooms Power and Lighting





Rex Consultants
 Building Services Engineers
 Top Plaza Office 3, 3rd Floor,
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 E-mail: rex@rexcons.com
 Website: www.rexcons.com

scale	1:100
date	May:2018
drawn	N.K.M
checked	S.N.M
job no.	R533
sheet no.	001E

KEY:

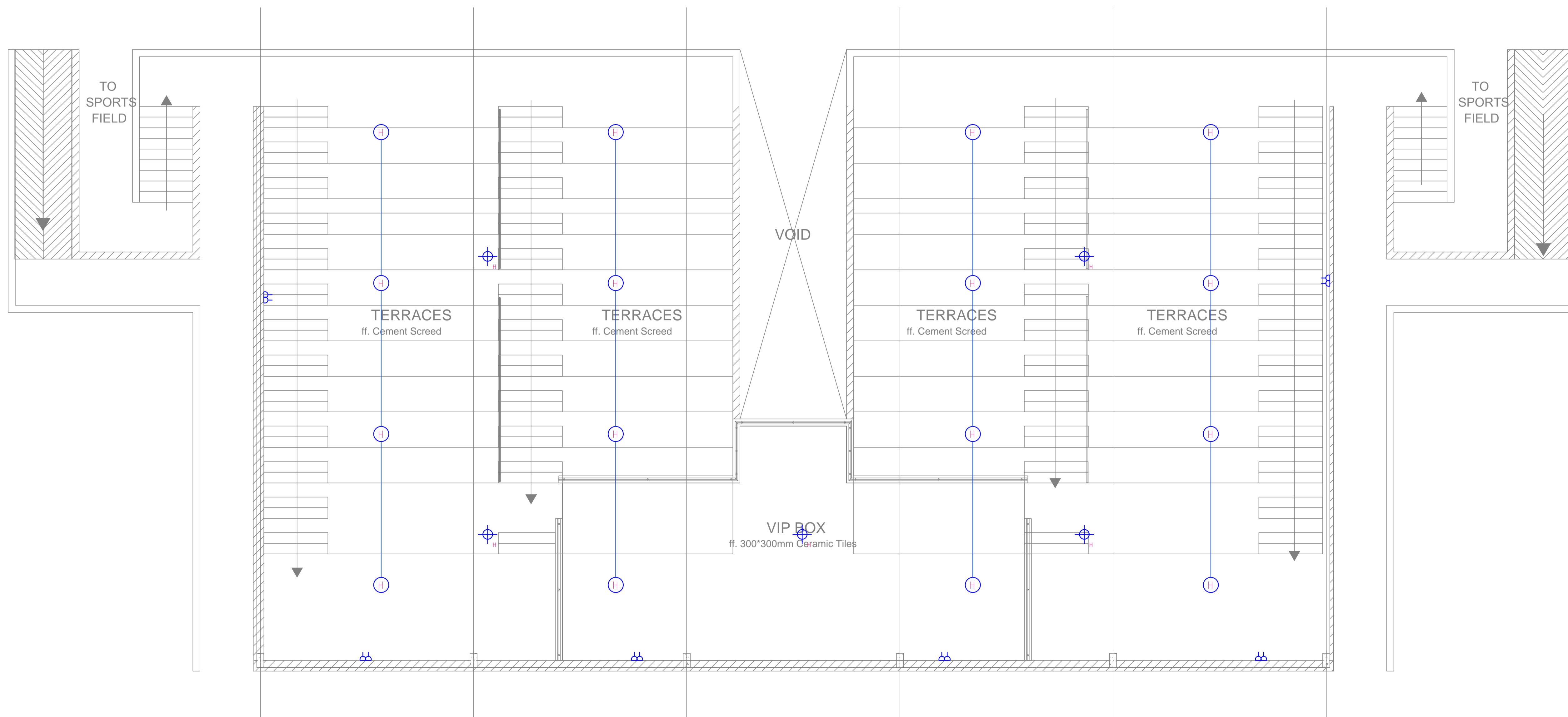
-  1 Way 1 gang switch
-  1 Way 2 gang switch
-  2 Way 1 gang switch
-  2 Way 2 gang switch
-  Intermediate Switch
-  Telephone outlet

-  13A Single socket outlet
-  CCTV Camera
-  Smoke Detector
-  13A Twin socket outlet
-  TV outlet
-  20A DP Switch

-  Fire Alarm Break Glass
-  Fire Alarm Sounder Bell
-  Meter board
-  Distribution board
-  Heat Detector

Lighting symbols

- H – Suspendend LED Light
- 5 – 1200mmx36w twin fluorescent fitting with Cover
- K – 600mmx18w Mirror light as thorn arrow slim
- V – Ditto but 1200mmx36W
- D – Circular ceiling fitting as thorn club CD.
- M – As D above
- 4 – 1200mmx36w Single battern flourescent fitting



No.	NOTES
1.	All dimensions are in mm unless otherwise stated.

REVISIONS		
no.	date	descriptions
0.	04.03.2020	Original issue.

Client
Meru University

Signature _____ Date _____

Architects
Otto Mruttu+Partners Architects.
P.O. BOX 76382, 00508 Nairobi.
TEL: 020-2134392/3589334 Fax: 020-2305101
Cell: 0722554624 -Nairobi.

Project
M.U.S.T Sports Fields Meru

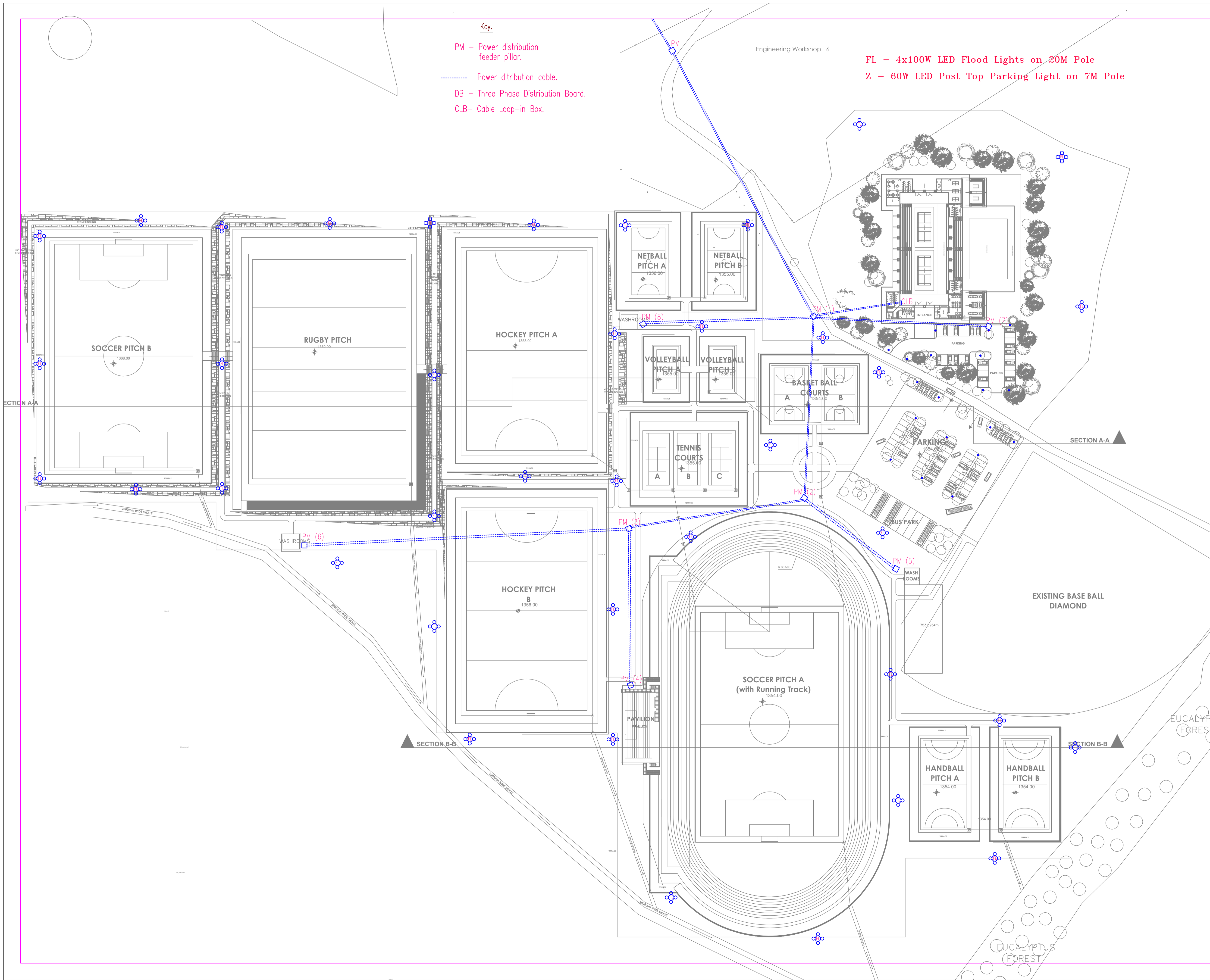
Drg. title.
Pavilion
Power and Lighting

Rex Consultants
Building Services Engineers
Top Plaza Office 3, 3rd Floor,
Kindaruma Road, Off Ngong Road, Nairobi
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Website: www.rexcons.com

scale	1:125
date	May:2018
drawn	N.K.M
checked	S.N.M
job no.	R533
sheet no.	002E

Key.
 PM – Power distribution feeder pillar.
 Power distribution cable.
 DB – Three Phase Distribution Board.
 CLB– Cable Loop-in Box.

FL – 4x100W LED Flood Lights on 20M Pole
 Z – 60W LED Post Top Parking Light on 7M Pole



No. NOTES

1. All dimensions are in mm unless otherwise stated.

Cultivated Shamba

REVISIONS

no.	date	descriptions
0.	04.03.2020	Original issue.

Client
Meru University
 Signature _____ Date _____
 Architects
Otto Mruttu+Partners Architects.
 P.O. BOX 76382, 00508 Nairobi.
 Tel: 020-2134392/3589334 Fax: 020-2305101
 Cell: 0722554624 -Nairobi.
 Project
M.U.S.T Sports Fields Meru
 Drg. title.
 Fields & Sports Hall
 Elect Site Plan

Rex Consultants
 Building Services Engineers
 Top Plaza Office 3, 3rd Floor,
 Kindaruma Road, Off Ngong Road, Nairobi
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 E-mail: rex@rexcons.com
 Website: www.rexcons.com

scale	1:1500
date	Feb:2020
drawn	Z.M.K
checked	S.N.M
job no.	R533
sheet no.	001E