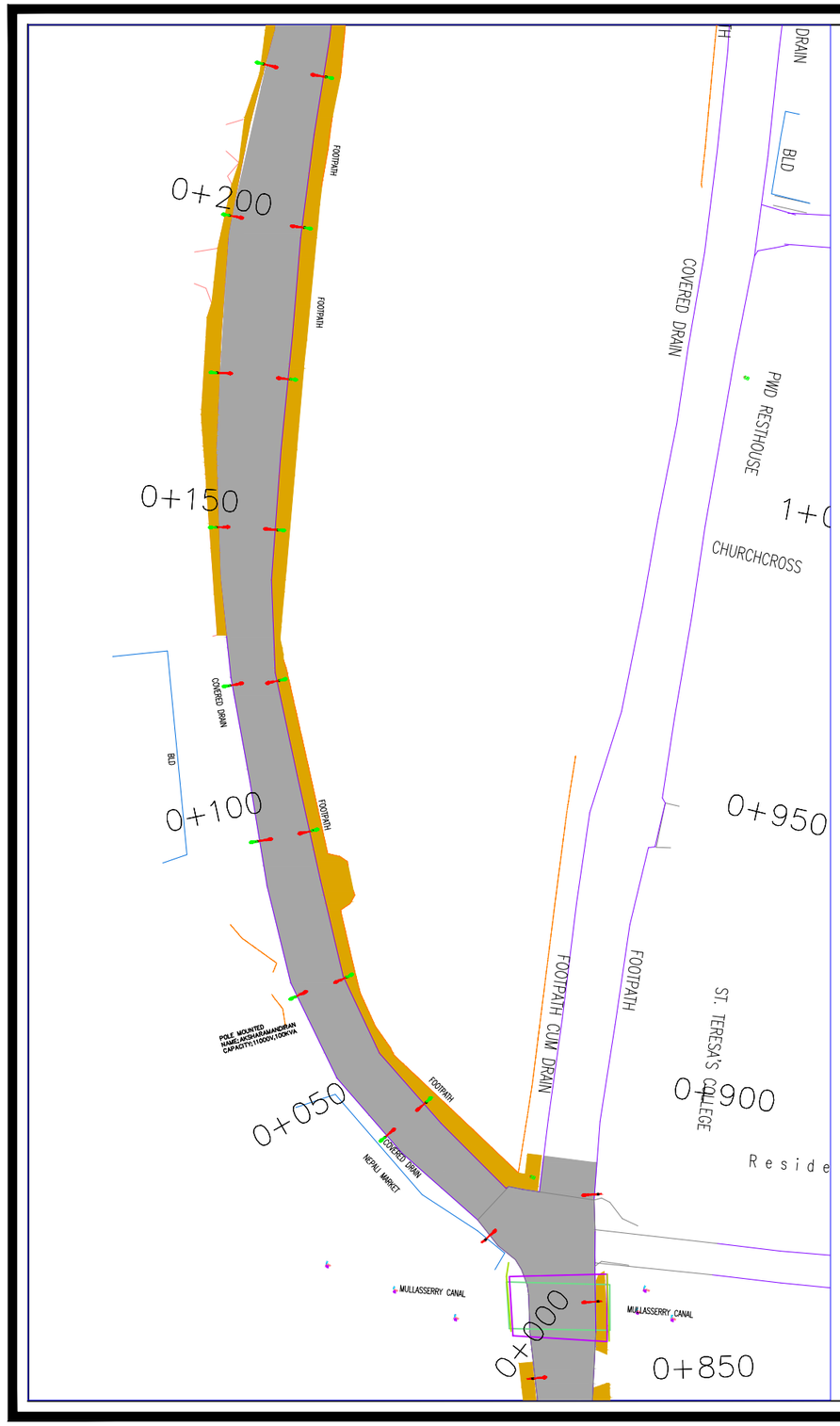
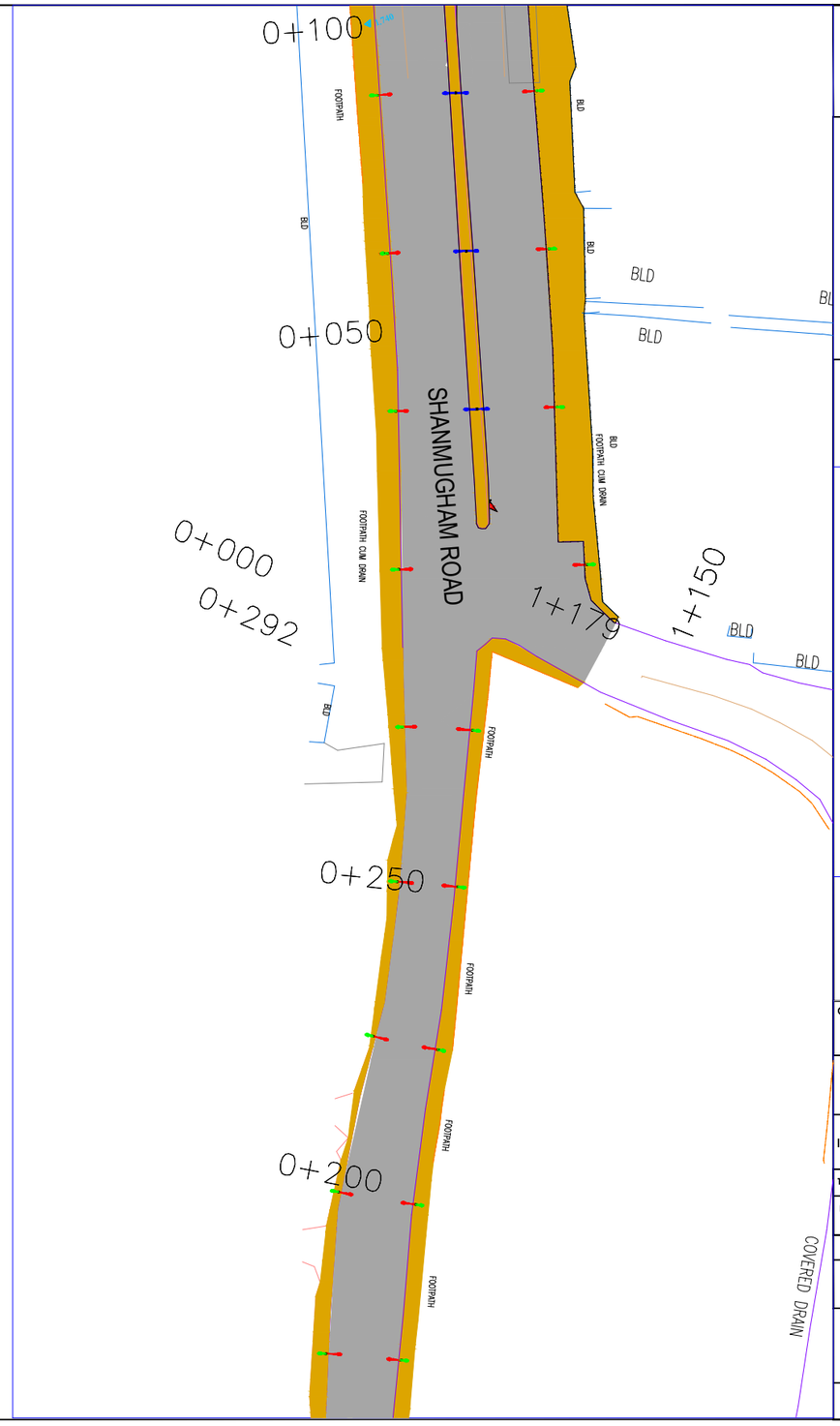
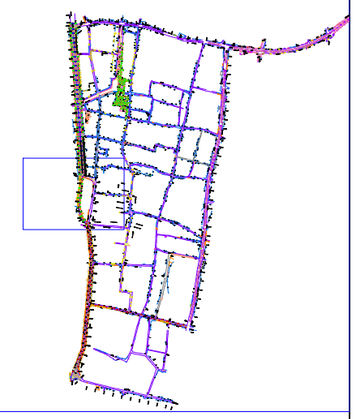




SMART ROADS STREET LIGHT POSITION- SHANMUGHAM ROAD

NOTE:

1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.



CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

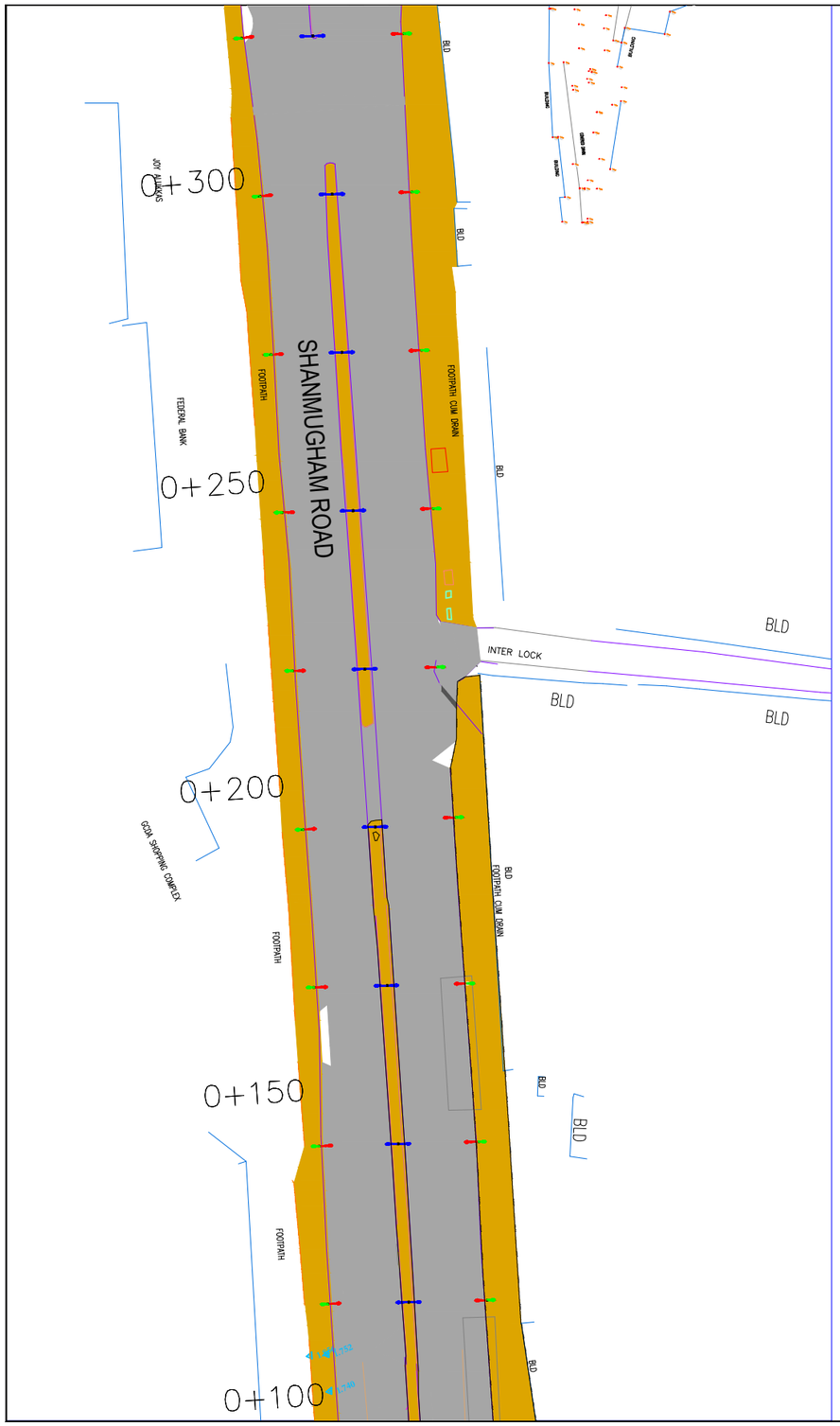
TITLE : STREET LIGHT POSITION -SHANMUGHAM ROAD
(1 OF 3)

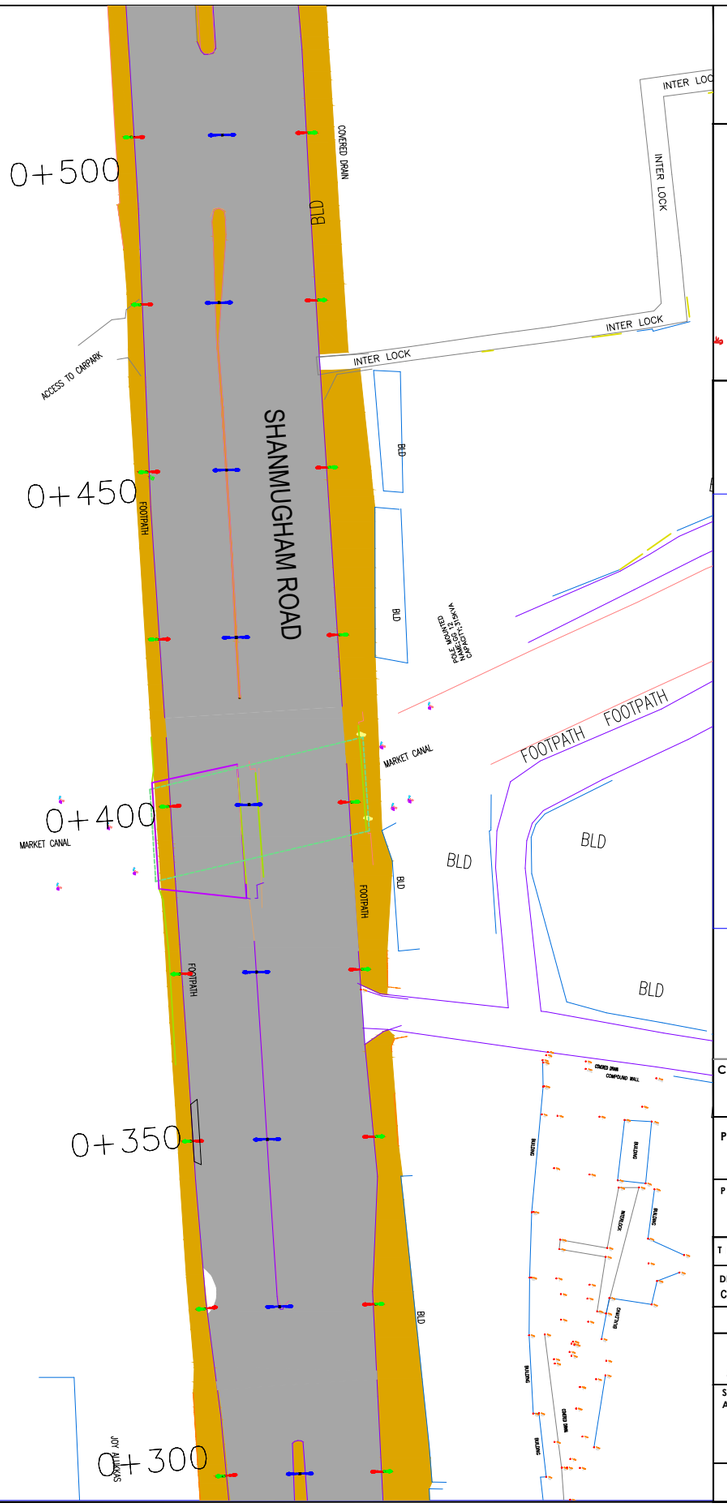
DRG NO.	SCALE : 1:400(A3)	N
CSML/M4/SMR/LED-001	DATE : 25-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

TENDER PURPOSE ONLY





SMART ROADS STREET LIGHT POSITION- SHANMUGHAM ROAD

NOTE:

1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.

LEGEND
- ILM STREET LIGHT POLE WITH DIFFERENTIAL ARM BRACKET
- ILM STREET LIGHT POLE WITH DOUBLE ARM BRACKET
- ILM STREET LIGHT POLE WITH SINGLE ARM BRACKET
- POST TOP POLE

CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

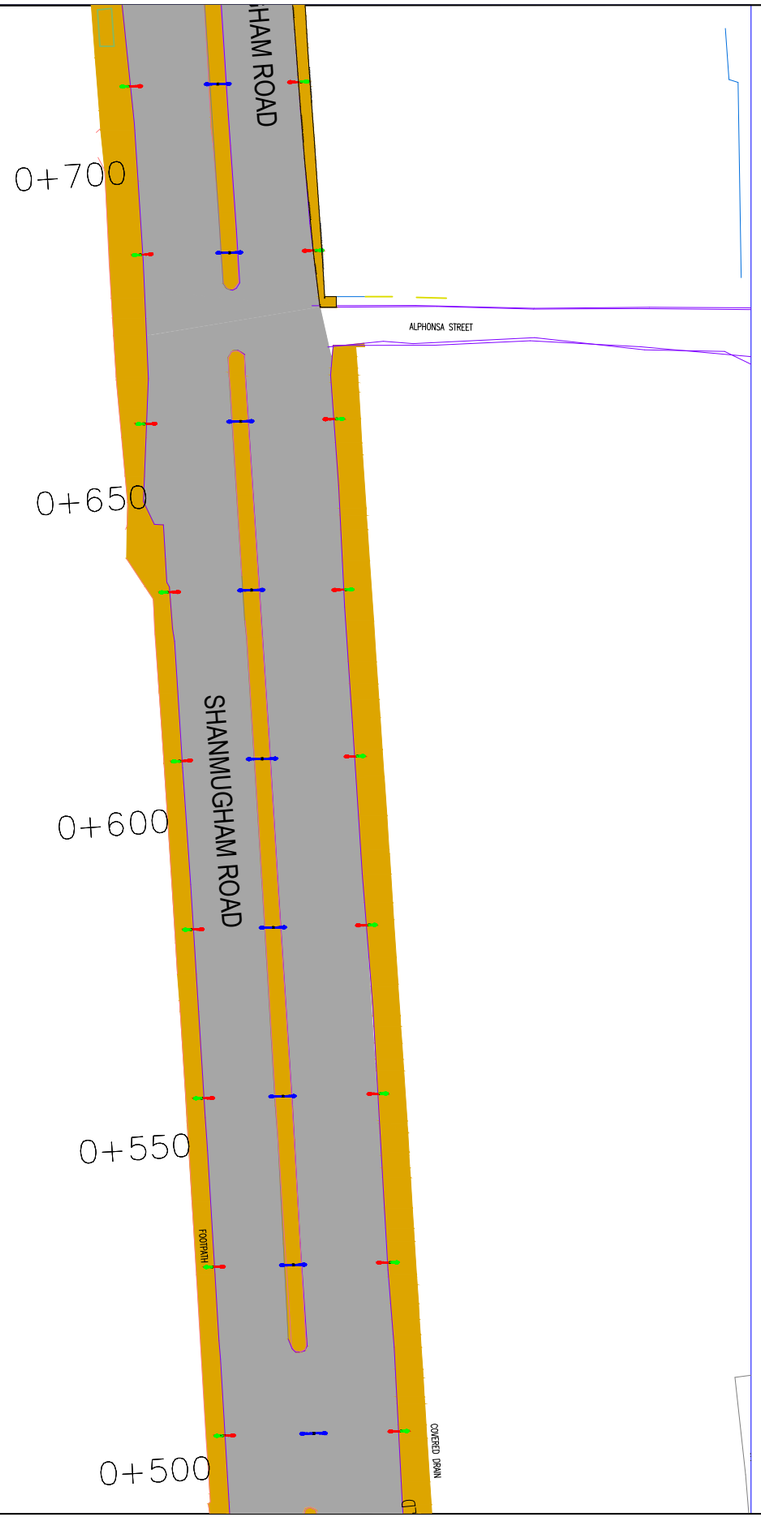
TITLE : STREET LIGHT POSITION -SHANMUGHAM ROAD (2 OF 3)

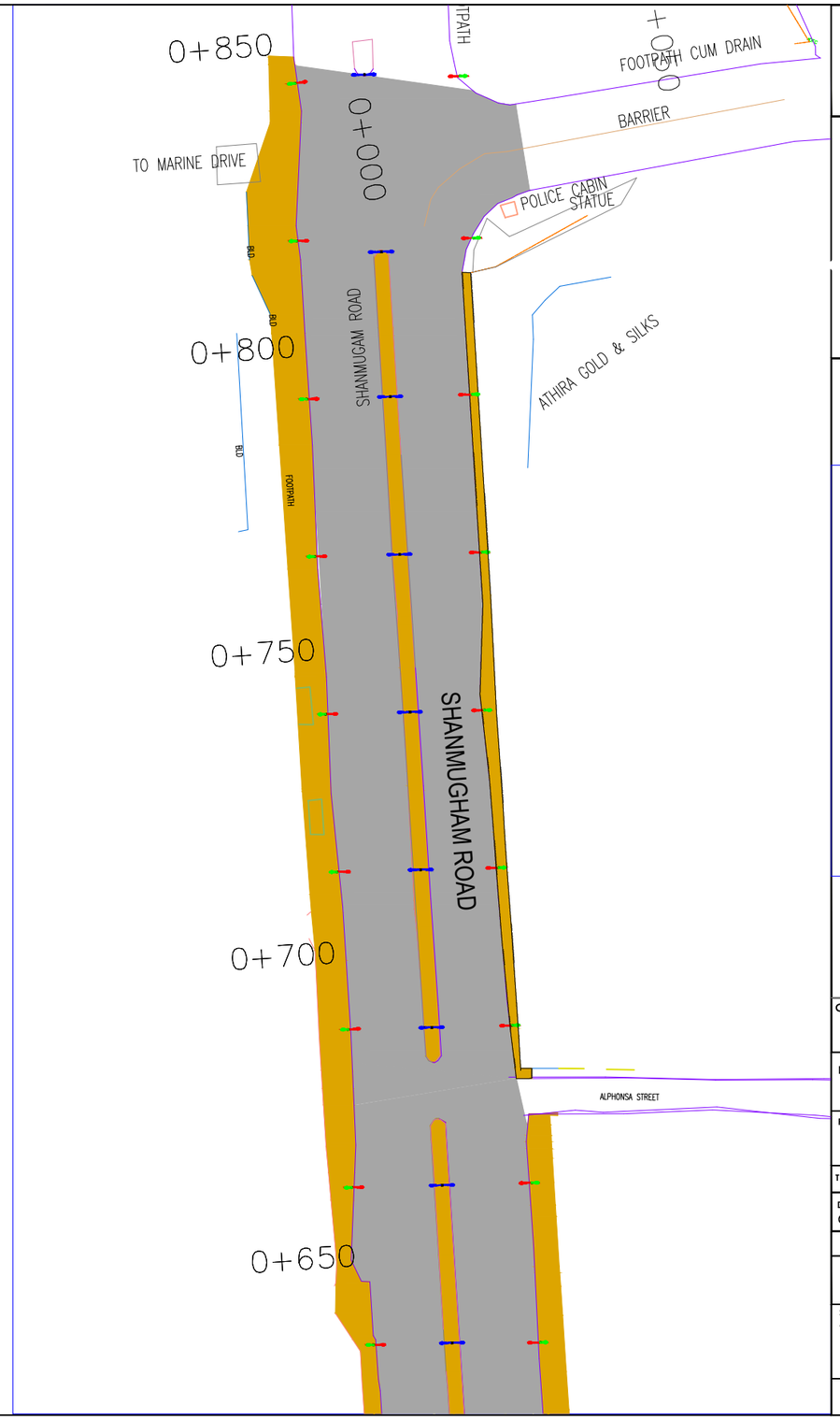
DRG NO.	SCALE : 1:400(A3)	N
CSML/M4/SMR/LED-002	DATE : 25-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

TENDER PURPOSE ONLY

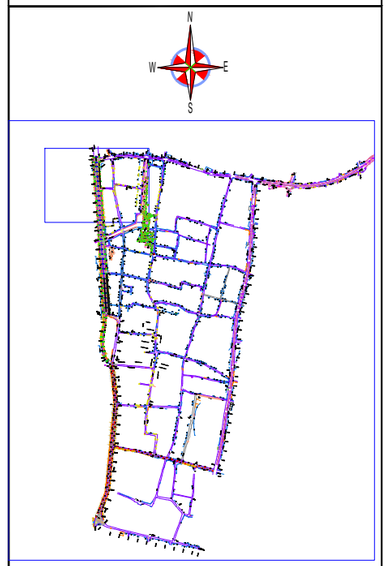


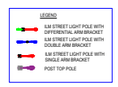


SMART ROADS STREET LIGHT POSITION- SHANMUGHAM ROAD

NOTE:

1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.





CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

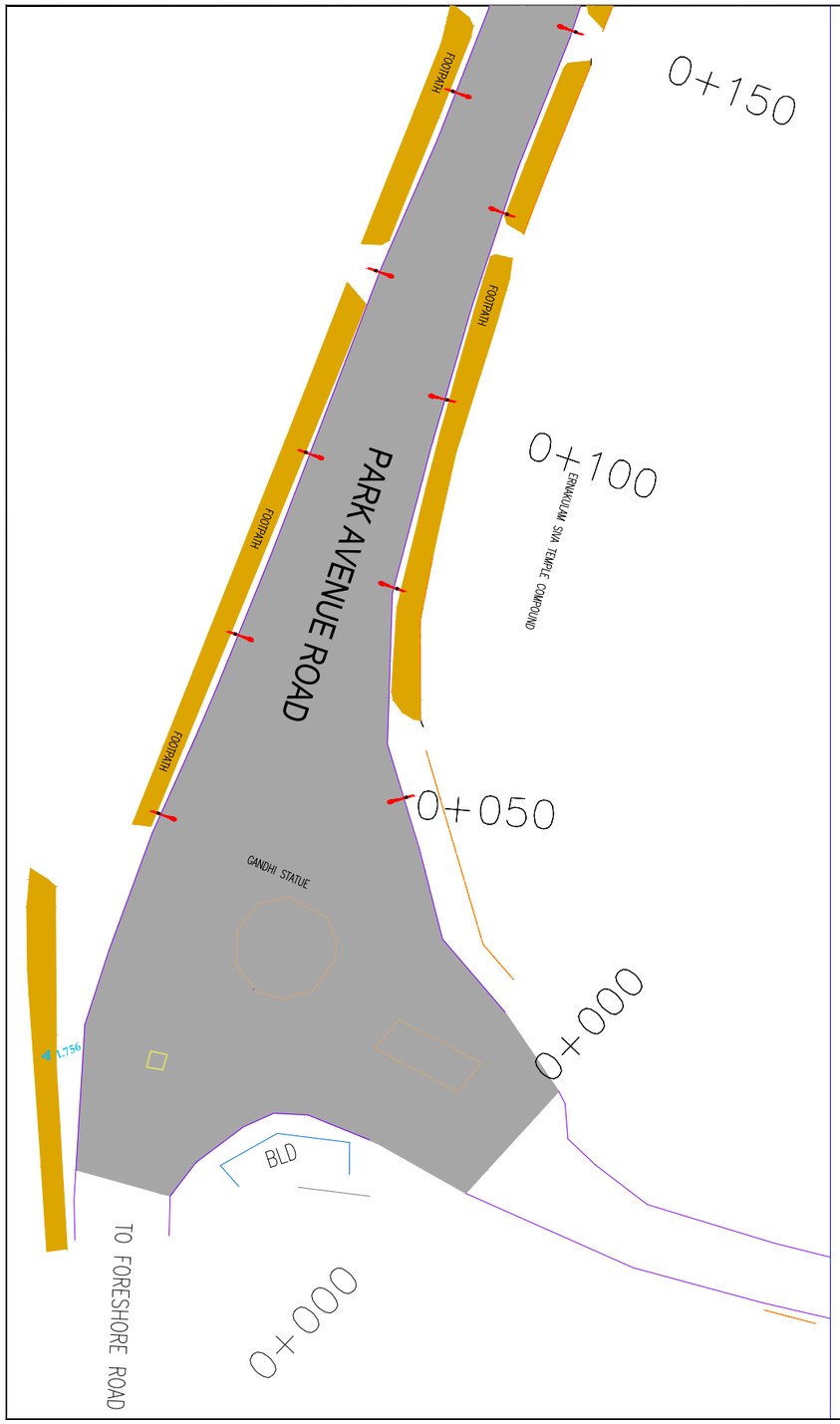
TITLE : STREET LIGHT POSITION -SHANMUGHAM ROAD (3 OF 3)

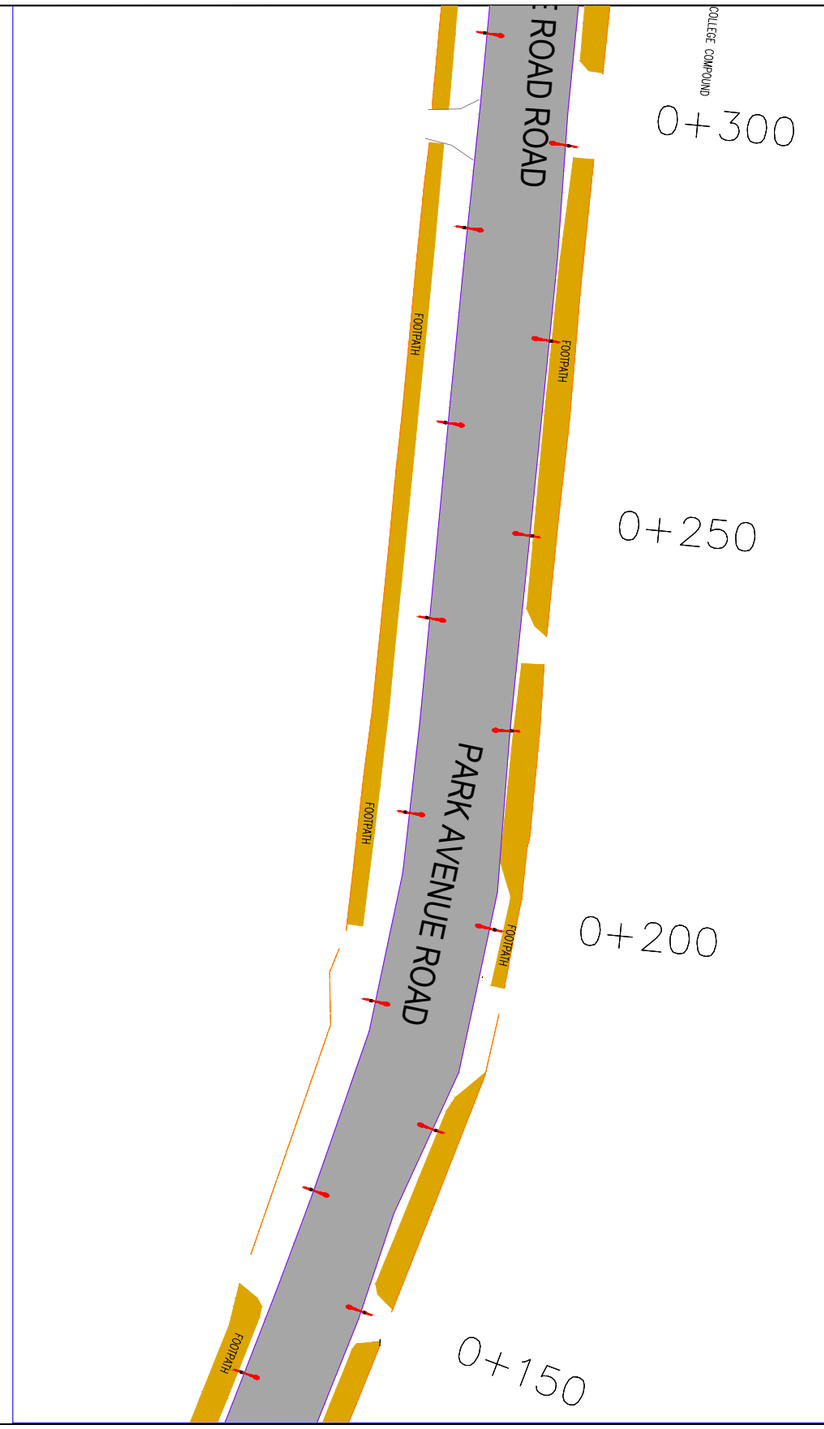
DRG NO.	SCALE : 1:400(A3)	N
CSML/M4/SMR/LED-003	DATE : 25-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

TENDER PURPOSE ONLY

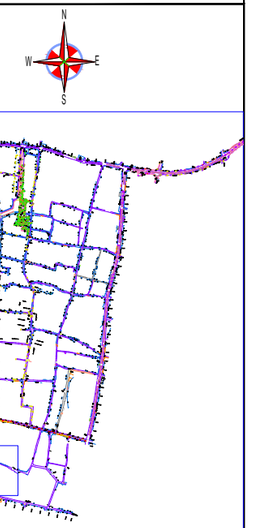


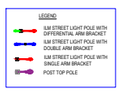


SMART ROADS STREET LIGHT POSITION- PARK AVENUE ROAD

NOTE:

1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.





CLIENT : **COCHIN SMART MISSION LIMITED**
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : **IPE Global & Royal HaskoningDHV**
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

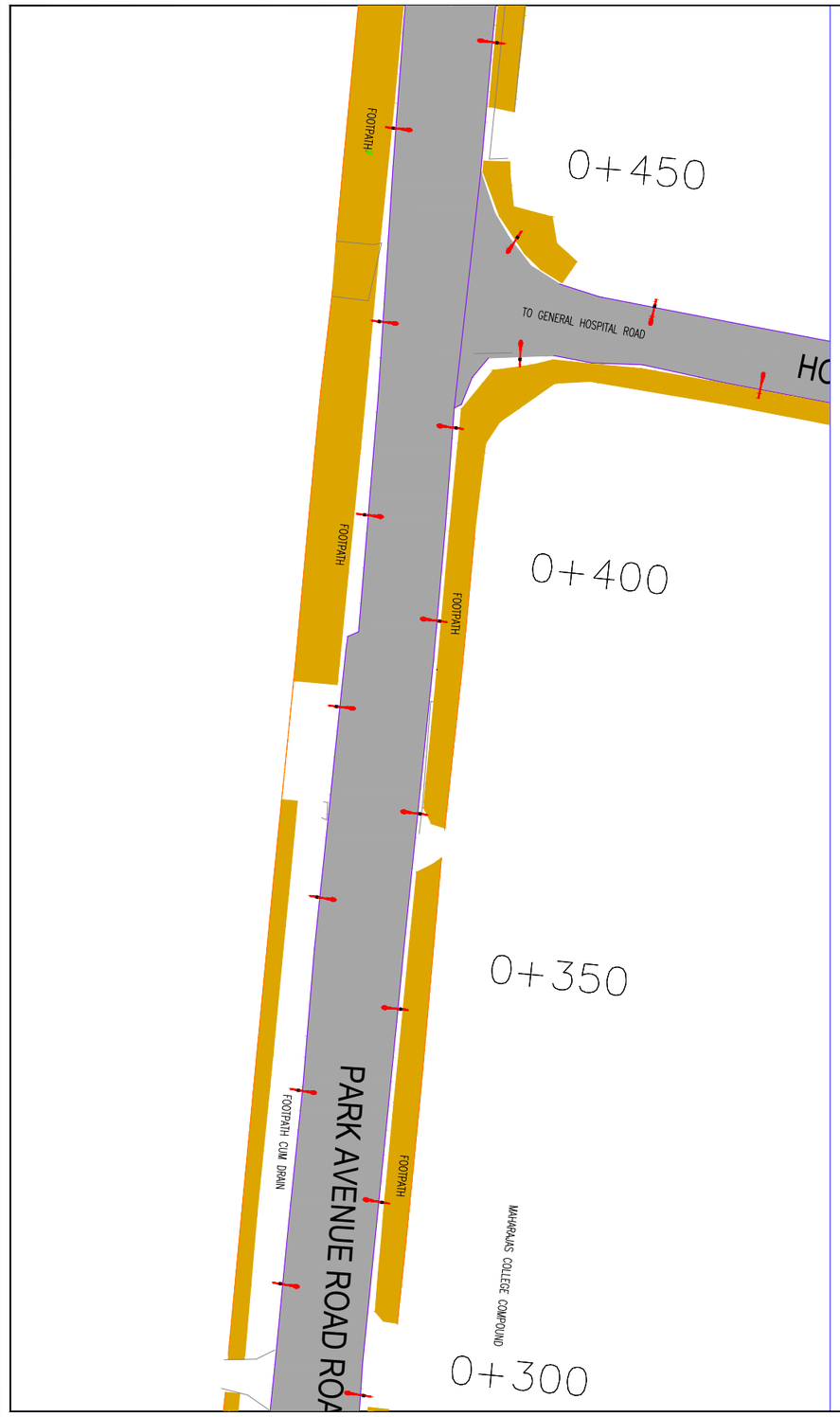
TITLE : **STREET LIGHT POSITION -PARK AVENUE ROAD (1 OF 3)**

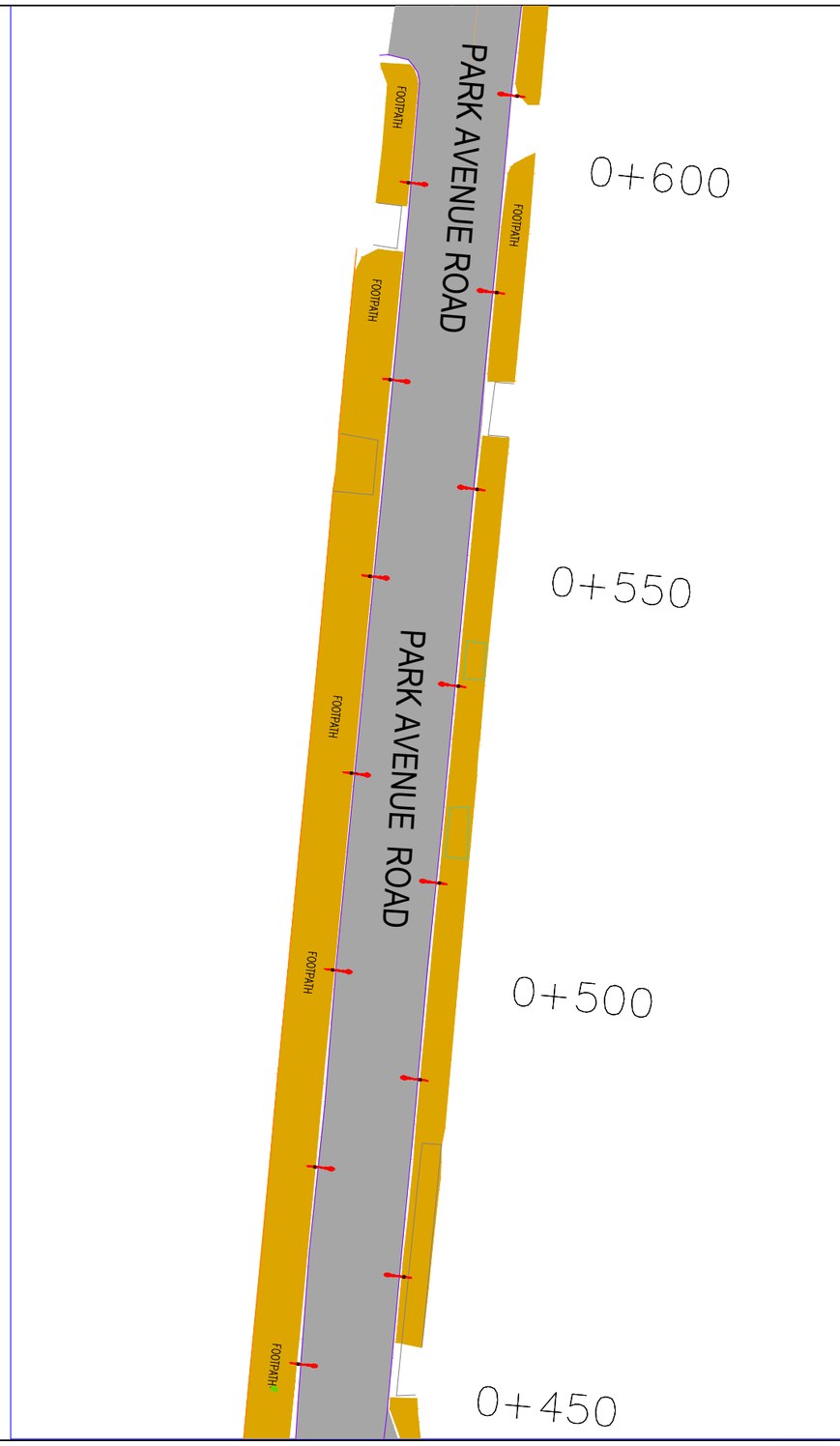
DRG NO.	SCALE : 1:300(A3)	N
CSML/M4/SMR/LED-004	DATE : 25-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

TENDER PURPOSE ONLY





SMART ROADS STREET LIGHT POSITION- PARK AVENUE ROAD

NOTE:

1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.

CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

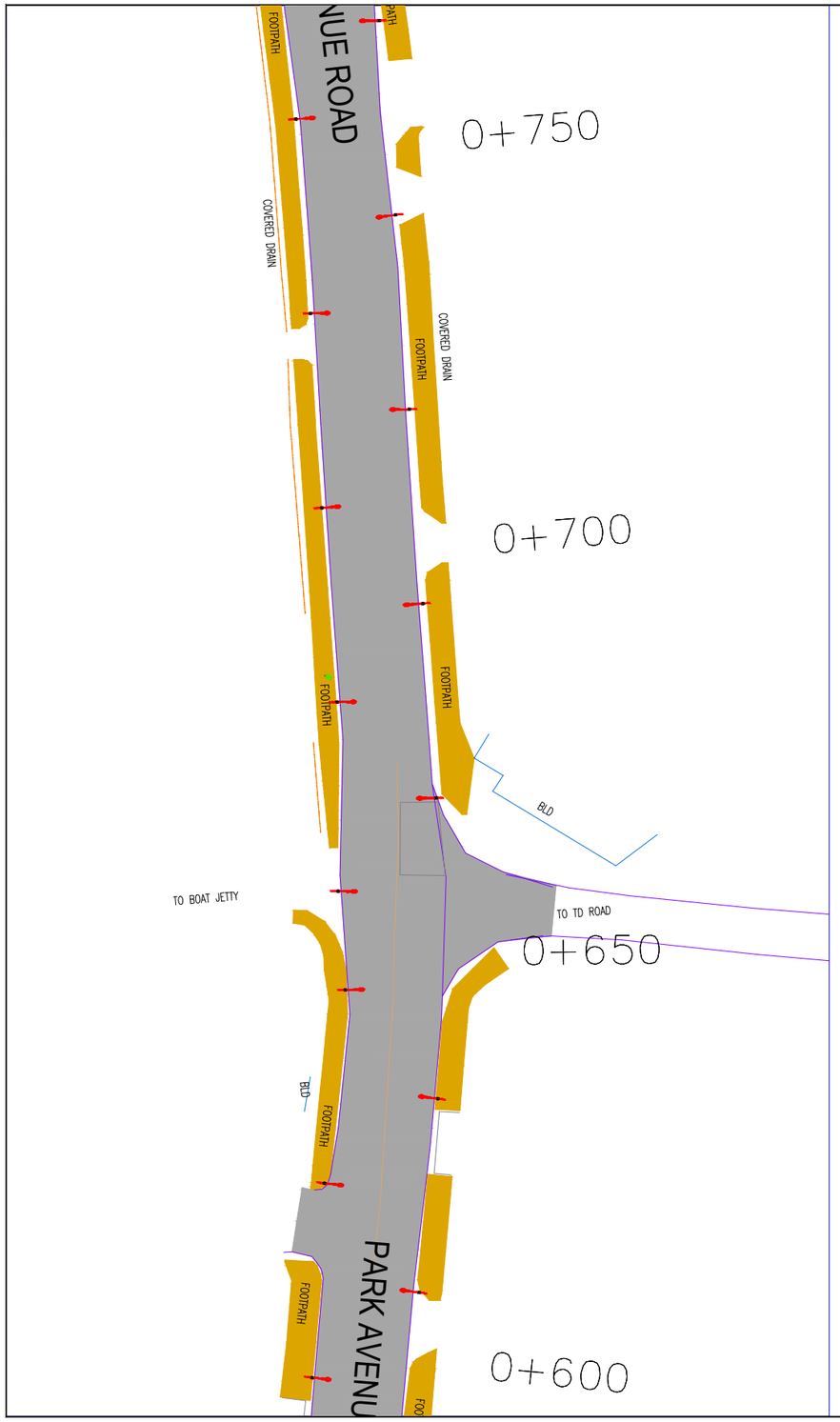
TITLE : STREET LIGHT POSITION -PARK AVENUE ROAD (2 OF 3)

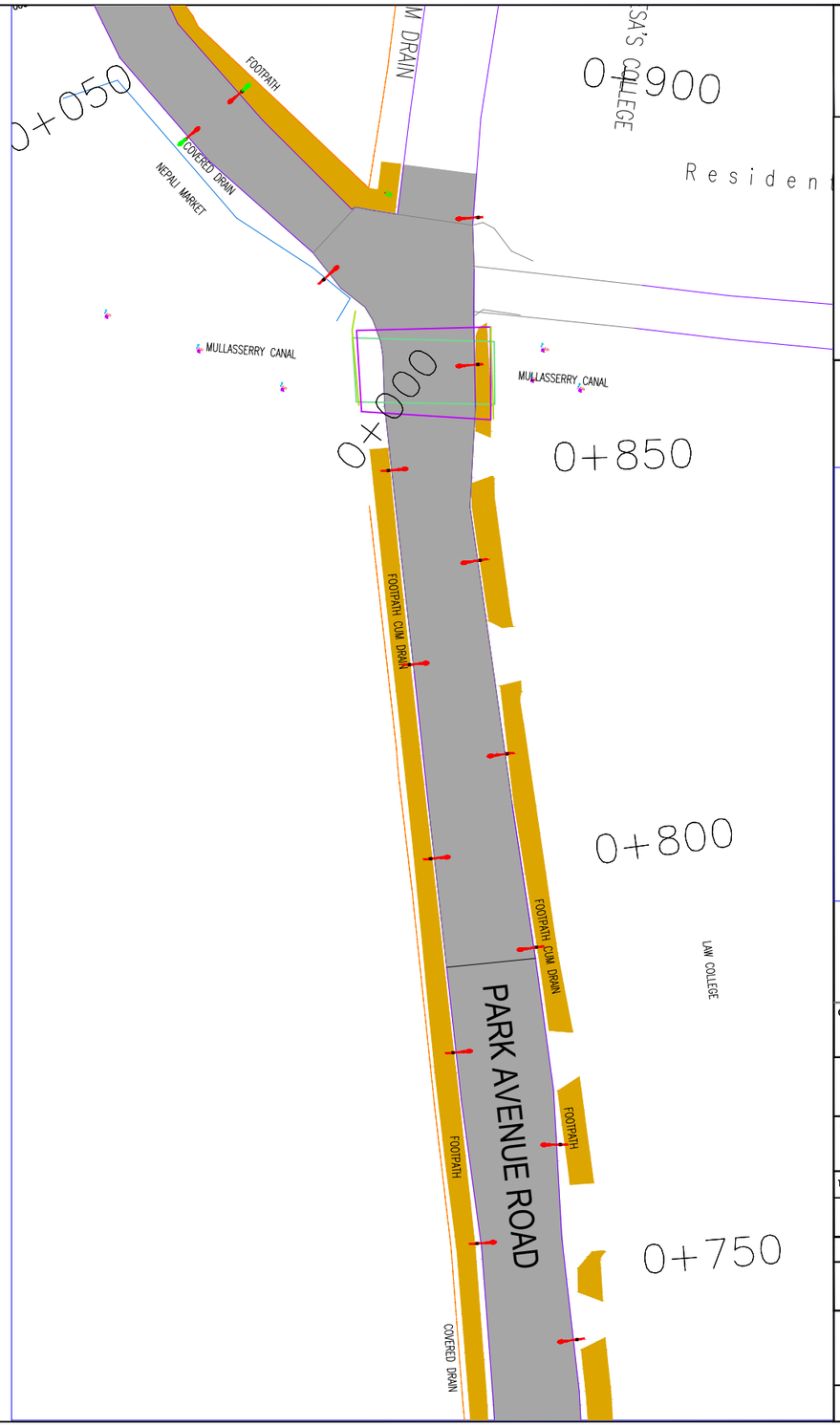
DRG NO.	SCALE : 1:300(A3)	N
CSML/M4/SMR/LED-005	DATE : 25-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

TENDER PURPOSE ONLY





SMART ROADS STREET LIGHT POSITION- PARK AVENUE ROAD

NOTE:

1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.

CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

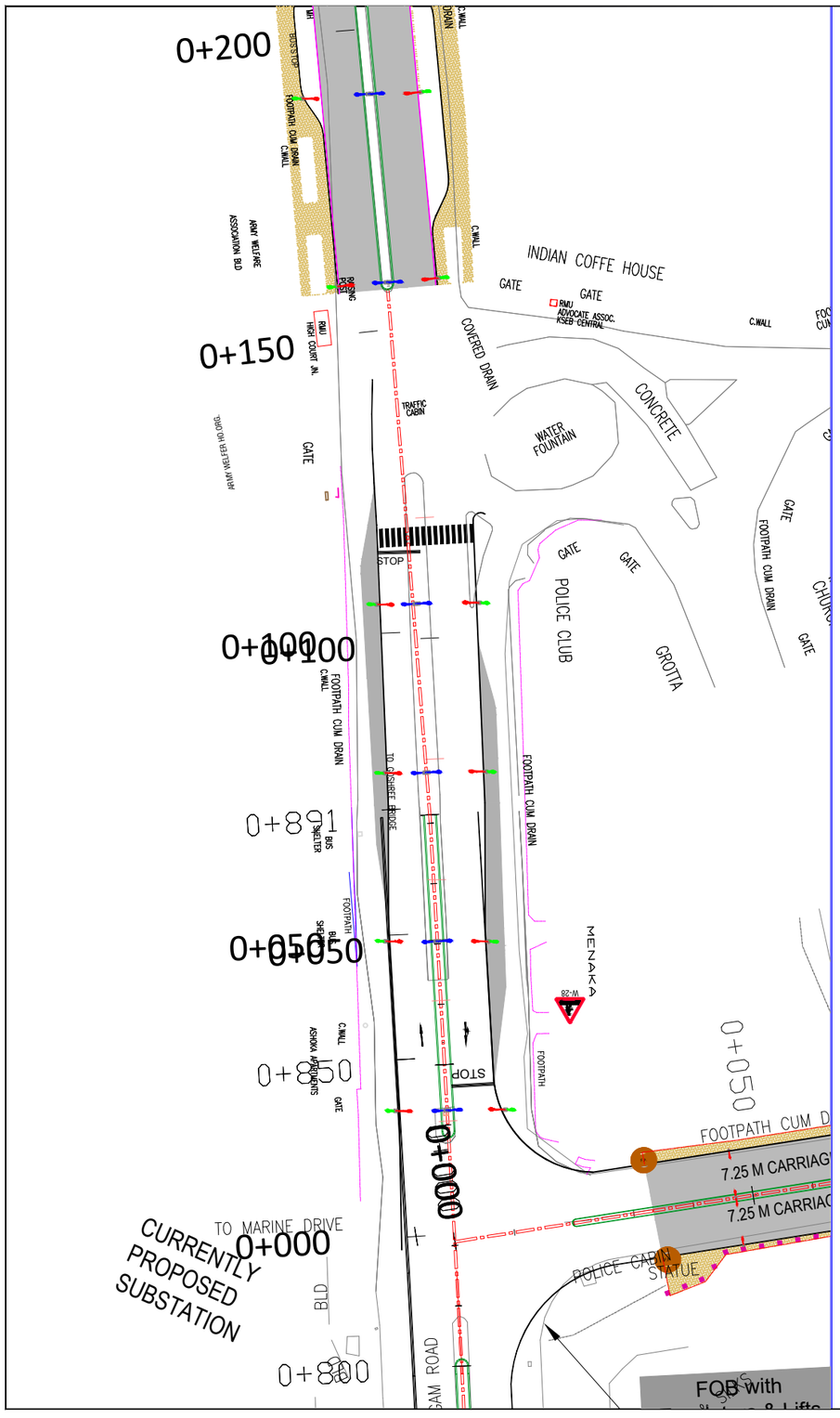
TITLE : STREET LIGHT POSITION -PARK AVENUE ROAD
(3 OF 3)

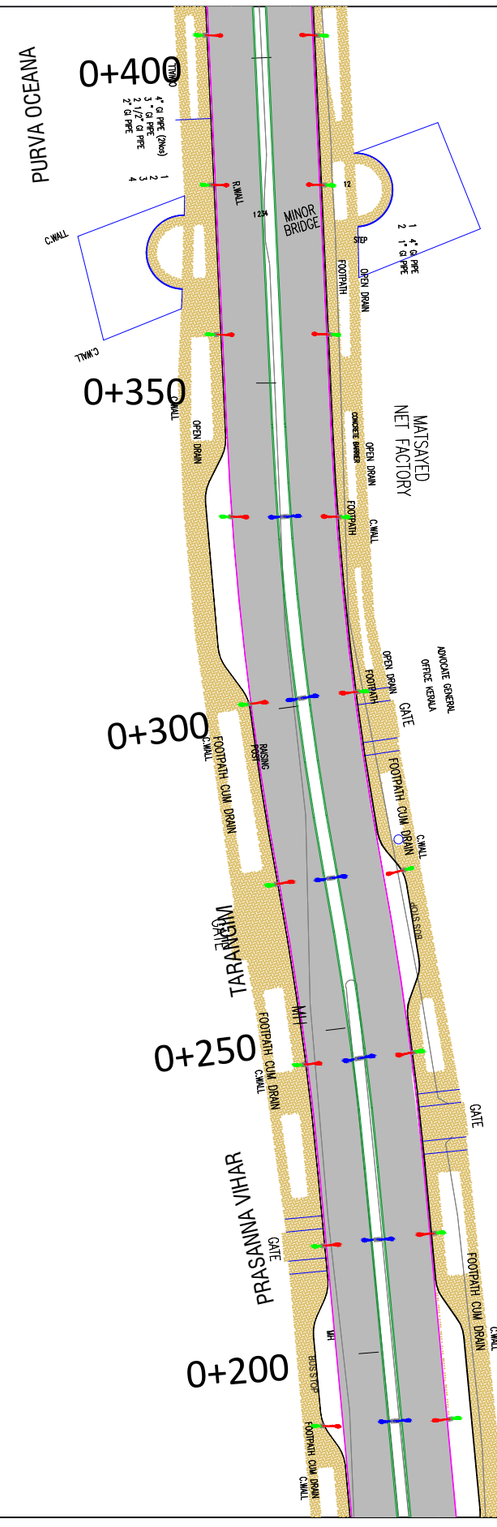
DRG NO.	SCALE : 1:300(A3)	N
CSML/M4/SMR/LED-006	DATE : 25-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

TENDER PURPOSE ONLY



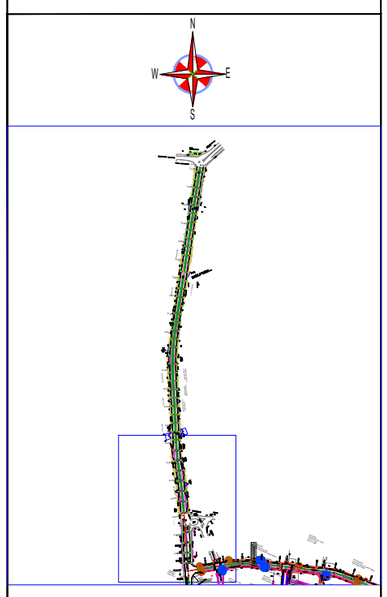


SMART ROADS STREET LIGHT

POSITION ABRAHAM MADAMAKKAL ROAD

NOTE:

1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.



CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

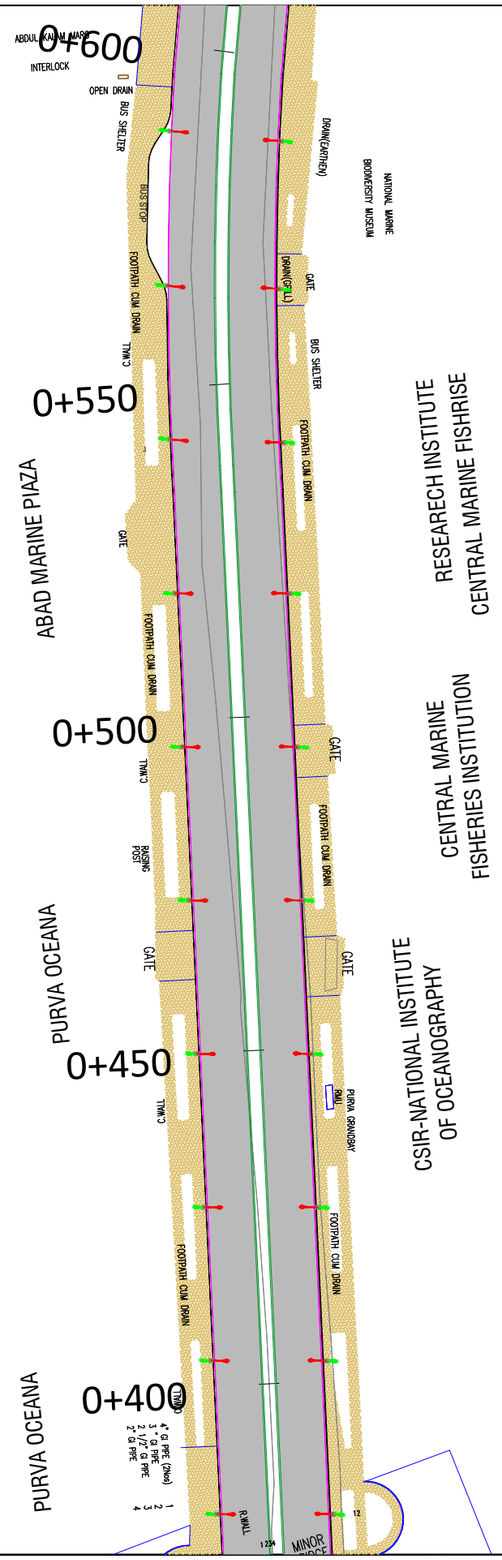
TITLE : STREET LIGHT POSITION ABRAHAM MADAMAKAL ROAD (1 of 3)

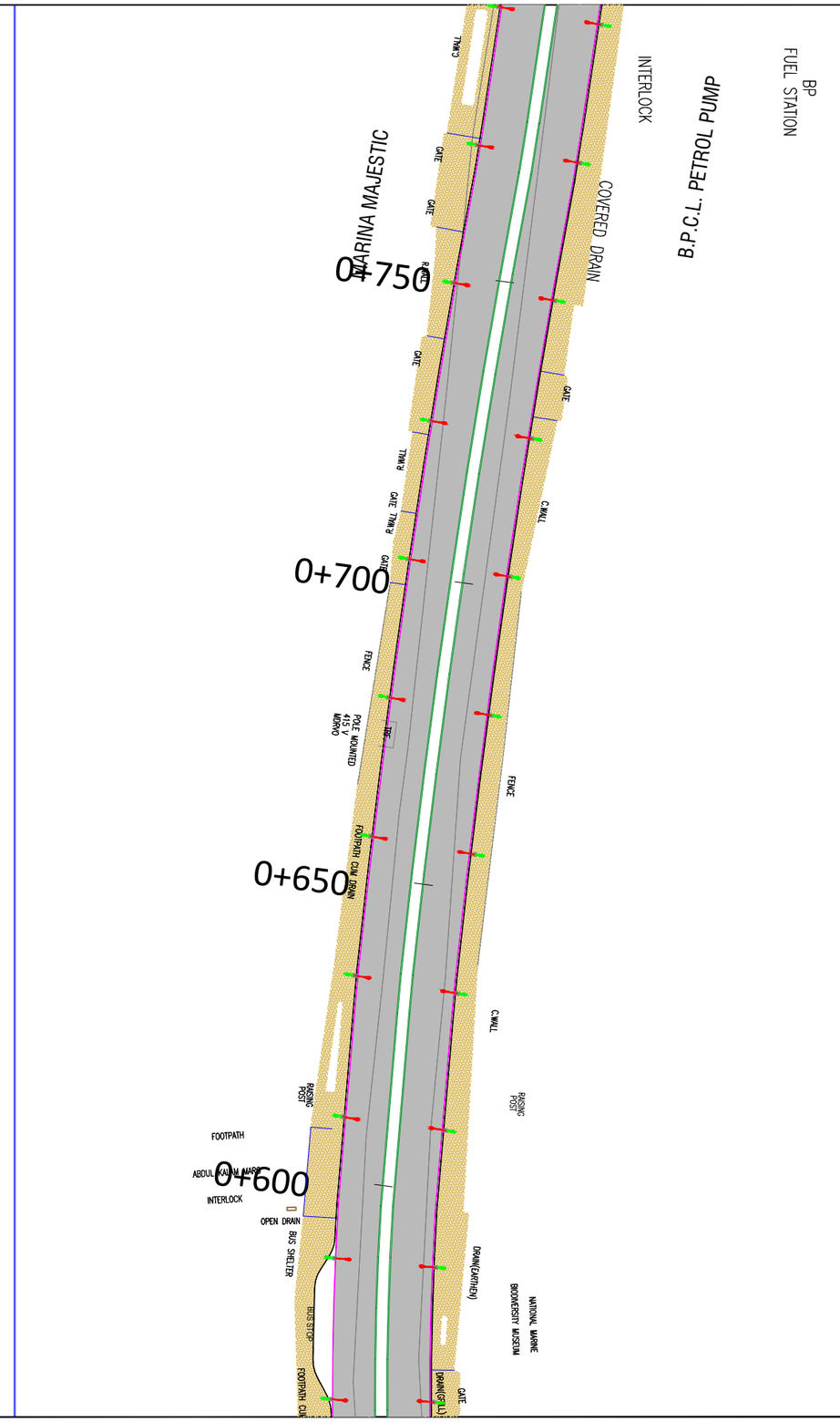
DRG NO.	SCALE : 1:400(A3)	N
CSML/M4/SMR/LED-007	DATE : 25-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

TENDER PURPOSE ONLY



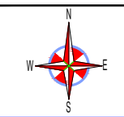


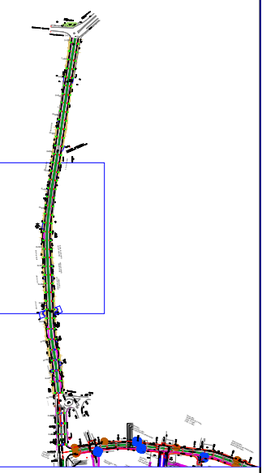
SMART ROADS STREET LIGHT

POSITION ABRAHAM MADAMAKKAL ROAD

NOTE:

1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.





LEGEND

- 9.M STREET LIGHT POLE WITH DIFFERENTIAL ARM BRACKET
- 9.M STREET LIGHT POLE WITH DOUBLE ARM BRACKET
- 9.M STREET LIGHT POLE WITH SINGLE ARM BRACKET
- POST TOP POLE

CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

TITLE : STREET LIGHT POSITION ABRAHAM MADAMAKKAL ROAD
(2 of 3)

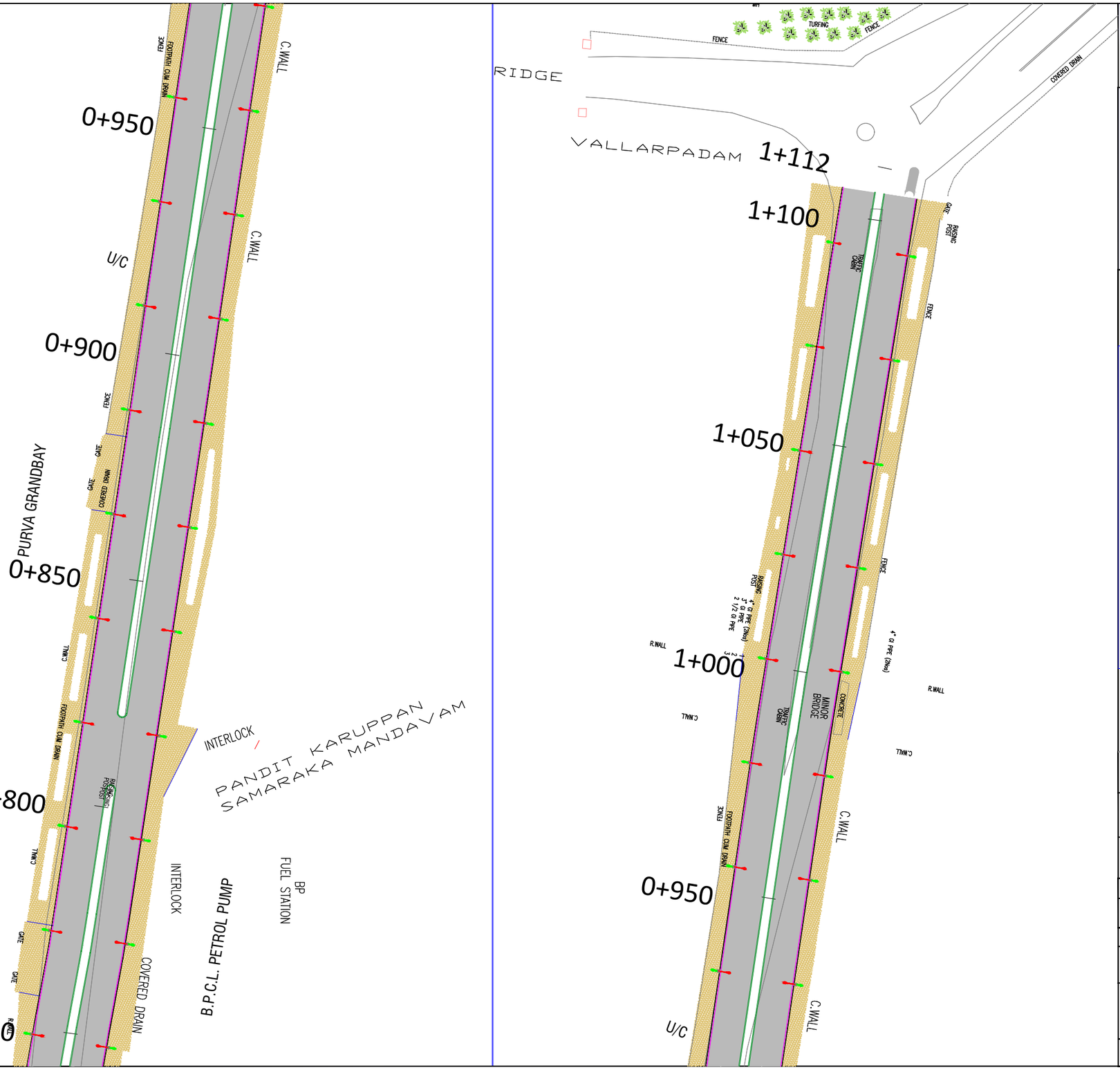
DRG NO.	SCALE : 1:400(A3)	N
CSML/M4/SMR/LED-008	DATE : 25-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R0

SIGNATORY
ARCHITECT:

SIGNATORY
CSML :

TENDER PURPOSE ONLY

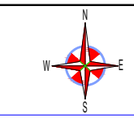


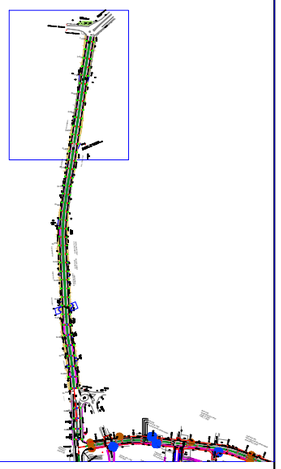
SMART ROADS STREET LIGHT

POSITION ABRAHAM MADAMAKKAL ROAD

NOTE:

1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.





CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

TITLE : STREET LIGHT POSITION ABRAHAM MADAMAKAL ROAD (3 of 3)

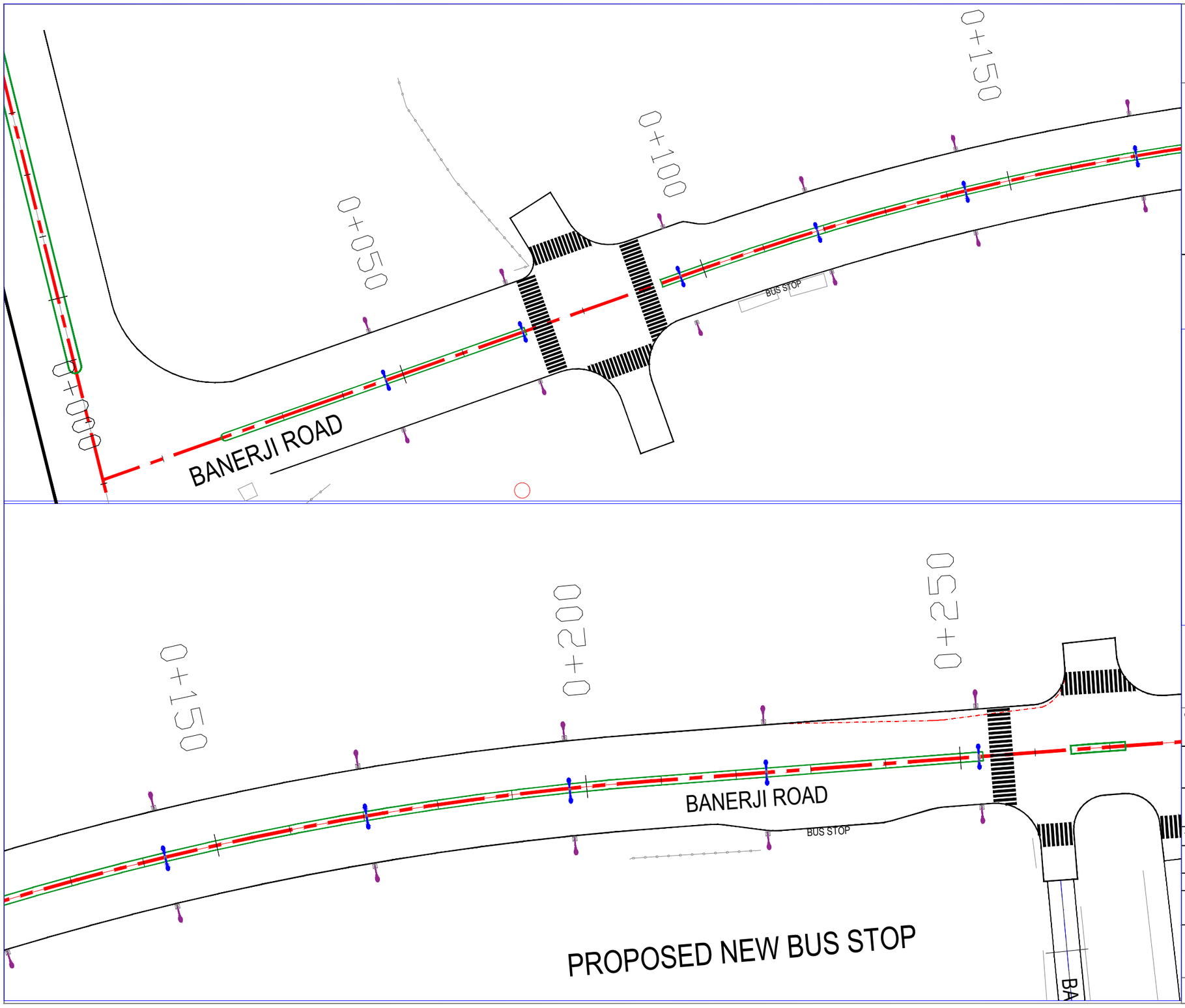
DRG NO.	SCALE :1:400(A3)	N
CSML/M4/SMR/LED-009	DATE : 25-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:

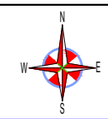
SIGNATORY CSML :

TENDER PURPOSE ONLY

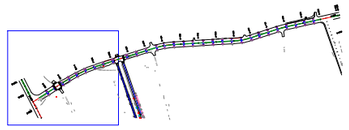


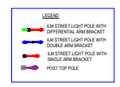
STREET LIGHT POSITION
BANERJI ROAD

NOTE:
1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.



BANNERJI ROAD





CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

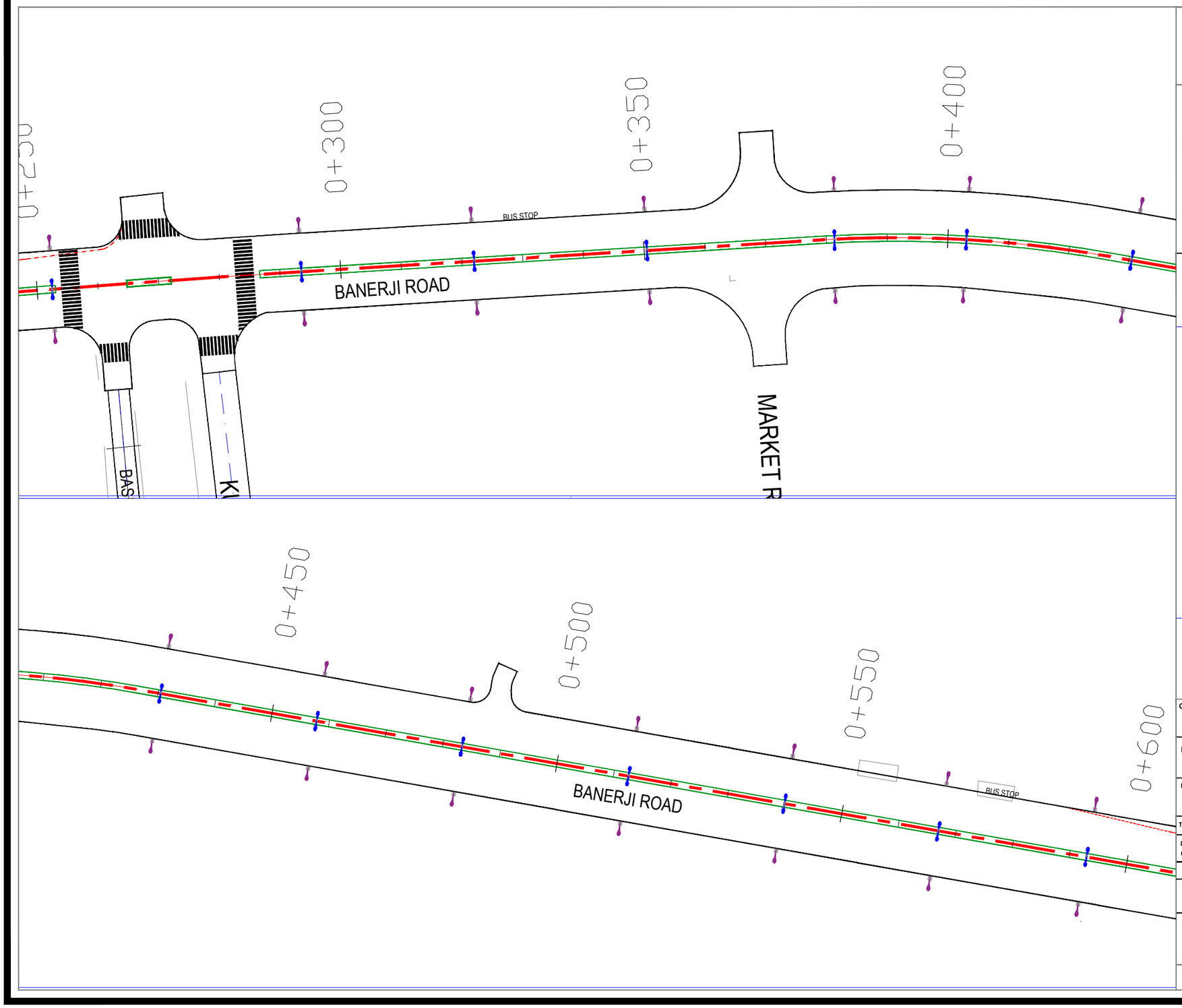
TITLE : STREET LIGHT POSITION BANERJI ROAD(1 OF 3)

DRG NO.	SCALE : NTS(A3)	N
CSML/M4/SMR/LED-010	DATE : 07-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
ANAND NAIR	KARUNAKARAN M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

TENDER PURPOSE ONLY

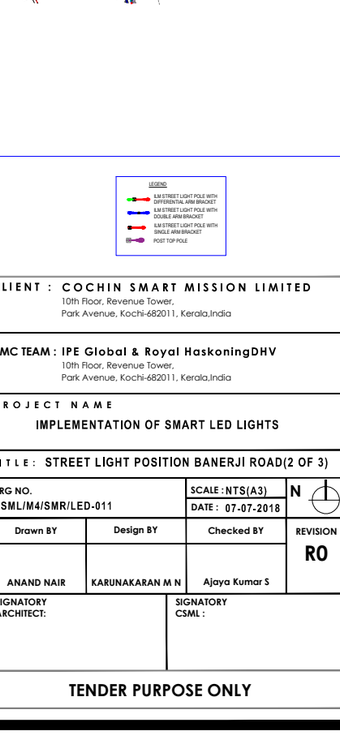


STREET LIGHT POSITION
BANERJI ROAD

NOTE:
1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE.
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.

N
W E
S

BANNERJI ROAD



LEGEND
- 9 M STREET LIGHT POLE WITH DIFFERENTIAL ARM BRACKET
- 9 M STREET LIGHT POLE WITH DOUBLE ARM BRACKET
- 9 M STREET LIGHT POLE WITH SINGLE ARM BRACKET
- POST TOP POLE

CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

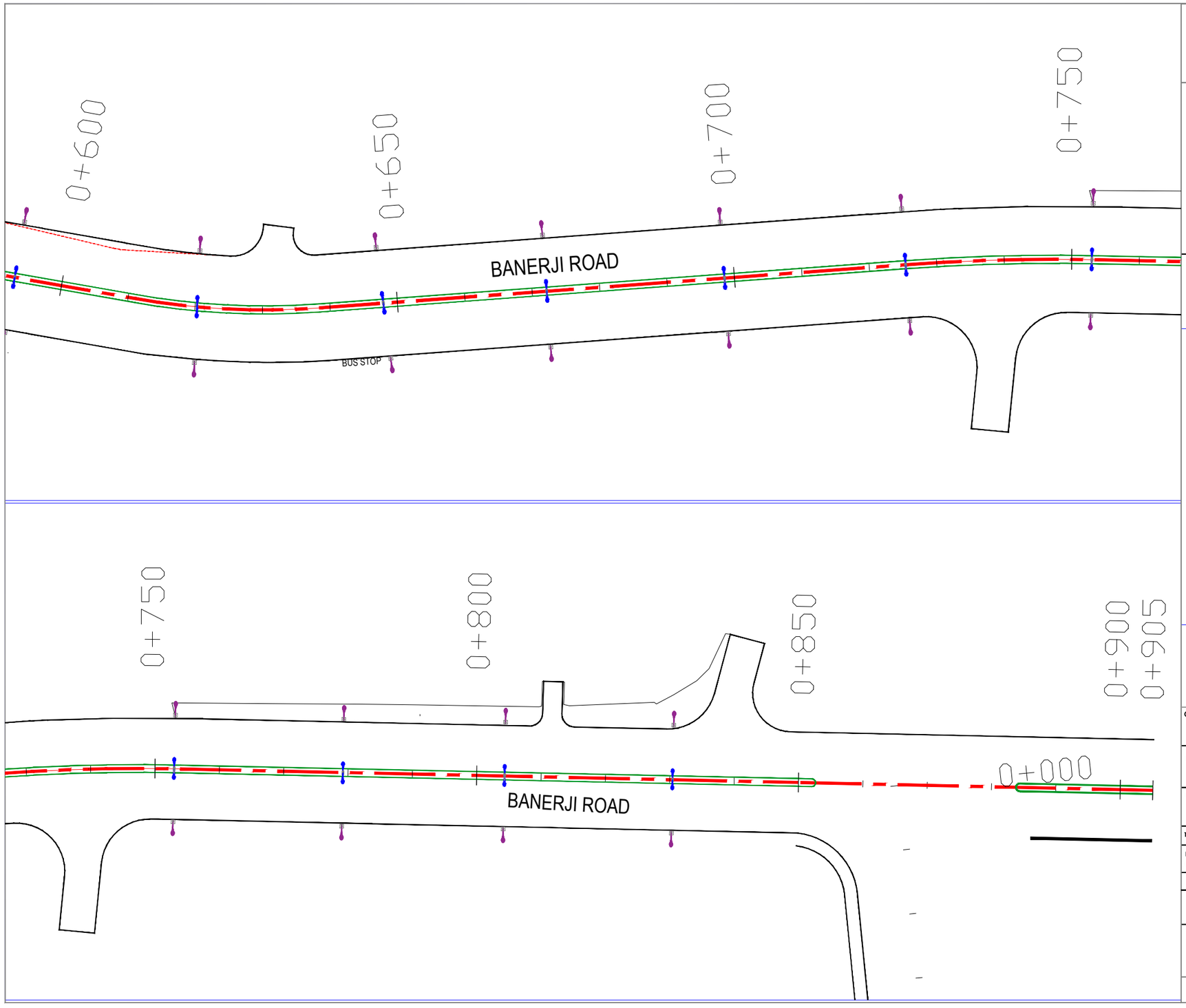
TITLE: STREET LIGHT POSITION BANERJI ROAD(2 OF 3)

DRG NO.	SCALE : NTS(A3)	N
CSML/M4/SMR/LED-011	DATE : 07-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
ANAND NAIR	KARUNAKARAN M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

TENDER PURPOSE ONLY



STREET LIGHT POSITION
BANERJI ROAD

NOTE:
1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.

N
W E
S

BANNERJI ROAD

LEGEND
- 9.M STREET LIGHT POLE WITH DIFFERENTIAL ARM BRACKET
- 9.M STREET LIGHT POLE WITH DOUBLE ARM BRACKET
- 9.M STREET LIGHT POLE WITH SINGLE ARM BRACKET
- POST TOP POLE

CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

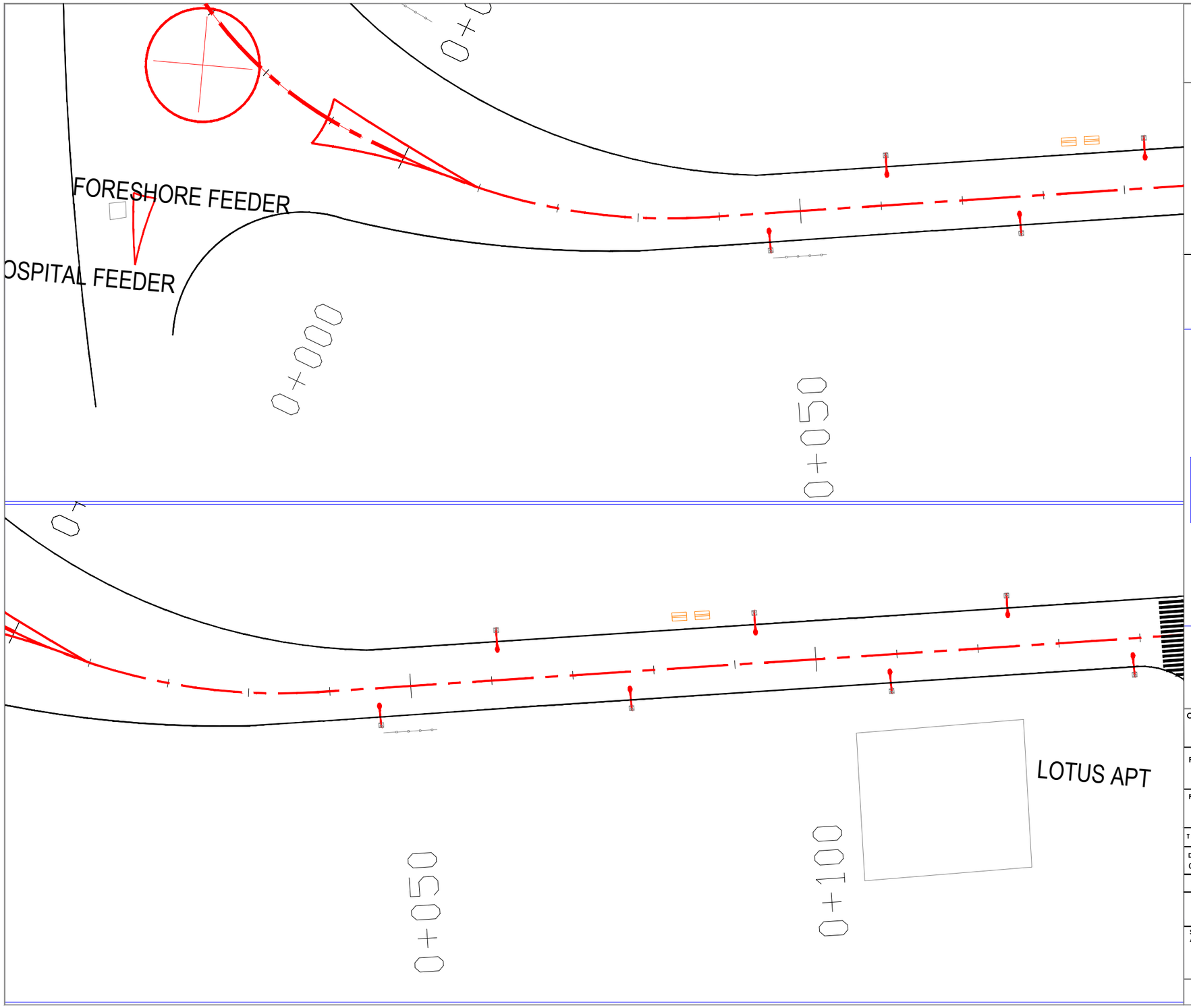
TITLE: STREET LIGHT POSITION BANERJI ROAD(3 OF 3)

DRG NO.	SCALE : NTS(A3)	N
CSML/M4/SMR/LED-012	DATE : 07-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
ANAND NAIR	KARUNAKARAN M N	Ajaya Kumar S	R0

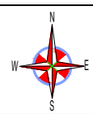
SIGNATORY ARCHITECT:	SIGNATORY CSML :

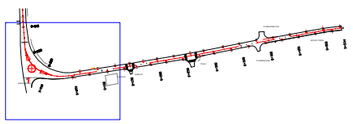
TENDER PURPOSE ONLY



STREET LIGHT POSITION
DURBAR HALL ROAD

NOTE:
1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE.
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.





CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

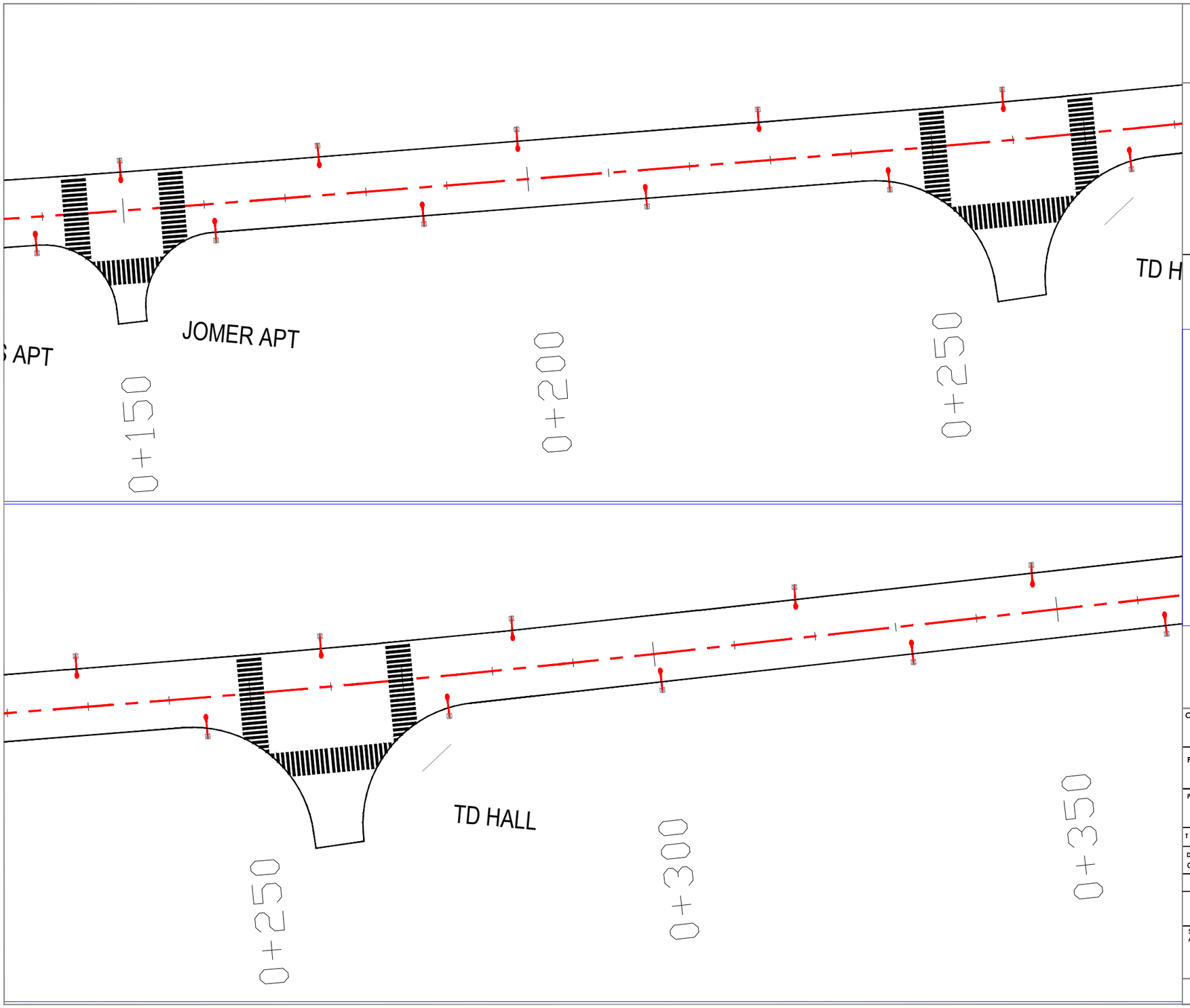
TITLE :STREET LIGHT POSITION DURBAR HALL ROAD(1OF 3)

DRG NO.	SCALE : NTS(A3)	N
CSML/M4/SMR/LED-013	DATE : 07-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
ANAND NAIR	KARUNAKARAN M N	Ajaya Kumar S	R0

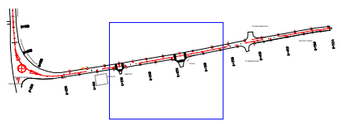
SIGNATORY ARCHITECT:	SIGNATORY CSML :

TENDER PURPOSE ONLY



STREET LIGHT POSITION
DURBAR HALL ROAD

NOTE:
1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.



LEGEND
- 9M STREET LIGHT POLE WITH DIFFERENTIAL ARM BRACKET
- 9M STREET LIGHT POLE WITH DOUBLE ARM BRACKET
- 9M STREET LIGHT POLE WITH SINGLE ARM BRACKET
- POST TOP POLE

CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

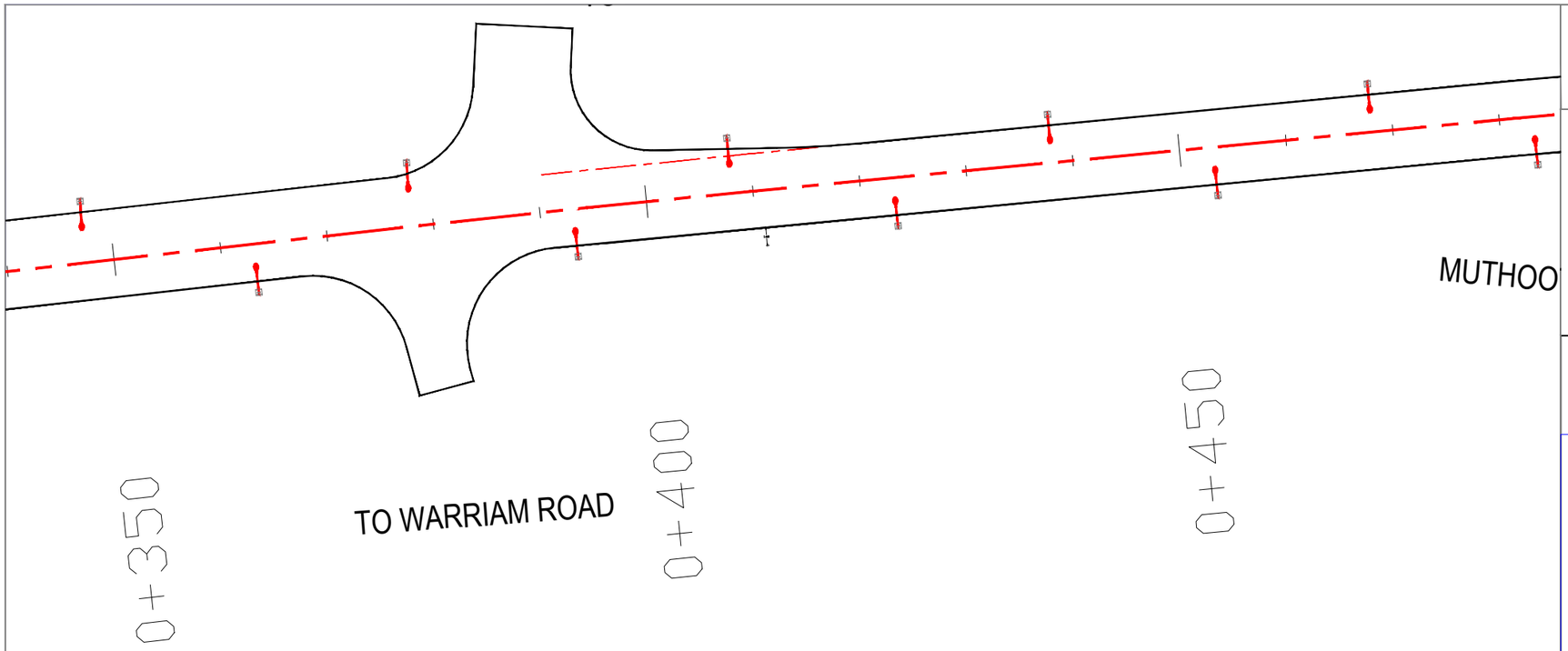
TITLE : STREET LIGHT POSITION DURBAR HALL ROAD(2 OF 3)

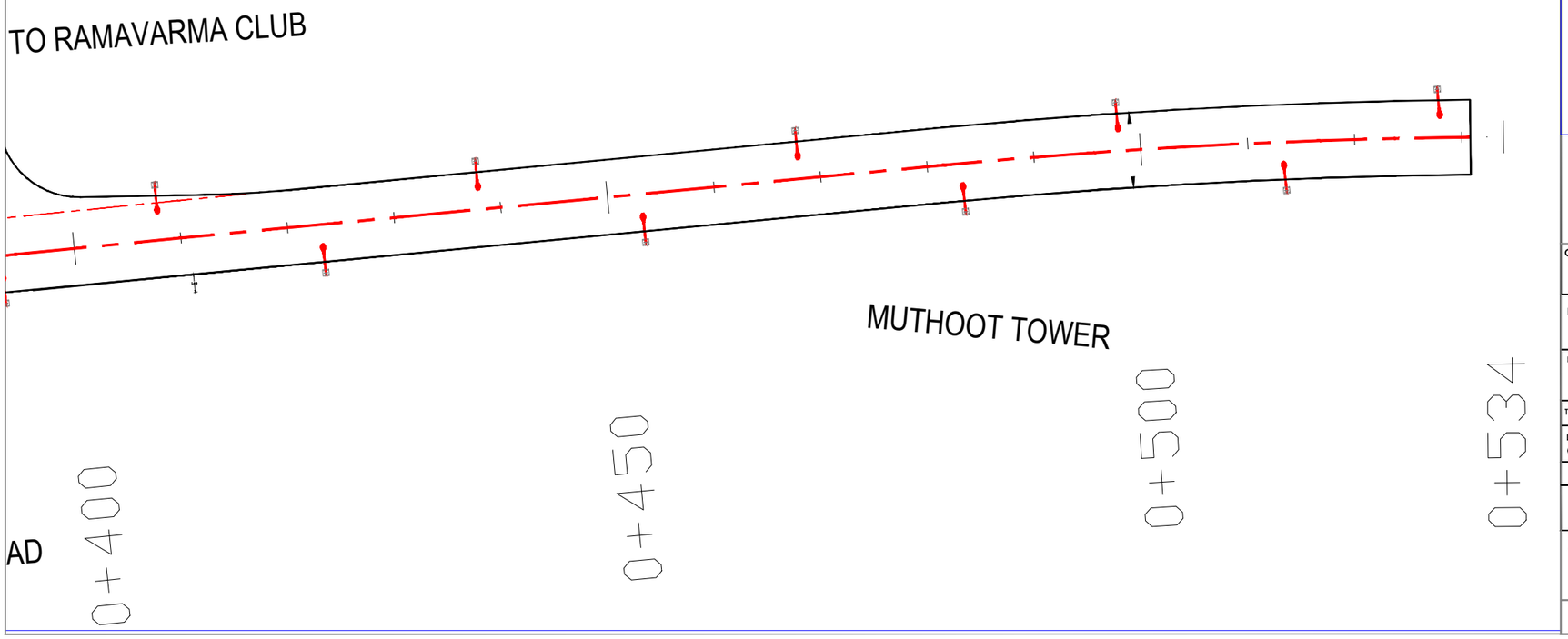
DRG NO.	SCALE : NTS(A3)	N
CSML/M4/SMR/LED-014	DATE : 07-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
ANAND NAIR	KARUNAKARAN M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

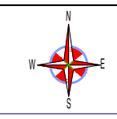
TENDER PURPOSE ONLY

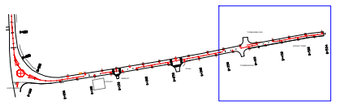




STREET LIGHT POSITION
DURBAR HALL ROAD

NOTE:
1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.





CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

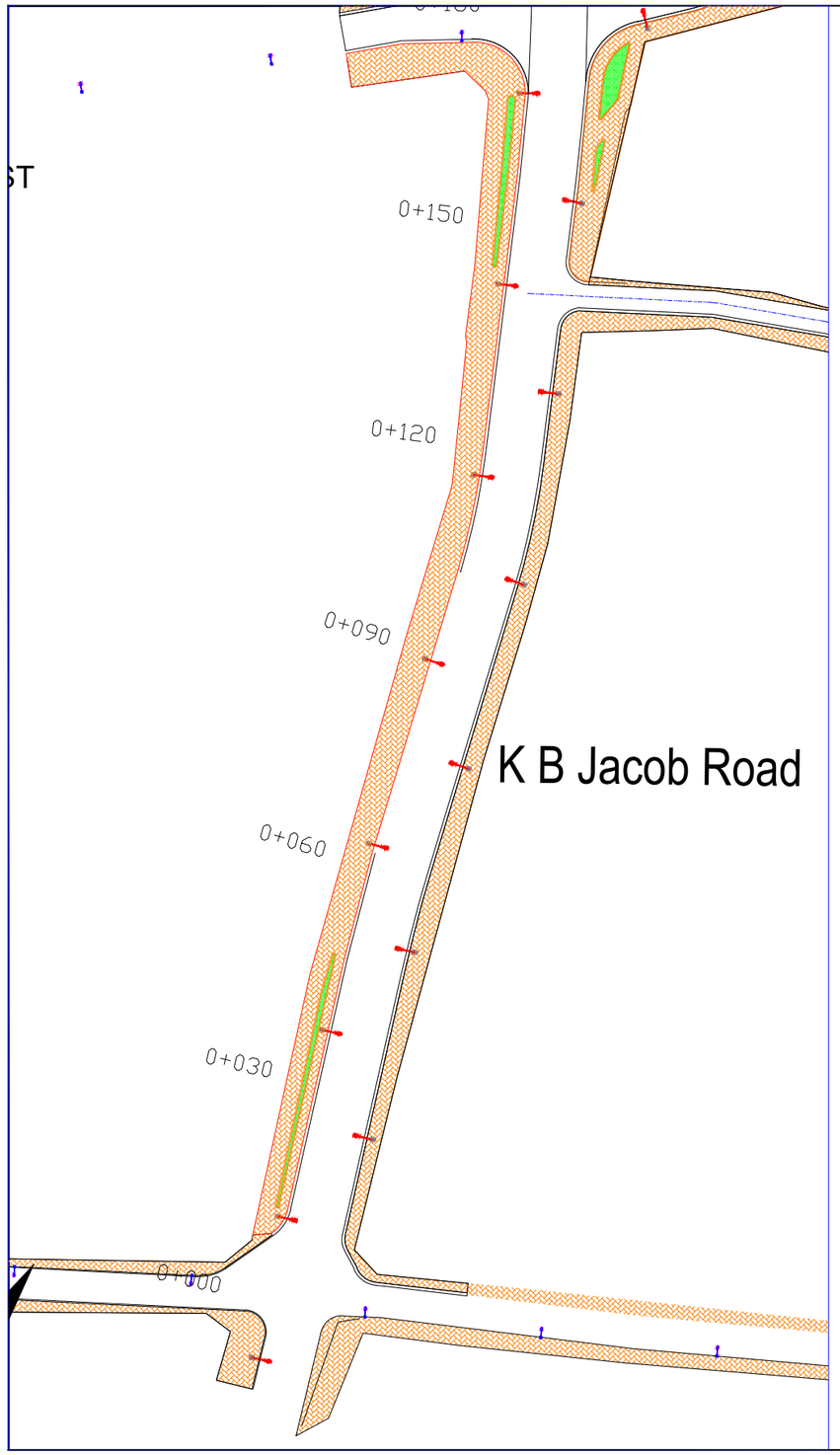
TITLE : STREET LIGHT POSITION DURBAR HALL ROAD(3 OF 3)

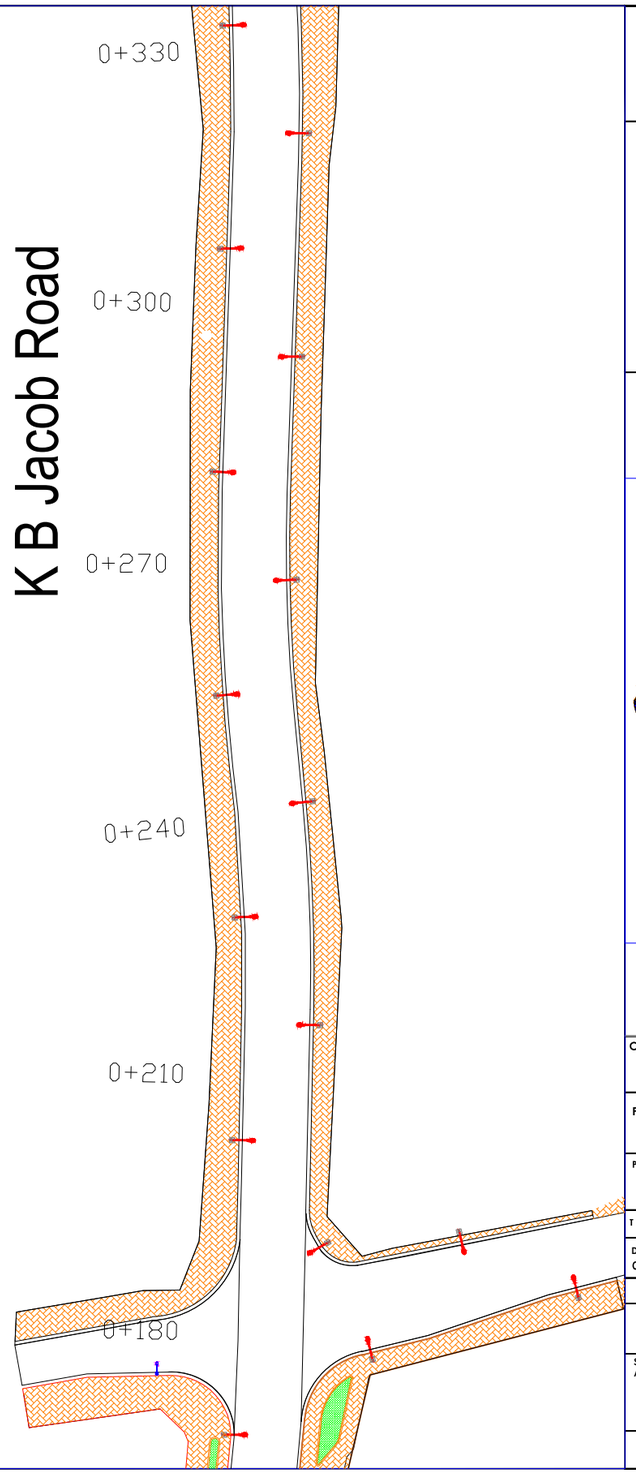
DRG NO.	SCALE : NTS(A3)	N
CSML/M4/SMR/LED-015	DATE : 07-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
ANAND NAIR	KARUNAKARAN M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

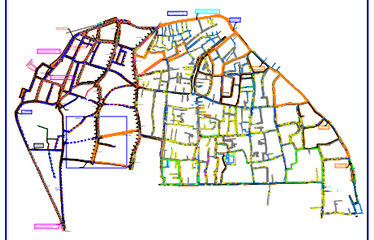
TENDER PURPOSE ONLY





SMART ROAD STREET LIGHT POSITION- K B JACOB ROAD

NOTE:
1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.



CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

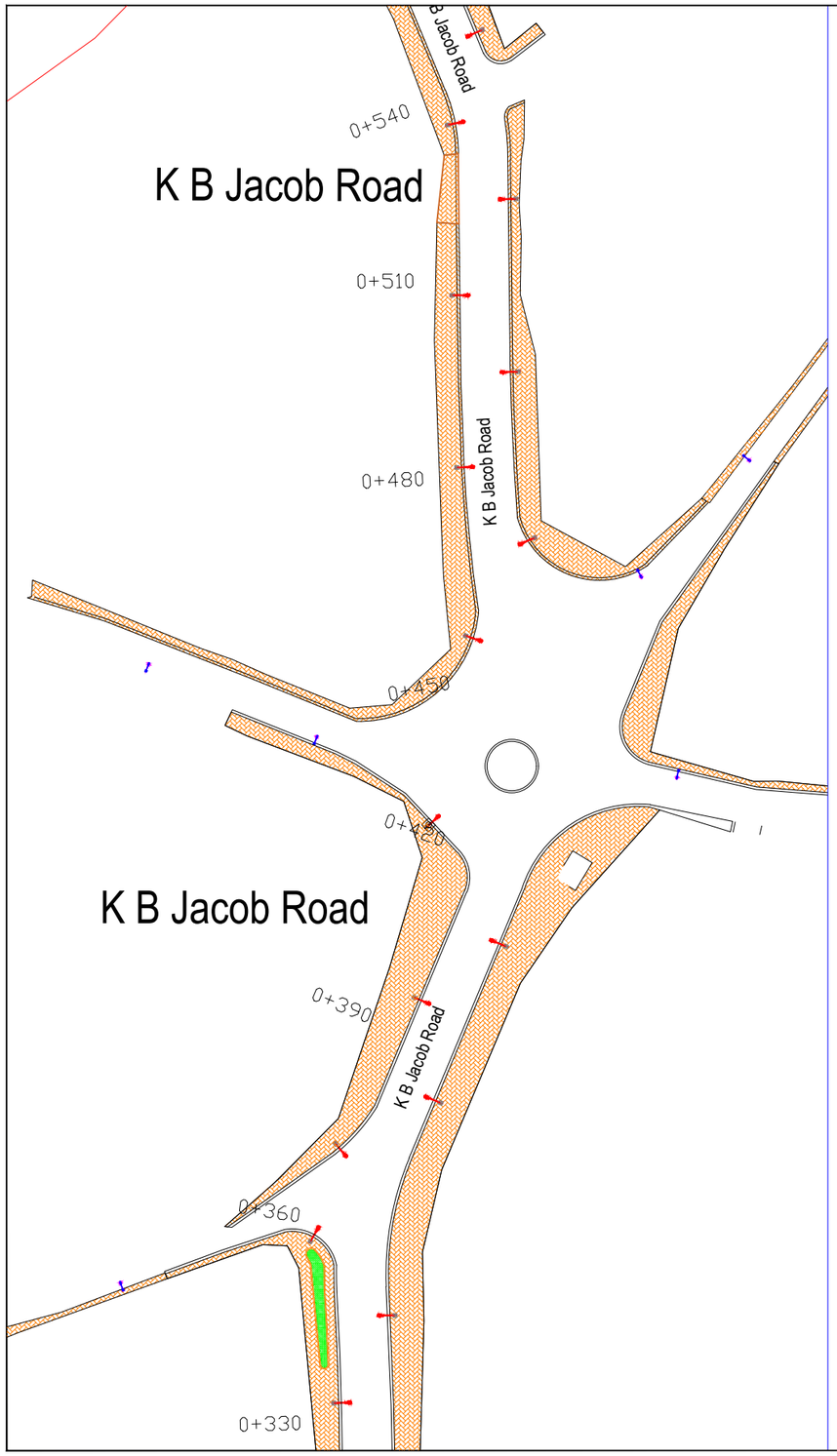
TITLE : **STREET LIGHT POSITION- K B JACOB ROAD**
(1 of 3)

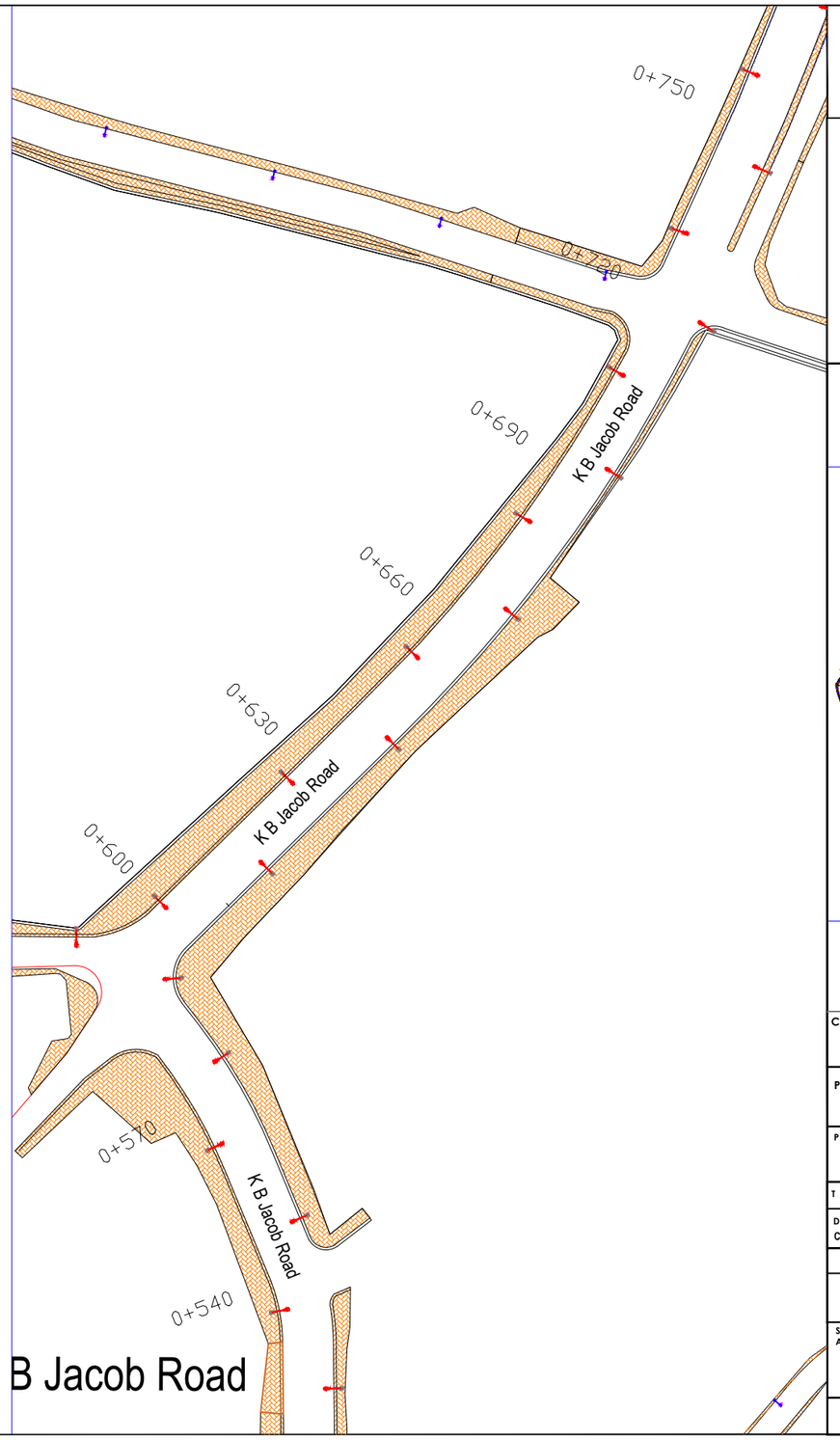
DRG NO.	SCALE :NTS(A3)	N
CSML/M4/SMR/LED-016	DATE : 25-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

TENDER PURPOSE ONLY

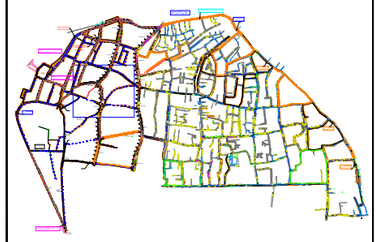




SMART ROAD STREET LIGHT POSITION- K B JACOB ROAD

NOTE:

1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.



CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

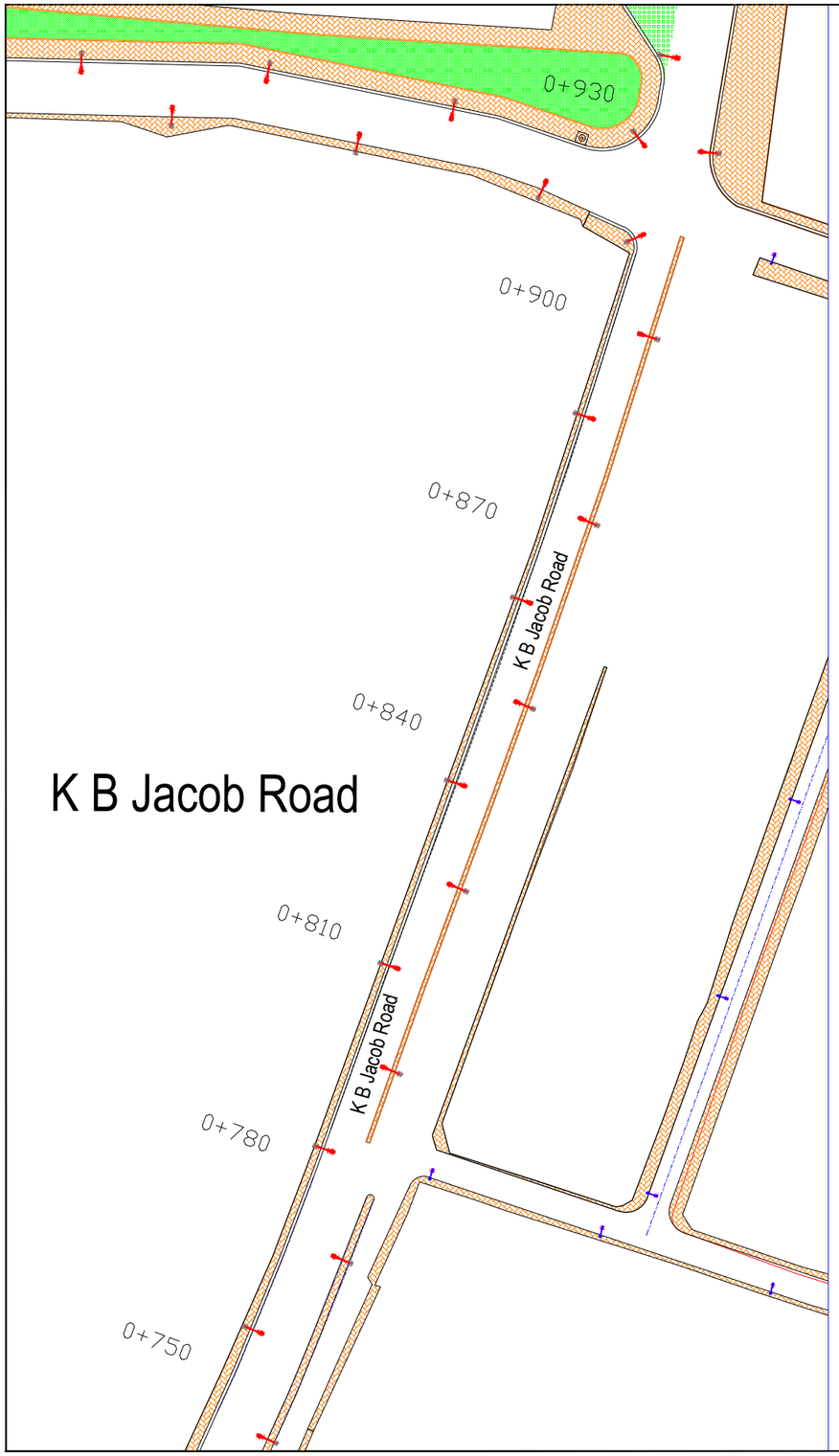
TITLE : STREET LIGHT POSITION- K B JACOB ROAD
(2 of 3)

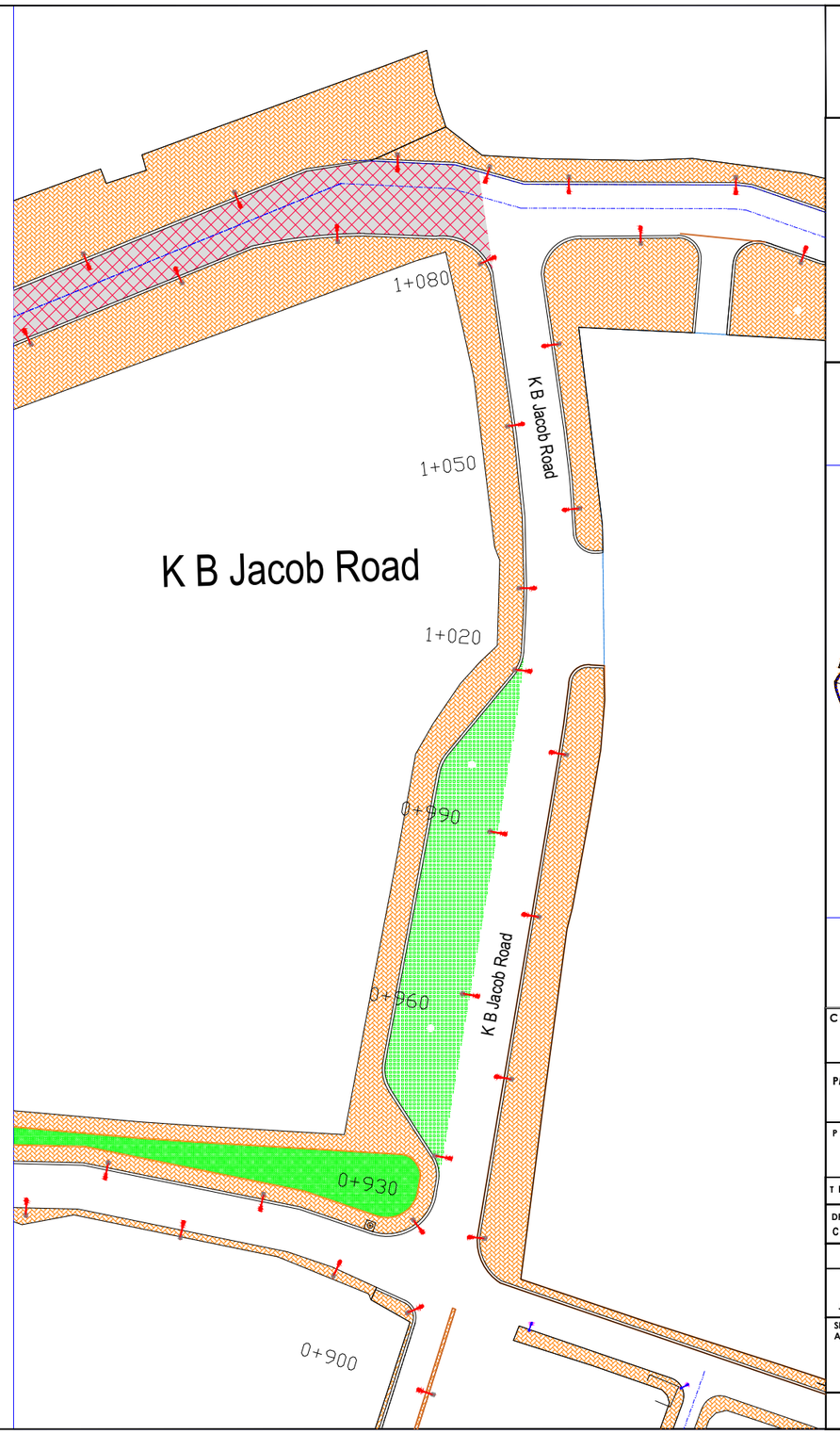
DRG NO.	SCALE : NTS(A3)	N
CSML/M4/SMR/LED-017	DATE : 25-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

TENDER PURPOSE ONLY

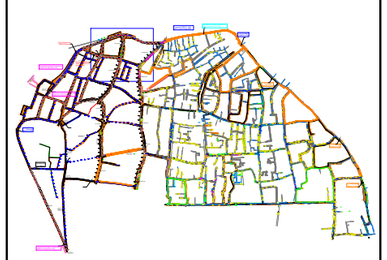




SMART ROAD STREET LIGHT POSITION- K B JACOB ROAD

NOTE:

1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.



CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

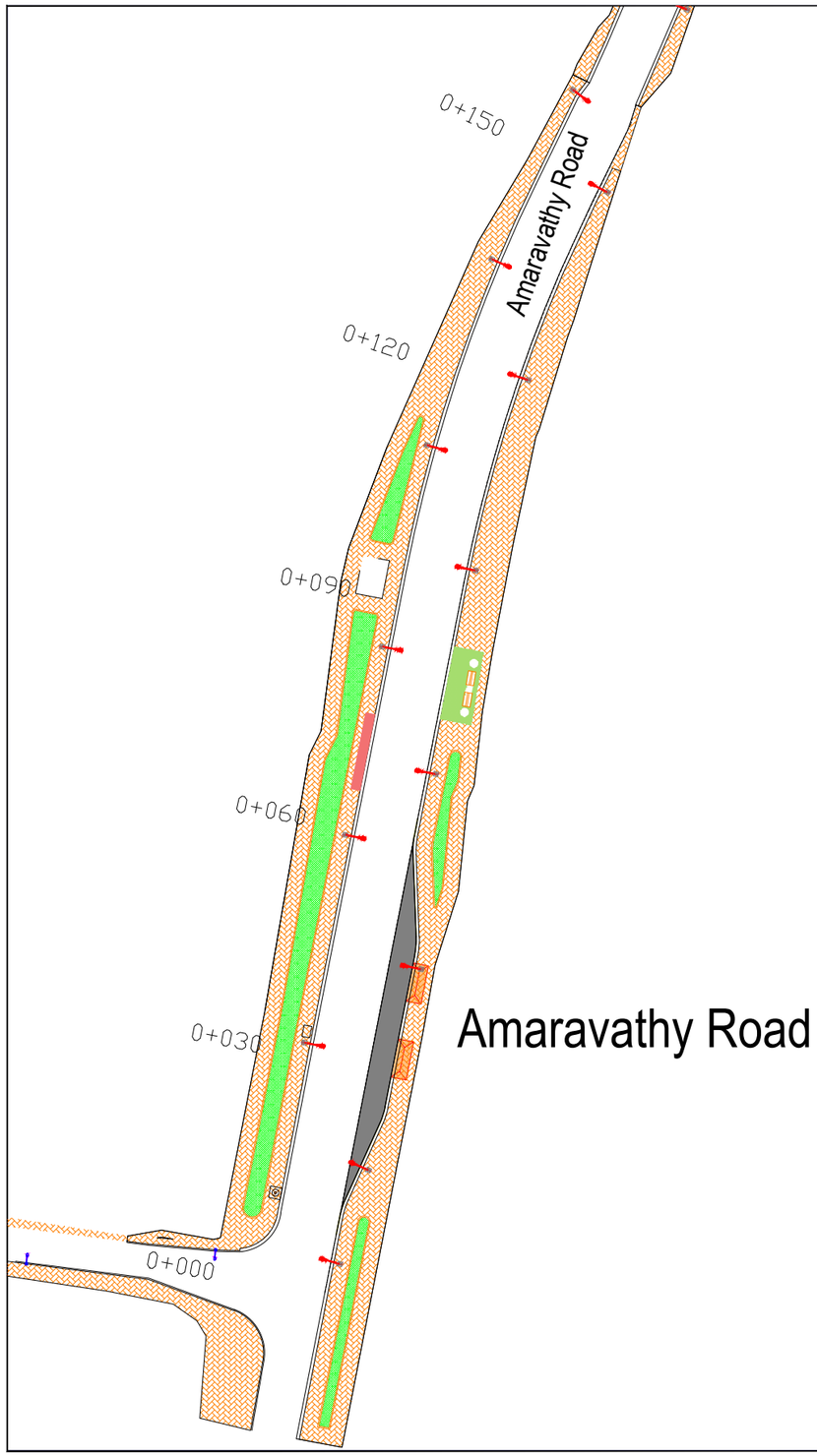
TITLE : STREET LIGHT POSITION- K B JACOB ROAD
(3 of 3)

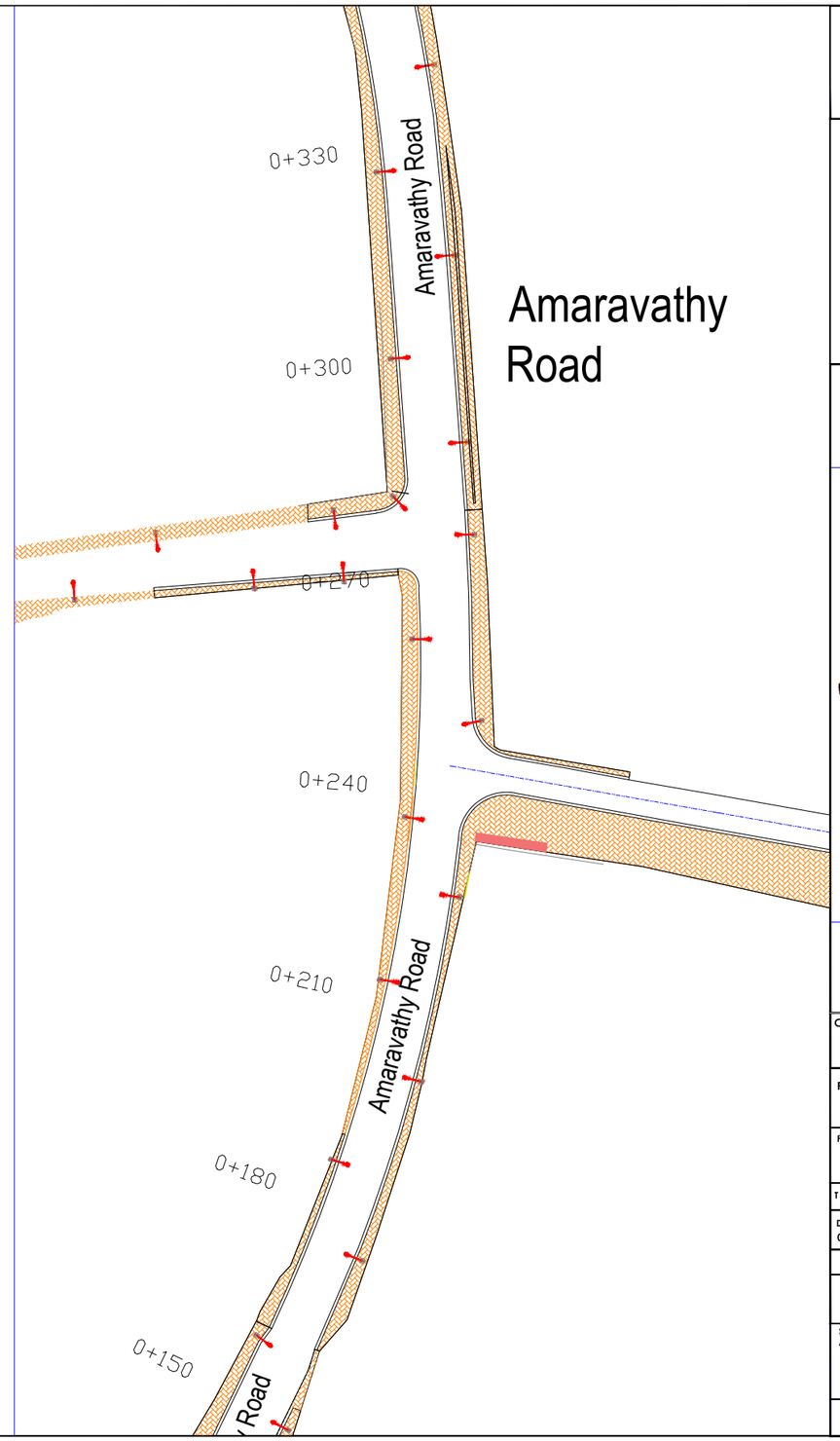
DRG NO.	SCALE : NTS(A3)	N
CSML/M4/SMR/LED-018	DATE : 25-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

TENDER PURPOSE ONLY

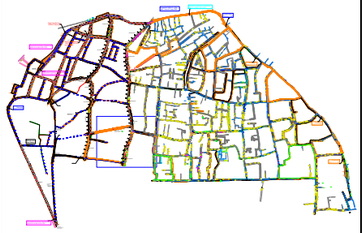




SMART ROAD STREET LIGHT POSITION- AMARAVATHY ROAD

NOTE:

1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.



CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

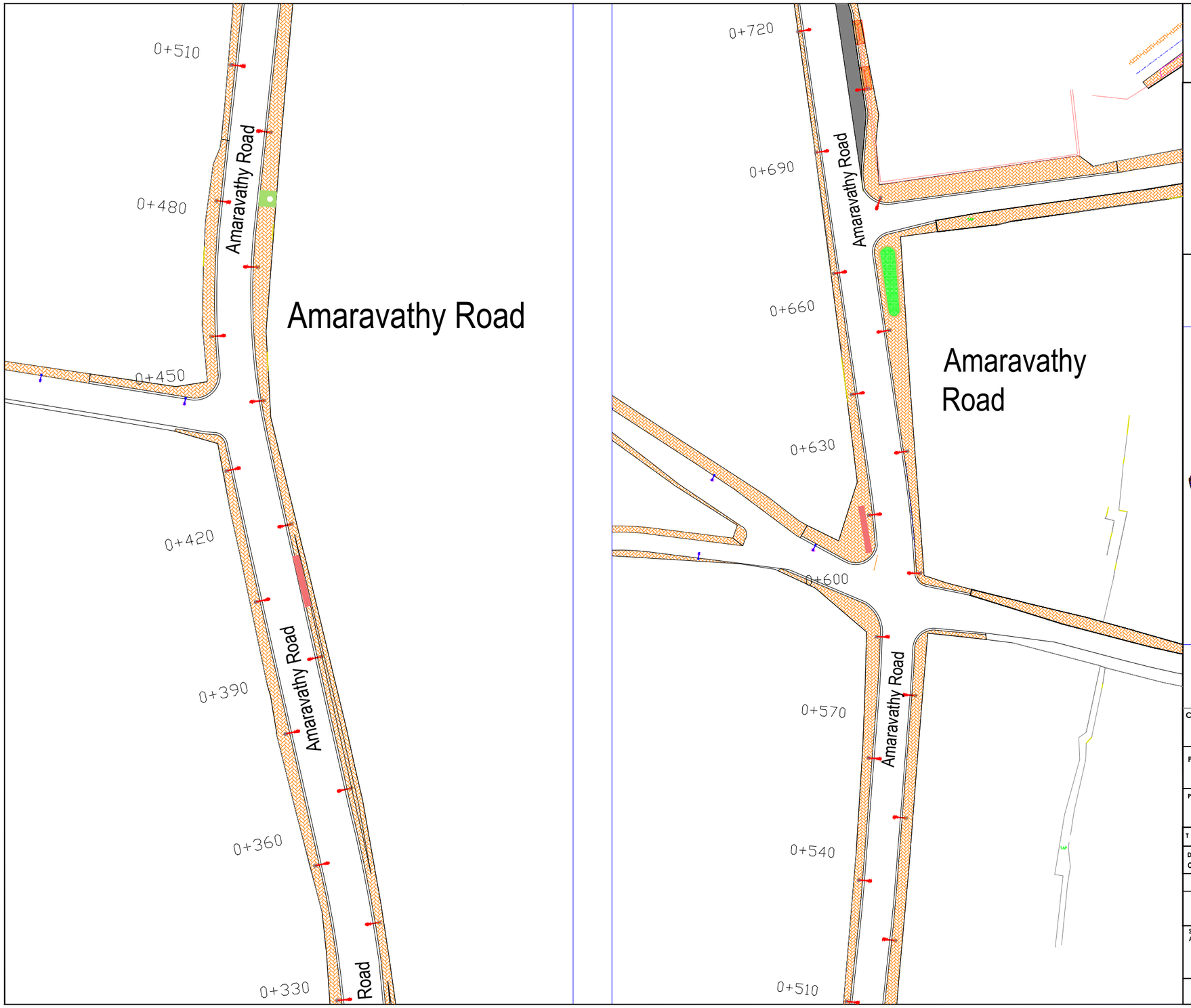
TITLE : STREET LIGHT POSITION- AMARAVATHY ROAD
(1 of 3)

DRG NO.	SCALE : NTS(A3)	N
CSML/M4/SMR/LED-019	DATE : 25-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

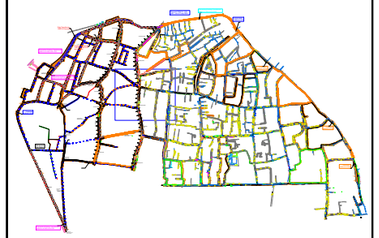
TENDER PURPOSE ONLY



SMART ROAD STREET LIGHT POSITION- AMARAVATHY ROAD

NOTE:

1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.



CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

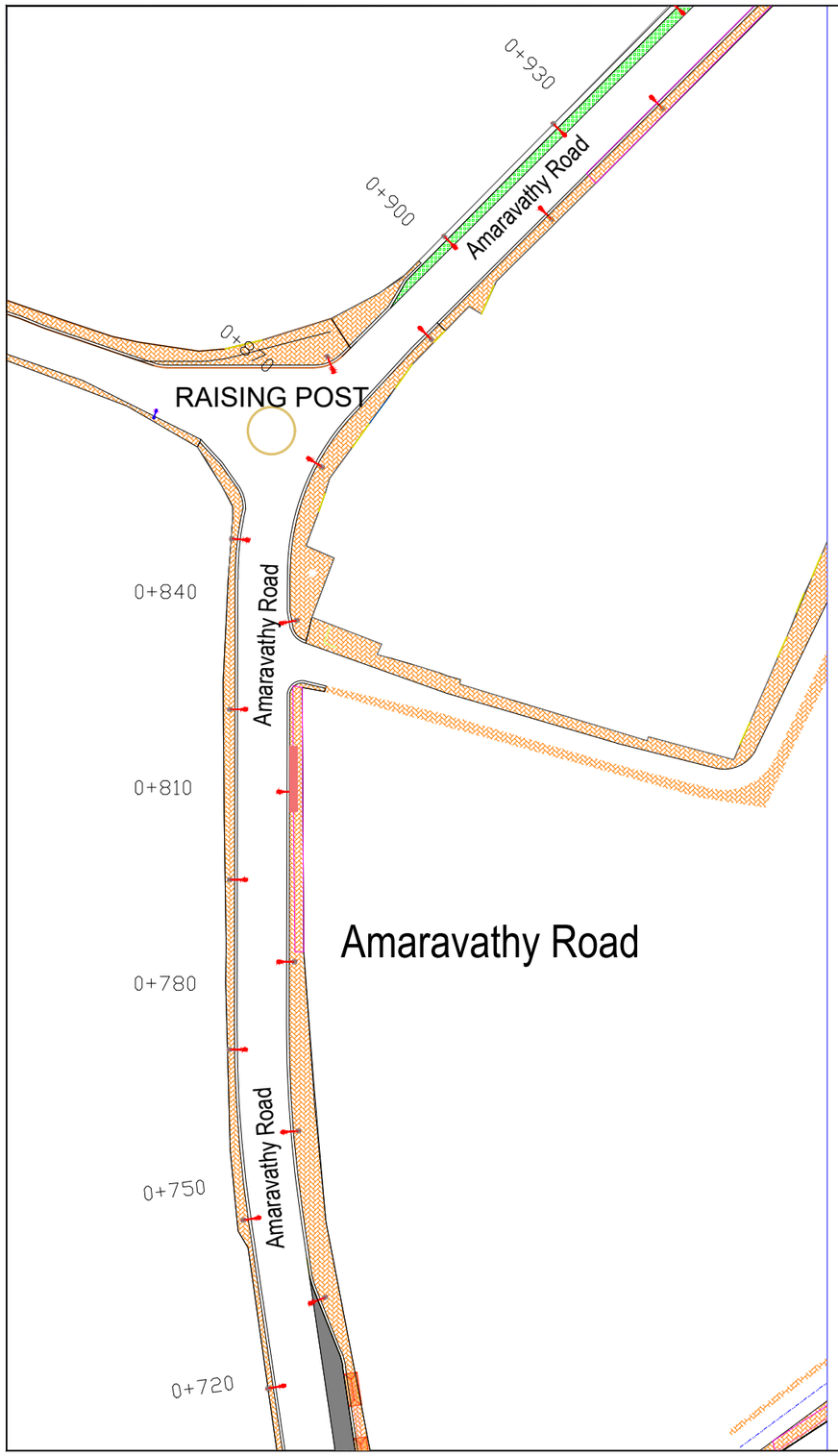
TITLE : STREET LIGHT POSITION- AMARAVATHY ROAD
(2 of 3)

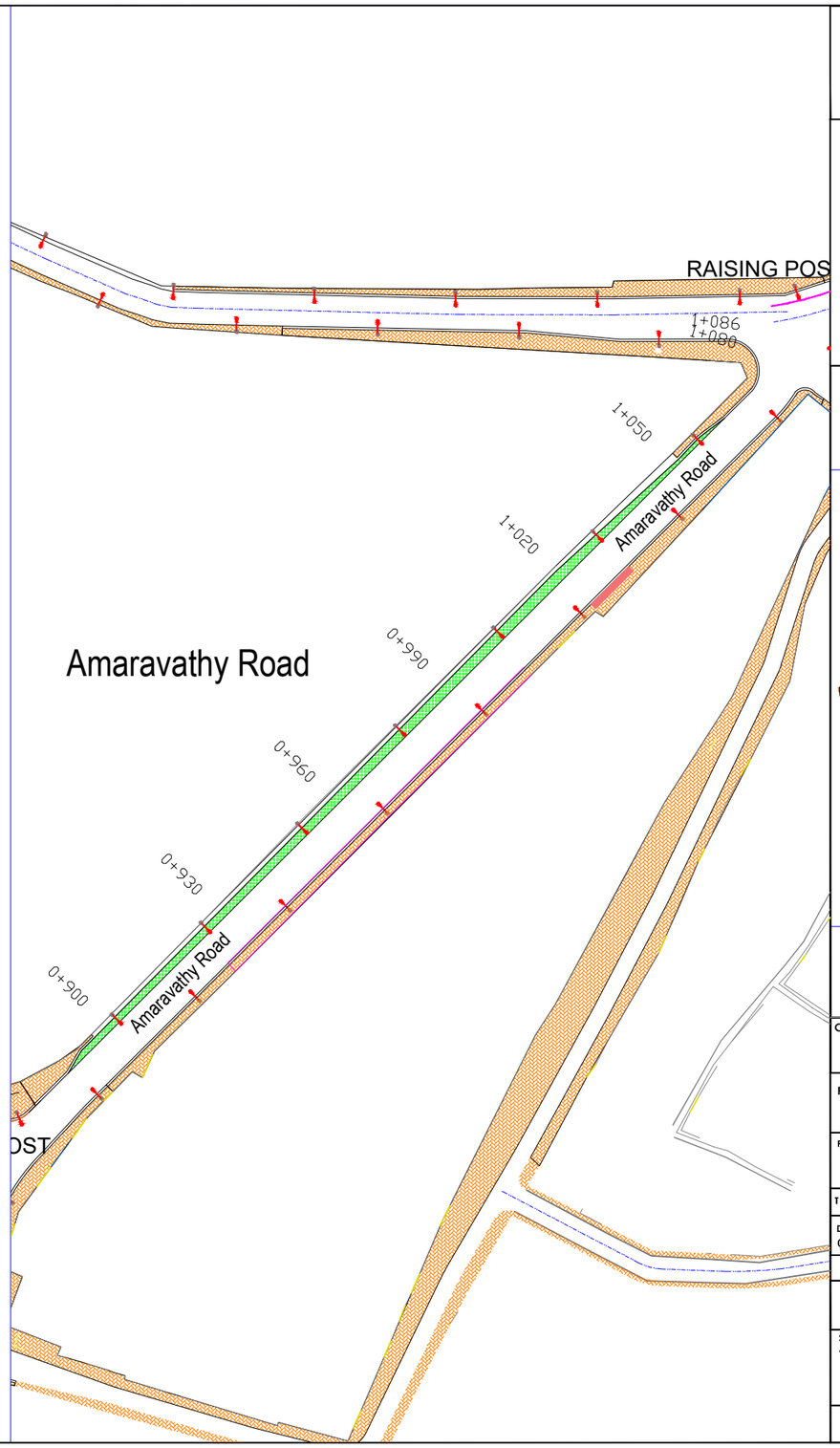
DRG NO.	SCALE : NTS(A3)	N
CSML/M4/SMR/LED-020	DATE : 25-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

TENDER PURPOSE ONLY

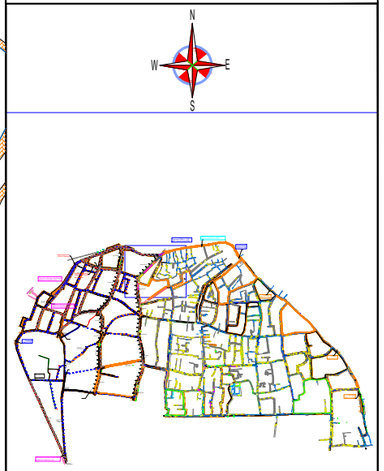


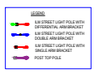


SMART ROAD STREET LIGHT POSITION- AMARAVATHY ROAD

NOTE:

1. ALL DIMENSIONS ARE IN M UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.





CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

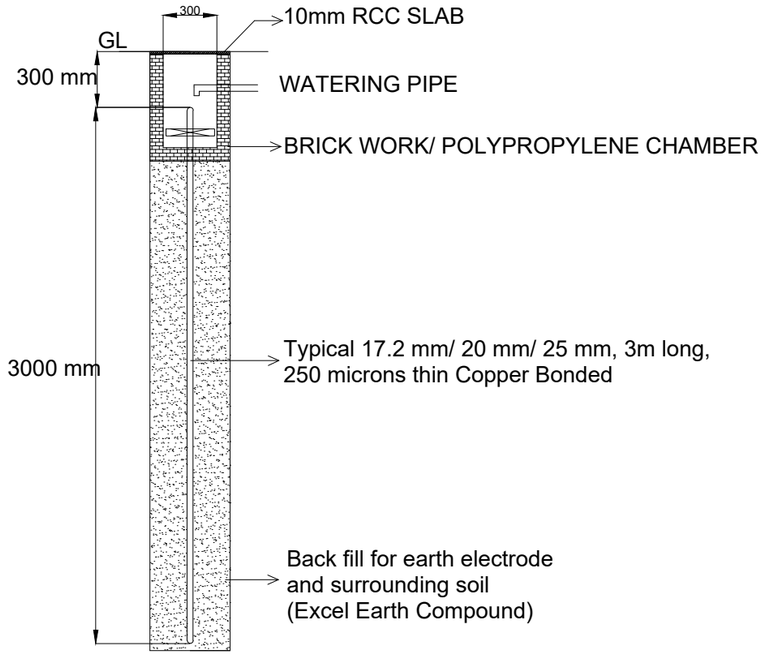
TITLE : STREET LIGHT POSITION- AMARAVATHY ROAD (3 of 3)

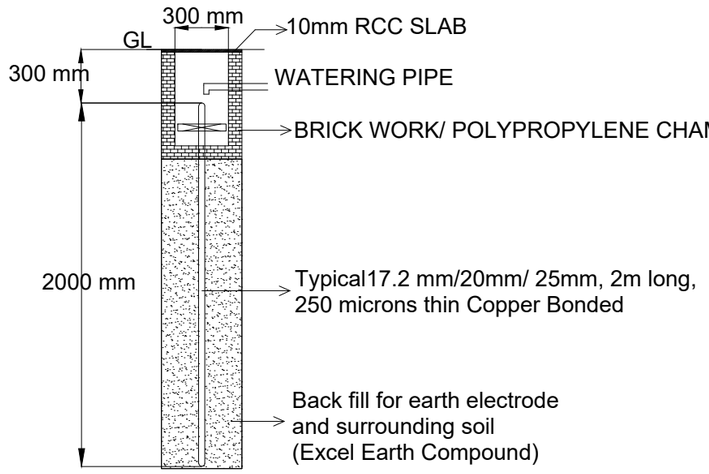
DRG NO.	SCALE : NTS(A3)	N
CSML/M4/SMR/LED-021	DATE : 25-07-2018	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

TENDER PURPOSE ONLY





TYPICAL ROD EARTH DETAILS

TYPICAL ROD EARTHING

NOTE:
1. ALL DIMENSIONS ARE IN MM UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.

CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

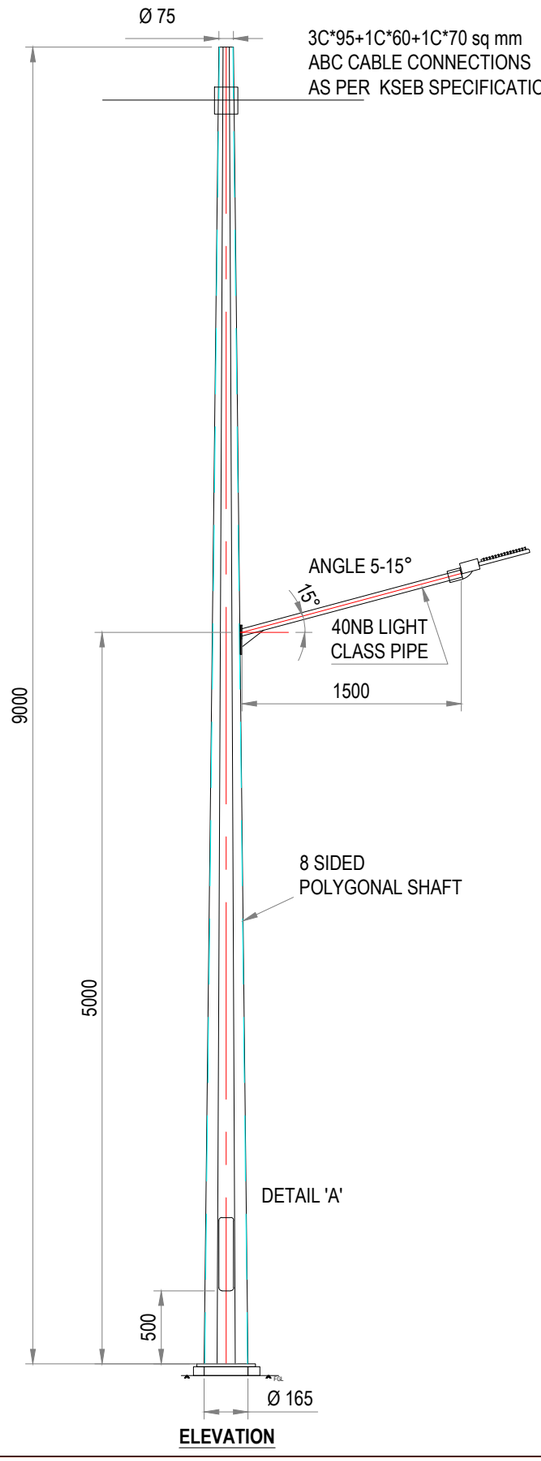
TITLE : TYPICAL ROD EARTHING DETAILS

DRG NO.	SCALE : 1:1000(A3)	N
CSML/M4/SMR/LED-022	DATE : 03-07-2018	

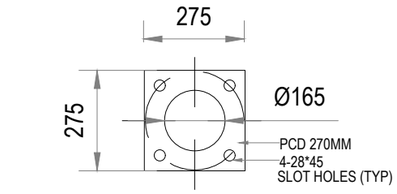
Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

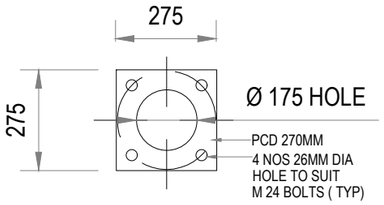
TENDER PURPOSE ONLY



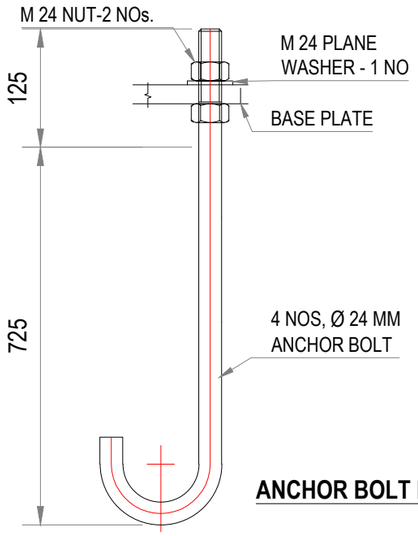
ELEVATION



SECTION A-A BASEPLATE DETAIL

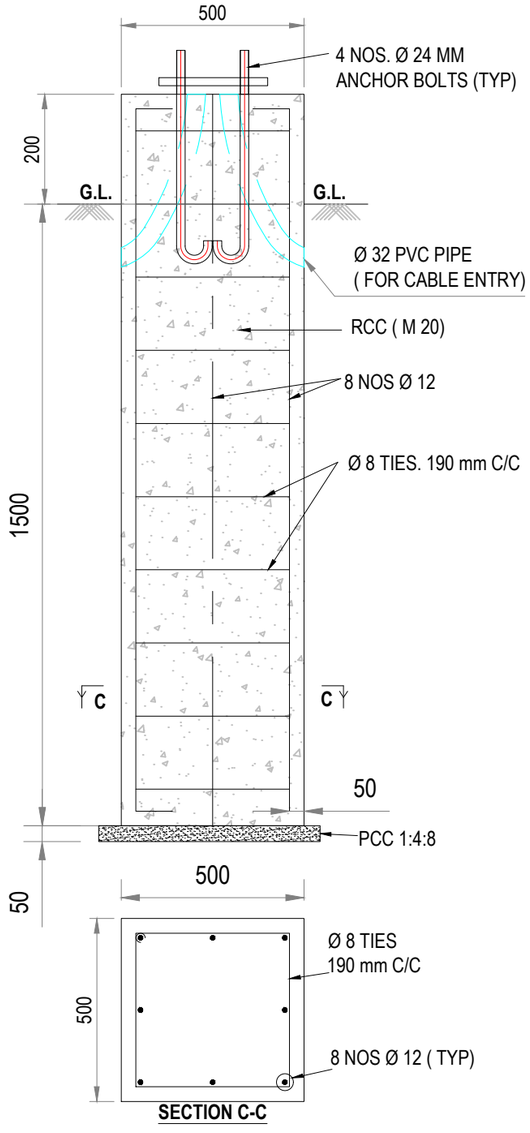


CAGE TEMPLATE DETAIL



ANCHOR BOLT DETAIL

DETAIL OF CIVIL FOUNDATION



SECTION C-C

CONICAL POLE DETAILS

Height of Pole (H) in MTR	Top Dia (D) in MM	Bottom Dia (D) in MM	Wall Thickness (t) in MM	Base Plate (b) in MM	PCD (p) in MM	Foundation Bolts (J)
7	75	145	3	240X240X12	235	M20X700
9	75	165	3	275X275X16	270	M24X850

TYPICAL FOUNDATION OF STREET LIGHT POLE

NOTE:

1. ALL DIMENSIONS ARE IN MM UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.

N W E S

NOTES :-

1. ALL DIMENSIONS ARE IN M.M.
2. DESIGN STANDARD BS EN 40-3-1&3
3. DESIGN CRITERIA :
   - 3.1.BASIC WIND SPEED- IS : 875 PART III : 1987
   - 3.2.DESIGN LIFE - 25 YEARS.
   - 3.3.TERRAIN CATEGORY - 2
   - 3.4.TOPOGRAPHY - FLAT
4. MATERIALS :
   - 4.1.SHAFT: S355 AS PER BS EN 10025.
   - 4.2.FLANGE: AS PER IS-2062.
   - 4.3.FOUNDATION BOLTS : EN-8 GRADE
5. FINISHING : HOT DIP GALVANIZED TO BS EN ISO 1461.

FOUNDATION NOTES :-

1. ASSUMED S.B.C. - 10 T/M² (MINIMUM)
2. GRADE OF R.C.C - M20
3. GRADE OF STEEL REINFORCEMENT Fe - 415
4. CLEAR COVER TO REINFORCEMENT - 50 MM
5. CONCRETE VIBRATED
6. USE SHUTTERING

TOLERANCES :-	
DIAMETERS A/F	± 2.5 %
POLE TOTAL LENGTH	± 1.2 %
POLE STRAIGHTNESS	± 0.3 %

CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

TITLE : 9 M STREETLIGHT POLE

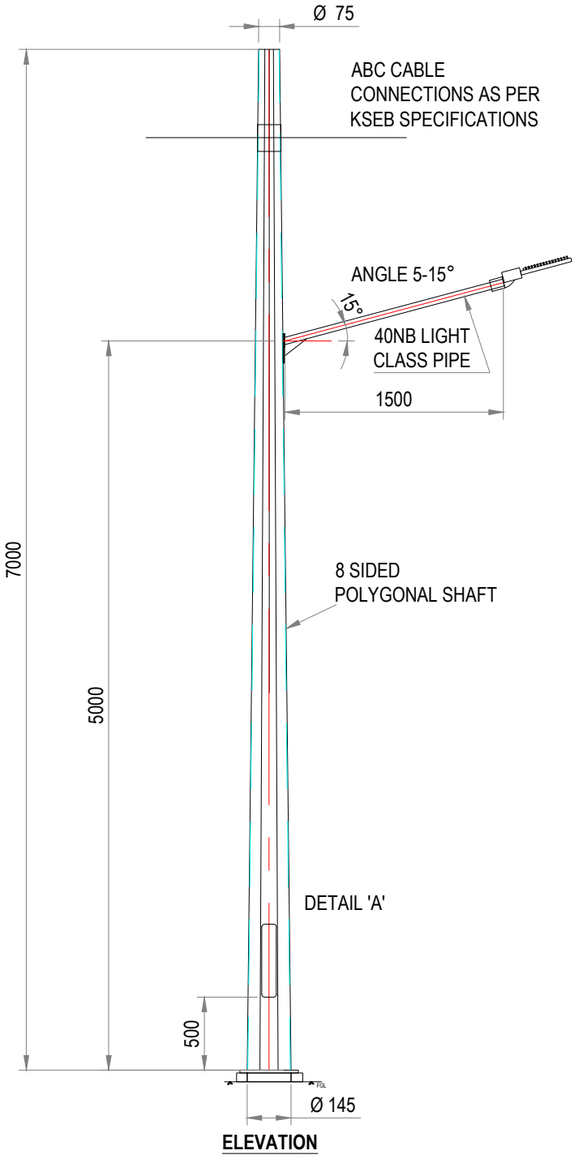
DRG NO.	SCALE : 1:1000(A3)	N
CSML/M4/SMR/LED-023	DATE : 08-01-2019	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R1

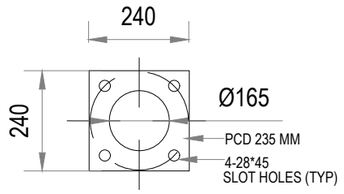
SIGNATORY ARCHITECT:

SIGNATORY CSML :

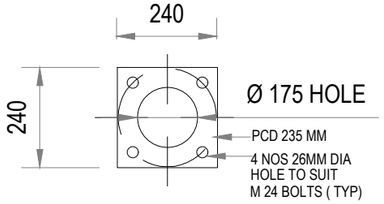
TENDER PURPOSE ONLY



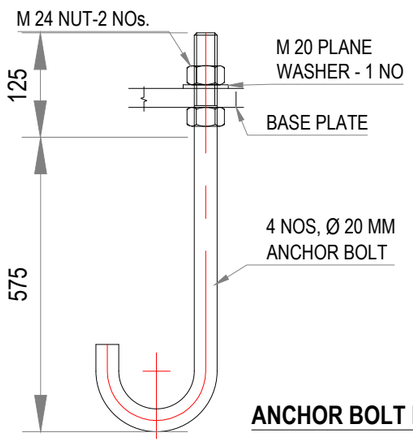
ELEVATION



SECTION A-A BASEPLATE DETAIL

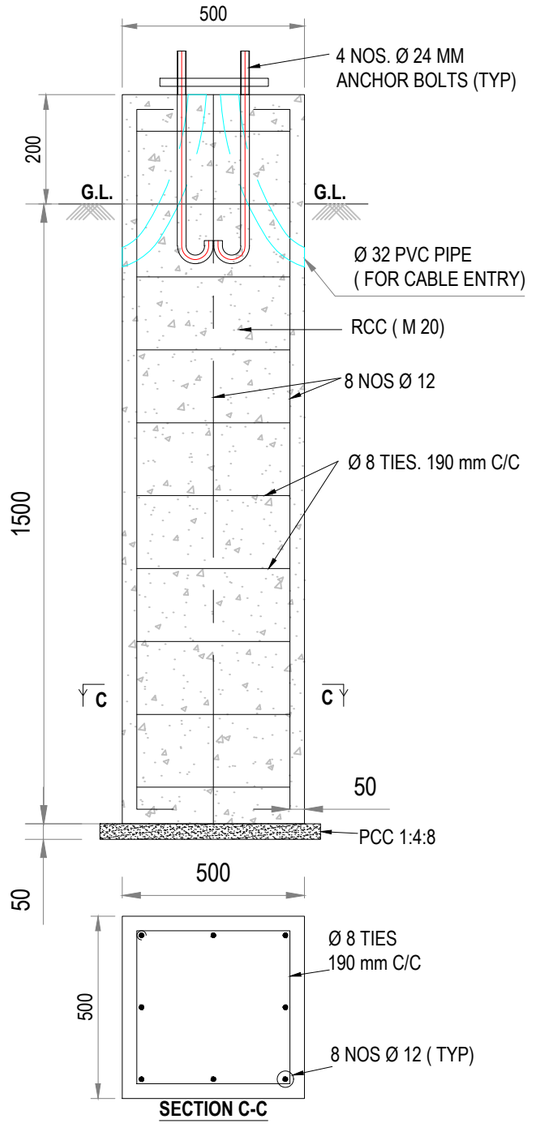


CAGE TEMPLATE DETAIL



ANCHOR BOLT DETAIL

DETAIL OF CIVIL FOUNDATION



SECTION C-C

CONICAL POLE DETAILS						
Height of Pole (H) in MTR	Top Dia (D) in MM	Bottom Dia (D) in MM	Wall Thickness (t) in MM	Base Plate (b) in MM	PCD (p) in MM	Foundation Bolts (J)
7	75	145	3	240X240X12	235	M20X700
9	75	165	3	275X275X16	270	M24X850

TYPICAL FOUNDATION OF STREET LIGHT POLE

NOTE:
1. ALL DIMENSIONS ARE IN MM UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.

NOTES :-
1. ALL DIMENSIONS ARE IN M.M.
2. DESIGN STANDARD BS EN 40-3-1&3
3. DESIGN CRITERIA :
   3.1.BASIC WIND SPEED- IS : 875 PART III : 1987
   3.2.DESIGN LIFE - 25 YEARS.
   3.3.TERRAIN CATEGORY - 2
   3.4.TOPOGRAPHY - FLAT
4. MATERIALS :
   4.1.SHAFT: S355 AS PER BS EN 10025.
   4.2.FLANGE: AS PER IS-2062.
   4.3.FOUNDATION BOLTS : EN-8 GRADE
5. FINISHING : HOT DIP GALVANIZED TO BS EN ISO 1461.

FOUNDATION NOTES :-
1. ASSUMED S.B.C. - 10 T/M² (MINIMUM)
2. GRADE OF R.C.C - M20
3. GRADE OF STEEL REINFORCEMENT Fe - 415
4. CLEAR COVER TO REINFORCEMENT - 50 MM
5. CONCRETE VIBRATED
6. USE SHUTTERING

TOLERANCES :-	
DIAMETERS A/F	± 2.5 %
POLE TOTAL LENGTH	± 1.2 %
POLE STRAIGHTNESS	± 0.3 %

CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

TITLE : 7 M STREETLIGHT POLE

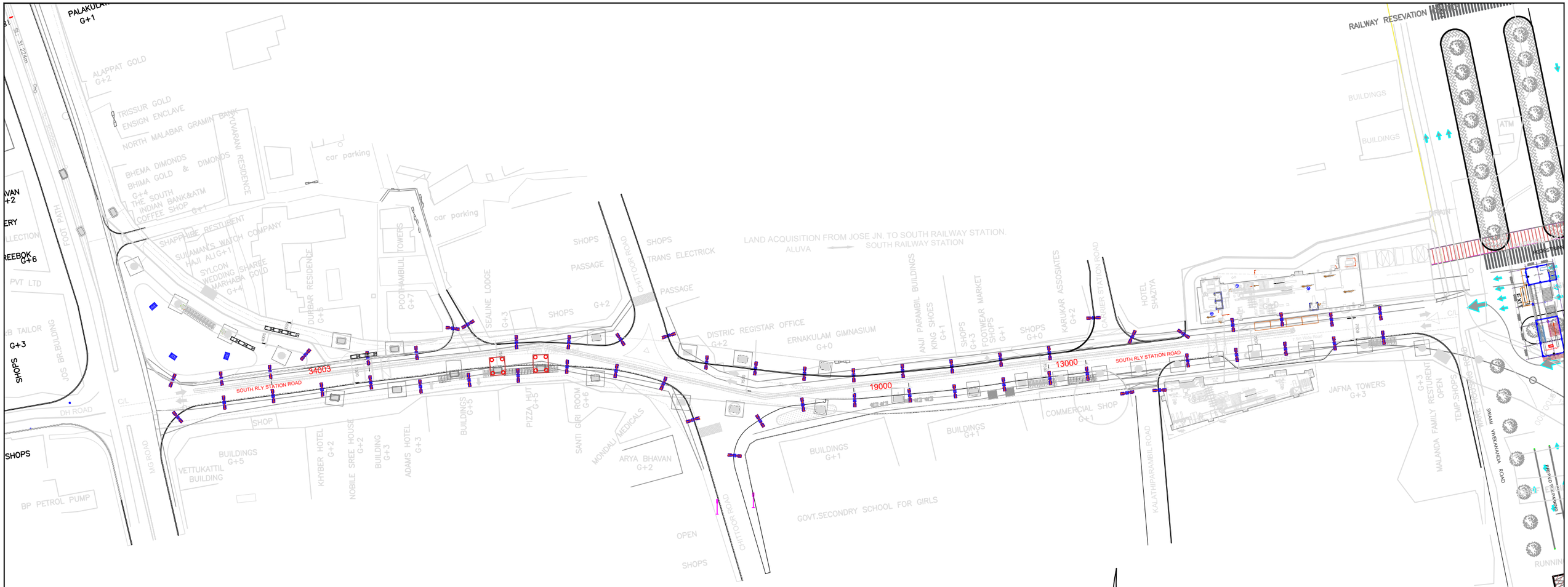
DRG NO.	SCALE :1:1000(A3)	N
CSML/M4/SMR/LED-024	DATE : 08-01-2019	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakaran M N	Ajaya Kumar S	R 1

SIGNATORY ARCHITECT:

SIGNATORY CSML :

TENDER PURPOSE ONLY



LAYOUT OF SMART ROAD WITH LED LIGHTS

INDEX

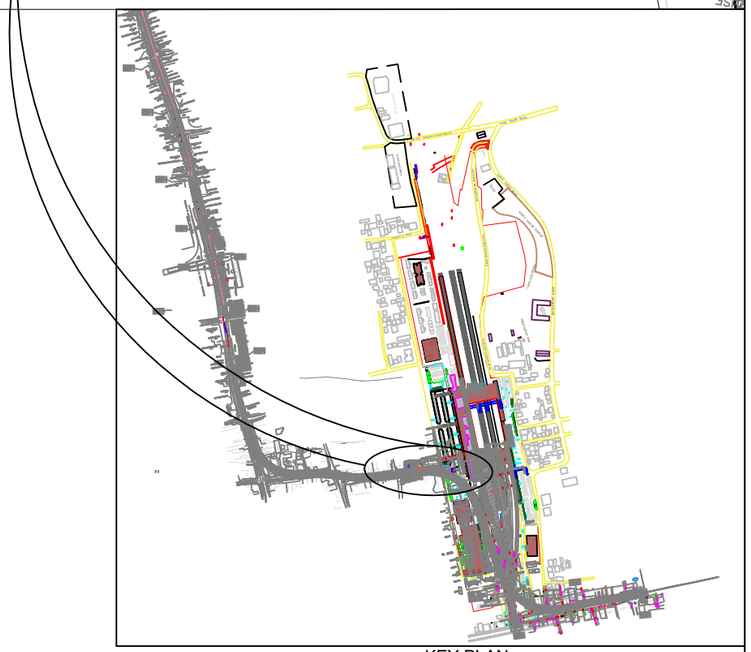
TWINARM POLE - 3500-2500 LUMINUS

RBG FLOOD LIGHT 50W

NOTE:

1. ALL DIMENSIONS ARE IN MM UNLESS MENTIONED OTHERWISE.
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.

4. **POST LIGHT SHOULD BE KEPT AT A DISTANCE OF MINIMUM 17.0M.**

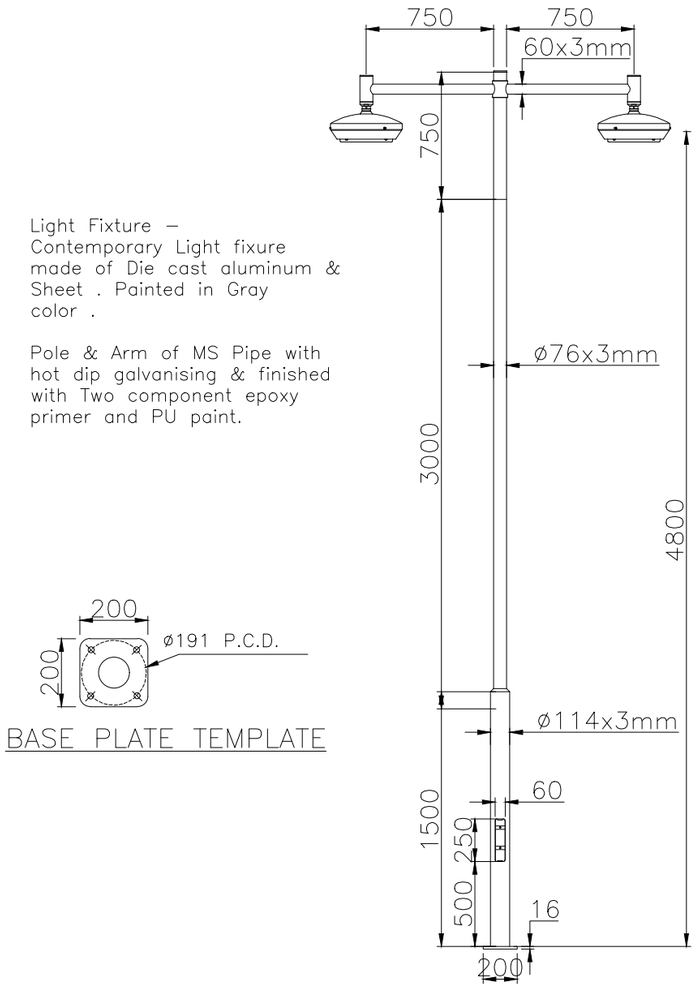


KEY PLAN

PROJECT NAME: IMPLEMENTATION OF SMART LED LIGHTS	CLIENT: COCHIN SMART MISSION LIMITED, 10th Floor, Revenue Tower, Park Avenue, Kochi-682011, Kerala,India	PMC TEAM: IPE Global & Royal HaskoningDHV, 10th Floor, Revenue Tower, Park Avenue, Kochi-682011, Kerala,India	TITLE: Layout of Street Light for Jos Junction to South Railway Station Road DRG NO. CSML/M4/SMR/LED-025	Drawn BY: Soumya	Design BY: Karunakaran MN	Checked BY: Karunakaran MN	N SCALE: 1:650 (A1)	REVISION: R0 DATE: 05-01-2019	SIGNATORY ARCHITECT: SIGNATORY CSML:	TENDER PURPOSE ONLY

* LIGHTING FIXTURE DIMENSIONS ARE FOR REPRESENTATION PURPOSE ONLY. BIDDER IS FREE TO CHOOSE THE MANUFACTURER MEETING THE TENDER SPECIFICATION REQUIREMENTS.

- Light Fixture – Contemporary Light fixure made of Die cast aluminum & Sheet . Painted in Gray color .
- Pole & Arm of MS Pipe with hot dip galvanising & finished with Two component epoxy primer and PU paint.



BASE PLATE TEMPLATE

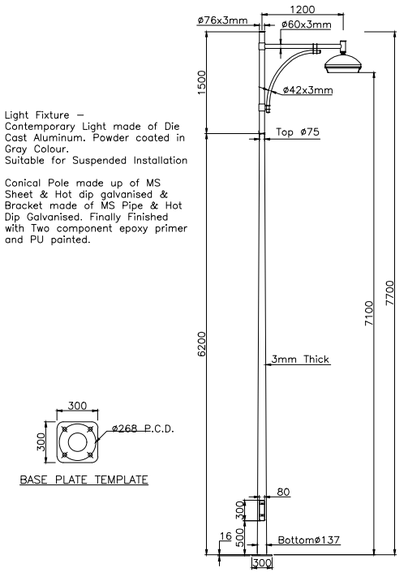
5.0m HEIGHT TWIN ARM CONICAL POLE

NOTE:
1. ALL DIMENSIONS ARE IN MM UNLESS MENTIONED OTHERWISE.
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.

PROJECT NAME: IMPLEMENTATION OF SMART LED LIGHTS	CLIENT: COCHIN SMART MISSION LIMITED, 10th Floor, Revenue Tower, Park Avenue, Kochi-682011, Kerala,India	PMC TEAM: IPE Global & Royal HaskoningDHV, 10th Floor, Revenue Tower, Park Avenue, Kochi-682011, Kerala,India	TITLE: Details of Lighting Fixtures and Poles for Jos Junction to South Railway Station Road DRG NO. CSML/M4/SMR/LED-026	Drawn BY: Soumya	Design BY: Karunakaran MN	Checked BY: Karunakaran MN	N	REVISION: R0 SCALE: 1:20 (A1) DATE: 08-02-2019	SIGNATORY ARCHITECT:	SIGNATORY CSML:

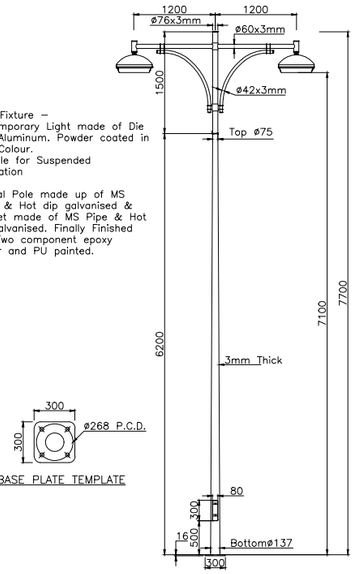
TENDER PURPOSE ONLY

- Light Fixture – Contemporary Light made of Die Cast Aluminum. Powder coated in Gray Colour. Suitable for Suspended Installation
- Conical Pole made up of MS Sheet & Hot dip galvanised & Bracket made of MS Pipe & Hot Dip Galvanised. Finally Finished with Two component epoxy primer and PU painted.



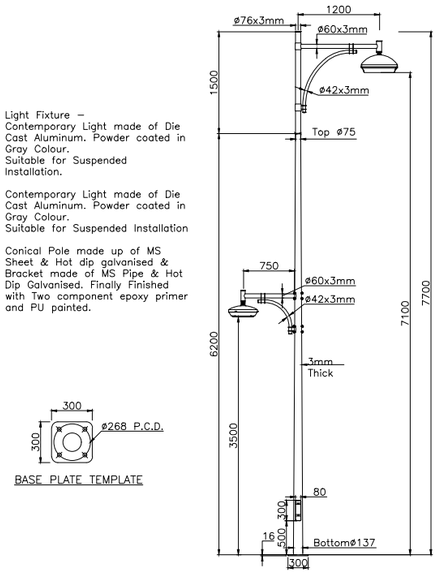
7.5m HEIGHT SINGLE ARM CONICAL POLE

- Light Fixture – Contemporary Light made of Die Cast Aluminum. Powder coated in Gray Colour. Suitable for Suspended Installation
- Conical Pole made up of MS Sheet & Hot dip galvanised & Bracket made of MS Pipe & Hot Dip Galvanised. Finally Finished with Two component epoxy primer and PU painted.



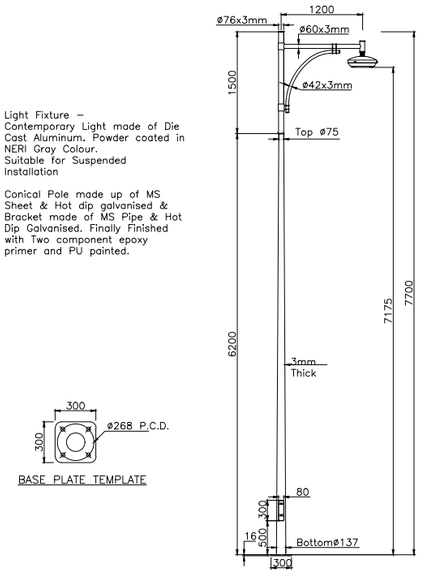
7.5m HEIGHT TWIN ARM CONICAL POLE

- Light Fixture – Contemporary Light made of Die Cast Aluminum. Powder coated in Gray Colour. Suitable for Suspended Installation.
- Contemporary Light made of Die Cast Aluminum. Powder coated in Gray Colour. Suitable for Suspended Installation
- Conical Pole made up of MS Sheet & Hot dip galvanised & Bracket made of MS Pipe & Hot Dip Galvanised. Finally Finished with Two component epoxy primer and PU painted.



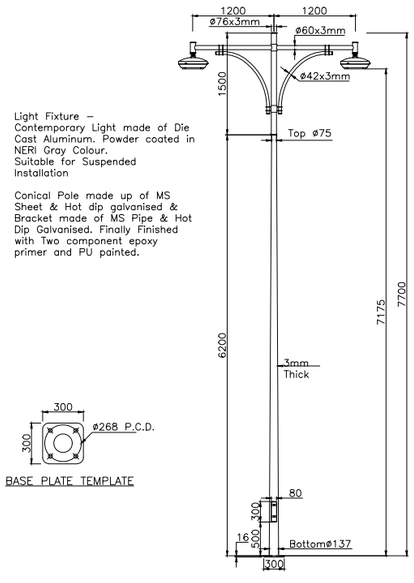
7.5m HEIGHT TWIN ARM DIFFERENTIAL CONICAL POLE

- Light Fixture – Contemporary Light made of Die Cast Aluminum. Powder coated in NERI Gray Colour. Suitable for Suspended Installation
- Conical Pole made up of MS Sheet & Hot dip galvanised & Bracket made of MS Pipe & Hot Dip Galvanised. Finally Finished with Two component epoxy primer and PU painted.



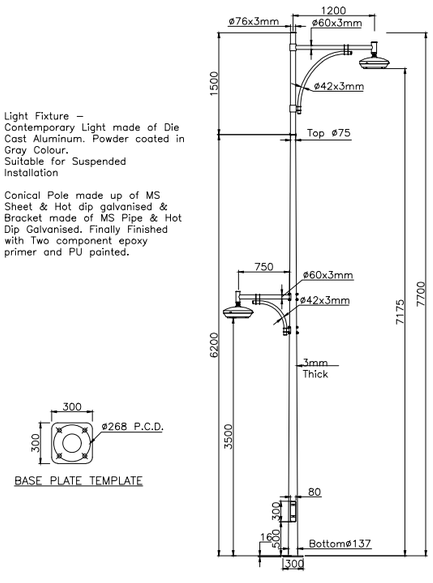
7.5m HEIGHT SINGLE ARM CONICAL POLE

- Light Fixture – Contemporary Light made of Die Cast Aluminum. Powder coated in NERI Gray Colour. Suitable for Suspended Installation
- Conical Pole made up of MS Sheet & Hot dip galvanised & Bracket made of MS Pipe & Hot Dip Galvanised. Finally Finished with Two component epoxy primer and PU painted.



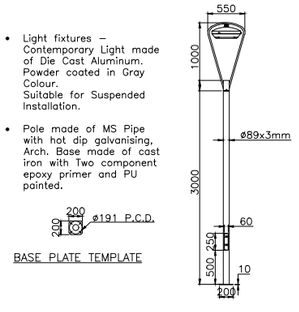
7.5m HEIGHT TWIN ARM CONICAL POLE

- Light Fixture – Contemporary Light made of Die Cast Aluminum. Powder coated in Gray Colour. Suitable for Suspended Installation
- Conical Pole made up of MS Sheet & Hot dip galvanised & Bracket made of MS Pipe & Hot Dip Galvanised. Finally Finished with Two component epoxy primer and PU painted.



7.5m HEIGHT TWIN ARM DIFFERENTIAL CONICAL POLE

- Light fixtures – Contemporary Light made of Die Cast Aluminum. Powder coated in Gray Colour. Suitable for Suspended Installation.
- Pole made of MS Pipe with hot dip galvanising, Arch. Base made of cast iron with Two component epoxy primer and PU painted.



3.0m HEIGHT TOP POST POLE

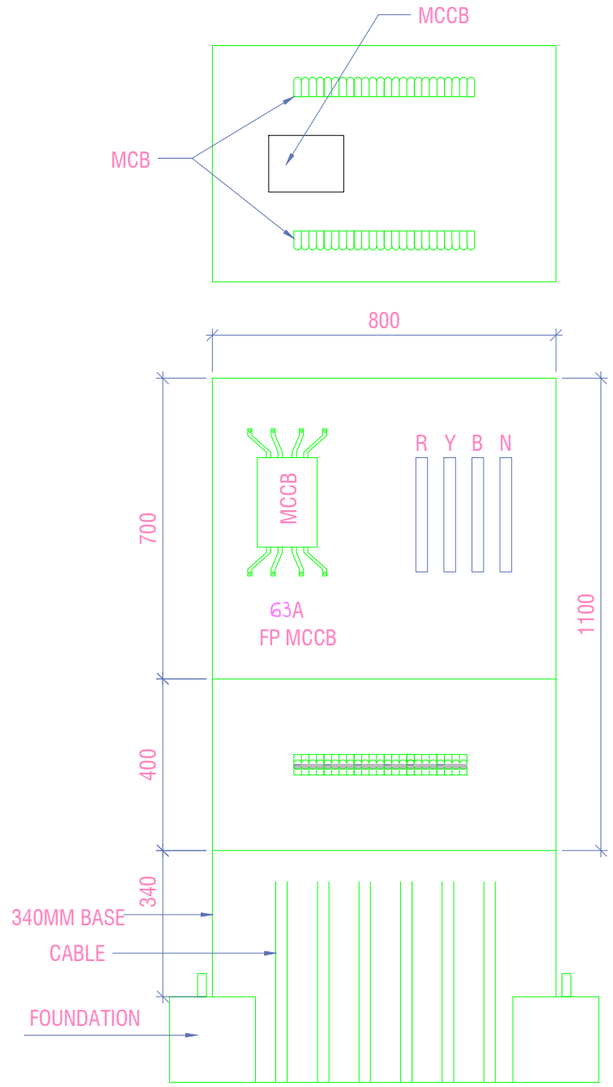
* LIGHTING FIXTURE DIMENSIONS ARE FOR REPRESENTATION PURPOSE ONLY. BIDDER IS FREE TO CHOOSE THE MANUFACTURER MEETING THE TENDER SPECIFICATION REQUIREMENTS.

NOTE:
1. ALL DIMENSIONS ARE IN MM UNLESS MENTIONED OTHERWISE.
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.

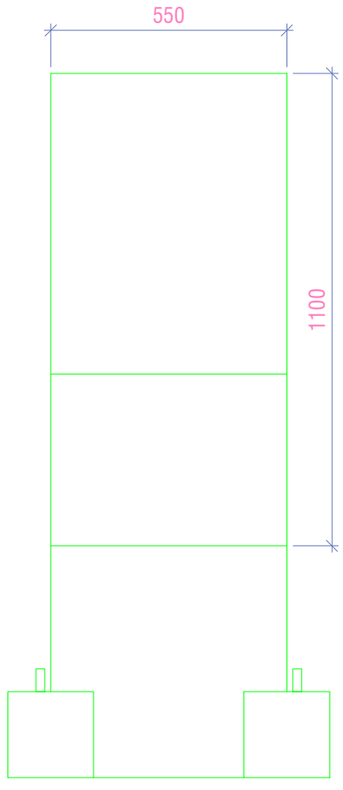
PROJECT NAME : IMPLEMENTATION OF SMART LED LIGHTS	**CLIENT :** COCHIN SMART MISSION LIMITED, 10th Floor, Revenue Tower, Park Avenue, Kochi-682011, Kerala,India	**PMC TEAM :** IPE Global & Royal HaskoningDHV, 10th Floor, Revenue Tower, Park Avenue, Kochi-682011, Kerala,India	**TITLE :** Details of Lighting Fixtures and Poles for Smart Roads **DRG NO.** CSML/M4/SMR/LED-027	**Drawn BY** Soumya	**Design BY** Karunakaran MN	**Checked BY** Karunakaran MN	N **SCALE :** 1:20 (A1)	**REVISION** R0 **DATE :** 08-02-2019	**SIGNATORY ARCHITECT:** **SIGNATORY CSML :** **TENDER PURPOSE ONLY**

63 A 415 V FEEDER PILLAR

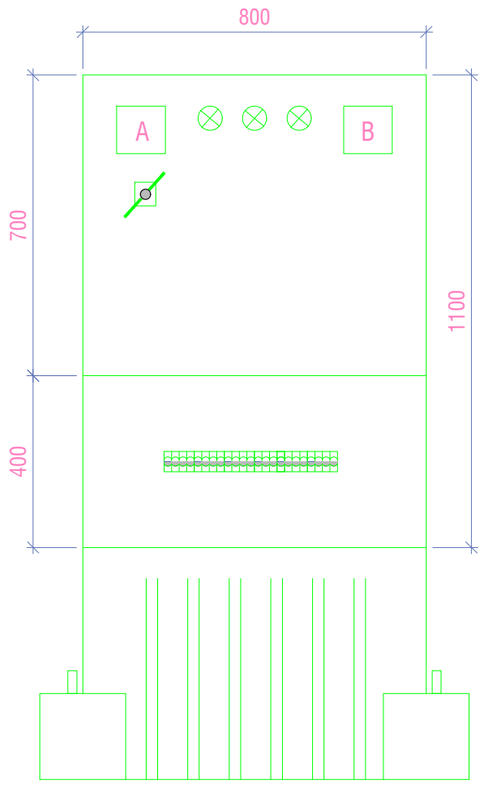
NOTE:
1. ALL DIMENSIONS ARE IN MM UNLESS MENTIONED OTHERWISE
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.



FRONT VIEW
SCALE 1:15



SIDE VIEW
SCALE 1:15



METERING
SCALE 1:15

CLIENT : COCHIN SMART MISSION LIMITED
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PMC TEAM : IPE Global & Royal HaskoningDHV
10th Floor, Revenue Tower,
Park Avenue, Kochi-682011, Kerala,India

PROJECT NAME
IMPLEMENTATION OF SMART LED LIGHTS

TITLE : 63 A 415 V FEEDER PILLAR

DRG NO.	SCALE : NTS(A3)	N
CSML/M4/SMR/LED-028	DATE : 06-02-2019	

Drawn BY	Design BY	Checked BY	REVISION
Jothish Kumar M	Karunakarn M N	Ajaya Kumar S	R0

SIGNATORY ARCHITECT:	SIGNATORY CSML :

TENDER PURPOSE ONLY

NOTE:
1. ALL DIMENSIONS ARE IN MM UNLESS MENTIONED OTHERWISE.
2. ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED
3. THIS DRAWING IS TO BE READ ALONG WITH ALL REFERENCED OR MENTIONED DRAWINGS.

PROJECT NAME: IMPLEMENTATION OF SMART LED LIGHTS	CLIENT: COCHIN SMART MISSION LIMITED, 10th Floor, Revenue Tower, Park Avenue, Kochi-682011, Kerala,India	PMC TEAM: IPE Global & Royal HaskoningDHV, 10th Floor, Revenue Tower, Park Avenue, Kochi-682011, Kerala,India	TITLE: TYPICAL LIGHT FIXTURE SAMPLES DRG NO. CSML/M4/SMR/LED-029	Drawn BY: Soumya	Design BY: Karunakaran MN	Checked BY: Karunakaran MN	N	REVISION: R0 DATE: 08-02-2019	SCALE: N T S	SIGNATORY ARCHITECT: SIGNATORY CSML: TENDER PURPOSE ONLY