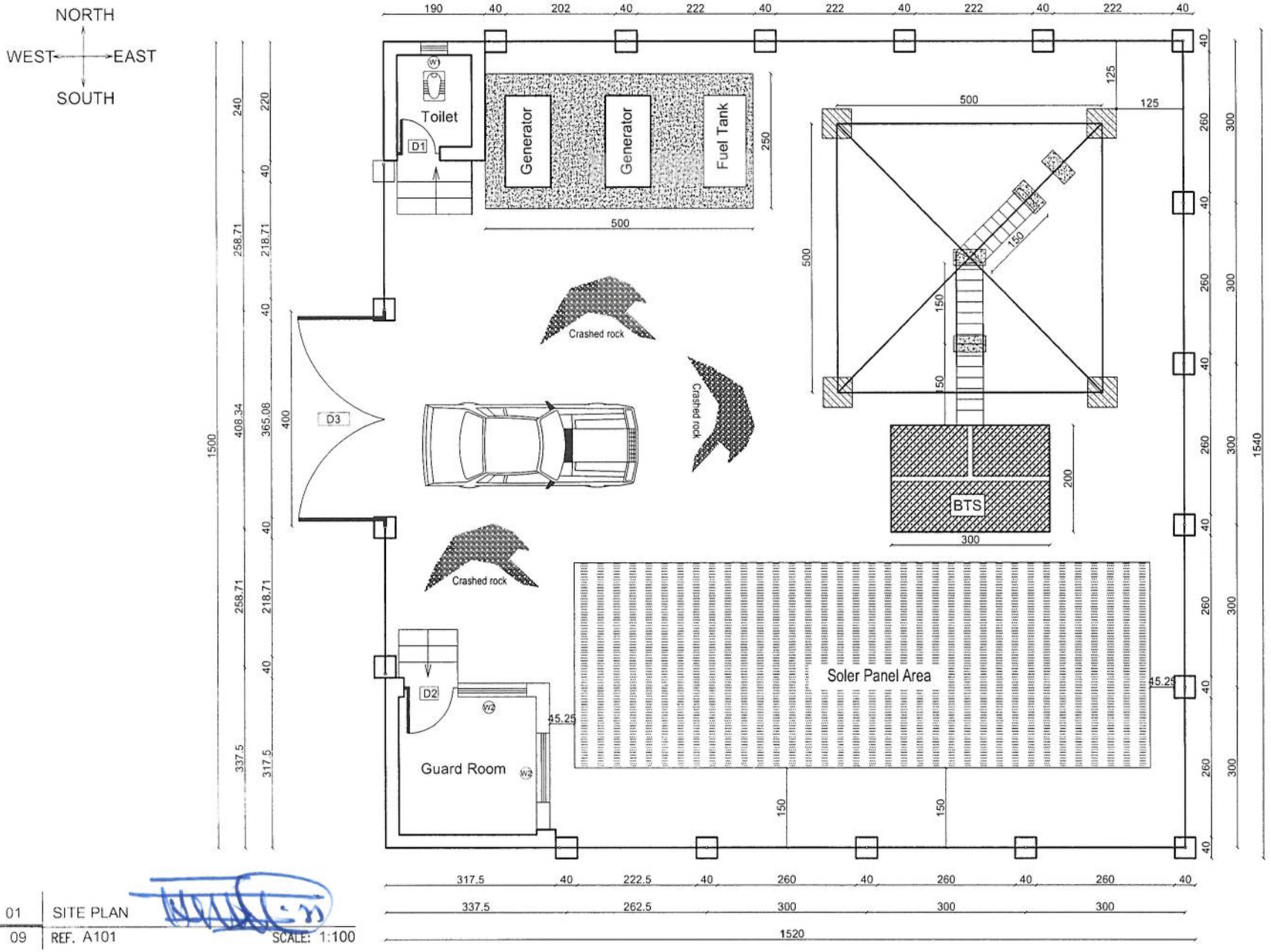
جدول سروی سایتهای غیر تی دی افAFTEL)

32	نوعیت ساحه (ساحه باز یا ساحه محاط)	باز
33	مساحت موجود (طول وعرض)	15*15
34	مساحت مورد نیاز سایت(طول عرض)	15*15
35	نوعیت احاطه درصورت ضرورت	لازم است
36	محل بودباش گارد درصورت ضرورت	لازم است
37	تاور(کیبلی روی زمین یا سلف سپورت)	سلف سپورت
38	ارتفاع تاورمورد نیاز	متر ۴۰/۳۰
39	امکانات وصل ترانسمیشن سایت(TX type)	بلی
40	سایه بان وسلب برای وسایل مخابراتی (BTS and all racks)	لازم است
41	سایه بان و سلب مورد نیاز جنراتور وتانکر	لازم است
42	امکانات نصب سولر است؟	بلی
43	ساحه کافی برای بسول موجود است؟	بلی
44	برق شهری درساحه وجود دارد؟	نخیر
45	فاصله برج برق از ساحه سایت	
46	تیم سروی	کندهار
47	نام	بشیراحمد ابراهیمی
48	دیپارتمنت	RF
49	شماره	749998645
50	سکیچ ساحه سایت (ترتیب وضم ریور سروی شود)	
51	عکسهای پانارومیک از ساحه گرفته شود	
52	خط دید وصل مایکروویف با تیم ازساحه باید چک و تایید شود	
53	خدمات سلام درساحه موجود است؟	
54	کیفیت خدمات سلام در ساحه	
55	نظریات:	نوموری ساحه د کابل ټیم له لوری هم مخکی سروی سوی ده



01 | SITE PLAN

09 | REF. A101 | SCALE: 1:100

REVISION RECORDS ثبت تعدیلات		
REVISION NO شماره تعدیل	DATE تاریخ	DESCRIPTION تشریحات

LEGEND: علایم:

- CRASHED ROCK سنگ
- PCC کنکریت
- W1 WINDOWS TYPE 1 کلکین نوع اول
- W2 WINDOWS TYPE 2 کلکین نوع دوم
- D1 DOOR TYPE 1 دروازه نوع اول
- D2 DOOR TYPE 2 دروازه نوع دوم
- D3 DOOR TYPE 3 دروازه نوع سوم

PROJECT TITLE / NO:
GSM SITES
عنوان پروژه:
سایت های جی اس ام

DRAWING TITLE:
SITE PLAN WITH FENCE WALL
پلان موقعیت با احاطه فینس

DRAWN BY: ترسیم:
CIVIL TEAM

CHECKED BY: کنترول:

APPROVED BY: منظوری:

SCALE: مقیاس:
1:100

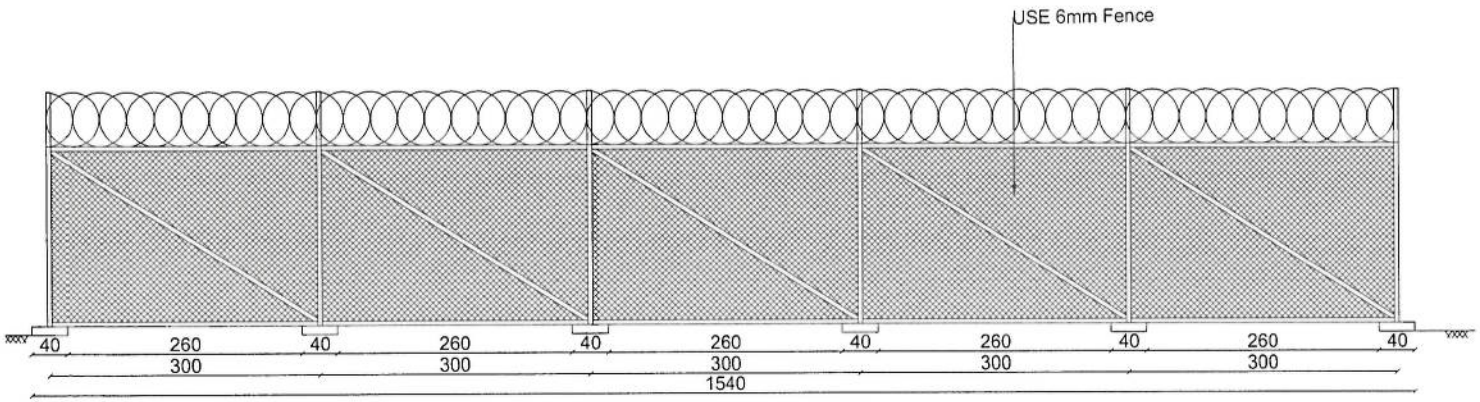
ACTUAL DATE:
23 /02/ 2025

ISSUE DATE:

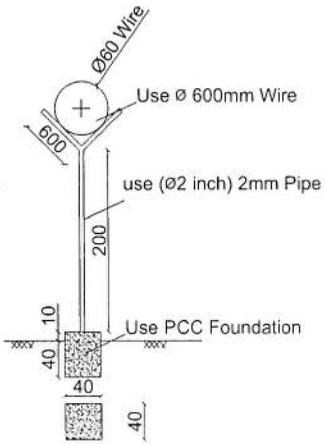
DRG.NO: 01

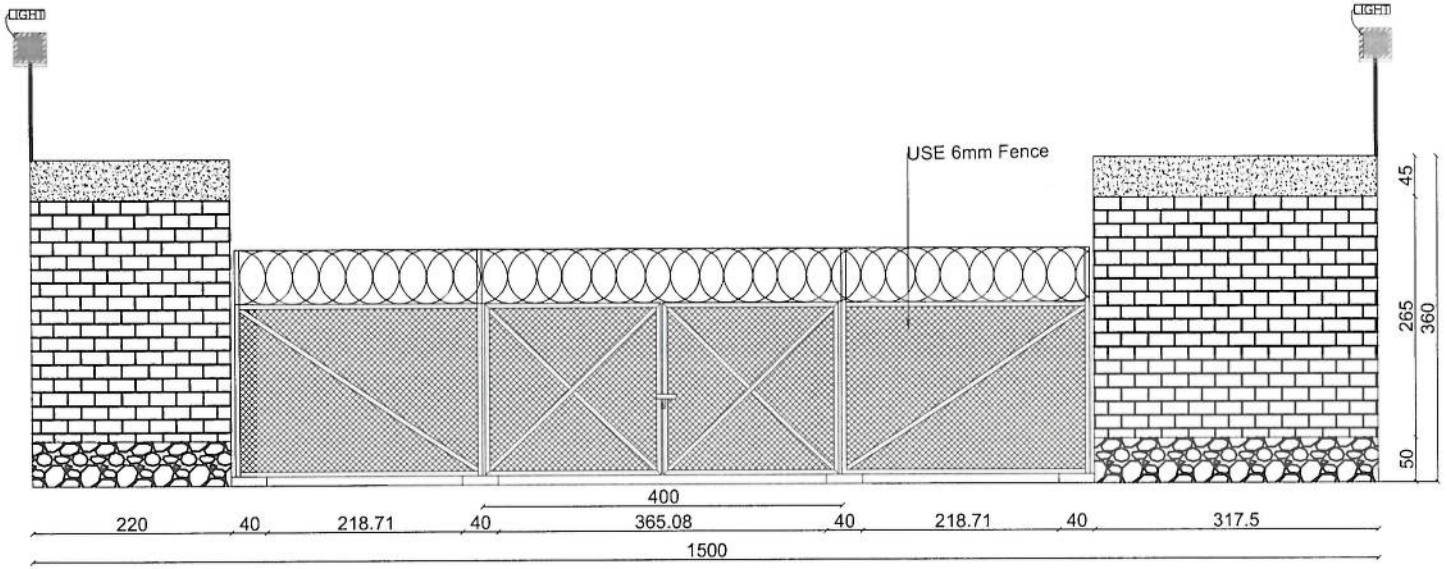
OWNER: مالک پروژه:
AFGHAN TELECOM

سلام | Salaam Telecomunication Company
KABUL
AFGHANISTAN



EAST ELEVATION





WEST ELEVATION

02	WALL ELEVATIONS & DETAILS
09	REF. A102 SCALE: 1:100

REVISION RECORDS

REVISION NO	DATE	DESCRIPTION

LEGEND

BRICK WALL
STONE MASONRY
PCC PLASTERD
RAZOR WIRE
LIGHT

PROJECT TITLE / NO
GSM SITES

DRAWING TITLE:
FENCE WALL ELEVATIONS & DETAILS

DRAWN BY:
CIVIL TEAM

CHECKED BY:

APPROVED BY:

SCALE: 1:100

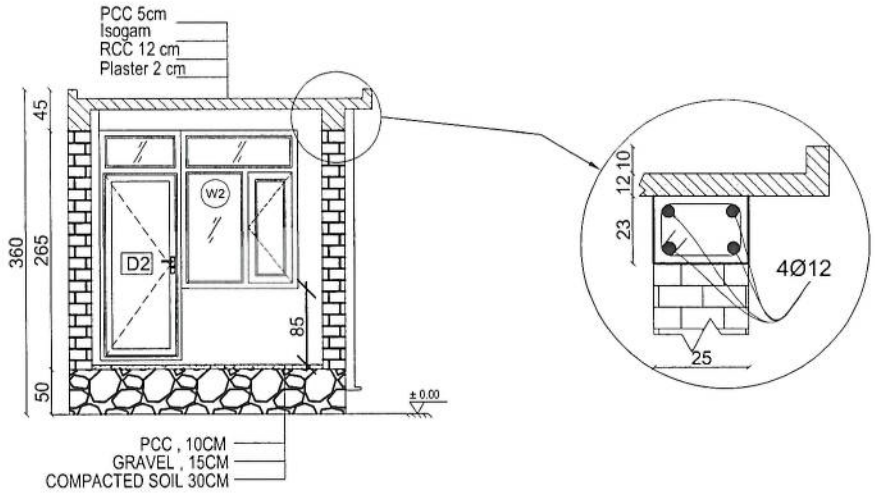
ACTUAL DATE: 23/02/2025

ISSUE DATE:

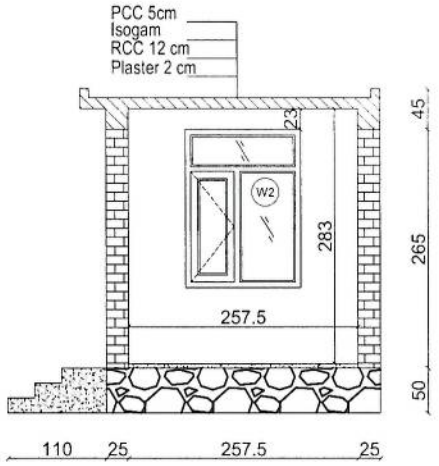
DRG.NO. 02

OWNER:
AFGHAN TELECOM

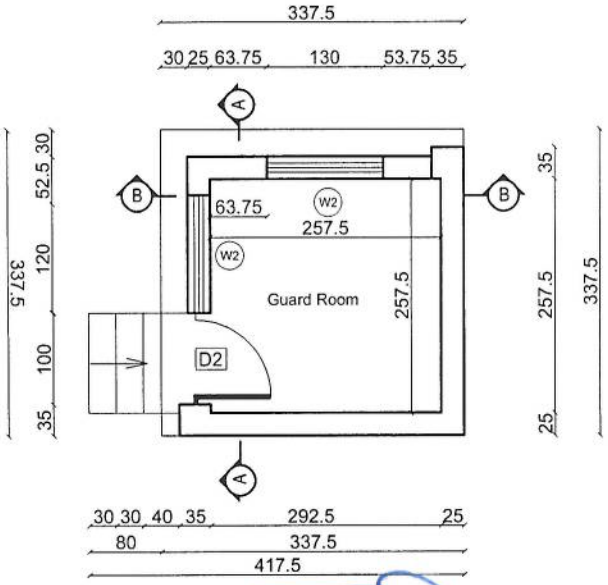
Salaam Telecomunication Company
KABUL
AFGHANISTAN

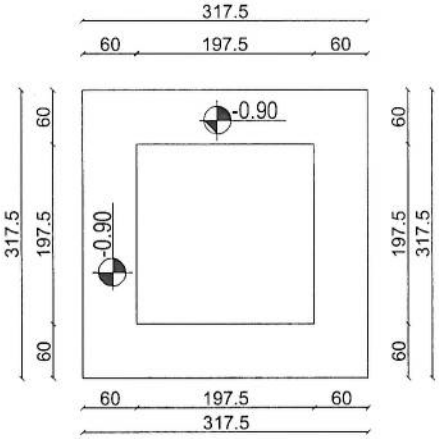


Section AA

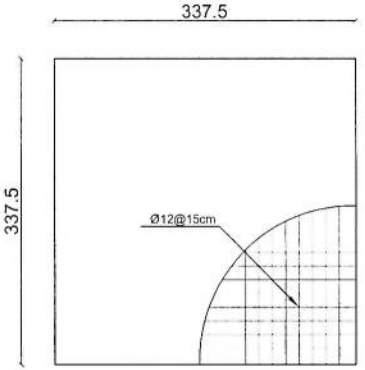


Section B-B





Excavation of Foundation



Rebar details of GR roof

03	GUARD ROOM
09	REF. A103

SCALE: 1:75

REVISION RECORDS

REVISION NO	DATE	DESCRIPTION

LEGEND:

PROJECT TITLE / NO:
GSM SITES

DRAWING TITLE:
GUARD ROOM

DRAWN BY:
CIVIL TEAM

CHECKED BY:

APPROVED BY:

SCALE: 1:75

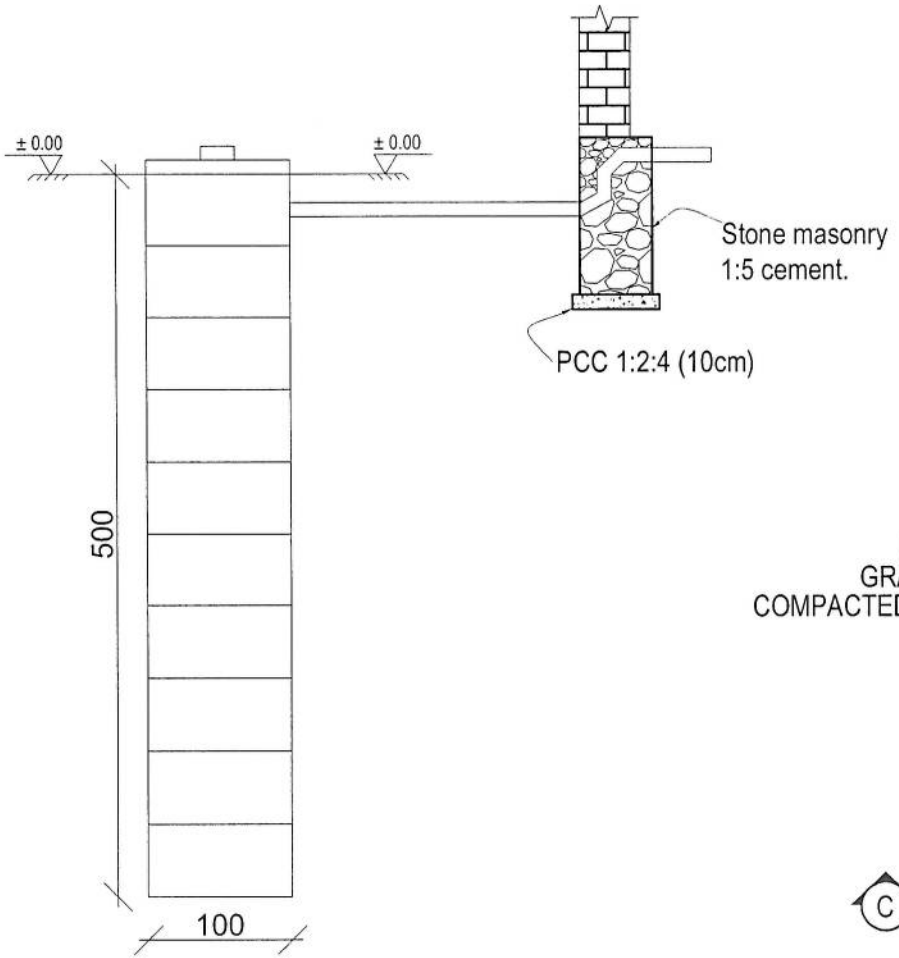
ACTUAL DATE: 23 /02/ 2025

ISSUE DATE:

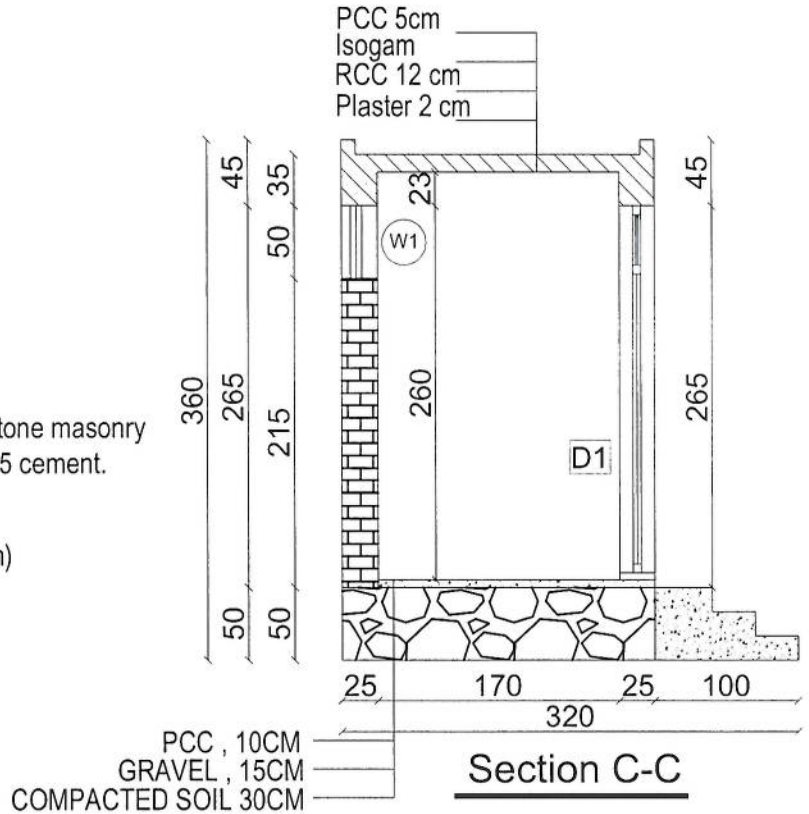
DRG.NO 03

OWNER:
AFGHAN TELECOM

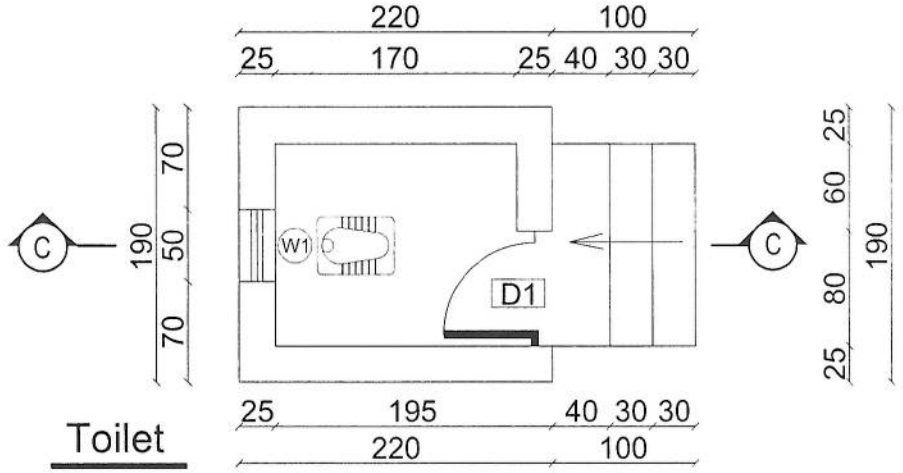
Salaam Telecomunication Company
KABUL
AFGHANISTAN



Well for toilet



Section C-C



Toilet

04	TOILET	
09	REF. A104	SCALE: 1:50

REVISION RECORDS

REVISION NO	DATE	DESCRIPTION

LEGEND:

PROJECT TITLE / NO:
GSM SITES

DRAWING TITLE:
TOILET

DRAWN BY:
CIVIL TEAM

CHECKED BY:

APPROVED BY

SCALE:
1:50

ACTUAL DATE:
23 /02/ 2025

ISSUE DATE:

DRG.NO: 04

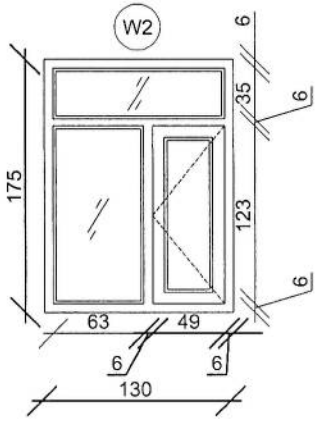
OWNER:
AFGHAN TELECOM

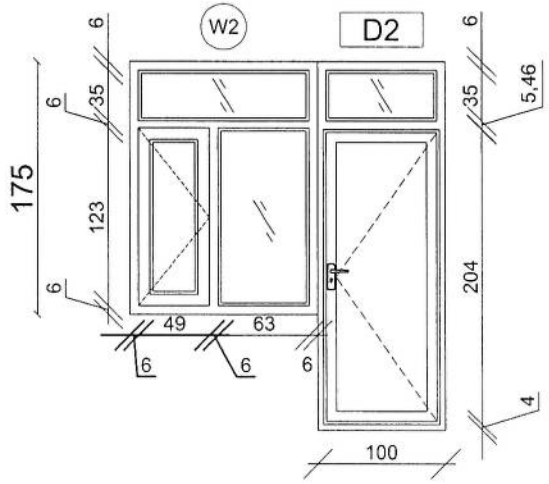
Salaam Telecomunication Company
KABUL
AFGHANISTAN

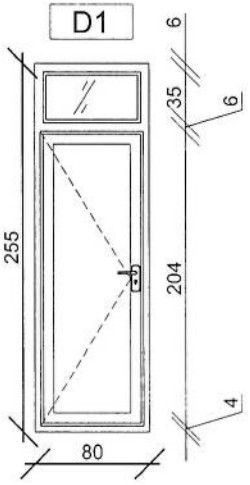
جدول سروی سایتهای غیر تی دی اف(AFTEL)

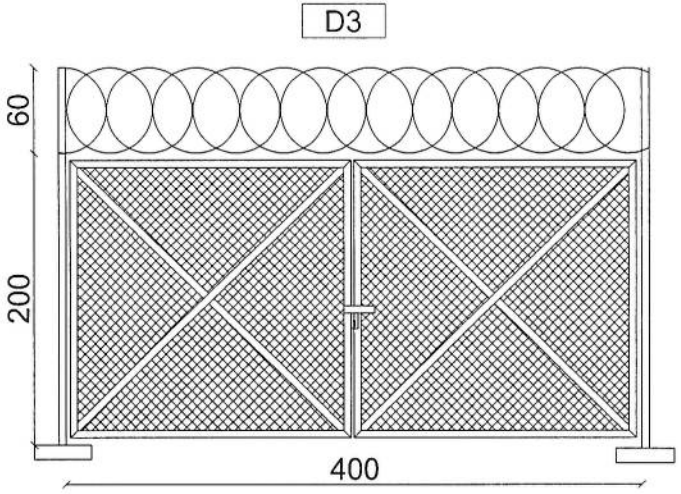
شماره	معلومات ابتدایه ضروری هنگام سروی	درج معلومات به اساس سروی از ساحه
1	(آی دی سایت) Site ID	HLD159
2	کاندید شماره	1
3	GPS coordinates	31.9935, 64.08412
4	نام ساحه ومنطقه	جونو کیمپ
5	نام ولسوالی و ولایت مربوطه	هلمند، گریشک
6	(نام ساحاتی که قرار است تحت پوشش سایت بیایند)	جونو کیمپ، کاروان گاه و شهرای کندهار - هرات
7	مالیکت زمین(شخصی یا دولتی)	دولتی
8	مالک جایداد/خانه قابل دسترس است	دولتی
9	شماره تماس مالک یا سکنه جایداد	**دولتی**
10	شخصی/کرایی	دولتی
11	مالک جایداد با نصب سایت و شرایط افغان تیلی کام راضی است	دولتی
12	موافقه ابتدایی ساحوی با مالک جایداد صورت گرفت؟	دولتی
13	نوعیت سایت (سریام یا روی مین)	سر کوه
14	چگونگی ساحه (شهری، روستایی، دوردست)یا VIP	شهرا
15	سرک که واسطه نقلیه تردد بتواند دارد	بلی
16	آیا به سرک جهت تردد واسطه ضرورت است	نه خیر
17	چه مقدار سرک تردد واسطه ضرورت است(به متر)	
18	درصورتیکه کاندید سایت سریام تعمیرات باشد	
19	نوعیت تعمیر (مسکونی/تجارتی)	
20	تعداد منازل	
21	ارتفاع تعمیر	
22	راه رسیدن به بام(زینه بیرونی داخلی)	
23	امکان جابجایی وسایل سریام با افراد وکارگرها است؟	
24	امکان جابجایی وسایل سریام با کرین است؟	
25	ظاهراً تعمیر قابلیت برداشت سیات را دارد؟	
26	نوعیت سریام (رنگ کانکریتی یا گادری)	
27	مساحت موجود سریام (طول وعرض)	
28	تاور مورد نیاز(گاید ماست کیبلی)	
29	ارتفاع تاور مورد نیاز	
30	ارتفاع مجموعی تاور و تعمیر از سطح زمین منزل	
31	درصوتیکه کاندید سروی درحویلی یا زمین جایداد باشد	√

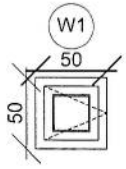
ISL-HRT Highway

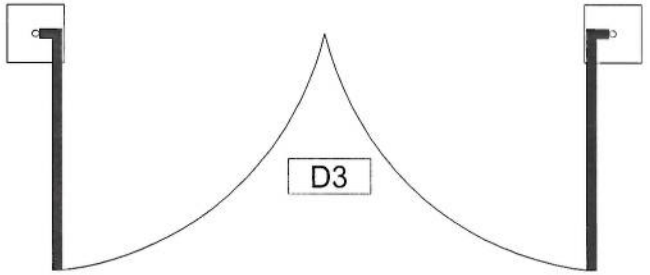












05 DOORS & WINDOWS DETAILS

09 REF. A105 SCALE: 1:50

REVISION RECORDS

REVISION NO	DATE	DESCRIPTION

LEGEND:

BRICK FIRED

W1 WINDOWS TYPE 1

W2 WINDOWS TYPE 2

D1 DOOR TYPE 1

D2 DOOR TYPE 2

D3 DOOR TYPE 3

PROJECT TITLE / NO:

GSM SITES

DRAWING TITLE:

DOORS & WINDOWS DETAILS

DRAWN BY:

CIVIL TEAM

CHECKED BY:

APPROVED BY:

SCALE: 1:50

ACTUAL DATE: 23 /02/ 2025

ISSUE DATE:

DRG.NO 05

OWNER:

AFGHAN TELECOM

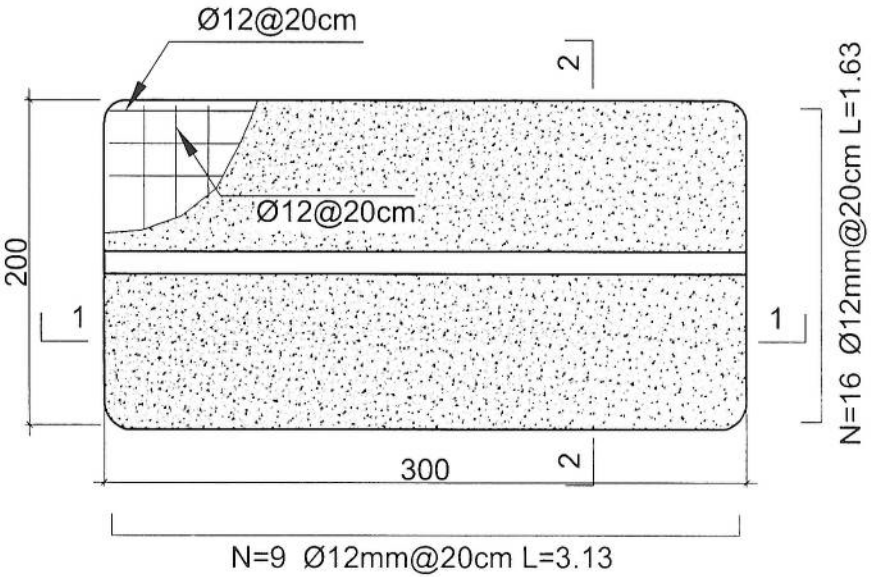
Salaam Telecomunication Company

KABUL

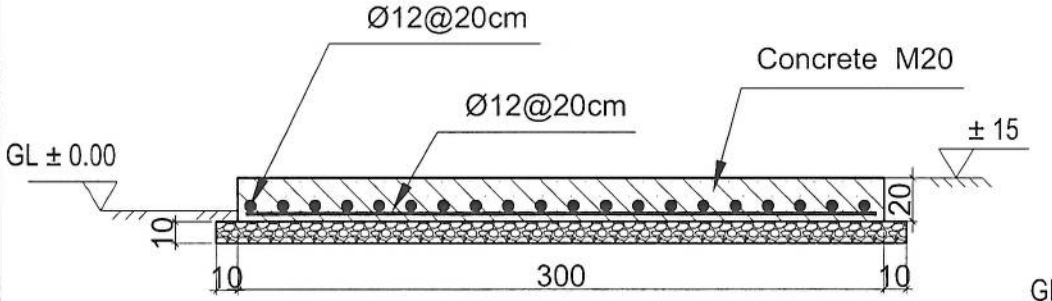
AFGHANISTAN

Notes:

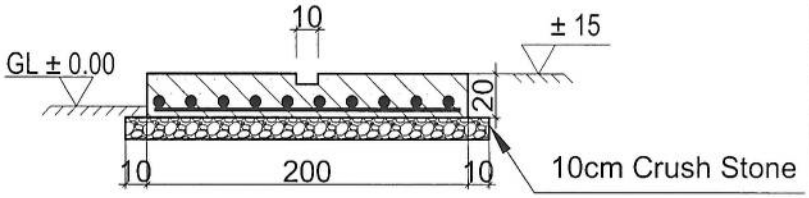
1. The foundation is adopts reinforced concrete,
the concrete is M20; (M20:compressive strength is 20N/mm2);
the foundation lays on a 10cm thick crush stone pad;
2. Ø12: mild steel,rebars strength 210N/mm2
3. minimum concrete cover for rebar is 3.5cm,
4. All units are in cm
5.All edges of the Slab should be curve



Outdoor BTS Foundation



1-1 section



2-2 section

06	ZTE OUTDOOR BTS FOUNDATION	
09	REF. A106	SCALE: 1:25

REVISION RECORDS

REVISION NO	DATE	DESCRIPTION

LEGEND:

CRASHED ROCK

PCC / PLASTER

RCC

GROUND LEVEL

PROJECT TITLE / NO:

GSM SITES

DRAWING TITLE:

ZTE OUTDOOR BTS FOUNDATION

BTS

DRAWN BY:

CIVIL TEAM

CHECKED BY:

APPROVED BY:

SCALE:

1:25

ACTUAL DATE:

23 -02- 2025

ISSUE DATE:

DRG NO: 06

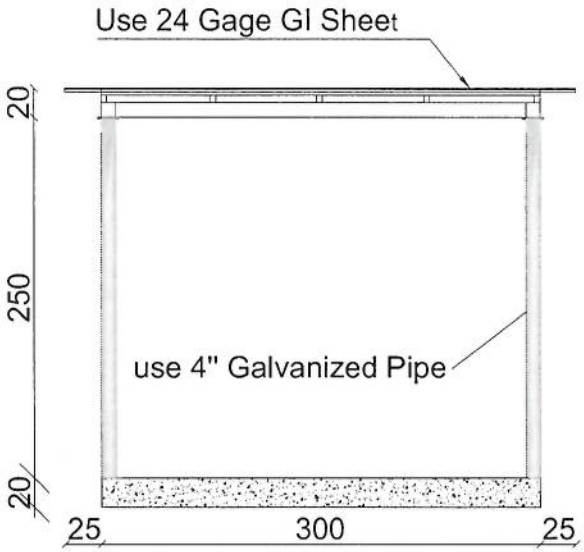
OWNER:

AFGHAN TELECOM

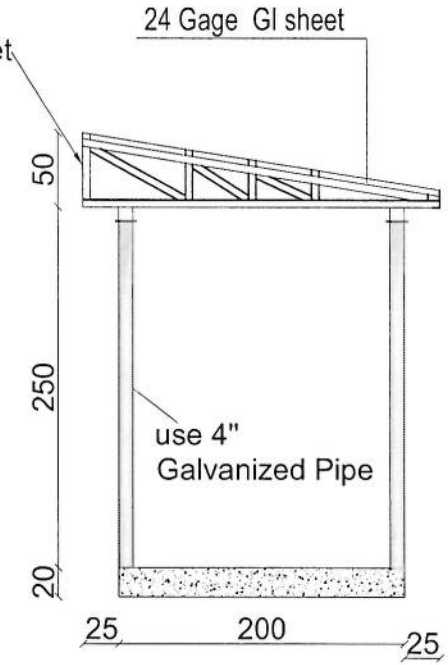
Salsam Telecomunication Company

KABUL

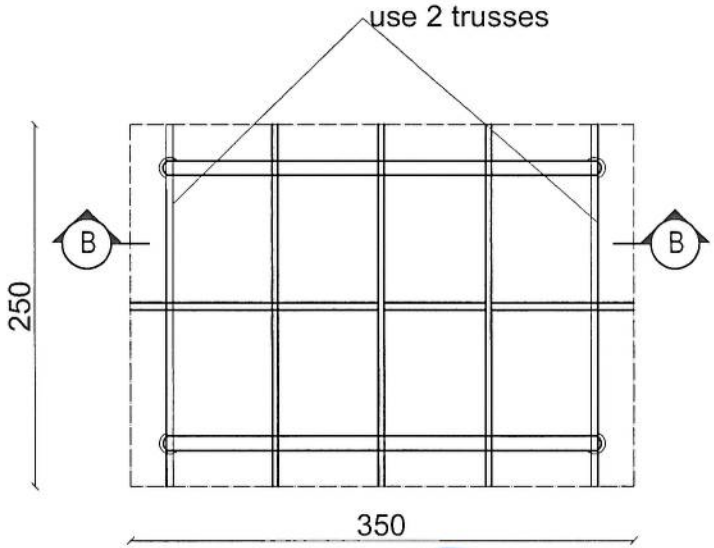
AFGHANISTAN

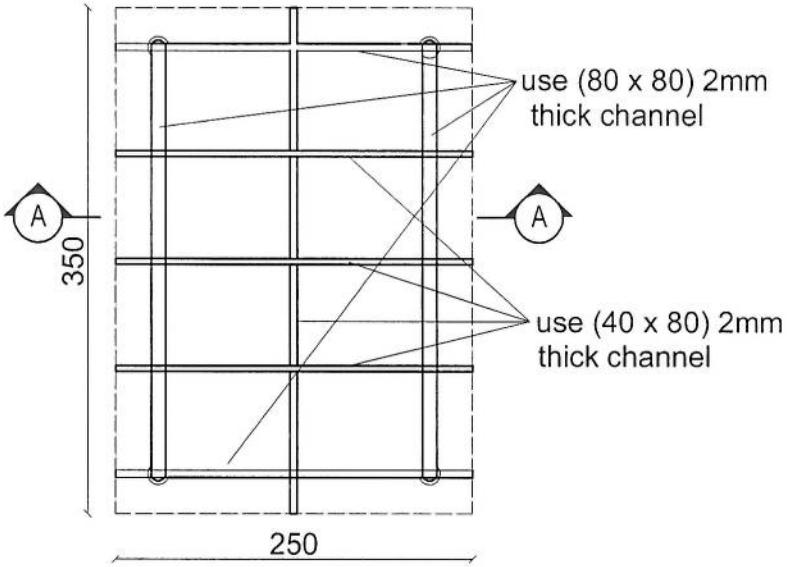


Section BB



Section AA





07	SUN SHELTER FOR ZTE BTS
09	REF. A107 SCALE: 1:50

REVISION RECORDS

REVISION NO	DATE	DESCRIPTION

LEGEND

PROJECT TITLE / NO:
GSM SITES

DRAWING TITLE:
SUN SHELTER FOR ZTE BTS

DRAWN BY:
CIVIL TEAM

CHECKED BY:

APPROVED BY:

SCALE: 1:50

ACTUAL DATE: 23 /02/ 2025

ISSUE DATE:

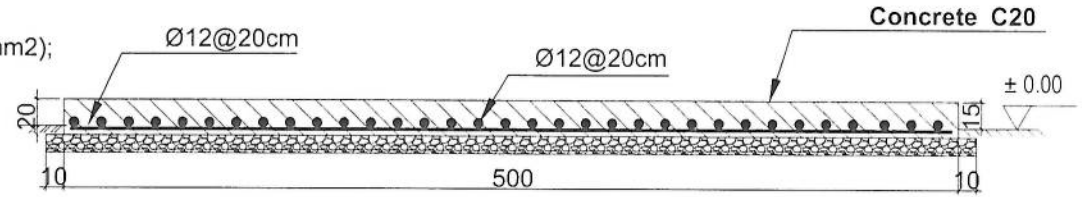
DRG.NO 07

OWNER:
AFGHAN TELECOM

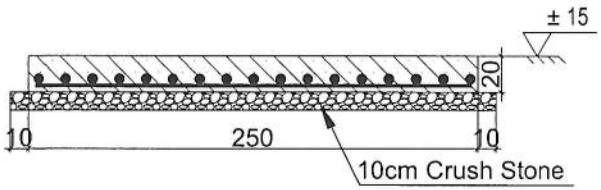
Salaam Telecommunication Company
KABUL
AFGHANISTAN

Notes:

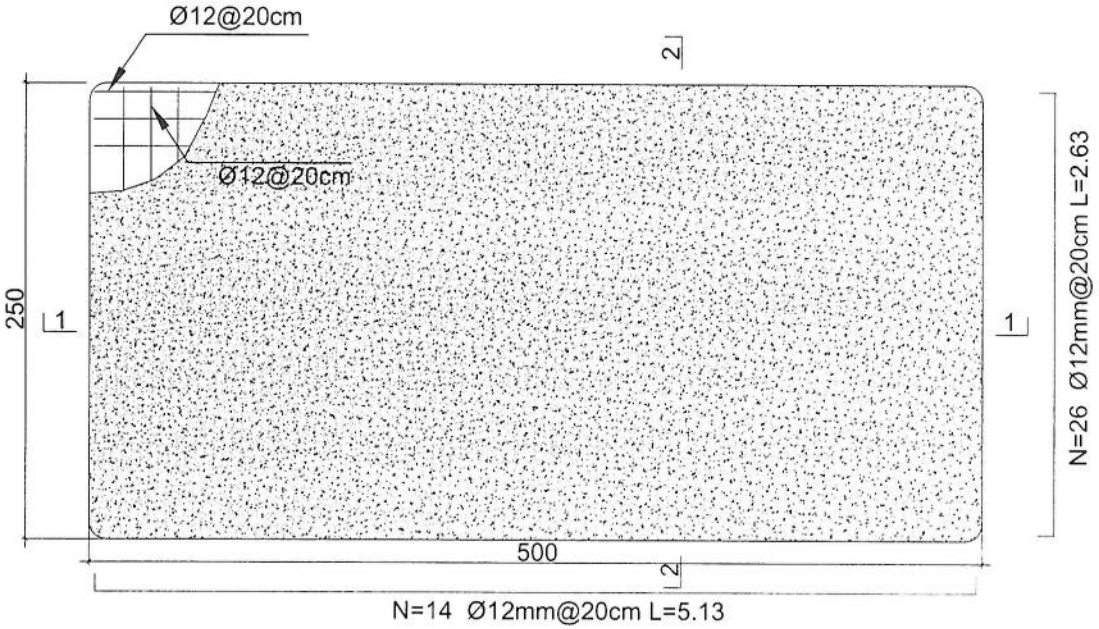
1. The foundation is adopts reinforced concrete,
the concrete is C20; (C20:compressive strength is 20N/mm2);
the foundation lays on a 10cm thick crush stone pad;
2. Ø12: mild steel,rebars strength 210N/mm2
3. minimum concrete cover for rebar is 3.5cm,
4. All units are in cm
5.All edges of the Slab should be curve



1-1 section



2-2 section



Generator Foundation

08	GENERATOR FOUNDATION	
09	REF. A108	SCALE: 1:25

REVISION RECORDS

REVISION NO	DATE	DESCRIPTION

LEGEND:

PROJECT TITLE / NO:
GSM SITES

DRAWING TITLE:
GENERATOR FOUNDATION

DRAWN BY:
CIVIL TEAM

CHECKED BY:

APPROVED BY:

SCALE:
1:25

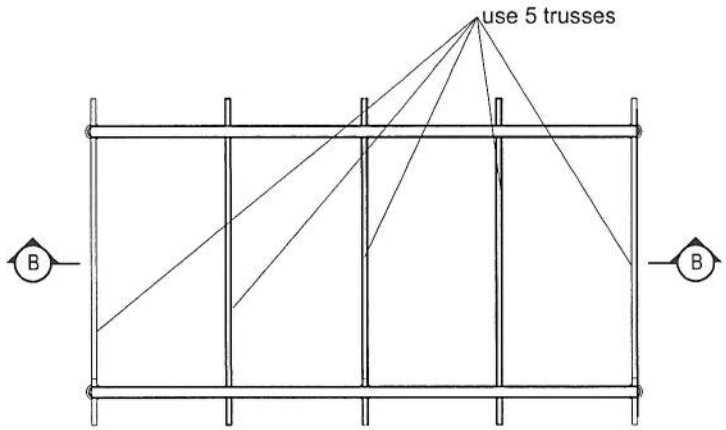
ACTUAL DATE:
23 /02/ 2025

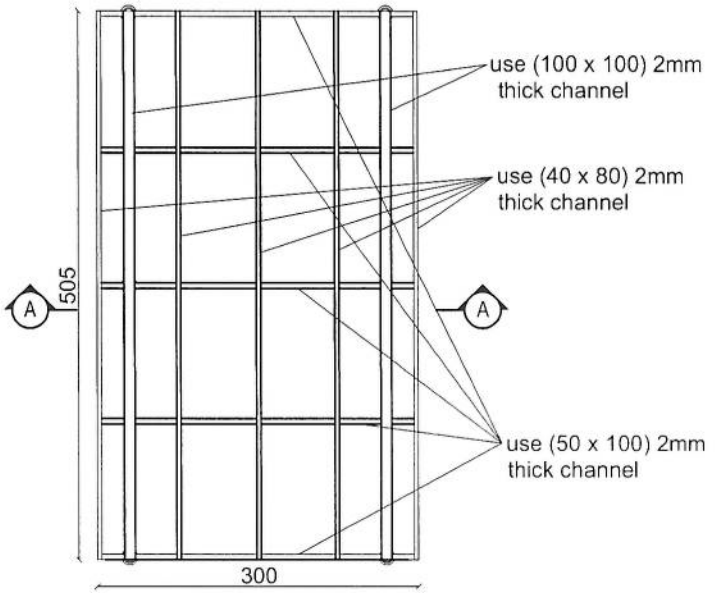
ISSUE DATE:

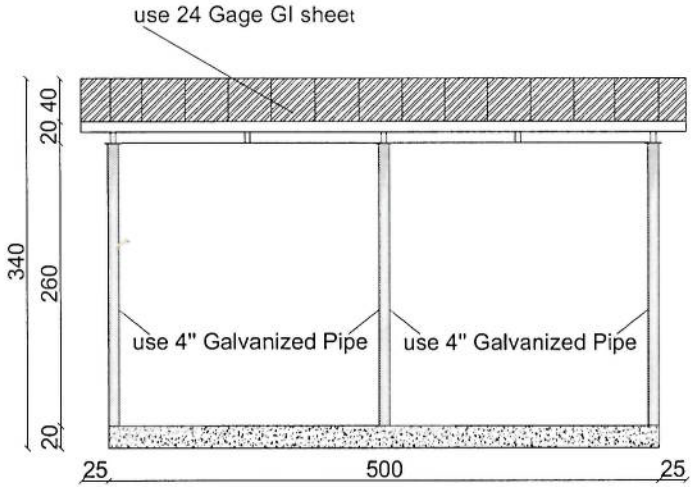
DRG NO: 08

OWNER:
AFGHAN TELECOM

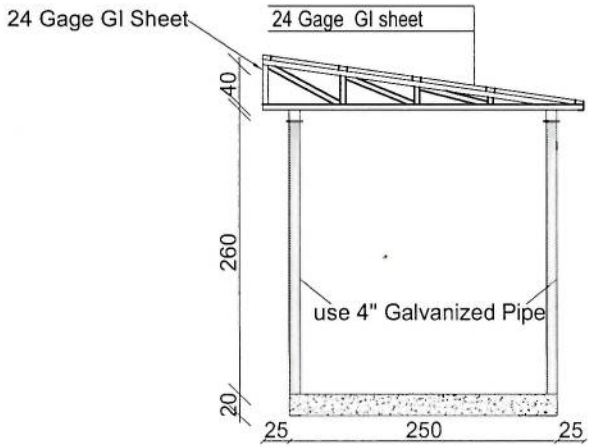
Salaam Telecomunication Company
KABUL
AFGHANISTAN







Section B-B



Section AA

09	SUN SHELTER FOR GENERATOR
09	REF. A109 SCALE: 1:75

REVISION RECORDS

REVISION NO	DATE	DESCRIPTION

LEGEND:

CRASHED ROCK

PROJECT TITLE / NO:
GSM SITES

DRAWING TITLE:
SUN SHELTER FOR GENERATOR

DRAWN BY:
CIVIL TEAM

CHECKED BY:

APPROVED BY:

SCALE:
1:75

ACTUAL DATE:
23 /02/ 2025

ISSUE DATE:

DRG.NO 09

OWNER:
AFGHAN TELECOM

Salaam Telecomunication Company
KABUL
AFGHANISTAN

TOWER TYPE "AK1"

LATTICE Tower:40m

Loading-EPA=10 -Wind speed 160Km/h

Omid Pishgam
Engineering Co.

LATTICE Tower:40m

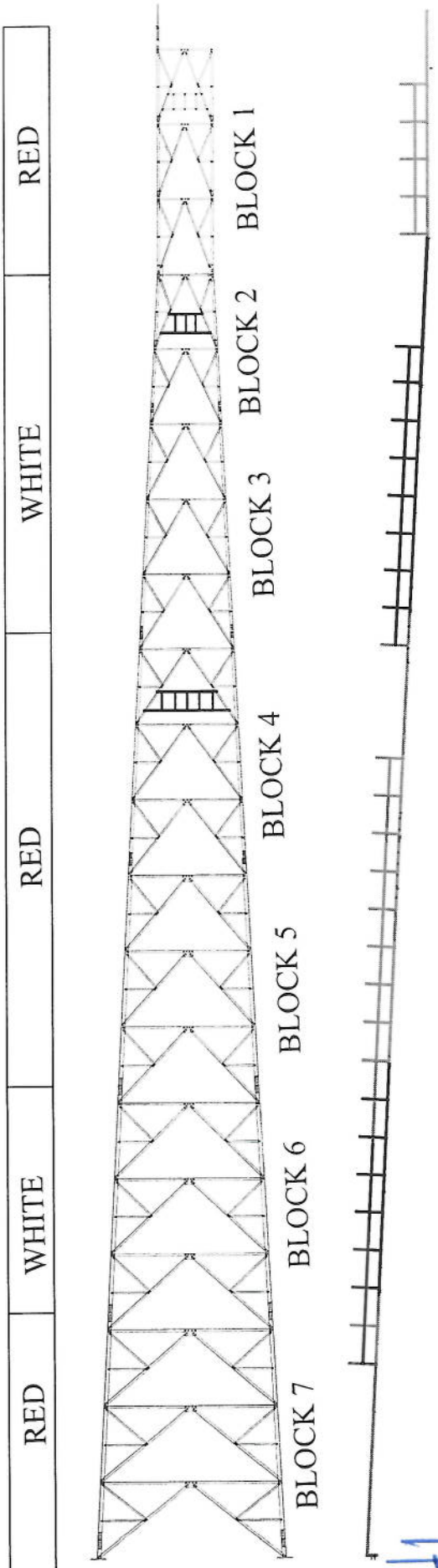
Loading-EPA=10 -Wind speed 160Km/h

APPROVAL DRAWING

TOWER TYPE "AK1"

TOTAL WEIGHT IN 40 M G.F TOWER		
BLOCK NO.	BLOCK HEIGHT (M)	WEIGHT
BLOCK 1	6	705.96 Kg
BLOCK 2	4	473.02 Kg
BLOCK 3	6	650.17 Kg
BLOCK 4	6	938.12 Kg
BLOCK 5	6	1036.82 Kg
BLOCK 6	6	1267.39 Kg
BLOCK 7	6	1508.92 Kg
LADDER		740.09 Kg
SUPORTER		161.29 Kg
BASE		524.41 Kg
	TOTAL	8006.20 Kg

Omid Pishgam Engineering Co.



40M TOWER VIEW

REV	DESCRIPTION	DESIGN	DRAWN	CHECK	APPR	VRF	DATE
2	FIRST ISSUE	A.GH	Mr To.De	D.DEP.	A.GH	--	--

CLIENT: AFGHAN TELECOM

TITLE: APPROVAL DRAWING
FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

CONTRACTOR

DESIGN AND MANUFACTURER: DAKALSAZAN KALAN CO.

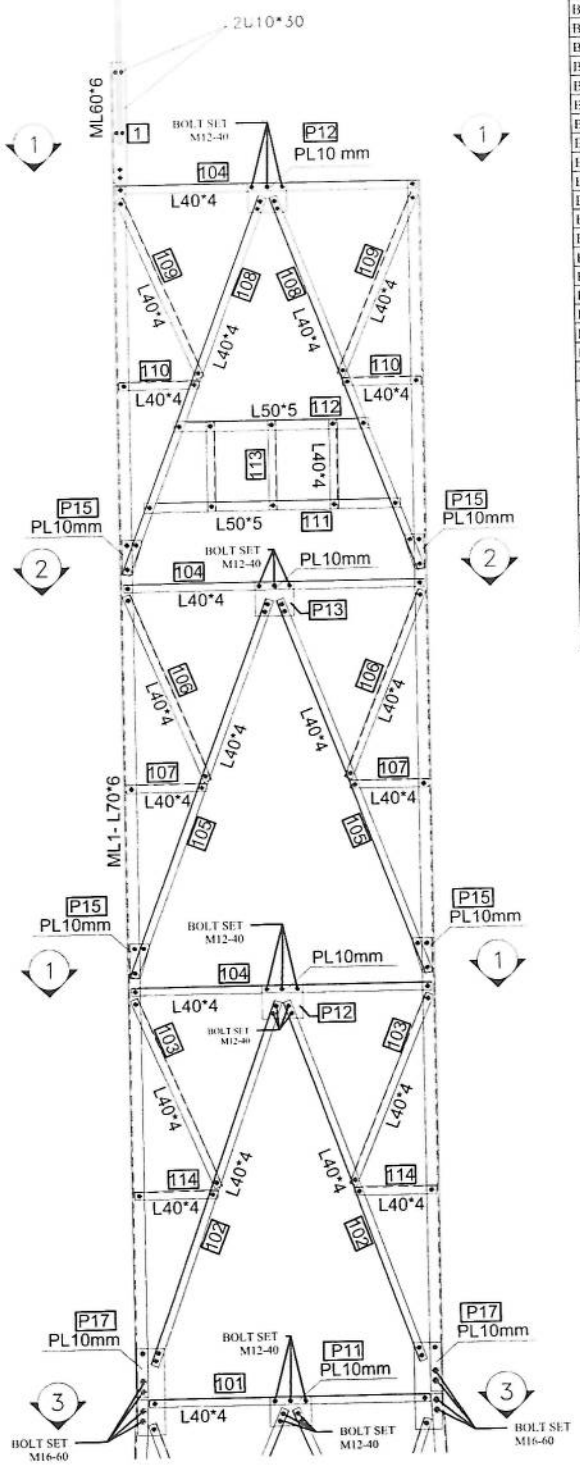
SCALE:	FORMAT: A1	DESIGN STAGE: DETAIL DESIGN	
DAKALSAZAN DWG. NO: --		REV: 0	SH. / TOTAL 1 OF 20

1 2 3 4 5

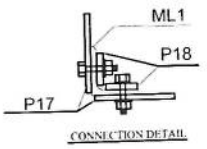
A B C D E F G

BLOCK 1

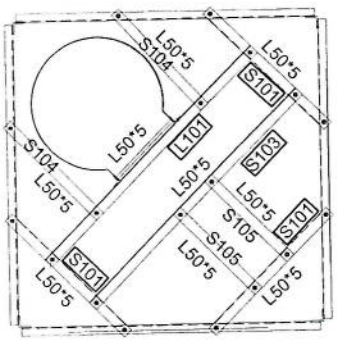
NOTE:
1-ALL BOLT SET IN BRACING ARE M12-40
2-ALL BOLT SET IN MAIN LEGS ARE M16-60



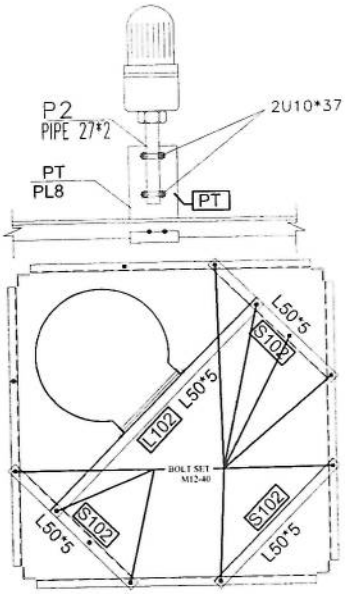
Block	Mark	Description	Length	WEIGHT	NUMBER	Total Weight
BL1	ML1	L70X6	6	38.9958	4	155.9832
BL1	101	L 40X4	1.38	3.397146	4	13.588584
BL1	102	L 40X4	1.925	4.7387725	8	37.910618
BL1	103	L 40X4	0.978	2.4075426	8	19.2603408
BL1	104	L 40X4	1.475	3.6310075	12	43.572089
BL1	105	L 40X4	2.04	5.021868	8	40.174944
BL1	106	L 40X4	1.004	2.4715468	8	19.7723744
BL1	107	L 40X4	0.375	0.9231375	8	7.3851
BL1	108	L 40X4	2.043	5.0292531	8	40.2340248
BL1	109	L 40X4	1.006	2.4764702	8	19.8117616
BL1	110	L 40X4	0.375	0.9231375	8	7.3851
BL1	111	L50X5	1.21	4.648699	4	18.594796
BL1	112	L50X5	0.88	3.380872	4	13.523488
BL1	113	L 40X4	0.495	1.2185415	12	14.622498
BL1	114	L 40X4	0.396	0.9748332	8	7.7986656
BL1	Heavy Mesh	3/16" wire @ 1"CC=(0.235m2)@ 11KGS	2.5	28.325	1	28.325
BL1	Mesh Washers	PL100X40X8	1	0.2575	10	2.575
BL1	S 101	L50X5	0.8	3.07352	9	27.66168
BL1	S 102	L50X5	0.855	3.2848245	3	9.8544735
BL1	S 103	L50X5	1.465	5.6283835	1	5.6283835
BL1	S 104	L50X5	0.599	2.3012981	2	4.6025962
BL1	S 105	L50X5	0.569	2.1860411	2	4.3720822
BL1	L101	L50X5	1.465	5.6283835	3	16.8851505
BL1	L102	L50X5	1.449	5.5669131	1	5.5669131
BL1	P 12	PL 150*160*10	1	1.9364	8	15.4912
BL1	P13	PL 150*160*10	1	1.9364	4	7.7456
BL1	P 11	PL240*160*10	1	3.1003	4	12.4012
BL1	P 15	PL187*110*10	1	1.6583	16	26.5328
BL1	P 17	PL308*120*10	1	2.987	8	23.896
BL1	P18	PL308*50*10	1	1.2463	8	9.9704
BL1	PT	PL400*150*8	1	3.8831	1	3.8831
BL1	1	L 60X6	0.6	3.31866	1	3.31866
BL1	U 10*37		1	0.206	2	0.412
BL1	U10*30		1	0.206	2	0.412
BL1	BOLT SET	M12-40	1	0.06798	410	27.8718
BL1	BOLT SET	M16-60	1	0.16274	32	5.20768
BL1	WASHER		1	0.008446	442	3.733132
					TOTAL WEIGHT	705.96 Kg



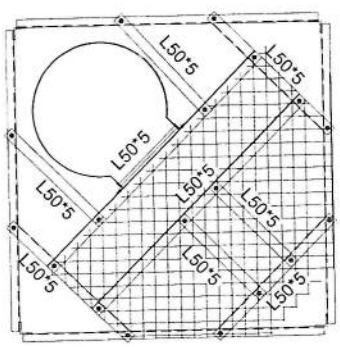
CONNECTION DETAIL



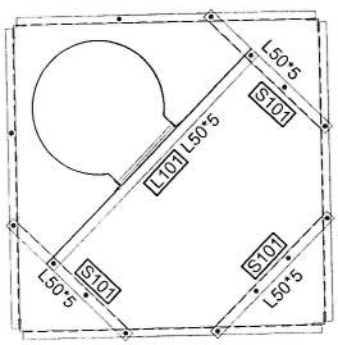
SECTION 2-2



SECTION 3-3



SECTION 2-2



SECTION 1-1

PROFILES GRADE LEGEND

1-L =ST37
2-ML =ST50
3-HT =ST52
4-ALL JOINT PLATES ARE ST52

REV	DESCRIPTION	DESIGN	DRAWN	CHECK	APPR	VRF	DATE
2	FIRST ISSUE	A.GH	Me To Do	D.DEP	A.GH		

CLIENT: AFGHAN TELECOM

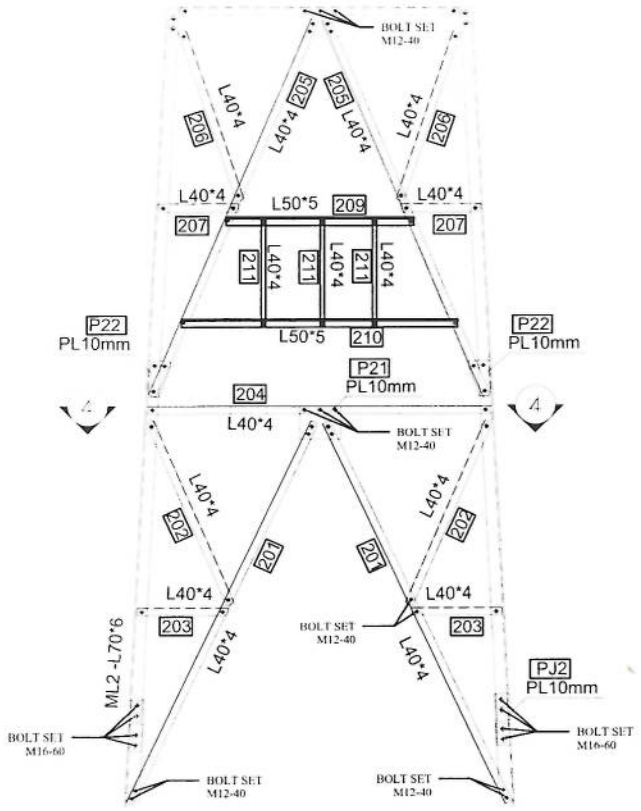
TITLE: APPROVAL DRAWING
FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

CONTRACTOR

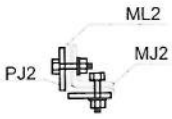
DESIGN AND MANUFACTURER: DAKALSAZAN KALAN CO.

SCALE	FORMAT A1	DESIGN STAGE	DETAIL DESIGN
DAKALSAZAN DWG NO: --		REV 0	SH 1 OF

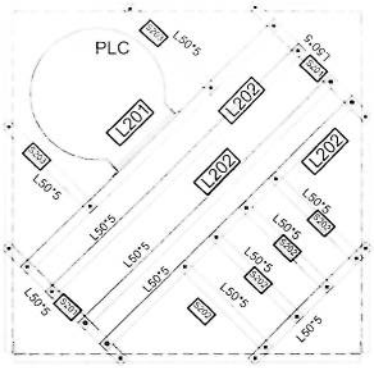
NOTE:
1.ALL BOLT SET IN BRACING ARE M12-40
2.ALL BOLT SET IN MAIN LEGS AND JOINT ARE M16-60
3.ALL PLATE AND JOINT PLATE ARE PLATE 10mm



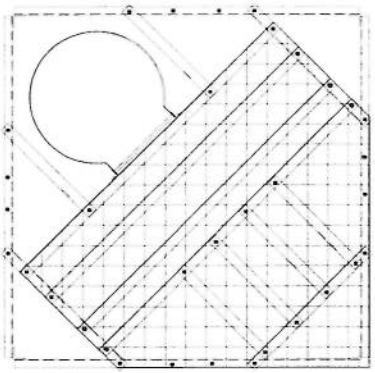
BLOCK 2



CONNECTION DETAIL



SECTION 4-4



SECTION 4-4

Block	Mark	Description	Length	WEIGHT	Qty	Total Weight
BL2	ML2	L70X6	4.005	26.0296965	4	104.118786
BL2	201	L 40X4	2.303	5.6692951	8	45.3543608
BL2	202	L 40X4	1.083	2.6660211	8	21.3281688
BL2	203	L 40X4	0.425	1.0462225	8	8.36978
BL2	204	L 40X4	1.69	4.160273	4	16.641092
BL2	205	L 40X4	2.32	5.711144	8	45.689152
BL2	206	L 40X4	1.115	2.7447955	8	21.958364
BL2	207	L 40X4	0.37	0.910829	8	7.286632
BL2	209	L50X5	0.96	3.688224	4	14.752896
BL2	210	L50X5	1.38	5.301822	4	21.207288
BL2	211	L 40X4	0.585	1.4400945	12	17.281134
BL2	S 201	L50X5	0.877	3.3693463	3	10.1080389
BL2	S 202	L50X5	0.519	1.9939461	4	7.9757844
BL2	S 203	L50X5	0.579	2.2244601	2	4.4489202
BL2	L 201	L50X5	1.723	6.6195937	1	6.6195937
BL2	L 202	L50X5	1.723	6.6195937	3	19.8587811
BL2	Washer	PL100X40X8	1	0.2575	10	2.575
BL2	Bolt Set	M16-60	1	0.16274	32	5.20768
BL2	Bolt Set	M12-40	1	0.06798	304	20.66592
BL2	P 21	PL240*160*10	1	3.1003	4	12.4012
BL2	P 22	PL119*110*10	1	1.0609	8	8.4872
BL2	PJ2	PL320*60*10	1	1.5553	8	12.4424
BL2	MJ2	L 60X6	0.32	1.769952	4	7.079808
BL2	MESH	HEVY MESH	2.5	28.325	1	28.325
BL2	WASHER		1	0.008446	336	2.837856
					TOTAL WEIGHT	473.02 Kg

PROFILES GRADE LEGEND
1-L =ST37
2-ML =ST50
3-HT =ST52
4-ALL JOINT PLATES ARE ST52

CLIENT: AFGHAN TELECOM

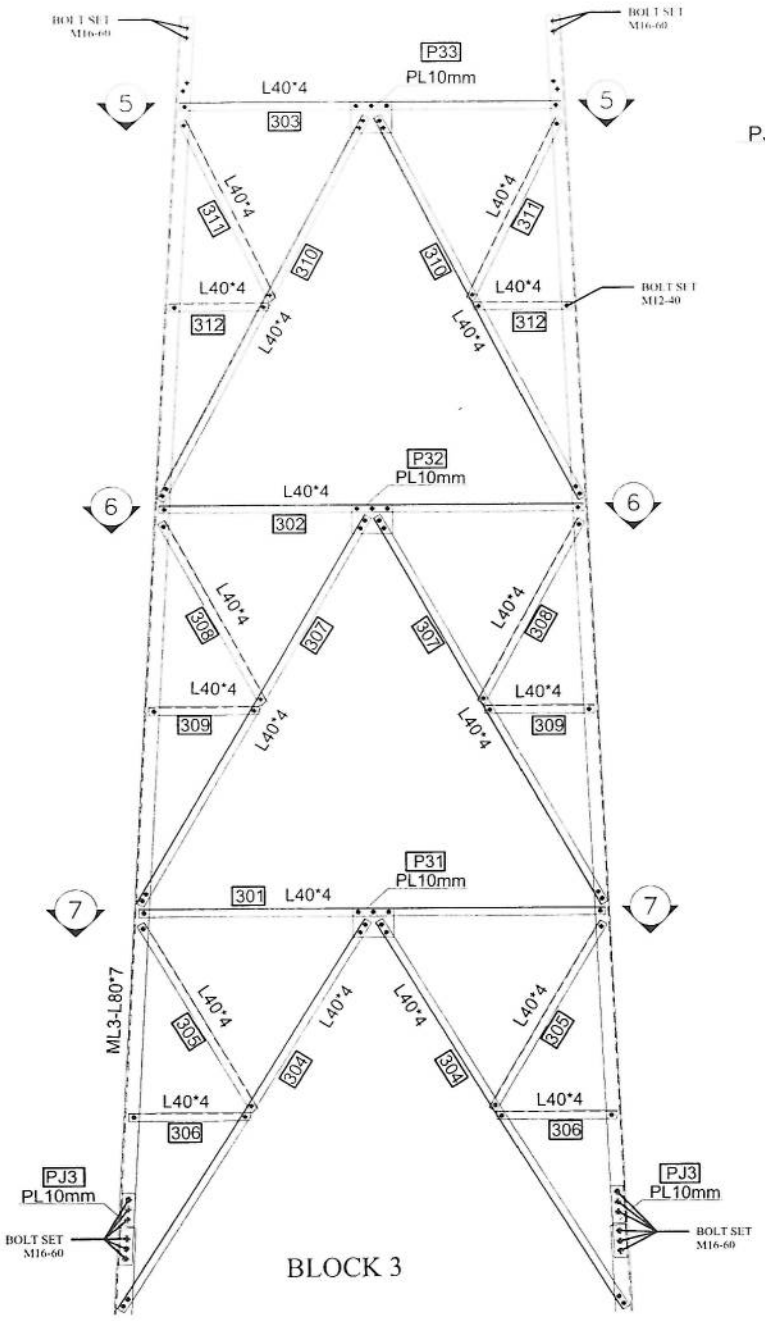
TITLE: APPROVAL DRAWING
FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

CONTRACTOR:

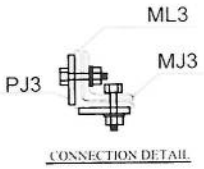
DESIGN AND MANUFACTURER: DAKALSAZAN KALAN CO.

SCALE: FORMAT: A1 DESIGN STAGE: DETAL DESIGN
DAKALSAZAN DWG NO: REV: 0 SH. / TOTAL: 1 OF 20

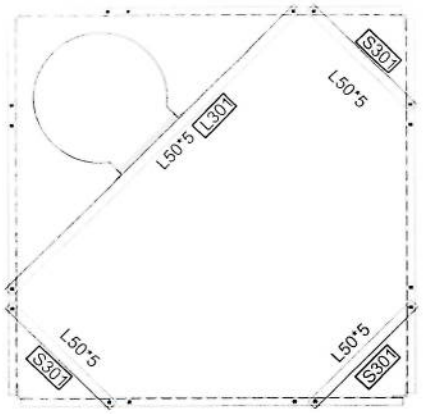
NOTE:
1.ALL BOLT SET IN BRACING ARE M12-40
2.ALL BOLT SET IN MAIN LEGS AND JOINT ARE M16-60
3.ALL PLATE AND JOINT PLATE ARE PLATE 10mm



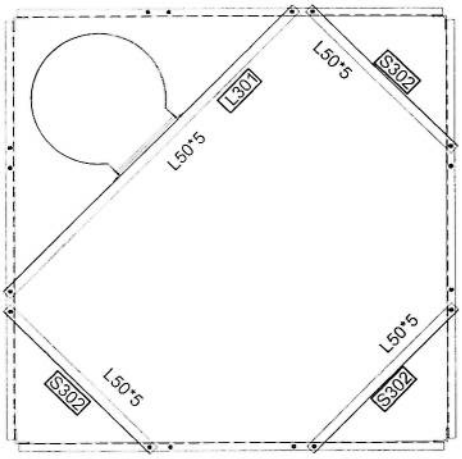
BLOCK 3



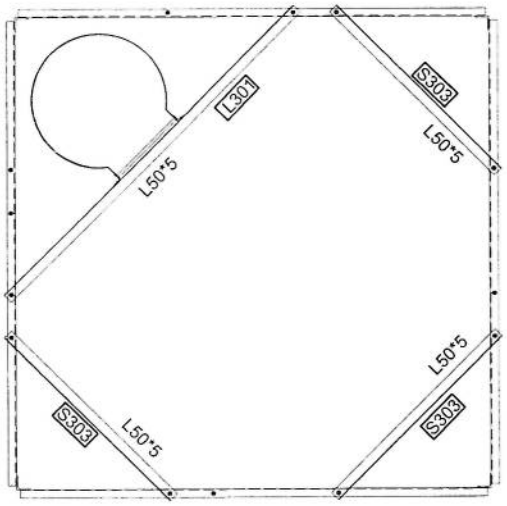
CONNECTION DETAIL



SECTION 5-5



SECTION 6-6



SECTION 7-7

Block	Mark	Description	Length	WEIGHT	Qty	Total Weight
BL3	ML3	L80X7	6	51.9738	4	207.8952
BL3	301	L 40X4	2.336	5.7505312	4	23.0021248
BL3	302	L 40X4	2.122	5.2237274	4	20.8949096
BL3	303	L 40X4	1.925	4.7387725	4	18.95509
BL3	304	L 40X4	2.263	5.5708271	8	44.5666168
BL3	305	L 40X4	1.108	2.7275636	8	21.8205088
BL3	306	L 40X4	0.573	1.4105541	8	11.2844328
BL3	307	L 40X4	2.23	5.489591	8	43.916728
BL3	308	L 40X4	1.086	2.6734062	8	21.3872496
BL3	309	L 40X4	0.526	1.2948542	8	10.3588336
BL3	310	L 40X4	2.185	5.3788145	8	43.030516
BL3	311	L 40X4	1.061	2.6118637	8	20.8949096
BL3	312	L 40X4	0.478	1.1766926	8	9.4135408
BL3	PJ3	PL320*80*10	1	2.0703	8	16.5624
BL3	MJ3	L70X6	0.32	2.079776	4	8.319104
BL3	P 31	PL240*160*10	1	3.1003	4	12.4012
BL3	P 32	PL240*160*10	1	3.1003	4	12.4012
BL3	P 33	PL240*160*10	1	3.1003	4	12.4012
BL3	L 301	L50X5	1.993	7.6569067	3	22.9707201
BL3	S 301	L50X5	0.717	2.7546423	3	8.2639269
BL3	S 302	L50X5	1	3.8419	3	11.5257
BL3	S 303	L50X5	1.31	5.032889	3	15.098667
BL3	Washer	PL100X40X8	1	0.2575	10	2.575
BL3	Bolt Set	M16-60	1	0.16274	48	7.81152
BL3	Bolt Set	M12-40	1	0.06798	288	19.57824
BL3	WASHER		1	0.008446	336	2.837856
					TOTAL WEIGHT	650.17 Kg

NO.	DESCRIPTION	DESIGN	DRAWN	CHECK	APPR.	VRF	DATE
2	FIRST ISSUE	A.GH	Me To De	D.DEP	A.GH	--	

CLIENT: AFGHAN TELECOM

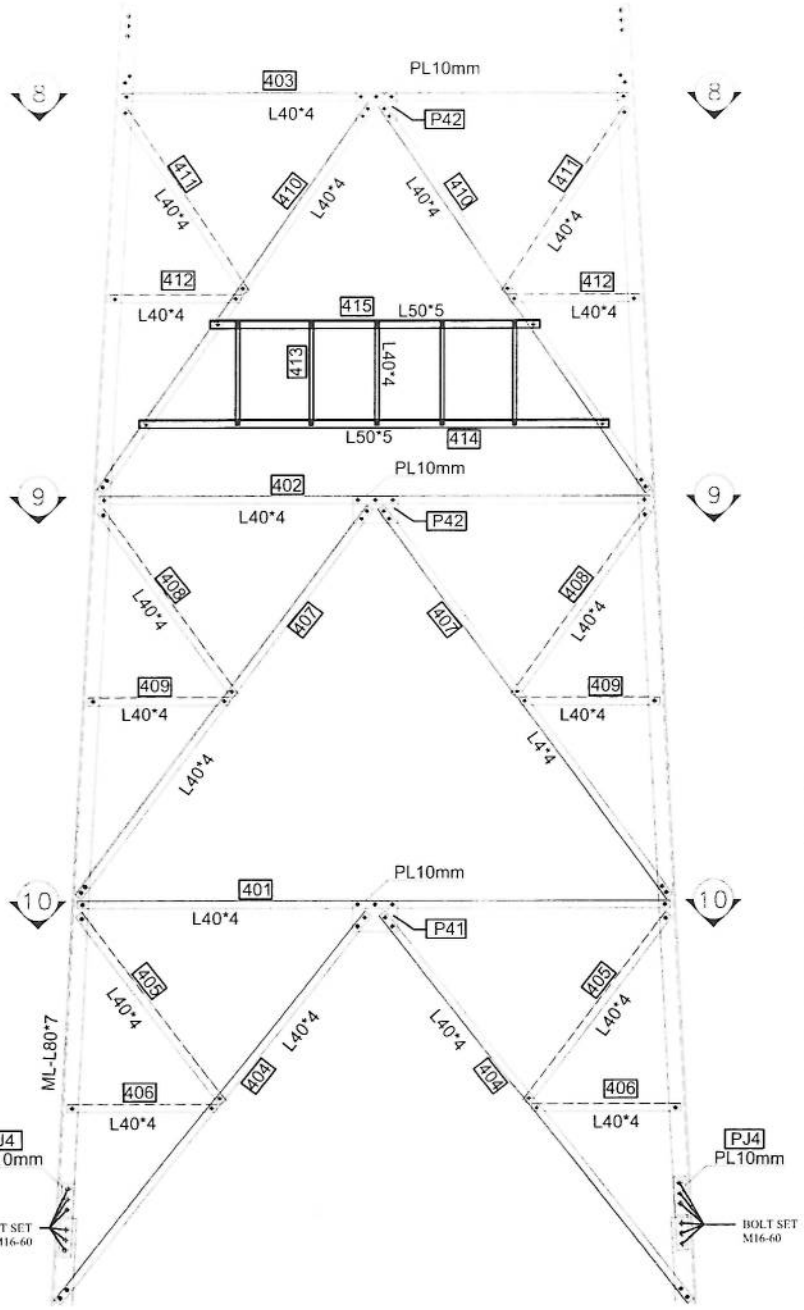
TITLE: APPROVAL DRAWING
FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

CONTRACTOR

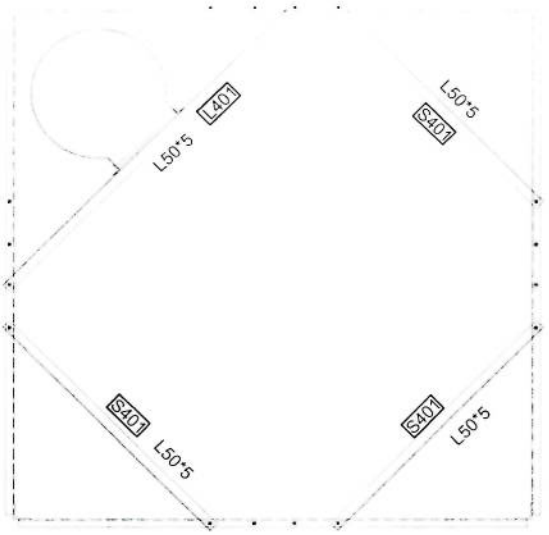
DESIGN AND MANUFACTURER: DAKALSAZAN KALAN CO.

SCALE	FORMAT A1	DESIGN STAGE	DETAIL DESIGN
DAKALSAZAN DWG NO: --		REV: 0	SH. 1 /10 OF: 2

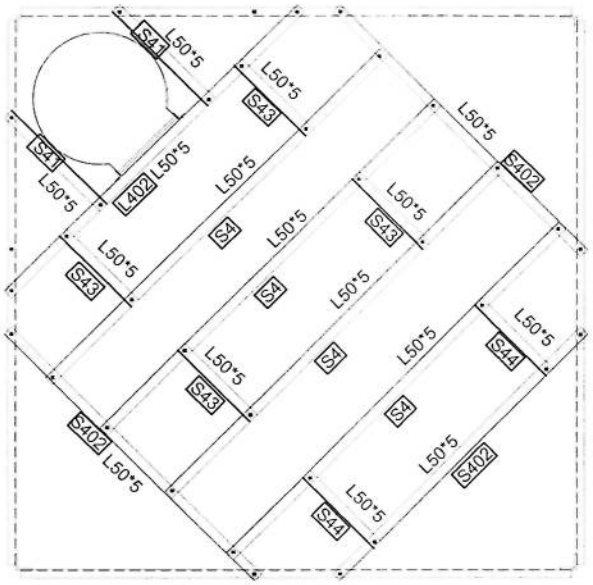
NOTE:
1.ALL BOLT SET IN BRACING ARE M12-40
2.ALL BOLT SET IN MAIN LEGS AND JOINT ARE M16-60
3.ALL PLATE AND JOINT PLATE ARE PLATE 10mm



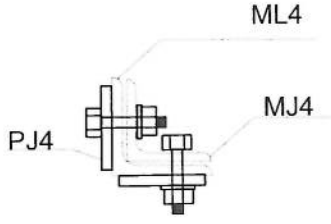
BLOCK 4



SECTION 8-8



SECTION 9-9



CONNECTION DETAIL

PROFILES GRADE LEGEND
1-L =ST37
2-ML =ST50
3-HT =ST52
4-ALL JOINT PLATES ARE ST52

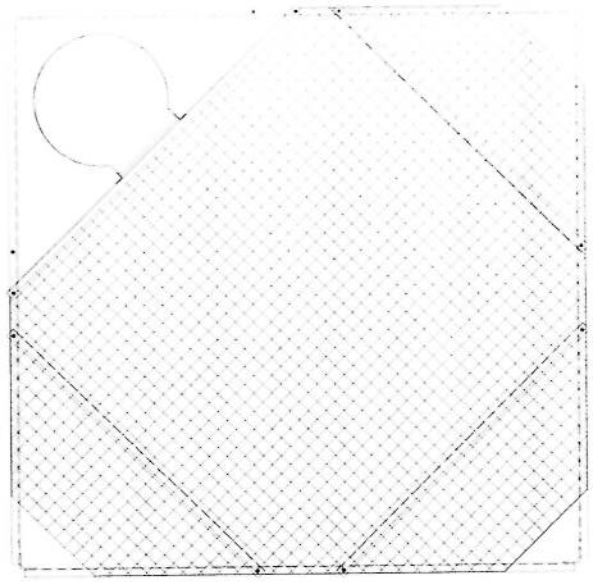
CLIENT: AFGHAN TELECOM

TITLE: APPROVAL DRAWING
FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

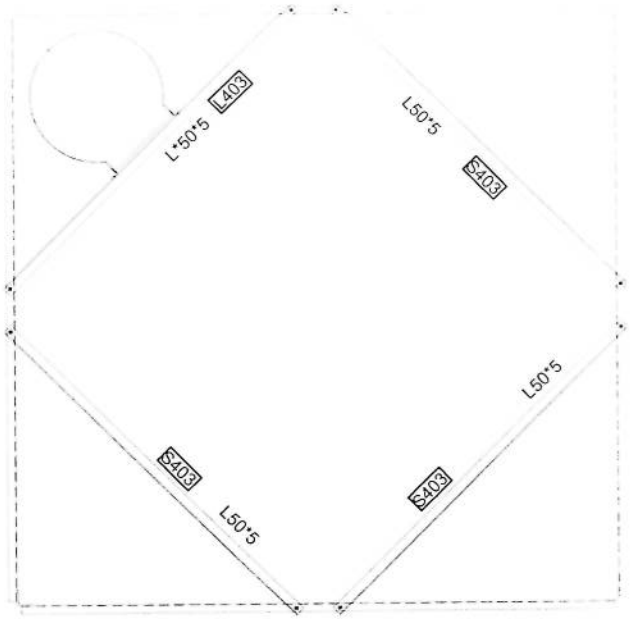
CONTRACTOR:

DESIGN AND MANUFACTURER: DAKALSAZAN KALAN CO.

SCALE: FORMAT: A1 DESIGN STAGE: DETAIL DESIGN
DAKALSAZAN DWG NO: REV: SH. / TOTAL
-- 0 1 OF 20



PLATFORM +22m



SECTION 10-10

Block	Mark	Description	Length	WEIGHT	Qty	Total Weight
BL4	ML4	L80X7	6.005	52.0171115	4	208.068446
BL4	401	L 40X4	2.955	7.2743235	4	29.097294
BL4	402	L 40X4	2.75	6.769675	4	27.0787
BL4	403	L 40X4	2.534	6.2379478	4	24.9517912
BL4	404	L 40X4	2.444	6.0163948	8	48.1311584
BL4	405	L 40X4	1.185	2.9171145	8	23.336916
BL4	406	L 40X4	0.71	1.747807	8	13.982456
BL4	407	L 40X4	2.38	5.858846	8	46.870768
BL4	408	L 40X4	1.158	2.8506486	8	22.8051888
BL4	409	L 40X4	0.664	1.6345688	8	13.0765504
BL4	410	L 40X4	2.321	5.7136057	8	45.7088456
BL4	411	L 40X4	1.132	2.7866444	8	22.2931552
BL4	412	L 40X4	0.617	1.5188689	8	12.1509512
BL4	413	L 40X4	0.545	1.3416265	20	26.83253
BL4	414	L50X5	2.293	8.8094767	4	35.2379068
BL4	415	L50X5	1.59	6.108621	4	24.434484
BL4	L 401	L50X5	1.995	7.6645905	1	7.6645905
BL4	S401	L50X5	1.519	5.8358461	3	17.5075383
BL4	S402	L50X5	1.7	6.53123	3	19.59369
BL4	S403	L50X5	1.986	7.6300134	3	22.8900402
BL4	L 402	L50X5	1.986	7.6300134	1	7.6300134
BL4	L 403	L50X5	1.986	7.6300134	1	7.6300134
BL4	S4	L50X5	1.387	5.3287153	4	21.3148612
BL4	S44	L50X5	0.61	2.343559	2	4.687118
BL4	S41	L50X5	0.62	2.381978	2	4.763956
BL4	S43	L50X5	0.467	1.7941673	4	7.1766692
BL4	P 41	PL300*200*10	1	4.8513	4	19.4052
BL4	P 42	PL300*200*10	1	4.8513	4	19.4052
BL4	P 43	PL300*200*10	1	4.8513	4	19.4052
BL4	MJ4	L70X6	0.42	2.729706	4	10.918824
BL4	PJ 4	PL420*80*10	1	2.7192	8	21.7536
BL4	Bolt Set	M16-60	1	0.16274	64	10.41536
BL4	Bolt Set	M12-40	1	0.06798	372	25.28856
BL4	Washer	PL100X40X8	1	0.2575	20	5.15
BL4	MESH	HEVY MESH	5.1	57.783	1	57.783
BL4	WASHER		1	0.008446	436	3.682456
					TOTAL WEIGHT	938.12 Kg

REV	DESCRIPTION	DESIGN	DRAWN	CHECK	APPR	VRF	DATE
2	FIRST ISSUE	A.GH	Me To De	D.DEP	A.GH		

CLIENT: AFGHAN TELECOM

TITLE: APPROVAL DRAWING
FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

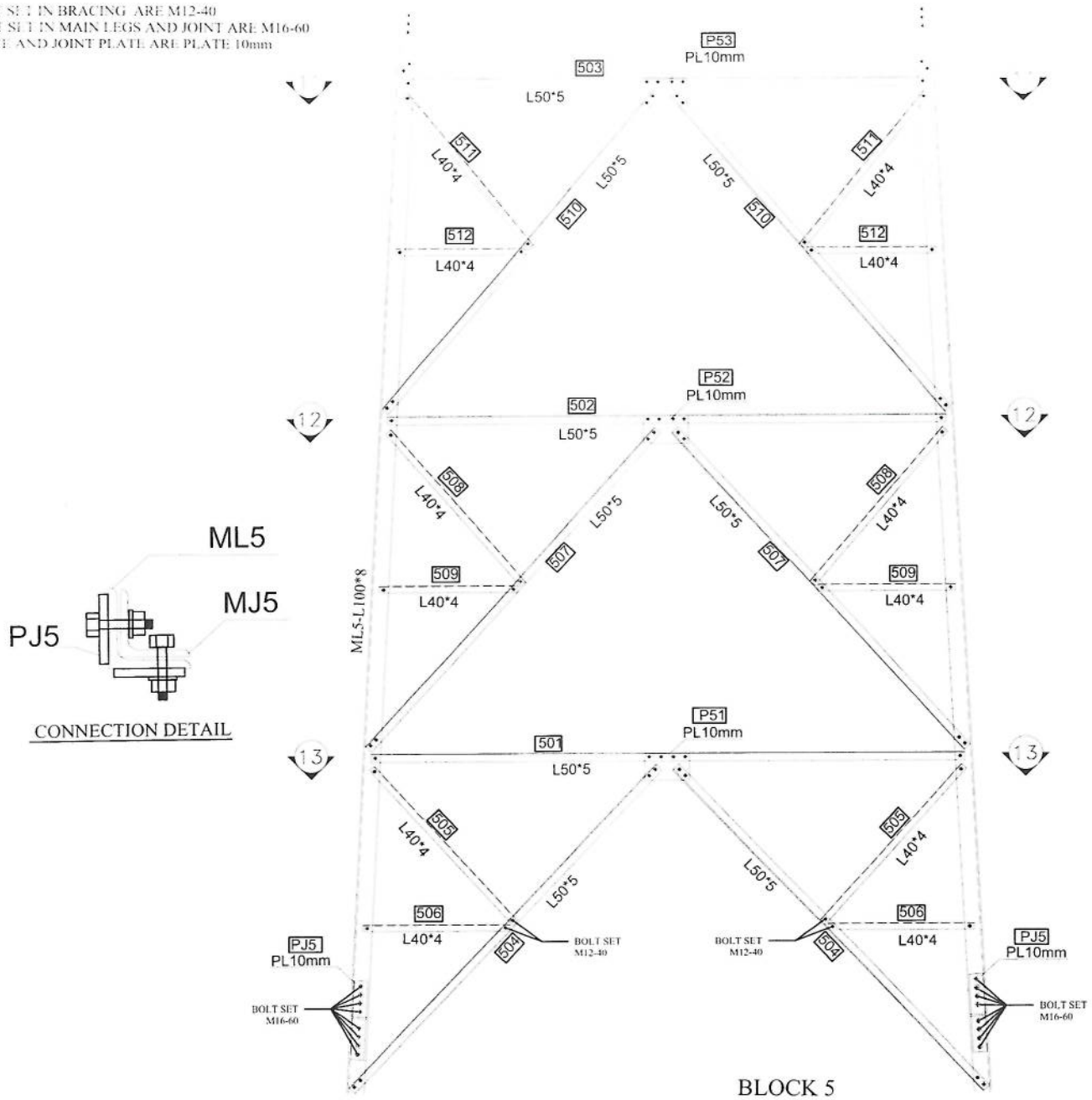
CONTRACTOR

DESIGN AND MANUFACTURER: DAKALSAZAN KALAN CO.

SCALE | FORMAT: A1 | DESIGN STAGE | DETAIL DESIGN

DAKALSAZAN DWG NO | REV 0 | SH 1 OF 2

NOTE:
1.ALL BOLT SET IN BRACING ARE M12-40
2.ALL BOLT SET IN MAIN LEGS AND JOINT ARE M16-60
3.ALL PLATE AND JOINT PLATE ARE PLATE 10mm



CONNECTION DETAIL

BLOCK 5

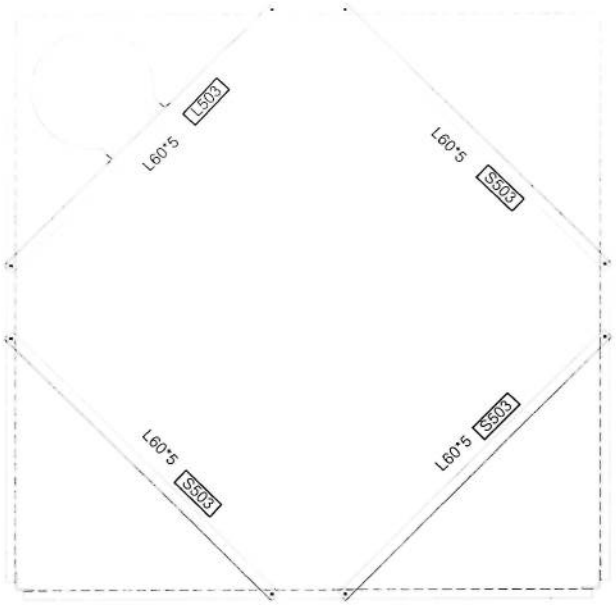
Block	Mark	Description	Length	WEIGHT	Qty	Total Weight
BL5	ML5	L 100X8	6.005	74.592909	4	298.371636
BL5	501	L50X5	3.588	13.7847372	4	55.1389488
BL5	502	L50X5	3.382	12.9933058	4	51.9732232
BL5	503	L50X5	3.177	12.2057163	4	48.8228652
BL5	504	L50X5	2.648	10.1733512	8	81.3868096
BL5	505	L 40X4	1.24	3.052508	8	24.420064
BL5	506	L 40X4	0.818	2.0136706	8	16.1093648
BL5	507	L50X5	2.577	9.9005763	8	79.2046104
BL5	508	L 40X4	1.208	2.9737336	8	23.7898688
BL5	509	L 40X4	0.771	1.8979707	8	15.1837656
BL5	510	L50X5	2.514	9.6585366	8	77.2682928
BL5	511	L 40X4	1.177	2.8974209	8	23.1793672
BL5	512	L 40X4	0.724	1.7822708	8	14.2581664
BL5	L503	L 60X5	1.98	9.197694	3	27.593082
BL5	S 503	L 60X5	1.98	9.197694	9	82.779246
BL5	P51	PL260*180*10	1	3.7801	4	15.1204
BL5	P52	PL260*180*10	1	3.7801	4	15.1204
BL5	P 53	PL260*180*10	1	3.7801	4	15.1204
BL5	Bolt Set	M16-60	1	0.16274	64	10.41536
BL5	Bolt Set	M12-40	1	0.06798	288	19.57824
BL5	MJ5	L80X7	0.42	3.638166	4	14.552664
BL5	PJ5	PL420*90*10	1	3.0591	8	24.4728
BL5	Washer		1	0.008446	350	2.9561
					TOTAL WEIGHT	1036.82 Kg

AFGHAN TELECOM

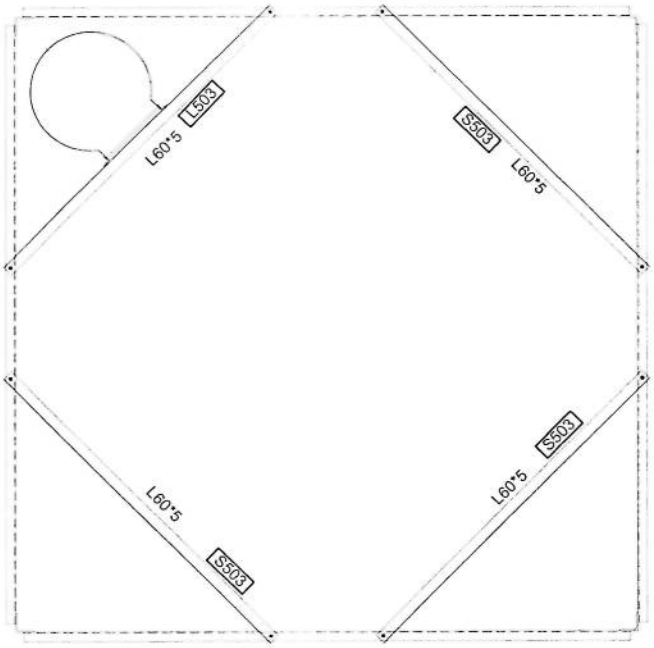
APPROVAL DRAWING
FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

DESIGN AND MANUFACTURER
DAKALSAZAN KALAN CO.

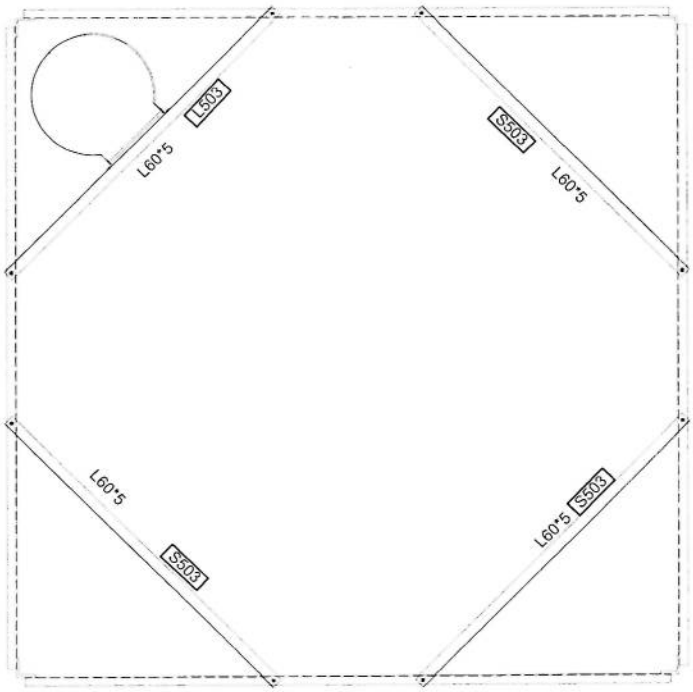
SCALE | FORMAT A1 | DESIGN STAGE DETAIL DESIGN
DAKALSAZAN DWG NO: | REV 0 | SH 1 OF 20



SECTION 11-11



SECTION 12-12



SECTION 13-13

AFGHAN TELECOM

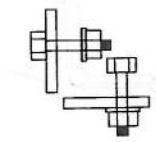
APPROVAL DRAWING
FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

CONTRACTOR

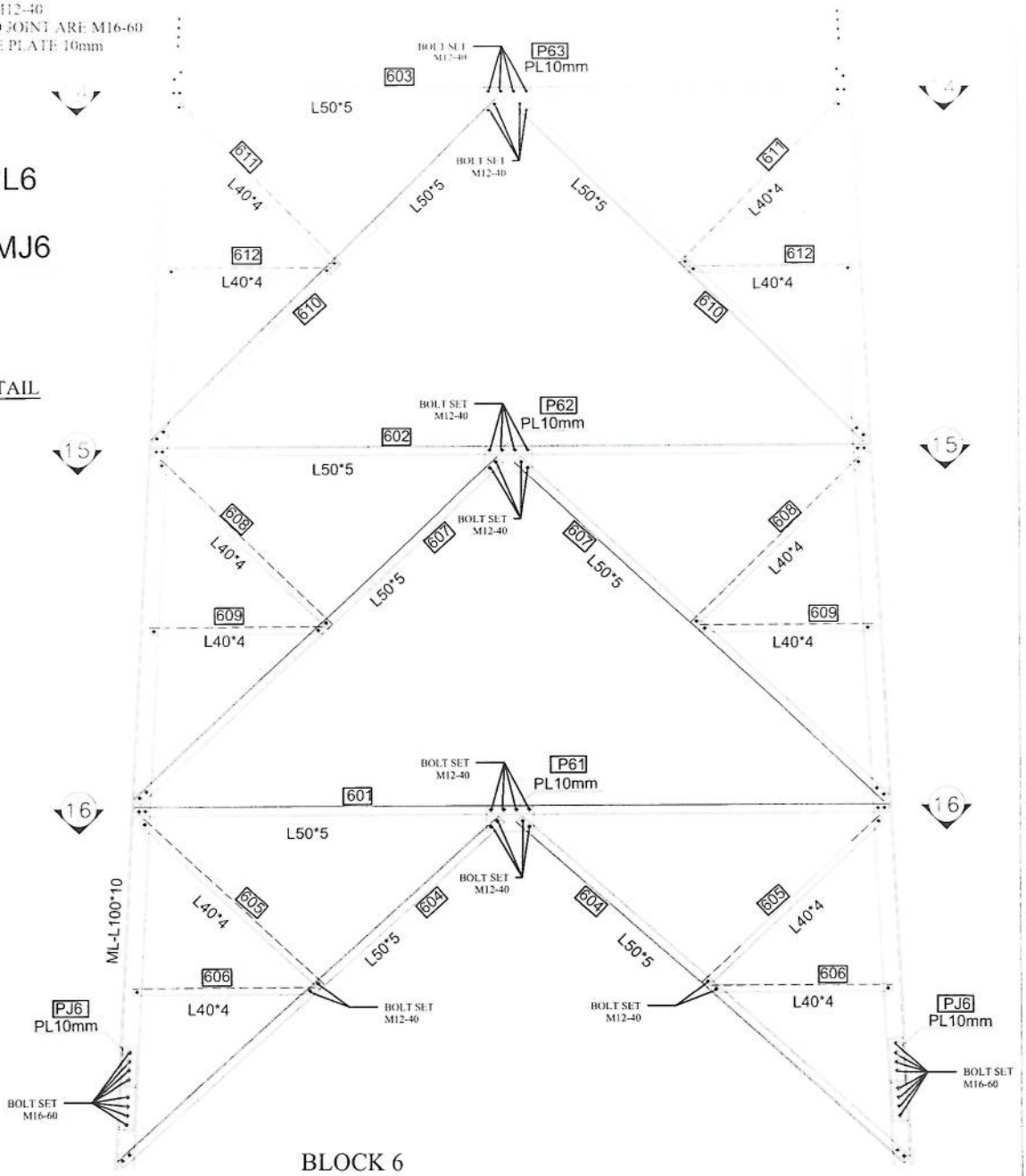
DESIGN AND MANUFACTURER
DAKAISAZAN KALAN CO.

SCALE | FORMAT A1 | DESIGN STAGE | DETAIL DESIGN
DAKAISAZAN DWG NO.
REV 0 | SH 1 OF 20

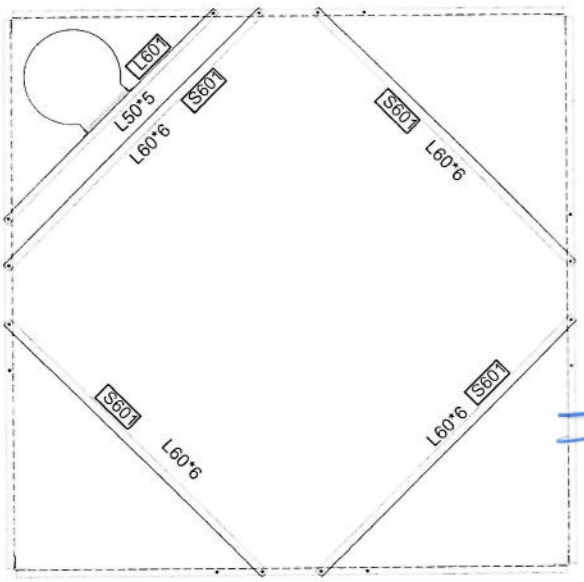
NOTE:
1.ALL BOLT SET IN BRACING ARE M12-40
2.ALL BOLT SET IN MAIN LEGS AND JOINT ARE M16-60
3.ALL PLATE AND JOINT PLATE ARE PLATE 10mm



CONNECTION DETAIL



BLOCK 6

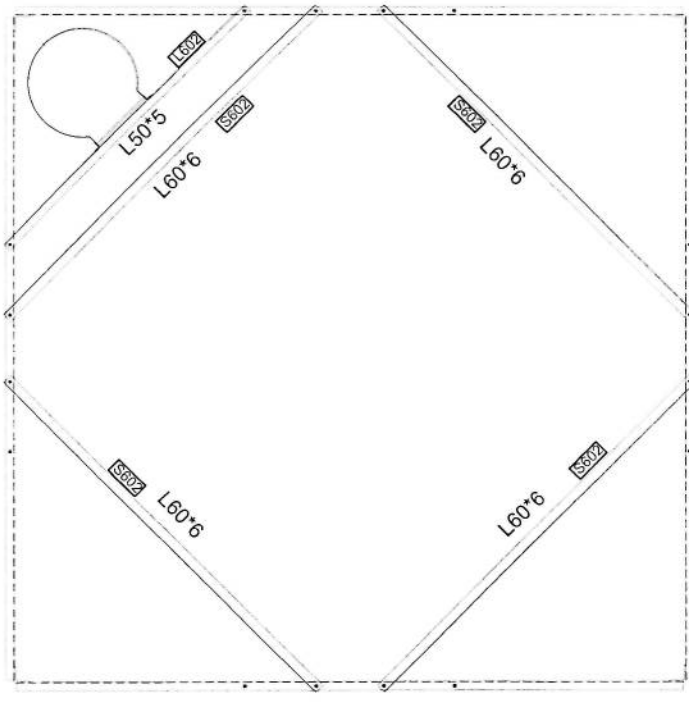


SECTION 14-14

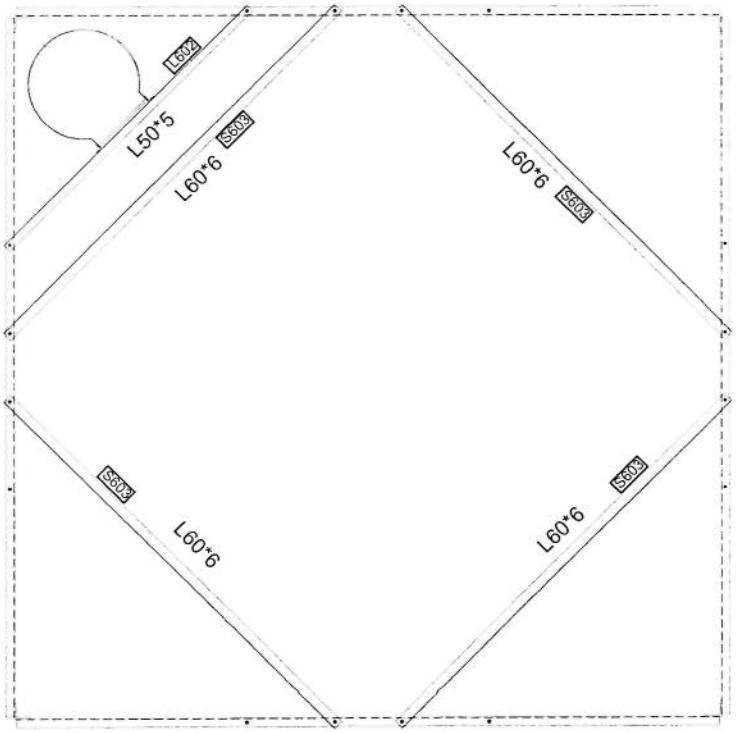
| | | |

NOTE
1.ALL BOLT SET IN BRACING ARE M12-40
2.ALL BOLT SET IN MAIN LEGS AND JOINT ARE M16-60
3.ALL PLATE AND JOINT PLATE ARE PLATE 10mm

Block	Mark	Description	Length	WEIGHT	Qty	Total Weight
BL6	ML6	L100X10	6.005	92.282438	4	369.129752
BL6	601	L50X5	4.205	16.1551895	4	64.620758
BL6	602	L50X5	3.999	15.3637581	4	61.4550324
BL6	603	L50X5	3.793	14.5723267	4	58.2893068
BL6	604	L50X5	2.856	10.9724664	8	87.7797312
BL6	605	L 40X4	1.342	3.3036014	8	26.4288112
BL6	606	L 40X4	0.954	2.3484618	8	18.7876944
BL6	607	L50X5	2.781	10.6843239	8	85.4745912
BL6	608	L 40X4	1.306	3.2149802	8	25.7198416
BL6	609	L 40X4	0.906	2.2303002	8	17.8424016
BL6	610	L50X5	2.708	10.4038652	8	83.2309216
BL6	611	L 40X4	1.271	3.1288207	8	25.0305656
BL6	612	L 40X4	0.858	2.1121386	8	16.8971088
BL6	L 601	L50X5	2	7.6838	1	7.6838
BL6	L 602	L50X5	1.999	7.6799581	2	15.3599162
BL6	S 601	L60X6	2.434	13.4626974	4	53.8507896
BL6	S 602	L60X6	2.578	14.2591758	4	57.0367032
BL6	S 603	L60X6	2.724	15.0667164	4	60.2668656
BL6	P 61	PL300*200*10	1	4.8513	4	19.4052
BL6	P62	PL300*200*10	1	4.8513	4	19.4052
BL6	P 63	PL300*200*10	1	4.8513	4	19.4052
BL6	PJ 6	PL420*90*10	1	3.0591	8	24.4728
BL6	MJ6	L80X7	0.42	3.638166	4	14.552664
BL6	Bolt Set	M16-60	1	0.16274	64	10.41536
BL6	Bolt Set	M12-40	1	0.06798	318	21.61764
BL6	Washer		1	0.008446	382	3.226372
					TOTAL WEIGHT	1267.39 Kg



SECTION 15-15



SECTION 16-16

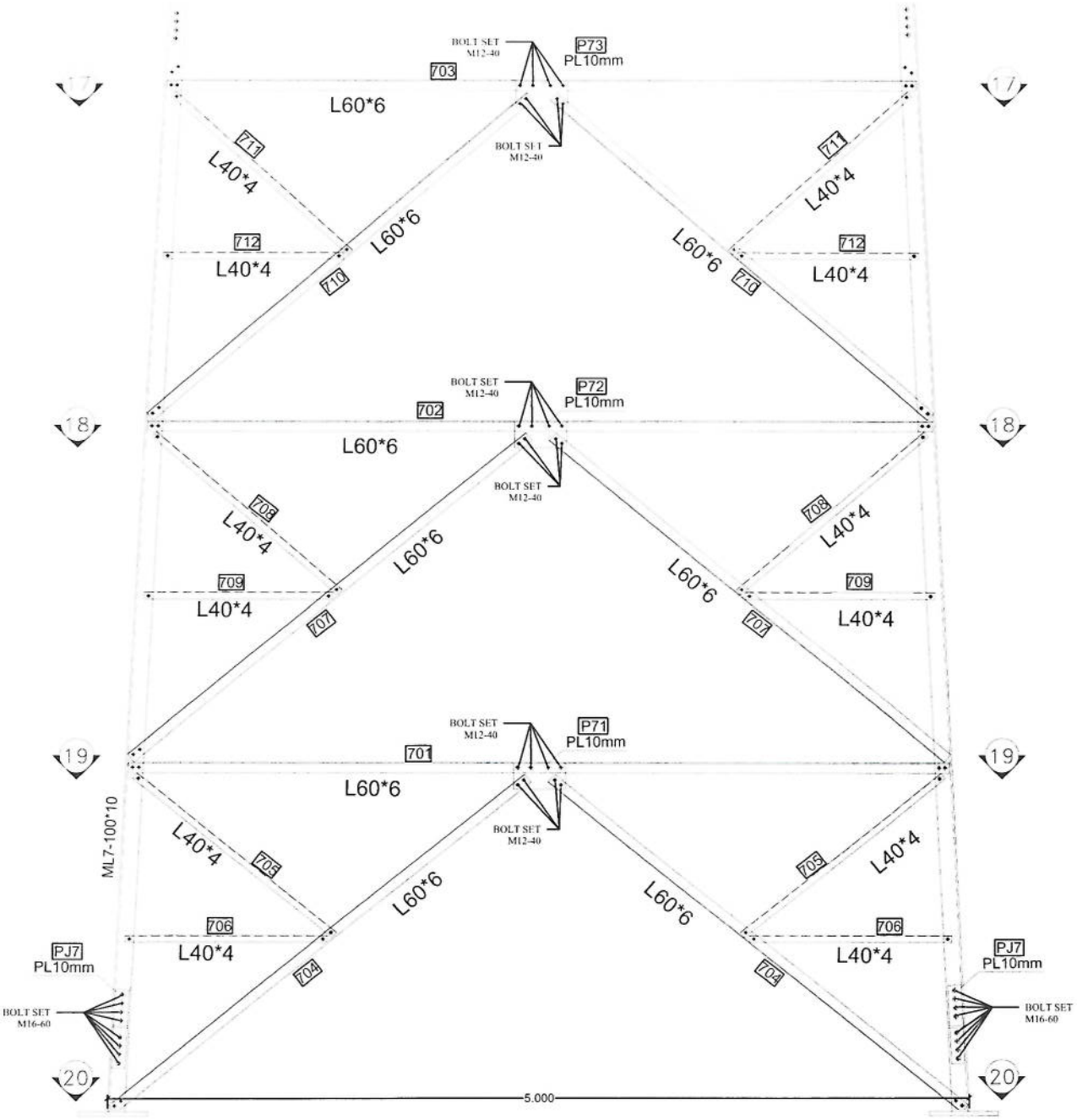
AFGHAN TELECOM

APPROVAL DRAWING
FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

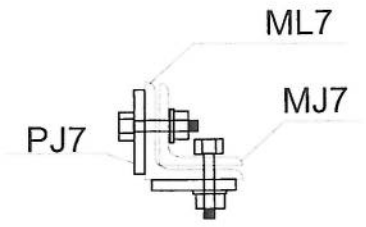
CONTRACTOR

DESIGN AND MANUFACTURER
DAKALSAZAN KALAN CO.

NOTE:
1.ALL BOLT SET IN BRACING ARE M12-40
2.ALL BOLT SET IN MAIN LEGS AND JOINT ARE M16-60
3.ALL PLATE AND JOINT PLATE ARE PLATE 10mm



BLOCK 7



CONNECTION DETAIL

PROFILES GRADE LEGEND

1-L =ST37

2-ML =ST50

3-HT =ST52

4-ALL JOINT PLATES ARE ST52

CLIENT: AFGHAN TELECOM

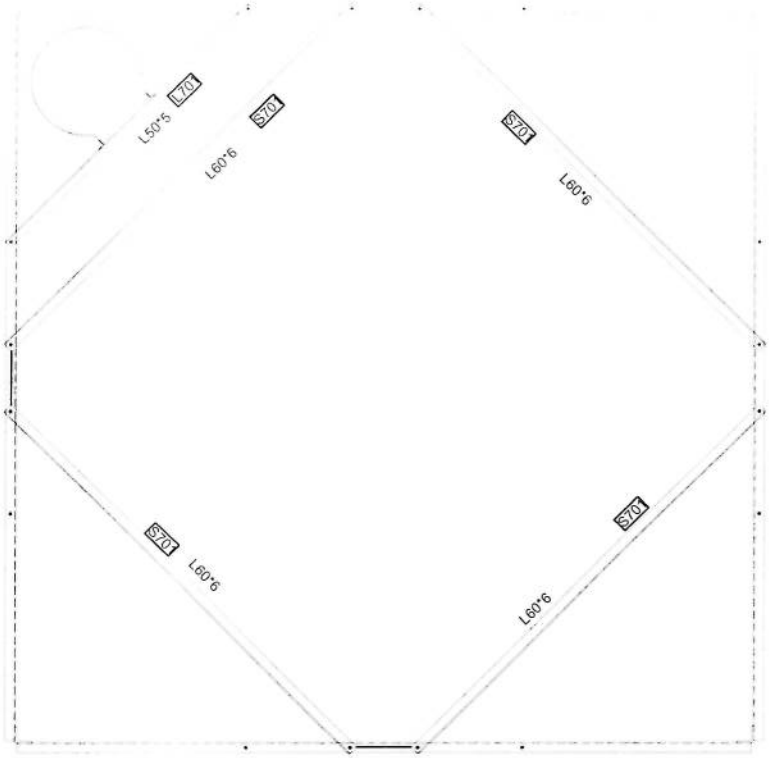
TITLE: APPROVAL DRAWING
FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

CONTRACTOR

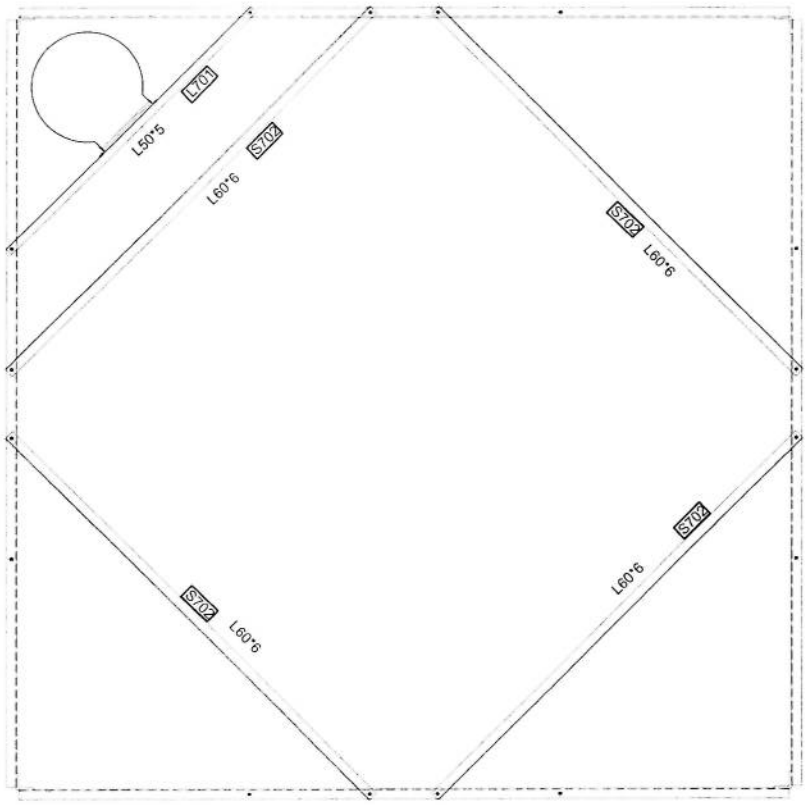
DESIGN AND MANUFACTURER: DAKALSAZAN KALAN CO.

SCALE | FORMAT A1 | DESIGN STAGE | DETAIL DESIGN

DAKALSAZAN DWG NO. | REV. 0 | SH. 1 OF 20



SECTION 17–17



SECTION 18–18

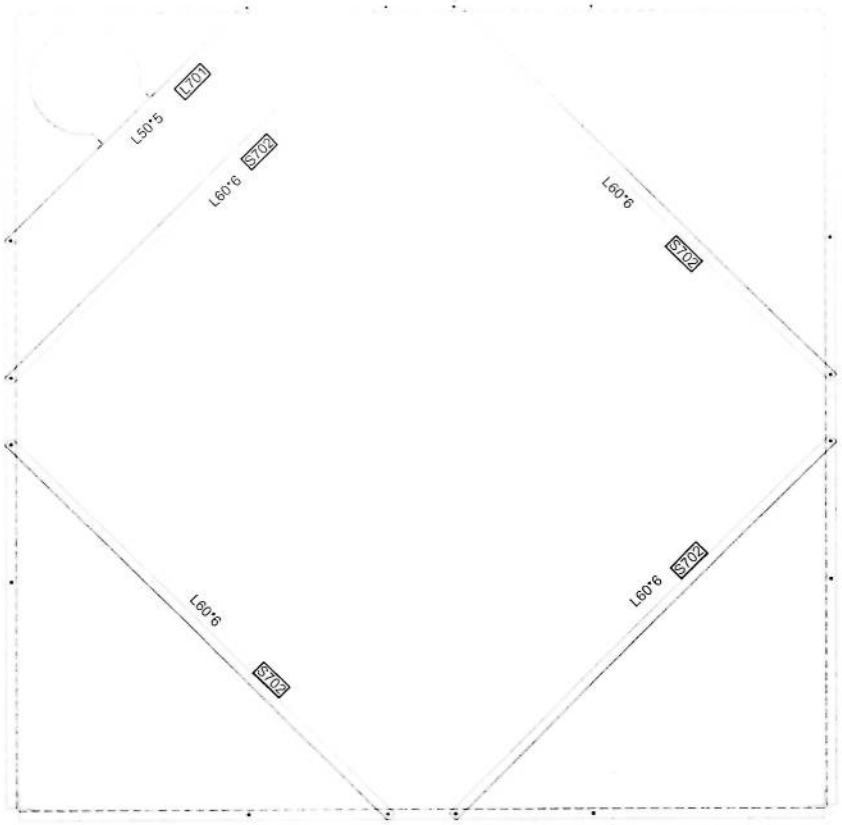
AFGHAN TELECOM

APPROVAL DRAWING

FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

DESIGN AND MANUFACTURER
DAKALSAZAN KALAN CO.

SCALE | FORMAT A1 | DESIGN STAGE DETAIL DESIGN
DAKALSAZAN DWG NO. | REV 0 | SH 1 OF 20 | TOTAL



SECTION 19-19

Block	Mark	Description	Length	WEIGHT	Qty	Total Weight
BL7	ML 7	L 100X10	5.5	84.5218	4	338.0872
BL7	701	L60X6	4.781	26.4441891	4	105.7767564
BL7	702	L60X6	4.595	25.4154045	4	101.661618
BL7	703	L60X6	4.41	24.392151	4	97.568604
BL7	704	L60X6	2.962	16.3831182	8	131.0649456
BL7	705	L 40X4	1.403	3.4537651	8	27.6301208
BL7	706	L 40X4	1.072	2.6389424	8	21.1115392
BL7	707	L60X6	2.855	15.7912905	8	126.330324
BL7	708	L 40X4	1.348	3.3183716	8	26.5469728
BL7	709	L 40X4	1.028	2.5306276	8	20.2450208
BL7	710	L60X6	2.779	15.3709269	8	122.9674152
BL7	711	L 40X4	1.315	3.2371355	8	25.897084
BL7	712	L 40X4	0.985	2.4247745	8	19.398196
BL7	L701	L50X5	2	7.6838	3	23.0514
BL7	S 701	L60X6	2.876	15.9074436	4	63.6297744
BL7	S 702	L60X6	3	16.5933	8	132.7464
BL7	P 71	PL300*175*10	1	4.2436	4	16.9744
BL7	P72	PL300*175*10	1	4.2436	4	16.9744
BL7	P 73	PL300*175*10	1	4.2436	4	16.9744
BL7	PJ 7	PL420*90*10	1	3.0591	8	24.4728
BL7	MJ7	L80X7	0.42	3.638166	4	14.552664
BL7	Bolt Set	M16-60	1	0.16274	64	10.41536
BL7	Bolt Set	M12-40	1	0.06798	318	21.61764
BL7	Washer		1	0.008446	382	3.226372
					TOTAL WEIGHT	1508.92 Kg

CLIENT: AFGHAN TELECOM

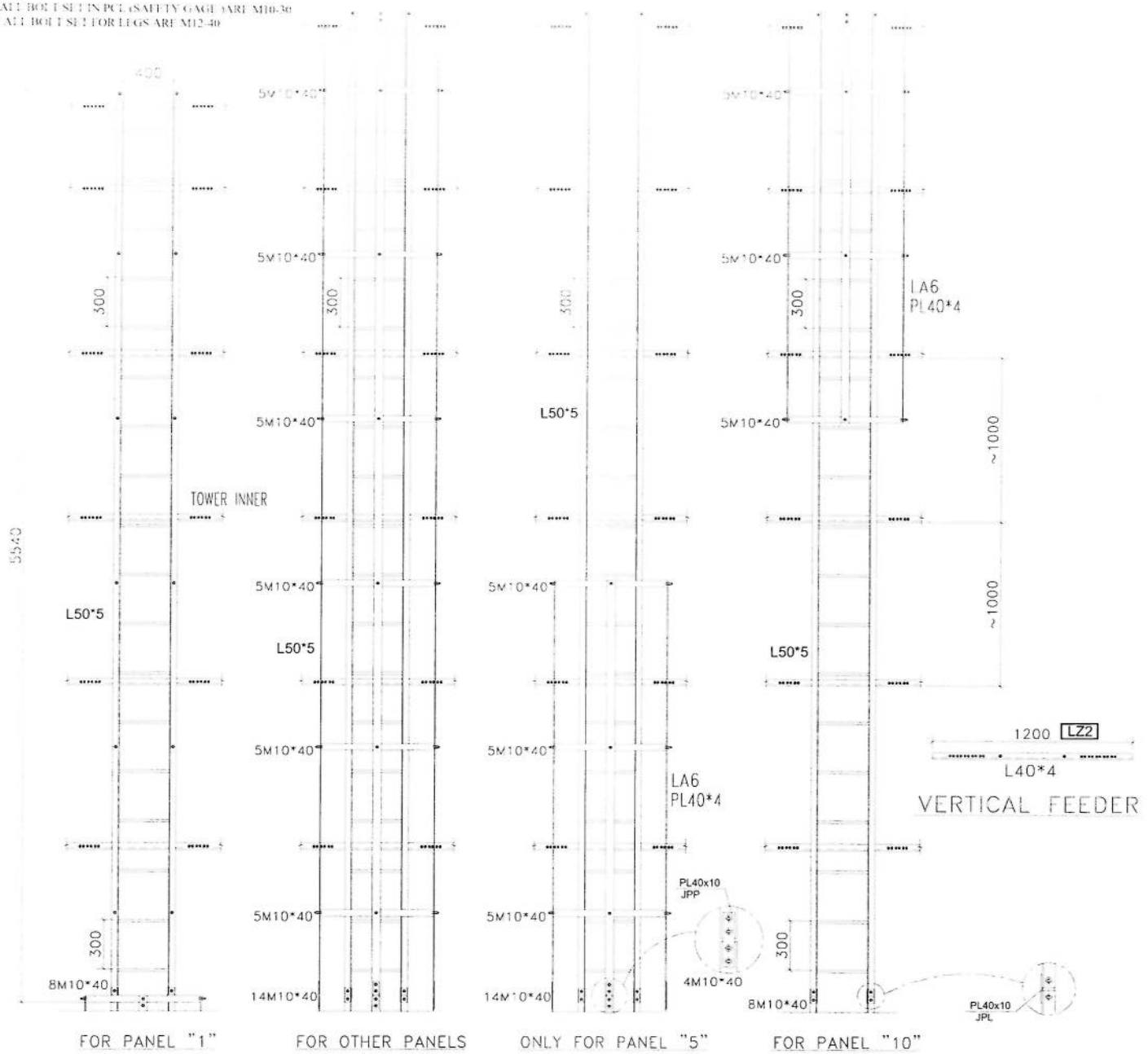
TITLE: APPROVAL DRAWING
FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

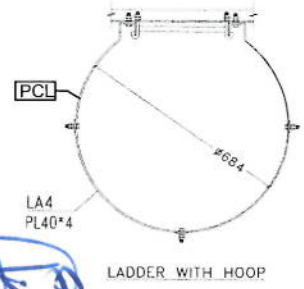
CONTRACTOR

DESIGN AND MANUFACTURER: DAKALSAZAN KALAN CO.

SCALE | FORMAT | DESIGN STAGE | DETAIL DESIGN
DAKALSAZAN DWG NO | REV 0 | SH 1 OF 20

NOTE
1. ALL BOLT SET IN PCL (SAFETY GAGE) ARE M10-30
2. ALL BOLT SET FOR LEGS ARE M12-40





Block	Mark	Description	Length	WEIGHT	Qty	Total Weight
Ladder	PCL	PL40X4	1.875	2.433375	29	70.567875
Ladder	PL6	PL40X4	5.868	7.6154904	3	22.8464712
Ladder	PL5	PL40X4	5.996	7.7816088	3	23.3448264
Ladder	PL4	PL40X4	4.168	5.4092304	3	16.2276912
Ladder	PL3	PL40X4	5.603	7.2715734	3	21.8147202
Ladder	PL2	PL40X4	1.448	1.8792144	3	5.6376432
Ladder	PL1	PL40X4	4.05	5.25609	3	15.76827
Ladder	LL7	L50X5	5.995	23.0321905	2	46.064381
Ladder	LL6	L50X5	5.995	23.0321905	2	46.064381
Ladder	LL5	L50X5	5.995	23.0321905	2	46.064381
Ladder	LL4	L50X5	5.997	23.0398743	2	46.0797486
Ladder	LL3	L50X5	5.997	23.0398743	2	46.0797486
Ladder	LL2	L50X5	2.998	11.5180162	2	23.0360324
Ladder	LL1	L50X5	6.048	23.2358112	2	46.4716224
Ladder		L50X5	0.57	2.189883	2	4.379766
Ladder	ROD	Φ 16	0.5	0.8137	134	109.0358
Ladder	JPP	PL184*40*8	1	0.4738	9	4.2642
Ladder	JPL	PL105*40*8	1	0.2678	24	6.4272
Ladder	LZ2	L40X4	1.2	2.95404	40	118.1616
Ladder	J BOLT SET	Φ 10	0.1	0.06386	80	5.1088
Ladder	BOLT SET	M10-30	1	0.05974	150	8.961
Ladder	BOLT SET	M12-40	1	0.06798	84	5.71032
Ladder	Washer		1	0.008446	234	1.976364
					TOTAL WEIGHT	740.09 Kg

REV	DESCRIPTION	DESIGN	DRAWN	CHECK	APPR	VRF	DATE
2	FIRST ISSUE	A.GH	Me To De	D.DEF	A.GH		

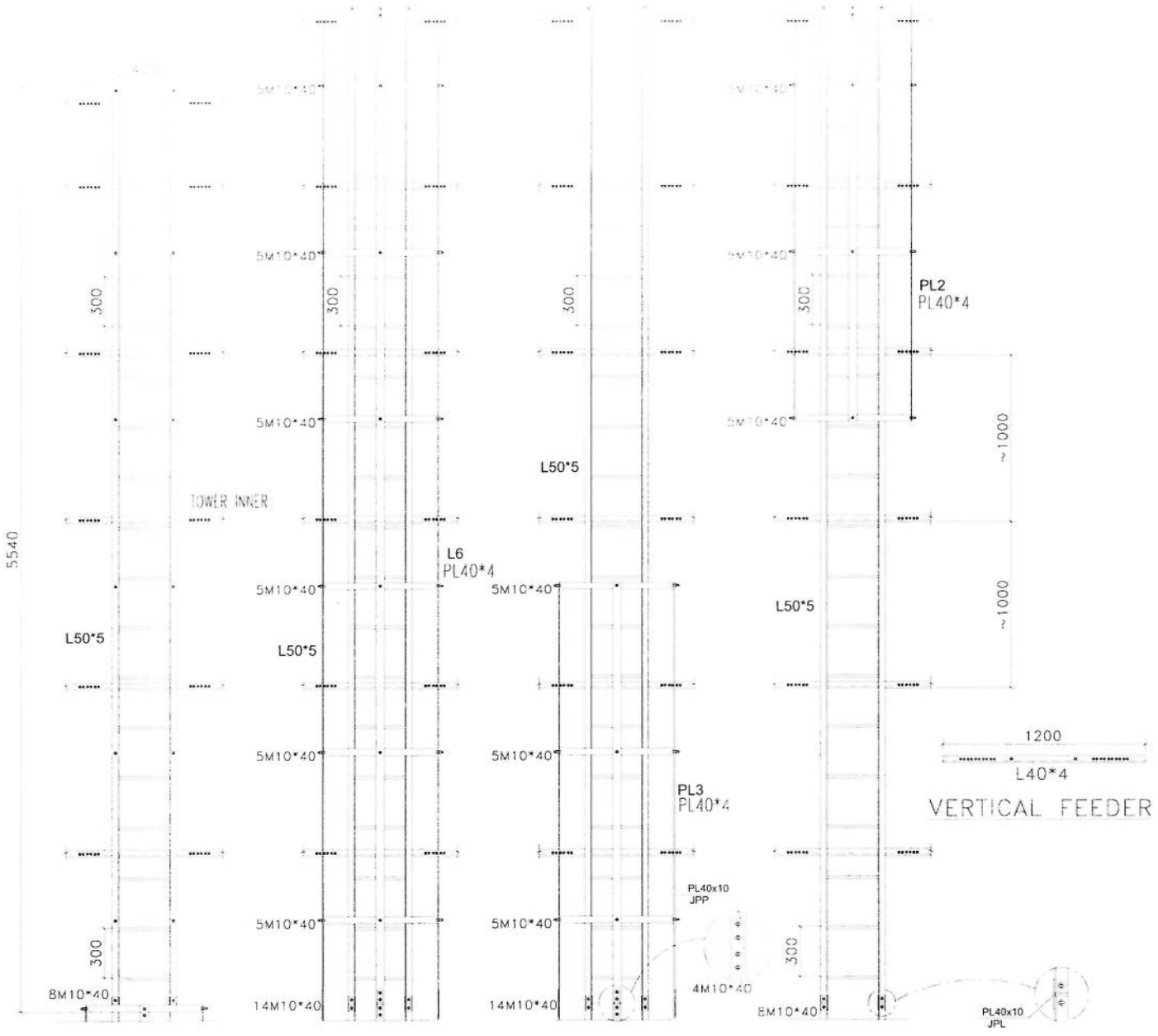
CLIENT
AFGHAN TELECOM

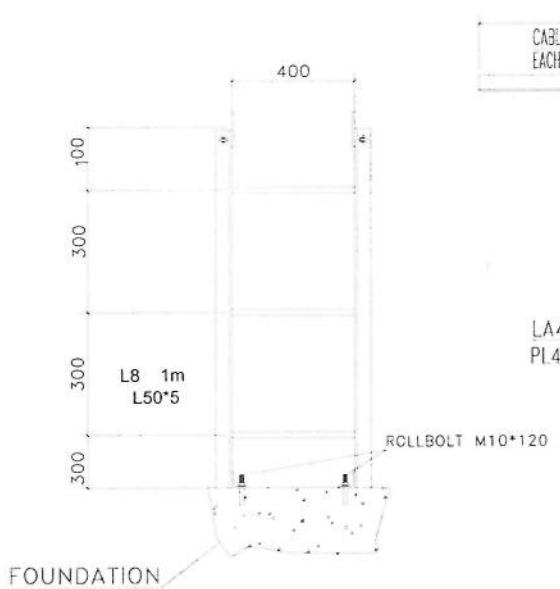
TITLE
APPROVAL DRAWING
FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

CONTRACTOR

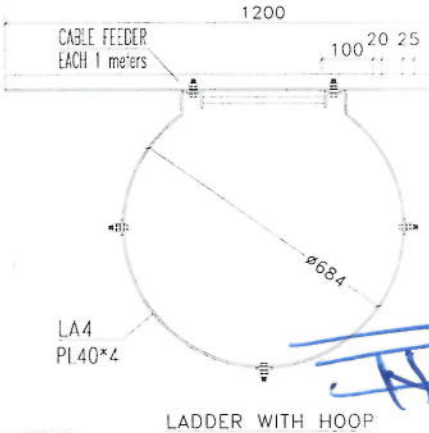
DESIGN AND MANUFACTURER
DAKALSAZAN KALAN CO.

SCALE | FORMAT A1 | DESIGN STAGE | DETAIL DESIGN
DAKALSAZAN DWG NO | REV 0 | SH 1 OF 20





INSTALL BOTTOM PART OF LADDERS



LADDER WITH HOOP



LADDER WITHOUT HOOP

AFGHAN TELECOM

APPROVAL DRAWING

FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

CONTRACTOR

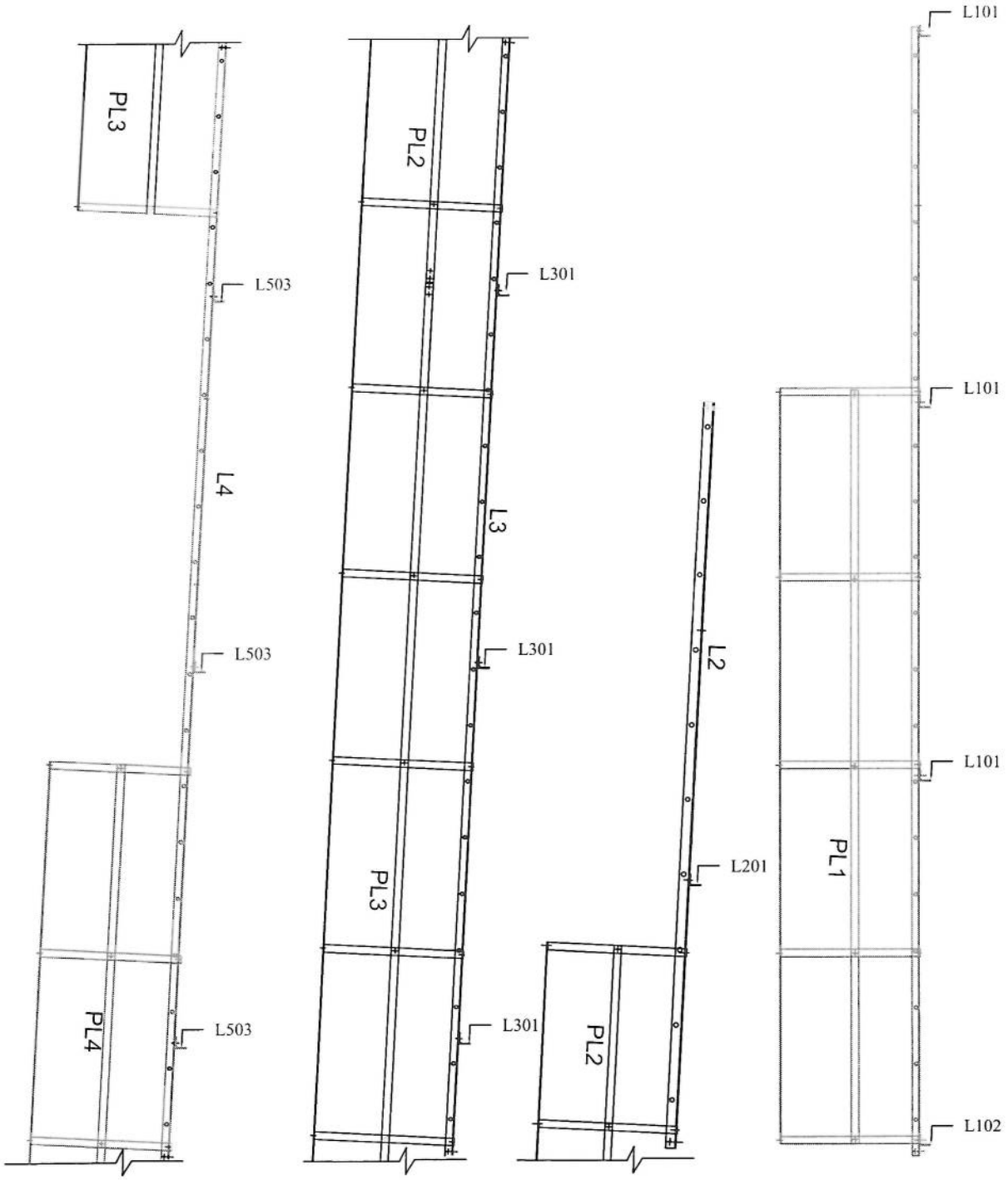
DESIGN AND MANUFACTURER

DAKALSAZAN KALAN CO.

SCALE | FORMAT A1 | DESIGN STAGE | DETAIL DESIGN

DAKALSAZAN DWG NO.

REV. 0 | SH. 1 | TOTAL OF 20



AFGHAN TELECOM

APPROVAL DRAWING

FOR TOWER TYPE 40-160-EPA10(AK1-40m)

PANEL 4

CONTRACTOR

DESIGN AND MANUFACTURER

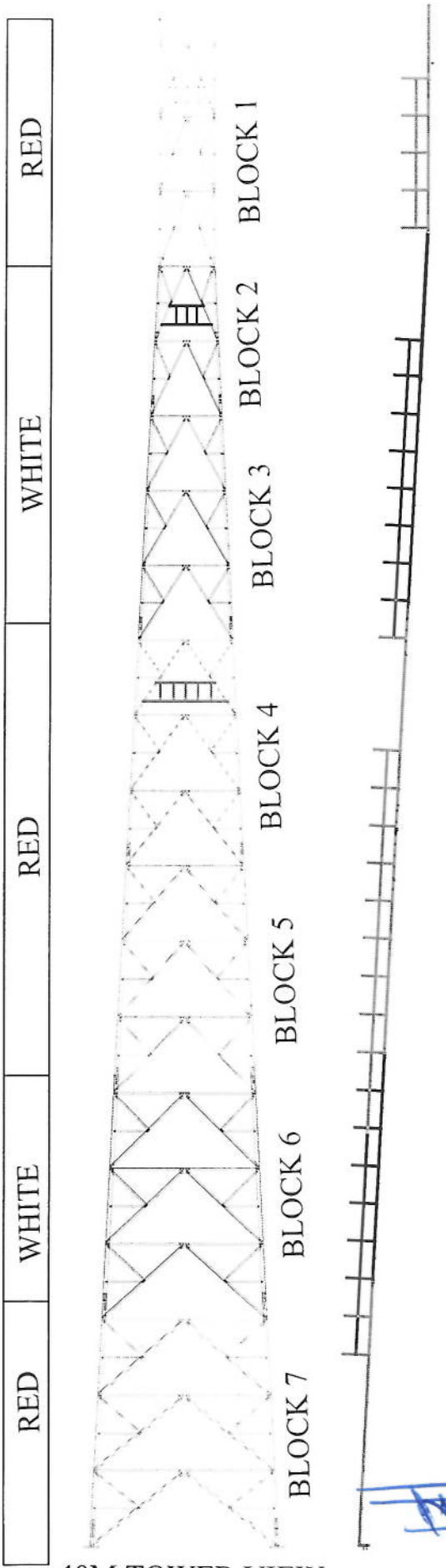
DAKALSAZAN KALAN CO.

SCALE | FORMAT: A1 | DESIGN STAGE: DETAL DESIGN

DAKALSAZAN DWG NO

REV: 0

SH: 1 OF: 20



40M TOWER VIEW

2	FIRST ISSUE					
REV	DESCRIPTION	DESIGN	DRAWN	CHECK	APPR	DATE

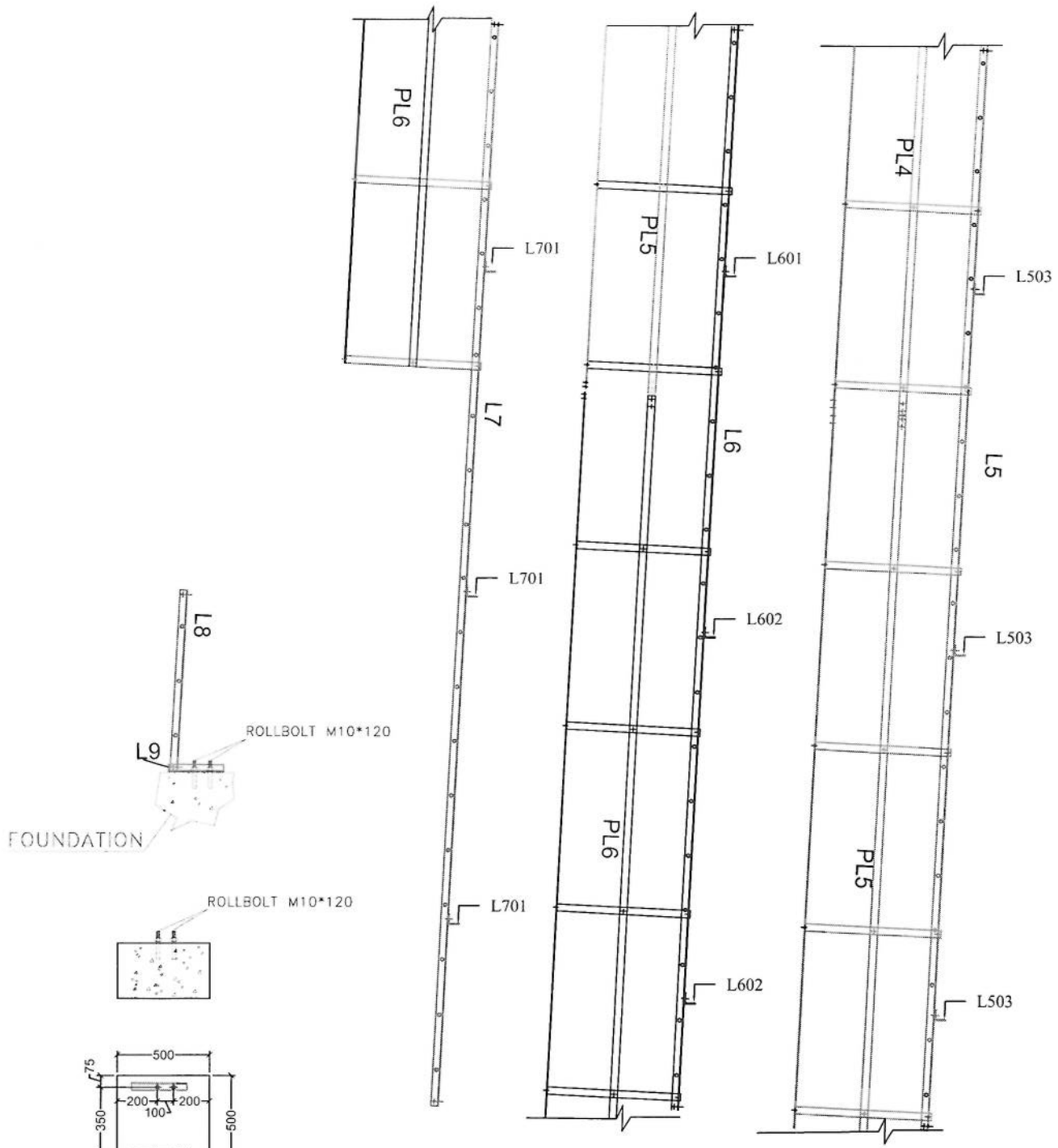
CLIENT: AFGHAN TELECOM

TITLE: APPROVAL DRAWING
FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

CONTRACTOR:

DESIGN AND MANUFACTURER: DAKALSAZAN KALAN CO.

SCALE	FORMAT A1	DESIGN STAGE DETAIL DESIGN	
DAKALSAZAN DWG NO.		REV.	SH. / TOTAL
---		0	1 OF 20



REV	DESCRIPTION	DESIGN	DRAWN	CHECK	APPR	MR	DATE
2	FIRST ISSUE	A.GH	Me.To.De	D.DEP	A.GH		

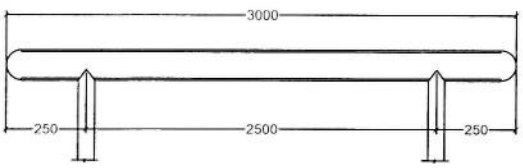
CLIENT:
AFGHAN TELECOM

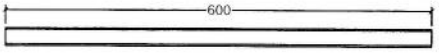
TITLE:
APPROVAL DRAWING
FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

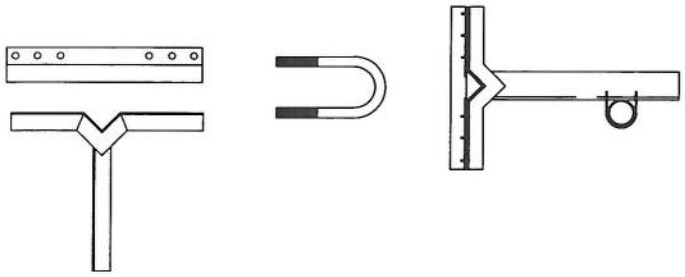
CONTRACTOR:

DESIGN AND MANUFACTURER:
DAKALSAZAN KALAN CO.

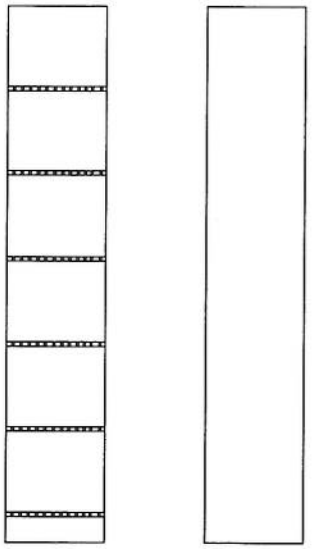
SCALE: | FORMAT: A1 | DESIGN STAGE: DETAIL DESIGN
DAKALSAZAN DWG NO: --- | REV: 0 | SH. / TOTAL: 1 OF 20



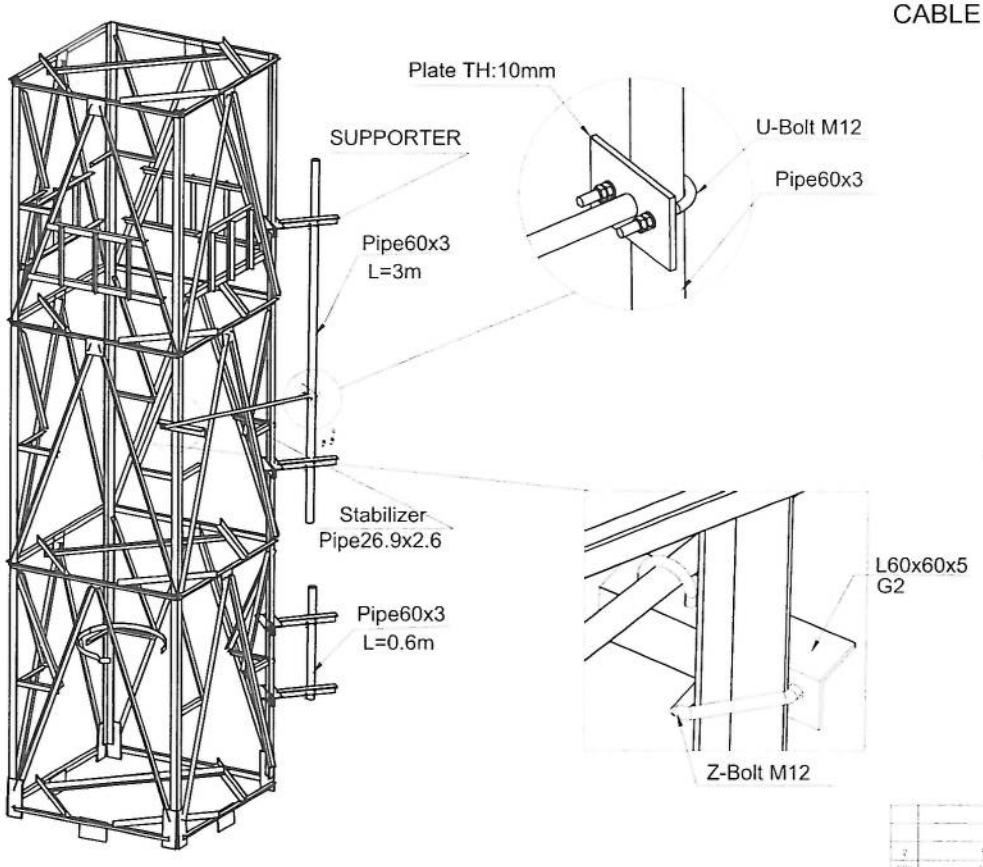




SUPPORTER



CABLE TRAY



Sr.No	Block	Mark	Description	Length	WEIGHT	Qty	Total Weight
			SUPPORTER				0
1	SUPPORT		(60X3)MM PIPE	3	13 0398	3	39 1194
2	SUPPORT		(60X3)MM PIPE	0 6	2 60796	2	5 21592
3	ANGLE	SL1	L60X6	0 6	3 31866	3	9 95598
4	ANGLE	ANG	L60X6	0 45	2 488995	20	49 7799
5	ANGLE	ANG	L60X6	0 5	2 76555	5	13 82775
6	PIPE	PIPE	(27X2 6)MM PIPE	1 6	3 98816	5	19 9408
7	ANGLE	ANGLE	L60X6	0 5	2 76555	5	13 82775
8	U BOLT	U B	ROD 12	0 3	0 27501	35	9 62535
						TOTAL WEIGHT	161.29 Kg

AFGHAN TELECOM

APPROVAL DRAWING

FOR TOWER TYPE 40-160-EPA10(AK1-40m)
PANEL 4

CONTRACTOR

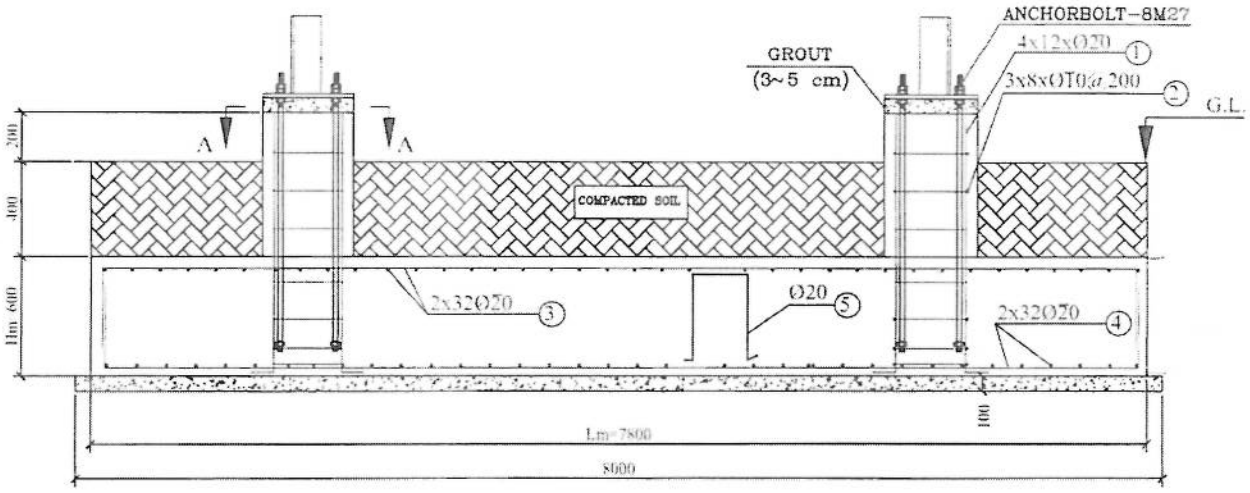
DESIGN AND MANUFACTURER

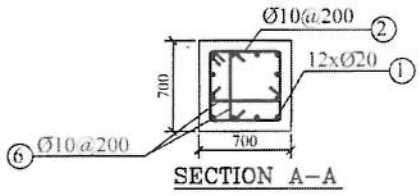
DAKALSAZAN KALAN CO.

SCALE | FORMAT A1 | DESIGN STAGE | DETAIL DESIGN

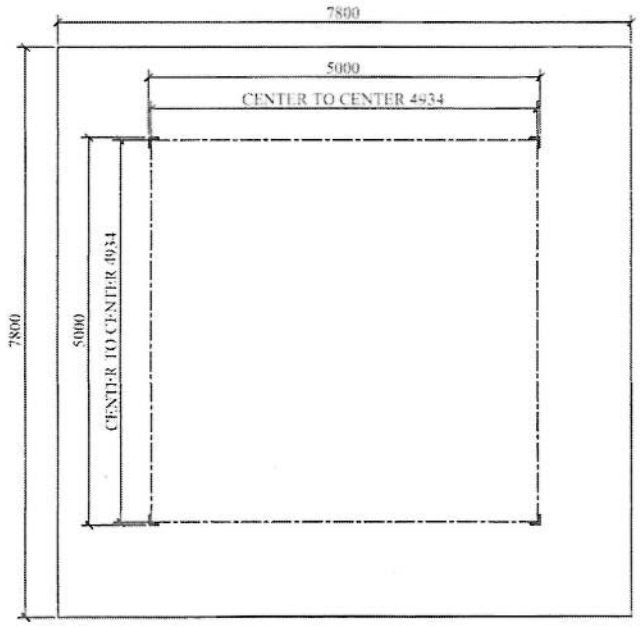
DAKALSAZAN DWG NO.

REV 0 | SH. 1 OF 20



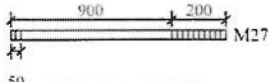


SECTION A-A

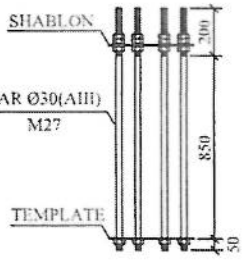


FOUNDATION PLAN

NOTE :
1- ALL DIMENSION ARE IN MM . EXCEPTION AS NOTED.
2- F'c=210 Kg/Cm2 AFTER 28 DAYS ON CYLINDER SPEC.
3- GRADE OF BARS:
AII FOR D<12mm
AIII FOR D>12mm
4- COVER ON BARS IS 75 mm .
5- THICKNESS OF LEAN CONCRETE 10cm.



ANCHOR BOLT



SOIL CHARAC.: ALLOWABLE BEARING=1.0~2.0 KG/CM2 NORMAL

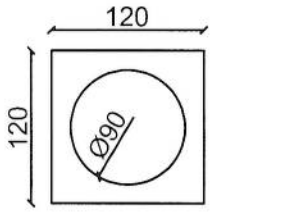
BAR BENDING SCHEDULE (TYPE AIII - FY=4000kg/cm^2)

TYPE 7

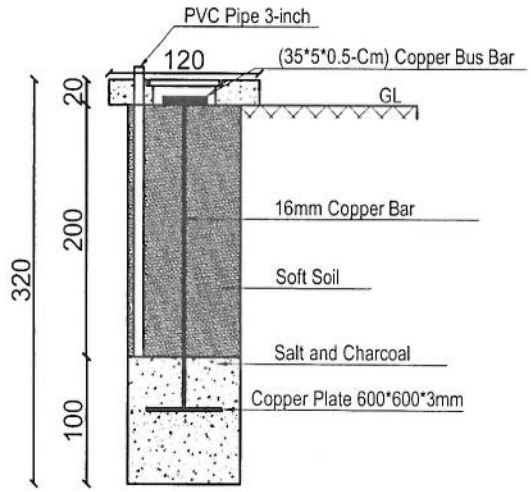
POS.	BENDING DIAGRAM cm	ϕ mm	NO ROD.	UNIT LENGTH m	TOTAL LENGTH m	UNIT WEIGHT Kg/m	TOTAL WEIGHT Kg
1	105 / 30	20	12*4	1.35	64.8	2.47	160
2	L=240 550 □550	10	6*4	2.40	57.6	0.617	36
3	765 / 30 30	20	32*2	8.25	528	2.47	1304
4	765 / 30 30	20	32*2	8.25	528	2.47	1304
5	45 130 / 30 / 45 30	20	58	1.80	104.4	2.47	258
6	55 / 10 10	10	48	0.75	36	0.617	22

CON. VOL. =37.7m^3 TOTAL WEIGHT (kg) : 3084

SULTAN MOON
CONSULTING ENGINEERING SERVICES



Plan of well-depth-3m



Detail-A
Well Section

Item List		
Item	Quantity	Dimension
Copper Rod	4	1m*Ø16mm
Copper Rod	1	2m*Ø16mm
Bus Bar	5	35cm*5cm*5mm
Copper Plate	1	60cm*60cm*3mm
Lightning Arrestor	1	1m
Ground Cable	60m	25mm
Uncovered Ground Cable	32m	25mm
Tower Light with photo cell	1	48V DC
Power Cable	50m	2*2mm

01	Grouding system- well plan & section
01	REF. A101 SCALE: 1:75

REVISION RECORDS
ثبت تعدیلات

REVISION NO شماره تعدیل	DATE تاریخ	DESCRIPTION تشریحات

LEGEND: علایم:

PCC شعله کنکریت

PROJECT TITLE / NO:
GSM SITES
عنوان پروژه:
سایت های جی اس ام

DRAWING TITLE:
40m Tower Grounding System
سیستم گراندنگ تاور چهل متره

DRAWN BY: ترسیم:
CIVIL TEAM

CHECKED BY: کنترول:

APPROVED BY: منظوری:

SCALE: مقیاس:
1:75

ACTUAL DATE: 10/05/ 2025
ISSUE DATE:

DRG.NO: 01

OWNER: مالک پروژه:
AFGHAN TELECOM

سلام | Salaam Telecomunication Company
KABUL
AFGHANISTAN