



stated.

1. All dimensions are in millimeters, unless otherwise

#### PROJECT

COMPANY

**PROPOSED CIVIL WORKS &** STRUCTURES FOR KINANIE 66/11KV, 1X23MVA TX

#### **CONSTRUCTION DRAWINGS**

#### GENERAL ARRANGEMENT

#### ELECTRICAL

#### KIN- SHEET 001/025

Drawn	D.WAITHERA		Scale(s)	AS INDICATED
Designed	D.WAITHERA		Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU		Date	MARCH, 2024
Approved	ENG. D.M.WAMBUGU		Date	MARCH, 2024
ISSUE DA	ATE	MARCI	H, 2024	
JOB No.				

	SCHED	ULE OF COLUMNS &	BASES	
FOUNDATION	COLUMN SIZE	N0.	BASE SIZE	N
F1	600x600 mm	54	1200x1200 mm	54
F2	900x900 mm	6	2000x1200 mm	3
F3	500x500 mm	32	1500x1500 mm	32
	FOUNDATION F1 F2 F3	SCHEDFOUNDATIONCOLUMN SIZEF1600x600 mmF2900x900 mmF3500x500 mm	SCHEDULE OF COLUMNS &FOUNDATIONCOLUMN SIZEN0.F1600x600 mm54F2900x900 mm6F3500x500 mm32	SCHEDULE OF COLUMNS & BASESFOUNDATIONCOLUMN SIZENO.BASE SIZEF1600x600 mm541200x1200 mmF2900x900 mm62000x1200 mmF3500x500 mm321500x1500 mm



1. All dime stated.	nsions are	e in millime	ters, unless otherwise						
2. This dra dimension	wing must s should b	t not be sca be used.	aled ,only figured						
3.This drav Architectu	ving must ral drawing	be read in gs.	conjunction with relev	vant					
4.Reinforco grade C20/ floor slab (	ed concre /25 to BS /grade C16	ete for all EN 206-1:2 5/20), and re	structural elements 2002, except for the gr oof slab (C25/30).	to be round					
5. Cover to (a) Four (b) Colu (c) Bean (d) Slab	<ul> <li>5. Cover to main reinforcement to be as follows:</li> <li>(a) Foundation = 50mm</li> <li>(b) Columns = 40mm</li> <li>(c) Beams = 30mm</li> <li>(d) Slabs = 25mm</li> </ul>								
6."H" Denotes ribbed high yield bars to BS 4461 with a yield strength of 500N/mm2 to BS 4449-2005.									
7. Reinford by the Eng	ement in v ineer befo	walls and c re being ei	olumns must be inspe nclosed in formwork.	cted					
8. All masc iron after e be extende	onry walls every two a ed through	must be re alternate co the colum	inforced with 25mm he ourses. The hoop iron In sections.	oop must					
9. To ensu the R.C. co before the	re enhanc blumns, the columns a	ed bonding e masonry are cast.	g between the masonr walling must be raised	y and d first					
10. All mor the stone w mortar join	tar used to walling be its.	o be of cen ing laid in	nent sand mix 1:3, with 200mm courses with <i>′</i>	all 12mm					
11. A minir strength of BS 5268 st	num of 7.0 f masonry nould be u	N/mm2 avo in accorda sed for all	erage compressive ance with BS EN 771 ar wall sections.	nd					
12. Mass c	oncrete to	be grade 1	12/15 to BS EN 206-1:2	002.					
13. Double Waterproo first wall to	e masonry fing plaste b Engineer	y walls to er shall be 's approva	b be built one at a applied to the inside I before the second is	time. of the built .					
		REVISIO	ONS						
Date	Suffix	D	escriptions	Issue					
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	Ē	PROJE	CT						
PRO	POSE		L WORKS &						
STR									
6	0/11 <b>K</b> \	/, 1X23							
CON	ISTRU		N DRAWINGS						
GE	NERA	LARR	ANGEMENT						
	ST	RUCT	URAL						
k	(IN- SI	HEET (	002/025 (a)						
Drawn [	D.WAITHFI	 RA	Scale(s) AS INDIC	ATED					
	1. All dimension 3. This draw Architectur 4. Reinforcur grade C20, floor slab 5. Cover to (a) Four (b) Colur (c) Bear (d) Slab 6. "H" Denyield stren 7. Reinford by the Eng 8. All mass iron after e be extende 9. To ensur the R.C. co before the 10. All more mortar join 11. A mining S 5268 str 12. Mass c 13. Double Waterproof irst wall to Date PRO STR 6. CON STR 6. 10. All more more and to BS 5268 str 12. Mass c 13. Double Waterproof GE	1. All dimensions are stated.     2. This drawing must dimensions should be a stated.     3. This drawing must Architectural drawing 4. Reinforced concress grade C20/25 to BS floor slab (grade C166 5. Cover to main rein (a) Foundation = 5 (b) Columns = 40m (c) Beams = 30mm (d) Slabs = 25mm	1. All dimensions are in millimensions should be used.      2. This drawing must not be so climensions should be used.      3. This drawing must be read in Architectural drawings.      4. Reinforced concrete for all grade C20/25 to BS EN 206-12; floor slab (grade C16/20), and r      5. Cover to main reinforcement (a) Foundation = 50mm     (b) Columns = 40mm     (c) Beams = 30mm     (d) Slabs = 25mm     6. "H" Denotes ribbed high yie yield strength of 500N/mm2 to 10     7. Reinforcement in walls and c by the Engineer before being end     8. All masonry walls must be reiron after every two alternate c be extended through the columns     9. To ensure enhanced bondin the R.C. columns, the masonry before the columns are cast.     10. All mortar used to be of centhe stone walling being laid in mortar joints.     11. A minimum of 7.0N/mm2 av strength of masonry walls to Waterproofing plaster shall be first wall to Engineer's approvate the stone walling being laid in mortar joints.     12. Mass concrete to be grade 1     13. Double masonry walls to Waterproofing plaster shall be first wall to Engineer's approvate the stone walling being laid in mortar joints.     11. All minimum of 7.0N/mm2 av strength of masonry walls to Waterproofing plaster shall be first wall to Engineer's approvate the stone walling being laid in mortar joints.     CONSTRUCTION     GENERAL ARE     CLIE     KENYA POWER COMP.     COMP.     CONSTRUCTION     D.WAITHERA	1. All dimensions are in millimeters, unless otherwise stated.      2. This drawing must not be scaled ,only figured dimensions should be used.      3. This drawing must be read in conjunction with releve Architectural drawings.      4. Reinforced concrete for all structural elements of grade C20/25 to BS EN 206-1:2002, except for the releve and rest of the State of C25/30).      5. Cover to main reinforcement to be as follows:     (a) Foundation = 50mm     (b) Columns = 40mm     (c) Beams = 30mm     (d) Slabs = 25mm     6. "H" Denotes ribbed high yield bars to BS 4449-2005.      7. Reinforcement in walls and columns must be insperied by the Engineer before being enclosed in formwork.      8. All massony walls must be reinforced with 25mm high ron after every two alternate courses. The hoop iron the extended through the column sections.      9. To ensure enhanced bonding between the masonr the R.C. columns, the masonry in accordance with 25 EX8 should be used for all wall sections.      10. All mortar used to be of cement sand mix 1:3, with the stone walling being laid in 200mm courses with 1 mortar joints.      12. Mass concrete to be grade 12/15 to BS EN 206-1:2      13. Double masonry walls to be built one at a Waterproofing plaster shall be applied to the linide of the under a law sectores.      CLIENT     KENYA POWER & LIGHTING COMPANY      Date Suffix Descriptions      CLIENT     KENYA POWER & LIGHTING COMPANY      CONSTRUCTION DRAWINGS      GENERAL ARRANGEMENT      KIN- SHEET 002/025 (a)      CONSTRUCTION DRAWINGS					

Drawn	D.WAITHE	RA	Scale(s)	AS INDICATED
Designed	D.WAITHE	IRA	Date	MARCH, 2024
Checked	ENG. D.M	.WAMBUGU	Date	MARCH, 2024
Approved	ENG. D.M	.WAMBUGU	Date	MARCH, 2024
ISSUE DA	ATE MARCI		H, 2024	
JOB No.				

ANTE V Eng. D. M. Wandsugh 12/03/2025. For Budding only.



	NOTES					
	1. All dimensions are in millimeters, unless otherwise stated.					
	2. This drawing must not be scaled ,only figured dimensions should be used.					
	3.This drawing must be read in conjunction with relevant Architectural drawings.					
	4.Reinforced concrete for all structural elements to be grade C20/25 to BS EN 206-1:2002, except for the ground floor slab (grade C16/20), and roof slab (C25/30).					
	5. Cover (a) For (b) Co (c) Bea (d) Sla	to main rein undation = 5 lumns = 40r ams = 30mn abs = 25mm	forcement t i0mm ทm า	o be as fol	lows:	
	6."H" De yield stre	notes ribbe	d high yiel N/mm2 to B	d bars to S 4449-200	BS 4461 v 5.	vith a
<u>3-150 B</u> 1	7. Reinfo by the Er	rcement in v ngineer befo	walls and co re being end	lumns mus closed in fo	st be inspe ormwork.	cted
<u>2-150 B1</u>	8. All mas iron after be extend	sonry walls <sup>r</sup> every two a ded through	must be rein alternate co the column	nforced wit urses. The sections.	h 25mm ho hoop iron	oop must
150B2	9. To ens the R.C. (	sure enhanc columns, th	ed bonding e masonry v are cast	between ti valling mus	he masonr st be raised	y and d first
ENCH S	10. All me the stone mortar io	ortar used to a walling be vints.	be of ceme ing laid in 2	ent sand m 00mm cou	ix 1:3, with rses with 1	all I2mm
<u> </u>	11. A min strength BS 5268 s	nimum of 7.0 of masonry should be u	N/mm2 aver in accordan sed for all w	rage comp ice with BS vall section	ressive S EN 771 ar s.	nd
ed Concrete (C30)	12. Mass	concrete to	be grade 12	2/15 to BS I	EN 206-1:2	002.
<u>ts</u> ick RHS at 1m Spacing	13. Dout Waterpro	ble masonr	y walls to er shall be a	be built pplied to t	one at a he inside (	time. of the
red Concrete (C25)	first wall	to Engineer	's approval REVISIO	before the	second is	built .
Concrete Blinding (C15)	Date	Suffix	Des	scriptions		Issue
ENCH						
			CLIEN	IT		
	KE	ENYA P	OWER	& LIG	HTING	
	KENTA POWER & LIGHTING COMPANY					
		Ē	PROJE	CT		
			D CIVIL RES FO	. WOR	KS & ANIF	
0mm PVC pipes		66/11K	/, 1X23	MVA T	X	
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AIL						
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v v u	Drawn		24	Scale(a)		ΔΤΕΡ
Wand wy .	Designed		RA	Date	MARCH	2024
0. 03 2025	Checked		WAMBLICH	Date	MARCH 2	2024
$\mathcal{L}$					1	r 📘

MARCH, 2024

Approved ENG. D.M.WAMBUGU Date

**ISSUE DATE** 

JOB No.

MARCH, 2024



NO	TES	
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1. All dimensions are in millimeters, unless otherwise stated.

2. This drawing must not be scaled ,only figured dimensions should be used.

3. This drawing must be read in conjunction with relevant Architectural drawings.

4.Reinforced concrete for all structural elements to be grade C20/25 to BS EN 206-1:2002, except for the ground floor slab (grade C16/20), and roof slab (C25/30).

5. Cover to main reinforcement to be as follows: (a) Foundation = 50mm (b) Columns = 40mm

(c) Beams = 30mm

(d) Slabs = 25mm

6."H" Denotes ribbed high yield bars to BS 4461 with a yield strength of 500N/mm2 to BS 4449-2005.

7. Reinforcement in walls and columns must be inspected by the Engineer before being enclosed in formwork.

8. All masonry walls must be reinforced with 25mm hoop iron after every two alternate courses. The hoop iron must be extended through the column sections.

9. To ensure enhanced bonding between the masonry and the R.C. columns, the masonry walling must be raised first before the columns are cast.

10. All mortar used to be of cement sand mix 1:3, with all the stone walling being laid in 200mm courses with 12mm mortar joints.

11. A minimum of 7.0N/mm2 average compressive strength of masonry in accordance with BS EN 771 and BS 5268 should be used for all wall sections.

12. Mass concrete to be grade 12/15 to BS EN 206-1:2002.

13. Double masonry walls to be built one at a time. Waterproofing plaster shall be applied to the inside of the first wall to Engineer's approval before the second is built .

REVISIONS					
Date	Suffix	Descriptions	Issue		

#### CLIENT

**KENYA POWER & LIGHTING** COMPANY

#### PROJECT

**PROPOSED CIVIL WORKS &** STRUCTURES FOR KINANIE 66/11KV, 1X23MVA TX

**CONSTRUCTION DRAWINGS** 

CONTROL ROOM BUILDING

#### ARCHITECTURAL

#### KIN- SHEET 003/025 (a)

Drawn	D.WAITHE	RA	Scale(s)	AS INDICATED
Designed	D.WAITHE	RA	Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU		Date	MARCH, 2024
Approved	ENG. D.M.WAMBUGU		Date	MARCH, 2024
ISSUE DA	SUE DATE MARC		H, 2024	
JOB No.				





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	1. All dim stated.	ensions are	e in millimete	ers, unless	otherwise		
	2. This dı dimensio	rawing must ons should b	t not be scal be used.	ed ,only fiç	gured		
	3.This dra Architect	awing must tural drawing	be read in c gs.	onjunction	ı with relev	ant	
	4.Reinfor grade C2 floor slat	ced concre 20/25 to BS 5 (grade C16	ete for all s EN 206-1:20 5/20), and roo	structural 0 02, except of slab (C2	elements t t for the gr 5/30).	o be ound	
	5. Cover (a) Fou (b) Co (c) Bea (d) Sla	to main rein undation = 5 lumns = 40n ams = 30mn ibs = 25mm	forcement to i0mm nm 1	o be as foll	ows:		
	6."H" De yield stre	notes ribbe ength of 500	d high yield N/mm2 to B	d bars to S 4449-200	BS 4461 w 5.	vith a	
	<ul> <li>7. Reinforcement in walls and columns must be inspected by the Engineer before being enclosed in formwork.</li> <li>8. All masonry walls must be reinforced with 25mm hoop iron after every two alternate courses. The hoop iron must be extended through the column sections.</li> </ul>						
	9. To ens the R.C. o before th	sure enhanc columns, the e columns a	ed bonding e masonry v are cast.	between tl valling mus	ne masonry st be raised	y and I first	
	10. All mo the stone mortar jo	ortar used to a walling be ints.	o be of ceme ing laid in 2	ent sand m 00mm cou	ix 1:3, with rses with 1	all 2mm	
	11. A minimum of 7.0N/mm2 average compressive strength of masonry in accordance with BS EN 771 and BS 5268 should be used for all wall sections.						
	12. Mass	concrete to	be grade 12	2/15 to BS E	EN 206-1:20	)02. tim	
	าง. Dout Waterpro first wall	ofing plaste to Engineer	y walls to er shall be a 's approval	be built pplied to t before the	he inside d second is l	ame. of the built .	
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	Date	Suffix	Des	scriptions		Issue	
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	<u>PROJECT</u> PROPOSED CIVIL WORKS & STRUCTURES FOR KINANIE 66/11KV, 1X23MVA TX						
	CO	NSTRU		DRAV	VINGS		
	CC	ONTRO	L ROOI	M BUIL	DING		
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	orawn Designor	D.WAITHEI	RA	ocale(s)	MARCH C		
	Checked		WAMRUCU	Date		2024	
	Approved	ENG. D.M.	WAMBUGU	Date	MARCH, 2	2024	
					í <i>'</i>		

MARCH, 2024

**ISSUE DATE** 

JOB No.



			(c) (d)	Bear Slab	ns = 30 s = 251
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			7. Re by th	inforc e Eng	ement ineer l
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			12. M	lass c	oncret
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			Dat	te	Suffix
DINT FLUORESCENT					
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3. This drawing must be read in conjunction with relevant Architectural drawings.

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5. Cover to main reinforcement to be as follows:

- (a) Foundation = 50mm Columns = 40mm (b)
- 0mm
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ibbed high yield bars to BS 4461 with a 500N/mm2 to BS 4449-2005.

t in walls and columns must be inspected before being enclosed in formwork.

alls must be reinforced with 25mm hoop two alternate courses. The hoop iron must ugh the column sections.

anced bonding between the masonry and s, the masonry walling must be raised first nns are cast.

sed to be of cement sand mix 1:3, with all g being laid in 200mm courses with 12mm

of 7.0N/mm2 average compressive sonry in accordance with BS EN 771 and be used for all wall sections.

ete to be grade 12/15 to BS EN 206-1:2002.

sonry walls to be built one at a time. laster shall be applied to the inside of the neer's approval before the second is built . REVISIONS

Date	Suffix	Descriptions	lssue

### CLIENT

**KENYA POWER & LIGHTING** COMPANY

#### PROJECT

**PROPOSED CIVIL WORKS &** STRUCTURES FOR KINANIE 66/11KV, 1X23MVA TX

# **CONSTRUCTION DRAWINGS**

CONTROL ROOM BUILDING

#### ELECTRICAL

#### KIN- SHEET 003/025 (c)

Drawn	D.WAITHERA		Scale(s)	AS INDICATED
Designed	D.WAITHERA		Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU		Date	MARCH, 2024
Approved	ENG. D.M.WAMBUGU		Date	MARCH, 2024
ISSUE DA	ATE	MARCH, 2024		
JOB No.				



	Ν	OTES			
1. All dime stated.	1. All dimensions are in millimeters, unless otherwise stated.				
2. This dra dimension	2. This drawing must not be scaled ,only figured dimensions should be used.				
3.This drav Architectu	ving must ral drawing	be read in conjunction with relev gs.	ant		
4.Reinforco grade C20/ floor slab (	ed concre /25 to BS /grade C16	ete for all structural elements t EN 206-1:2002, except for the gr //20), and roof slab (C25/30).	o be ound		
5. Cover to (a) Four	main rein dation = 5	forcement to be as follows: 0mm			
(b) Colu (c) Bean (d) Slab	mns = 40n ns = 30mn s = 25mm	กm า			
6."H" Deno yield stren	otes ribbe gth of 500	d high yield bars to BS 4461 w N/mm2 to BS 4449-2005.	vith a		
7. Reinforc by the Eng	ement in v ineer befo	valls and columns must be inspe re being enclosed in formwork.	cted		
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13. Double Waterproo first wall to	e masonry fing plaste o Engineer	y walls to be built one at a er shall be applied to the inside o 's approval before the second is l	time. of the built .		
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Date	Suffix	Descriptions	Issue		
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Drawn	D.WAITHERA		Scale(s)	AS INDICATED
Designed	D.WAITHERA		Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU		Date	MARCH, 2024
Approved	ENG. D.M.WAMBUGU		Date	MARCH, 2024
ISSUE DA	ATE	MARCH, 2024		
JOB No.				



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2. This drav dimension	wing must s should b	t not be scaled ,only figured be used.	
3.This drav Architectu	ving must ral drawine	be read in conjunction with re αs.	levant
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5. Cover to (a) Foun (b) Colu (c) Bean (d) Slabs	main rein Idation = 5 mns = 40n ns = 30mm s = 25mm	forcement to be as follows: 50mm nm n	
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12. Mass co	oncrete to	be grade 12/15 to BS EN 206-1	:2002.
13. Double Waterproo first wall to	e masonry fing plaste Engineer	y walls to be built one at er shall be applied to the insid 's approval before the second	a time. e of the is built .
		REVISIONS	
Date	Suffix	Descriptions	Issue
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# **PROPOSED CIVIL WORKS &**

STRUCTURES FOR KINANIE 66/11KV, 1X23MVA TX

#### **CONSTRUCTION DRAWINGS**

#### TRANSFORMER

#### PLINTH

#### KIN- SHEET 005/025 (a)

Drawn	D.WAITHERA		Scale(s)	AS INDICATED
Designed	D.WAITHERA		Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU		Date	MARCH, 2024
Approved	ENG. D.M.WAMBUGU		Date	MARCH, 2024
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1. All dimensions are in millimeters, unless otherwise stated.

2. This drawing must not be scaled ,only figured dimensions should be used.

3. This drawing must be read in conjunction with relevant Architectural drawings.

4.Reinforced concrete for all structural elements to be grade C20/25 to BS EN 206-1:2002, except for the ground floor slab (grade C16/20), and roof slab (C25/30).

5. Cover to main reinforcement to be as follows: (a) Foundation = 50mm

- (b) Columns = 40mm(c) Beams = 30mm
- (d) Slabs = 25mm

6."H" Denotes ribbed high yield bars to BS 4461 with a yield strength of 500N/mm2 to BS 4449-2005.

7. Reinforcement in walls and columns must be inspected by the Engineer before being enclosed in formwork.

8. All masonry walls must be reinforced with 25mm hoop iron after every two alternate courses. The hoop iron must be extended through the column sections.

9. To ensure enhanced bonding between the masonry and the R.C. columns, the masonry walling must be raised first before the columns are cast.

10. All mortar used to be of cement sand mix 1:3, with all the stone walling being laid in 200mm courses with 12mm mortar joints.

11. A minimum of 7.0N/mm2 average compressive strength of masonry in accordance with BS EN 771 and BS 5268 should be used for all wall sections.

12. Mass concrete to be grade 12/15 to BS EN 206-1:2002.

13. Double masonry walls to be built one at a time. Waterproofing plaster shall be applied to the inside of the first wall to Engineer's approval before the second is built .

REVISIONS				
Date	Suffix	Descriptions	lssue	

# CLIENT

**KENYA POWER & LIGHTING** COMPANY

#### PROJECT

**PROPOSED CIVIL WORKS &** STRUCTURES FOR KINANIE 66/11KV, 1X23MVA TX

#### CONSTRUCTION DRAWINGS

#### TRANSFORMER

#### **OIL INTERCEPTOR**

#### KIN- SHEET 005/025 (b)

Drawn	D.WAITHERA		Scale(s)	AS INDICATED
Designed	D.WAITHERA		Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU		Date	MARCH, 2024
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3.This drav Architectu	ving must ral drawing	be read in conjunction with relevants	ant
4.Reinforco grade C20/ floor slab (	ed concre /25 to BS /grade C16	ete for all structural elements t EN 206-1:2002, except for the gr 5/20), and roof slab (C25/30).	o be ound
5. Cover to (a) Four (b) Colu (c) Bean (d) Slab	o main rein ndation = 5 mns = 40n ns = 30mm s = 25mm	forcement to be as follows: 00mm nm 1	
6."H" Deno yield stren	otes ribbe gth of 500	d high yield bars to BS 4461 w N/mm2 to BS 4449-2005.	vith a
7. Reinforc by the Eng	ement in v ineer befo	walls and columns must be inspe re being enclosed in formwork.	cted
8. All masc iron after e be extende	onry walls every two a ed through	must be reinforced with 25mm ho alternate courses. The hoop iron the column sections.	oop must
9. To ensu the R.C. co before the	re enhanc blumns, the columns a	ed bonding between the masonry e masonry walling must be raised are cast.	y and I first
10. All mor the stone w mortar join	tar used to walling bei its.	o be of cement sand mix 1:3, with ing laid in 200mm courses with 1	all 2mm
11. A minin strength of BS 5268 sh	num of 7.0 f masonry nould be us	N/mm2 average compressive in accordance with BS EN 771 an sed for all wall sections.	d
12. Mass c	oncrete to	be grade 12/15 to BS EN 206-1:20	002.
13. Double Waterproo first wall to	e masonr fing plaste Engineer	y walls to be built one at a er shall be applied to the inside o 's approval before the second is l	time. of the built .
		REVISIONS	
Date	Suffix	Descriptions	Issue
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		CLIENT	
KE	NYA P	OWER & LIGHTING COMPANY	
	Ē	PROJECT	
PRO STRI 6	POSE UCTUR 6/11K\	D CIVIL WORKS & RES FOR KINANIE /, 1X23MVA TX	
CON	ISTRU	ICTION DRAWINGS	
	FEN	CE AND GATE	

## KIN- SHEET 006/025

Drawn	D.WAITHERA		Scale(s)	AS INDICATED
Designed	D.WAITHERA		Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU		Date	MARCH, 2024
Approved	ENG. D.M.WAMBUGU		Date	MARCH, 2024
ISSUE DA	ATE	MARCH, 2024		
JOB No.				

Finished GL

Tot Bidding only.



1. All dimensions are in millimeters, unless otherwise stated.

2. This drawing must not be scaled ,only figured dimensions should be used.

3. This drawing must be read in conjunction with relevant Architectural drawings.

4.Reinforced concrete for all structural elements to be grade C20/25 to BS EN 206-1:2002, except for the ground floor slab (grade C16/20), and roof slab (C25/30).

5. Cover to main reinforcement to be as follows: (a) Foundation = 50mm
(b) Columns = 40mm
(c) Beams = 30mm
(d) Slabs = 25mm

6."H" Denotes ribbed high yield bars to BS 4461 with a yield strength of 500N/mm2 to BS 4449-2005.

7. Reinforcement in walls and columns must be inspected by the Engineer before being enclosed in formwork.

8. All masonry walls must be reinforced with 25mm hoop iron after every two alternate courses. The hoop iron must be extended through the column sections.

9. To ensure enhanced bonding between the masonry and the R.C. columns, the masonry walling must be raised first before the columns are cast.

10. All mortar used to be of cement sand mix 1:3, with all the stone walling being laid in 200mm courses with 12mm mortar joints.

11. A minimum of 7.0N/mm2 average compressive strength of masonry in accordance with BS EN 771 and BS 5268 should be used for all wall sections.

12. Mass concrete to be grade 12/15 to BS EN 206-1:2002.

13. Double masonry walls to be built one at a time. Waterproofing plaster shall be applied to the inside of the first wall to Engineer's approval before the second is built .

REVISIONS			
Date	Suffix	Descriptions	lssue

#### CLIENT

**KENYA POWER & LIGHTING** COMPANY

#### PROJECT

**PROPOSED CIVIL WORKS &** STRUCTURES FOR KINANIE 66/11KV, 1X23MVA TX

#### CONSTRUCTION DRAWINGS

#### **GROUND WATER TANK PLINTH**

#### KIN- SHEET 007/025

Drawn	D.WAITHERA		Scale(s)	AS INDICATED
Designed	D.WAITHERA		Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU		Date	MARCH, 2024
Approved	ENG. D.M.WAMBUGU		Date	MARCH, 2024
ISSUE DATE		MARCH, 2024		
JOB No.				



1. All dimensions are in millimeters, unless otherwise stated.

2. This drawing must not be scaled ,only figured dimensions should be used.

3. This drawing must be read in conjunction with relevant Architectural drawings.

4.Reinforced concrete for all structural elements to be grade C20/25 to BS EN 206-1:2002, except for the ground floor slab (grade C16/20), and roof slab (C25/30).

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- (c) Beams = 30mm
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12. Mass concrete to be grade 12/15 to BS EN 206-1:2002.

13. Double masonry walls to be built one at a time. Waterproofing plaster shall be applied to the inside of the first wall to Engineer's approval before the second is built .

REVISIONS						
Date	Suffix	Descriptions	lssue			

#### CLIENT

**KENYA POWER & LIGHTING** COMPANY

#### PROJECT

**PROPOSED CIVIL WORKS &** STRUCTURES FOR KINANIE 66/11KV, 1X23MVA TX

#### **CONSTRUCTION DRAWINGS**

SEPTIC TANK AND SOAK PIT

#### KIN- SHEET 008/025

Drawn	D.WAITHERA		Scale(s)	AS INDICATED
Designed	D.WAITHERA		Date	MARCH, 2024
Checked	ENG. D.M.WAMBUGU		Date	MARCH, 2024
Approved	ENG. D.M.WAMBUGU		Date	MARCH, 2024
ISSUE DATE		MARCH, 2024		
JOB No.				





