PORTFOLIO OF EVIDENCE FOR ETWATWA EXT 35

PORTFOLIO OF EVIDENCE OF: ETWATWA EXT 35

INDEX

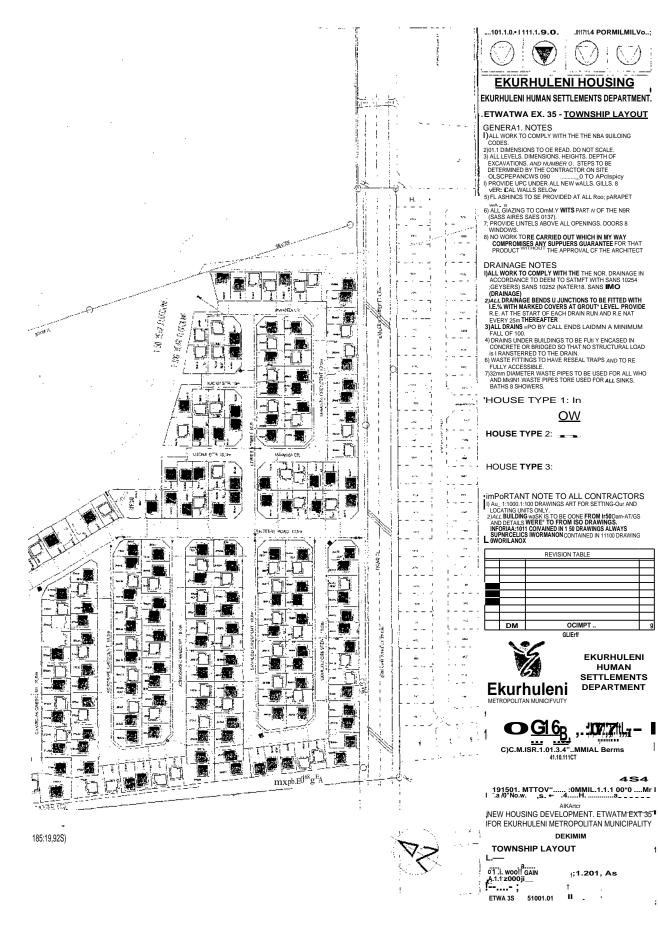
ETWATWA EXT 35 TOWNSHIPH LAYOUT

- 1. APROVED BUILDING PLANS
 - 1.1 TYPOLOGY ALLOCATED TO PROJECT
 - TYPE 1
 - TYPE 2
 - TYPE 3
 - 1.2 LIST OF APPROVED PLANS
 - 1.3 COPIES OF INDIVIDUAL APPROVED SITE PLANS
- 2. NUMBER OF STRUCTURES CONSTRUCTED SPREAD SHEET
 - 2.1 SUMMARY OF HOUSES CONSTRUCTED
 - FOUNDATION
 - **¬**TOP STRUCTURES
- 3. JOB CREATION
 - 3.1 SUMMARY OF LABOUR STATS
 - 3.3 EPWP REPORT



ETWATWA EXT 35 TOWNSHIP LAYOUT







1.APPROVED BUILDING PLANS



1.1 TYPOLOGY ALLOCATED TO THE PROJECT

- TYPE 1
- 'TYPE 2
- TYPE 3



TYPE 1- STAND ALONE HOUSE

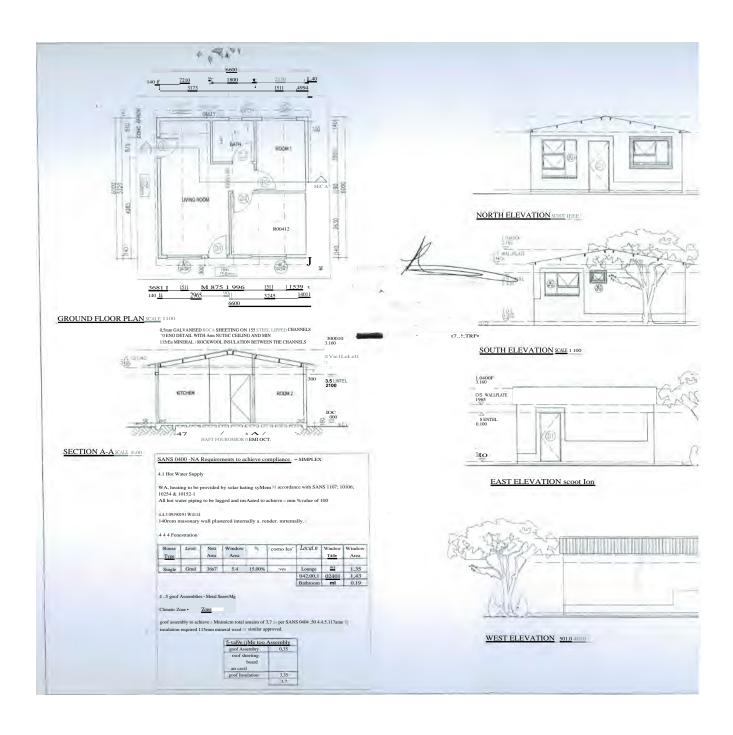




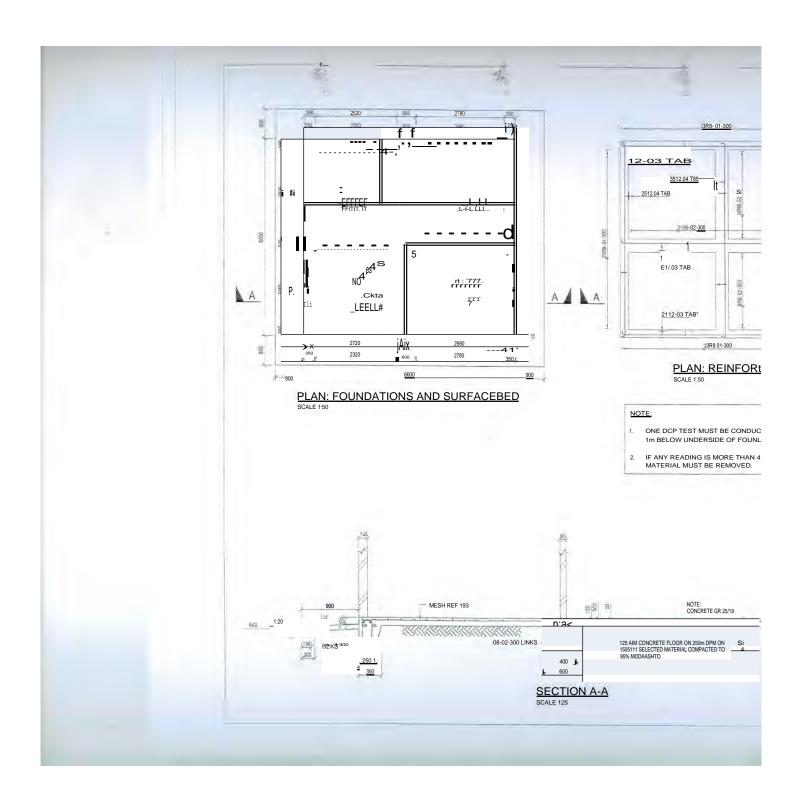
TYPICAL BUILDING PLANS FOR FULL SUBSIDY HOUSING Ekurhuleni Human Settlements Department













							_			
Members	No. of Mbrs	Type & Size	No. of Bars	Cutting Length	Total Bars	Mark	Shape Code	Α	В	С
RAFT	1	R8	86	1250	86	01	60	400	150	
	1	R8	40	1300	40	02	72	400	300	
	1	Y12	14	6700	14	03	35	6500		
	1	Y12	14	6100	14	04	35	5900		
	6	8	10	12	16	20	25	32	40	TOTAL
R	0	63	0	0	0	0	О	0	0	63
Y	0	0	0	159	0	0	0	0	0	159
тот	0	63	0	159	0	0	0	0	0	222

€PROJECT	ETWATWA EXTENSION 35 HOUSING PROJECT	Reference Owg. No.	Project No. J33064				
▼ DETAIL	UNIT TYPE 1 — STAND ALONE HOUSE AREA: 40m² — FOUNDATION BENDING SCHEDULE	Designed By A MILES	Reviewed By P LOUBSER				
This drawing is not to be used in whole, or pa, other than for the Intended purpose and project as defined on this drawing. Refer to the contract for full terms and conditions.							



TYPE 2- STAND ALONE HOUSE



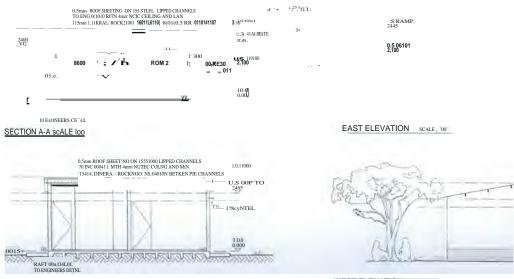


TYPICAL BUILDING PLANS FOR FULL SUBSIDY HOUSING Ekurhuleni Human Settlements Department





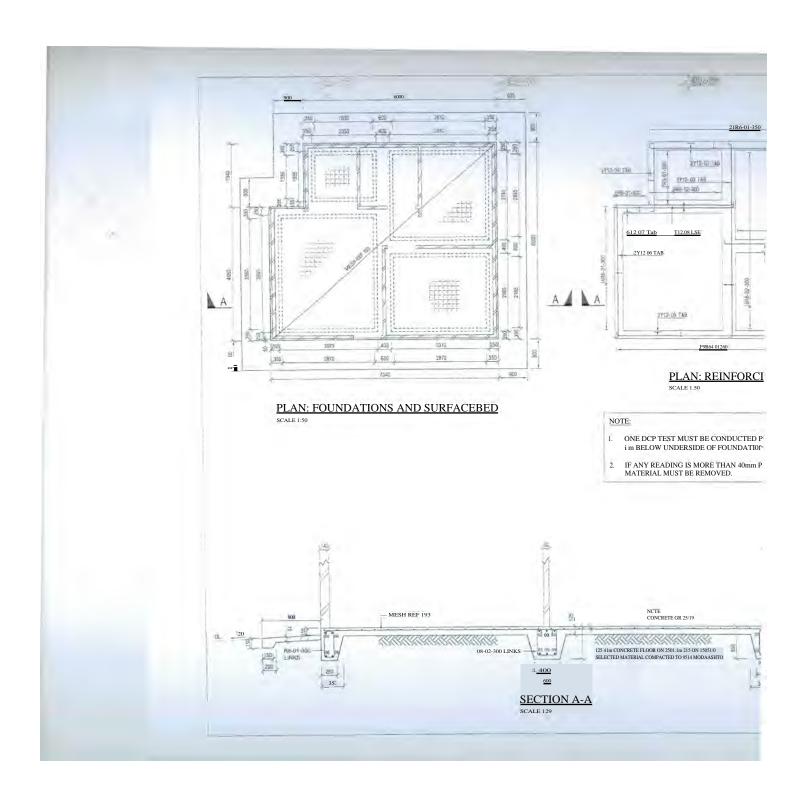




SECTION B-BSCA,L 1100









-								_			
	Members	No. of Mbrs	Type & Size	No. of Bars	Cutting Length	Total Bars	Mark	Shape Code	Α	В	С
	RAFT	1	R8	92	1250	92	01	60	400	150	
		1	R8	39	1300	39	02	72	400	300	
		1	Y12	14	6100	14	03	35	5900		
		1	Y12	4	2300	4	04	35	2100		
		1	Y12	4	7150	4	05	35	6940		
		1	Y12	4	4150	4	06	35	3950		
6-		1	Y12	10	3800	10	07	35	3600		
		1	Y12	2	2800	2	08	35	2580		
o											
T		6	8	10	12	16	20	25	32	40	TOTS
	R	0	65	0	0	0	0	0	0	0	65
	Υ	0	0	0	163	0	0	0	0	0	163
	тот	0	65	0	163	0	0	0	0	0	228
Г	·										

PROJECT ETWATWA EXTENSION 35 HOUSING PROJECT	Reference Own. No.	Project No. 13306
L UNIT TYPE 2 - STAND ALONE HOUSE AREA: 40m² - FOUNDATION BENDING SCHEDULE	V- Designed By A MILES	Reviewed By P LOUBSER
This drawing is not to be used in whole, or part, other than for the intended impose and project as defined on this drawing.	Refer to the contract for t terms	and conditions.



TYPE 3 - STAND ALONE HOUSE

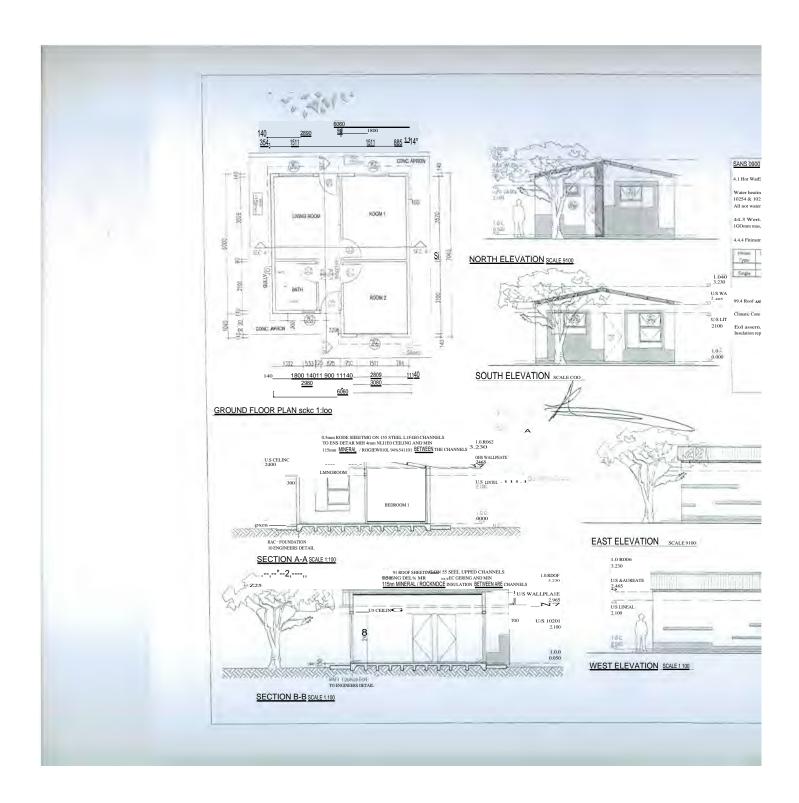




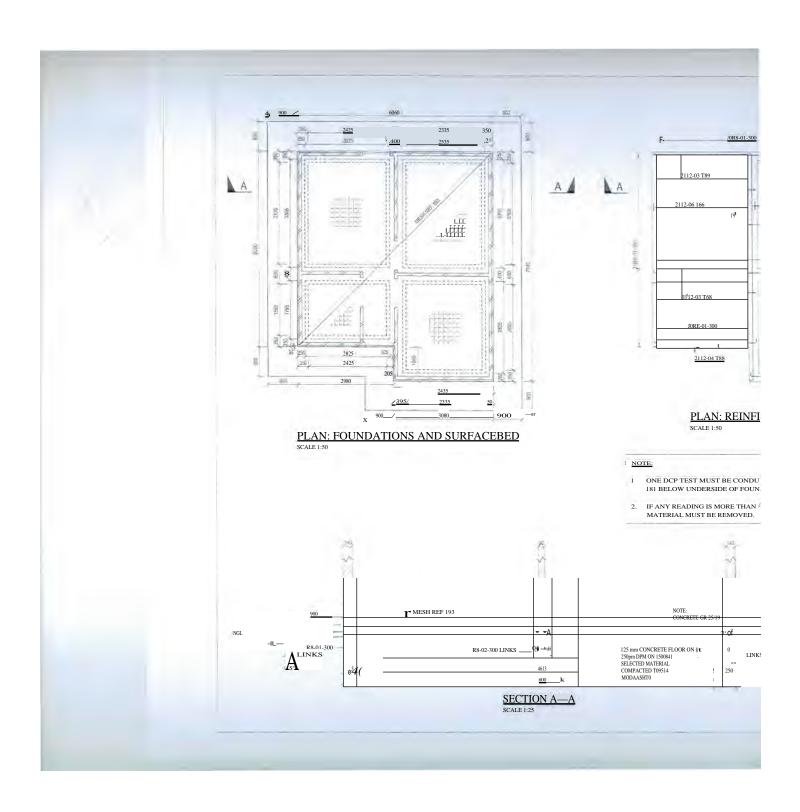
TYPICAL BUILDING PLANS FOR FULL SUBSIDY HOUSING Ekurhuleni Human Settlements Department









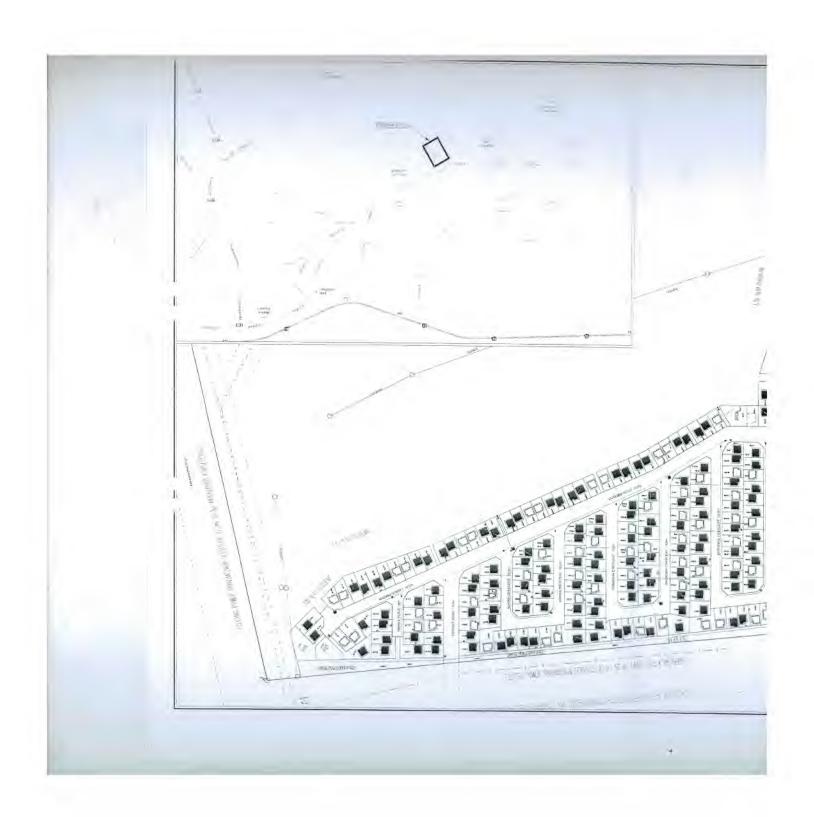




Members	No. of Mbrs	Type & Size	No. of Bars	Cutting Length	Total Bars	Mark	Shape Code	Α	В	С
RAFT	1	R8	86	1250	86	01	60	400	150	
	1	R8	44	1300	44	02	72	400	300	
	1	Y12	10	6150	10	03	35	5950		
	1	Y12	4	3350	4	04	35	3150		
	1	Y12	4	3150	4	05	35	2950		
	1	Y12	6	6100	6	06	35	5900		
	1	Y12	8	7150	8	07	35	6950		
										,
	6	8	10	12	16	20	25	32	40	TOTAL
R	0	65	0	0	0	0	0	0	0	65
Υ	0	0	0	161	0	0	0	0	0	161
тот	0	65	0	161	0	0	0	0	0	226

DETAIL LINIT TYPE*- STAND ALONE HOUSE		-
DETAIL UNIT TYPE*- STAND ALONE HOUSE AREA: 40m² - FOUNDATION BENDING SCHEDULE	Designed By A MILES	Resnewea By P LOUBSER







1.2 LIST OF APPROVED SITE PLANS



SO •- sc.4.6 •••••1,41-r (-4

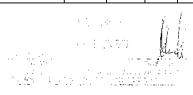
OCCUBAT	ION CERTIFICATE		ETWATWA								·
		OCC. DATE									
STAND	PTN I PLAN No	OCC. DATE	EST COST	AREA		DATE APPR		BUILD	NOT BUILI	FOUND	2ND PLAN
36868	459/14		R 56,000.00		35	01-Apr-15	SUBMIT 12 MAY 2014				
36869	460/14		R 56,000.00		35	01 -Apf-1 5	SUBMIT 12 MAY 2014				
36870	461/14		R 56,000.00		35	01-Apr-15	SUBMIT 12 MAY 2014			12444r-1S	
36871	4 462/14		R 56,000.00	40	35	01-Apr-15	SuBMIT 12 MAY 2014			1344r.15	
36872	463/14		R 56,000.00	40	35	01-Apr-15	SUBMIT IS MAY 2014				
36873	464/14		R 56,000.00	40	35	01-Apr-15	SUBMIT 12 MAY 2014			13•Mar.1 S	
36874	465/14		R 56,000.00	40	35	01-Apr-15	SUBMIT 12 MAY 2014			134115	
_36875	466/14		R 56,000.00	40	35	01-Aer-15	SUBMIT It MAY 2014			13-Mar.15	
ı 3687.6	467/14		R 56,000.00	40	35	01-Apr-15	Su IT 12 MAY 2014				
36877	¹ 468(14		R 56,000.00	40	35	01-Apr-15	SUE IT 12 MAY 2014			13410143	
36917	-1 47 1/₁4		R 56 000.00	40	35	01,4pr-15	SUBMIT 12 MAY 2014				
36918	472/14		R 56,000.00	40	35.	01-Apr-15	SUBMIT 12 MAY 2014				
36919	473/14		R 56,000.00	40	35	01-Apr-15	SUBMIT 12 MAY 2014				
36920	474/14		R 56,000.00	40	35.	01-Apr-15	SUBMIT 12 MAY 2014				
36921	475/14		R 56,000.00	40 ،		i 01-Apr-Is	SUBMIT 12 MAY 2014				
16922	476/14		R 56,000.00	40	35	01-Apr-15	SuBM:T 12 mAY 2014				
36923	477/14		R 56,000.00	40	35	01-Apr-15	SUBMIT 12 MAY 2014				
36924	478/14		R 56 000.00	40	35	01-Apr-15	SUBmIT 12 MAY 2014				
36926	479/14		R 56,000.00	40	35	01-Apr-15	SUBMIT 12 MAY 2014				
36926	480/14		R 56,000.00	40	35	01-Apr-15	SUBMIT 12 MAY 2014				
36927	481/14		R 56,000.00	40	35	01-Apr-15	SUBMIT 12 MAY 2014		t	,	
1 36928	482/14		R 56,000.00	40	35	01-Apr-16	SUBMIT 12 mAY 2014				
36929	483/14		R 56,000.00	40	35	01-Apr-15	SUBMIT 12 MAY 2014				
36930	484/14		R 56,000;00	46	- ' 35 '	: 01-Apr-15	- 0'11:0411 ₹214AX2014				
1_36931	486/14		R 56.0000	- 40*	'::36	01-Ap.r-1C	sueun 1244:47Y 01.1				
∟ 36932	, 486/14		R 56,00040	40	35	01-Apr-16 •	SUB, liCr 2014	-			
ı 36933 l	487/14		R 56,000.00	40	4.0	01-Apr-15'.	•101.18M1Y 14 WAY:2014				
36934	488/14		R 56,00040	40	35	01-Aprs15: -:	SUBMIT 12 MAY.2014				
36935	489/14		R 56,000.00	40	35	01-Apr-15	SUBMIT 1 AY 2014				
36936	490/14		R 66,000.00	40	35	01-Apr-15	SUIT AAY 2014				
36938	, 492/14		R 56000.00	40	35	01-Apr-15	SUIT f ₂ MAY ma				



bCCUPAT	ION CE	RTIFICATE		ET	WATVVA							
STAND	PTN	PLAN No	OCC. DATE	Е	ST COST	AREA	EXT	DATE APPR	COMMENTS	BUILD	NOT BUILD	FOUND
36895		135/14		R	56,000.00	40	35	05-M ar-15	siesta 1FE82414		1	
36896				R	56,000.00	40	35	05-Mar-15	SUBMIT 144E12.2014			
36897		137/14		R	56,000.00	40	35	05 -M ar-15	Smarr 144E04014			
7 36898		138/14		R	56,000.00	40	35	05 - M ar-15	sum., 14408,2014			
36899		139/14		R	56,000.00	40	35	05 - M ar-15	sueMIT 144E84014			
1 [−] 76900		140/14		R	56,000.00	40	35	05 Mar-15	SUBMIT 144E84014			
1_36901		141/14		R	56,000.00	40	35	05 - Mar-15	sum, *44E13.2014			
<u>i</u> 36902		142/14		R	66,000.00	40	35	05 - M ar-15	suerFee.4.14			
36903		143/14		R	56,000.00	40	35	05-Mar-15	SUBMIT 144013-2C14			
1 36904		144/14		R	56,000.00	40	35	05-Mar-15	SUBMIT 14488.2014			
36905		145/14		R	56.000.00	40	35	05 -7. ar-15	SUBMIT 144E8.2014			
1 36907		146/14		R	66,000.00	40	35	05 Mar-15	sueonor 144E040.			
36908		147/14		R	66,000.00	40	35	05-Mar-15	SUBMIT 144E8.2044			
[36909		148/14		R	56.000.00	40	35	05-Mar-15	SUBMIT 144E8.2014			
36919		149/14		R	56.000.00	40	35	05-Mar-15	SUBMIT 144E84014			
36911		150/14		R	56,000.00	40	35	05-Mar-15	SUBMIT 14.20144014			
, 36912		151/14		R	56,000.00	40	35	05-Mar-15	suspar1CFEB.2014			
36913		152/14		R	56.000.00	40	35	05-Mar-15	SUBMIT 144E9.2014			
36914		153/14		R	56.000.00	40	35	05-Mar-15	SUBMIT 1Fee.2ola			
36915		154/14		R	56.000.00	40	35	05-Mar-15	WOW i4.ree.20			
36916		155/14		R	56,000,00	40	35	05-Mar-15	SUBMIT 144E84014			
36990		171/14		R	66,000,00	40	35	05-Mar-15	SUBMIT 14.F66.2014		L	
36991		172/14		R	56.000.00	40	35	05-Mar-15	sumer ,reo.2oi.	1 (22.22)	k."'	
36992		173/14		R	56,000.00	40	35	05-Mar-15	sus,, ,,ea.20,.	<i>'</i>		
36993		174/14		R	56,000.00	40	35	05-Mar-15	SUBMIT 14E8.20,4	; ,		
36995		175/14		R	66,000.00	40	35	05-Mar-15	suemir 144E8.2014		1	
36996		176/14		R	56.000.00	40	35	05-Mar-15	SUBMIT144 E111.2014			· · · · ·
36997		177/14			56.000.00	40	35	05-Mar-15	swam44E54014			
L 36998		178/14			56.000.00	40	36	05-Mar-15	stoma 14.FE0-2014			
36999		179/14			56.000.00	40	35	05-Mar-15	suabur1440.2014			
37000		180/14		_	56,000.00	40	35	05-Mar-15	SUBMIT 144E84014			



OCCUPAT	TION CE	RTIFICATE		ET	WATINA							ſ	
STAND	PTN	PLAN No	OCC. DATE		ST COST	AREA	EXT	DATE API:i	COMMENTS	BUILD	NOT BUILD	FOUND	2ND PLAN
36971	•	524/14		R	56,000.00	40	35	01-Apr-15	susmir ,t MAY 2rmr				
37027		525114		R	56,000.00	40	35	01-Apr-15	suemr +2 may 2014				
37028		526/14		R	56,000.00	40	35	01-Apr-15	SUBMIT 12 MAY 2014				
,_ 37029		527/14		R	56,000.00	40	35	01-Apr-15	SUBMIT 12 MAY 2014				
37030		553/14		R	56,000.00	40	35	01-Apr-15	SUBMIT 12 MAY 20.				
37031		528/14		R	56,000.00	40	35	01-Apr-15	SUBMIT 12 MAY 2014				
• 37032		529/14		R	56,000.00	40	35	01-Apr-15	SUBMIT /2 MAY 2014				
37033		530/14		R	56,000.00	40	35	01-A • r-15	SUBMIT 12 NAY 2014				
37034		531/14		R	56 700.00	40	35	01- • r-15	SUBMIT 12 MAY 2014				
37035		532/14		R	56,000.00	40	35	01-A • r-15	SUBMIT 12 MAY 2014				
37036		533/14		R	56,000.00	40	35	_01-Apr-15	SUBMIT 12 MAY 2014				
37037		534/14		R	56,000.00	40	35	01-A • .15	SUBMIT 12214Y 2014				
37038		535/14		R	56,000.00	40	35	01-Apr-15	SUMMER 12 MAY pm				
L 37039		63 ⁶ /₁4		R	56,000.00	40	35	01-Apr-15	SUBMIT 12 MAY2014				
I 37040		537/14		R	56,00040	40	35	01-Apr-15	SUMT 12 MAY 2014				
- 37041		538/14		R	56,000.00	40	35	01 -Air-15	SUBMIT 12 MAY 2014				
37042		539/14		R	56,000.00	40	36	01-Apr-15	SUBMIT 12 MAY 2014				
37043		540/14		R	58,000.00	' 40	35	01-Apr-15	SUBMIT 12 MAY 2014				
37044		541/14		R	56,000.00	40	35	01-Apr-15	SUBMIT 12 MAY 2212				,
37045		542/14		R	56,000.00	40	35	01-Apr-15	sue 12 MAY 2014				
37046		543/14		R	56,000.00	40	35	01-Apr-15	SUEMOT 12 MAY 2014				
37047		544/14		R	56,000.00	40	35	01•Apr-15	SUBMIT 12 MAY 2014				
37048		545/14		R	56,000.00	40	35	01-Apr-15	stern rowlork-	t			
37049		546/14		R	56,00040	40	36	01-Apr-15	suer4V2mai'R,Ls-'	f: ,a :!" :::	•i4' :•(4 f l	Z6', i,	.ail
37050		547/14		R	56,000.00	40	35	01-Apr-15	mull i+maër-mpa .	kr r'vc - •	• r : r.rv •	zr.1:.	J [.] :
LA7051		548/14		R	sspoomo	40	35	01-Apr-16	sue me 2 may2orr •	• -	🕶	• 1.	•





!IDCCUPA	TION CE	RTIFICATE		ETWATWA	_						ſ	
ESTAND	PTN	PLAN No	OCC. DATE	EST COST	AREA	EXT	DATE APPR	COMMENTS	BUILD	NOT BUILE	FOUND	2ND PLAN
36919		493/14		R 56,000.0	0 40	35	01-Apr-15	SUBMIT 12 MAY 2014				
16240		494/14		R 56,000.0	0 40	35	01-Apr-15	SUBMIT 12 MAY 2014				
• 2.5j 21		495/14		R 66.000.0	0 40	35	01-Apr-15	motor,: how 2014				
o, .12		196/14		R 56,000.0	0 40	35	01-Apr-15	Sax, 12 MAY 2014				
:6143		:97/14		R 56,000.0	0 40	35	01-Apr-15	SUBMIT 12 MAY 2014				
;5944		:98/14		R 56,000.0	0 40	35	01-Apr-15	SUBMIT 12 MAY 2014				
36945		:99/14		R 56,000.0	0 40	35	01-Apr-15	suem.r 12 MAY 2014				
36946		500/14		R 56 000.0	0 40	35	01-Apr-15	SUBMIT: 2 MAY 2014				
36947		501/14		R 56,000.0	0 40	35	01 .Apr-15	SUBMIT 12 MAY 2014				
36948		502/14		R 56,000.0	0 40	35	01-Apr-15	SUBMIT 12 MAY 2014				
36949		503/14		R 56,000.0	40	35	01-Apr-16	SUBMIT 12 MAY 2014				
36950		504/14		R 56,000.0	0 40	35	01-Apr-15	suemir 12 MAY 2014				
36951		505/14		R 56,000.0	40	35	01-Apr-15	SUBMIT 12 MAY 2014				
36953		506/14		R 56,000.0	40	35	01-Apr-15	SWIM 12 MAY tom				
36954		507/14		R 56,000.0	40	35	01-Apr-15	sue1 1214AV 2014				
36955		508114		R 56,000.0	40	35	01-Apr-15	SUBMIT 12 MAY 2014				
36956		509114		R 56,000.0	40	35	01-Apr-15	SUMMIT 12 MAY 2014				
36957		510/14		R 56,000.0	40	35	01-Apr-15	SUMT 12 MAY 2014				
36958		511/14		R 56,000.00	40	35	01-Apr-15	SUBMIT 12 MAY 2014				
36959		512/14		R 66,000.00	40	35	01-Apr-15	SUBMIT 12 MAY 2014				
36960		513/14		R 56 000.00	40	35	01-Apr-15 ,	SUBMIT 12 MAY 2014				
36961		514/14		R 56,000.00	40	35	01.Apr-15	suemrr 12 MAY 2014				
36962		515/14		R 56,000.00	40	35	01-Apr-15	nem 12 MAY 2014				
₹ 36963		516/14		R 56,000.00	40	35	01-Apr-15	sum/ 12 MAY 2014				
36964		517/14		R 56,000.00	40	35	01-Apr-15	i'•suleM1- 1,1-				
36965		518/14		R 56,000.00	40	35	01-Apr-15	srJiTI&A,b3.117	:": .7' ""4).'	i i rl. 1r1	r: y	
36966		519/14		R 56,000.00	40	35	01-Apr-16	, sujimecy/FrAi;P"	4	4	7.	
36967		520/14		R 56,000.00	40	35	01-Apr-15	: suillirrA: riki :ai :; .	, P.M P	<i>Lit'i</i> itwii	14.1i -	
36968		521/14		R 56,000.00	40	35	01-Apr-15	SUBMIT 12 maiiiiim:⁻·i				
36969		522/14		R 56,000.00	40	35	01-Apr-15	. suelm rir mar 2014				
36970	J	523/14		R 56,000.00		36	01-Apr-15	S1.180 ² 11' 12 MAY 2014	1.25 (1.35)	.: ".	J' I	

.421-: :313.4 1:.:1 O'....



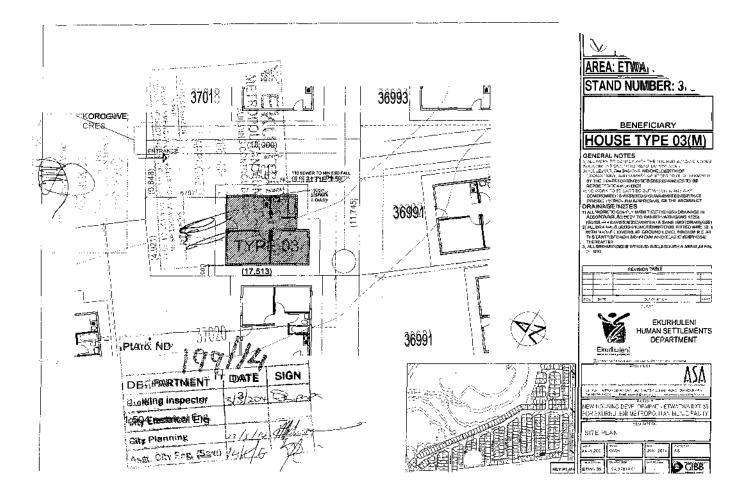
OCCLIBA	TION CERTIFICATE.		WATWA							
STAND	PTN PLAN No O	CC. DATE ES	I COSTA	REA	EXIL	DATE APPR	COMMENTS	BUILD N	OT BUILD	FOUND
37001	181/14	R	56,000.00	40	35	05-Mar-15	SUBT, T FEB 2D 4		•	
37002	182/14	R	56,000.00	40	35	05-Mar-15	SUBMIT -FEB-201a			
37003	183/14	R	56,000.00	40	35	05-Mar-15	SUBMIT '14 FEB 20.			
37004	184/14	R	56,000.00	40	35	05-Mar-15	SUBMIT 1a-FES-2.014			
37005	185/14	R	56,000.00	40	35	05-Mar-15	SUBMIT 14 FEB-201.1			
37006	186/14	R	56,000.00	40	35	05-Mar-15	SONO, 14-FEB-2014			
37007	187/14	R	56,000.00	40	35	05-Mar-15	SUBMIT 14-FEB-2014			
37008	158/14	R	56,000.00	40	35	05-Mar-15	SUBMIT 14-FtB-201			
37009	189/14	R	56,000.00	40	35	05-Mar-15	SANT 14.FEB-2014			
L 37010	190/14	R	56,000.00	40	35	05-Mar-15	ѕивміт la-FEB-2014			
37011	191/14	R	56,000.00	40	35	05-Mar-15	SUBMIT 14-FEB-2014			
37012	192/14	R	56,000 00	40	35	05-Mar-15	SUBMIT la FEB-20.a			
37013	193/14	R	56,000 00	40	35	05-Mar-15	sawn -FEB-201a			
37014	194/14	R	56,000 00	40	35	05-Mar-15	SUBMIT 14-FEB-2014			
37015	195/14	R	56,000 00	40	35	05-Mar-15	SUBMIT 14-FEB-2011			
37020	200/14	R	56,000.00	40	35	05-Mar-15	SUBMIT 14-FEB-2016			
37025	205114	R	56,000.00	40	35	05-Mar-15	SUBMIT 14-FEB-2014			
37026	206/14	R	56,000.00	40	35	05-Mar-15	SUBMIT 14FEB-2014			
37052'	207/14	R	56,000.00	40	35	05-Mar-15	SUBMIT 14-FEB-2014			



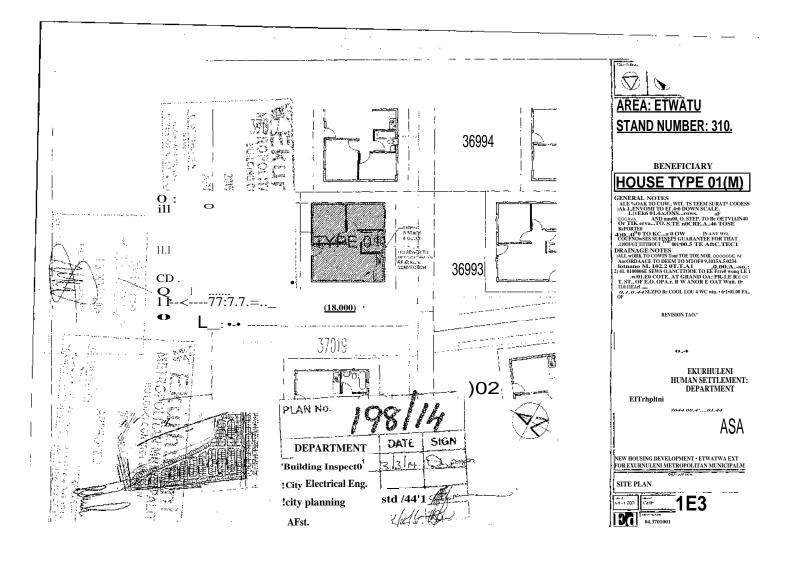


1.3 :: COPIES OF INDIVIDUAL APPROVED SITE PLANS

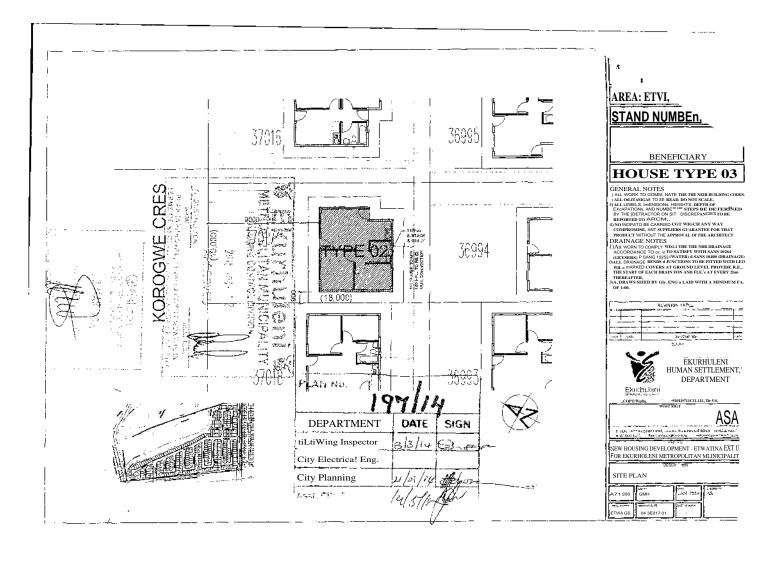




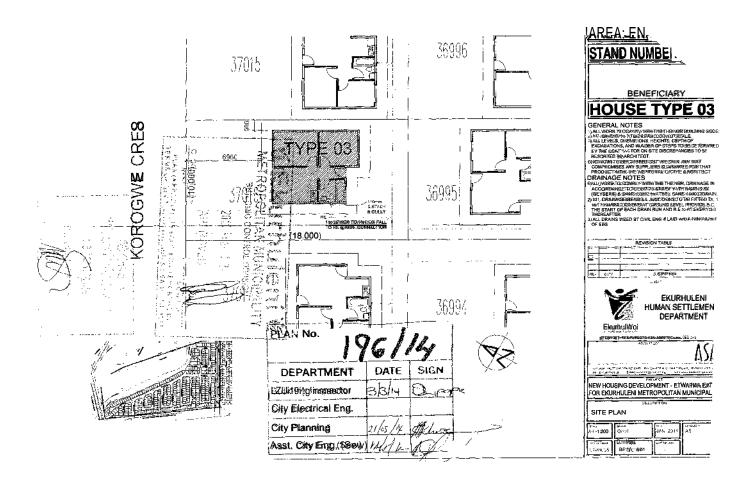




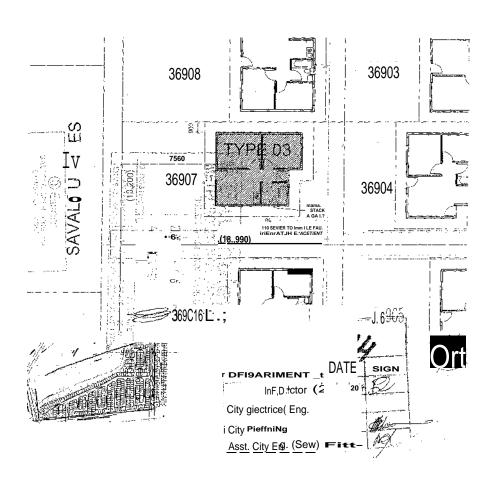














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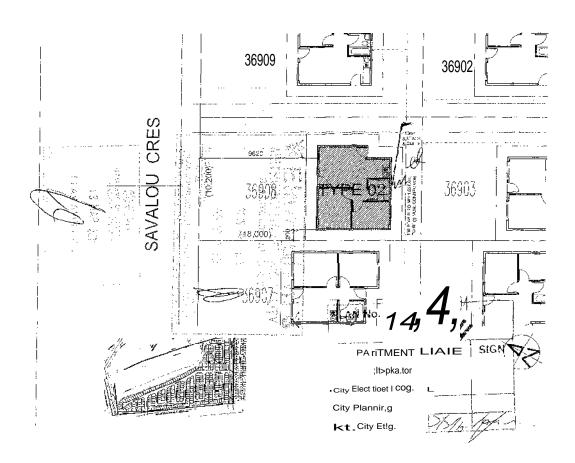
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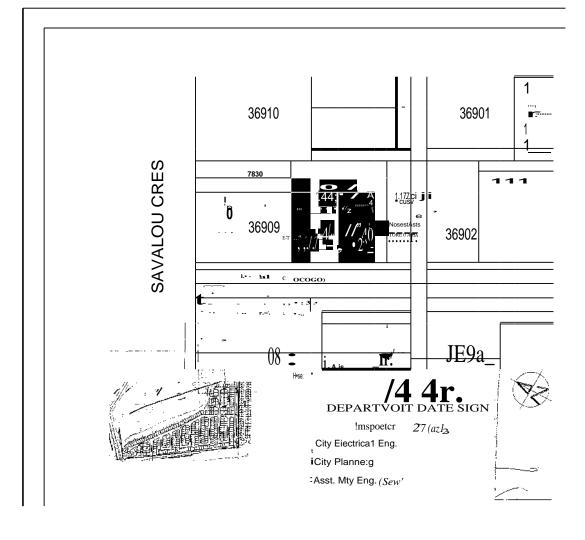
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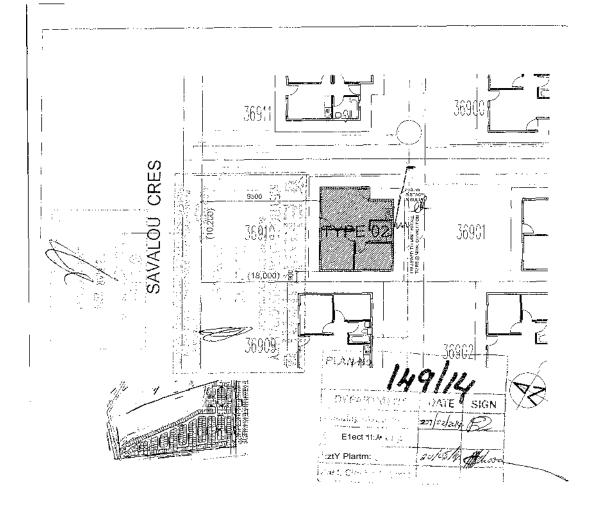
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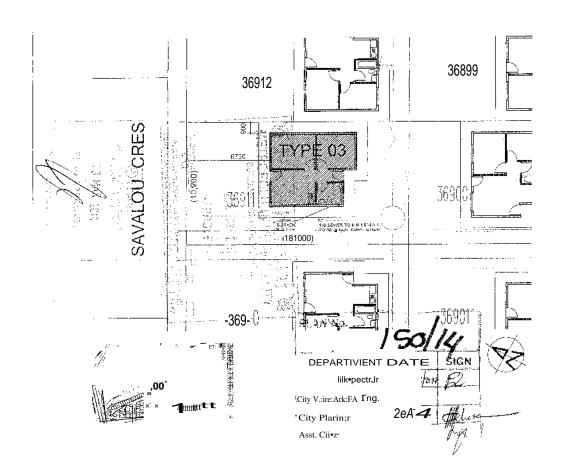
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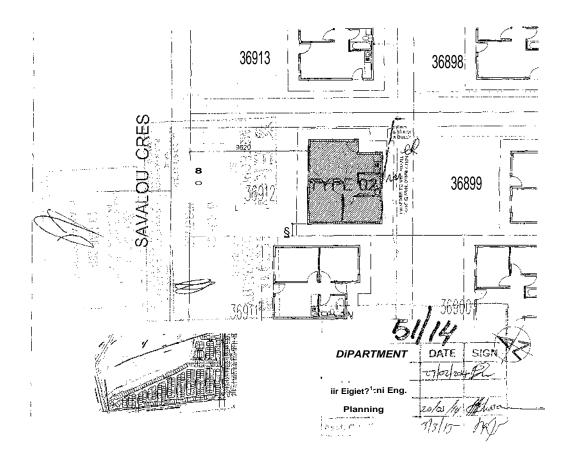
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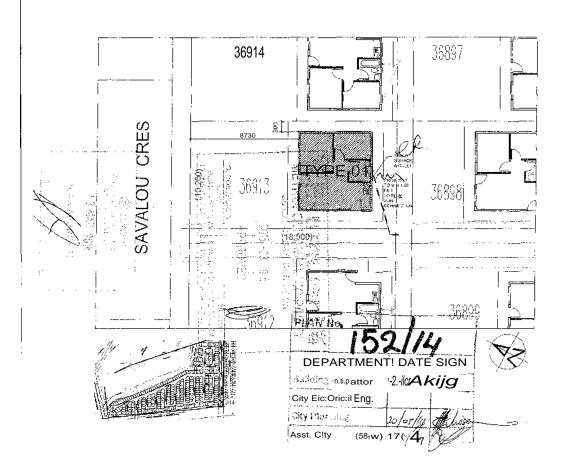
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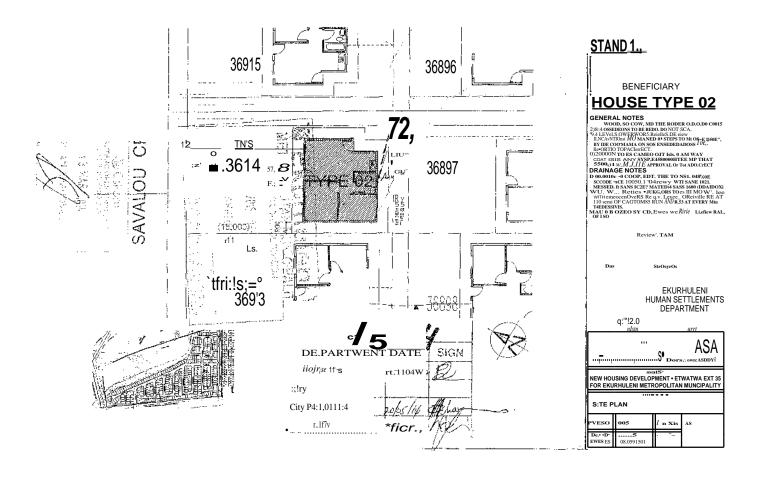
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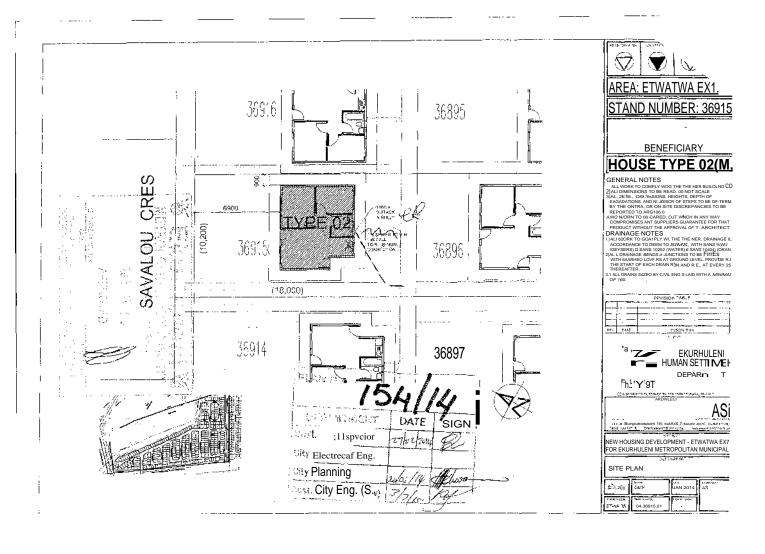
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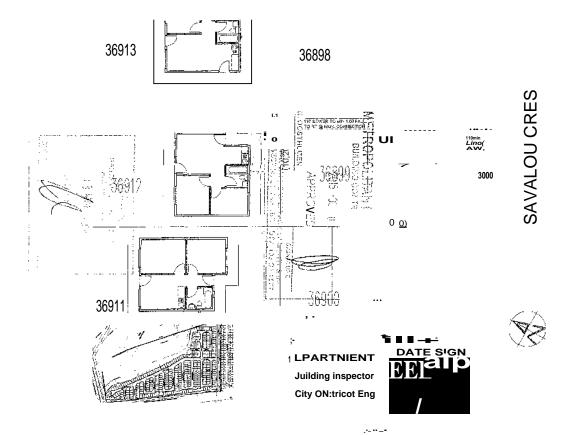












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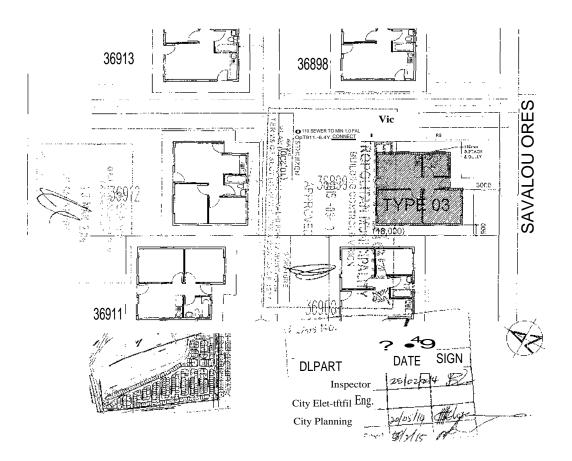
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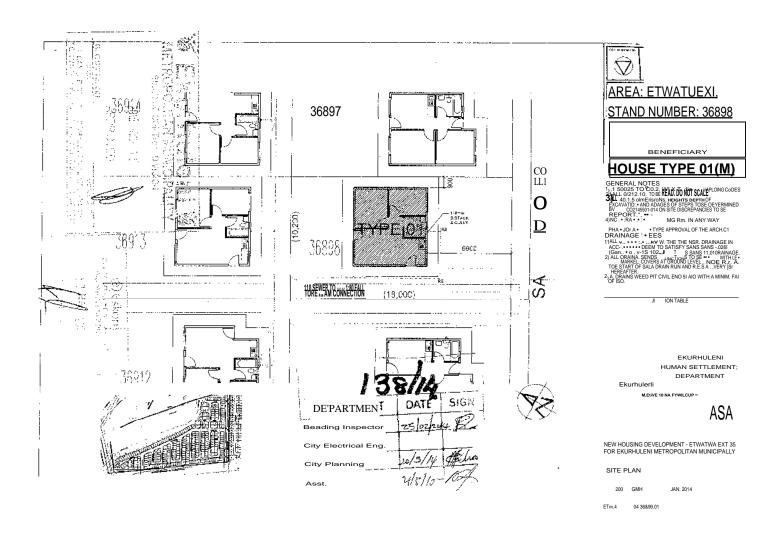
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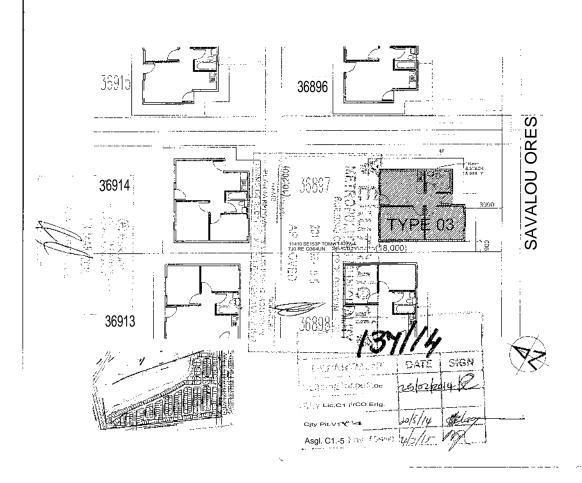
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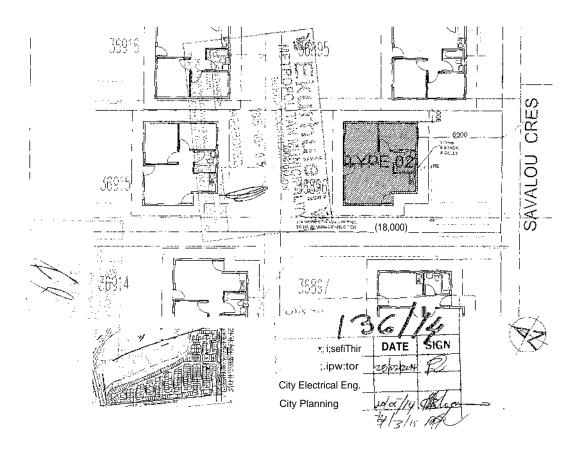












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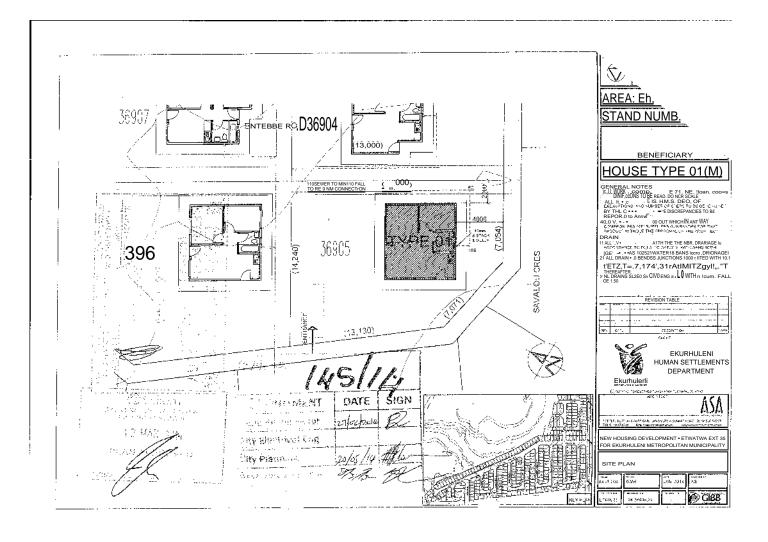
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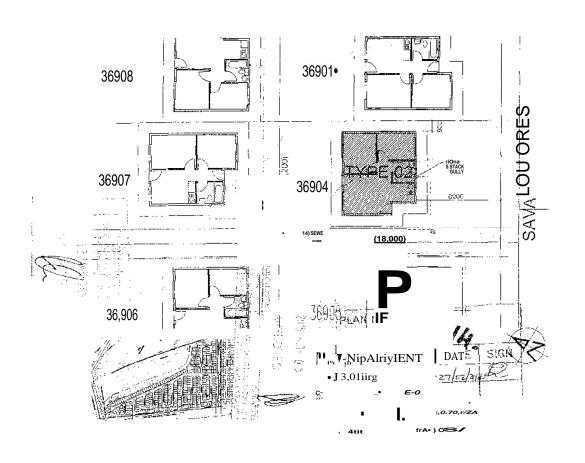


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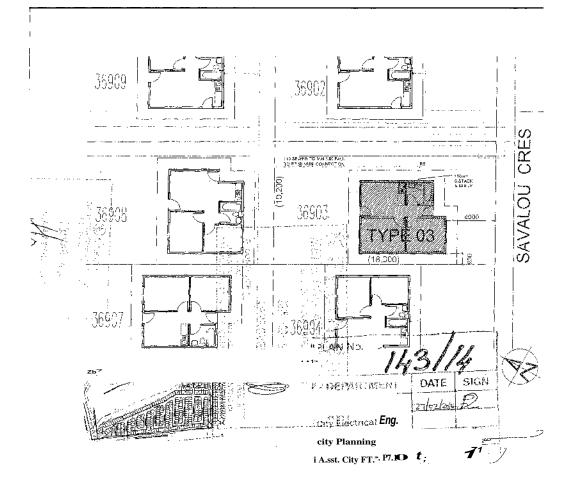
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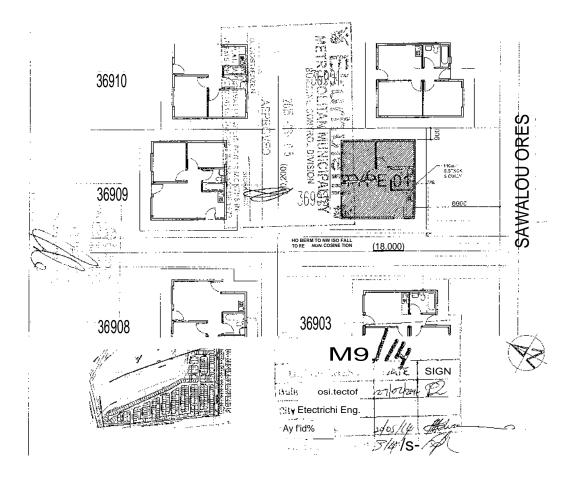
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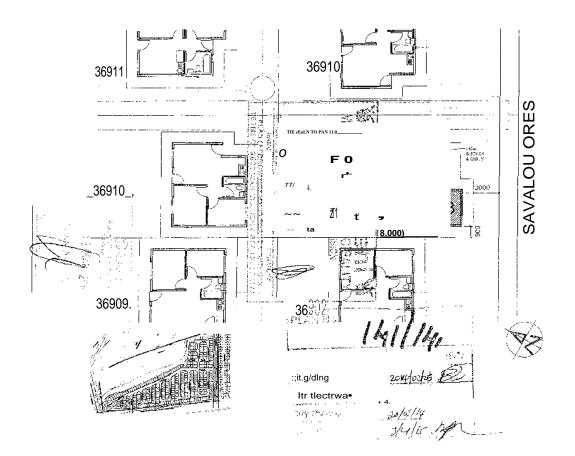
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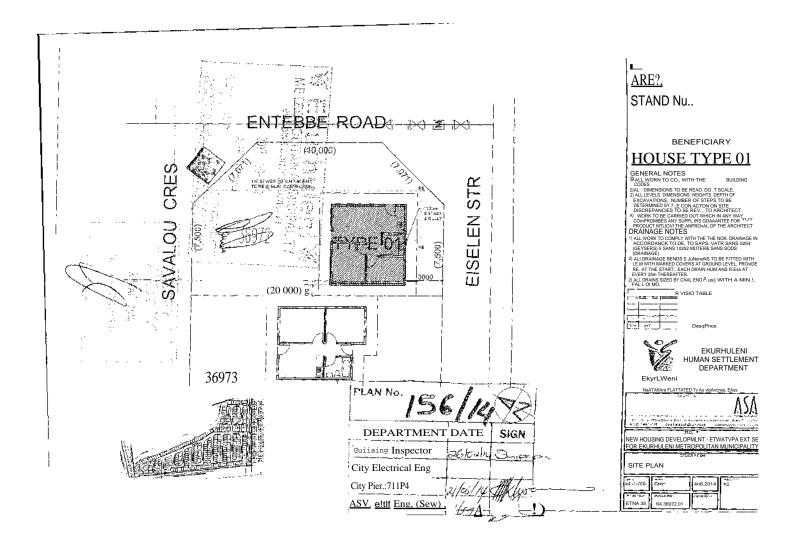
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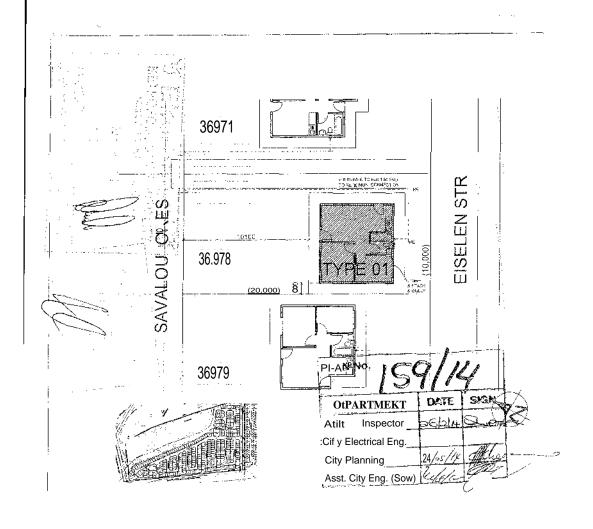
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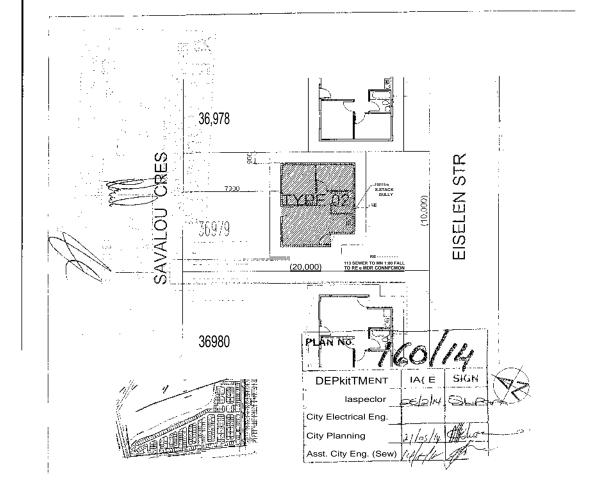






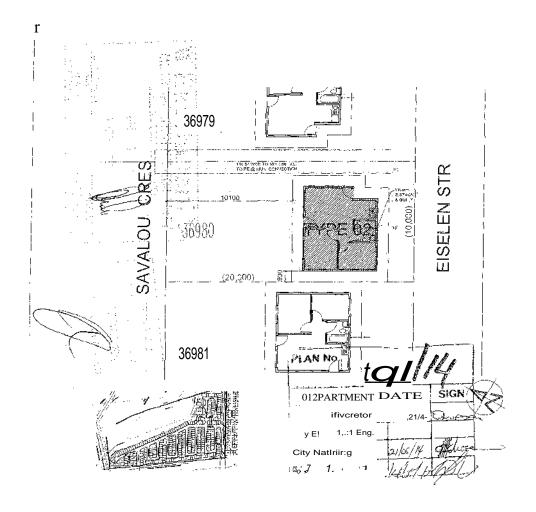












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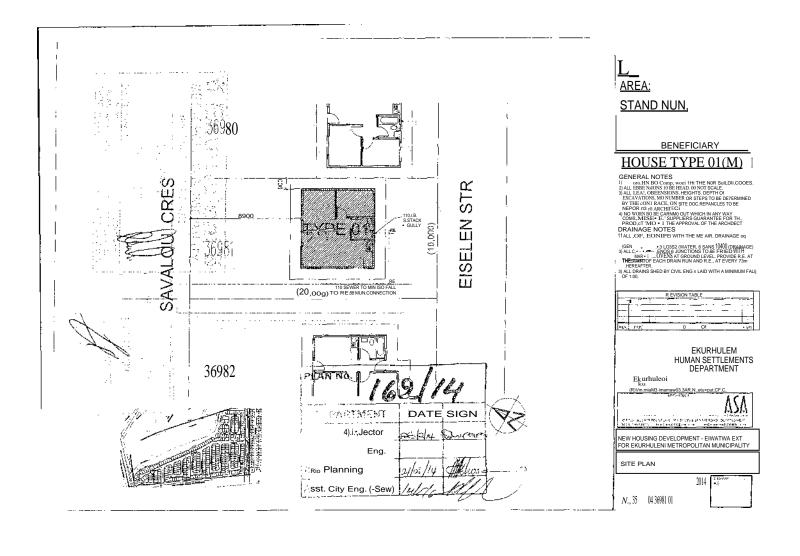


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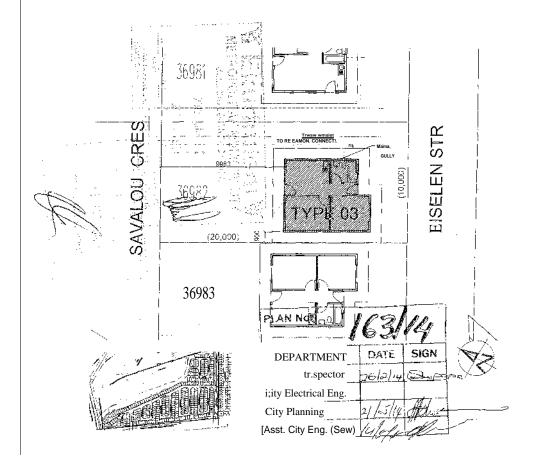
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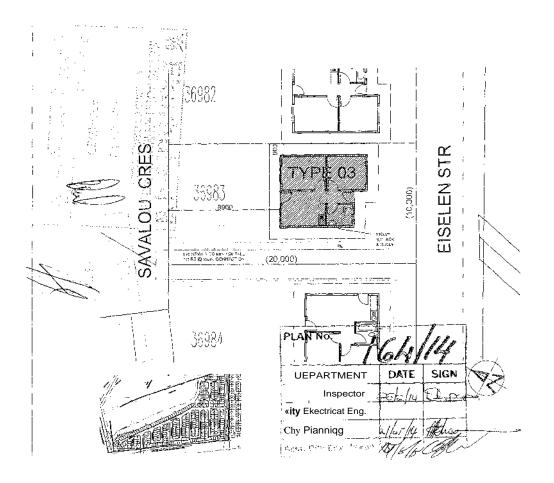
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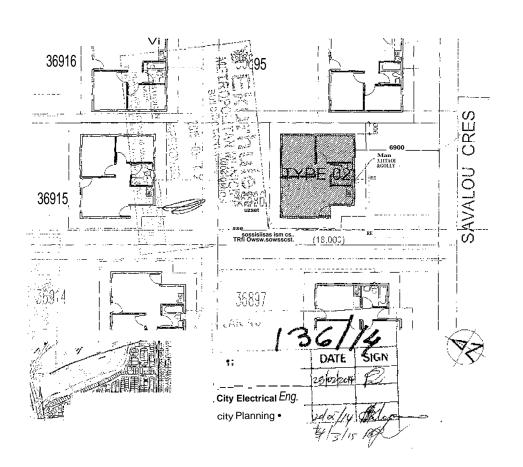
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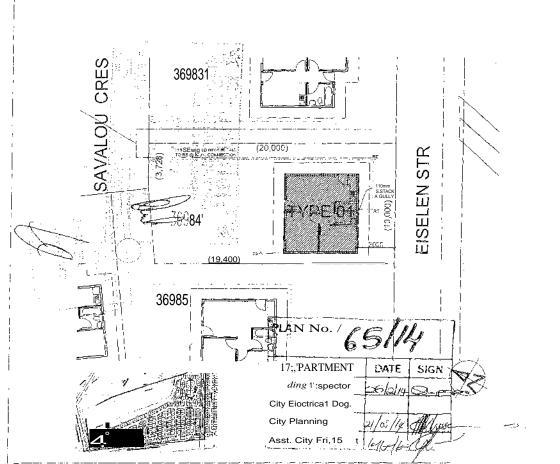
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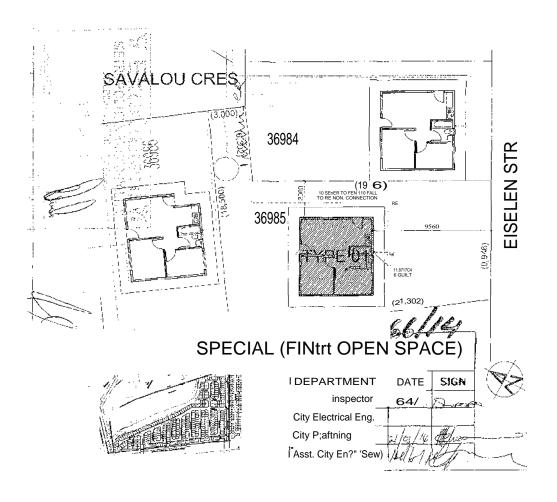
EkurhuenPI. METROPOLITAN MIMICIA MWANZA CR AREA: ETWATWA EXT. 35 STAND NUMBER: 36871 G. 0027-9385 BENEFICIARY **HOUSE TYPE 02(M)** DEPARTMENT ukEflg<u>Inspector</u>... Planning Planting Pla (10,000) OrACR.121 168/4 1887 N. C. EKURHULENI HUMAN SETTLEMENTS DEPARTMENT $AS4^1$ NEN riOUSNG DErELOPNEN7 • :1 FOR EKURHULENI MEIROPOL11r:: ETOTS **E E** or3E ○ 71**v**











K't AREA: Ei STAND NUMBt.

BENEFICIARY

HOUSE TYPE 01

GENERAL NOTES

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EKURHULENI HUMAN SETFLEMENTE DEPARTMENT

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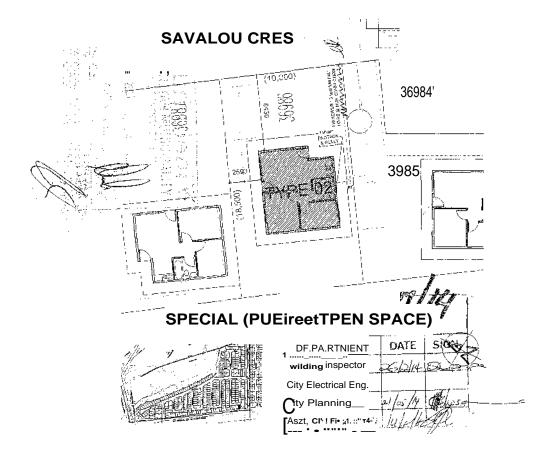
NEW HOUSING DEVELOPMENT - ETWATWA EXT 35 FOR EKURHULENI METROPOLITAN MUNICIPALITY

SITE PLAN

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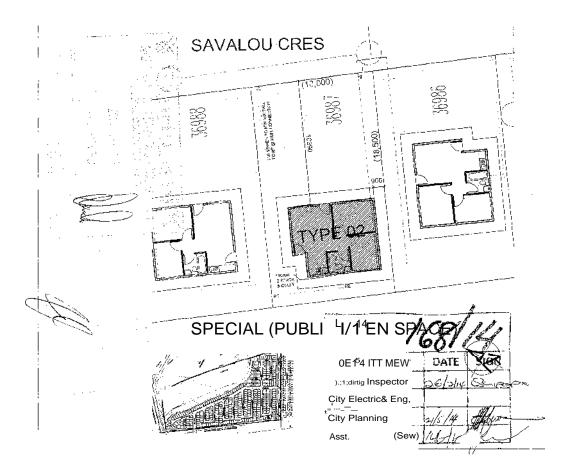






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HOUSE TYPE 02(M)

GENERAL NOTES

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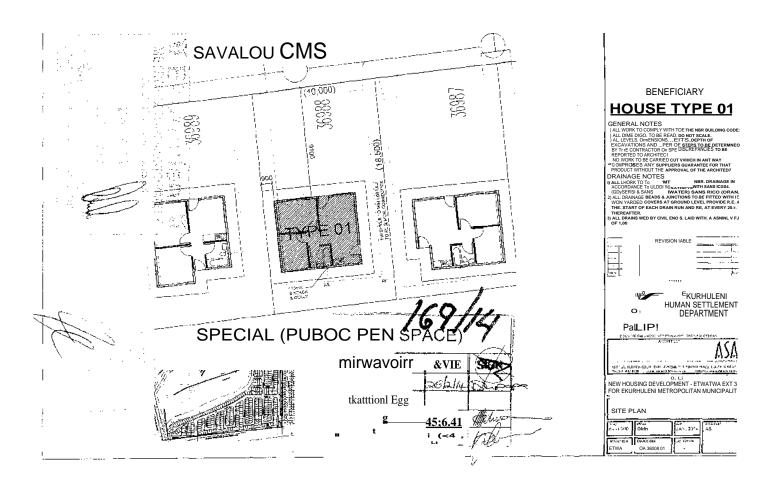
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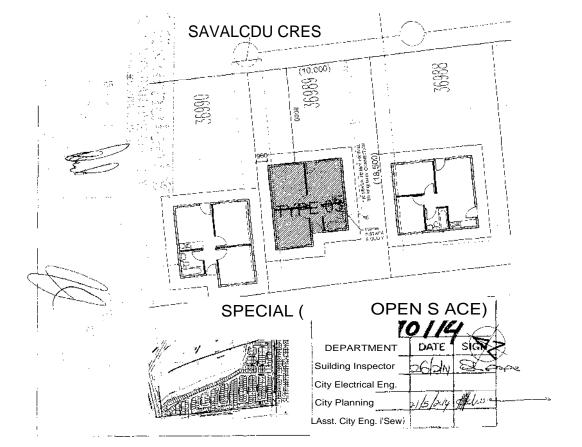
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HOUSE TYPE 03(M)

GENERAL NOTES

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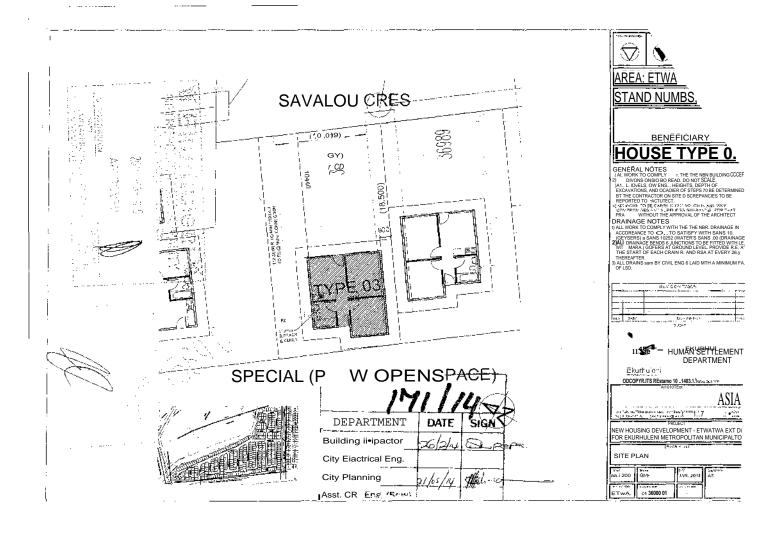
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SITE PLAN

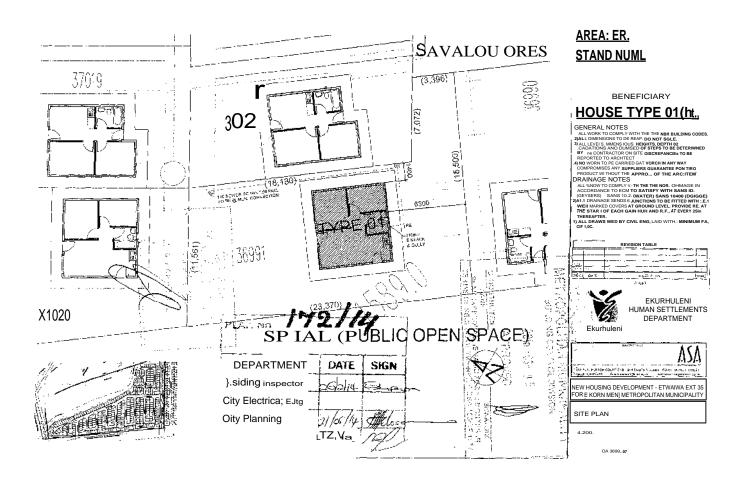
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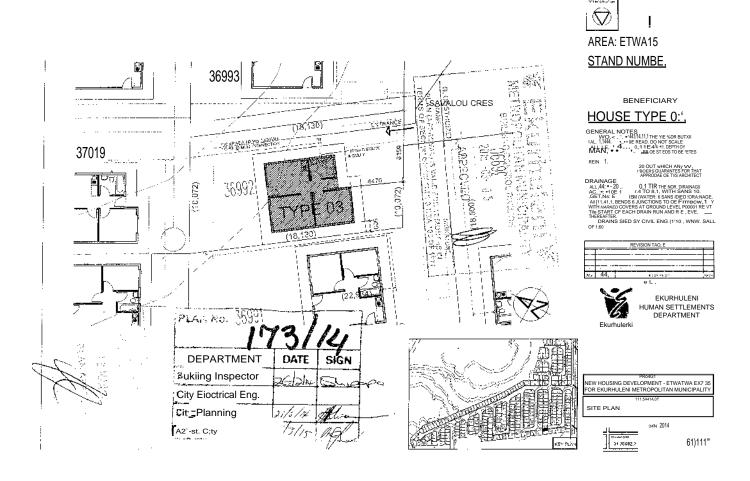




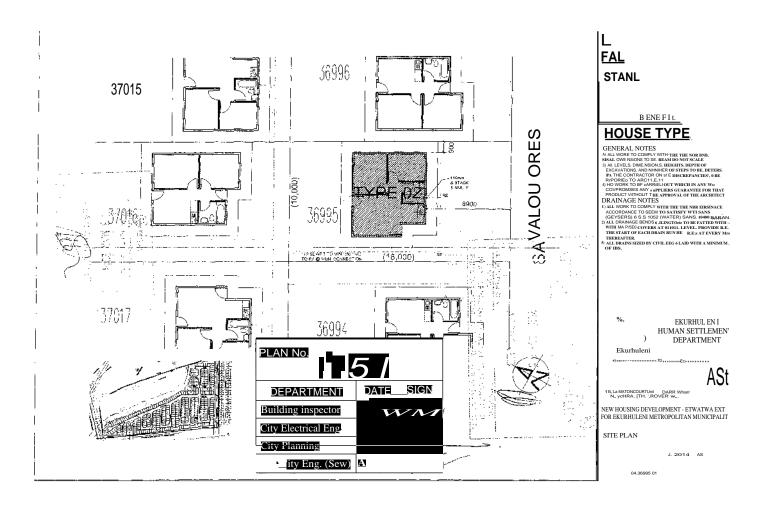




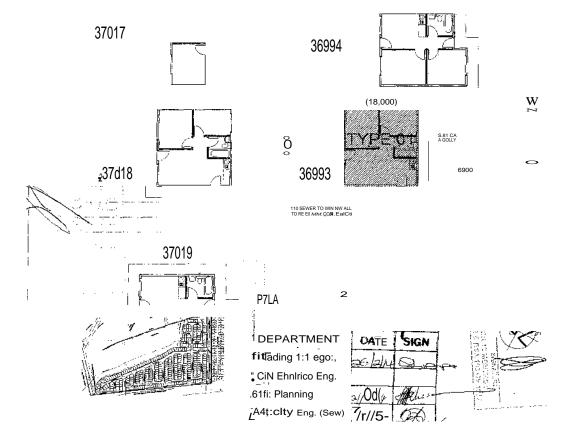












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HOUSE TYPE 01(i...

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GENERAL NOTES

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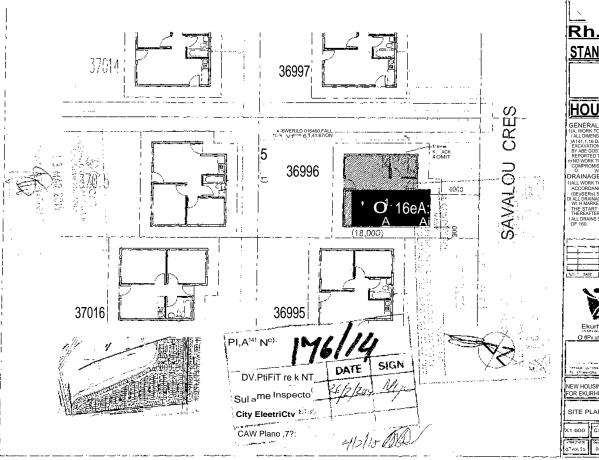
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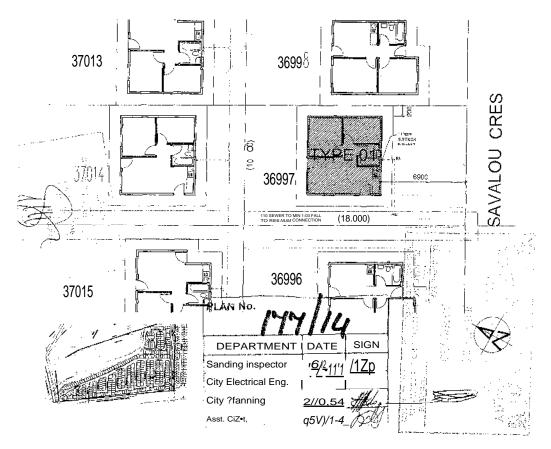
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BENEFICIARY

HOUSE TYPE 01(M)

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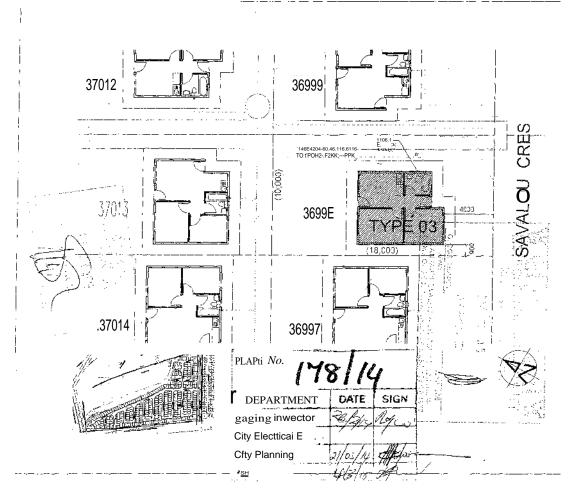
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GENERAL NOTES

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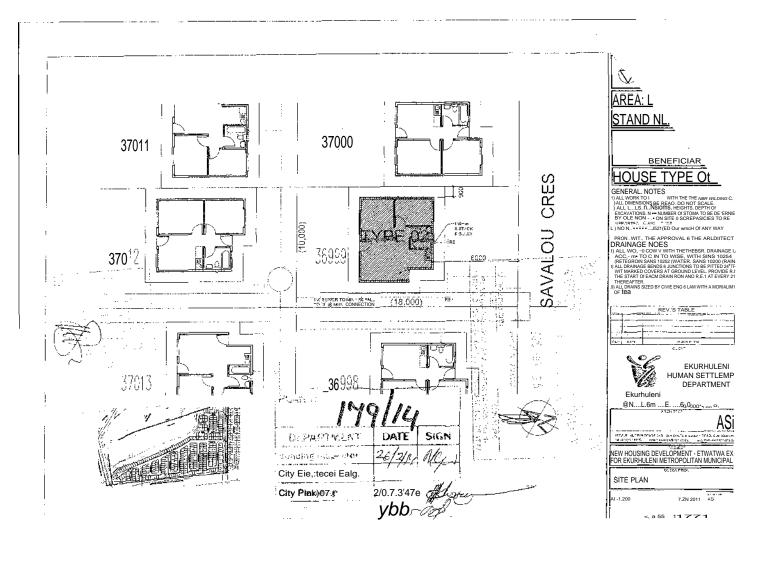
NEW HOUSING DEVELOPMENT - ETWATWA EXT FOR EKURHULENI METROPOLITAN MUNICIPALIT1

SITE PLAN

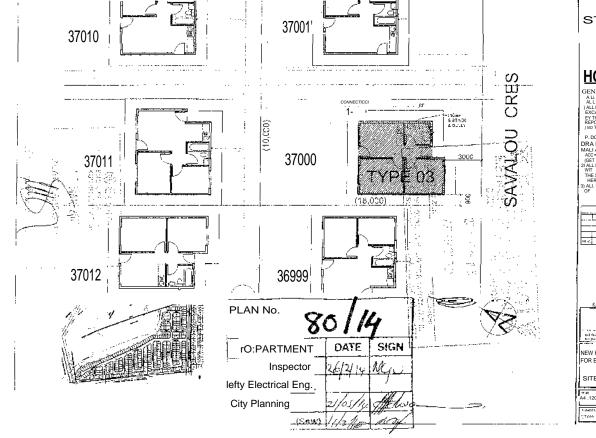
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HOUSE TYPE 03(k.

GENERAL NOTES

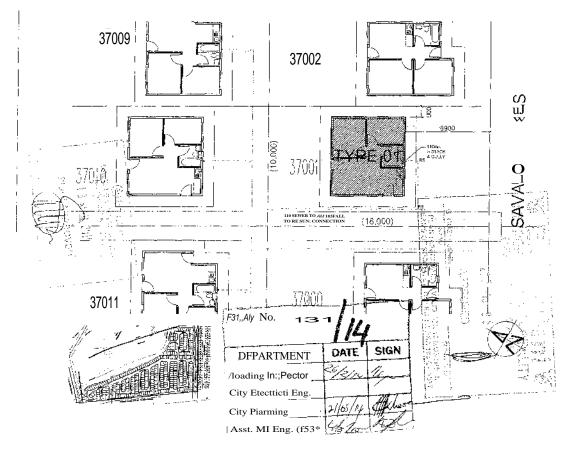
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HOUSE TYPE 01t..

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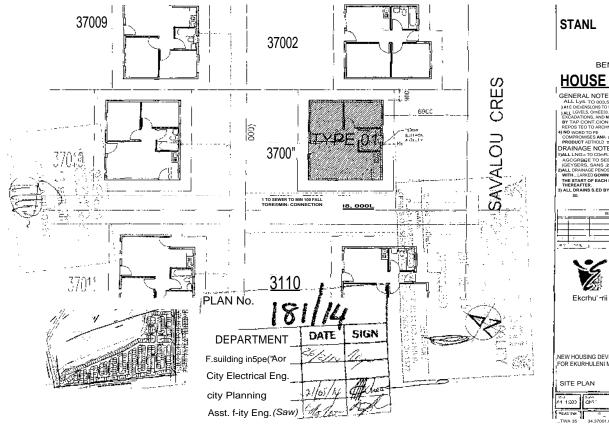
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HOUSE TYPE 01(E.





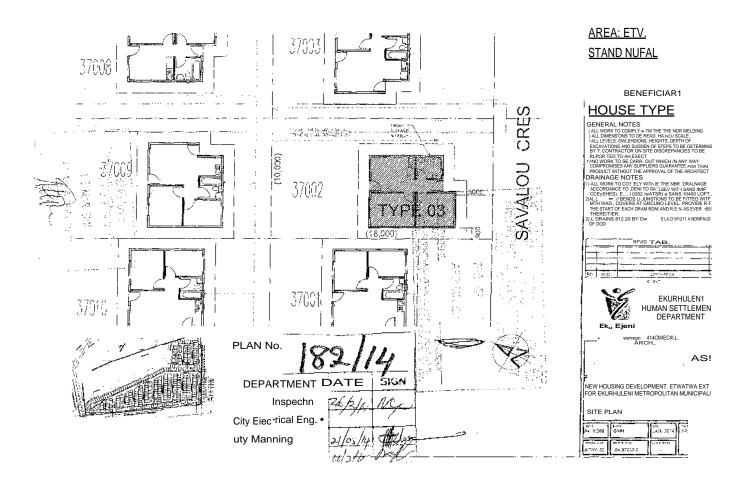
EKURHULENI HUMAN SETTLEMENT; DEPARTMENT

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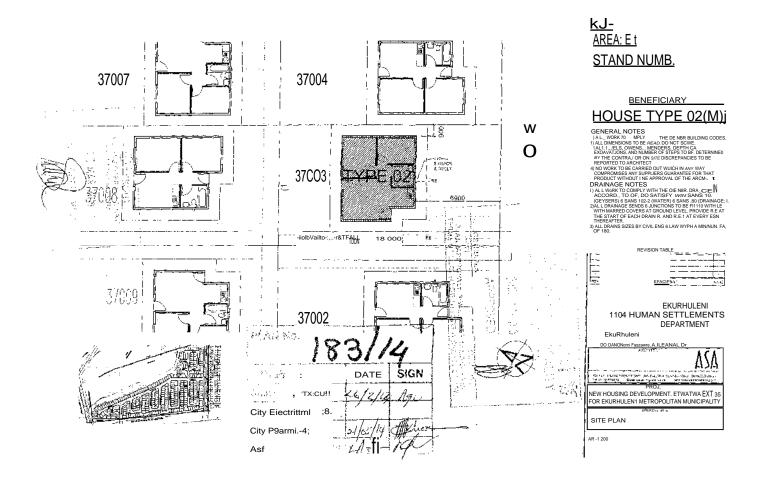
NEW HOUSING DEVELOPMENT - ETWATWA EXT 35 FOR EKURHULENI METROPOLITAN MUNICIPALITY



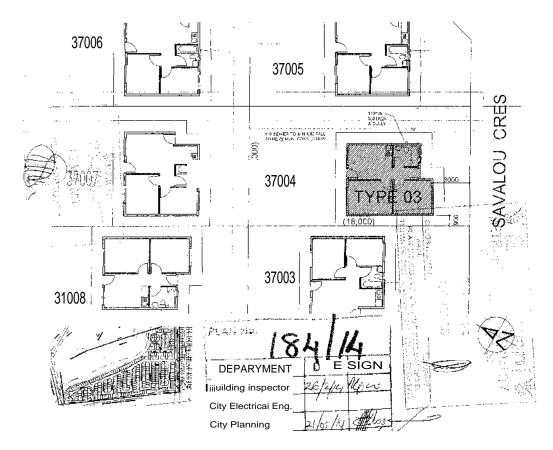












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HOUSE TYPE 03(nh,

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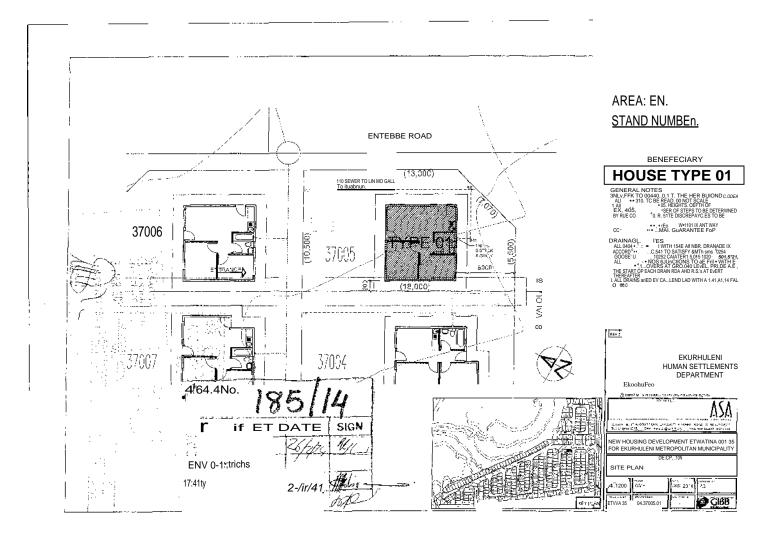
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SITE PLAN

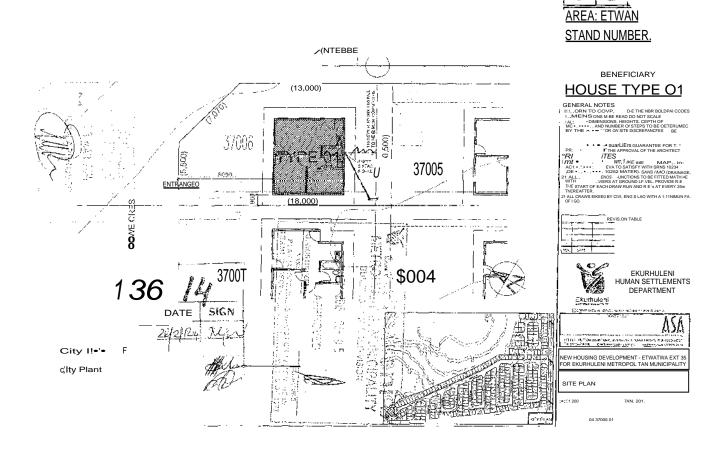
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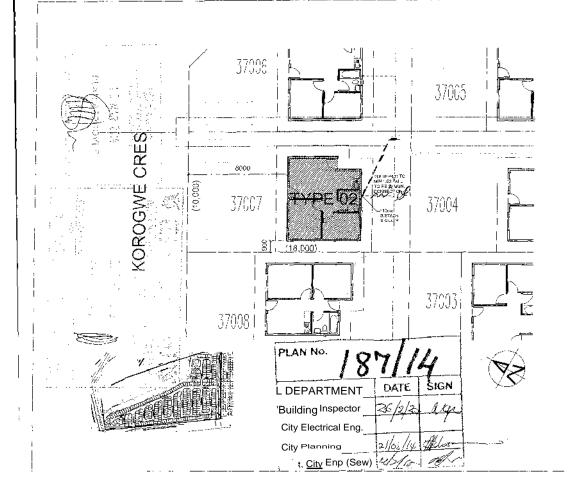






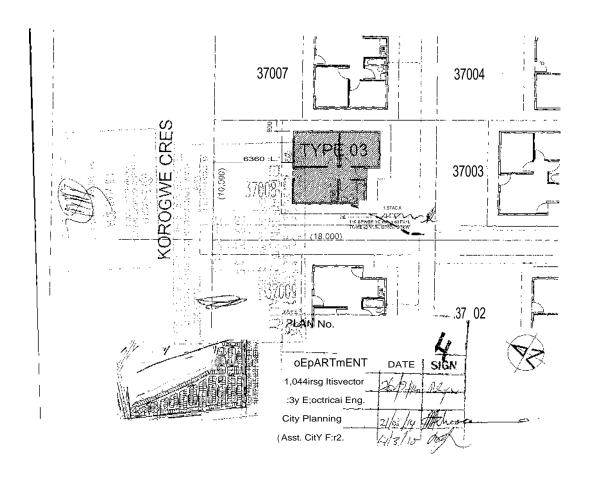












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HOUSE TYPE 0

GENERAL NOTES

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9) ALL DRAINS SIZED BY CIVIL ENO 6 LAID PATNA IONIN





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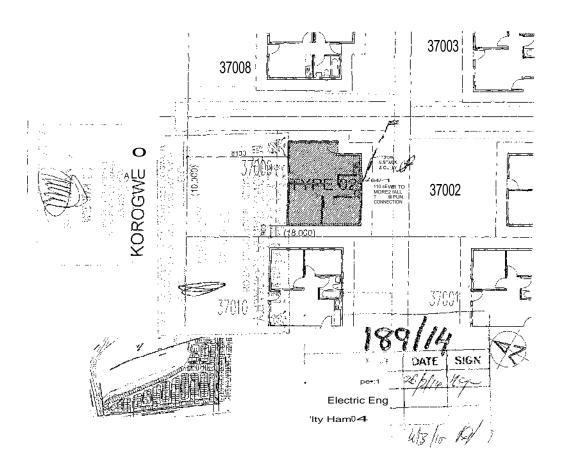
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BENEFICIARY

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GENERAL NOTES

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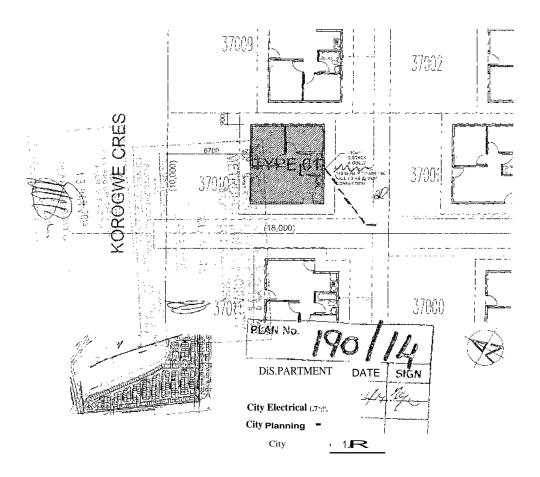




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BENEFICIARY

HOUSE TYPE 01(M)

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EKURHULENI HUMAN SETTLEMENT: DEPARTMENT

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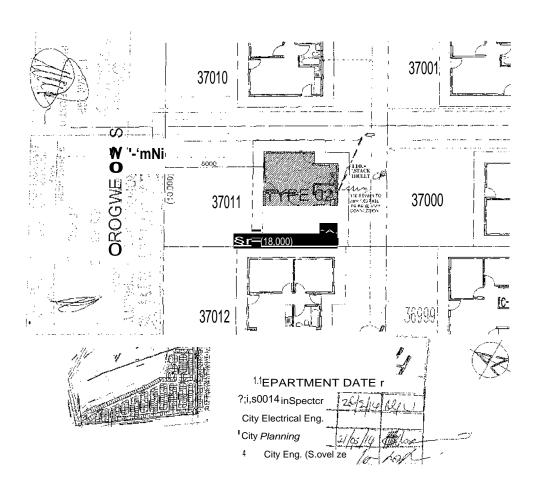
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AREA: E) STAND NUMBL.

BENEFICIARY

HOUSE TYPE 02

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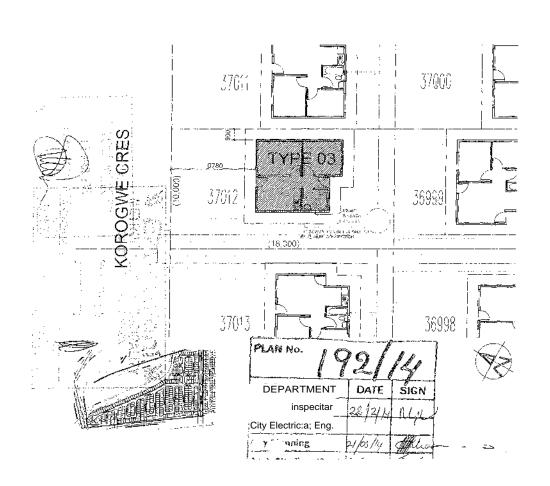
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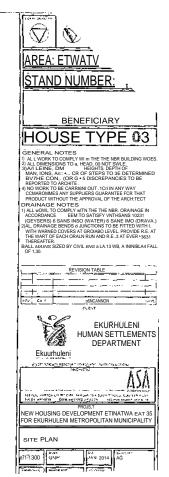
NEW HOUSING DEVELOPMENT • ETWAIWA EXT FOR EKUPPIULENI METROPOLRAN MUNICIPAL!

SITE PLAN Gym

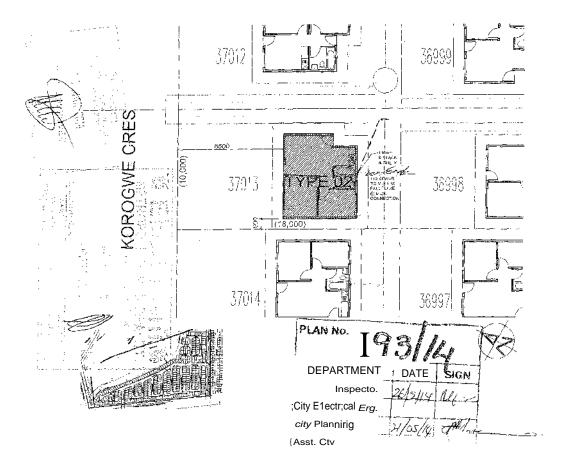
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BENEFICIARY

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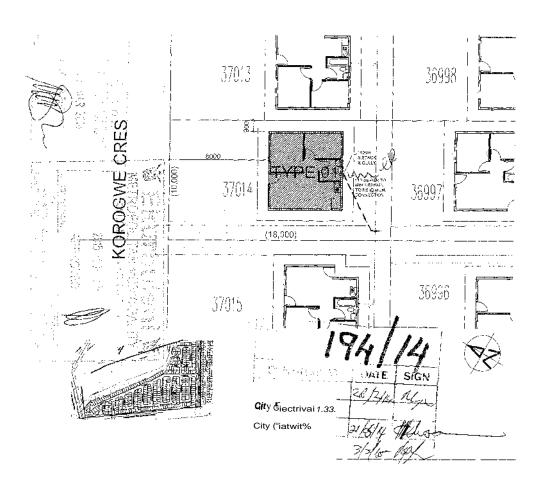
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NEW HOUSING DEVELOPMENT - EIWATWA EXT FOR EKURHULENI METROPOLITAN MUNICIPAL'

SITE PLAN

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BENEFICIARY

HOUSE TYPE 01(M

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DRAINAGE NOTES

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EKURHULENI HUMAN SETTLEMENT DEPARTMENT

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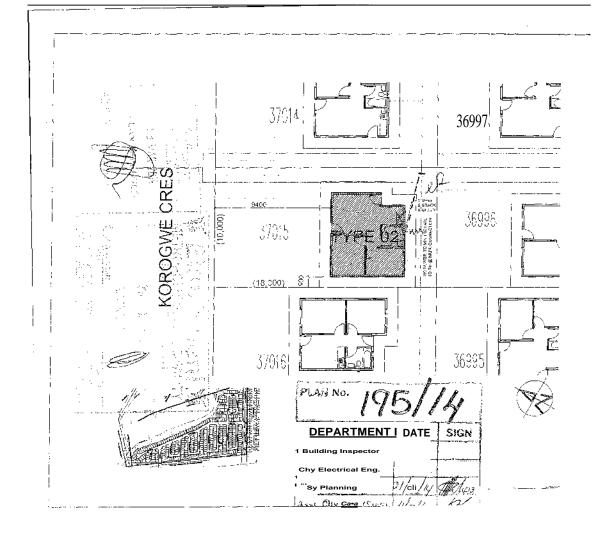
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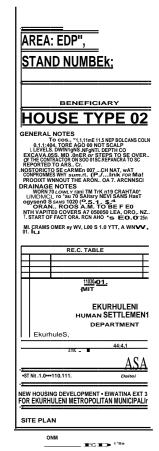
NEW HOUSING DEVELOPMENT -E1WATWA EXT 35 FOR EKURHULENI METROPOLITAN MUNICIPALITY

SOS PLAN

JAN. 2014

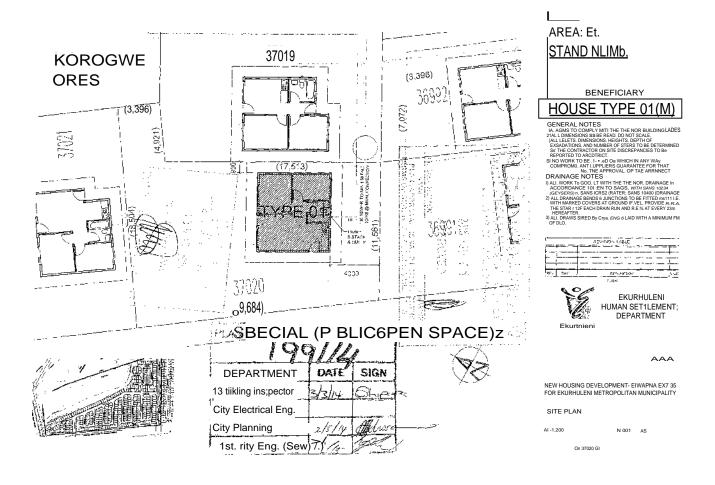




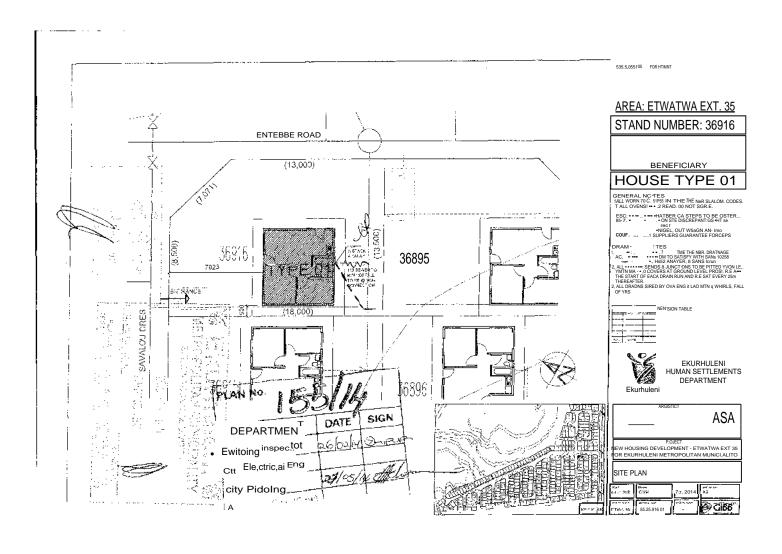




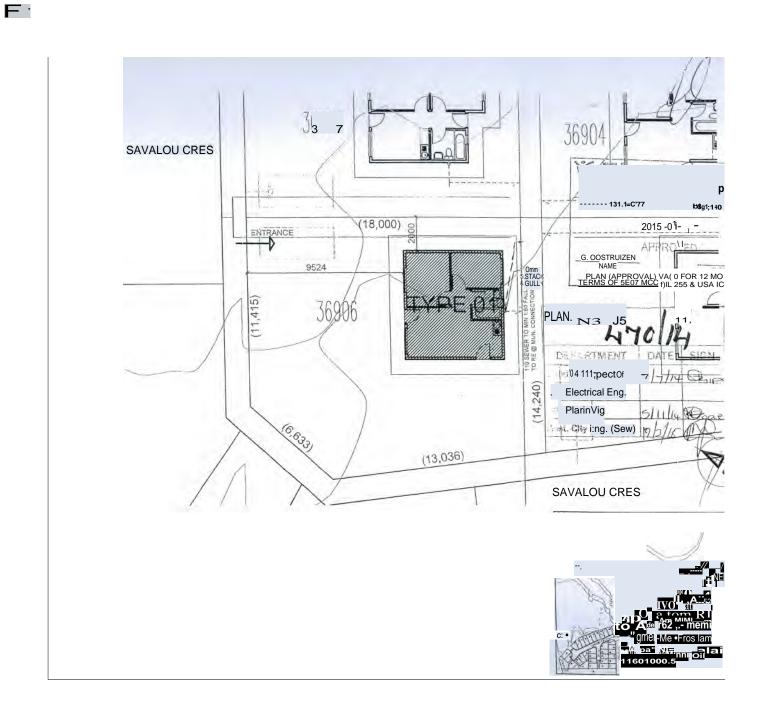






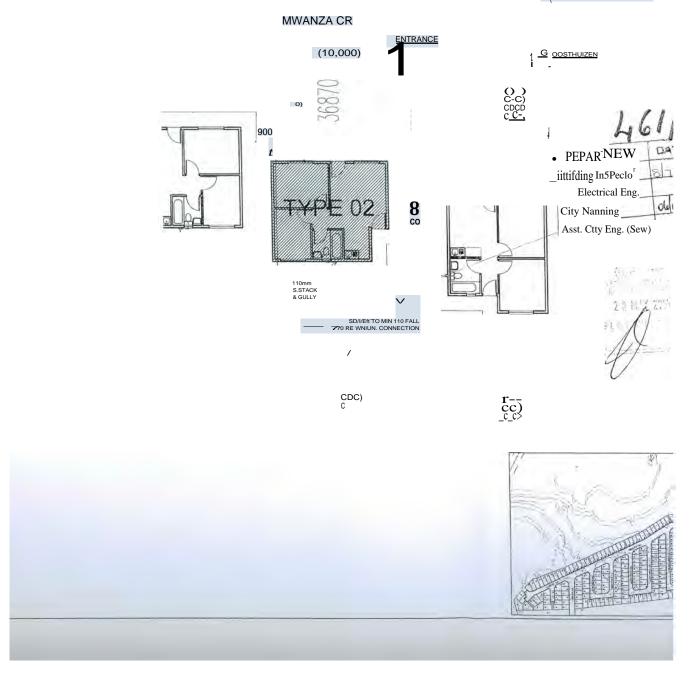




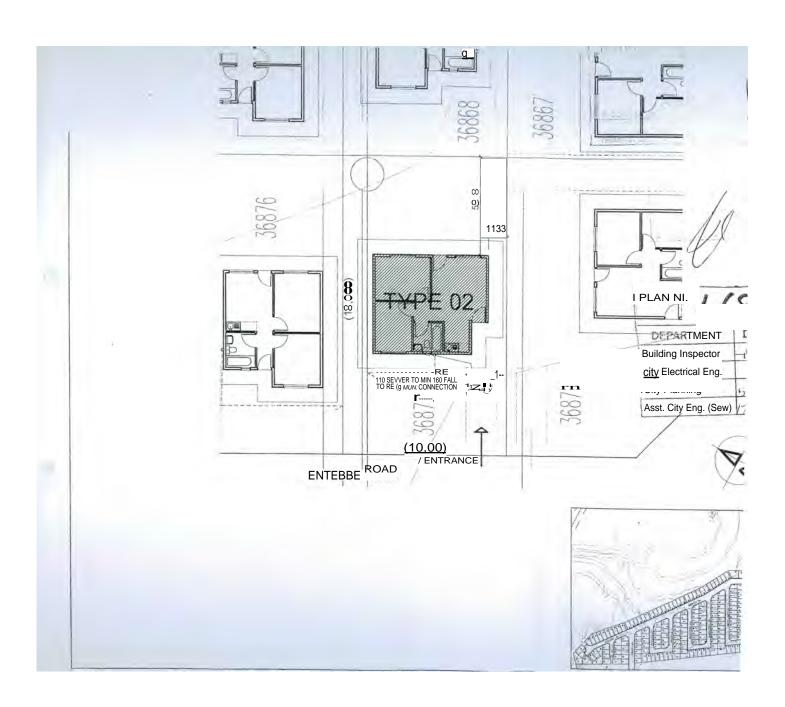




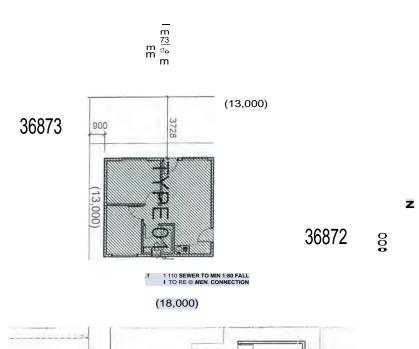
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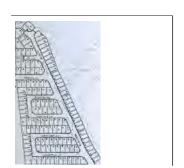












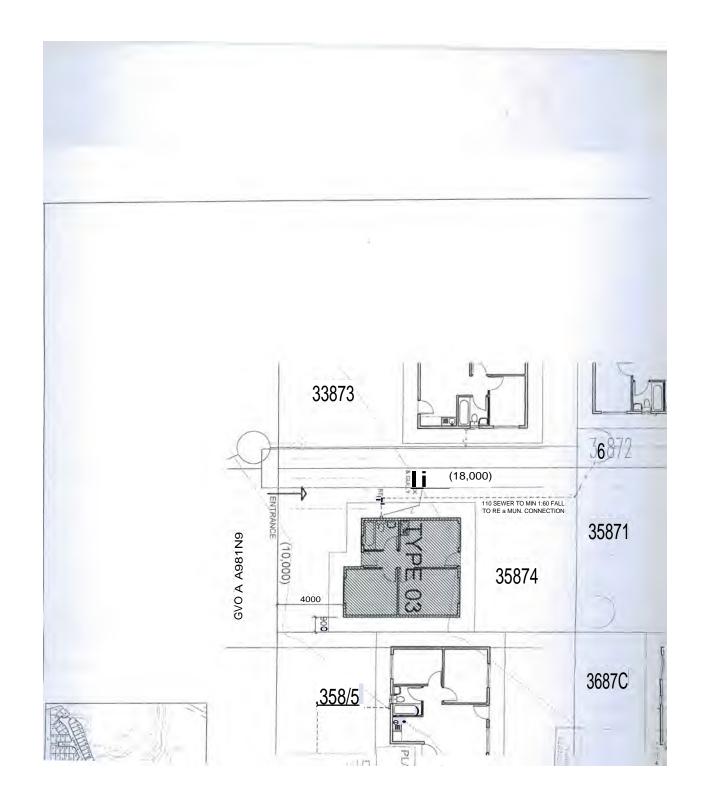




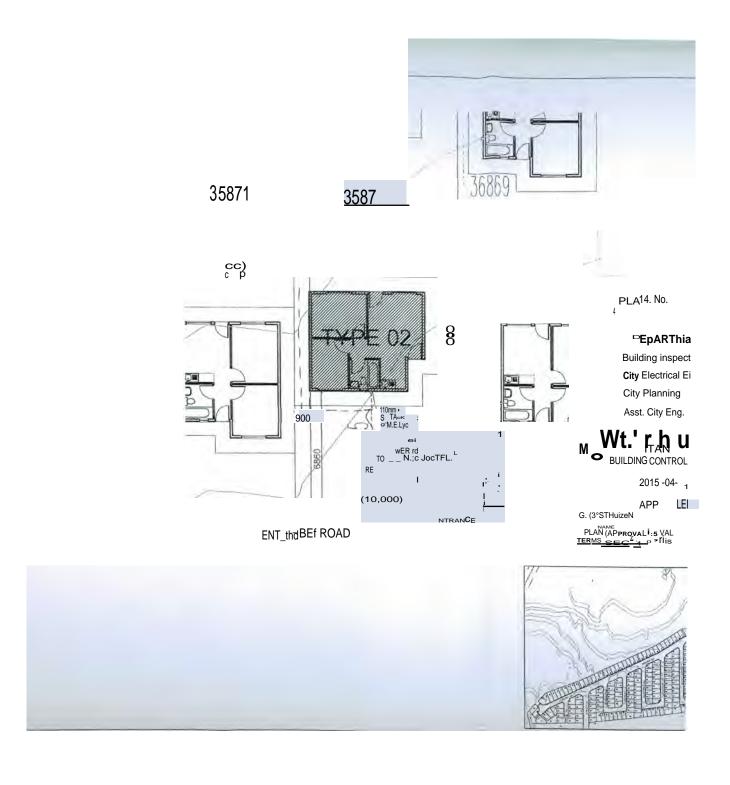




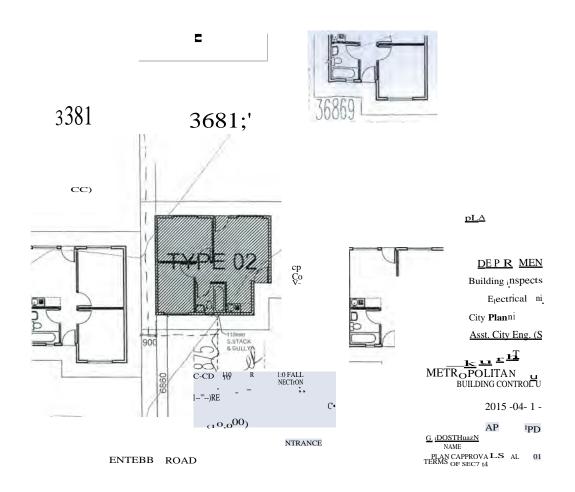








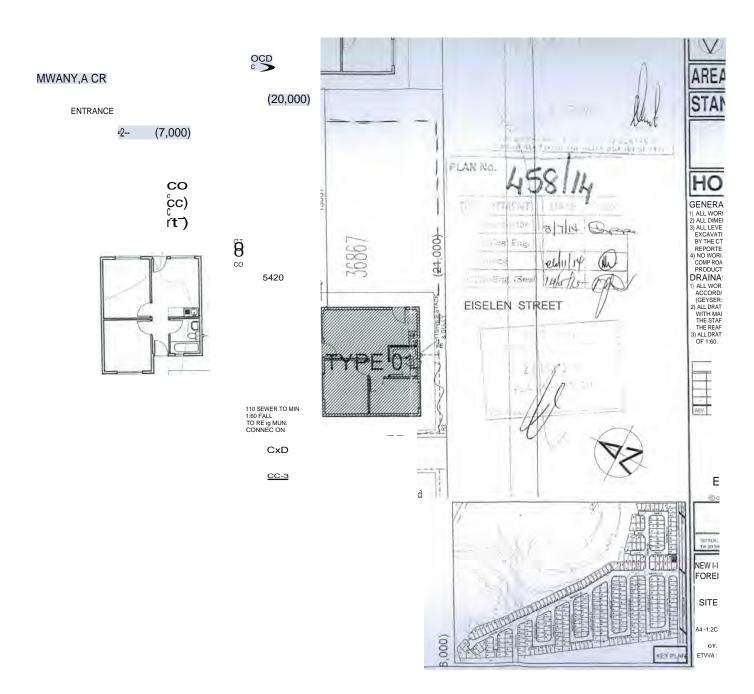




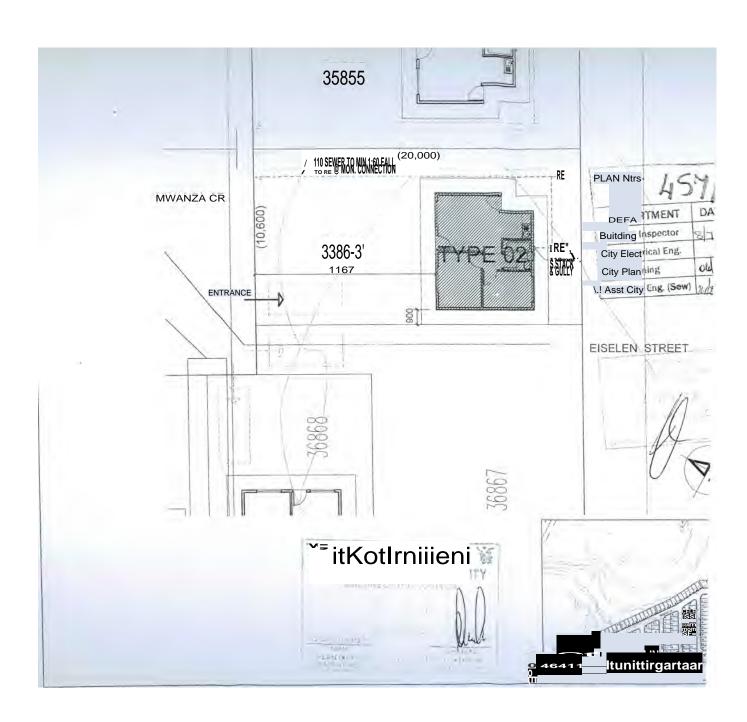




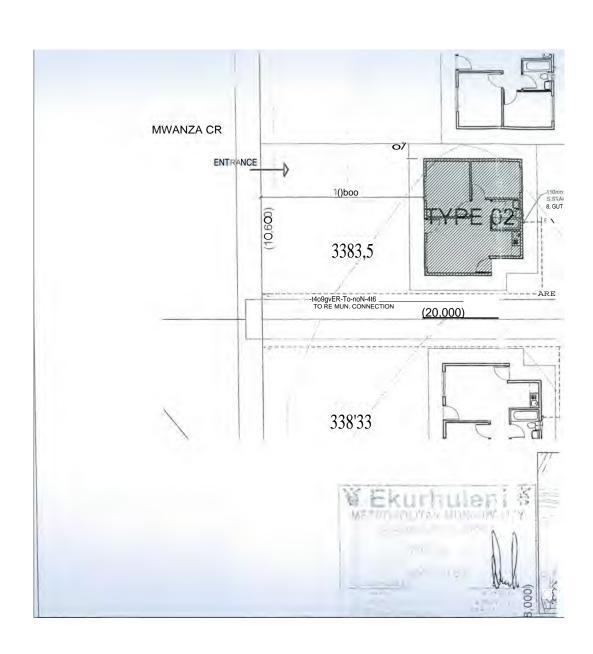




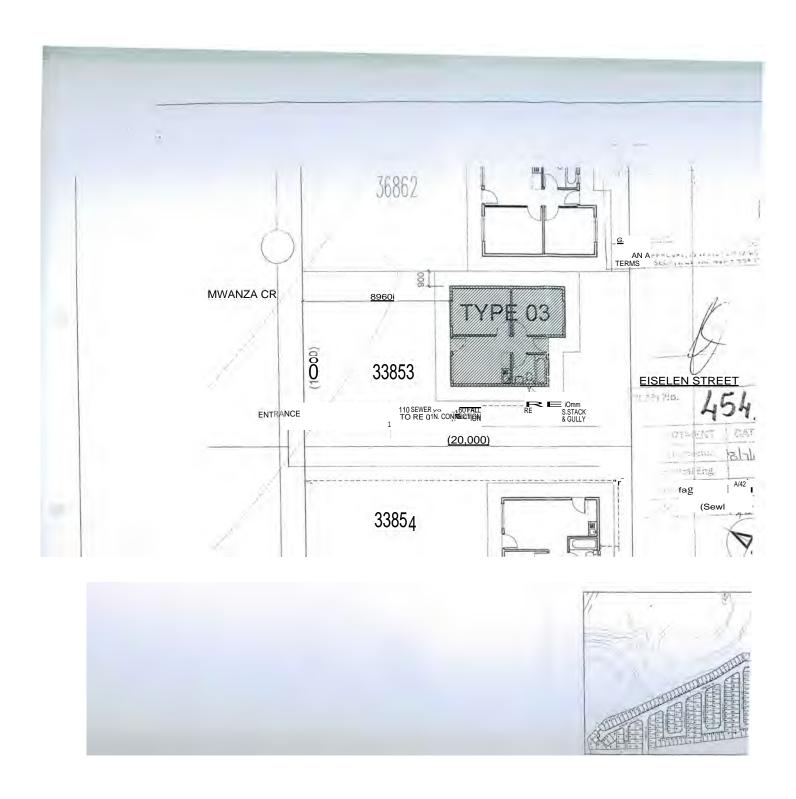




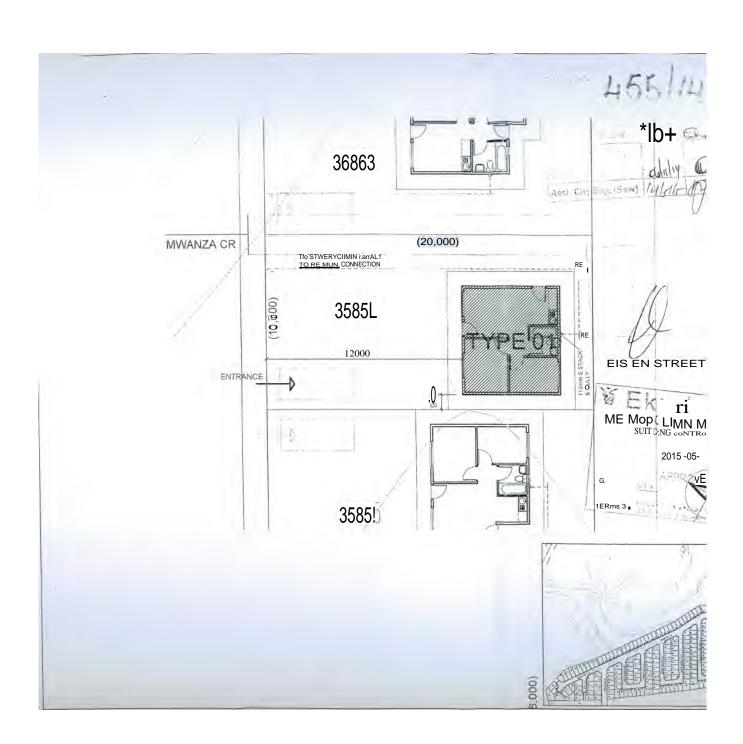




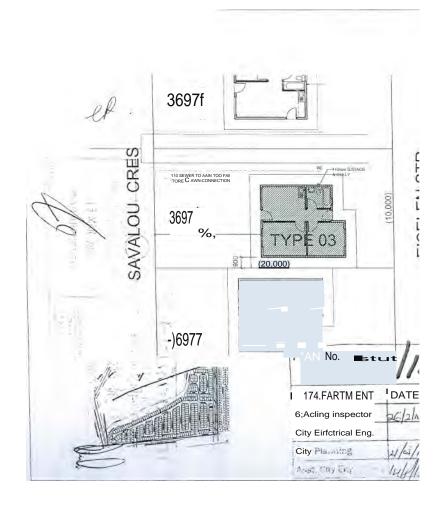




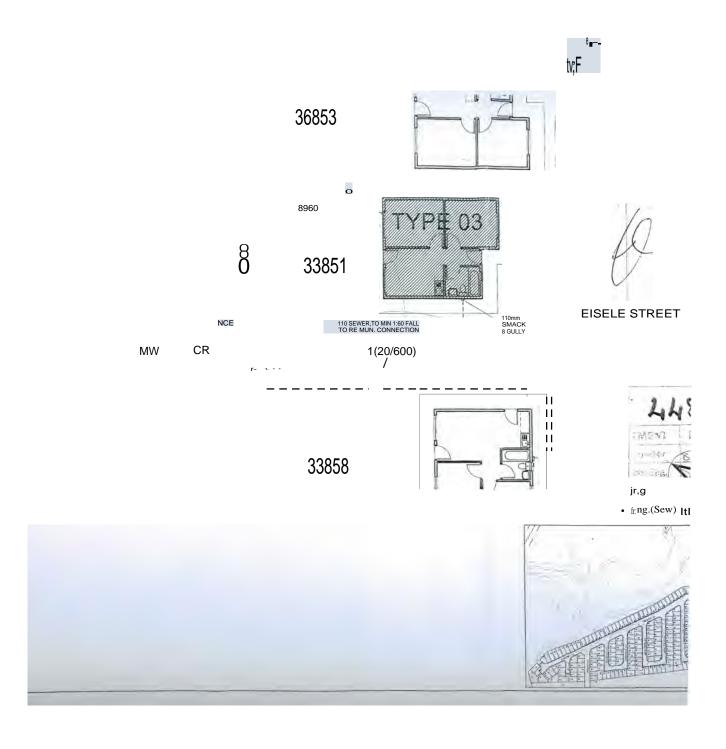




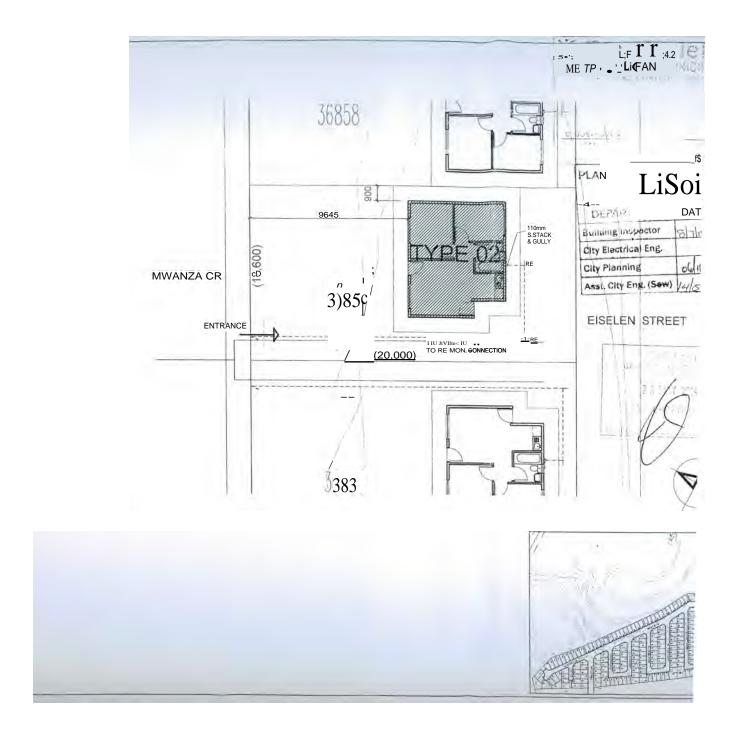




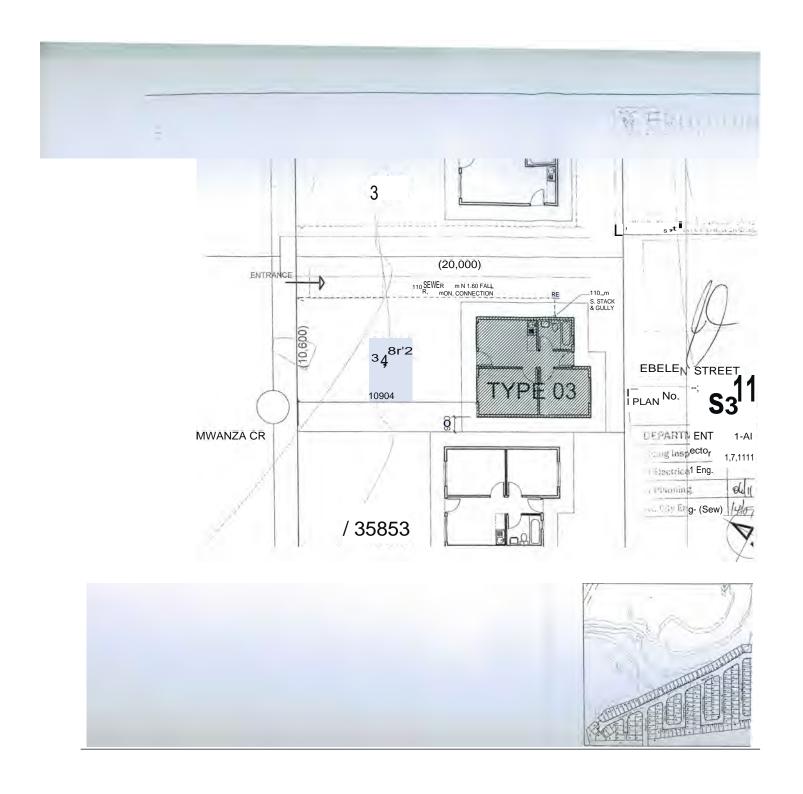














2. NUMBER OF STRUCTURESPONSTRUCTED SPREAD SHEET:



Employer EkuMuleni Metropolitan Municipaloty Department of Human Settlements

Consultant Gibb Engineenng and Architecture
Project Etwatvra Ext 35 .Khonibisa

Contract No HS 03/2013

Total No. of Units	334	%Complete - Phase 1(182 units)	
PoundatiOnS Completed	82	45%	5
WallPlate Completed	82	45%	V// 0
Roof Completed	51	28%	Ekurhuleni
Completion Completed	3	2%	Ekumuleni
Handed over	0	0%	€ GIBE
Overall	i Propinsi	30%	€ GIDE
Progress as at	29 May 201		

Item No.	Stanc	Foundation	1		Cil ling_	20	mbine					Doore	1	Concrete	
	N.	Slab		—Rophing	Ciling	/= ter	sewer	Geyser	Plastering	Painting	Back	Po inneili	Giii ng	Concrete	Corr mants
e-that are	3 W. C. W.	1700	15 (19)	325700	TO PERCENT		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	120559		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9350 VA	2 3 5 5 2 2 3 N W	al members and	ASSOCIATIONS	17 West 2000 100 100 100 100 100 100 100 100 10
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	36859													•	
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	36864	1													
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7	36866														
8	36867	1	1												
9	36870	1	1												
10	36871	1	1												
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12	36873	1	1												
13	36874	1	1												
14	36875	1	-												
15	36877	1	1												
16	36878	1	1												
17	36895	1	1												
18	36896 '			1											
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23	36901	1		1											
24	36902														
25	36903	1	1	1											



Employer Elturhuleni Metropolitan Municipality Department of Human Settlements

Consultant Glbb Engineering and Architecture
Project Etwatwa Eat 35 Khombisa
Contract No HS 0³/₂013

'total No. of Units	334	%Complete - Phase 1(182 units)	
Foundations Completed	82	45%	
Wallplate Completed	82	45%	
Roof Completed	51	28%	Ekurhuleni
Completion Completed	3	2%	Lkumulem
Handed over	0	0%	pIBB
Overall			PIDD
Progress as at	29 May 2015		

Item No.	Stand No.	foUntlatio Slab	WaNplate	Roofing	Ce4Ing	Plui	nbing sewer	Geyser	Plastering	Painting	trash	Docns &vanish	Glazing	Concrete Aprons	CommentS
26	36904	1	1	1		atc.		1			1	avanisii	1	Aprolls	
27	36905		1	1				1	1		1		1		
28	36905	21	1	1				1	1		1		-		
29	36907	1	1						-		· ·				
30	36908	2	1	1				1	1		1		1		
31	36909	1	1	1				1	1		1		1		
32	36910								-						
33	36911	1	1											i	
34	36917	1	1												
35	36913	1	1	1				1	1		1		1	1	
36	36914	1	1	1				1	1		1		1		
37	36915	1	1	1				1	1		1		1		
38	36916	1	1	1				1	1		1		1		
39	36972	1	1												
40	36973	1	1												
41	36974	1	1												
42	36975	1	1	1				1	1		1		1		
43	36978	1	1	1				1	1		1		1		
44	36979														
45	36980	1	1	1				1	1		1		1	1	
46	36981	1	1	1				1	1		1		1		
47	36982	1	1	1									i .		
48	36983		-	1	1	2	1	1	1	1	1	1	1	1	Showhouse
49	36984		1	1	1	1	1	1	1	1	1	1	1	1	Showhouse
50	36985		1	1	2	1	1	1	1	1	1	1	1	2	Showhouse
51	36986	1	1	1			İ	1	1		1		1	1 -	0



Employer Ekurholeni Metropolitan Municipality Department of Human Settlements

Consultant Gibb Engineering and Architecture
Project Etwatwa Eat 35 - Khombrsa

Contract No HS 03/2013

1	Total No. of Units	334	%Complete • Phase 1(182 units)	
	Foundations Completed	82	45%	
	Wallplate Completed	82	45%	
	Roof Completed	51	28%	Ekurhuleni
	Completion Completed	3	2%	
	Handed over	0	0%	GIBB
	Overall			0.55
	Progress as at	29 May 2015		

Item No.	Stand No.	Foundation Slab 1	Waliplate 1	Rooting	Ceiling	Plur Water	nbing sewer	Geyser	Plastering 1	Painting	Back wash	Doors &vanish	Glazing	Concrete Aprons	Comments
5537	887	1						1	1		1				
54	36989	1	1	1											
55	36990	1	1	1											1
56	36991	1	1	1				1	1		1		1		
57	36992	1	1												
58	36993	1	1	1				1	1		1		1		
59	36994	1	1	1											
60	36995	1	1	1				1	1		1		1		
61	36596	1	1												
62	36997	1	1	1				1	1		1		1		
63	36998	1	1	1											
64	36999	1	1	1				1	1				1		
65	37000	1	- 1												
66	37001	1	1	1				1	1		1		1		
67	37002	å	1												
68	37003	1	1	1				1	1		1		1		
69	37004	1	1												
70	37005	1	1	1				1	1		1		1		
71	37006	1	1	1				1	1		1		1		
72	37007	1	1	1				1	1		1		1		
73	37008	1													
74	37009	1	1	1				1	1		1		1		
75	37010	1	1												
76	37011	1	1	1				1	1		1		1		
77	37012	1	1												



Employer Ekurhulem Metropolitan Municipality Department of Human Settlements

Consultant Cnbb fingmeering and Architecture
Project Etwutwa Ext 35 • Khombisa
Contract No HS 03/2013

Total No. of Units	334	%Complete - Phase 1(182 units)	
Foundations Completed	82	45%	5
Waliplate Completed	82	45%	V63
Roof Completed	51	28%	Ekurhuteni
Completion Completed	3	2%	Likamatem
Handed over	9		€ GIBB
Overall	75 B	30%	GIDD
Progress as at	29 May 2015		.

Item No.	Stand Foundation	waiipiate Roo	ing Coiling	Plumbing	Geyser Plastering	- Deinting	Back Doors	Concrete
	No. Slab		ing Celling	Water sewer	deyser Flastering	• Fainting	wash &vahlsho_bing	Aprons
78	<u> </u>	11			1 1		1 1	
78	37014 1	1 :		1	; [i		T - " '	
80 '	37015 1	1				1	T1	
81	37019 : : :	: : : <u>-1</u>				T-1 "'		
82	37017 1	1 1			!			
83	37018	4	<u> </u>					
34	37019 1	1				T	[
85	370701	1			<u>i</u> i		1	



SUMMARY OF Houses Constructed



FOUNDATION INSPECTION REQUEST



03/02/2017 oundation	ETV ftur PC insp	VATV ·law I13	VA Ex itami	T 33			PRC	JEC	T NO:	PS M\$2,3•201,3			
03/02/2017 oundation	ftur PC 1	·law 113	itamr				PRC	JEC	T NO:	PS M\$2.3*201.3			
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oundation	insp				Plent fturlawitammaiamay nspection No: PC 113								
oundation		ectio											
	h .	003/02/2017 inspection Date: i											
oto								7					
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3/12/2014													
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FOUNDATION CHECKLIST







LEADERS IN THE DEVELOPMENT OF WING ENVIRONMENTS





Checklist for House Raft Foundation and Concrete Works

Employer	•	Ekurhuleni Metropolitan Municipality
Project	:	Etwatwa Ext 35 - Khombiza
Contract	•	PSJHS23-2013
Contractor	:	Bankuna Construction and Engineering
Date	:	15-Jan-14
File	:	

HOUSE NUMBER 36983

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

Β'

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

YES

NO

onsimereo Stand Boundary

NO

Contractor to confirm the following dimensions:

A=	
8=	900
C=	
0=	8960

s anni	msions.
\mathbf{E}_{-}	8910
F =	8910
'	

EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?



Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

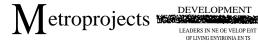
Is formwork 100% level?

Is formwork 100% secured?

yes	
yes	
yes	
yes	













Checklist for House Raft Foundation and Concrete Works

Has The Engineer received the ant poison certificate from the Cont	tractor?		yes	
DAMP COURSE LAYER				
Has the damp course layer been installed under slab and beam?			yes	
s the DPC USB green 250 Micron?			yes	
s there a 400mm overlap at the joints od the OPC?			yes	
REINFORCING			-	
Has all the steel (or mesh) been installed as per the design and ben	ding schedule?		yes	
Has the correct mesh been used? (specify the type of mesh)	_		yes	
s the steel/mesh free of rust?			yes	
s the mesh overlap length as per specification?			yes	
What is the lap length?			400	
Are the stirrups in ground beams spaced correctly?			yes	
Have cover blocks been installed to provide the required cover?			yes	
Are the cover block tied to the steel?			no	
ENGINEER ———		DATE	30-Jan-14	
<u>CONCRETE</u>				
If ready mix concrete is used, is the supplier quality control appro-	ved?		· · · · · · · · · · · · · · · · · · ·	
What is the grade / strength of concrete			25MPa	
What is the aggregate size			19mm	
What is the theoretical volume of concrete			11	
What is the theoretical volume of concrete What is the actual volume of concrete poured			11 10.7	
	ne	Completi	10.7	
What is the actual volume of concrete poured	ne	Completi	10.7	
What is the actual volume of concrete poured Duration of concrete pouring Start Tir		Completi	10.7	
What is the actual volume of concrete poured Duration of concrete pouring Start Tir Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of conc	crete?	Completi	10.7 on No	
What is the actual volume of concrete poured Duration of concrete pouring Start Tir Was any water added to the concrete mix on site	crete?	Completi	10.7 on No yes	
What is the actual volume of concrete poured Duration of concrete pouring Start Tir Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of conc What was the slump of the concrete? (75mm to 125mm is accept	crete? able)	Completi	10.7 on No yes 75mm	
What is the actual volume of concrete poured Duration of concrete pouring Start Tir Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of conc What was the slump of the concrete? (75mm to 125mm is accept Have concrete cubes been made on site or at the batch plant?	crete? able)	Completi	10.7 on No yes 75mm Batch Plant	
What is the actual volume of concrete poured Duration of concrete pouring Start Tir Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of conc What was the slump of the concrete? (75mm to 125mm is accept Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to th Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator?	crete? able)	Completi	10.7 on No yes 75mm Batch Plant yes	
What is the actual volume of concrete poured Duration of concrete pouring Start Tir Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of conc What was the slump of the concrete? (75mm to 125mm is accept Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to th Is there a powerfloat machine on site?	crete? able)	Completi	10.7 No yes 75mm Batch Plant yes yes yes	NO
What is the actual volume of concrete poured Duration of concrete pouring Start Tir Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of conc What was the slump of the concrete? (75mm to 125mm is accept Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to th Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING	crete? able) e correct level?		10.7 No yes 75mm Batch Plant yes yes yes	NO
What is the actual volume of concrete poured Duration of concrete pouring Start Tir Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of conc What was the slump of the concrete? (75mm to 125mm is accept Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to th Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction	crete? able) e correct level?		10.7 No yes 75mm Batch Plant yes yes yes	NO
What is the actual volume of concrete poured Duration of concrete pouring Start Tir Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of conc What was the slump of the concrete? (75mm to 125mm is accept Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to th Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct	crete? able) e correct level?	->f•e<	10.7 No yes 75mm Batch Plant yes yes yes	
What is the actual volume of concrete poured Duration of concrete pouring Start Tir Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of conc What was the slump of the concrete? (75mm to 125mm is accept Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to th Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct CONCRETE CURING	crete? able) e correct level?	->f•e<	10.7 No yes 75mm Batch Plant yes yes yes	

DATE

14-Mar-14



inclusion in the next Payment Certificate

ENGINEER



Metroprojects

DEVELOPMENT

LEADERS IN THE DEVELOPMENT OF WINO ENVIRONMENTS





Checklist for House Raft Foundation and Concrete Works

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Khombiza
Contract	PS/HS23.2013
Contractor	Bankuna Construction and Engineering
Date	15Jan-14
'File	

HOUSE NUMBER 36984

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions:

A=	3000
8=	
Cr	900
D.	

dilli	msions.	
E		8910
F =		8910

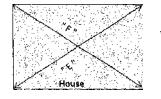
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



4commems Stand Boundary

Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

<u>>r<</u>

NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

ye	es
ye	es
ye	es
ye	es





Vetroprojects

DEVELOPMENT

LEADERS ?NINE DEVELOPMENT OF LIVING ENVIRONMENTS





Checklist for House Raft Foundation and Concrete Works

<u>ANT</u>	PO:	ISC	N

Has The Engineer received the ant poison certificate from the Contractor?

DAMP COURSE LAYER

Has the damp course layer been installed under slab and beam?

Is the DPC USB green 250 Micron?

Is there a 400mm overlap at the joints od the DPC?

REINFORCING

Has all the steel (or mesh) been installed as per the design and bending schedule?

Has the correct mesh been used? (specify the type of mesh)

Is the steel/mesh free of rust?

Is the mesh overlap length as per specification?

What is the lap length?

Are the stirrups in ground beams spaced correctly?

Have cover blocks been installed to provide the required cover?

Are the cover block tied to the steel?

GI	В	В
11'41.11.1	h	110,

yes	
yes	
yes	
yes	
400	
yes	
yes	
no	

yes

yes

yes

ENGINEER

DATE

30-Jan-14

CONCRETE

If ready mix concrete is used, is the supplier quality control approved?

What is the grade / strength of concrete

What is the aggregate size

What is the theoretical volume of concrete

What is the actual volume of concrete poured

Duration of concrete pouring

Was any water added to the concrete mix on site

Is there a concrete vibrator at the raft site prior to placing of concrete?

What was the slump of the concrete? (75mm to 125mm is acceptable)

Have concrete cubes been made on site or at the batch plant?

Is there a screed bar on site to ensure the concrete is placed to the correct level?

Is there a powerfloat machine on site?

Was the concrete adequately vibrated with a concrete vibrator?

POWER FLOATING

Is power floating completed to Engineer's satisfaction

If "NO", the Contractor must provide method statement to correct the work

25MPa
19mm
11
10.7
Completion I
No
yes
75mm
Batch Plant
yes
yes
ves



NO

CONCRETE CURING

What curing method will be used?

What was the achieved concrete strength; 1) At 7 days?

Shuttering removal period (minimum 36 hours)

Close slab with sand and pour water daily

17 b) At 28 days? 48 hrs

25.5

Upon final sign off of this form complying to all requirements the raft may be certified as complete and is due for inclusion in the next Payment Certificate

Start Time

ENGINEER

1992

DATE

14-Mar-14



IVIetroprojects

DEVELOPMENT

LEADERS IN THE DEVELOPMENT





Checklist for House Raft Foundation and Concrete Works

Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract		PS/HS23-2013
Contractor	!	Bankuna Construction and Engineering
Date	!	15-Jan-14
File	!	

HOUSE NUMBER 3698

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the_following dimensions:

A=	<u>9560</u>	E =	8910
B=	3000	$\mathbf{F} =$	8910
C=			
D=			

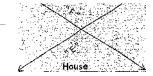
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



Stand Boundary

Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?



BEAMS

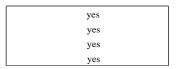
Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?



FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

yes	
yes	
yes	
yes	







LEADERS IN THE DEVELOPMENT OE LIVING ENVIRONNE ?ITS



ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
ENGINEED Symmethys.	DATE 20 1 14
ENGINEER	DATE <u>30-Jan-14</u>
CONCRETE	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	2SMPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	NO
If "NO", the Contractor must provide method statement to correct the work	
CONCRETE CURING	
	with sand and pour water daily
What was the achieved concrete strength; 1) At 7 days? 17	b) At 28 days? <u>25.5</u>
Shuttering removal period (minimum 36 hours) 48 hrs	
Upon final sign off of this form complying to all requirements the raft may be certified as com-	nplete and is due for
inclusion in the next Payment Certificate	
ENGINEER / DATE	14-Mar-14
ENGINEER DATE	





LEADERS IN THE DEVELOPMENT OF LIVING ENVIRONMENTS





Checklist for House Raft Foundation and Concrete Works

Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract	:	PSIHS23-2013
Contractor		Bankuna Construction and Engineering
Date	-	25 April 2014
File		

HOUSE NUMBER 37014

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

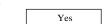
NO

Contractor to confirm the following dimensions:

A=		$\mathbf{E} =$	8910
B=	900	F	8910
C=			
	8000		

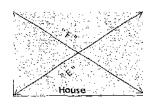
EARTH WORKS

Is the excavations deep enough as specified by the engineers?



Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



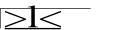
o

4•Emouls.
Stand
Boundary

NO

Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house ?



BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

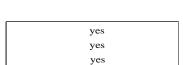
Are the trenches dry?

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?



yes
yes
yes
ves









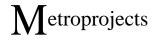




<u> </u>				
ANT POISON				
Has The Engineer received the ant poison certificate from the Contractor?		yes		
DAMP COURSE LAYER		······		
Has the damp course layer been installed under slab and beam?		yes		
Is the DPC USB green 250 Micron?	<u> </u>	yes		
Is there a 400mm overlap at the joints od the DPC?	<u> </u>	yes		
REINFORCING				
Has all the steel (or mesh) been installed as per the design and bending schedule?		yes		
Has the correct mesh been used? (specify the type of mesh)	<u> </u>	yes		
Is the steel/mesh free of rust?		yes		
Is the mesh overlap length as per specification?		yes		
What is the lap length?		400		
Are the stirrups in ground beams spaced correctly?		yes		
Have cover blocks been installed to provide the required cover?		yes		
Are the cover block tied to the steel?		no		
ENGINEER	D A TITE			
ENGINEER	DATE	08 May 2014		
CONCRETE				
If ready mix concrete is used, is the supplier quality control approved?				
What is the grade / strength of concrete		25MPa		
What is the aggregate size		19mm		
What is the theoretical volume of concrete		11		
What is the actual volume of concrete poured		10.7		
Duration of concrete pouring Start Time	Completion	Completion		
Was any water added to the concrete mix on site		No		
Is there a concrete vibrator at the raft site prior to placing of concrete?		yes		
What was the slump of the concrete? (75mm to 125mm is acceptable)		75mm		
Have concrete cubes been made on site or at the batch plant?		Batch Plant		
Is there a screed bar on site to ensure the concrete is placed to the correct level?		yes		
Is there a powerfloat machine on site?		yes		
Was the concrete adequately vibrated with a concrete vibrator?		yes		
POWER FLOATING				
Is power floating completed to Engineer's satisfaction			NO	
If "NO", the Contractor must provide method statement to correct the work				
1 10 , the conductor must provide method statement to correct the work				
CONCRETE CURING				
	ose slab with sand and	l nour water daily		
What was the achieved concrete strength; 1) At 7 days?	b) At 28 da	-	29.5	
Shuttering removal period (minimum 36 hours) 48 hrs	b) 111 20 di	_	27.5	
Shuttering removal period (minimum 50 hours) 40 hrs				
Upon final sign off of this form complying to all requirements the raft may be certifie	d as complete and is d	ue for		
inclusion in the next Payment Certificate				
ENGINEER 2	DATE 13	June 2014		















Checklist for House Raft Foundation and Concrete Works

Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 . Khombiza
Contract		PSIHS23-2013
Contractor	•	Bankuna Construction and Engineering
Date		25 April 2014
File		

HOUSE NUMBER 37019

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

<u>SETTING ÖÜT</u>			
Has the builder had the position of the stand boundary beacons conf	irmed?	¥E5	NO
Contractor to confirm the following dimensions: $A = $	"B" Hoose	" C "	Stand
Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes	Δ.		Boundary
Is the 67 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes	Roa	d Reserve	
Are the final earthworks higher than the surrounding area so that st not affect the house ?	orm water does		NO
BEAMS.			
Are beams excavated in the correct position and the right dimension. Are beams straight? Is the top of beam chamfered 45 deg as per detail? Has all the loose soil in the beam excavation been removed?	ns?	yes yes yes yes	
Are the trenches dry?			
FORMWORK. Is formwork treated with a releasing agent? Is formwork 100% level? Is formwork 100% secured?		yes yes yes	
Is formwork Straight?		yes	





$metropro_{j}ects \\$









Jos The Engineer received the ent noisen contificate from the Centr	nator?				
Has The Engineer received the ant poison certificate from the Contr DAMP COURSE LAYER	actor?			yes	
Has the damp course layer been installed under slab and beam?				yes	
Is the DPC USB green 250 Micron?				yes	
Is there a 400mm overlap atthe joints od the DPC?				yes	
REINFORCING				,	
Has all the steel (or mesh) been installed as per the design and bend	ling schedule?			yes	
Has the correct mesh been used? (specify the type of mesh)				yes	
Is the steel/mesh free of rust?			yes		
Is the mesh overlap length as per specification?				yes	
What is the lap length?				400	
Are the stirrups in ground beams spaced correctly?				yes	
Have cover blocks been installed to provide the required cover?				yes	
Are the cover block tied to the steel?				no	
1 - The second of the second o	,				
ENGINEER			DATE	08 May 2014	
CONCRETE					
CONCRETE If ready miv concrete is used is the symplical quality control opprove	ad2				
If ready mix concrete is used, is the supplier quality control approve	eu?			25MPa	
What is the grade / strength of concrete				19mm	
What is the aggregate size What is the theoretical volume of concrete				11	
			 -	10.7	
What is the actual volume of concrete poured Duration of concrete pouring Stort Time		٦	Completies		
Duration of concrete pouring Start Time Was any water added to the concrete mix on site	e		Completio	No	
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concre	ata?		ļ	yes	
What was the slump of the concrete? (75mm to 125mm is acceptal			~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	75mm	
Have concrete cubes been made on site or at the batch plant?	bie)			Batch Plant	
Is there a screed bar on site to ensure the concrete is placed to the	correct level?				
Is there a powerfloat machine on site?	correct lever:			yes	
Was the concrete adequately vibrated with a concrete vibrator?				yes	·-· · -
POWER FLOATING			L	yes	·
Is power floating completed to Engineer's satisfaction					NO
is power floating completed to Engineer's satisfaction					110
If "NO", the Contractor must provide method statement to correct	the work				
CONCRETE CURING		G1 .:			
What curing method will be used?		Close slab		nd pour water daily	
What was the achieved concrete strength; 1) At 7 days?	17		b) At 28 (days?	29.5
Shuttering removal period (minimum 36 hours)	48 hrs				
Upon final sign off of this form complying to all requirements the	roft may be ac-+:+	Find as so	nlata and is i	lue for	
inclusion in the next Payment Certificate	ran may be cerm	ieu as com	piete anu 18 C	10E 10I	
merusion in the next Fayment Certificate					
ENGINEER / Land		DATE	4.	2 I 2014	
ENGINEER		DATE	1.	3 June 2014	







DEVELOPMENT LEADERS IN THE OEVELOPMEIIT OF LIVING ENVIRONMENTS







Checklist for House Raft Foundation and Concrete Works

Employer		Ekurhuleni Metropolitan Municipality
Project	:	Etwatwa Ext 35 - Khombiza
Contract	•	PSMS23-2013
Contractor		Bankuna Construction and Engineering
Date	:	25 April 2014
File	:	

HOUSE NUMBER 37015

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

YES .

NO

Contractor to confirm the following dimensions:

A=	
$\mathbf{B}=$	900
C=	
0=	9400

aime	ensions:	
E_		8485
F=		8485

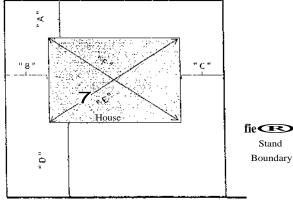
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the 07 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house ?

NO

BEAMS.

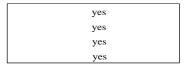
Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?



FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

Is formwork Straight?

yes yes yes yes









13 June 2014

DATE



NT POISON	
as The Engineer received the ant poison certificate from the Contractor?	yes
AMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
s the DPC USB green 250 Micron?	yes
s there a 400mm overlap at the joints od the DPC?	yes
EINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
s the steel/mesh free of rust?	yes
s the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
1697- 1 1	
ENGINEER	DATE 08 May 2014
CONCRETE	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
	Completion
Duration of concrete pouring Start Time	-
Was any water added to the concrete mix on site	No
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete?	No yes
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable)	No yes 75mm
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant?	No yes
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level?	No yes 75mm Batch Plant yes
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? is there a powerfloat machine on site?	No yes 75mm Batch Plant
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator?	No yes 75mm Batch Plant yes
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING	No yes 75mm Batch Plant yes yes yes
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator?	No yes 75mm Batch Plant yes yes
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING	No yes 75mm Batch Plant yes yes yes
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work	No yes 75mm Batch Plant yes yes yes
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING	No yes 75mm Batch Plant yes yes yes NO
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? Close	No yes 75mm Batch Plant yes yes yes NO
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? Close What was the achieved concrete strength; 1) At 7 days?	No yes 75mm Batch Plant yes yes yes NO
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? Close	No yes 75mm Batch Plant yes yes yes NO



ENGINEER



metr o pr o_ie cts









Checklist for House Raft Foundation and Concrete Works

Employer		Ekurhuieni Metropolitan Municipality
Project	:	Etwatwa Ext 35 - Khombiza
Contract		PS/HS23-2013
Contractor		Bankuna Construction and Engineering
Date	:	25 April 2014
File	•	

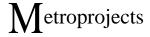
HOUSE NUMBER 37007

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT Has the builder had the position of the stand boundary beacons confirmed? YES. NO Contractor to confirm the following dimensions: <u>۔</u> Α= 8485 8= 900 8485 C= 8000 "8" EARTH WORKS Is the excavations deep enough as specified by the engineers? Yes ijormummo Stand Is the 150mm thick in-situ material ripped and Boundary 0 ,re-compacted to 93% MOD AASHTO? Is the G7 quality material compacted to 95% MOD Road Reserve AASHTO in 150mm thick layers? Are the final earthworks higher than the surrounding area so that storm water does not affect the house? NO Are beams excavated in the correct position and the right dimensions? yes Are beams straight? yes Is the top of beam chamfered 45 deg as per detail? yes Has all the loose soil in the beam excavation been removed? yes Are the trenches dry? **FORMWORK** Is formwork treated with a releasing agent? yes Is formwork 100% level? yes Is formwork 100% secured? yes Is formwork Straight? yes













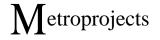


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-
NO
<u>y</u>
29,5







LEADERS 10 TIE DEVELOPMENT OF LIVING ENVIRONMENTS



yes



Checklist for House Raft Foundation and Concrete Works

Employer	Ekurhuleni Metropoli	itan Municipality		
Project	• Etwatwa Ext 35 - Kho			
Contract	PSIHS23-2013			
Contractor	Bankuna Construction	on and Engineering		
Date	25 April 2014			
File	!			
HOUSE NUMBER	37016			
The Contractor has estab	lished that these controlled works h	nave been constructed to the co	rrect horizontal and vertica	al alignment
and position, that such w	ork has been carried out to the requ	aired standards and specification	ons, as set out in the docum	nent and
drawings.				
SETTING OUT			_	
Has the builder had the p	position of the stand boundary beaco	ons confirmed?		NO
	C 11	1		
Contractor to confirm the	E = $\left \begin{array}{c} \text{E = } \\ \text{E = } \end{array}\right $ 8528			
	900 F = 8528			
Cs	700			
	960			
EARTH WORKS				
Is the excavations deep	enough as			
specified by the enginee	<u> </u>	.н.	House	4missiomn
specified by the enginee	15.			Stand
Is the 150mm thick in-si	tu material ripped and	ct		Boundar
re-compacted to 93% MC	DD AASHTO? yes			
Is the G7 quality materia	al compacted to 95% MOD	I		
AASHTO in 150mm thic		R	oad Reserve	
			1	
Are the final corthwerk	s higher than the surrounding area s	so that starm water does		
not affect the house?	s finguer than the surrounding area s	so that storm water does		
not affect the nouse.			> E <	NO
BEAMS				
	n the correct position and the right d	limensions?	V	es
Are beams straight?	the correct position and the right d	inicusions:		es
	nfered 45 deg as per detail?			es
•	the beam excavation been removed	1?		es
Are the trenches dry?			,	
			l	
FORMWORK				
Is formwork treated wi	th a releasing agent ?		у	es
Is formwork 100% level	1?		- I	res
Is formwork 100% secu	ired?		3	res
			1	







LEADERS IN THE DEVELOPMENT OF LIVING ENVIRONMENTS





-			
<u>ANT POISON</u>			
Has The Engineer received the ant poison certificate from the Contractor	or?	3	/es
DAMP COURSE LAYER			
Has the damp course layer been installed under slab and beam?		· ·	/es
Is the DPC USB green 250 Micron?		_	/es
Is there a 400mm overlap at the joints od the DPC?			ves
REINFORCING	14-1-9		
Has all the steel (or mesh) been installed as per the design and bending	schedule?	_	yes
Has the correct mesh been used? (specify the type of mesh) Is the steel/mesh free of rust?			yes yes
Is the mesh overlap length as per specification?			yes
What is the lap length?			400
Are the stirrups in ground beams spaced correctly?			yes
Have cover blocks been installed to provide the required cover?			yes
Are the cover block tied to the steel?			no
The the cover block hed to the steet.			
100 to	1		_
ENGINEER	<i>7</i>	DATE	08 May 2014
CONCRETE			
CONCRETE If we do not in a control is also a control is a control is a control in a control is a control in a control is a control in			
If ready mix concrete is used, is the supplier quality control approved?		25N	MDo.
What is the grade / strength of concrete			9mm
What is the aggregate size What is the theoretical volume of concrete		1	11
What is the actual volume of concrete poured			10.7
Duration of concrete pouring Start Time		Completion	1017
Was any water added to the concrete mix on site		Completion	No
Is there a concrete vibrator at the raft site prior to placing of concrete	?		yes
What was the slump of the concrete? (75mm to 125mm is acceptable		7	75mm
Have concrete cubes been made on site or at the batch plant?		Bat	ch Plant
Is there a screed bar on site to ensure the concrete is placed to the co	rrect level?		yes
Is there a powerfloat machine on site?			yes
Was the concrete adequately vibrated with a concrete vibrator?			yes
POWER FLOATING			
Is power floating completed to Engineer's satisfaction			NO
If "NO", the Contractor must provide method statement to correct the	e work		
··· , ··· ···	1		
_CONCRETE CURING			
What curing method will be used?	Close slab v	with sand and pour	water daily
What was the achieved concrete strength; 1) At 7 days?	17	b) At 28 days?	I 29.5
Shuttering removal period (minimum 36 hours)	48 hrs	-	
Upon final sign off of this form complying to all requirements the raf	t may be certified as com	plete and is due for	
inclusion in the next Payment Certificate			
microsopp /		10 1 2011	
ENGINEER	DATE	13 June 2014	













Checklist for House Raft Foundation and Concrete Works

Employer	•	Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract	!	PS/HS23-2013
Contractor		Bankuna Construction and Engineering
Date		25 April 2014
File		

HOUSE NUMBER 37002

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

XKK

NO

Contractor to confirm the following dimensions:

A=	
6=	900
C=	
D=	3000

dime	nsions:	
E =		8528
F=		8528

EARTH WORKS

Is the excavations deep enough as specified by the engineers?

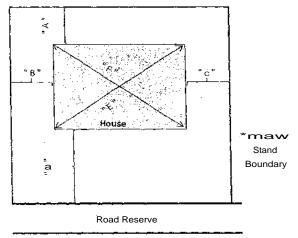
Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOO AASHTO?

yes

Is the•G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes

Are the final earthworks higher than the surrounding area so that storm water does



es

NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

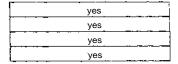
Are beams straight?

not affect the house?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?



FORMWORK

Is formwork treated with a releasing agent ?

Is formwork 100% level?

Is formwork 100% secured?

yes	
yes	
yes	
 V00	





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DEVELOPMENT

LEADERS IN THE DEVELOPMENT OF LIVING ENVIRONMENTS





21 Checklist for House Raft Foundation and Concrete Works		
ANT POISON		
Has The Engineer received the ant poison certificate from the Contractor?		yes
DAMP COURSE LAYER		
Has the damp course layer been installed under slab and beam?		yes
Is the DPC USB green 250 Micron?		yes
Is there a 400mm overlap at the joints od the DPC?		yes
REINFORCING		
Has all the steel (or mesh) been installed as per the design and bending schedule?		yes
Has the correct mesh been used? (specify the type of mesh)		yes
Is the steel/mesh free of rust?		yes
Is the mesh overlap length as per specification?		yes
What is the lap length?		400
Are the stirrups in ground beams spaced correctly?		yes
Have cover blocks been installed to provide the required cover?		yes
Are the cover block tied to the steel?		no
ENGINEER 1997	DATE	08 May 2014
CONCRETE		
If ready mix concrete is used, is the supplier quality control approved?		
What is the grade / strength of concrete		25MPa

Start Time

What is the aggregate size

What is the theoretical volume of concrete

What is the actual volume of concrete poured

Duration of concrete pouring

Was any water added to the concrete mix on site

Is there a concrete vibrator at the raft site prior to placing of concrete?

What was the slump of the concrete? (75mm to 125mm is acceptable)

Have concrete cubes been made on site or at the batch plant?

Is there a screed bar on site to ensure the concrete is placed to the correct level?

Is there a powerfloat machine on site?

Was the concrete adequately vibrated with a concrete vibrator?

Is power floating completed to Engineer's satisfaction

If "NO", the Contractor must provide method statement to correct the work

25MPa	
19mm	
11	
10.7	
Completion	
No	
yes	
75mm	
Batch Plant	
yes	
yes	
yes	



CONCRETE CURING

What curing method will be used?

What was the achieved concrete strength; 1) At 7 days?

Shuttering removal period (minimum 36 hours)

Close slab with sand and pour water daily

17 48 hrs b) At 28 days?

29.5

Upon final sign off of this form complying to all requirements the raft may be certified as complete and is due for inclusion in the next Payment Certificate

ENGINEER

DATE

13 June 2014



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DEVELOPMENT



yes



Checklist for House Raft Foundation and Concrete Works

Employer •	Ekurhuleni Metropolitan Muni	cipality	
Project	Etwatwa Ext 35 - Khombiza		
Contract !	PS/HS23-2013		
Contractor	Bankuna Construction and En	ngineering	
Date !	25 April 2014		
File			
HOUSE NUMBER	37017		
The Contractor has established that	t these controlled works have bee	en constructed to the correct horizontal	and vertical alignment
and position, that such work has be	en carried out to the required stan	ndards and specifications, as set out in t	the document and
drawings.			
<u>SETTING OUT</u>		<u> </u>	
Has the builder had the position of	the stand boundary beacons confi	irmed?	NO
		1	
Contractor to confirm the following			
A= B= 900	E = 8485 F 8485		
Cr 900	F 8485		
D= 9000			
D=[9000]	I		
EARTH WORKS			
<u> </u>			
is the excavations deep enough as		House	
specified by the engineers?	Yes		issammen
In the 450 constitution of constants	Manager 1		Stand
Is the 150mm thick in-situ material			Boundar
re-compacted to 93% MOD AASHT	O? yes		
Is the G7 quality material compact	ed to 95% MOD	I	
AASHTO in 150mm thick layers?	yes	Road Reserve	
•	,		
Are the final earthworks higher that	on the surrounding area so that str	orm water does	
not affect the house?	in the dameananing area do that sa	> F	
			NO NO
BEAMS			
Are beams excavated in the corre	at position and the right dimension	002	
Are beams straight?	st position and the right dimension	3:	yes
Is the top of beam chamfered 45 c	log as par datail?		yes
Has all the loose soil in the beam	• .		yes
Are the trenches dry?	on the state of th		yes
FORMWORK			
Is formwork treated with a releasi	ng agent?		yes



Is formwork 100% secured?





LEADERS IH IRE DEVELOPMENT UK
OF LIVING ENVIRONMENTS







CI		
ANT POISON		
Has The Engineer received the ant poison certificate from the Contractor?	yes	
DAMP COURSE LAYER	·	
Has the damp course layer been installed under slab and beam?	yes	
Is the DPC USB green 250 Micron?	yes	
Is there a 400mm overlap at the joints od the DPC?	yes	
REINFORCING		
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes	
Has the correct mesh been used? (specify the type of mesh)	yes	
Is the steel/mesh free of rust?	yes	
Is the mesh overlap length as per specification?	yes	
What is the lap length?	400	
Are the stirrups in ground beams spaced correctly?	yes	
Have cover blocks been installed to provide the required cover?	yes	
Are the cover block tied to the steel?	no	
ENGINEER	DATE 08 May 2014	
ENGINEER	DATE 08 May 2014	
CONCRETE		
If ready mix concrete is used, is the supplier quality control approved?		
What is the grade / strength of concrete	2SMPa	
What is the aggregate size	19mm	
What is the theoretical volume of concrete	11	
What is the actual volume of concrete poured	10.7	
Duration of concrete pouring Start Time	Completion	
Was any water added to the concrete mix on site	No	
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes	
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm	
Have concrete cubes been made on site or at the batch plant?	Batch Plant	
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes	
Is there a powerfloat machine on site?	yes	
Was the concrete adequately vibrated with a concrete vibrator?	yes	
POWER FLOATING		
Is power floating completed to Engineer's satisfaction		NO
If "NO", the Contractor must provide method statement to correct the work		
CONCRETE CURING		
What curing method will be used? Close slab w	vith sand and pour water daily	
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days?	29.5
Shuttering removal period (minimum 36 hours) 48 hrs		
	1. 1. 1. 6	
Upon final sign off of this form complying to all requirements the raft may be certified as comp	plete and is due for	
inclusion in the next Payment Certificate		
ENCINEED	12 I 2014	
ENGINEER DATE	13 June 2014	







LEADERS IN THE CEVELOPMEN





Checklist for House Raft Foundation and Concrete Works

Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract	•	PS/HS23-2013
Contractor		Bankuna Construction and Engineering
Date	:	25 April 2014
File		

HOUSE NUMBER 37003

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions:

A=	
B=	900
C=	
ID=	6900

EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes

House

ommoommi Stand Boundary

Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

	yes
:	yes
	yes
	yes





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DEVELOPMENT

LEADERS IN THE DEVELOPMENT OF LIVING ENVIRONMENTS





ANT POISON Has The Engineer received the ant poison certificate from the Contractor?	
	yes
DAMP COURSE LAYER	yes
Has the damp course layer been installed under slab and beam?	yes
is the DPC USB green 250 Micron?	yes
s there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	3 **
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
s the steel/mesh free of rust?	yes
s the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
ENGINEER	DATE 08 May 2014
If ready mix concrete is used, is the supplier quality control approved? What is the grade / strength of concrete	25) (D-
What is the aggregate size	25MPa 19mm
What is the aggregate size What is the theoretical volume of concrete	19mm 11
What is the aggregate size What is the theoretical volume of concrete What is the actual volume of concrete poured	19mm 11 10.7
What is the aggregate size What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Start Time	19mm 11 10.7 Completion
What is the aggregate size What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site	19mm 11 10.7 Completion No
What is the aggregate size What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete?	19mm 11 10.7 Completion No yes
What is the aggregate size What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable)	19mm 11 10.7 Completion No yes 75mm
What is the aggregate size What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant?	19mm 11 10.7 Completion No yes 75mm Batch Plant
What is the aggregate size What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level?	19mm 11 10.7 Completion No yes 75mm Batch Plant yes
What is the aggregate size What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site?	19mm 11 10.7 Completion No yes 75mm Batch Plant yes yes
What is the aggregate size What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator?	19mm 11 10.7 Completion No yes 75mm Batch Plant yes
What is the aggregate size What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site?	19mm 11 10.7 Completion No yes 75mm Batch Plant yes yes
What is the aggregate size What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING	19mm 11 10.7 Completion No yes 75mm Batch Plant yes yes yes
What is the aggregate size What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work	19mm 11 10.7 Completion No yes 75mm Batch Plant yes yes yes
What is the aggregate size What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work	19mm 11 10.7 Completion No yes 75mm Batch Plant yes yes yes
What is the aggregate size What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING	19mm 11 10.7 Completion No yes 75mm Batch Plant yes yes yes





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DEVELOPMENT

I FADERS IN THE DEVELOPMENT





Checklist for House Raft Foundation and Concrete Works

Employer		Ekurhuleni Metropolitan Municipality
Project	•	Etwatwa Ext 35 - Khombiza
Contract		PS/HS23-2013
Contractor		Bankuna Construction and Engineering
Date		25 April 2014
File	:	

37018 The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings. SETTING OUT NO Has the builder had the position of the stand boundary beacons confirmed? Contractor to confirm the following dimensions: = << A٠ E = 8910 В 8910 900 _''B' " C " 8000 EARTH WORKS Is the excavations deep enough as House Yes specified by the engineers? lommismom Stand Is the 150mm thick in-situ material ripped and Boundary 0 re-compacted to 93% MOD AASHTO? yes Is the G7 quality material compacted to 95% MOD Road Reserve AASHTO in 150mm thick layers? Are the final earthworks higher than the surrounding area so that storm water does not affect the house? NO **BEAMS** Are beams excavated in the correct position and the right dimensions? yes

Are beams straight? yes Is the top of beam chamfered 45 deg as per detail? yes

Has all the loose soil in the beam excavation been removed? Are the trenches dry?

FORMWORK

Is formwork treated with a releasing agent? Is formwork 100% level?

Is formwork 100% secured? Is formwork Straight?

yes	
yes	
yes	
yes	







LEADERS IN THE DEVELOPMENT OF LIVING ENVIAOHMEWS





as The Engineer received the ant poison certificate from the Contractor?			yes	
AMP COURSE LAYER			yes	
as the damp course layer been installed under slab and beam?			yes	
the DPC USB green 250 Micron?			yes	
there a 400mm overlap at the joints od the DPC?			yes	
EINFORCING			,	
as all the steel (or mesh) been installed as per the design and bending schedu	le?		yes	
as the correct mesh been used? (specify the type of mesh)			yes	
s the steel/mesh free of rust?			yes	
the mesh overlap length as per specification?			yes	
What is the lap length?			400	
are the stirrups in ground beams spaced correctly?			yes	
lave cover blocks been installed to provide the required cover?			yes	
are the cover block tied to the steel?			no	
ENGINEER 17		DATE	Oa May	2014
87/		5.112		
ONCRETE		,		
f ready mix concrete is used, is the supplier quality control approved?				
What is the grade/ strength of concrete			2SMPa	
What is the aggregate size		ļ	19mm	
What is the theoretical volume of concrete			11	
What is the actual volume of concrete poured			10.7	
Ouration of concrete pouring Start Time		Completion	<u> </u>	<u> </u>
Was any water added to the concrete mix on site			No	
s there a concrete vibrator at the raft site prior to placing of concrete?)	yes	
What was the slump of the concrete? (75mm to 125mm is acceptable)			75mm	
Have concrete cubes been made on site or at the batch plant?			Batch Plant	
Is there a screed bar on site to ensure the concrete is placed to the correct lev	rel?		yes	<u>-</u>
Is there a powerfloat machine on site?		ļ	yes	
Was the concrete adequately vibrated with a concrete vibrator?		<u> </u>	yes	
POWER FLOATING			=1	
Is power floating completed to Engineer's satisfaction		PLS	<u> </u>	NO
If "NO", the Contractor must provide method statement to correct the work]		
CONCERTE CURING				
CONCRETE CURING What a puise a math of will be used?	Closs slob	with cond and	pour water dail	ly,
What curing method will be used?				1y 29.:
	hrs	b) At 28 da	ys:	29
Shuttering removal period (minimum 36 hours) 48	IIIS			
Upon final sign off of this form complying to all requirements the raft may be	e certified as cor	nplete and is du	ue for	





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DEVELOPMENT

LEADERS IN THE DEVELOPMEN





Checklist for House Raft Foundation and Concrete Works

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Khombiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	25 April 2014
File	

HOUSE NUMBER 37001

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions:

A=	
B=	900
C.	
D=	6900

EARTH WORKS

Is the excavations deep enough as

specified by the engineers?

Yes

House

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

yes

I--mom Stand Boundary

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers?

Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

REAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight ?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

<u>>r<</u> NO

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

Is formwork Straight?

yes	
yes	

yes

yes

yes
yes
yes
yes





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DEVELOPMENT

LEADERS IN THE DEVELOPMENT OF LIVING ENVIRONMENTS





ANT POISON		
Has The Engineer received the ant poison certificate from the Contractor	r?	yes
DAMP COURSE LAYER	•	
Has the damp course layer been installed under slab and beam?		yes
Is the DPC USB green 250 Micron?		yes
Is there a 400mm overlap at the joints od the DPC?		yes
REINFORCING		
Has all the steel (or mesh) been installed as per the design and bending	schedule?	yes
Has the correct mesh been used? (specify the type of mesh)		yes
Is the steel/mesh free of rust?		yes
Is the mesh overlap length as per specification?		yes
What is the lap length?		400
Are the stirrups in ground beams spaced correctly?		yes
Have cover blocks been installed to provide the required cover?		yes
Are the cover block tied to the steel?		no
197	1	
ENGINEER	7	DATE 08 May 2014
CONCRETE		
CONCRETE If we do not in a constant is the constant of the co		
If ready mix concrete is used, is the supplier quality control approved?		2SMPa
What is the grade / strength of concrete		
What is the aggregate size		19mm
What is the theoretical volume of concrete		11
What is the actual volume of concrete poured		10.7
Duration of concrete pouring Start Time		Completion
Duration of concrete pouring Start Time Was any water added to the concrete mix on site		Completion No
Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete		Completion No yes
Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete what was the slump of the concrete? (75mm to 125mm is acceptable)		Completion No yes 75mm
Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete. What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant?		Completion No yes 75mm Batch Plant
Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the concrete.		Completion No yes 75mm Batch Plant yes
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Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the cor Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the CONCRETE CURING	rect level? work	Completion No yes 75mm Batch Plant yes yes yes NO
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Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the cord is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the CONCRETE CURING What curing method will be used? What was the achieved concrete strength; 1) At 7 days?	work Close slab w	Completion No yes 75mm Batch Plant yes yes yes NO No
Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the cor Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the CONCRETE CURING What curing method will be used? What was the achieved concrete strength; 1) At 7 days? Shuttering removal period (minimum 36 hours)	work Close slab w 17 48 hrs	Completion No yes 75mm Batch Plant yes yes yes NO No with sand and pour water daily b) At 28 days? I 29.5
Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the cor Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the CONCRETE CURING What curing method will be used? What was the achieved concrete strength; 1) At 7 days? Shuttering removal period (minimum 36 hours)	work Close slab w 17 48 hrs	Completion No yes 75mm Batch Plant yes yes yes NO No with sand and pour water daily b) At 28 days? I 29.5
Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the cor Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the CONCRETE CURING What curing method will be used? What was the achieved concrete strength; 1) At 7 days? Shuttering removal period (minimum 36 hours)	work Close slab w 17 48 hrs	Completion No yes 75mm Batch Plant yes yes yes NO No with sand and pour water daily b) At 28 days? I 29.5
Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the cor Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the CONCRETE CURING What curing method will be used? What was the achieved concrete strength; 1) At 7 days? Shuttering removal period (minimum 36 hours) Upon final sign off of this form complying to all requirements the raft inclusion in the next Payment Certificate	work Close slab w 17 48 hrs may be certified as comp	Completion No yes 75mm Batch Plant yes yes yes NO No Aith sand and pour water daily b) At 28 days? I 29.5
Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the cor Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the CONCRETE CURING What curing method will be used? What was the achieved concrete strength; 1) At 7 days? Shuttering removal period (minimum 36 hours)	work Close slab w 17 48 hrs	Completion No yes 75mm Batch Plant yes yes yes NO No with sand and pour water daily b) At 28 days? I 29.5







LEADERS IN THE DEVELOPMENT OF JIVING ENVIRONMENTS





Checklist for House Raft Foundation and Concrete Works

Employer	•	Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract		PS/HS23-2013
Contractor		Bankuna Construction and Engineering
Date		25 April 2014
File	!	

Employer	•	Ekurhuleni Metropolitan Municipality	
Project		Etwatwa Ext 35 - Khombiza	
Contract		PS/HS23-2013	
Contractor		Bankuna Construction and Engineering	
Date		25 April 2014	
File	:		
		T36996 se controlled works have been constructed to the correct horizontal and vertical alignment carried out to the required standards and specifications, as set out in the document and	nt
SETTING OUT Has the builder had the pos	ition of the	stand boundary beacons confirmed?	Э
Contractor to confirm the_fe	ollowing dir	mensions:	

Contractor to confirm the following dimensions: A. E 8528 B. 900 F 8528 D. 4000 EARTH WORKS Is the excavations deep enough as specified by the engineers? Yes Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes				-
B. 900 F 8528 D. 4000 EARTH WORKS Is the excavations deep enough as specified by the engineers? Yes Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes Is the G7 quality material compacted to 95% MOD	Contractor to c	confirm the follow	ing dimensi	ons:
D. 4000 EARTH WORKS Is the excavations deep enough as specified by the engineers? Yes Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes Is the G7 quality material compacted to 95% MOD	A.		Е	8528
EARTH WORKS. Is the excavations deep enough as specified by the engineers? Yes Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes Is the G7 quality material compacted to 95% MOD	В.	900	F	8528
Is the excavations deep enough as specified by the engineers? Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? Is the G7 quality material compacted to 95% MOD Road R	D.	4000		
specified by the engineers? Yes Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes Is the G7 quality material compacted to 95% MOD Road Res	EARTH WORKS	<u>S</u>		
Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes Is the G7 quality material compacted to 95% MOD Road Rese	Is the excavati	ons deep enough a	as	
re-compacted to 93% MOD AASHTO? yes Is the G7 quality material compacted to 95% MOD Road Reserv	specified by th	ne engineers?		Yes
re-compacted to 93% MOD AASHTO? yes Is the G7 quality material compacted to 95% MOD Road Reserve				
Is the G7 quality material compacted to 95% MOD Road Reserve	Is the 150mm	thick in-situ mater	rial ripped a	nd
Road Reserv	re-compacted to	o 93% MOD AASI	HTO?	yes
Road Reserv				
AASHTO in 150mm thick layers? yes Road Reserv	Is the G7 quali	ity material compa	cted to 95%	MOD
	AASHTO in 15	50mm thick layers?		yes

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

is formwork 100% level?

Is formwork 100% secured?

yes	
yes	
yes	
yes	







LEADERS IN THE DEVELOPMENT OF LIVING ENVIRONMENTS





Has The Engineer received the ant poison certificate from the Contractor?		yes	
DAMP COURSE LAYER Has the damp course layer been installed under slab and beam?		yes	
is the DPC USB green 250 Micron?		yes	
(s there a 400mm overlap at the joints od the DPC?		yes	
REINFORCING			
Has all the steel (or mesh) been installed as per the design and bending schedule?		yes	
Has the correct mesh been used? (specify the type of mesh)		yes	
Is the steel/mesh free of rust?		yes	
Is the mesh overlap length as per specification?		yes	
What is the lap length?		400	
Are the stirrups in ground beams spaced correctly?		yes	
Have cover blocks been installed to provide the required cover?		yes	
Are the cover block tied to the steel?		no	
	_		
1972 - 4	~	227 2014	
ENGINEER 17	DATE	08 May 2014	
CONCRETE			
If ready mix concrete is used, is the supplier quality control approved?			
What is the grade / strength of concrete		25MPa	
What is the aggregate size		19mm	
What is the theoretical volume of concrete		11	
What is the actual volume of concrete poured		10.7	
Duration of concrete pouring Start Time	Completio	on 1	
Was any water added to the concrete mix on site		No	
Is there a concrete vibrator at the raft site prior to placing of concrete?		yes	
What was the slump of the concrete? (75mm to 125mm is acceptable)		75mm	
		Batch Plant	
Have concrete cubes been made on site or at the batch plant?	1	yes	
Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level?			
		yes	
Is there a screed bar on site to ensure the concrete is placed to the correct level?		yes yes	
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site?		yes	
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator?			
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING		yes	
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work		yes	
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING	Close elsh with sand an	yes	
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used?	Close slab with sand an	yes NO	
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Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? What was the achieved concrete strength; 1) At 7 days? 17 Shuttering removal period (minimum 36 hours) 48 hrs	b) At 28 d	yes NO d pour water daily lays? 29.5	
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? What was the achieved concrete strength; 1) At 7 days? Shuttering removal period (minimum 36 hours) 17 Shuttering removal period (minimum 36 hours)	b) At 28 d	yes NO d pour water daily lays? 29.5	
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LEADERS IN THE DEVELOPMENTS





Checklist for House Raft Foundation and Concrete Works

Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract		PS/HS23-2013
Contractor	:	Bankuna Construction and Engineering
Date		25 April 2014
File	•	

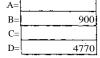
HOUSE NUMBER 36992

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

Contractor to confirm the following dimensions:





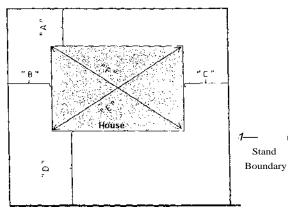
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

NO

NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

yes
yes
yes
yes







LEADERS IN THE DEVELOPMENT OF LEONG ENVIRONMENTS





<u> </u>	
ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
s the DPC USB green 250 Micron?	yes
s there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
ENGINEER	DATE 108 May 2014
<u>CONCRETE</u>	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion I No
Was any water added to the concrete mix on site	·
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes 75mm
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm Batch Plant
Have concrete cubes been made on site or at the batch plant?	
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site? We the concrete adequately vibrated with a concrete vibrator?	yes yes
Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING	yes
Is power floating completed to Engineer's satisfaction	NO
If "NO", the Contractor must provide method statement to correct the work	
CONCRETE CURING	
What curing method will be used? Close sla	b with sand and pour water daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days? 29.5
Shuttering removal period (minimum 36 hours) 48 hrs	
Upon final sign off of this form complying to all requirements the raft may be certified as coinclusion in the next Payment Certificate	mplete and is due for







LEADERS IN THE DEVELOPMENT





Checklist for House Raft Foundation and Concrete Works

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Khombiza
Contract	PSIHS23-2013
Contractor	Bankuna Construction and Engineering
Date	25 April 2014
File	

HOUSE NUMBER 36997

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?



NO

Contractor to confirm the following dimensions:

A=		E_	
$\mathbf{B}=$		F=	
C=	900		
D=	6900		

EARTH WORKS

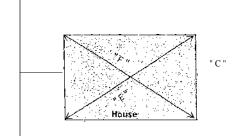
Is the excavations deep enough as specified by the engineers?

Yes

8910 8910

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



limmomment Stand Boundary

Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?



NO

BEAMS

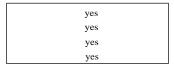
Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?



FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

yes
yes
yes
yes







LEADERS IN THE DEVELOPMEN





O	
ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	,
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule	? yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
ENGINEER	DATE 08 May 2014
<u>CONCRETE</u>	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level	? yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	NO
If "NO", the Contractor must provide method statement to correct the work	
CONCRETE CURING	
What curing method will be used?	Close slab with sand and pour water daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days? 29.5
Shuttering removal period (minimum 36 hours) 48 hr	rs
Upon final sign off of this form complying to all requirements the raft may be considered in the part Power Confidence	ernned as complete and is due for
inclusion in the next Payment Certificate	
myonymp e and at	70 T
ENGINEER	DATE 13 June 2014





Metroprojects

DEVELOPMENT

LEADERS IH THE DEVELOPMENT





Checklist for House Raft Foundation and Concrete Works

Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract	:	PS/HS23.2013
Contractor	•	Bankuna Construction and Engineering
Date	:	25 April 2014
File	!	

HOUSE NUMBER 36993

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

irmed? NO

Contractor	to confirm the fo	llowing dime	nsions:
A=		E =	8910
B=	900	F =	8910
C=			
Ds	6900		

EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

House imommin Stand Boundary

Is the G7 quality material compacted to 95% MOD

AASHTO in 150mm thick layers? yes

ves Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

	NO
yes	
yes	
yes	
yes	
yes	
yes	
yes	
yes	





Metroprojects

DEVELOPMENT

LEADERS IN THE DEVELOPMENT OE LIVING ENVIRONMENTS



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ui			
ANT POISON			
Has The Engineer received the ant poison certificate from the Contract	ctor?	yes	<u>i</u>
DAMP COURSE LAYER Here the degree account have installed and a slab and because			
Has the damp course layer been installed under slab and beam?		ye	
Is the DPC USB green 250 Micron?		ye	
Is there a 400mm overlap at the joints od the DPC?		ye	Š
REINFORCING			
Has all the steel (or mesh) been installed as per the design and bending	ng schedule?	ye	
Has the correct mesh been used? (specify the type of mesh)		ye	
Is the steel/mesh free of rust?		ye	
Is the mesh overlap length as per specification?		ye	
What is the lap length?		40	
Are the stirrups in ground beams spaced correctly?		ye	
Have cover block been installed to provide the required cover? Are the cover block tied to the steel?		ye n	
Are the cover block tied to the steel?		ne)
192	,		
ENGINEER	~~ <u>~</u>	DATE 08 May	2014
CONCRETE	-		
If ready mix concrete is used, is the supplier quality control approved	49		
What is the grade / strength of concrete	d:	25MPa	a
What is the grade / strength of concrete What is the aggregate size			mm
What is the aggregate size What is the theoretical volume of concrete			11
What is the decircle volume of concrete poured			0.7
Duration of concrete pouring Start Time		Completion	7. 7
Was any water added to the concrete mix on site			No
Is there a concrete vibrator at the raft site prior to placing of concre	rte?		/es
What was the slump of the concrete? (75mm to 125mm is acceptable)			5mm
Have concrete cubes been made on site or at the batch plant?	ic,		h Plant
Is there a screed bar on site to ensure the concrete is placed to the	correct level?		/es
Is there a powerfloat machine on site?	Jones Is . C.		yes
Was the concrete adequately vibrated with a concrete vibrator?		_	yes
POWER FLOATING			
Is power floating completed to Engineer's satisfaction			NO
If "NO", the Contractor must provide method statement to correct to	the work		
CONCRETE CURING			
What curing method will be used?	Close slab	with sand and pour wa	ıter daily
What was the achieved concrete strength; 1) At 7 days?	17	b) At 28 days?	29.5
Shuttering removal period (minimum 36 hours)	48 hrs		
Upon final sign off of this form complying to all requirements the r inclusion in the next Payment Certificate		nplete and is due for	







LEADERS IN THE DEVELOPMEN





Checklist for House Raft Foundation and Concrete Works

Employer	!	Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract	!	PS/HS23-2013
Contractor		Bankuna Construction and Engineering
Date		25 April 2014
File		

HOUSE NUMBER 36998

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

de S Stand

Boundary

Contractor to confirm the following dimensions:

A=		
B.	900	
C.		
D=	4000	

,	
Е	8528
F	8528

EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

House

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Road Reserve

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

>t< №

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

Is formwork Straight?

yes yes yes yes







LEIVDTRS IND% DEVELOPMEN





Checklist for House Raft Foundation and Concrete Works

Has The Engineer received the ant poison certificate from the Contractor? Has The Engineer received the ant poison certificate from the Contractor? Bake COURSE LAYER Has the damp course layer been installed under slab and beam? Is the DPC USB green 250 Microry Is the DPC USB green 250 Microry Yes Is there a 40Ornm overlap at the joints od the DPC? Has all the steel (or mesh) been installed as per the design and bending schedule? Has the correct mesh been used? (specify the type of mesh) Yes Is the steel/mesh free of rust? Yes Is the steel/mesh free of rust? Yes What is the lap length? Are the stirrups in ground beams spaced correctly? Have cover blocks been installed to provide the required cover? Are the cover block ided to the steel? ENGINEER CONCRETE If ready mix concrete is used, is the supplier quality control approved? What is the grade / strength of concrete What is the grade / strength of concrete What is the actual volume of concrete What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete fixm to 125 mm is acceptable) Have concrete cubsate been made on site or at the batch plant? Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (Spenim to 125 mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a powerfloat machine on site? Was any water added to the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete cubes been made on site or at the batch plant? Is there a powerfloat machine on site? Yes Was the concrete cubes been made on site or at the batch plant? Is there a powerfloat machine on site? Yes Was the concrete of concrete or the concrete vibrator? Yes Was the concrete or concrete vibrator at the raft site prior to placing of concrete? Is there a powerfloat machine on site? Yes Was the concrete or concrete vibrator at th	O CHARLEST TO THOUSE THEM I COMMUNICATION WITH CONTROL WITH COMMUNICATION CONTROL WITH CONTROL WITH COMMUNICATION CONTROL WITH CONTROL WITH COMMUNICATION CO	
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Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? Close slab with sand and pour water daily What was the achieved concrete strength; 1) At 7 days? 17 b) At 28 days? 29.5	What is the actual volume of concrete poured	10.7
Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? Close slab with sand and pour water daily What was the achieved concrete strength; 1) At 7 days? 17 b) At 28 days? 29.5	Duration of concrete pouring Start Time	Completion
What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? Close slab with sand and pour water daily What was the achieved concrete strength; 1) At 7 days? 17 b) At 28 days? 29.5	Was any water added to the concrete mix on site	No
Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? Close slab with sand and pour water daily What was the achieved concrete strength; 1) At 7 days? 17 b) At 28 days? 29.5	Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? Close slab with sand and pour water daily What was the achieved concrete strength; 1) At 7 days? 17 b) At 28 days? 29.5	What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm
Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? Close slab with sand and pour water daily What was the achieved concrete strength; 1) At 7 days? 17 b) At 28 days? 29.5	Have concrete cubes been made on site or at the batch plant?	Batch Plant
Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? Close slab with sand and pour water daily What was the achieved concrete strength; 1) At 7 days? 17 b) At 28 days? 29.5	Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? What was the achieved concrete strength; 1) At 7 days? Close slab with sand and pour water daily b) At 28 days? 29.5	Is there a powerfloat machine on site?	yes
Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? What was the achieved concrete strength; 1) At 7 days? It is power floating completed to Engineer's satisfaction Close slab with sand and pour water daily b) At 28 days? 29.5	Was the concrete adequately vibrated with a concrete vibrator?	yes
If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? What was the achieved concrete strength; 1) At 7 days? Close slab with sand and pour water daily b) At 28 days? 29.5	POWER FLOATING	
CONCRETE CURING What curing method will be used? What was the achieved concrete strength; 1) At 7 days? Close slab with sand and pour water daily b) At 28 days? 29.5	Is power floating completed to Engineer's satisfaction	NO NO
What curing method will be used? Close slab with sand and pour water daily What was the achieved concrete strength; 1) At 7 days? 17 b) At 28 days? 29.5	If "NO", the Contractor must provide method statement to correct the work	
What was the achieved concrete strength; 1) At 7 days? 17 b) At 28 days? 29.5	CONCRETE CURING	
· · · · · · · · · · · · · · · · · · ·	What curing method will be used? Clo	se slab with sand and pour water daily
Shuttering removal period (minimum 36 hours) 48 hrs	What was the achieved concrete strength; 1) At 7 days?	b) At 28 days? 29.5
	Shuttering removal period (minimum 36 hours) 48 hrs	

Upon final sign off of this form complying to all requirements the raft may be certified as complete and is due for inclusion in the next Payment Certificate

ENGINEER

DATE 13 lune 2014















Employer		Ekurhuleni Metropolitan Municipality
Project	-	Etwatwa Ext 35 - Combiza
Contract	•	PS/HS23-2013
Contractor	!	Bankuna Construction and Engineering
Date		25 April 2014
File	•	

HOUSE NUMBER 36994

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?



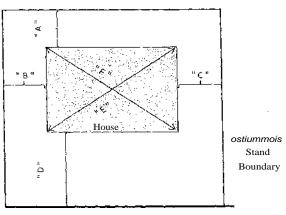
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house ?

NO

NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes	
yes	
yes	
yes	

FORMWORK

Is formwork treated with a releasing agent?

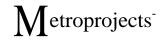
Is formwork 100% level?

Is formwork 100% secured?

yes
yes
yes
yes







LEADERS IN THE DEVELOPMENT OF LIVING ENVIRONMENTS



Checklist for House Raft Foundation and Concrete Works		
ANT POISON		
Has The Engineer received the ant poison certificate from the Contractor?		yes
DAMP COURSE LAYER		
Has the damp course layer been installed under slab and beam?		yes
s the DPC USB green 250 Micron?		yes
s there a 400mm overlap at the joints od the DPC?		yes
REINFORCING Has all the steel (or mesh) been installed as per the design and bending schedule?		VAC
Has the correct mesh been used? (specify the type of mesh)		yes yes
s the steel/mesh free of rust?		yes
s the mesh overlap length as per specification?		yes
What is the lap length?		400
Are the stirrups in ground beams spaced correctly?		yes
Have cover blocks been installed to provide the required cover?		yes
Are the cover block tied to the steel?		no
ENGINEER	DATE _	08 May 2014
CONCRETE If ready mix concrete is used, is the supplier quality control approved? What is the grade / strength of concrete		25MPa
What is the aggregate size		19mm
What is the theoretical volume of concrete		11
What is the actual volume of concrete poured		10.7
Duration of concrete pouring Start Time	Completion	
Was any water added to the concrete mix on site	1	No
Is there a concrete vibrator at the raft site prior to placing of concrete?		yes
What was the slump of the concrete? (75mm to 125mm is acceptable)		110 mm
Have concrete cubes been made on site or at the batch plant?]	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?		yes
Is there a powerfloat machine on site?		yes
Was the concrete adequately vibrated with a concrete vibrator?		yes
POWER FLOATING		
Is power floating completed to Engineer's satisfaction		NO
If "NO", the Contractor must provide method statement to correct the work		
CONCRETE CURING		
	e slab with sand and po	our water daily
What curing method will be used? Clos What was the achieved concrete strength; 1) At 7 days?	b) At 28 days	•
Shuttering removal period (minimum 36 hours) 48 hrs	0) At 20 days	. 29.3
5 Hattering Temoval period (Himminum 50 Hours) 46 IIIS		
Upon final sign off of this form complying to all requirements the raft may be certified a inclusion in the next Payment Certificate	as complete and is due	for
ENGINEER D	ATE 1	3 June 2014





Metroprojects

DEVELOPMENT

LEADERS IN THE DEVELOPMENT OF LIVING ENVIRONMENTS



C

Employer	Ekurhuleni Metropolitan Municipality			
Project	Etwatwa Ext 35 - Khombiza			
Contract •	PS/HS23-2013			
Contractor	Bankuna Construction and Engineering			
Date	25 April 2014			
File				
HOUSE NUMBER The Contractor has established that if	36999 hese controlled works have been constr	ructed to the correct horizontal and	vertical alignment	
	n carried out to the required standards a		-	
drawings.	in carried out to the required standards a	and specifications, as set out in the	document and	
diawings.				
SETTING OUT				
·	ne stand boundary beacons confirmed?		NO	
Contractor to confirm the following of	limensions:			
A=	E_ <u>8485</u>			
B. 900	F= <u>8485</u>			
C=				
D= 6900	I			
EARTH WORKS				
Is the excavations deep enough as		Hous		
specified by the engineers?	Yes		iimmEnnew	
			Stand	
Is the 150mm thick in-situ material r	ipped and		Boundary	
re-compacted to 93% MOD AASHTO	? yes			
Is the G7 quality material compacted	to 95% MOD	Road Reserve		
AASHTO in 150mm thick layers?	yes	Road Reserve		
Are the final earthworks higher than	n the surrounding area so that storm wa	nter does		
not affect the house ?			NO	
BEAMS				
Are beams excavated in the correct	position and the right dimensions?		yes	
Are beams straight?	-		yes	
Is the top of beam chamfered 45 de	g as per detail?		yes	
Has all the loose soil in the beam ex	acavation been removed?		yes	
Are the trenches dry?		·		
<u>FORMWORK</u>				
Is formwork treated with a releasing	g agent ?		yes	
Is formwork 100% level?			yes	
Is formwork 100% secured?			yes	
Is formwork Straight?			yes	





Metroprojects

DEVELOPMENT

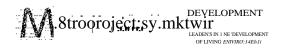
LEADERS IN ME DEVELOPMENT OF LIVIND ENVIRONMENTS



ANT POISON	_		
Has The Engineer received the ant poison certificate from the Contractor?			yes
DAMP COURSE LAYER	_		
Has the damp course layer been installed under slab and beam?			yes
Is the DPC USB green 250 Micron?			yes
Is there a 400mm overlap at the joints od the DPC?			yes
REINFORCING	_		
Has all the steel (or mesh) been installed as per the design and bending schedule?			yes
Has the correct mesh been used? (specify the type of mesh)			yes
Is the steel/mesh free of rust?			yes
Is the mesh overlap length as per specification?			yes
What is the lap length?			400
Are the stirrups in ground beams spaced correctly?			yes
Have cover blocks been installed to provide the required cover?			yes
Are the cover block tied to the steel?			no
ENGINEER		DATE	08 May 2014
CONCRETE If ready mix concrete is used, is the supplier quality control approved?	1		
What is the grade / strength of concrete		25	SMPa
What is the aggregate size	·		19mm
What is the theoretical volume of concrete	Ì		11
What is the actual volume of concrete poured			10.7
Duration of concrete pouring Start Time]	Completion	
Was any water added to the concrete mix on site	J		No
Is there a concrete vibrator at the raft site prior to placing of concrete?			yes
What was the slump of the concrete? (75mm to 125mm is acceptable)		· · · · · · · · · · · · · · · · · · ·	75mm
Have concrete cubes been made on site or at the batch plant?		В	atch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?			yes
Is there a powerfloat machine on site?			yes
Was the concrete adequately vibrated with a concrete vibrator?			yes
POWER FLOATING		L	
Is power floating completed to Engineer's satisfaction			NO
If "NO", the Contractor must provide method statement to correct the work		L	
CONCRETE CURING			
	Close slab wi	ith sand and pou	=
What was the achieved concrete strength; 1) At 7 days?		b) At 28 days?	29.5
Shuttering removal period (minimum 36 hours) 48 hrs			
Upon final sign off of this form complying to all requirements the raft may be certific inclusion in the next Payment Certificate	ed as compl	ete and is due fo	or
ENGINEER	DATE	13 June 2014	











Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 -Comb za
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	10-Feb-15
File	

HOUSE NUMBER 36864

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions:

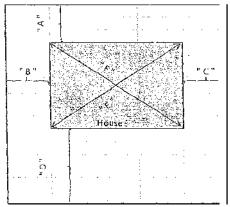
A=		$\mathbf{E} =$	8910
	900	$\mathbf{F} =$	8910
C=			
D-	12000		

EARTH WORKS

Is the excavations deep enough as specified by the engineers? Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?



NO

42====**a** Stand

Boundary

BEAMS

Are beams excavated in the correct position and the right dimensions? Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

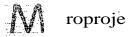
Is formwork 100% level?

Is formwork 100% secured?

yes	
yes	
yes	
yes	











ANT POISON					
Has The Engineer received the ant poison certificate from the Contractor?				yes	
DAMP COURSE LAYER					
Has the damp course layer been installed under slab and beam?				yes	
Is the DPC USB green 250 Micron?				yes	
Is there a 400mm overlap at the joints od the DPC?				yes	
REINFORCING					
Has all the steel (or mesh) been installed as per the design and bending scho	edule?			yes	
Has the correct mesh been used? (specify the type of mesh)				yes	
Is the steel/mesh free of rust?				yes	
Is the mesh overlap length as per specification?				yes	
What is the lap length?				400	
Are the stirrups in ground beams spaced correctly?				yes	
Have cover blocks been installed to provide the required cover?				yes	
Are the cover block tied to the steel?				no	
ENGINEER /2			DATE	<u>Fors/oz/10</u>	
CONCRETE					
If ready mix concrete is used, is the supplier quality control approved?					
What is the grade / strength of concrete				25MPa	
What is the aggregate size				19mm	
What is the theoretical volume of concrete				11	
What is the actual volume of concrete poured				10.7	
Duration of concrete pouring Start Time		\neg	Completion	n	
Was any water added to the concrete mix on site				No	
Is there a concrete vibrator at the raft site prior to placing of concrete?				yes	
What was the slump of the concrete? (75mm to 125mm is acceptable)				110 mm	
Have concrete cubes been made on site or at the batch plant?				Batch Plant	
Is there a screed bar on site to ensure the concrete is placed to the correct	level?			yes	
Is there a powerfloat machine on site?				yes	
Was the concrete adequately vibrated with a concrete vibrator?				yes	
POWER FLOATING				-	
Is power floating completed to Engineer's satisfaction					NO
If "NO", the Contractor must provide method statement to correct the wo	ork				
CONCRETE CURING					
What curing method will be used?		Close slab v	vith sand and	l pour water dai	ilv
What was the achieved concrete strength; 1) At 7 days?	19		b) At 28 da	-	29.5
Shuttering removal period (minimum 36 hours)	48 hrs				
Upon final sign off of this form complying to all requirements the raft maginclusion in the next Payment Certificate	y be certi	ified as comp	olete and is d	ue for	

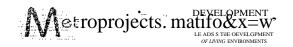
DATE

10-Feb-15



ENGINEER









Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	10-Feb-15
File	

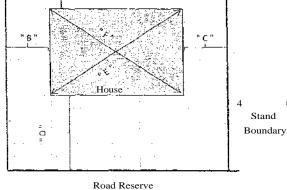
ROUSE NUMBER 36866

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and

SETTING OUT Has the builder had the position of the stand boundary beacons confirmed? NO Contractor to confirm the following dimensions: ۲. 8485 B= 900 8485 C= D= 11037 EARTH WORKS Is the excavations deep enough as specified by the engineers? Yes Stand Is the 150mm thick in-situ material ripped and

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers?

re-compacted to 93% MOD AASHTO?



Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

yes

NO

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes	
yes	
yes	
yes	

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secu red?

yes
yes
yes
yes







LEADEAS IN TKE CEVELOPMEKT OF WING FINVIR:A1,1ENni



ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has ail the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
Justin Justin	
ENGINEER	DATE $zols/0^2/_10$
, 2, 3	
	_
CONCRETE	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	2SMPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	110 mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	NO
If "NO", the Contractor must provide method statement to correct the work	
i 100 , the conductor must provide method statement to correct the work	<u> </u>
CONCRETE CURING	
	lab with sand and pour water daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days? 29.5
Shuttering removal period (minimum 36 hours) 48 hrs	b) At 26 days: 29.3
Shuttering removal period (minimum 30 nours) 48 ms	
Upon final sign off of this form complying to all requirements the raft may be certified as of	complete and is due for
inclusion in the next Payment Certificate	
ENGINEER DAT	E 10-Feb-15
12 year	
	-









ANT POISON			
Has The Engineer received the ant poison certificate from the Co	ontractor?		yes
DAMP COURSE LAYER			
Has the damp course layer been installed under slab and beam?	•		yes
Is the DPC US8 green 250 Micron?			yes
Is there a 400mm overlap at the joints od the DPC?			yes
REINFORCING			
Has all the steel (or mesh) been installed as per the design and be	pending schedule?		yes
Has the correct mesh been used? (specify the type of mesh)			yes
Is the steel/mesh free of rust?			yes
Is the mesh overlap length as per specification?			yes
What is the lap length?			400
Are the stirrups in ground beams spaced correctly?			yes
Have cover blocks been installed to provide the required cover?	?		yes
Are the cover block tied to the steel?			no
ENGINEER		DATE	2015/0²/ 10
CONCRETE			
If ready mix concrete is used, is the supplier quality control app	proved?		
What is the grade / strength of concrete			25MPa
What is the aggregate size			19mm
What is the theoretical volume of concrete			11
What is the actual volume of concrete poured			10.7
Duration of concrete pouring Start	Time	Completion	on
Was any water added to the concrete mix on site			No
Is there a concrete vibrator at the raft site prior to placing of co	oncrete?	<u> </u>	yes
What was the slump of the concrete? (75mm to 125mm is acce	eptable)	l	110 mm
Have concrete cubes been made on site or at the batch plant?			Batch Plant
is there a screed bar on site to ensure the concrete is placed to	the correct level?		yes
Is there a powerfloat machine on site?			yes
Was the concrete adequately vibrated with a concrete vibrator	r?		yes
POWER FLOATING			
Is power floating completed to Engineer's satisfaction		YES.	NO
If "NO", the Contractor must provide method statement to con-	rrect the work		
CONCRETE CURING			
What curing method will be used?	Close sl		d pour water daily
What was the achieved concrete strength; 1) At 7 days?	19	b) At 28 c	lays? i <u>29.5</u>
Shuttering removal period (minimum 36 hours)	48 hrs		
Upon final sign off of this form complying to all requirements inclusion in the next Payment Certificate	the raft may be certified as c	omplete and is o	lue for
ENGINEER	DATI	E 10-Fe	b-15









Employer	:	Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Combiza
Contract	:	PSIHS23-2013
Contractor		Bankuna Construction and Engineering
Date		10-Feb-16
File	t	

HOUSE NUMBER 36878

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT.

Has the builder had the position of the stand boundary beacons confirmed?

NO NO

Contractor to confirm the following dimensions:





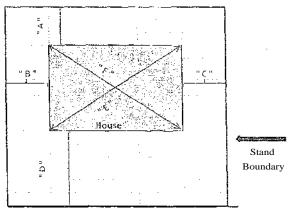
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? $$\rm yes$$



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

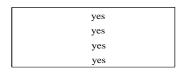
yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?















ANT POISON			
Has The Engineer-received the ant poison certificate from the Contracto	r?	yes	
DAMP COURSE LAYER	L		
Has the damp course layer been installed under slab and beam?	ſ	yes	
Is the DPC USB green 250 Micron?		yes	
Is there a 400mm overlap at the joints od the DPC?		yes	
REINFORCING	L		
Has all the steel (or mesh) been installed as per the design and bending	schedule?	yes	
'Has the correct mesh been used? (specify the type of mesh)		yes	
Is the steel/mesh free of rust?		yes	
Is the mesh overlap length as per specification?		yes	
What is the lap length?		400	
Are the stirrups in ground beams spaced correctly?		yes	
Have cover blocks been installed to provide the required cover?		yes	
Are the cover block tied to the steel?		no	
1271	A		
ENGINEER	7	DATE 2015/02/10	
CONCRETE			
If ready mix concrete is used, is the supplier quality control approved?		25MDo	
What is the grade / strength of concrete		25MPa	
What is the aggregate size		19mm	
What is the theoretical volume of concrete		11	
What is the actual volume of concrete poured		10.7	
Duration of concrete pouring Start Time		Completion	
Was any water added to the concrete mix on site		No	
Is there a concrete vibrator at the raft site prior to placing of concrete?		yes	
What was the slump of the concrete? (75mm to 125mm is acceptable)		110 mm	
Have concrete cubes been made on site or at the batch plant?		Batch Plant	
is there a screed bar on site to ensure the concrete is placed to the con-	rect level?	yes	
Is there a powerfloat machine on site?		yes	
Was the concrete adequately vibrated with a concrete vibrator?		yes	
POWER FLOATING			
Is power floating completed to Engineer's satisfaction			NO
If "NO", the Contractor must provide method statement to correct the	work		
CONCRETE CURING			
What curing method will be used?	Close slab w	ith sand and pour water dai	ly
What was the achieved concrete strength; 1) At 7 days?	19	b) At 28 days?	29.5
Shuttering removal period (minimum 36 hours)	48 hrs		
Upon final sign off of this form complying to all requirements the raft	may be certified as compl	ete and is due for	
inclusion in the next Payment Certificate			
1			
ENGINEER /	DATE	10-Feb-15	





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Checklist for House Raft Foundation and Concrete Works

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS1HS23-2013
Contractor	Bankuna Construction and Engineering
Date	10-Feb-15
File	

HOUSE NUMBER 36897

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and

drawings. SETTING OUT Has the builder had the position of the stand boundary beacons confirmed? Contractor to confirm the following dimensions: 85<u>2</u>8 900 8528 13= C= D= 3000 " 8 " " C " EARTH WORKS Is the excavations deep enough as specified by the engineers? Yes Stand

Is the 67 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes

Is the 150mm thick in-situ material ripped and

re-compacted to 93% MOD AASHTO?

Are the final earthworks higher than the surrounding area so that storm water does

Road Reserve

NO

Boundary

NO

not affect the house?

Are beams excavated in the correct position and the right dimensions? Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

Is formwork Straight?

yes
yes
yes
yes



yes











Checklist for House Raft Foundation and Concrete Works	
ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
15-71	
ENGINEER	DATE zois/oz/io
CONCRETE	
If ready mix concrete is used, is the supplier quality control approved?	2010
What is the grade / strength of concrete	2SMPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is accontable)	yes 110 mm
What was the slump of the concrete? (75mm to 125mm is acceptable)	Batch Plant
Have concrete cubes been made on site or at the batch plant? . Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	yes
Is power floating completed to Engineer's satisfaction	NO
If "NO", the Contractor must provide method statement to correct the work	
. CONCRETE CURING	
What curing method will be used? Close slab w	ith sand and pour water daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days? 29.5
Shuttering removal period (minimum 36 hours) 48 hrs	
Upon final sign off of this form complying to all requirements the raft may be certified as compl inclusion in the next Payment Certificate ENGINEER DATE	ete and is due for
ENGINEER DATE	
/	





LEADERS IN PRE DEVELORMENTS

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Checklist for House Raft Foundation and Concrete Works

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PSIHS23-2013
Contractor	Bankuna Construction and Engineering
Date	10-Feb-15
File	

HOUSE NUMBER 36899

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT Has the builder had the position of the stand boundary beacons confirmed? NO Contractor to confirm the following dimensions: $8\bar{5}\bar{2}8$ В. 900 8528 C= 3000 D: "В" EARTH WORKS Is the excavations deep enough as specified by the engineers? Yes Stand Is the 150mm thick in-situ material ripped and Boundary _ re-compacted to 93% MOD AASHTO? yes Is the G7 quality material compacted to 95% MOD Road Reserve AASHTO in 150mm thick layers? yes Are the final earthworks higher than the surrounding area so that storm water does not affect the house? NO

SEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

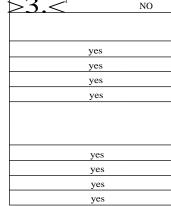
Are the trenches dry?

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?











ANT POISON				
Has The Engineer received the ant poison certificate from the Contractor?			yes	
DAMP COURSE LAYER			-	
Has the damp course layer been installed under slab and beam?			yes	
Is the DPC USB green 250 Micron?			yes	
Is there a 400mm overlap at the joints od the DPC?			yes	
REINFORCING				
Has all the steel (or mesh) been installed as per the design and bending sc	hedule?		yes	
Has the correct mesh been used? (specify the type of mesh)			yes	
Is the steel/mesh free of rust?			yes	
Is the mesh overlap length as per specification?			yes	
What is the lap length?			400	
Are the stirrups in ground beams spaced correctly?			yes	
Have cover blocks been installed to provide the required cover?			yes	
Are the cover block tied to the steel?			no	
ENGINEER / FT		DATE	2015/02/10	
CONCRETE			_	
If ready mix concrete is used, is the supplier quality control approved?				
What is the grade / strength of concrete			25MPa	
What is the aggregate size			19mm	
What is the theoretical volume of concrete			11	
What is the actual volume of concrete poured			10.7	
Duration of concrete pouring Start Time		Completion		Ţ
Was any water added to the concrete mix on site	· · · · · · · · · · · · · · · · · · ·		No	
Is there a concrete vibrator at the raft site prior to placing of concrete?			yes	
What was the slump of the concrete? (75mm to 125mm is acceptable)			110 mm	
Have concrete cubes been made on site or at the batch plant?			Batch Plan	 nt
Is there a screed bar on site to ensure the concrete is placed to the correct	ct level?		yes	
Is there a powerfloat machine on site?			yes	
Was the concrete adequately vibrated with a concrete vibrator?			yes	
POWER FLOATING				
Is power floating completed to Engineer's satisfaction		X+3]	NO
If "NO", the Contractor must provide method statement to correct the w	ork			
CONCRETE CURING				
What curing method will be used?		Close slab with sand and p	our water d	laily
What was the achieved concrete strength; 1) At 7 days?	19	b) At 28 day	s?	29.5
Shuttering removal period (minimum 36 hours)	48 hrs	•		



inclusion in the next Payment Certificate

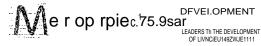
ENGINEER

Upon final sign off of this form complying to all requirements the raft may be certified as complete and is due for

DATE

10-Feb-15





NOM



Checklist for House Raft Foundation and Concrete Works

Employer	Ekurhuleni Metropolitan Municipality	
Project	Etwatwa Ext 35 - Combiza	
Contract	PS/HS23-2013	
Contractor	Bankuna Construction and Engineering	
Date	10-Feb-15	
File		

HOUSE NUMBER 36903

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions:

A=	
	900
C=	
D=-	4000



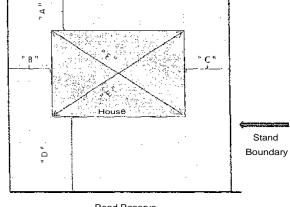
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? ves



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes

FORMWORK

is formwork treated with a releasing agent?

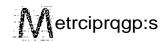
Is formwork 100% level?

Is formwork 100% secured?

yes
yes
yes
yes







DEVEL<u>OPME</u>NT

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ANT POISON		
Has The Engineer received the ant poison certificate from the Contractor?	yes	
DAMP COURSE LAYER		
Has the damp course layer been installed under slab and beam?	yes	
Is the DPC USB green 250 Micron?	yes	
Is there a 400mm overlap at the joints of the DPC?	yes	
REINFORCING		
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes	
Has the correct mesh been used? (specify the type of mesh)	yes	
Is the steel/mesh free of rust?	yes	
Is the mesh overlap length as per specification?	yes	
What is the lap length?	400	
Are the stirrups in ground beams spaced correctly?	yes	
Have cover blocks been installed to provide the required cover?	yes	
Are the cover block tied to the steel?	no	
		_1
ENGINEER	DATE 201s/02/10	
CONCRETE		
If ready mix concrete is used, is the supplier quality control approved?		
What is the grade / strength of concrete	25MPa	
What is the aggregate size	19mm	
What is the theoretical volume of concrete	11	
What is the actual volume of concrete poured	10.7	
Duration of concrete pouring Start Time {	Completion	
Was anywater added to the concrete mix on site	No]
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes	
What was the slump of the concrete? (75mm to 125mm is acceptable)	110 mm	
Have concrete cubes been made on site or at the batch plant?	Batch Plant	
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes	
Is there a powerfloat machine on site?	yes	
Was the concrete adequately vibrated with a concrete vibrator?	yes	
POWER FLOATING		
Is power floating completed to Engineer's satisfaction	NO NO	Ō
If "NO", the Contractor must provide method statement to correct the work		
ii NO, the Contractor must provide method statement to correct the work	L	
CONCRETE CURING		
	sh with and and nour water daily	
	b) At 28 days? 29	9.5
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days!	7.5
Shuttering removal period (minimum 36 hours) 48 hrs		
		
Upon final sign off of this form complying to all requirements the raft may be certified as co	omplete and is due for	
inclusion in the next Payment Certificate	_	
ENGINËER DATE	10-Feb-15	
ENGINEER DATE	-	













Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Combiza
Contract		PSIHS23-2013
Contractor		Bankuna Construction and Engineering
Date	:	10-Feb-15
File		

HOUSE NUMBER 36972

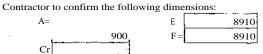
The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO J

A=	
l	900
Cr	
DT	3000

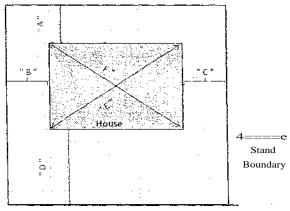


EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? 1___



Is the G7 quality material compacted to 95% MOD

AASHTO in 150mm thick layers? yes Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

	NO
yes	
yes	
yes	
yes	
yes	
yes	
yes	
yes	
	yes yes yes yes yes yes yes





ANT POISON









Checklist for House Raft Foundation and Concrete Works

Has The Engineer received the ant poison certificate	e from the Contractor?		yes	
DAMP COURSE LAYER				
Has the damp course layer been installed under sla	b and beam?		yes	
Is the DPC USB green 250 Micron?			yes	
Is there a 400mm overlap at the joints od the DPC?			yes	
REINFORCING				
Has all the steel (or mesh) been installed as per the	design and bending schedule?		yes	
Has the correct mesh been used? (specify the type	of mesh)		yes	
Is the steel/mesh free of rust?			yes	
Is the mesh overlap length as per specification?			yes	
What is the lap length?			400	
Are the stirrups in ground beams spaced correctly?	?		yes	
Have cover blocks been installed to provide the rec	quired cover?		yes	
Are the cover block tied to the steel?			no	
ENGINEER		D 4 mm		
ENGINEER	s	DATE	zolsozgo	
<u>CONCRETE</u>				
If ready mix concrete is used, is the supplier quality	y control approved?			
What is the grade / strength of concrete		L	25MPa	
What is the aggregate size			19mm	
What is the theoretical volume of concrete			11	
What is the actual volume of concrete poured			10.7	
Duration of concrete pouring	Start Time	Complet	ion	
Was any water added to the concrete mix on site			No	
•Is there a concrete vibrator at the raft site prior to	placing of concrete?	<u></u>	yes	
What was the slump of the concrete? (75mm to 125mm is acceptable)			110 mm	

Was the concrete adequately vibrated with a concrete vibrator?

is there a powerfloat machine on site?

POWER FLOATING

Is power floating completed to Engineer's satisfaction

Have concrete cubes been made on site or at the batch plant?

If "NO", the Contractor must provide method statement to correct the work

Is there a screed bar on site to ensure the concrete is placed to the correct level?

	25MPa	
	19mm	
	11	
	10.7	_
Completion		
	No	
	yes	
	110 mm	
	Batch Plant	
	yes	
	yes	
	yes	

→ Set	[NO

CONCRETE	CURING

What curing method will be used? What was the achieved concrete strength; 1) At 7 days? Close slab with sand and pour water daily b) At 28 days?

19

29.5

Shuttering removal period (minimum 36 hours)

48 hrs

Upon final sign off of this form complying to all requirements the raft may be certified as complete and is due for inclusion in the next Payment Certificate

ENGINEER

DATE

10-Feb-15













Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	10-Feb-15
File	

HOUSE NUMBER 36973

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT.

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions:

A=	 _
Б.	 900
C.	
D.	 7900

E =	8528
F =	8528

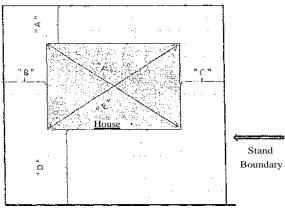
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to <u>95% MOD</u>
AASHTO in 150mm thick layers? yes



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK.

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

yes
yes
yes
yes













r House Raft Foundation and Concrete Works

Λ	NT	DO	TCC	IN

Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
r	

CONCRETE.

ENGINEER

If ready mix concrete is used, is the supplier quality control approved?

What is the grade / strength of concrete

What is the aggregate size

What is the theoretical volume of concrete

What is the actual volume of concrete poured

Duration of concrete pouring

Was any water added to the concrete mix on site

Is there a concrete vibrator at the raft site prior to placing of concrete?

What was the slump of the concrete? (75mm to 125mm is acceptable)

Have concrete cubes been made on site or at the batch plant?

Is there a screed bar on site to ensure the concrete is placed to the correct level?

Is there a powerfloat machine on site?

Was the concrete adequately vibrated with a concrete vibrator?

POWER FLOATING

Is power floating completed to Engineer's satisfaction

If "NO", the Contractor must provide method statement to correct the work

	25MP	a			_
	19n	ım		· ·	
	11	Ì			
	10	3			
Completion					
	N	0			_
	ye	s			_
	110	mm			
	Batch	Plan	ıt		
	ye	es			_
	ye	es			
	'ye	es			

2015/02/10

DATE

YES	NO

CONCRETE CURING

What curing method will be used? Close slab with sand and pour water daily
What was the achieved concrete strength; 1) At 7 days? 19 b) At 28 days? 29.5

Start Time

Shuttering removal period minimum 36 hours) 48 hrs

Upon final sign off of this form complying to all requirements the raft may be certified as complete and is due for inclusion in the next Payment Certificate

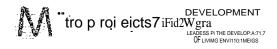
4

10-Feb-15

DATE











	Ekurhuleni Metropolitan Municipality	
	Etwatwa Ext 35 - Combiza	
•	PS/H523-2013	
	Bankuna Construction and Engineering	
	10-Feb-15	
		Etwatwa Ext 35 - Combiza PS/H523-2013 Bankuna Construction and Engineering

HOUSE NUMBER 36974 The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings. **SETTING OUT** Has the builder had the position of the stand boundary beacons confirmed? NO Contractor to confirm the following dimensions: = 4. E = 8485 900 8485 B C= 7000 D: * B " **EARTH WORKS** is the excavations deep enough as specified by the engineers? Yes Stand Is the 150mm thick in-situ material ripped and Boundary Ē re-compacted to 93% MOD AASHTO? yes Is the 07 quality material compacted to 95% MOD Road Reserve AASHTO in 150mm thick layers? yes Are the final earthworks higher than the surrounding area so that storm water does not affect the house? NO Are beams excavated in the correct position and the right dimensions? yes Are beams straight? yes Is the top of beam chamfered 45 deg as per detail? yes Has all the loose soil in the beam excavation been removed? yes Are the trenches dry?

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level? is formwork 100% secured? Is formwork Straight?

yes yes yes yes









ANT POISON				
Has The Engineer received the ant poison certificate from the Contract	etor?		yes	
DAMP COURSE LAYER				
Has the damp course layer been installed under slab and beam?			yes	
Is the DPC USB green 250 Micron?			yes	
is there a 400mm overlap at the joints od the DPC?			yes	
REINFORCING				
Has all the steel (or mesh) been installed as per the design and bendir	ng schedule?		yes	
Has the correct mesh been used? (specify the type of mesh)			yes	
Is the steel/mesh free of rust?			yes	
Is the mesh overlap length as per specification?			yes	
What is the lap length?			400	
Are the stirrups in ground beams spaced correctly?			yes	
Have cover blocks been installed to provide the required cover?			yes	
Are the cover block tied to the steel?			no	
ENGINEER	- 1	DATE	zots/oz/lo	
<u>CONCRETE</u>				
If ready mix concrete is used, is the supplier quality control approved	1?			
What is the grade / strength of concrete			25MPa	
What is the aggregate size			19mm	
What is the theoretical volume of concrete			11	
What is the actual volume of concrete poured			10.7	
Duration of concrete pouring Start Time		Completio	on	
Was any water added to the concrete mix on site			No	
Is there a concrete vibrator at the raft site prior to placing of concret	e?		yes	
What was the slump of the concrete? (75mm to 125mm is acceptabl	e)		110 mm	
Have concrete cubes been made on site or at the batch plant?			Batch Plan	nt
Is there a screed bar on site to ensure the concrete is placed to the	orrect level?		yes	
is there a powerfloat machine on site?		L	yes	
Was the concrete adequately vibrated with a concrete vibrator?			yes	
POWER FLOATING				
Is power floating completed to Engineer's satisfaction		XES.		NO
If "NO", the Contractor must provide method statement to correct the	he work	[· ··	
CONCRETE CURING				
What curing method will be used?	Close s	lab with sand an	-	daily
What was the achieved concrete strength; 1) At 7 days?	19	b) At 28 d	lays?	I <u>29.5</u>
Shuttering removal period (minimum 36 hours)	48 hrs			
Upon final sign off of this form complying to all requirements the rainclusion in the next Payment Certificate	aft may be certified as o	complete and is d	lue for	

DATE

10-Feb-15

ENGINEER











CI

Employer	Ek	urhuleni Metropolitan M	unicipality			
Project .		vatwa Ext 35 - Combiza	ame paney			
Contract		IHS23-2013				
Contractor		nkuna Construction and	Engineering			
Date		-Feb-15				
File						
HOUSE NUMBER	369	75				
The Contractor has establish			een constructed to th	ne correct horizontal and v	vertical ali	gnment
and position, that such work						_
drawings.		•	•	•		
J						
SETTING OUT						
Has the builder had the posi	tion of the stan	d boundary beacons co	onfirmed?			NO
Contractor to confirm the fo	llowing dimens	ions:				
A=	0=	8528				
B= 900	$\mathbf{F} =$	8528				
C=						
8960						
EARTH WORKS						
Is the excavations deep eno	ugh as			House		
specified by the engineers?		Yes			<	2=====
						Stand
Is the 150mm thick in-situ r		and				Boundary
re-compacted to 93% MOD A	AASHTO?	yes				
Is the G7 quality material co	-	% MOD		Road Reserve		
AASHTO in 150mm thick lay	yers?	yes		rioud rioserve		
Are the final earthworks hi	gher than the s	urrounding area so tha	t storm water does			
not affect the house?						NO
BEAMS						
Are beams excavated in the	e correct position	on and the right dimens	sions?		yes	
Are beams straight?				yes		
Is the top of beam chamfered 45 deg as per detail?				yes		
Has all the loose soil in the beam excavation been removed?				yes		
Are the trenches dry?						
<u>FORMWORK</u>						
Is formwork treated with a	releasing agen	t ?			yes	
Is formwork 100% level?					yes	
Is formwork 100% secured	.?				<u>ves</u>	
Is formwork Straight?					yes	













Has The Engineer received the ant poison certificate from the Cor	atractor?	У	es	
DAMP COURSE LAYER				
Has the damp course layer been installed under slab and beam?		•	es	
Is the DPC USB green 250 Micron?		-	res	
Is there a 400mm overlap at the joints od the DPC?		У	res	
REINFORCING				
Has all the steel (or mesh) been installed as per the design and be	ending schedule?	•	res	
Has the correct mesh been used? (specify the type of mesh)		-	/es	
Is the steel/mesh free of rust?		yes yes		
Is the mesh overlap length as per specification?				
What is the lap length?			100	
Are the stirrups in ground beams spaced correctly?			yes	
Have cover blocks been installed to provide the required cover?			yes	
Are the cover block tied to the steel?			no	
191	1 2			
ENGINEER FINANCIAL ENGINEER	5-7/	DATE zoist	ozzio	
CONCRETE				
If ready mix concrete is used, is the supplier quality control appr	oved?			
What is the grade / strength of concrete		25M	IPa	
What is the aggregate size		19	9mm	
What is the theoretical volume of concrete			11	
What is the actual volume of concrete poured			10.7	
Duration of concrete pouring Start T	Гime	Completion		
Was any water added to the concrete mix on site			No	
Is there a concrete vibrator at the raft site prior to placing of con	ncrete?		yes	
What was the slump of the concrete? (75mm to 125mm is accept			0 mm	
Have concrete cubes been made on site or at the batch plant?		Bato	ch Plant	
Is there a screed bar on site to ensure the concrete is placed to t	the correct level?		yes	
Is there a powerfloat machine on site?			yes	
Was the concrete adequately vibrated with a concrete vibrator?	?		yes	
POWER FLOATING				
Is power floating completed to Engineer's satisfaction			NO	
If "NO", the Contractor must provide method statement to corre	ect the work			
CONCRETE CURING				
What curing method will be used?	Close	slab with sand and pour	water daily	
	19	b) At 28 days?	29.5	
What was the achieved concrete strength; 1) At 7 days?		•		

ENGINEER DATE 10-Feb-15











ΝŌ

Checklist for House Raft Foundation and Concrete Works

Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Conibiza
Contract		PS/HS23-2013
Contractor	!	Bankuna Construction and Engineering
Date		10-Feb-15
File		

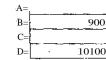
HOUSE NUMBER	36978	
The Contractor has establish	ned that these controlled work	s have been constructed to the correct horizontal

al and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

Contractor to confirm the following dimensions: 8528





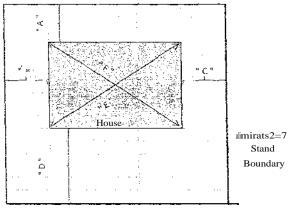
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the 07 quality material compacted to 95% MOD AASHTO in 150mm thick layers?



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

not affect the house.		NO
<u>BEAMS</u>		
Are beams excavated in the correct position and the right dimensions?	yes	
Are beams straight?	yes	
Is the top of beam chamfered 45 deg as per detail?	yes	
Has all the loose soil in the beam excavation been removed?	ves	

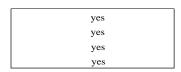
FORMWORK

Is formwork treated with a releasing agent? Is formwork 100% level?

is formwork 100% secured?

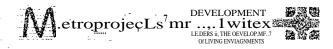
Is formwork Straight?

Are the trenches dry?













cate from the Contractor?		yes	
slab and beam?		yes	
		yes	
C?		yes	
the design and bending schedule?		yes	
pe of mesh)		yes	
		yes	
		yes	
		400	
ly?		yes	
required cover?		yes	
		no	
The state of	DATE	2015/02/10	
ality control approved?	L		
		25MPa	
	ļ	19mm	
	ļ 	11	
	<u> </u>	10.7	
Start Time	Completion	1	<u>L</u>
	slab and beam? C? the design and bending schedule? pe of mesh) ly? required cover?	slab and beam? C? the design and bending schedule? pe of mesh) ly? required cover? DATE	slab and beam? yes yes C? yes the design and bending schedule? yes yes yes yes yes 400 tly? required cover? DATE 2015/02/10 ality control approved? 25MPa 19mm 11 10.7

What was the slump of the concrete? (75mm to 125mm is acceptable)
Have concrete cubes been made on site or at the batch plant?
Is there a screed bar on site to ensure the concrete is placed to the correct level?
Is there a powerfloat machine on site?
Was the concrete adequately vibrated with a concrete vibrator?

Is there a concrete vibrator at the raft site prior to placing of concrete?

Was any water added to the concrete mix on site

Is power floating completed to Engineer's satisfaction

POWER FLOATING

Batch Plant
yes
yes
yes
yes

No

yes

110 mm

NO

If "NO", the Contractor must provide method statement to correct the work

CONCRETE CURING			
What curing method will be used?		Close slab with sand and pour water daily	
What was the achieved concrete strength; 1) At 7 days?	19	b) At 28 days?	29.5
Shuttering removal period (minimum 36 hours)	48 hrs		

Upon final sign off of this form complying to all requirements the raft may be certified as complete and is due for inclusion in the next Payment Certificate

ENGINEER DATE 10-Feb-15





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Checklist for House Raft Foundation and Concrete Works

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	10-Feb-15
File	

HOUSE NUMBER 37008

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

Ski IING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to con	firm the followin	g dimensio	ns:
A=		E	8528
B= <u>,</u> _	900,	F={	8528
C=			

6360

EARTH WORKS

DT

Is the excavations deep enough as specified by the engineers?

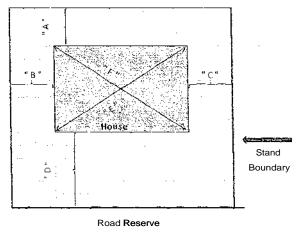
Yes

Is the 150mm thick in-situ material ripped and
re-compacted to 93% MOD AASHTO?

yes

Is the G7 quality material compacted to 95% MOD

AASHTO in 150mm thick layers? yes



Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes	
yes	
yes	
yes	

FORMWORK.

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secu red?

yes
yes
yes
yes













Checklist for House Raft Foundation and Concrete Works				
ANT POISON				
Has The Engineer received the ant poison certificate from the Contract	etor?		yes	
DAMP COURSE LAYER				
Has the damp course layer been installed under slab and beam?			yes	
Is the DPC USB green 250 Micron?			yes	
Is there a 400mm overlap at the joints od the DPC?			yes	
REINFORCING				
Has all the steel (or mesh) been installed as per the design and bendir	ng schedule?		yes	
Has the correct mesh been used? (specify the type of mesh)			yes	
Is the steel/mesh free of rust?			yes	
Is the mesh overlap length as per specification?			yes	
What is the lap length?			400	
Are the stirrups in ground beams spaced correctly?			yes	
Have cover blocks been installed to provide the required cover?			yes	
Are the cover block tied to the steel?			no	
ENGINEER	-7,	DATE	ziliszoz/io	
CONCRETE				
If ready mix concrete is used, is the supplier quality control approved	1?			
What is the grade / strength of concrete			25MPa	
What is the aggregate size			19mm	
What is the theoretical volume of concrete			11	
What is the actual volume of concrete poured			10.7	
Duration of concrete pouring Start Time	e I	Completio		
Was any water added to the concrete mix on site	_		No	
Is there a concrete vibrator at the raft site prior to placing of concret			yes	
What was the slump of the concrete? (75mm to 125mm is acceptable	le)		110 mm	
Have concrete cubes been made on site or at the batch plant?			Batch Plant	
Is there a screed bar on site to ensure the concrete is placed to the c	orrect level?		yes	
Is there a powerfloat machine on site?			yes	
Was the concrete adequately vibrated with a concrete vibrator?			yes	
POWER. FLOATING			\neg	NO
Is power floating completed to Engineer's satisfaction				NO
If "NO", the Contractor must provide method statement to correct to	he work			
CONCRETE CURING				
What curing method will be used?	Close	e slab with sand and	d pour water da	ily
What was the achieved concrete strength; 1) At 7 days?	19	b) At 28 da	ays?	29.5
Shuttering removal period (minimum 36 hours)	48 hrs			

Upon final sign off of this form complying to all requirements the raft may be certified as complete and is due for inclusion in the next Payment Certificate

ENGINEER DATE 10-Feb-15







DEVELOPMENT aV

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Checklist for House Raft Foundation and Concrete Works

Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Combiza
Contract	!	PS/HS23-2013
Contractor		Bankuna Construction and Engineering
Date	:	10-Feb-15
File		

37012

HOUSE NUMBER The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings. SETTING OUT Has the builder had the position of the stand boundary beacons confirmed? NO Contractor to confirm the following dimensions: AT 8528 8= 900 8528 Cı o 6780 " B 1 EARTH WORKS Is the excavations deep enough as Yes specified by the engineers? Stand Is the 150mm thick in-situ material ripped and Boundary re-compacted to 93% MOD AASHTO? yes Is the G7 quality material compacted to 95% MOD Road Reserve AASHTO in 150mm thick layers? Are the final earthworks higher than the surrounding area so that storm water does not affect the house? NO **BEAMS** Are beams excavated in the correct position and the right dimensions? yes Are beams straight? yes Is the top of beam chamfered 45 deg as per detail? yes Has all the loose soil in the beam excavation been removed? yes Are the trenches dry? **FORMWORK** Is formwork treated with a releasing agent? yes Is formwork 100% level? yes Is formwork 100% secured? yes Is formwork Straight? yes







DEVELOPMENT .F.ADEAS OF LWING ENVIRONMENTS





ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	-
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
ENGINEER	DATE 2015/02/10
CONCRETE.	
If ready mix concrete is used, is the supplier quality control approved?	Ţ
What is the grade /strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	110 MM
Have concrete cubes been made on site or at the batch plant?	Batch Plant
is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	,
Is power floating completed to Engineer's satisfaction	NO NO
If "NO", the Contractor must provide method statement to correct the work	
CONCRETE CURING	
	with sand and pour water daily
What curing method will be used? Close slab What was the achieved concrete strength; 1) At 7 days?	b) At 28 days? 29.S
Shuttering removal period (minimum 36 hours) 48 hrs	D) At 20 days:
Upon final sign off of this form complying to all requirements the raft may be certified as com inclusion in the next Payment Certificate	plete and is due for
ENGINEER DATE	10-Feb-15



FOUNDATION CHECK LIST



Payment Certificate No.1

Raft Foundations - Stand numbers



No.	Stand No.	No.	Stand No.
1	36870	29	36989
2	36871	30	36990
3	36873	31	36991
4	36875	32	36992
5	36877	33	36993
6	36895	34	36996
7	36989	35	36995
8	36896	36	36997
9	36902	37	36999
10	36904	38	36998
11	36905	39	37001
12	36906	40	37002
13	36907	41	37003
14	36908	42	37005
15	36909	43	37006
16	36911	44	37007
17	36913	45	37009
18	36914	46	37010
19	36915	47	37011
20	36916	48	37013
21	36980	49	37014
22	36981	50	37015
23	36983	51	37016
24	36984	52	37017
25	36985	53	37018
26	36986	54	37019
27	36987	55	37020
28	36988	56	36912

Total Number of Foundations: 56

Certified By:

Project Manager

GIBB Engineering and Architecture

25/08/20 Date'



CHECK LISTS











Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	13-Oct-14
File	

HOUSE NUMBER

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions:

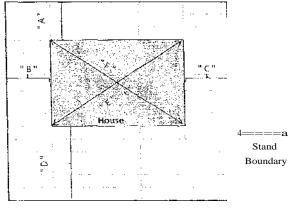
A=		$\mathbf{E} =$	8528
B=	900	$\mathbf{F} =$	8528
C=			
0=	9960		

EARTH WORKS

Is the excavations deep enough as specified by the engineers? Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



Road Reserve

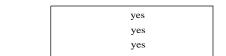
Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

		NO
	yes	
	yes	
	<u>yes</u>	
	yes	

Are beams excavated in the correct position and the right dimensions? Are beams straight? Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?



FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?





Metroprojects

DEVELOPMENT 10

LE40 CRS IN THE DEVELOPMEta OF LIV64C. EKOR ON MEWS



ANT POISON	
ANT POISON Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	· · · · · · · · · · · · · · · · · · ·
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USE green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
ENGINEER 17	DATE 201 ⁴ /-0/13
CONCRETE If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	25MPa
What is the aggregate size	25MPa 19mm
What is the aggregate size What is the theoretical volume of concrete	111
What is the actual volume of concrete What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	110 mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	yoo
Is power floating completed to Engineer's satisfaction	YES NO
If "NO", the Contractor must provide method statement to correct the work	
CONCRETE CURING	
<u> </u>	with sand and pour water daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days? 29
Shuttering removal period (minimum 36 hours) 48 hrs	-, ,
Upon final sign off of this form complying to all requirements the raft may be certified as comp inclusion in the next Payment Certificate	olete and is due for
ENGINEER DATE	13-Oct-14





DEVELOPMENT LEADERS IF, THE DEVELOPMENT OF LtVING ENVIRONMENT" G



yes

yes

yes



Checklist for House Raft Foundation and Concrete Works

Employer		• Eku	rhuleni Metropolitan Munic	cipality		
Project		Etw	atwa Ext 35 - Combiza			
Contract		PSI	HS23-2013			
Contractor		Bar	Bankuna Construction and Engineering			
Date		13-0	Oct-14			
File						
HOUSE NUMBER		3690	01			
The Contractor ha	as established tl	hat these co	ntrolled works have been	constructed to the correct h	orizontal and vertical alig	nment
and position, that	such work has	been carrie	d out to the required star	dards and specifications, as	set out in the document a	nd
drawings.						
SETTING OUT				_	_	
Has the builder h	ad the position	of the stand	boundary beacons confi	rmed?	_	NO
Contractor to con	firm the follow	ing dimensi	ons:			
A=		E=	8528			
В.	900	F =	8528			
C=						
D=	3000				11.	
EARTH WORKS						
is the excavation	s deep enough	as		. House:.		
specified by the	engineers?		Yes	. Itouse	4	
						Stand
Is the 150mm thi	ick in-situ mate	rial ripped a	nd			Boundar
re-compacted to 9	93% MOD AAS	HTO?	yes			
Is the G7 quality	material compa	acted to 95%	MOO	, n		
AASHTO in 150	mm thick layers?	?	yes	Road Ro	eserve	
Are the final ear	thworks higher	r than the su	rrounding area so that st	orm water does		
not affect the ho	ouse ?		-			NO
<u>BEAMS</u>						
Are beams exca	vated in the cor	rrect positio	n and the right dimension	ns?	yes	
Are beams strai	ght ?				yes	
Is the top of bea	am chamfered 4	45 deg as pe	r detail?		yes	
Has all the loos	e soil in the bea	ım excavatio	on been removed?		yes	
Are the trenche	s dry?					
FORMWORK						
Is formwork tre	eated with a rele	easing agent	?		yes	
					1	



Is formwork 100% level?

Is formwork Straight?

Is formwork 100% secured?





DEVELOPMENT







ANT POISON Has The Engineer received the ant poison certificate from the Contractor?			yes	
DAMP COURSE LAYER	-			
Has the damp course layer been installed under slab and beam?			yes	
Is the DPC USE green 250 Micron?			yes	
Is there a 400mm overlap at the joints od the DPC?	_		yes	
REINFORCING				
Has all the steel (or mesh) been installed as per the design and bending sche	dule?		yes	
Has the correct mesh been used? (specify the type of mesh)			yes	
Is the steel/mesh free of rust?			yes	
Is the mesh overlap length as per specification?			yes	
What is the lap length?			400	
Are the stirrups in ground beams spaced correctly?			yes	
Have cover blocks been installed to provide the required cover?			yes	
Are the cover block tied to the steel?			no	
ENGINEER 27		DATE _	2014/10/13	
CONCRETE. If ready mix concrete is used, is the supplier quality control approved?				
What is the grade / strength of concrete			25MPa	
What is the aggregate size			19mm	
What is the theoretical volume of concrete			11	
What is the actual volume of concrete poured			10.7	
Duration of concrete pouring Start Time		Completion		
Was any water added to the concrete mix on site			No	
Is there a concrete vibrator at the raft site prior to placing of concrete?			yes	
What was the slump of the concrete? (75mm to 12Smm is acceptable)			110 ram	
Have concrete cubes been made on site or at the batch plant?			Batch Plant	
Is there a screed bar on site to ensure the concrete is placed to the correct	level?		yes	
Is there a powerfloat machine on site?			yes	
Was the concrete adequately vibrated with a concrete vibrator?			yes	
POWER FLOATING				
is power floating completed to Engineer's satisfaction]	NO
If "NO", the Contractor must provide method statement to correct the wor	·k			
CONCRETE CURING				
What curing method will be used?	Close slab v	with sand and p	our water daily	7
What was the achieved concrete strength; 1) At 7 days?	17	b) At 28 days	s?	29
Shuttering removal period (minimum 36 hours)	48 hrs			
Upon final sign off of this form complying to all requirements the raft may inclusion in the next Payment Certificate	y be certified as comp	plete and is due	for	
ENGINEER	DATE	13-Oct-1	4	













Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	13-Oct-14
File	

HOUSE NUMBER 36900

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

<u>SETTING OUT</u>

Has the builder had the position of the stand boundary beacons confirmed?

₩65€

NO

Contractor to confirm the following dimensions

À=	
B=	900
C=	
D=	6900

dimension	ns:
E=	8485
F=	8485

EARTH WORKS

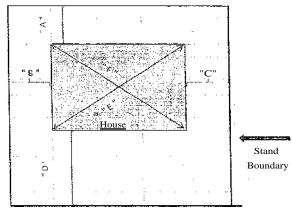
Is the excavations deep enough as specified by the engineers?

Yes

Is the 1SOmm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

yes yes

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? $$\rm yes$$



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house ?

NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes
yes
yes
yes

FORMWORK.

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

yes	
yes	
yes	
yes	











yes	
yes	
yes	
yes	
	_
yes	
yes	
yes	
yes	\Box
400	\Box
yes	
yes	
no	
DATE 2014/10/13	
25MPa 19mm	<u>-</u>
11	
10.7	
Completion	
No	_
yes	
110 mm	
Batch Plant	_
yes	_
yes	_
yes	
_	
<u>->f<</u> №	ON
with sand and pour water daily	
-	29
· ·	
	yes yes yes yes yes yes yes 400 yes yes no DATE 25MPa 19mm 11 10.7 Completion No yes 110 mm Batch Plant yes yes yes yes







DEVELOPMENT

LEADERS PI ENE DEVELOPMENT



Checklist for House Raft Foundation and Concrete Works

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	13-Oct-14
File	•

HOUSE NUMBER 36994

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NFS

NO

Contractor to confirm the following dimensions:

A=	
8≔	900
. C=	
D=	3000

emil	nsions:
E_	8528
F=	8528

EARTH WORKS

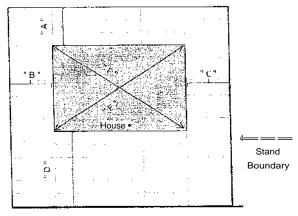
Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to 95% MOD

AASHTO in 150mm thick layers? yes



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight ?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

yes	
yes	
yes	
yes	







DEVELOPMENT





ANT POISON	_		
Has The Engineer received the ant poison certificate from the Contractor?		yes	
DAMP COURSE LAYER	_		
Has the damp course layer been installed under slab and beam?		yes	
Is the DPC USB green 250 Micron?		yes	
Is there a 400mm overlap at the joints od the DPC?		yes	
REINFORCING	_		
Has all the steel (or mesh) been installed as per the design and bending schedule?		yes	
Has the correct mesh been used? (specify the type of mesh)	Ī	yes	
Is the steel/mesh free of rust?	Ī	yes	
Is the mesh overlap length as per specification?		yes	
What is the lap length?		400	
Are the stirrups in ground beams spaced correctly?	ļ	yes	
Have cover blocks been installed to provide the required cover?	ŀ	yes	
Are the cover block tied to the steel?		no	
Are the cover block fied to the steer:	L	no	
ENGINEER		DATE 2014/10/13	
CONCRETE.			
If ready mix concrete is used, is the supplier quality control approved?			
What is the grade / strength of concrete		25MPa	
What is the aggregate size		19mm	
What is the theoretical volume of concrete		11	
What is the actual volume of concrete poured		10.7	
Duration of concrete pouring Start Time		Completion	
Was any water added to the concrete mix on site		No	
Is there a concrete vibrator at the raft site prior to placing of concrete?		yes	
What was the slump of the concrete? (75mm to 125mm is acceptable)		110 mm	
Have concrete cubes been made on site or at the batch plant?		Batch Plan	t
Is there a screed bar on site to ensure the concrete is placed to the correct level?		yes	-
Is there a powerBoat machine on site?		yes	
Was the concrete adequately vibrated with a concrete vibrator?		yes	
POWER FLOATING		yes	
Is power floating completed to Engineer's satisfaction			NO
If "NO", the Contractor must provide method statement to correct the work			
CONCRETE CURING			
What curing method will be used?	Close slab w	rith sand and pour water d	aily
What was the achieved concrete strength; 1) At 7 days?		b) At 28 days?	29
Shuttering removal period (minimum 36 hours) 48 hrs			
Upon final sign off of this form complying to all requirements the raft may be cer inclusion in the next Payment Certificate ENGINEER	rtified as compl	lete and is due for 13-Oct-14	











1		
Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Combiza
Contract	•	PS/F[523 20 3
Contractor		Bankuna Construction and Engineering
Date		13-Oct-14
File	•	

HOUSE NUMBER

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions:

в.	900
C=	
D=	3000



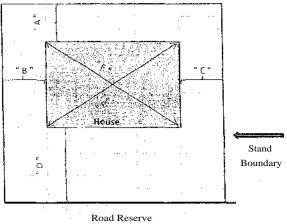
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers?



Are the final earthworks higher than the surrounding area so that storm water does not affect the house?



NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

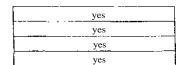
FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

yes	
yes	
yes	
yes	









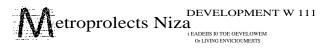




ANT POISON			
Has The Engineer received the ant poison certificate from the Contractor	or?	yes	
DAMP COURSE LAYER	,		
Has the damp course layer been installed under slab and beam?		yes	
Is the DPC USB green 250 Micron?		yes	
Is there a 400mm overlap at the joints od the DPC?		'yes	
<u>REINFORCING</u>		, <u>-</u>	
Has all the steel (or mesh) been installed as per the design and bending	schedule?	yes	
Has the correct mesh been used? (specify the type of mesh)		yes	
Is the steel/mesh free of rust?		yes	
Is the mesh overlap length as per specification?		yēs	
What is the lap length?		400	
Are the stirrups in ground beams spaced correctly?		yēs	
Have cover blocks been installed to provide the required cover?		yes	
Are the cover block tied to the steel?		no	
ENGINEER	_		
ENGINEER	7	DATE 2014/10/13	
CONCRETE.			
If ready mix concrete is used, is the supplier quality control approved?			
What is the grade / strength of concrete		25MPa	
What is the aggregate size		19mm	
What is the theoretical volume of concrete		11	
What is the actual volume of concrete poured		10.7	
Duration of concrete pouring Start Time		Completion	
Was any water added to the concrete mix on site		No	
Is there a concrete vibrator at the raft site prior to placing of concrete	?	yes	
What was the slump of the concrete? (75mm to 125mm is acceptable))	110 mm	
Have concrete cubes been made on site or at the batch plant?		Batch Plant	
Is there a screed bar on site to ensure the concrete is placed to the con-	rect level?	yes	
Is there a powerfloat machine on site?		yes	
Was the concrete adequately vibrated with a concrete vibrator?		yes	
POWER FLOATING			
Is power floating completed to Engineer's satisfaction			NO
If "NO", the Contractor must provide method statement to correct the	e work		
CONCEDENT CURRY C			
CONCRETE CURING			
What curing method will be used?		ith sand and pour water daily	7
What was the achieved concrete strength; 1) At 7 days?	17	b) At 28 days?	29
Shuttering removal period (minimum 36 hours)	48 hrs		
Upon final sign off of this form complying to all requirements the rafi inclusion in the next Payment Certificate	may be certified as comp	lete and is due for	
ENGINEER	DATE	13-Oct-14	









Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	13-Oct-14
File	

HOUSE NUMBER 37004

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

Has the builder had the position of the stand boundary beacons confirmed?



NO

Contractor to confirm the following

A=,	
B=	900
C=	
·ID=	3000

dimensio	ns:
E =	8528
F=	8528
	•

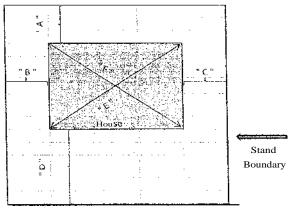
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

NO

BEAMS

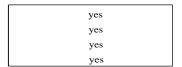
Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?



FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

yes
yes
yes
yes











ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	•
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	,
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
The tile cover block fied to the steer.	110
ENGINEER (The second se	DATE 2014/10/13
CONCRETE	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	110 mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	NO
If "NO", the Contractor must provide method statement to correct the work	
CONCRETE CURING	
What curing method will be used? Close slab w	rith sand and pour water daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days? 29
Shuttering removal period (minimum 36 hours) 48 hrs	
Upon final sign off of this form complying to ail requirements the raft may be certified as compl inclusion in the next Payment Certificate	lete and is due for
<u> </u>	
ENGINEER DATE	13-Oct-14





DEVELOPMENT





Checklist for House Raft Foundation and Concrete Works

Employer	Ekurhuleni Metropolitan Municipality	
Project	Etwatwa Ext 35 - Combiza	
Contract	PS/HS23-2013	
Contractor	Bankuna Construction and Engineering	
Date	13-Oct-14	
File		

HOUSE NUMBER 36874

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?



NO

NO

Contractor to confirm the following dimensions:

A=_	
В=	900
c.	
D=	4000

dillic	IISIO	115.		
E =			8528	
F=			8528	

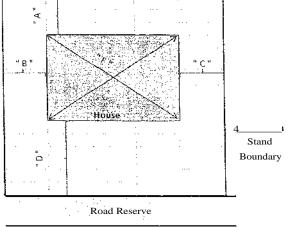
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers?



Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

	yes	
	yes	
	yes	
	ves	









ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER Has the damp course layer been installed under slab and beam?	vaa l
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	yes
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
1572	
ENGINEER	DATE 2014/10/13
· · · · · · · · · · · · · · · · · · ·	
CONCRETE	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	110 mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	NO
If "NO", the Contractor must provide method statement to correct the work	
•	
CONCRETE CURING.	
What curing method will be used? Close slab w	ith sand and pour water daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days? 29
Shuttering removal period (minimum 36 hours) 48 hrs	· ·
	1. 1. 6
Upon final sign off of this form complying to all requirements the raft may be certified as complication in the part Pourent Contificate	iete and is due for
inclusion in the next Payment Certificate	
ENCINEED () The state of the s	12 Oct 14
ENGINEER DATE	13-Oct-14









Employer		Ekurhuleni Metropolitan Municipality
Project	:	Etwatwa Ext 35 - Combiza
Contract	:	PS/HS23 2013
Contractor		Bankuna Construction and Engineering
Date		13-Oct-14
File		

HOUSE NUMBER

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions:

A=	
B=	900
C=	
D=	9645



EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm, thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes

Stand Boundary _

Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

>?< NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

Is formwork Straight?

yes yes yes









ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
1972 2.4	2014/10/10
ENGINEER	DATE <u>2014/10/13</u>
'	
<u>CONCRETE</u>	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	2̄SM̄Pa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
DUration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is ac_eptable)	110 mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
. Is there a screed bar on site to ensure the concrete is placed to the correct level?	yës
Is there a powerfloat machine on site?	. ·· yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	l] NŌ
If "NU', the Contractor must provide method statement to correct the work	
I The , and continues provide memora statement to contest the work	
CONCRETE CURING	
CONCRETE CURING	
	with sand and pour water daily
	with sand and pour water daily b) At 28 days? 1 29
What curing method will be used? Close slab v	
What curing method will be used? What was the achieved concrete strength; 1) At 7 days? Close slab v	b) At 28 days? 1 29













Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Combiza
Contract		PS/HS23-2013
Contractor	:	Bankuna Construction and Engineering
Date		13-Oct-14
File		

HOUSE NUMBER 36865

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT. Has the builder had the position of the stand boundary beacons confi	irmed?	NO
Contractor to confirm the following dimensions: A	"B" "C"	Stand Boundary
Is the G7 quality material compacted to 95% MOD AASHTO in 150rrim thick layers? yes	Road Reserve	
Are the final earthworks higher than the surrounding area so that st not affect the house?	form water does	NO
BEAMS		
Are beams excavated in the correct position and the right dimensio		
Are beams straight?	yes yes	
	yes	
Are the trenches dry? FORMWORK		
Is formwork treated with a releasing agent?	yes	
Is formwork 100% level?	yes	
is formwork 100% secured?	yes	
Is formwork Straight?	yes	











Checklist for House Raft Foundation	n and Concrete Works					
ANT POISON						
Has The Engineer received the ant poison ce	rtificate from the Contra	ctor?			yes	
DAMP COURSE LAYER						
Has the damp course layer been installed un	der slab and beam?				yes	
Is the DPC USB green 250 Micron?					yes	
Is there a 400mm overlap at the joints od the	DPC?				yes	
REINFORCING						
Has all the steel (or mesh) been installed as	per the design and bendi	ng schedule?			yes	
Has the correct mesh been used? (specify th	e type of mesh)				yes	
Is the steel/mesh free of rust?					yes	
Is the mesh overlap length as per specificati	on?				yes	
What is the lap length?					400	
Are the stirrups in ground beams spaced con	rrectly?				yes	
Have cover blocks been installed to provide	the required cover?				yes	
Are the cover block tied to the steel?					no	
ENGINEER	1992-	- -27		DATE	zo1 ⁴ / ₁ 0/13	
CONCRETE If ready mix concrete is used, is the supplie What is the grade / strength of concrete	r quality control approve	ed?			25MPa	
What is the aggregate size					19mm	
What is the theoretical volume of concrete					11	
What is the actual volume of concrete pou					10.7	
Duration of concrete pouring	Start Time	e		Completio	on	
Was any water added to the concrete mix	on site				No	
Is there a concrete vibrator at the raft site		ete?			yes	
What was the slump of the concrete? (75m	nm to 125mm is acceptab	ole)			110 mm	
Have concrete cubes been made on site or	at the batch plant?				Batch Plant	
Is there a screed bar on site to ensure the o	concrete is placed to the	correct level?			yes	
Is there a powerfloat machine on site?					yes	
Was the concrete adequately vibrated with	h a concrete vibrator?				yes	
POWER FLOATING						
Is power floating completed to Engineer's	satisfaction					NO
If "NO", the Contractor must provide met	hod statement to correct	the work				
CONCRETE CURING						
What curing method will be used?			Close slab w	ith sand ar	nd pour water daily	
What was the achieved concrete strength;	1) At 7 days?	17		b) At 28	days?	29

Upon final sign off of this form complying to all requirements the raft may be certified as complete and is due for inclusion in the next Payment Certificate

48 hrs

DATE

13-Oct-14

ENGINEER

Shuttering removal period (minimum 36 hours)











Employer	Ekurhuteni Metropolitan Municipalit	у	
Project	Etwatwa Ext 35 - Khombiza		
Contract	PS/HS23-2013		
Contractor	Bankuna Construction and Enginee	ring	
Date	16-May-14		
File			
	37005 t these controlled works have been conseen carried out to the required standards		=
SETTING OUT. Has the builder had the position o	f the stand boundary beacons confirmed	?	NO
Contractor to confirm the followin A= B= 900 C. 5000	g dimensions: E_		
EARTH WORKS			
Is the excavations deep enough a	s ·	_	
specified by the engineers? Is the 150mm thick in-situ materia	Yes	Rouse	4===== Stand Boundary
re-compacted to 93% MOD AASH			
Is the G7 quality material compac	ted to 95% MOD		
AASHTO in 150mm thick layers?	yes	Road Reserve	
Are the final earthworks higher t	han the surrounding area so that storm	water does	
not affect the house ?			NO
BEAMS			
Are beams excavated in the corre	ect position and the right dimensions?		yes
Are beams straight?			yes
Is the top of beam chamfered 45	= -		yes
Has all the loose soil in the bean	excavation been removed?		yes
Are the trenches dry?			
<u>FORMWORK</u>			
Is formwork treated with a relea	sing agent ?		yes
Is formwork 100% level?			yes
Is formwork 100% secured?			yes







DEVELOPMENT





ANT POISON				
Has The Engineer received the ant poison certificate from the Contractor	r?		yes	
DAMP COURSE LAYER				
Has the damp course layer been installed under slab and beam?			yes	
Is the DPC USB green 250 Micron?			yes	
Is there a 400mm overlap at the joints od the DPC?			yes	
REINFORCING				
Has all the steel (or mesh) been installed as per the design and bending	schedule?		yes	
Has the correct mesh been used? (specify the type of mesh)			yes	
Is the steel/mesh free of rust?			yes	
Is the mesh overlap length as per specification?			yes	
What is the lap length?			400	
Are the stirrups in ground beams spaced correctly?			yes	
Have cover blocks been installed to provide the required cover?			yes	
Are the cover block tied to the steel?			no	
ENGINEER 1572		DATE	6/6/2014	
<u>CONCRETE</u>				
If ready mix concrete is used, is the supplier quality control approved?				
What is the grade / strength of concrete			25MPa	
What is the aggregate size			19mm	
What is the theoretical volume of concrete			11	
What is the actual volume of concrete poured			10.7	
Duration of concrete pouring Start Time		Completion		
Was any water added to the concrete mix on site			No	
Is there a concrete vibrator at the raft site prior to placing of concrete?	•		yes	
What was the slump of the concrete? (75mm to 125mm is acceptable)			75mm	
Have concrete cubes been made on site or at the batch plant?			Batch Plant	
Is there a screed bar on site to ensure the concrete is placed to the con-	rect level?		yes	
Is there a powerfloat machine on site?			yes	
Was the concrete adequately vibrated with a concrete vibrator?			yes	
POWER FLOATING		\ <u></u>		
Is power floating completed to Engineer's satisfaction		¥65	NO	
If "NO", the Contractor must provide method statement to correct the	work	[
CONCRETE CURING				
What curing method will be used?		se slab with sand and po		
What was the achieved concrete strength; 1) At 7 days?	17	b) At 28 days	:?	
Shuttering removal period (minimum 36 hours)	48 hrs			
Upon final sign off of this form complying to all requirements the raft	may be certified	as complete and is due	for	
inclusion in the next Payment Certificate				
ENGINEER	1	DATE 13-Jun-14	1	







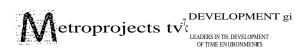




Employer Ekurhuleni Metropolitan Municipality	
Project Etwatwa Ext 35 - Khombiza	
Contract PSIHS23-2013	
Contractor : Bankuna Construction and Engineering	
Date 16-May-14	
File	
HOUSE NUMBER 37006	
The Contractor has established that these controlled works have been construct	ted to the correct horizontal and vertical alignment
and position, that such work has been carried out to the required standards and	I specifications, as set out in the document and
drawings.	
SETTING OUT	
Has the builder had the position of the stand boundary beacons confirmed?	NO
rias the burder had the position of the stand boundary bedeens commined.	
Contractor to confirm the following dimensions:	
A= E_ 8485	
8= 900 F= 8485	
C=	
D=8000	C"
EARTH WORKS	
Is the excavations deep enough as	House:
specified by the engineers? Yes	4====
	Stand
Is the 150mm thick in-situ material ripped and	Boundary
re-compacted to 93% MOD AASHTO? yes	
Is the C7 quality material compacted to 05% MOD	
Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes	Road Reserve
AASHTO III 130IIIIII unck layets?	
Are the final earthworks higher than the surrounding area so that storm water	r does
not affect the house?	NO
not arrest the house i	
<u>BEAMS</u>	
Are beams excavated in the correct position and the right dimensions?	yes
Are beams straight?	yes
Is the top of beam chamfered 45 deg as per detail?	yes
Has all the loose soil in the beam excavation been removed?	yes
Are the trenches dry?	
FORMWORK.	
Is formwork treated with a releasing agent?	yes
Is formwork 100% level?	yes
Is formwork 100% secured?	yes
18 IOIIIIWOIK 100% Secureu?	3 ···









ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
ENGINEER	DATE 6/6/2014
CONCRETE,	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	NO
If "NO", the Contractor must provide method statement to correct the work	
CONCRETE CURING	
	with sand and pour water daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days?
Shuttering removal period (minimum 36 hours) 48 hrs	
Upon final sign off of this form complying to all requirements the raft may be certified as compinctusion in the next Payment Certificate ENGINEER DATE	plete and is due for











Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract		PS/HS23-2013
Contractor	:	Bankuna Construction and Engineering
Date	·	13-Jun-14
File		

HOUSE NUMBER 36877

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?



NO

Contractor to confirm the following dimensions:

A=	- · · · · · · · · · · · · · · · · · · ·
B=	1133
C=	
12).=	5913

Ē=	8485
F=	8485

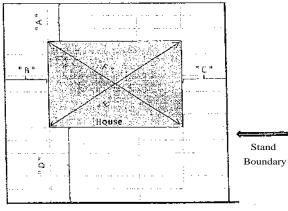
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

yes	
yes	
yes	
yes	







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Checklist for House Raft Foundation and Concrete Works

ANT	POISON	

Has The Engineer received the ant poison certificate from the Contractor?

DAMP COURSE LAYER

Has the damp course layer been installed under slab and beam?

Is the DPC USB green 250 Micron?

Is there a 400mm overlap at the joints od the DPC?

REINFORCING

Has all the steel (or mesh) been installed as per the design and bending schedule?

Has the correct mesh been used? (specify the type of mesh)

Is the steel/mesh free of rust?

Is the mesh overlap length as per specification?

What is the lap length?

Are the stirrups in ground beams spaced correctly?

Have cover blocks been installed to provide the required cover?

Are the cover block tied to the steel?

yes
_
yes
yes
yes
yes
400
yes
yes
no

yes

yes

yes

ENGINEER

199

DATE

6-Jun-14

CONCRETE

If ready mix concrete is used, is the supplier quality control approved?

What is the grade / strength of concrete

What is the aggregate size

What is the theoretical volume of concrete

What is the actual volume of concrete poured

Duration of concrete pouring

Start Time

Was any water added to the concrete mix on site

Is there a concrete vibrator at the raft site prior to placing of concrete?

What was the slump of the concrete? (75mm to 125mm is acceptable)

Have concrete cubes been made on site or at the batch plant?

Is there a screed bar on site to ensure the concrete is placed to the correct level?

Is there a powerfloat machine on site?

Was the concrete adequately vibrated with a concrete vibrator?

POWER FLOATING

Is power floating completed to Engineer's satisfaction

If "NO", the Contractor must provide method statement to correct the work

25MPa
19mm
11
10.7
Completion
No
yes
75mm
Batch Plant
yēš
yes
yes

THES.	NO

CONCRETE CURING

What curing method will be used?

What was the achieved concrete strength; 1) At 7 days?

Shuttering removal period (minimum 36 hours)

Close slab with sand and pour water daily

17 48 hrs b) At 28 days?

Upon final sign off of this form complying to all requirements the raft may be certified as complete and is due for inclusion in the next Payment Certificate

ENGINEER

DATE

13-Jun-14







DEVELOPMENT

LEADERS H THE DEVELOPMENT **gk**



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Checklist for House Raft Foundation and Concrete Works

Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract		PS/I1823-2013
Contractor		Bankuna Construction and Engineering
Date	•	13-Jun-14
File		
HOUSE NUMBER		

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions:			
A=		E_	8485
B=	900	F=	8485
0=			
D=	6860		

AASHTO in 150mm thick layers?

EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to 95% MOD

Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house ?

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

Is formwork Straight?

yes

yes





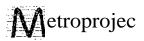


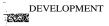


ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor	? yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending s	schedule? yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
1871	
ENGINEER	DATE 6-Jun-14
201707	
CONCRETE	
If ready mix concrete is used, is the supplier quality control approved?	OGA FD
What is the grade / strength of concrete	2SMPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the corre	
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	NO
If "NO", the Contractor must provide method statement to correct the	work
CONCRETE CURING	
What curing method will be used?	Close slab with sand and pour water daily
What was the achieved concrete strength; 1) At 7 days?	17 b) At 28 days?
Shuttering removal period (minimum 36 hours)	48 hrs
Upon final sign off of this form complying to all requirements the raft r	nay be certified as complete and is due for
inclusion in the next Payment Certificate	
د سر	
ENGINEER	DATE 13-Jun-14
ENGINEER	









BP U



Checklist for House Raft Foundation and Concrete Works

Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract	=	PS/HS23-2013
Contractor	•	Bankuna Construction and Engineering
Date		13-J un 14
File		

HOUSE NUMBER 36873

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

<u>SETTING OUT</u>

Has the builder had the position of the stand boundary beacons confirmed?

X45

NO

Contractor to confirm the following dimensions:

A=	
В=_	8379
C=	
Dr	4585

E = 8910 F 8910

EARTH WORKS

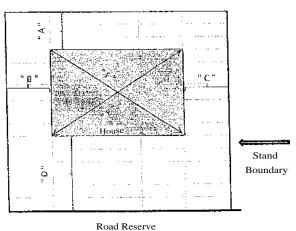
Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the G7 quality material compacted to 95% MOD

AASHTO in 150mm thick layers? yes



Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

 \geq

NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

is formwork 100% level?

Is formwork 100% secured?

yes	
yes	
yes	
yes	







ED 111



ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
ENGINEER	DATE 6-Jun-14
7- 8-3/	
CONCRETE	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
-	Completion
	No
Was any water added to the concrete mix on site	
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	NO
If "NO", the Contractor must provide method statement to correct the work	
,	
CONCRETE CURING	
	b with sand and pour water daily
	•
	b) At 28 days?
Shuttering removal period (minimum 36 hours) 48 hrs	
Upon final sign off of this form complying to all requirements the raft may be certified as cor	uplete and is due for
inclusion in the next Payment Certificate	1
metassis in the next rayment continue	
ENGINEER DATE	13-Jun-14
ENGINEER — r	13-Jun-14













Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Khombiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	13-Jun-14
File	•

HÖUSE NUMBER 36871

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions:

8485 8485 2060 4860

EARTH WORKS

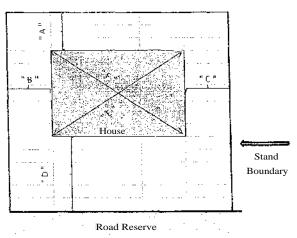
Is the excavations deep enough as specified by the engineers?

AASHTO in 150mm thick layers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to 95% MOD



Are the final earthworks higher than the surrounding area so that storm water does not affect the house?



BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

<u> </u>	yes
	yes
	yes
	yes

L	yes	4
	yes	
	yes	
	yes	













ANTE POLICON	
ANT POISON Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
ENGINEER / / / /	DATE 6-Jun-14
CONCRETE If ready mix concrete is used, is the supplier quality control approved? What is the grade / strength of concrete What is the aggregate size What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work	25MPa 19mm 11 10.7 Completion No yes 75mm Batch Plant yes yes yes yes No No
CONCRETE CURING What curing method will be used? What was the achieved concrete strength; 1) At 7 days? Shuttering removal period (minimum 36 hours) Close slab 17 48 hrs	with sand and pour water daily b) At 28 days?
Upon final sign off of this form complying to all requirements the raft may be certified as complication in the next Payment Certificate	plete and is due for
ENGINEER DATE	13-Jun-14







DEVELOPMENT MI M





yes

Checklist for House Raft Foundation and Concrete Works

Employer		Ekur	huleni Metropolitan Mu	nicipality		
Project		Etwa	twa Ext 35 - Khombiza			
Contract	PS/HS23-2013					
Contractor		Banl	cuna Construction and	Engineering		
Date		13-Jı	ın-14			
File						
HOUSE NUMBER		36870)			
	s established th	nat these con	trolled works have be	en constructed to the co	orrect horizontal and ve	rtical alignment
and position, that s	such work has	been carried	out to the required st	andards and specificati	ons, as set out in the do	ocument and
drawings.						
SETTING OUT						
Has the builder ha	d the position	of the stand	boundary beacons co	nfirmed?		NO
Contractor to confi	irm the follow	ing dimensio	ons:	1		
A=	in the rone w	E=	8485			
B=	900	F =	8485			
C=						
D=	6900					
EARTH WORKS						
Is the excavations	deep enough	as			House.	
specified by the e	ngineers?		Yes			4=====
						Stand
Is the 150mm thic	ck in-situ mate	rial ripped ar	nd			Boundar
re-compacted to 93	3% MOD AAS	HTO?	yes			
In the C7 quality		otod to 050/	MOD	I		
Is the G7 quality in AASHTO in 150m	_		yes	1	Road Reserve	
70.031110 iii 130ii	in thek layers		yes			
Are the final eart	hwarke hiaha	r than the cu	rrounding area so that	etorm water does		
not affect the ho		than the sui	Tounding area so that	storiii water does		NO
not affect the no	use:					NO
BEAMS						
	ated in the cor	rrect position	and the right dimens	ions?		yes
Are beams straig		F				yes
Is the top of bear		15 deg as per	detail?			yes
•			n been removed?			yes
Are the trenches						
FORMWORK.						
Is formwork trea		easing agent	?			yes
Is formwork 100						yes
Is formwork 100	% secured?					yes















Checklist for House Raft Foundation and Concrete Works	
ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
ENGINEER	DATE 6/6/2014
CONCRETE If ready mix concrete is used, is the supplier quality control approved? What is the grade / strength of concrete What is the aggregate size	2SMPa 19mm
What is the theoretical volume of concrete	
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	NO NO
If "NO", the Contractor must provide method statement to correct the work	
CONCRETE CURING	
What curing method will be used? Close s	lab with sand and pour water daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days?
Shuttering removal period (minimum 36 hours) 48 hrs	
Upon final sign off of this form complying to all requirements the raft may be certified as conclusion in the next Payment Certificate ENGINEER DAT	•













Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Khombiza
Contract	PS/I-1523-2013
Contractor	Bankuna Construction and Engineering
Date	13-Jun-14
File	

HŌUSĒ NUMBĒR 36896

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

XES

NO

ctor	to confirm the fol	lowing dime	1
A=		Е	
B=	900	F	
C=			
ъ	6000		

EARTH WORKS

Is the excavations deep enough as specified by the engineers?

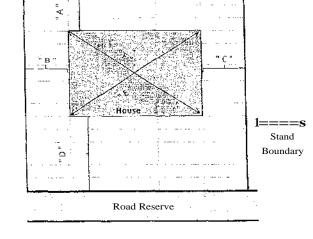
Yes

8485 8485

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the Gl quality material compacted to 95% MOD
AASHTO in 150mm thick layers? yes

Yes



Are the final earthworks higher than the surrounding area so that storm water does not affect the house ?



NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?



FORMWORK

Is formwork treated with a releasing agent?

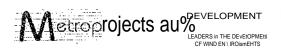
Is formwork 100% level?

Is formwork 100% secured?

 yes	
yes	
yes	
ves	<u>-</u>









ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
HaS the damp course layer been installed under slab and beam?	yes
Is the DPC USE green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yēs
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yės
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
And the cover block and to the steer:	
ENGINEER	DATE 6-Jun-14
CONCRETE.	
If ready mix concrete is used, is the supplier quality control approved?	25MDo
What is the grade / strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	NO
If "NO", the Contractor must provide method statement to correct the work	
CONCRETE CURING What curing method will be used? What was the achieved concrete strength; 1) At 7 days? Shuttering removal period (minimum 36 hours) Close slab 17 48 hrs	with sand and pour water daily b) At 28 days?
Upon final sign off of this form complying to all requirements the raft may be certified as composition in the next Payment Certificate	plete and is due for
ENGINEER DATE	13-Jun-14











Employer	!	Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract		PS/HS23-2013
Contractor		Bankuna Construction and Engineering
Date		13-Jun-14
File		

HOUSE NUMBER 36907

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings. SETTING OUT NO Has the builder had the position of the stand boundary beacons confirmed? Contractor to confirm the following dimensions: ٩ 8528 900 8528 13-= C= 0= 7560 EARTH WORKS Is the excavations deep enough as specified by the engineers? Yes Stand Is the 150mm thick in-situ material ripped and Boundary re-compacted to 93% MOD AASHTO? yes Is the G7 quality material compacted to 95% MOD Road Reserve AASHTO in 150mm thick layers? yes Are the final earthworks higher than the surrounding area so that storm water does not affect the house? NO Are beams excavated in the correct position and the right dimensions?

yes yes yes yes

Are beams straight? Is the top of beam chamfered 45 deg as per detail? Has all the loose soil in the beam excavation been removed?

FORMWORK

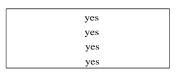
Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

Is formwork Straight?

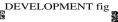
Are the trenches dry?















ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
s the DPC USB green 250 Micron?	yes
s there a 400mm overlap at the joints od the DPC?	yes
<u>REINFORCING</u>	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
s the steel/mesh free of rust?	yes
s the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
	'
ENGINEER	DATE 6-Jun-14
ENORMER	DATE 0-Juli-14
CONCRETE_	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
	11 10.7
What is the actual volume of concrete poured	
What is the actual volume of concrete poured Duration of concrete pouring Start Time	10.7
What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site	10.7 Completion
What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete?	10.7 Completion
What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable)	10.7 Completion No yes
What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant?	10.7 Completion No yes 75mm Batch Plant
What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level?	10.7 Completion No yes 75mm Batch Plant yes
What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site?	10.7 Completion No yes 75mm Batch Plant yes yes
What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator?	10.7 Completion No yes 75mm Batch Plant yes
What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site?	10.7 Completion No yes 75mm Batch Plant yes yes
What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction	10.7 Completion No yes 75mm Batch Plant yes yes yes
What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING	Tompletion No yes 75mm Batch Plant yes yes yes
What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction	10.7 Completion No yes 75mm Batch Plant yes yes yes
What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING	Tompletion No yes 75mm Batch Plant yes yes yes No
What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used?	Close slab with sand and pour water daily
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING	Close slab with sand and pour water daily b) At 28 days?

DATE

13-Jun-14



ENGINEER











Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Khombiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	13-Jun-14
File	

36904 HOUSE NUMBER

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions:

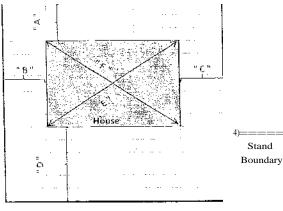
8485 A= 900 8485 B=C= 6860 D=

EARTH WORKS

Is the excavations deep enough as specified by the engineers? Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers?



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

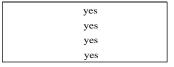
NO

BEAMS

Are beams excavated in the correct position and the right dimensions? Are beams straight?

Is the top of beam chamfered 45 deg as per detail? Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

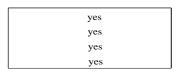


FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?















WEDGGOV	
ANT POISON Has The Free increased in data and action and if in the form the Contractor?	Y/OS
Has The Engineer received the ant poison certificate from the Contractor? DAMP COURSE LAYER	yes
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	5 - 2
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
5	
ENGINEER	DATE 6-Jun-14
CONCRETE	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	251V1Pa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yės
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	NO NO
If "NO", the Contractor must provide method statement to correct the work	
· · · · · · · · · · · · · · · · · ·	
CONCRETE CURING	
	with sand and pour water daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days?
Shuttering removal period (minimum 36 hours) 48 hrs	,
Upon final sign off of this form complying to all requirements the raft may be certified as comp	plete and is due for
inclusion in the next Payment Certificate	
ENGINEER DATE	13-Jun-14









Employer	-	Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract		PS/HS23-2013
Contractor	•	Bankuna Construction and Engineering
Date		13-Jun-14
File		

HOUSE NUMBER 36908

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

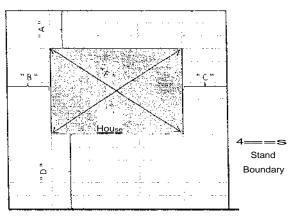
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

765

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

NO

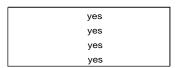
NO

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?













ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
The die core block ded to the steet.	h
. at 4	
ENGINEER	DATE 6-Jun-14
7- 83/	
CONCRETE	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	NO
If "NO", the Contractor must provide method statement to correct the work	
,	
CONCRETE CURING	
What curing method will be used? Close slab w	with sand and pour water daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days?
Shuttering removal period (minimum 36 hours) 48 hrs	
Upon final sign off of this form complying to all requirements the raft may be certified as comp inclusion in the next Payment Certificate	elete and is due for
ENGINEER DATE	13-Jun-14











Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract	:	PS/HS23-2013
Contractor		Bankuna Construction and Engineering
Date		13-Jun-14
File		

HOUSE NUMBER 36911

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETtING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions:

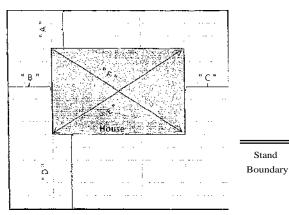
A=		$\mathbf{E} = 1$	<u>8528</u>
B=	900	F =	8528
C=			
Ds	6720		

EARTH WORKS

Is the excavations deep enough as specified by the engineers? Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house ?

not affect the house ?

BEAMS

Are beams excavated in the correct position and the right dimensions? Are beams straight?

. Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

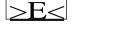
FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

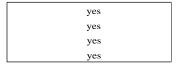
Is formwork 100% secured?

Is formwork Straight?



yes	
yes	
yes	
yes	

<u>NO</u>















ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
ENGINEER CONCRETE	DATE 6-Jun-14
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	>€<

CONCRETE CURING

What curing method will be used? Close slab with sand and pour water daily What was the achieved concrete strength; 1) At 7 days? 17 b) At 28 days?

Shuttering removal period (minimum 36 hours) 48 hrs

If "NO", the Contractor must provide method statement to correct the work

Upon final sign off of this form complying to all requirements the raft may be certified as complete and is due for inclusion in the next Payment Certificate

ENGINEER DATE 13-Jun-14





ENGINEER









use Raft Foundation and Concrete Works

Ias The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
s the DPC USB green 250 Micron?	yes
s there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	yes
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
(s the steel/mesh free of rust?	yes
s the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	
	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
p.ees-i	
ENGINEER	DATE 6-Jun-14
CONCRETE.	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
	Completion
Duration of concrete pouring Start Time	Completion
Duration of concrete pouring Start Time Was any water added to the concrete mix on site	No
	•
Was any water added to the concrete mix on site	No
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete?	No yes
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable)	No yes 75mm
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant?	No yes 75mm Batch Plant
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level?	No yes 75mm Batch Plant yes
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site?	No yes 75mm Batch Plant yes yes
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator?	No yes 75mm Batch Plant yes yes yes
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction	No yes 75mm Batch Plant yes yes
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING	No yes 75mm Batch Plant yes yes yes
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction	No yes 75mm Batch Plant yes yes yes
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING	No yes 75mm Batch Plant yes yes yes
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING	No yes 75mm Batch Plant yes yes No
Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable) Have concrete cubes been made on site or at the batch plant? Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? Cle	No yes 75mm Batch Plant yes yes yes NO

DATE

13-Jun-14











CI

Checklist for House Raft Foundation and Concrete Works

Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract		PS/I-1S23-2013
Contractor	•	Bankuna Construction and Engineering
Date		13-Jun-14
File		

HOUSE NUMBER 36907

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions:

A=	E=	8528
B=	900 F	8528
C=		
D=	7560	

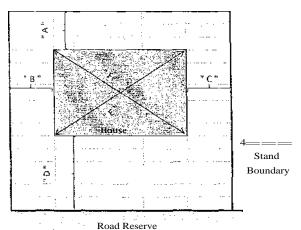
EARTH WORKi::

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thicklp-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



Are the final earthworks higher than the surrounding area so that storm water does not affect the house ?

>1<

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

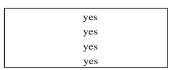
yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?















Employer		Ekurhuleni Metropolitan Municipality
Project	:	Etwatwa Ext 35 - Khombiza
Contract		PS/HS23-2013
Contractor		Bankuna Construction and Engineering
Date	•	13-Jun-14
File	•	

HOUSE NUMBER	36904
HOUSE NOMBER	00001

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions

A=	
B=	900
C=	
0=	6860

ıme	nsions:	
E =		8485
F=		8485

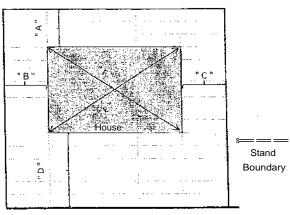
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the G7 quality material compacted to 95% MOD AASHTO in 150rnm thick layers?



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

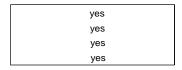
yes	
yes	
yes	
ves	

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?













Work

Checklist for House Raft Foundation and Concrete Works							
ANT POISON							
Has The Engineer received the ant poison certificate from the Contractor?	[yes				
DAMP COURSE LAYER	L		,				
Has the damp course layer been installed under slab and beam?	[yes				
Is the DPC USB green 250 Micron?			yes				
Is there a 400mm overlap at the joints od the DPC?			yes				
REINFORCING	L		,				
Has all the steel (or mesh) been installed as per the design and bending sche	dule?		yes				
Has the correct mesh been used? (specify the type of mesh)			yes				
Is the steel/mesh free of rust?			yes				
Is the mesh overlap length as per specification?			yes				
What is the lap length?			400				
Are the stirrups in ground beams spaced correctly?			yes				
Have cover blocks been installed to provide the required cover?			yes				
Are the cover block tied to the steel?			no				
or—Tor							
ENGINEER		DATE 6-J	un-14				
CONCENT							
<u>CONCRETE</u>							
If ready mix concrete is used, is the supplier quality control approved?		25	. m				
What is the grade / strength of concrete	25MPa						
What is the aggregate size	-	19mm					
What is the theoretical volume of concrete		11					
What is the actual volume of concrete poured	10.7						
Duration of concrete pouring Start Time	Completion						
Was any water added to the concrete mix on site							
Is there a concrete vibrator at the raft site prior to placing of concrete?		yes					
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm Batch Plant						
Have concrete cubes been made on site or at the batch plant?	1 10	Ва					
Is there a screed bar on site to ensure the concrete is placed to the correct	ievei?		yes				
Is there a powerfloat machine on site?			yes				
Was the concrete adequately vibrated with a concrete vibrator?			yes				
POWER FLOATING Le revier floating completed to Engineer's actions to			NO				
Is power floating completed to Engineer's satisfaction			NO				
If "NO", the Contractor must provide method statement to correct the wor	k						
CONCRETE CURING							
What curing method will be used?	Close slab w	ith sand and pour	water daily				
What was the achieved concrete strength; 1) At 7 days?	17	b) At 28 days?					
Shuttering removal period (minimum 36 hours)	48 hrs						
Upon final sign off of this form complying to all requirements the raft may	be certified as comp	lete and is due for					
inclusion in the next Payment Certificate	or compared as comp	icio una is due 101					
mendation in the next I ayment certificate							
ENGINEER A	DATE	13-Jun-14					
ENOINCER	DATE	15-Jun-14					







LEADERS IN THE DEVELOPMENT GAMING ENVIRONMENTS





ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
ENGINEER	DATE 6-Jun-14
<u>CONCRETE</u>	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	2SMPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	NO
If "NO", the Contractor must provide method statement to correct the work	
1 10 , the contractor must provide method statement to correct the work	
CONCRETE CURING	
	vith sand and pour water daily
	b) At 28 days?
Shuttering removal period (minimum 36 hours) 48 hrs	b) At 28 days:
Shuttering Temoval period (Infillindin 30 hours)	
Upon final sign off of this form complying to all requirements the raft may be certified as comple	lete and is due for
inclusion in the next Payment Certificate	
ENGINEER DATE	
	13-Jun-14
1 the state of the	13-Jun-14













ANT POISON

ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes

ENGINEER DATE	6-Jun-14
---------------	----------

Start Time

CONCRETE

If ready mix concrete is used, is the supplier quality control approved?

What is the grade / strength of concrete

Are the cover block tied to the steel?

What is the aggregate size

What is the theoretical volume of concrete

What is the actual volume of concrete poured

Duration of concrete pouring

Was any water added to the concrete mix on site

Is there a concrete vibrator at the raft site prior to placing of concrete?

What was the slump of the concrete? (75mm to 125mm is acceptable)

Have concrete cubes been made on site or at the batch plant?

Is there a screed bar on site to ensure the concrete is placed to the correct level?

Is there a powerfloat machine on site?

Was the concrete adequately vibrated with a concrete vibrator?

POWER FLOATING

Is power floating completed to Engineer's satisfaction

If "NO", the Contractor must provide method statement to correct the work

25MPa
19mm
11
10.7
Completion
No
yes
75mm
Batch Plant
yes
yes
yes

NO

no

CONC	RETE	CUI	RINC	<u>2</u> .															

17

48 hrs

What curing method will be used?

What was the achieved concrete strength; 1) At 7 days?

Shuttering removal period (minimum 36 hours)

Close slab with sand and pour water daily

b) At 28 days?

Upon final sign off of this form complying to all requirements the raft may be certified as complete and is due for inclusion in the next Payment Certificate

ENGINEER

DATE

13-Jun-14













Employer : Ekurhuleni Metropolitan I	Municipality		
Project • Etwatwa Ext 35 - Khombiz			
Contract • PS/HS23-2013			
Contractor Bankuna Construction ar	ad Engineering		
Date 13-Jun-14	gg		
File •			
HOUSE NUMBER 36912			
The Contractor has established that these controlled works have	been constructed to	o the correct horizontal and verti	cal alignment
and position, that such work has been carried out to the required	standards and spec	cifications, as set out in the docu	ment and
drawings.			
SETTING OUT			
Has the builder had the position of the stand boundary beacons	confirmed?	<u>Ee</u>	NO
	1		
Contractor to confirm the following dimensions:			
A= E 8485 B= 900 F= 8485			
B= 900 F= 8485			
9620	" B "		
3020	Ь		
EARTH WORKS			
Is the excavations deep enough as			
specified by the engineers?		House	
specified by the engineers:			Stand
Is the 150mm thick in-situ material ripped and			Boundary
re-compacted to 93% MOD AASHTO? yes			í
Is the G7 quality material compacted to 95% MOD	ı		
AASHTO in 150mm thick layers? yes		Road Reserve	
Are the final earthworks higher than the surrounding area so the	at storm water does		
not affect the house ?	ar oronn maror acce		NO
			NO
BEAMS			
Are beams excavated in the correct position and the right dimer	nsions?		/es
Are beams straight ?			/es
Is the top of beam chamfered 45 deg as per detail?		,	/es
Has all the loose soil in the beam excavation been removed?		,	/es
Are the trenches dry?			
<u>FORMWORK</u>			
Is formwork treated with a releasing agent?		•	yes
Is formwork 100% level?			yes
Is formwork 100% secured?			yes













ANT POISON	
H as The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
ENGINEER	DATE 6/6/2014
CONCRETE	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	NO NO
If "NO", the Contractor must provide method statement to correct the work	
CONCRETE CURING	
	vith sand and pour water daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days?
Shuttering removal period (minimum 36 hours) 48 hrs	
Upon final sign off of this form complying to all requirements the raft may be certified as completed inclusion in the next Payment Certificate ENGINEER DATE	ete and is due for 13-Jun-14











Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Khombiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	13-Jun-14
File	

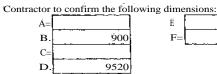
HOUSE NUMBER 36914

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

<u>SETTING OUT</u>

Has the builder had the position of the stand boundary beacons confirmed?

NO 8485



EARTH WORKS

Is the excavations deep enough as specified by the engineers?

AASHTO in 150mm thick layers?

Yes

8485

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the G7 quality material compacted to 95% MOD

4=111 Stand Boundary ۵

Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does

not affect the house?

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes

NO

FORMWORK

Is formwork treated with a releasing agent?

IS formwork 100% level?

Is formwork 100% secured?

yes	
yes	
yes	
yes	















<u>NT POISON</u>	,			
Has The Engineer received the ant poison certificate from the Contractor?			yes	
DAMP COURSE LAYER	,			
Has the damp course layer been installed under slab and beam?		<u> </u>	yes	
s the DPC USB green 250 Micron?	J	í	yes	
s there a 400mm overlap at the joints od the DPC?		ı	yes	
REINFORCING				
Has all the steel (or mesh) been installed as per the design and bending schedule?]		yes	
Has the correct mesh been used? (specify the type of mesh)]		yes	
s the steel/mesh free of rust?]		yes	
s the mesh overlap length as per specification?	J		yes	
What is the lap length?	J		400	
Are the stirrups in ground beams spaced correctly?	J		yes	
Have cover blocks been installed to provide the required cover?]		yes	
Are the cover block tied to the steel?]		no	
			- * . 14	
ENGINEER		DATE	6-Jun-14	
CONCRETE				
If ready mix concrete is used, is the supplier quality control approved?				
What is the grade / strength of concrete			25MPa	
What is the aggregate size			19mm	
What is the theoretical volume of concrete			11	
What is the actual volume of concrete poured			10.7	
Duration of concrete pouring Start Time	\neg	Completio		т
Was any water added to the concrete mix on site	_		No	
Is there a concrete vibrator at the raft site prior to placing of concrete?		_	yes	
What was the slump of the concrete? (75mm to 125mm is acceptable)			75mm	
Have concrete cubes been made on site or at the batch plant?			Batch Plant	t
Is there a screed bar on site to ensure the concrete is placed to the correct level?			yes	
Is there a powerfloat machine on site?			yes	
Was the concrete adequately vibrated with a concrete vibrator?			yes	
POWER FLOATING		_		
Is power floating completed to Engineer's satisfaction	!			NO
If "NO", the Contractor must provide method statement to correct the work				
CONCRETE CURING What awring method will be used?	-labr	-40	tan d	
	Close stan w		nd pour water da	aily
What was the achieved concrete strength; 1) At 7 days? 17 Shuttering removed period (minimum 36 hours) 48 hrs		b) At 28 d	days?	
Shuttering removal period (minimum 36 hours) 48 hrs				
Upon final sign off of this form complying to all requirements the raft may be certif	ried as comp	lete and is	due for	
inclusion in the next Payment Certificate				
ENGINEER				











Employer	•	Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract		PS/HS23-2013
Contractor		Bankuna Construction and Engineering
Date	•	13-Jun-14
File	•	

HOUSE NUMBER 36980

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

<u>ŠĒTTING OUT</u>

Has the builder had the position of the stand boundary beacons confirmed?

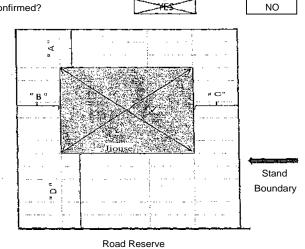
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

>?<

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

yes	
yes	
yes	
yes	













ANT POISON			
Has The Engineer received the ant poison certificate from the Contractor?		yes	
DAMP COURSE LAYER		,	
Has the damp course layer been installed under slab and beam?		yes	
Is the DPC USB green 250 Micron?		yes	
Is there a 400mm overlap at the joints od the DPC?		yes	
REINFORCING			
Has all the steel (or mesh) been installed as per the design and bending schedule?		yes	
Has the correct mesh been used? (specify the type of mesh)		yes	
Is the steel/mesh free of rust?		yes	
Is the mesh overlap length as per specification?		yes	
What is the lap length?		400	
Are the stirrups in ground beams spaced correctly?		yes	
Have cover blocks been installed to provide the required cover?		yes	
Are the cover block tied to the steel?		no	
ENGINEER			
ENGINEER	DATE	6-Jun-14	
CONCRETE			
If ready mix concrete is used, is the supplier quality control approved?			
What is the grade / strength of concrete		25MPa	
What is the aggregate size		19mm	
What is the theoretical volume of concrete		11	
What is the actual volume of concrete poured		10.7	
Duration of concrete pouring Start Time	Completion		
Was any water added to the concrete mix on site	Completion	No	
Is there a concrete vibrator at the raft site prior to placing of concrete?		yes	
What was the slump of the concrete? (75mm to 125mm is acceptable)		75mm	
Have concrete cubes been made on site or at the batch plant?		Batch Plant	
Is there a screed bar on site to ensure the concrete is placed to the correct level?		yes	
Is there a powerfloat machine on site?		yes	
Was the concrete adequately vibrated with a concrete vibrator?		yes	
POWER FLOATING		-	
Is power floating completed to Engineer's satisfaction			NO
If "NO", the Contractor must provide method statement to correct the work			
CONCRETE CURING			
What curing method will be used?	vith sand and	d pour water dail	у
What was the achieved concrete strength; 1) At 7 days?	b) At 28 da	ys?	
Shuttering removal period (minimum 36 hours) 48 hrs			
Upon final sign off of this form complying to all requirements the reft may be contified as complying	ata and ia di	un for	
Upon final sign off of this form complying to all requirements the raft may be certified as compl inclusion in the next Payment Certificate	ere ariu is Ul	10 IUI	
molosion in the next rayinent Certificate			
ENGINEER A DATE	13-Jun-	-14	
ENGINEER DATE	13-3411-	17	









Employer	•	Ekurhuleni Metropolitan Municipality
Project	•	Etwatwa Ext 35 - Khombiza
Contract	•	PS/HS23-2013
Contractor		Bankuna Construction and Engineering
Date	•	13-Jun-14
File	•	

HOUSE NUMBER 36981

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

Contractor to confirm the following dimensions:

A=
B=
900
F=
8910
D=
8900

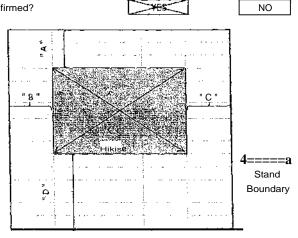
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

NO

BEAMS

Are beams excavated in the correct position and the right dimensions? Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?
Is formwork 100% secured?

Is formwork Straight?

yes yes yes yes









NT ala





ANT POISON		
Has The Engineer received the ant poison certificate from the Contractor?	ye	s
DAMP COURSE LAYER		
Has the damp course layer been installed under slab and beam?	ye	s
Is the DPC USB green 250 Micron?	ye	
Is there a 400mm overlap at the joints od the DPC?	ye	
REINFORCING		
Has all the steel (or mesh) been installed as per the design and bending schedule?	ye	s
Has the correct mesh been used? (specify the type of mesh)	ye	
Is the steel/mesh free of rust?	ye	
Is the mesh overlap length as per specification?	ye	s
What is the lap length?	40	00
Are the stirrups in ground beams spaced correctly?	ye	es
Have cover blocks been installed to provide the required cover?	ye	es
Are the cover block tied to the steel?	n	o
197		
ENGINEER	DATE 6-Jun	-14
		_
CONCRETE		
If ready mix concrete is used, is the supplier quality control approved?		
What is the grade / strength of concrete	25MI	
What is the aggregate size		mm
What is the theoretical volume of concrete	1	.1
What is the actual volume of concrete poured	10	0.7
Duration of concrete pouring Start Time	Completion	
Was any water added to the concrete mix on site	1	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	У	es
What was the slump of the concrete? (75mm to 125mm is acceptable)	75	mm
Have concrete cubes been made on site or at the batch plant?	Batc	h Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	3	/es
Is there a powerfloat machine on site?	3	/es
Was the concrete adequately vibrated with a concrete vibrator?	2	/es
POWER FLOATING		
Is power floating completed to Engineer's satisfaction		NO
If "NO", the Contractor must provide method statement to correct the work		
CONCRETE CURING		
	vith sand and pour w	ater daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days?	
Shuttering removal period (minimum 36 hours) 48 hrs		
Upon final sign off of this form complying to all requirements the raft may be certified as comp	elete and is due for	
inclusion in the next Payment Certificate		
ENGINEER DATE	13-Jun-14	





Metroprojects

DEVELOPMENT

LEADERS IN THE OEVELOPMENT
OF LIVING ENVIRONMENTS







Checklist for House Raft Foundation and Concrete Works

Employer	·	Ekurhuteni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract		PSIHS23-2013
Contractor		Bankuna Construction and Engineering
Date	•	15-Jan-14
File	•	

HOUSE NUMBER 36985

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

Contractor to confirm the following dimensions:

A= 9560 B= 3000 C= 0=



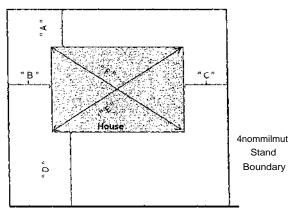
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

NO

NO

BEAMS

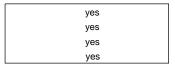
Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

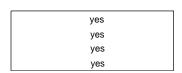


FORMWORK

Is formwork treated with a releasing agent?

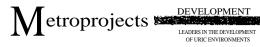
Is formwork 100% level?

Is formwork 100% secured?















Checklist for House Raft Foundation and Concrete Works			
ANT POISON			
Has The Engineer received the ant poison certificate from the Contractor?		yes	
DAMP COURSE LAYER			
Has the damp course layer been installed under slab and beam?		yes	
Is the DPC USB green 250 Micron?		yes	
Is there a 400mm overlap at the joints od the DPC?		yes	
REINFORCING			
Has all the steel (or mesh) been installed as per the design and bending schedule?		yes	
Has the correct mesh been used? (specify the type of mesh)		yes	
Is the steel/mesh free of rust?		yes	
Is the mesh overlap length as per specification?		yes	
What is the lap length?		400	
Are the stirrups in ground beams spaced correctly?		yes	
Have cover blocks been installed to provide the required cover?		yes	
Are the cover block tied to the steel?		no	
ENGINEER	DATE	30-Jan-14	
CONCRETE			
If ready mix concrete is used, is the supplier quality control approved?			
What is the grade / strength of concrete		25MPa	
What is the aggregate size		19mm	
What is the theoretical volume of concrete		11	
What is the actual volume of concrete poured		10.7	
Duration of concrete pouring Start Time	Complet	ion I	I
Was any water added to the concrete mix on site		No	
Is there a concrete vibrator at the raft site prior to placing of concrete?		yes	
What was the slump of the concrete? (75mm to 125mm is acceptable)		75mm	
Have concrete cubes been made on site or at the batch plant?		Batch Pla	nt
Is there a screed bar on site to ensure the concrete is placed to the correct level?		yes	
Is there a powerfloat machine on site?		yes	
Was the concrete adequately vibrated with a concrete vibrator?		yes	
POWER FLOATING			
Is power floating completed to Engineer's satisfaction	1>6<	<.1	NO
If "NO", the Contractor must provide method statement to correct the work			
CONCRETE CURING			
What curing method will be used? Close slab	with sand a	nd pour water	daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28	days?	25.5
Shuttering removal period (minimum 36 hours) 48 hrs			
Upon final sign off of this form complying to all requirements the raft may be certified as con inclusion in the next Payment Certificate	nplete and is	s due for	

DATE

14-Mar-14



ENGINEER



Employer



DEVELOPMENT rif



Ekurhuleni Metropolitan Municipality



Checklist for House Raft Foundation and Concrete Works

Employer	Ekurhuleni Metropolita	n Municipality		
Project	Etwatwa Ext 35 - Khom	ıbiza		
Contract	PS/H523-2013			
Contractor	 Bankuna Construction 	and Engineering		
Date	: 13-Jun-14			
File	•			
and position, that such wordrawings. SETTING OUT Has the builder had the pocurator to confirm the f A= B= 259	E = 8485	ed standards and specific		_
EARTH WORKS Is the excavations deep en specified by the engineers Is the 150mm thick in-siture-compacted to 93% MOD Is the G7 quality material of AASHTO in 150nim thick in thick in thick in the compact of the comp	material ripped and AASHTO? yes compacted to 95% MOD	" 5 " " 0 "	House Care	4—————————————————————————————————————
not affect the house ? BEAMS	nigher than the surrounding area so		V	NO
	position and the right an		J	
Are beams straight?			v	es
Are beams straight? Is the top of beam chamfe	ered 45 deg as per detail?			es es

FORMWORK.

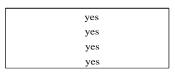
Is formwork treated with a releasing agent?

Is formwork 100% level?

Are the trenches dry?

Is formwork 100% secured?

Is formwork Straight?















	/
ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
e i desire	
ENGINEER	DATE 6-Jun-14
ENOINEER	U-Juli 11
<u>CONCRETE</u>	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	
Is power floating completed to Engineer's satisfaction	$\stackrel{\text{NO}}{=}$
If "NO", the Contractor must provide method statement to correct the work	
CONCRETE CURING	
What curing method will be used? Close slab w	vith sand and pour water daily
What was the achieved concrete strength; 1) At 7 days? 17	b) At 28 days?
Shuttering removal period (minimum 36 hours) 48 hrs	
Upon final sign off of this form complying to all requirements the raft may be certified as compl	lete and is due for
inclusion in the next Payment Certificate	
ENGINEER DATE	13-Jun-14









Employer	:	Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract	:	PS/HS23-2013
Contractor		Bankuna Construction and Engineering
Date		13-Jun-14
File		

HOUSE NUMBER 36987

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contra&or to confirm the following dimensions:

A=	
B≃	900
Č=	
0=	10390

Ē =	8485
F=	8485

EARTH WORKS

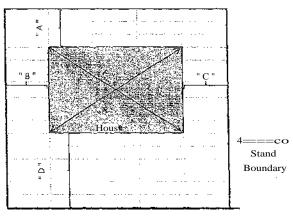
Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

yes

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers?



Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

>t<

NO

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

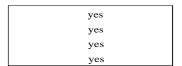
yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?





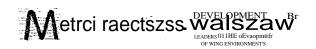






ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
ENGINEED 157	
ENGINEER	DATE 6-Jun-14
CONCRETE	
If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
Is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	yes
POWER FLOATING	0.11
Is power floating completed to Engineer's satisfaction	<u> </u>
If "NO", the Contractor must provide method statement to correct the work	
ii No , iio comusto must promus memos statoment to comost the nome	
CONCRETE CURING	
	with sand and pour water daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days?
Shuttering removal period (minimum 36 hours) 48 hrs	2) .
onationing remotal period (minimum or nearly)	
Upon final sign off of this form complying to all requirements the raft may be certified as complying to all requirements.	lete and is due for
inclusion in the next Payment Certificate	
ENGINEER DATE	13-Jun-l4
ENGINEER	







Employer	:	Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract		PS/HS23-2013
Contractor		Bankuna Construction and Engineering
Date		13-Jun-14
File	:	

HOUSE NUMBER 36988

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions:

A.	
	900,
C=	
Ð≃	9100



EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

e-compacted to 93% MOD AASHTO? yes

House Stand Boundary

Road Reserve

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers? yes

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?



BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

yes	
yes	
yes	
yes	







LEADERS IN TEA DEVELOPMENT







Checklist for House Raft Foundation and Concrete Works

Has The Engineer received the ant poison certificate from the Contractor?

ANT POISON			

DAMP COURSE LAYER Has the damp course layer been installed under slab and beam?

Is the DPC USB green 250 Micron?

Is there a 400mm overlap at the joints od the DPC?

Has all the steel (or mesh) been installed as per the design and bending schedule?

Has the correct mesh been used? (specify the type of mesh)

Is the steel/mesh free of rust?

Is the mesh overlap length as per specification?

What is the lap length?

Are the stirrups in ground beams spaced correctly?

Have cover blocks been installed to provide the required cover?

Are the cover block tied to the steel?

.1
yes
yes
yes
yes

yes
yes
yes
yes
400
yes
yes
no

ENGINEER

DATE

6-Jun-14

CONCRETE

If ready mix concrete is used, is the supplier quality control approved?

What is the grade / strength of concrete

What is the aggregate size

What is the theoretical volume of concrete

What is the actual volume of concrete poured

Duration of concrete pouring

Start Time

Was any water added to the concrete mix on site

Is there a concrete vibrator at the raft site prior to placing of concrete?

What was the slump of the concrete? (75mm to 125mm is acceptable)

Have concrete cubes been made on site or at the batch plant?

Is there a screed bar on site to ensure the concrete is placed to the correct level?

Is there a powerfloat machine on site?

Was the concrete adequately vibrated with a concrete vibrator?

POWER FLOATING

Is power floating completed to Engineer's satisfaction

If "NO", the Contractor must provide method statement to correct the work

	25MPa	
	19mm	
	11	
	10.7	
Completion		•
	· No	
	yes	
	75mm	
	Batch Plant	
	yes	
	yes	

THE C	NO
	

CONCRETE CURING

What curing method will be used?

What was the achieved concrete strength; 1) At 7 days?

Shuttering removal period (minimum 36 hours)

Close slab with sand and pour water daily

b) At 28 days?

17 48 hrs

Upon final sign off of this form complying to all requirements the raft may be certified as complete and is due for inclusion in the next Payment Certificate

ENGINEER

1995

DATE

13-Jun-14





DEVELOPMENT LEADERS IN THE DEVELOPMENT OF MING ENVIACWRIENTS

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Checklist for House Raft Foundation and Concrete Works

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13-Jun-14 36989 hese controlled n carried out to to the stand boundaries and boundaries are stand boundaries.	works have been the required stand	constructed to the correc dards and specifications,		ment and
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hese controlled n carried out to he stand bounda	the required stand	dards and specifications,		ment and
hese controlled n carried out to he stand bounda	the required stand	dards and specifications,		ment and
n carried out to	the required stand	dards and specifications,		ment and
he stand bounda			as set out in the docu	
	ry beacons confi	rmed?		<u>NO</u>
	ry beacons confi	rmed?		<u>NO</u>
	ry beacons confi	rmed?		<u>NO</u>
	ry ocacons comm	inica:		110
dimensions:				
E_ 8	3528			
F = 8	3528			
		tl		
Yes		ous	<u>se</u>	41=2===a
100				Stand
ripped and				Boundar
Lto 95% MOD		İ		
		Road	l Reserve	
)	Yes ripped and yes to 95% MOD yes	ripped and 1? yes 1 to 95% MOD	Yes ripped and ripyes to 95% MOD Roac	Yes ripped and r? yes to 95% MOD Road Reserve

FORMWORK.

Is formwork treated with a releasing agent?

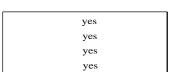
Has all the loose soil in the beam excavation been removed?

Is formwork 100% level?

Is formwork 100% secured?

Is formwork Straight?

Are the trenches dry?



yes













O			
ANT POISON			
Has The Engineer received the ant poison certificate from the Contract	or?		yes
DAMP COURSE LAYER			
Has the damp course layer been installed under slab and beam?			yes
Is the DPC USB green 250 Micron?			yes
Is there a 400mm overlap at the joints od the DPC?			yes
<u>REINFORCING</u>			
Has all the steel (or mesh) been installed as per the design and bending	g schedule?		yes
Has the correct mesh been used? (specify the type of mesh)			yes
Is the steel/mesh free of rust?			yes
Is the mesh overlap length as per specification?			yes
What is the lap length?			400
Are the stirrups in ground beams spaced correctly?			yes
Have cover blocks been installed to provide the required cover?			yes
Are the cover block tied to the steel?			no
ENGINEER ST.	_	DATE	16 7 14
ENGINEER		DATE	<u>16-Jun</u> -14
<u>CONCRETE</u>			<u> </u>
If ready mix concrete is used, is the supplier quality control approved	?		
What is the grade / strength of concrete		1	25MPa
		L	
What is the aggregate size			Ī9mm
What is the aggregate size What is the theoretical volume of concrete			Ī <u></u> 9mm 11
55 5			
What is the theoretical volume of concrete		Complet	11 10.7
What is the theoretical volume of concrete What is the actual volume of concrete poured		Complet	11 10.7
What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Start Time	2?	Complet	11 10.7
What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site		Complet	11 10.7 ion No
What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete		Complet	11 10.7 ion No
What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete What was the slump of the concrete? (75mm to 125mm is acceptable	*)	Complet	11 10.7 ion No yes 75mm
What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete What was the slump of the concrete? (75mm to 125mm is acceptable Have concrete cubes been made on site or at the batch plant?	*)	Complet	11 10.7 ion No No yes 75mm Batch Plant
What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete What was the slump of the concrete? (75mm to 125mm is acceptable Have concrete cubes been made on site or at the batch plant? Is, there a screed bar on site to ensure the concrete is placed to the concrete.	*)	Complet	11 10.7 ion No yes 75mm Batch Plant yes
What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete What was the slump of the concrete? (75mm to 125mm is acceptable Have concrete cubes been made on site or at the batch plant? Is, there a screed bar on site to ensure the concrete is placed to the co- Is there a powerfloat machine on site?	*)	Complet	11 10.7 ion No yes 75mm Batch Plant yes yes
What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete What was the slump of the concrete? (75mm to 125mm is acceptable Have concrete cubes been made on site or at the batch plant? Is, there a screed bar on site to ensure the concrete is placed to the co Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator?	*)	Complet	11 10.7 ion No yes 75mm Batch Plant yes yes
What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete What was the slump of the concrete? (75mm to 125mm is acceptable Have concrete cubes been made on site or at the batch plant? Is, there a screed bar on site to ensure the concrete is placed to the co Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING	e) orrect level?	Complet	11 10.7 ion No yes 75mm Batch Plant yes yes yes
What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete What was the slump of the concrete? (75mm to 125mm is acceptable Have concrete cubes been made on site or at the batch plant? Is, there a screed bar on site to ensure the concrete is placed to the co Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction	e) orrect level?	Complet	11 10.7 ion No yes 75mm Batch Plant yes yes yes
What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete What was the slump of the concrete? (75mm to 125mm is acceptable Have concrete cubes been made on site or at the batch plant? Is, there a screed bar on site to ensure the concrete is placed to the co Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the	errect level?		11 10.7 ion No yes 75mm Batch Plant yes yes yes
What is the theoretical volume of concrete What is the actual volume of concrete poured Duration of concrete pouring Was any water added to the concrete mix on site Is there a concrete vibrator at the raft site prior to placing of concrete What was the slump of the concrete? (75mm to 125mm is acceptable Have concrete cubes been made on site or at the batch plant? Is, there a screed bar on site to ensure the concrete is placed to the co Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING Is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the CONCRETE CURING.	errect level?		11 10.7 ion No yes 75mm Batch Plant yes yes yes NO

Upon final sign off of this form complying to all requirements the raft may be certified as complete and is due for inclusion in the next Payment Certificate

ENGINEER

DATE 13-Jun-14









Employer	=	Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Khombiza
Contract	•	PS/HS23-2013
Contractor	•	Bankuna Construction and Engineering
Date		13-Jun-14
File		

HOUSE NUMBER 36990

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

Contractor to confirm the following dimensions:

8528 8528

900 C:

10440

EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Yes

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO?

Is the G7 quality material compacted to 95% MOD AASHTO in 150mm thick layers?

Stand Boundary

Road Reserve

Are the final earthworks higher than the surrounding area so that storm water does not affect the house?

NO

NO

BEAMS

Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?

yes yes yes yes

FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

Is formwork Straight?

yes
yes
yes
yes











ANT POISON		
Has The Engineer received the ant poison certificate from the Contractor?		yes
DAMP COURSE LAYER		
Has the damp course layer been installed under slab and beam?		yes
Is the DPC USB green 250 Micron?		yes
Is there a 400mm overlap at the joints od the DPC?		yes
REINFORCING		
Has all the steel (or mesh) been installed as per the design and bending schedule?		yes
Has the correct mesh been used? (specify the type of mesh)		yes
Is the steel/mesh free of rust?		yes
Is the mesh overlap length as per specification?		yes
What is the lap length?		400
Are the stirrups in ground beams spaced correctly?		yes
Have cover blocks been installed to provide the required cover?		yes
Are the cover block tied to the steel?		no
ENGINEER	DATE	6-Jun-14
<u>CONCRETE</u>		
If ready mix concrete is used, is the supplier quality control approved?		
What is the grade / strength of concrete		25MPa
What is the aggregate size		19mm
What is the theoretical volume of concrete		11
What is the actual volume of concrete poured		10.7
Duration of concrete pouring Start Time	Completion	
Was any water added to the concrete mix on site		No
Is there a concrete vibrator at the raft site prior to placing of concrete?		yes
What was the slump of the concrete? (75mm to 12Smm is acceptable)		75mm
Have concrete cubes been made on site or at the batch plant?		Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?		yes
Is there a powerfloat machine on site?		yes
Was the concrete adequately vibrated with a concrete vibrator?		yes
POWER FLOATING		<u> </u>
Is power floating completed to Engineer's satisfaction		NO
If "NO", the Contractor must provide method statement to correct the work		
CONCRETE CURING		
What curing method will be used? Close slab w	ith sand and	pour water daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28 day	ys?
Shuttering removal period (minimum 36 hours) 48 hrs		
Upon final sign off of this form complying to all requirements the raft may be certified as complying to all requirements the raft may be certified as complying to all requirements the raft may be certified as complying to all requirements the raft may be certified as complying to all requirements the raft may be certified as complying to all requirements the raft may be certified as complying to all requirements the raft may be certified as complying to all requirements the raft may be certified as complying to all requirements the raft may be certified as complying to all requirements the raft may be certified as complying to all requirements the raft may be certified as complying to all requirements the raft may be certified as complying to all requirements the raft may be certified as complying to all requirements the raft may be certified as complying to all requirements the raft may be certified as complying to all requirements the raft may be certified as complying to all requirements the raft may be certified as complying to all requirements as a second contract may be considered as a	lete and is due	e for
inclusion in the next Payment Certificate		
ENGINEER DATE	13-Jun-	14











Employer		Ekurhuleni Metropolitan Municipality
Project	-	Etwatwa Ext 35 - Khombiza
Contract		PS/HS23-2013
Contractor		Bankuna Construction and Engineering
Date	:	13-Jun-14
File	:	

HOUSE NUMBER 37011

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor	to confirm the fol	lowing dime	ensions:
A.		E	8485
B.	900	F=	8485
C.			
D=	8000		

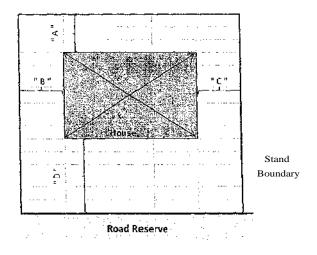
EARTH WORKS

Is the excavations deep enough as specified by the engineers?

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to 95% MOD

AASHTO in 150mm thick layers?



Are the final earthworks higher than the surrounding area so that storm	water	does
not affect the house ?		

BEAMS

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are beams excavated in the correct position and the right dimensions?

Are the trenches dry?

yes yes yes yes

NO

FORMWORK.

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

Is formwork Straight?

yes yes yes yes







DEVELOPMENT V RN

LEADERS IN THE CEVELOOMEKT OF UVitIG EN'fIRONMEtiTS



Checklist for House Raft Foundation and Concrete Works

ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
Is the DPC USB green 250 Micron?	yes
Is there a 400mm overlap at the joints od the DPC?	yes
REINFORCING	
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
Is the steel/mesh free of rust?	yes
Is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
Have cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
ENGINEER	
ENGINEER	DATE <u>6/6/2014</u>
	NM,
CONCRETE	
CONCRETE If we do not a supplier and is the small in and it is a supplier and it is a suppli	
If ready, mix concrete is used, is the supplier quality control approved?	25 MD-
What is the grade / strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete What is the actual volume of concrete poured	11
	Completion
Was any water added to the concrete mix on site Is there a concrete vibrator at the reft site prior to pleasing of concrete?	
Is there a concrete vibrator at the raft site prior to placing of concrete? What was the slump of the concrete? (75mm to 125mm is acceptable)	yes 75mm
Have concrete cubes been made on site or at the batch plant?	Batch Plant
Is there a screed bar on site to ensure the concrete is placed to the correct level?	
Is there a powerfloat machine on site?	yes
Was the concrete adequately vibrated with a concrete vibrator?	
POWER FLOATING	yes
Is power floating completed to Engineer's satisfaction	NO
is power mouning completed to Engineer's satisfaction	
If "NO", the Contractor must provide method statement to correct the work	
CONCRETE CURING	
What curing method will be used? Close slab v	with sand and pour water daily
What was the achieved concrete strength; 1) At 7 days?	b) At 28 days?
Shuttering removal period (minimum 36 hours) 48 hrs	
Upon final sign off of this form complying to all requirements the raft may be certified as comp	plete and is due for
inclusion in the next Payment Certificate	
ENGINEER DATE	13-Jun-14
ENGINEER DATE	











Employer	Ekurhuleni Metropolitan Munic	ipality	
Project	: Etwatwa Ext 35 - Khombiza		
Contract	PS/HS23-2013		
Contractor	Bankuna Construction and Eng	gineering	
Date	13-Jun-14		
File			
HOUSE NUMBER	37009		
The Contractor has establish	ned that these controlled works have been	constructed to the correct horizontal and	vertical alignment
and position, that such work	has been carried out to the required stand	dards and specifications, as set out in the	document and
drawings.			
SETTING OUT			
Has the builder had the posi	ition of the stand boundary beacons confir	med?	NO
Contractor to confirm the fo	Havring dimensions:	I	
Contractor to confirm the fo	E 8485		
B= 900			
C= <u>900</u>	1 = 8483		
0= 8100	,		
0= 0100	<i>'</i>		
EARTH WORKS			
Is the excavations deep end	nuch as		
specified by the engineers?		Hous	
specified by the engineers:	103		Stand
is the 150mm thick in-situ r	naterial ripped and		Boundary
re-compacted to 93% MOD	· · · —		•
	-		
is the G7 quality material co	ompacted to 95% MOD		
AASHTO in 150mm thick lay		Road Reserve	
Are the final earthworks his	gher than the surrounding area so that sto	rm water does	
not affect the house ?	,		NO
		L	110
<u>BEAMS</u>			
	e correct position and the right dimensions	s?	yes
Are beams straight?			yes
Is the top of beam chamfer	ed 45 deg as per detail?		yes
•	beam excavation been removed?		yes
Are the trenches dry?			
FORMWORK			
FORMWORK	releasing exent 2	I	VOS
Is formwork treated with a	releasing agent?		yes
Is formwork 100% level?	10		yes
Is formwork 100% secured	1?		yes
Is formwork Straight?			yes







DEVELOPMENT

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ANT POISON	
Has The Engineer received the ant poison certificate from the Contractor?	yes
DAMP COURSE LAYER	
Has the damp course layer been installed under slab and beam?	yes
is the DPC USB green 250 Micron?	yes
is there a 400mm overlap at the joints pd the DPC? REINFORCING	yes
Has all the steel (or mesh) been installed as per the design and bending schedule?	yes
Has the correct mesh been used? (specify the type of mesh)	yes
is the steel/mesh free of rust?	yes
is the mesh overlap length as per specification?	yes
What is the lap length?	400
Are the stirrups in ground beams spaced correctly?	yes
HaVe cover blocks been installed to provide the required cover?	yes
Are the cover block tied to the steel?	no
ENGINEER	DATE $\frac{6}{6} \cdot \frac{6}{2} \cdot 014$
CONCRETE If ready mix concrete is used, is the supplier quality control approved?	
What is the grade / strength of concrete	25MPa
What is the aggregate size	19mm
What is the theoretical volume of concrete	11 [
What is the actual volume of concrete poured	10.7
Duration of concrete pouring Start Time	Completion
Was any water added to the concrete mix on site	No
is there a concrete vibrator at the raft site prior to placing of concrete?	yes
What was the slump of the concrete? (75mm to 125mm is acceptable)	75mm
	Batch Plant
Have concrete cubes been made on site or at the batch plant?	
Is there a screed bar on site to ensure the concrete is placed to the correct level?	yes
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site?	yes yes
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator?	
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING	yes
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator?	yes yes
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING is power floating completed to Engineer's satisfaction	yes yes
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING	yes yes NO
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? Close	yes yes NO see slab with sand and pour water daily
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? Clos What was the achieved concrete strength; 1) At 7 days?	yes yes NO
Is there a screed bar on site to ensure the concrete is placed to the correct level? Is there a powerfloat machine on site? Was the concrete adequately vibrated with a concrete vibrator? POWER FLOATING is power floating completed to Engineer's satisfaction If "NO", the Contractor must provide method statement to correct the work CONCRETE CURING What curing method will be used? Close	yes yes NO see slab with sand and pour water daily

ENGINEER DATE 13-Jun-14













Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Khombiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	13-Jun-14
File	

HOUSE NUMBER 37013

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

SETTING OUT

Has the builder had the position of the stand boundary beacons confirmed?

NO

Contractor to confirm the following dimensions:

A=	
B=	900
C=	
13=	8500

ıme	nsions:	
E_		8485
F=		8485

EARTH WORKS

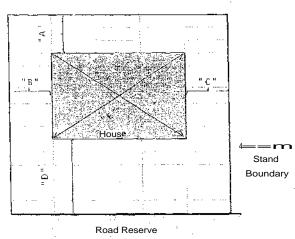
Is the excavations deep enough as specified by the engineers?

Voc

Is the 150mm thick in-situ material ripped and re-compacted to 93% MOD AASHTO? yes

Is the G7 quality material compacted to 95% MOD

AASHTO in 150mm thick layers? yes



Are the final earthworks higher than the surrounding area so that storm water does not affect the house?



NO

BEAMS

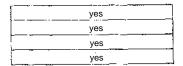
Are beams excavated in the correct position and the right dimensions?

Are beams straight?

Is the top of beam chamfered 45 deg as per detail?

Has all the loose soil in the beam excavation been removed?

Are the trenches dry?



FORMWORK

Is formwork treated with a releasing agent?

Is formwork 100% level?

Is formwork 100% secured?

Is formwork Straight?

	yes	
	yes	
	yes	
F	yes	ļ



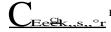




DEVELOPMENT

LEADERS IN THE DE0E10000





House Raft Foundation and Concrete Works

ANT POISON

Has The Engineer received the ant poison certificate from the Contractor?

DAMP COURSE LAYER

Has the damp course layer been installed under slab and beam?

Is the DPC USB green 250 Micron?

Is there a 400mm overlap at the joints od the DPC?

REINFORCING

Has all the steel (or mesh) been installed as per the design and bending schedule?

Has the correct mesh been used? (specify the type of mesh)

Is the steel/mesh free of rust?

Is the mesh overlap length as per specification?

What is the lap length?

Are the stirrups in ground beams spaced correctly?

Have cover blocks been installed to provide the required cover?

Are the cover block tied to the steel?

	yes	
	yes	
	400	
<u> </u>	yes	
	yes	
Ĺ	no	

yes

yes

yes

ENGINEER

12/2-51

Start Time

DATE

6/6/2014

CONCRETE

If ready mix concrete is used, is the supplier quality control approved?

What is the grade / strength of concrete

What is the aggregate size

What is the theoretical volume of concrete

What is the actual volume of concrete poured

Duration of concrete pouring

Was any water added to the concrete mix on site

Is there a concrete vibrator at the raft site prior to placing of concrete?

What was the slump of the concrete? (75mm to 125mm is acceptable)

Have concrete cubes been made on site or at the batch plant?

Is there a screed bar on site to ensure the concrete is placed to the correct level?

Is there a powerfloat machine on site?

Was the concrete adequately vibrated with a concrete vibrator?

POWER FLOATING

Is power floating completed to Engineer's satisfaction

If "NO", the Contractor must provide method statement to correct the work

2SMPa
19mm
11
10.7
Completion
No
yes
75mm
Batch Plant
yes
yes
yes

NO		
		NO

CONCRETE CURING

What curing method will be used?

Close slab with sand and pour water daily

What was the achieved concrete strength; 1) At 7 days?

Shuttering removal period (minimum 36 hours)

17 48 hrs b) At 28 days?

Upon final sign off of this form complying to all requirements the raft may be certified as complete and is due for inclusion in the next Payment Certificate

ENGINEER

DATE

13-Jun-14











yes

Checklist for House Raft foundation and Concrete Works

Employer		Ekurhuleni Metropolitan Municipality
Project	-	Etwatwa Ext 35 - Khombiza
Contract	•	PS/HS23-2013
Contractor	:	Bankuna Construction and Engineering
Date		13-Jun-14
File		

HOUSE NUMBER

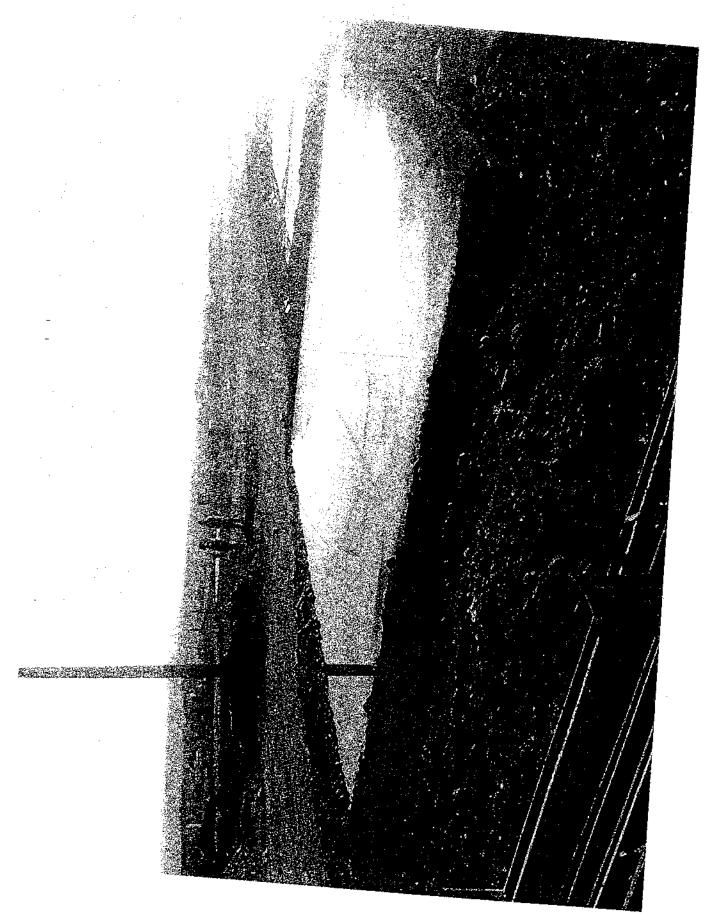
The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and

drawl ngs. SETTING OUT NO Has the builder had the position of the stand boundary beacons confirmed? Contractor to confirm the following dimensions: 8910 A= E = B= 8910 900 13-**EARTH WORKS** Is the excavations deep enough as specified by the engineers? Yes Stand Is the 150mm thick in-situ material ripped and Boundary à re-compacted to 93% MOD AASHTO? Is the G7 quality material compacted to 95% MOD Road Reserve AASHTO in 150mm thick layers? Are the final earthworks higher than the surrounding area so that storm water does not affect the house? NO **BEAMS** Are beams excavated in the correct position and the right dimensions? yes Are beams straight? <u>yes</u> Is the top of beam chamfered 45 deg as per detail? yes Has all the loose soil in the beam excavation been removed? yes Are the trenches dry? **FORMWORK** is formwork treated with a releasing agent? yes Is formwork 100% level? yes Is formwork 100% secured? yes Is formwork Straight?

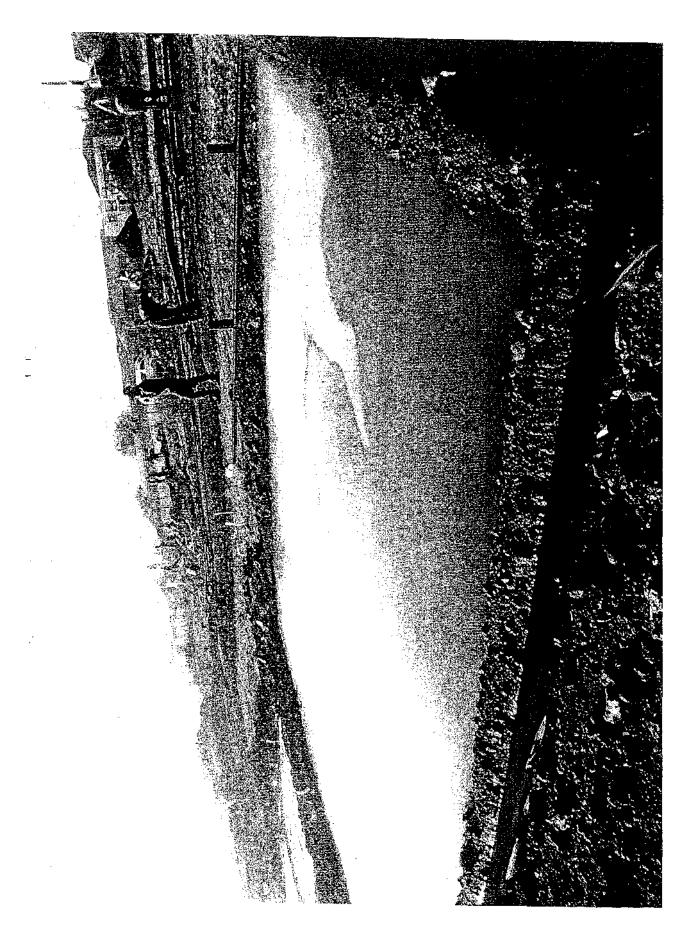


SITE PHOTOS









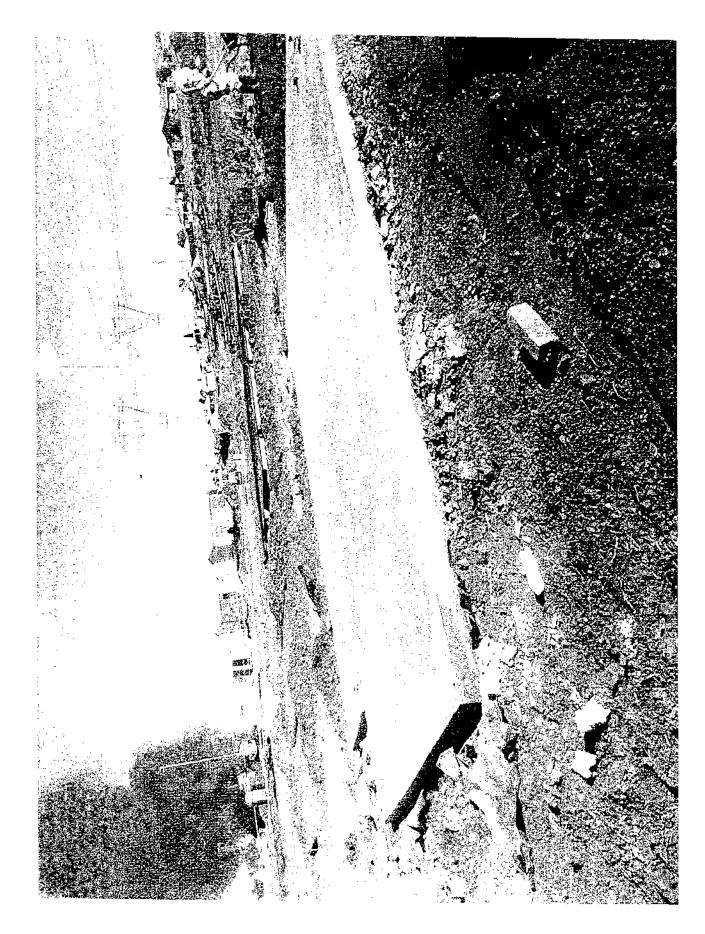
































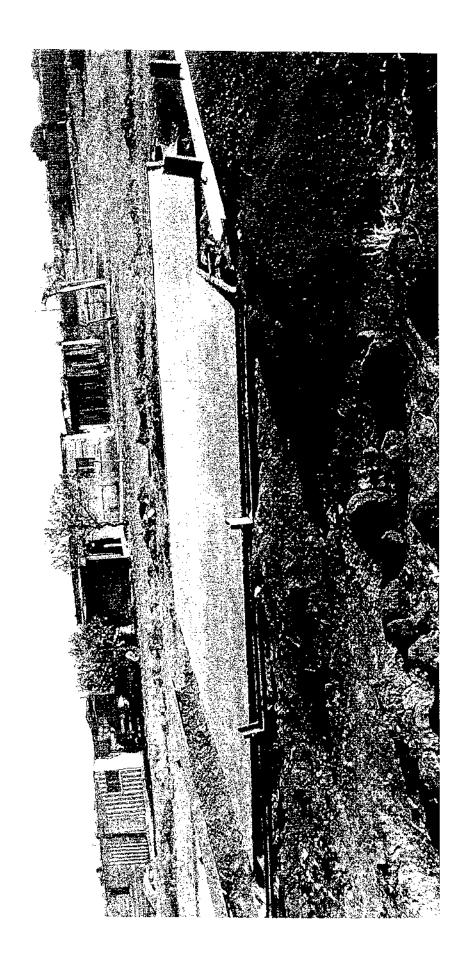








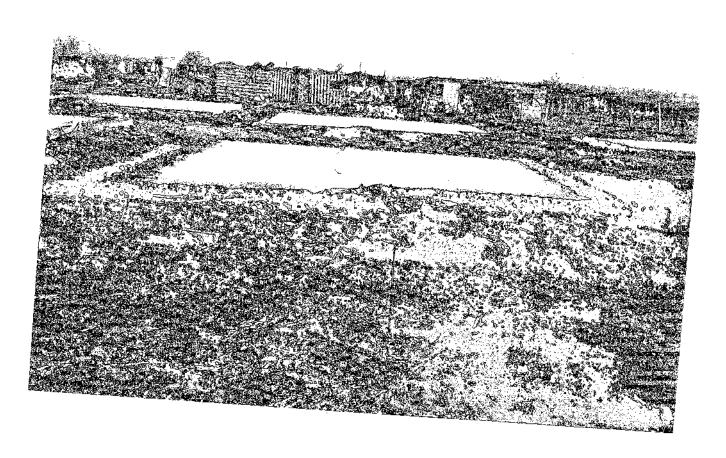






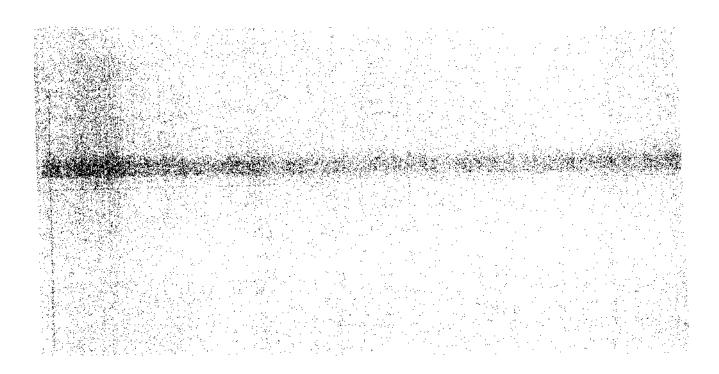






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WALL PLATE

INSPECTION REQUEST



WALL PLATE INSPECTION REQUEST



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TOP STRUCTURE CHECKLIST





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Checklist for House Super Structure

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	10 February 2014
File	

 $The \ Contractor \ has \ established \ that \ these \ controlled \ works \ have \ been \ constructed \ to \ \textit{the} \ correct \ horizontal \ and \ vertical \ alignment$ and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

House Number	36983					
BRICK WORK				_		
is the bricks SASS 0400	approved?			-	yes	
Are the minimum streng	th of the bricks as per spec	ification?		-	yes	
Does mortar mix comply	with SAGS 0164?			[yes	
- 1 part cement to 5 part						
- Minimum 28 day streng	gth > 5 MPA					
- Sand to be free of orga	nic material					
Is damp proof installed	between the raft and all wa	ılls?			no	
Is the brick force installe	ed according to the specific	ation?			yes	
- Minimum diameter of I	brickforce to be 2.8mm					
- Every 4th course						
- Every course above do	ors and windows					
- Brickforce to be bent a	t right angles at corners					
Toothing is not allowed	! !					
Does the wail have a 20	Omm overlap on the raft?				yes	
Have the walls been see	t out according to the layou	ıt plan?			yes	
Are the walls plumb?					yes	
Are ail the walls being internal and external w	constructed concurrently to	o ensure proper in	nterlock between		i <u>yes</u>	
internal and external w	rans?					
Have all the door fram	es been placed in the corre	ct position, plum	bed and square?		<u>yes</u>	
Ensure that the are in t	he correct position for hing	gescorrect openin	g and closing.			
Are the thicknes of stee	el/wooden doors and frame	es according to sp	ecification?		L <u>yes</u>	
Are the roof ties accord	ling to enecification?				Voc	
- Minimum depth of roc					yes	
Principal Agent, Engin	eer					
Name E. Kadzviti		ignature			Date	10 February 2014
			A.	.*		
Clerk of Works			VID 1.			
Name la	S	ignature			Date	10/02/2014
	Unan sig	n off at this stage	roofing may cor			



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Checklist for House Super Structure

		ر	
Employer	Ekurhuleni Metropolitan Municipality		
Project	Etwatwa Ext 35 - Combiza		
Contract	PS/HS23-2013		
Contractor	Bankuna Construction and Engineering		
Date	10 February 2014		
File			
	hed that these controlled works have been constructed to the corck has been carried out to the required standards and specifical 36985		_
DDICK WODK			
BRICK WORK is the bricks SABS 0400 app	royad?	1 100	
is the offers SABS 0400 app	loveu:	l <u>yes</u>	
Are the minimum strength of	of the bricks as per specification?	yes	
Does mortar mix comply wit	h SABS 0164?	yes	
- 1 part cement to 5 ports of	fsand		
- Minimum 28 day strength	a 5 MPA		
- Sand to be free of organic	material		
Is damp proof installed bety	ween the raft and all walls?	no	
Is the brick force installed a	according to the specification?	yes	
- Minimum diameter of brice	-	5.50	
- Every 4th course			
- Every course above doors	and windows		
- Brickforce to be bent at rig	ght angles at corners		
Toothing is not allowed!			
Does the wall have a 20mm	n overlap on the raft?	yes	
Have the walls been set ou	t according to the layout plan?	yes	
Are the walls plumb?		<u>yes</u>	
Are all the walls being con internal and external walls	astructed concurrently to ensure proper interlock between \$?	l <u>yes</u>	
	seen placed in the correct position, plumbed and square? correct position for hingescorrect opening and closing.	yes	
Are the thicknes of steel/w	vooden doors and frames according to specification?	yes	
Are the roof ties according - Minimum depth of roof ti		$\underline{y}^{\underline{es}}$	
Principal Agent, Engineer Name E. Kadzviti	Signature 225	. Date	10 February 2014
Clerk of Works Name	yanti Signature	Date	10/02/2014

Upon sign off at this stage, roofing may commence!













Checklist for House Super Structure

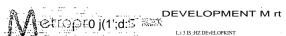
Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	10 February 2014
File	

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

House Number	36984			
BRICK WORK				
Is the bricks SABS D400 app	proved?		yes	
			<i>y</i> 0.5	
Are the minimum strength	of the bricks as per specification?	I_	yes	
Does mortar mix comply wi	th SABS 0164?		yes	
- 1 part cement to 5 parts of	of sand			
- Minimum 28 day strength	> 5 MPA			
- Sand to be free of organic	c material			
Is damp proof installed bet	ween the raft and ail walls?	I_	no	
is the brick force installed	according to the specification?		yes	
- Minimum diameter of brid	ckforce to be 2.8mm			
- Every 4th course				
- Every course above doors				
- Brickforce to be bent at ri	ght angles at corners			
Toothing is not allowed!				
Does the wall have a 20m	m overlap on the raft?		yes	
Have the walls been set or	at according to the layout plan?	-	yes	
Are the walls plumb?		-	yes	
Are all the walls being con internal and external wall	nstructed concurrently to ensure proper interlock s?	between i	yes	
	been placed in the correct position, plumbed and correct position for hingescorrect opening and cle	*	yes	
	wooden doors and frames according to specificati	-	yes	
Are the roof ties according - Minimum depth of roof ti		i	yes	
Principal Agent, Engineer Name E. <u>Kadzviti</u>			Date	10 February 2014
Clerk of Works	Jan Ju Signature		Date	W7.22/2014
<u> </u>		·		
L	Upon sign off at this stage, roofing	may commence!		









Ekurhuieni Metropolitan Municipality





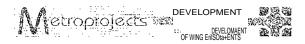
Employer

Checklist for House Super Structure

Project	Etwatwa Ext 35 - Combiza	
Contract	PS111823-2013	
Contractor	Bankuna Construction and Engineering	
Date	10-Feb-15	
File		
The Contractor has establish	hed that these controlled works have been constructed to the co	orrect horizontal and vertical alignment
	k has been carried out to the required standards and specifica	
drawings.		
•		
House Number	36905	
BRICK WORK		
is the bricks SABS 0400 app	roved?	yes
Are the minimum strength o	of the bricks as per specification?	yes
Does mortar mix comply with	n SABS 0164?	
- 1 part cement to Sports of	sand	
- Minimum 28 day strength	> 5 MPA	
- Sand to be free of organic	material	
Is damp proof installed betw	veen the raft and all walls?	no
		<u></u>
is the brick force installed a	according to the specification?	yes
- Minimum diameter of brici		
- Even/ 4th course		
- Every course above doors	and windows	
- Brickforce to be bent at rig		
· ·		
Taathina is not allowed		
Toothing is not allowed!		
Door the well have a 20mm	n availan on the vaft?	
Does the wall have a 20mn	n overlap on the rait?	yes,
		<u></u>
Have the walls been set ou	it according to the layout plan?	yes
Are the walls plumb?		ves
	structed concurrently to ensure proper interlock between	yes
internal and external walls	3?	
•		
	een placed in the correct position, plumbed and square?	yes
Ensure that the are in the	correct position for hingescorrect opening and closing.	
Are the thicknes of steel/w	rooden doors and frames according to specification?	i yes
Are the roof ties according		<u>ves</u>
- Minimum depth of roof tie	es is 6 cources	
F		
Data stars i A	on Olarik of Warks	
Principal Agent, Engineer		No. 20 2045
Name <u>E Kadzviti</u>	Signature	Date [10-02-2015
ł		

Upon sign off at this stage, roofing may commence)









Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2013
;Contractor	Bankuna Construction and Engineering
Date	10-Feb-15
'File	

Nouse Number	36904		
BRICK WORK,			
is the bricks SABS 0400	approved?	yes	
Are the minimum streng	gth of the bricks as per specification?	yes	
Does mortar mix compl	y with SABS 0164?	yes	
- 1 part cement to .5 pa	arts of sand		
- Minimum 28 day strer	ngth ,> 5 MPA		
- Sand to be free of org	anic material		
Is damp proof installed	l between the raft and all walk?	no	
Is the brick force instal	led according to the specification?	yes	
- Minimum diameter of	f brickforce to be 2.8mm		
- Every 4th course			
- Every course above of	loors and windows		
- Brickforce to be bent	at right angles at corners		
Toothing is not allowe	ed!		
Dots the wall have a 2	0mm overlap on the raft?	yes	
Have the walls been se	et out according to the layout plan?	yes	
Are the walls plumb?		L Ys	
Are all the walls being internal and external	constructed concurrently to ensure proper interlock between walls?	yes	
	nesbeen placed in the correct position, plumbed and square? the correct position for hingescorrect opening and closing.	yes	
Are the thicknes of ste	eel/wooden doors and frames according to specification?	yes	
Are the roof ties acco	rding to specification?	yes	
- Minimum depth of r	oof ties is 6 cources		
IPrincipal Agent, Engi Name i <u>E. Kadzvi</u>	neer or Clerk of Works ti	Date [10-02-2015	
	Upon sign off at this stage, roofing may comment&	· · · · · · · · · · · · · · · · · · ·	











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Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2013
Contractor	Bankuna Construdtion and Engineering
Date	10-Feb-15
File	

House Number	36981	<u>1</u>					
BRICK WORK							
s the bricks SASS 0400 approv	ed?			ye	s		
Are the minimum strength of th	e bricks as per specifi	cation?		ye	s		
Does mortar mixoomply with S	ABS 0164?			ye	s		
- 1 port cement to S ports of sa	nd						
- Minimum 28 day strength > 5	MPA						
- Sand to be free of organic ma	iterial						
Is damp proof installed betwee	en the raft and all walls	s?		l <u>n</u>	<u>o</u>		
Is the brick force installed acco	ording to the specificat	ion?		y€	es		
 Minimum diameter of brickfo 	rce to be 2.8mm						
- Every 4th course							
 Every course above doors an 							
- Brickforce to be bent at right	ongles at corners						
Toothing is not allowed!							
Does the wall have a 20mm o	verlap on the raft?			y	es		
Have the walls been set out a	ccording to the layout	plan?		у	es		
Are the walls plumb?				У	<u>res</u>		
Are all the walls being construinternal and external walls?	ucted concurrently to e	ensure prope	r interlock between	у	es/es		
Have all the door frames been Ensure that the are in the cor	•		•	У	/es		
Are the thitknes of steel/wood	den doors and frames	according to	specification?	>	yes		
Are the roof ties according to	specification?			,	yes		
- Minimum depth of roof ties	is 6 cources						
Principal Agent, Engineer or				_			
Name iE. <u>Kadzviti</u>	=1 Sig	nature		Date)	10-02-2015	
	Upon sian	off at this sta	ge, roofing may con	nmence.			







Ekurhuieni Metropolitan Municipality







Employer

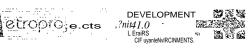
Checklist for House Super Structure

Froject	Etwatwa Ext 35 -Combiza		
Contract	PSIFIS23-2013		
Contractor	Bankuna Construction and Engineering		
Date	10-Feb-15		
File			
	shed that these controlled works have been constructed to the k k has been carried out to the required standards and specific	•	
House Number	36986		
BRICK WORK			
Is the bricks SABS 0400 app	roved?	<u>yes</u>	
Are the minimum strength of	f the bricks as per specification?	<u>ves</u>	— _J
Does mortar mix comply wit	n SABS 0164?	<u>yes</u>	
- 1 pert cement to 5 parts o		; —	
- Minimum 28 day strength	>5 MPA		
- Sand to be free of organic	material		
Is damp proof installed bet	veen the raft and all wails?	no	
Is the brick force installed a - Minimum diameter of brick	ccording to the specification?	L yes	
- Every 4th course			
- Every course above doors	and windows		
- Brickforce to be bent of rig	tht angles at corners		
Teething is not allowed!			
Does the wall have a 20mr	n overlap on the raft?	yes	
Have the wails been set ou	t according to the layout plan?	yes	
Are the walls plumb?		yes	
Are all the walls being con internal and external wall	structed concurrently to ensure proper interlock between s?	<u>yes</u>	
	een placed in the correct position, plumbed and square? correct position for hingescorrect opening and closing.	<u>yes</u>	
Are the thicknes of steel/w	ooden doors and frames according to specification?	yes	
Are the roof ties according - Minimum depth of roof ti		yes	
Principal Agent, Engineer Name E. Kadzviti	or Clerk of Works gnature	Date <u>110-02-2015</u>	_
	Upon sign off at this stage, roofing may commend	ce	













Contractor		~
Contractor Bankuna Construction and Engineering Date 10-Feb-15 The Contractor has established that these controlled works have been constructed to the correct I and position, that such work has been carried out to the required standards and specifications, drawings. House Number 36988 BRICK WORK Is the bricks SABS 0400 approved? Are the minimum strength of the bricks as per specification? Does mortar mix comply with SABS 0164? 1 part cement to 5 ports of sand - Minimum 28 day strength > 5 MPA - Sand to be free of organic material Is damp proof installed between the raft and all walls? Is the brick force installed according to the specification? - Minimum diameter of brickforce to be 2.8mm - Every 4th course - Every tocurse - Every course above doors and windows - Brickforce to be bent at right angles at corners Toothing is not allowed! Does the wall have a 20mm overlap an the raft? Have the walls been set out according to the layout plan? Are the walls being constructed concurrently to ensure proper interlock between internal and external walls? Have all the door frames been placed in the correct position, plumbed and square? Ensure that the are in the correct position for hingescorrect opening and closing. Are the troof ties according to specification? Are the troof ties according to specification?		
The Contractor has established that these controlled works have been constructed to the correct of and position, that such work has been carried out to the required standards and specifications, frawings. **Journal of the bricks of the bricks as per specification?** **John the minimum strength of the bricks as per specification?** **John the minimum strength of the bricks as per specification?** **John the minimum strength of the bricks as per specification?** **John the minimum the strength of the bricks as per specification?** **John the strength of the bricks as per specification?** **John the strength of the bricks as per specification?** **John the strength of the bricks as per specification?** **John the strength of the bricks as per specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the strength of the specification?** **John the strength of the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification?** **John the strength of the specification.** **John the strength of		
The Contractor has established that these controlled works have been constructed to the correct indiges position, that such work has been carried out to the required standards and specifications, frawings. House Number		
the Contractor has established that these controlled works have been constructed to the correct indiposition, that such work has been carried out to the required standards and specifications, trawings. House Number 36988 SRICK WORK Set the bricks SABS 0400 approved? Are the minimum strength of the bricks as per specification? Does mortar mix comply with SABS 0164? It part cement to 5 ports of sand Minimum 28 day strength > 5 MPA Sand to be free of organic material Its damp proof installed between the raft and all walls? Its the brick force installed according to the specification? Minimum diameter of brickforce to be 2.8mm Every 4th course -Every course above doors and windows - Brickforce to be bent at right angles at corners Toothing is not allowed! Does the wall have a 20mm overlap and the raft? Have the walls been set out according to the layout plan? Are the walls being constructed concurrently to ensure proper interlock between internal and external walls? Have all the door frames been placed in the correct position, plumbed and square? Ensure that the are in the correct position for hingescorrect opening and closing. Are the thicknes of steel/wooden doors and frames according to specification? Are the roof ties according to specification?		
he Contractor has established that these controlled works have been constructed to the correct in diposition, that such work has been carried out to the required standards and specifications, trawings. **ROUSE Number** 36988** **RICK WORK** **STANDER SABS 0400 approved?* **Are the minimum strength of the bricks as per specification?* **Prove the minimum strength of the bricks as per specification?* **Prove the minimum strength of the bricks as per specification?* **Prove the minimum strength of the bricks as per specification?* **Prove the minimum strength of the bricks as per specification?* **Prove the content of the strength of the specification?* **Prove the course of organic material* **Prove the course of brickforce to be 2.8mm* **Prove the course of brickforce to be 2.8mm* **Prove the course of the strength of the specification?* **Prove the course of the strength of the specification?* **Prove the course of the strength of the specification?* **Prove the course of the strength of the specification?* **Prove the course of the strength of the specification?* **Prove the course of the strength of the specification?* **Prove the strength of the speci		
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Are the walls plumb? Are all the walls being constructed concurrently to ensure proper interlock between internal and external walls? Have all the door frames been placed in the correct position, plumbed and square? Ensure that the are in the correct position for hingescorrect opening and closing. Are the thicknes of steel/wooden doors and frames according to specification? Are the roof ties according to specification?		
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Ensure that the are in the correct position for hingescorrect opening and closing. Are the thicknes of steel/wooden doors and frames according to specification? Are the roof ties according to specification?		
Ensure that the are in the correct position for hingescorrect opening and closing. Are the thicknes of steel/wooden doors and frames according to specification? Are the roof ties according to specification?	ves	
Are the thicknes of steel/wooden doors and frames according to specification? Are the roof ties according to specification?		
Are the roof ties according to specification?		•
Are the roof ties according to specification?	yes	
- '		
- · ·	yes	
	:	
Principal Agent, Engineer or Clerk of Works		
Name E. <u>Kadzviti</u> Signature	Date	110-02-2015











Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	10-Feb-15
File	

House Number	36987		
DDIOK WODK			
BRICK WORK			
Is the bricks SABS 0400 approved?		yes	
Are the minimum strength of the brick	s as per specification?	yes	
Does mortar mix comply with SABS 0	164?	yes	
- 1 part cement to 5 parts of sand			
- Minimum 28 day strength > 5 MPA			
- Sand to be free of organic mated&			
Is damp proof installed between the r	raft and ail walls?	по	
Is the brick force installed according t	to the specification?	yes	
- Minimum diameter of brickforce to l	·	,	
- Every 4th course			
- Every course above doors and winde	ows		
- Brickforce to be bent at right angles			
0 0			
Toothing is not allowed!			
Does the wall have a 20mm overlap	on the raft?	yes	
Have the wails been set out according	ng to the layout plan?	yes	
Thave the Maile Been eet eat according	g to the layout plant		
Are the walls plumb?		L yes	
		L y	
Are all the walls being constructed c	concurrently to ensure proper interlock between	yes	
internal and external walls?			
Have all the door frames been place	d in the correct position, plumbed and square?	yes	
Ensure that the are in the correct po	sition for hingescorrect opening and closing.		
Are the thicknes of steel/wooden do	ors and frames according to specification?	yes	
Are the roof ties according to specifi		yes	
- Minimum depth of roof ties is 6 cou	urces		
Principal Agent Engineer or Clark	of Works		
Principal Agent, Engineer or Clerk of Name IE. Kadzviti		Date	10-02-201F
Name [E. Kadzviti	1 Signature	Date	10-02-2015
	Upon sign off at this stage, roofing may commo	ence!	
	. 3		







DEVELOPMENT

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Checklist for House Super Structure

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PSIHS23-2013
Contractor	Bankuna Construction and Engineering
Date	10-Feb-15
File	

House Number 36993		
BRICK WORK		
Is the bricks SABS 0400 approved?	I <u>yes</u>	
Are the minimum strength of the bricks as per specification?	yes	
Does mortar mix comply with SABS 0164?	yes	
-1 port cement to 5 parts of sand		_
- Minimum 28 day strength > 5 MPA		
- Sand to be free of organic material		
is damp proof installed between the raft and all walls?	no	
Is the brick force installed according to the specification?	yes	
- Minimum diameter of brickforce to be 2.8mm		
- Every 4th course		
- Every course above doors and windows		
- Brickforce to be bent at right angles at corners		
Toothing is not allowed!		
Does the wall have a 20mm overlap on the raft?	yes	
Have the walls been set out according to the layout plan?	yes	
Are the walls plumb?	I <u>yes</u>	
Are all the walls being constructed concurrently to ensure proper interlock between	yes	
internal and external walls?		
Have all the door frames been placed in the correct position, plumbed and square?	yes	
Ensure that the are in the correct position for hingescorrect opening and closing.		
Are the thicknes of steel/wooden doors and frames according to specification?	yes	
Are the roof ties according to specification?	yes	
- Minimum depth of roof ties is 6 cources	•	
Principal Agent, Engineer or Clerk of Works		
Name IE. Kadzviti j Signature	Date	10-02-2015
The state of the s		













Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS1HS23-2013
Contractor	Bankuna Construction and Engineering
Date	10-Feb-15
File	

drawings.		
House Number	36997	
BRICK WORK		
Is the bricks SABS 0400	approved?	<u>yes</u>
Are the minimum streng	th of the bricks as per specification?	yes
Does mortar mix comply	with SABS 0164?	yes
- 1 port cement to 5 port	ts of sand	
- Minimum 28 day streng	gth > 5 MPA	
- Sand to be free of orga	nic material	
Is damp proof installed	between the raft and all walls?	no
Is the brick force installed - Minimum diameter of k	ed according to the specification?	yes
- Every 4th course	DICKIOICE to be 2.0mm	
- Every course above do	oors and windows	
- Brickforce to be bent a		
Toothing is not allowed	∄ !	
Does the wall have a 20	Omm overlap on the raft?	yes
Have the walls been set	t out according to the layout plan?	yes
Are the walls plumb?		yes
Are all the walls being internal and external w	constructed concurrently to ensure proper interlock between valls?	yes
	es been placed in the correct position, plumbed and square? he correct position for hingescorrect opening and closing.	yes
Are the thicknes of stee	el/wooden doors and frames according to specification?	yes
Are the roof ties accord - Minimum depth of roo		L <u>Yes</u>
Principal Agent, Engin Name [<u>E. Kadzviti</u>		Date 40-02-2015
<u> </u>	Upon sign off at this stage, roofing may commence	!











Ekurhuieni Metropolitan Municipality
Etwatwa Ext 35 - Combiza
PS/HS23-2013
Bankuna Construction and Engineering
10-Feb-15

drawings.	
House Number 37001	
BRICK WORK	
is the bricks SASS 0400 approved?	yes
Are the minimum strength of the bricks as per specification?	yes
Does mortar mix comply with SASS 0164?	yes
- 1 part cement to 5 parts of sand	
- Minimum 28 day strength > 5 MPA	
- Sand to be free of organic material	
is damp proof installed between the raft and ail walls?	<u>L</u> <u>no</u>
Is the brick force installed according to the specification?	yes
- Minimum diameter of brickforce to be 2.8mm	
- Every 4th course	
 Every course above doors and windows Brickforce to be bent at right angles at corners 	
Toothing is not allowed!	
Does the wall have a 20mm overlap on the raft?	yes
Have the walls been set out according to the layout plan?	yes
Are the walls plumb?	ves
Are all the walls being constructed concurrently to ensure proper interlock between internal and external walls?	yes
Have all the door frames been placed in the correct position, plumbed and square?	yes
Ensure that the are in the correct position for hingescorrect opening and closing.	
Are the thicknes of steel/wooden doors and frames according to specification?	yes
Are the roof ties according to specification? - Minimum depth of roof ties is 6 coerces	LYes
Principal Agent, Engineer or Clerk of Works Name E. Kadzviti 1 Signature	Date 0-02-2015
Upon sign off at this stage, roofing may commence!	











Employer	Ekurhuieni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	10-Feb-15
File	

House Number	37005		
BRICK WORK			
s the bricks SABS 0400 ap	pproved?	yes	
Are the minimum strength	of the bricks as per specification?	yes	
Does mortar mix comply with SABS 0164?			
- 1 part cement to 5 ports	of sand		
- Minimum 28 day strength	h > 5 MPA		
- Sand to be free of organi	ic material		
s damp proof installed be	etween the raft and all wails?	0	
	according to the specification?	yes	
Minimum diameter of bri	ickforce to be 2.8mm		
- Every 4th course			
 Every course above door 			
- Brickforce to be bent at r	right angles at corners		
Toothing is not allowed!			
Does the wall have a 20m	nm overlap on the raft?	yes	
Have the walls been set of	out according to the layout plan?	yes	
Are the walls plumb?		yes	
Are all the walls being constructed concurrently to ensure proper interlock between internal and external walls?		1 <u>yes</u>	
Have all the door frames been placed in the correct position, plumbed and square? Ensure that the are in the correct position for hingescorrect opening and closing.		<u>ves</u>	
Are the thicknes of steel/	wooden doors and frames according to specification?	I yes	
Are the roof ties according	ng to specification?	yes	
- Minimum depth of roof		yes	
Principal Agent, Enginee	er or Clerk of Works		
Name IE. Kadzviti	Signature	Date	10-02-2015
		24.0	
	Upon sign off at this stage, roofing may commen	ce]	









Ekurhuleni Metropolitan Municipality





Employer

Checklist for House Super Structure

Project	Etwatwa Ext 35 - Combiza	
Contract	PSIHS23-2013	
Contractor	Bankuna Construction and Engineering	
Date	10-Feb-15	
File		
	nat these controlled works have been constructed to the cost seen carried out to the required standards and specific	
House Number	37006	
BRICK WORK		F
Is the bricks SABS 0400 approved	17	yes
Are the minimum strength of the	bricks as per specification?	yes
Does mortar mix comply with SA	BS 0164?	yes
- i part cement to .5 parts of sand	d	<u> </u>
- Minimum 28 day strength > 5 M	MPA .	
- Sand .to be free of organic mate	rial	
Is damp proof installed between	the raft and all walls?	ao
Is the brick force installed accord	ding to the specification?	yes
- Minimum diometer of brickford	e to be 28mm	
- Every 4th course		
- Every course above doors and	windows	
- Brickforce to be bent at right a	ngles at corners	•
nothing is not allowed!		
Does the wall have a 20mm over	erlap on the raft?	Lyes
Have the walls been set out acc	ording to the layout plan?	yes
Are the wails plumb?		yes
Are al; the walls being construction internal and external walls?	ted concurrently to ensure proper interlock between	yes
	placed in the correct position, plumbed and square?	yes

Principal Agent, Engineer or Clerk of Works

Name E. <u>Kadzviti</u> Signature Date <u>110-D2-2015</u>

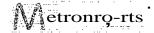
Upon sign off at this stage, roofing may commence!



Are the thicknes of steel/wooden doors and frames according to specification?

Are the roof ties according to specification? - Minimum depth of roof ties is 6 cources







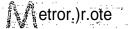




*Employer	Ekurhuleni Metropolitan Municipality	
l= oject	Etwatwa Ext 35 - Combiza	
Contract	PSIHS23-2013	
Contractor	Bankuna Construction and Engineering	
Date	10-Feb-15	
File		
and position, that such work has been of drawings.	e controlled works have been constructed to the carried out to the required standards and specifi	=
BRICK WORK		
isthe bricks SABS 0400 approved?		yes
Are the minimum strength of the bricks a	s per specification?	yes
Does mortar mix comply with SABS 0164	?	yes
- part cement to Sports of sand		
- Minimum 28 day strength > 5 MPA		
-Sand to be free of organic material		
Is damp proof installed between the raft	and all walls?	<u>no</u>
as damp proof instance between the fair	and an wans.	. 10
Is the brick force installed according to the	e specifiCation?	yes
- Minimum diameter of brickforce to be 2	•	y es
- Every 4th course		
-Every course above doors and windows		
-Brickforce to be bent at right angles at		
Toothing is not allowed!		
Does the wall have a 20mm overlap on	the raft?	yes
Have the walls been set out according to	the layout plan?	yes
Are the walls plumb?		Nos
Are the wans piumo:		yes
Are all the walls being constructed cond	currently to ensure proper interlock between	yes
internal and external walls?	variently to ensure proper interioek between	
memarana exemar wans.		
	the correct position, plumbed and square? on for hingescorrect opening and closing.	yes
Are the thicknes of steel/wooden doors	and frames according to specification?	yes
Are the roof ties according to specificat	ion?	yes
- Minimum depth of roof ties is 6 course		L 7
similar by roof desired to confee	•	
		···· · · · · · · · · · · · · · · · · ·
Principal Agent, Engineer or Clerk of W	/orks	2
Name <u>E. Kadzviti</u>	Signature	Date 10-02-2015
!		

Upon sign off at this stage, roofing may commence:







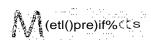




Employer	Ekurhuleni Metropolitan Municipality	
Project	Etwatwa Ext 35 - Combiza	
C ntract	PS/HS23-2013	
Contractor	Bankuna Construction and Engineering	
Date	10-Feb-it	
File		1
	ese controlled works have been constructed to the constructed to the constructed out to the required standards and specificates.	
House Number	<u>37013</u>	
BRICK WORK		
Is the bricks SAES 0400 approved?		yes
Are the minimum strength of the bricks	s as per specification?	yes
Does mortar mix comply with SAGS 01	64?	yes
- I port cement to .5 parts of sand		
- Minimum 28 day strength > 5 MPA		
- Sand to be free of organic material		
is damp proof installed between the ra	aft and all walls?	no
Is the brick force installed according to	the specification?	[yes
- Minimum diameter of brickforce to b	-	
- Every 4th course		
- Every course above doors and window	ws	
- Brickforce to be bent at right angles a	at corners	
Toothing is not allowed!		
Does the wall have a 20mm overlap o	n the raft?	yes
Hove the wells been set out seconding	states lavavit mlan2	
Have the walls been set out according	to the layout plan?	yes
Are the walls plumb?		<u> </u>
Are the walls plants:		<u>ves</u>
Are all the walls being constructed co	ncurrently to ensure proper interlock between	yes
internal and external walls?	,	,
	in the correct position, plumbed and square?	yes
Ensure that the are in the correct pos	ition for hingescorrect opening and closing.	
Are the thicknes of steel/wooden door	rs and frames according to specification?	yes
Are the roof ties according to specific	ation?	
- Minimum depth of roof ties is 6 cour		yes
- minimum deput of root des is 6 cour	ves	
	· · · · · · · · · · · · · · · · · · ·	
Principal Agent, Engineer or Clerk of	Works	
Name E. Kadzviti	Signature Signature	Date 10-02-2015
	_	

Upon sign off at this stage, roofing may commence!











Checklist for House Super Structure

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 36 - Combiza
Contract	PSIHS23-2313
Contractor	Bankuna Construction and Engineering
Date	10-feb-15
File	

and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

House Number	<u>37014</u>			
BRICK WORK				
is the bricks SABS 0400 appr	oved?		yes	
Are the minimum strength of <i>the</i> bricks as per specification?		r yes		
Does mortar mix comply with	SABS 0164?		yes	
- 1 part cement to 5 ports of	sand			
- Minimum 28 day strength :	> 5 MPA		•	
- Sand to be free of organic i	material			
			r	
is damp proof installed betw	een the raft and all walls?		<u>no</u>	
Is the brick force installed ac	ccording to the specification?		yes	
- Minimum diameter of brick				
- Every 4th course				
- Every course above doors	and windows			
- Brickforce to be bent at rig	ht angles at corners			
Toothing is not allowed!				
Does the wall have a 20mm	overlap on the raft?		yes	
Have the walls been set out	according to the layout plan?	•	yes	
			,	
Are the walls plumb?			yes	
Are all the walls being cons	structed concurrently to ensur	e proper interlock between	ves	4 181-1
Are all the walls being constructed concurrently to ensure proper interlock between internal and external walls?				
•				
Have all the door frames be	een placed in the correct posit	tion, plumbed and square?	_ <u>y</u> es	
Ensure that the are in the o	correct position for hingescorre	ect opening and closing.		
Are the thicknes of steel/w	ooden doors and frames acco	ording to specification?	yes	
		raing to opcompanion.	l , , , , , , , , , , , , , , , , , ,	
Are the roof ties according	to specification?		yes	
- Minimum depth of roof tie	es is 6 cources			
<u></u>		 		
Principal Agent, Engineer	or Clerk of Works	1 -71	. g	
Name _I E. <u>Kadzviti</u>	Signatui	re ====================================	Date	10-02-2015
	Upon sign off at	this stage, roofing may com	mence!	
64 Ekurhuleni umar, settlements PHAS	SE P ETWATWAV SFr Mop Structure Rep	ports \ 370110314 Structure Report.xlsx		









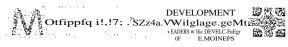


Employer	Ekurhuleni Metropolitan Municipality	
Project	"=twatwa Ext 35 - Combiza	
Contract	PSIHS23-2013	
Contractor	Bankuna Construction and Engineering	
Date	15-Feb-15	
File		

House Number	37015			
BRICK WORK				
Is the bricks SABS 040	.0 approved?	yes]
Are the minimum street	ngth of the bricks as per specification?	yes]
Does mortar mix comp	ly with SABS 0164?	yes		7
-1 port cement to 5 p	•			_
- Minimum 28 day stre	ength > 5 MPA			
- Sand to be free of or	ganic material			
Is damp proof installe	d between the raft and all walls?	no]
Is the brick force insta	alled according to the specification?	yes		٦
- Minimum diameter d	of brickforce to be 2.8mm			_
 Every 4th course 				
- Every course above	doors and windows			
- Brickforce to be ben	t at right angles at corners			
Toothing is not allow	red!			
Does the wall have a	20mm overlap on the raft?	yes		-
Have the walls been	set out according to the layout plan?	yes		
Are the walls plumb?	,	ves		
Are all the walls beir	ng constructed concurrently to ensure proper interlock between	yes		
internal and external	a wans:			
Have all the door frames been placed in the correct position, plumbed and square?				\Box
Ensure that the are in	n the correct position for hingescorrect opening and closing.			
Are the thicknes of s	teel/wooden doors and frames according to specification?	yes		
Are the roof ties acco	ording to specification?	"es		
- Minimum depth of		<u> </u>		
Γ				~
Principal Agent. Eng	ineer or Clerk of Works			
Name <u>E. Kadzy</u>		Date	0-02-2015	
ļ	Upon sign off at the stage, roofing may commence!			_











!Employer	Ekurhuleni Metropolitan Municipality
Project	Etwah,va Ext 35 -Cornhiza
1Contract	PS/RS23-2013
{Contractor	Bankuna Construction and Engineering
Date	10-Feb-15
File	

House Number 37016	
BRICK WORK	
Is the bricks SABS 0400 approved?	yes
Are the minimum strength of the bricks as <i>per</i> specification?	yes
Does mortar mix comply with SABS 0164?	yes
- 1 port cement to Sports of sand	
- Minimum 28 day strength > 5 MPA	
- Sand to be free of organic material	
is damp proof installed between the raft and all walls?	no
is the brick force installed according to the specification?	yes
- Minimum diameter of brick!orce to be 2.8mm	7
- Every 4th course	
- Every course above doors and windows	
- Brickfores to be bent at right angles at corners	
Mottling is not allowed!	
Does the wall have a 20mm overlap on the raft?	yes
Have the walls been set out according to the layout plan?	yes
Are the walls plumb?	yes
Are all the walls being constructed concurrently to ensure proper interlock between internal and external walls?	yes
Have all the door frames been placed in the correct position, plumbed and square? Ensure that the are in the correct position for hingescorrect opening and closing.	yes
Are the thicknes of steel/wooden doors and frames according to specification?	yes
Are the roof ties according to specification? - Minimum depth of roof ties is 6 cources	yes
Principal Agent, Engineer or Clerk of Works Name E. <u>Kadzviti</u> Signature	Date 10-02-2015
Upon sign off at this stage, roofing may commence!	











Project <u>Etw</u>	atwa Ext 30 - Combiza		
Contract	1 S23-2013		
	kuna Construction and Engineering		
Date 10-F	-eb-15		
File			
The Contractor has established that these contractor, that such work has been carridrawings.			-
House Number 3701	7		
BRICK WORK			
is the bricks SABS 0400 approved?		<u> </u>	<u>res</u>
Are the minimum strength of the bricks as pe	er specification?	У	/es
Does mortar mix comply with SABS 0164?		У	/es
- i port cement to 5 ports of sand			
- Minimum 28 day strength > 5 MPA			
- Sand to be free of organic material			
Is damp proof installed between the raft and	all wails?		no
Is the brick force installed according to the s	pecification?	3	yes
- Minimum diameter of brickforce to be 2.8n	nm		
- Every 4th course			
- Every course above doors and windows			
- Brickforce to be bent of right angles at corr	ners		
Toothing is not allowed!			
Does the wall have a 20mm overlap on the	raft?	į	<u>yes</u>
Have the walls been set out according to the	e layout plan?]	yes
Are the walls plumb?			yes
Are all the walls being constructed concurrent internal and external walls?	ently to ensure proper interlock between	E	yes
Have all the door frames been placed in the Ensure that the are in the correct position for			yes
Are the thicknes of steel/wooden doors and	I frames according to specification?		yes
Are the roof ties according to specification	?		yes
- Minimum depth of roof ties is 6 cources			•
Principal Agent, Engineer or Clerk of Work		_	42.02.024.5
Name I <u>L.</u> <u>Kadzviti</u>	Signature	Da	ite 113-02-201.5

Upon sign off at this stage, roofing may commence!











Employer	Ekurhuieni Metropolitan Municipality	
Project	Etwatwa Ext 35 - Combiza	
Contract	PSIHS23-2013	
Contractor	Cankuna Construction and Engineering	
Date	10-Feb-15	
File		

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment

drawings.	th work has been carried out to the required standards and specificati		
House Number	37018		
BRIČK WORK			
is the bricks SABS 040	00 approved?	yes	_
Are the minimum stre	ength of the bricks as per specification?	yes	
Does mortar mix com	ply with SABS 0164?	yes	_
- 1 part cement to 5 p	ports of sand		
- Minimum 28 day str	rength a 5 MPA		
- Sand to be free of o	rganic material		
is damp proof installe	ed between the raft and all walls?	no	
Is the brick force insta	alled according to the specification?	yes	
- Minimum diameter	of brickforce to be 2.8mm		
- Every 4th course			
- Every course above	doors and windows		
- Bockforce to be ber	nt at right angles at corners		
Toothing is not allow	wed!		
Does the wall have a	20mm overlap on the raft?	yes	
Have the wails been	set out according to the layout plan?	yes	
Are the walls plumb	?	yes	_
Are all the walls beir internal and external	ng constructed concurrently to ensure proper interlock between al walls?	yes	
	mes been placed in the correct position, plumbed and square? in the correct position for hingescorrect opening and closing.	<u>ves</u>	
Are the thicknes of	steel/wooden doors and frames according to specification?	yes	
Are the roof ties acc	cording to specification?	Yes	
- Minimum depth of	roof ties is 6 cources		
Principal Agent, En Name <u>1E. Kadz</u>	gineer or Clerk of Works viti Signature	Date 110-02-2015	_·
ļ·	Upon sign off at this stage, rooung may commence.		













Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	10-Feb-15
File	

House Number	<u>37019</u>			
BRICK WORK				
Is the bricks SA	ABS 0400 approved?		<u>ves</u>	
Are the minim	oum strength of the bricks as per s	pecification?	l <u>yes</u>	
Does mortar n	nix comply with SABS 0164?		<u>yes</u>	
- 1 port cemer	nt to S ports of sand		•	
- Minimum 28	day strength > 5 MPA			
- Sand to be f	ree of organic material			
Is damp proof	installed between the raft and ail	walls?	no	
Is the brick fo	rce installed according to the speci	ification?	yes	
- Minimum dia	ameter of brickforce to be 2.8mm			
- Every 4th co	urse			
- Every course	e above doors and windows			
- Brickforce to	be bent at right angles at corners	3		
Toothing is n	ot allowed!			
Does the wall	have a 20mm overlap on the raft	?	yes	
Have the wal	Is been set out according to the lay	yout plan?	L yes	ì .
Are the walls	plumb?		<u>ves</u>	È
	-	y to ensure proper interlock between	en yes	S
internal and	external walls?			
Have all the	door frames been placed in the cor	rrect position, plumbed and square	? ye	S
Ensure that t	he are in the correct position for h	ningescorrect opening and closing.		
Are the thick	nes of steel/wooden doors and fra	ames according to specification?	I <u>ye</u>	S
Are the roof	ties according to specification?		ye	s
	epth of roof ties is 6 cources		•	
Principal Age	ent, Engineer or Clerk of Works			
Name E	. Kadzviti	Signature	Date	I10-02-2015
	Upon	sign off at this stage, roofing may co	ommence I	













Employer	Ekurhuieni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PSMS23-2013
Contractor	Bankuna Construction and Engineering
Date	10-Feb-15
File	

House Number	37020			
BRICK WORK				
Is the bricks SABS 0400 approve	ed?		yes	
Are the minimum strength of the	e bricks as per specification?		<u>ves</u>	
Does mortar mix comply with SA	ABS 0164?	1	yes	
- 1 part cement to 5 parts of sal	nd			
- Minimum 28 day strength S	MPA			
- Sand to be free of organic ma	nterial			
Is damp proof installed between	n the raft and ail walls?		no	
Is the brick force installed acco	ording to the specification?		yes	
- Minimum diameter of brickfor	rce to be 2.8mm			
- Every 4th course				
- Every course above doors and				
- Brickforce to be bent at right a	angles at corners			
Toothing is not allowed!				
Does the wail have a 20mm ov	verlap on the raft?		yes	
Have the walls been set out ac	ccording to the layout plan?		yes	
Are the walls plumb?			yes	
Are all the walls being construinternal and external walls?	icted concurrently to ensure proper interlock betwee	en	yes	
	n placed in the correct position, plumbed and square? ect position for hingescorrect opening and closing.	?	yes	
Are the thicknes of steel/wood	den doors and frames according to specification?	r	yes	
Are the roof ties according to	specification?		yes	
- Minimum depth of roof ties is			, 00	
Principal Agent, Engineer or 0	Clerk of Works			
Name E. Kadzviti	Signature	D	ate	110-02-2015
	-			
	Upon sign off at this stage, roofing may co	ommence!		





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DEVELOPMENT 1

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Checklist for House Super Structure

Employer	•	Ektichuleni Metropolitan Municipality
Project	•	Etwatwa Ext 35 - Combiza
Contract		PS1HS23.2013
Contractor	•	Bankuna Construction and Engineering
Date	:	14-05-2015
File	!	

g- -		
ouse Number 35866		
RICK WORK		
the bricks SAGS 0400 approved?	yes	
Are the minimum strength of the bricks as per specification?	yes	
Does mot tar mix comply with SASS 0164?	yes	
1 port cement to 5 parts of sand	L	
Minimum 28 day strength)5 MPA		
Sand to be free of organic material		
s damp proof installed between the raft and all walls?	YES	
s the brick force installed according to the specification?	<u>yes</u>	
Minimum diameter of bnck force to be 2.8nu1	•	
• Every 4th course		
- Every course above doors and windows		
- Brickforce to be bent at right angles at turners		
Toothing is not allowed!		
Does the wall have a 20rnm overlap on the raft?	yes	
Have the walls been set out according to the layout plan?	yes	
Are the walls plumb?	yes	
Are all the walls being constructed concurrently to ensure proper interlock between internal and external walls?	yes	
Have all the door frames been placed in the correct position, plumbed and square? Ensure that the are in the correct position for hingescorrect opening and closing.	yes	
Are the thicknes of steel/wooden doors and frames according to specification?	yes	
Are the roof ties according to specification?	\[\frac{\Asi \chi}{\chi}\]	
• Minimum depth of roof ties is 6 (Durres		
Name [nias Kadzviti Signature Ar	Date <u>1</u>	<u>20-05-2015</u>
	Date <u>1</u>	<u>20-05-2015</u>





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DEVELOPMENT



GIBB

Checklist for House Super Structure

Employer	•	Elcurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Combiza
Contract		PSIHS23-2013
Contractor		Bankuna Construction and Engineering
Date		14-05-2015
File		

House Number	36867	
BRICK WORK		
Is the bricks SASS 0400 app	proved?	yes
Are the minimum strength of	<u>yes</u>	
Does mortar mix comply wi	• ith SASS 0160	yes
- 1 port cement to 5 ports o	of sand	•
Minimum 28 day strength		
- Sand to be free of organic	e material	
is damp proof installed bet	ween the 'aft and all walls?	<u>YES</u>
is the brick force installed a	according to the specification?	yes
Minimum diameter of brid	crlorce to be 2 Smtn	: —
 Every 4th course 		
- Every course above doors	and windows	
- Brickforce to be bent at rig	ght angles at comers	
Toothing is not allowed!		
Does the wall have a 20mm	m overlap on the raft?	yes
Have the walls been set or	ut according to the layout plan?	<u>yes</u>
Are the walls plumb?		<u> ves</u>
Are all the walls being cor internal and external walls	nstructed concurrently to <i>ensure</i> proper interlock between s?	[yes
	been placed in the correct position, plumbed and square? correct position for hingescorrect opening and closing.	. <u>yes</u>
Are the thicknes of steel/v	wooden doors and frames according to specification?	<u>C yes</u>
Are the roof ties according - Minimum depth of roof t		yes
Principal Agent, Enginee	T to make	- Artis
Name <u>Enias</u> Kadzvit		Date 20-05-2015
Clerk of Works	<u> </u>	
Name <u>Davey Dyant</u>	<u>ii</u> Signature	Date 20-05-201S
	Upon sign ofi at this stage, roofin rece	rmence!











Employer	•	Ekurhuleni Metropolitan Municipality
Project	•	Etwatwa Ext 35 - Combiza
Contract	•	PS/HS23-2013
Contractor	•	Bankuna Construction and Engineering
Date	•	14-05-2015
File		

drawings.						
House Number	36870	1				
BRICKWORK						
Is the bricks SASS 0400 approve	ed?			7	yes	
Are the minimum strength of the	e bricks as per spe	ecification?			yes	
Does mortar mix comply with S	ASS 0164?			1 3	ves	
- 1 port cement to 5 ports of sai	nd			-		
Minimum 28 day strength > 5	MPA					
- Sond to be free of organic man	terial					
is damp proof installed betwee	n the raft and all w	valls?			YES	
Is the brick force installed acco	rding to the specif	ication?			yes	
Minimum diameter of backfor	ce to be 2.8nun			·		
• Every 4th course						
• Every course above doors and	windows					
- 8rickforce to be bent of right a	angles at corners					
Toothing is not allowed!						
Does the wall have a 20mm.ov	erlao on the raft?				<u>ves</u>	
Have the walls been set out ac	cording to the laye	out plan?		<u>r</u>	<u>ves</u>	
Are the walls plumb?				<u>_</u>	<u>yes</u>	
Are all the walls being construinternal and external walls?	cted concurrently	to ensure pro	per interlock between		yes	
Have all the door frames been Eniure that the are in the corre	-	-			yes	
Are the thicknes of steel/wood	den doors and fran	nes according	to specification?	L	<u>yes</u>	
Are the roof ties according to • Minimum depth of roof ties is	-				yes	
Principal Agent, Engineer						
Name Enias Kadzviti		Signature	THE REAL PROPERTY.	∱ □	ate	<u>120-05-2015</u>
Clerkof Works			مين ماند داند داند	, ·		
Name <u>1Davey Dyantji</u>		Cianatura	Ar L	·	ate	[20 0E 204E
Iname IDavey Dyantiji	Unone	Signature	stage, roofing <u>rutay co</u>		ale	[20-05-2015
'~ kt_	_Cvy 4,1, • ITTErrOTI	ign on at thus		ve gellM		









Checklist for House Super Structure

Б 1		FI 1 1 'Ma Fa M ' ' Fa
Employer	<u> </u>	Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 • Combiza
Contract		PSIHS23-2013
Contractor	1	Bankuna Construction and Engineering
Date	:	14.05.2015
File		

House Number 36871		
BRICK WORK		
s the bricks SASS 0400 approved?	<u>yes</u>	
Are the minimum strength of the bricks as per specification?	yes	
Does mortar mix comply with SABS 0164?	yes	
- 1 port cement to 5 ports of sond		
• Minimum 28 day strength > 5 MPA		
• Sand to be free of organic material		
Is damp proof installed between the raft and all walls?	YCS	
Is the brick force installed according to the specification?	yes_	
Minimum diameter of brickforce to be 2.8mm	•	_
Every 4th course		
- Every course above doors and windows		
- Brick force to be bent at right angles at cowers		
Toothing is not allowed!		
Does the wall have a 20mm overlap on the raft?	yes	
Have the walls been set out according to the layout plan?	yes	
Are the walls plumb?	yes	
Are all the walls being constructed concurrently to ensure proper interlock between internal and external walls?	yes	
Have all the door frames been placed in the correct position, plumbed <i>and</i> square? Ensure that the are in the correct position for hingescorrect opening and closing.	yes_	
Are the thicknes of steel/wooden doors and frames according to specification)	yes	
Are the roof ties according to specification?	r yes	
- Minimum depth of roof ties is 6 cources		
Principal Agent, Engineer		
Name Enias Kadzviti Signature	Date	20-05-2015
Clerk of Works		
Name <u>Davey Dyantji</u> Signature	—Date	;20-05 2015



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Checklist for House Super Structure

Employer	•	Ekurhuleni Metropolitan Municipality
Project	1	Etwanya Ext 35 • Combiza
Contract	•	PS/1-1S23.2013
Contractor	:	Bankuna Construction and Engineering
Date	:	14-05-2015
Fife	:	

drawings.		
House Number 36973		
BRICK WORK		
Is the bricks SABS 0400 approved?	yes	
Are the minimum strength of the bricks as per specification?	ny7S	
Does mortar mix comply with SABS 0164 ³	LYes	
1 port cement to S ports of sand		
• Minimum 28 day strength > 5 MPA		
Sand to be free of organic moteriol		
Is damp proof installed between the raft and all wails?	L <u>YES</u>	
is tne brick force installed according to tire specification >	yes	
Minimum diameter of brickforce to be 2.8min		
• Every 4th course		
Every course above doors and windows		
- Brickforce to be bent at right angles at corners		
Toothing is not allowed!		
Does the wall have a 70mm over lap on the rail)	yes	
Have the walls been set out according to the layout pla ,?	<u>ves</u>	
Are the walls plumb?	r==Tres	
Are all the walls being constructed concurrently to ensure propel interiock between internal and external walls?	yes	
Have all the door frames <i>been</i> placed in the correct position, plumbed and square?	yes	
Ensure that the <i>are</i> in the correct position for hinges(orrec t opening and closing.		
Are the thicknes of steel/wooden doors and f rames according to specification?	Nes	
Are the roof ties according to specification? - Minimum depth of roof ties is 6 cources	I <u>yes</u>	
willimum depart of 1001 des is a cources		
	 .	
Principal Agent, Engineer	e F	
Name Enias Kadzviti Signature	Date	20-05-2015
Clerk of Works		
Nama Dayay Dyantii Signatura	Date	P-0-05-2015
Upon sign off at this stage, roofin mai commen		







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Checklist for House Super Structure

Employer		Ekurhuleni Metropolitan Municipality
Project	•	Etwatwa Ext 35 - Combiza
Contract	•	PS/HS23-2013
Contractor		Bankuna Construction and Engineering
Date		14-05-2015
File	:	

House Num	ber 3627	4				
BRICK WOR	<u>K</u>					
Is the bricks	SABS 0400 approved?			yes		
Are the mir	imum strength of the bricks as pe	r specification?		ı <u>yes</u>		
Does morta	r mix comply with SASS 0164?			yes		
• 1 port cen	nent to 5 parts of sand					
- Minimum	23 day strength > 5 MPA					
• Sand to b	e free of organic material					
Is damp pr	oof installed between the raft and	all walls?		YES		
	force installed according to the si			<u>ves</u>		
• Every 4th		III I				
-	rse above doors and windows					
-	to be bent of right angles at com	ers				
	,					
Toothing i	s not allowed!					
Does the v	wall have a 20mm overlap on the	raft?		<u>yes</u>		 .
Have the	walls been set Out according to the	e layout plan		yes		
Are the w	alls plumb?			LYe.		_
Are all the	e walls being constructed concurr	ently to ensure pror	per interlock between	L_yes		1
	nd external walls?	entry to ensure prop	ser interioek between	L_yes		1
Have all t	he door frames been placed in the	e correct position. p	olumbed and square?	yes		
Ensure th	at the are in the correct position for	or hingescorrect op	ening and closing.			
Are the th	nir.knes of steel/wooden doors and	I frames according	to specification?	yes		
Are the re	oof ties according to specification	?		$L_{\mathrm{y^{es}}}$		
	m depth of roof ties is 6 cources			L y		
				-		
Principal	Agent, Engineer		The mark			
Name	Enias Kadzviti	Signature		Date	20-05-2015	
Clerk of	Works		1. 4. 7. 1			
Name	Davey Dyantji	Signature		Date	(20-05-2015	
0.4	I. • L r.'' !,/,'It • S	pon sign off at th's s vitooplutpl.ofe	tage, rooll may commence!			







Employer +	Ekurhuloni Metropolitan Municipality		
Project !	Etwatwa Ext 35 - Combiza		
Contract	PS/NS23.2013		
Contractor	Bankuna Construction and Engineering		
Date !	14-05-2015		
File			
and position, that such work has been c drawings.	contiolted works have been constructed to the carried out to the required standards and specific		_
BRICK WORK			
is the br icks SASS 0400 approved?		yes	
Are the minimum strength of the bricks a	s per specification?	yes	
C			
Does mortar mix comply with SASS 0164	?	ves_	
- 1 part cement to 5 ports of sand			
 Minimum 28 day strength > 5 MPA Sand to be free of organic material 			
cana to be not of organic material			
N damp proof installed between the raft	and all walls'	YES	
Is the brick force installed according to the Minimum diometer of brick/nice to be 2 Every 4th course Eve:) course above doors and windows Brick force to he bent at right angles at	2.8mm	<u>ves</u>	
Toothing is not allowed!			
Does the wall have a 20inm overlap on	the rah?	yes	
Have the wails been set Out according to	o the layout oian?	<u>ves</u>	
Are the walls plumb?		<u>yes</u>	
Are all the walls being constructed conditional and external wails?	currently to ensure proper interlock between	yes	
•	on the correct position, plumbed and square?	yes	
Are the thicknes of steel/wooden doors	and frames according to specification	yes	
Are the roof ties according to specifica - Minimum depth of roof ties is 6 course		yes	
Principal <u>Agent</u> , Engineer Name	Signature	Date	0-05-2015
Name Davey Dyantii	Signature	Date	ftC1.0S-201S

Davey Dyantji Signature rt.""C|

Upon sign off a i this stage, roof in ay cdmmerce!

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Date

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Employer		Ekurbuleni Metropolitan Municipality
Project		Etwatwa Ext 35 • Combiza
Contract		PS/HS23-2013
Contractor	1	Bankuna Construction and Engineering
Date		14-05-2015
File		

lhe Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications. as set out in the document and drawings.

House <u>Number</u> 36877J	
BRICK WORK	
is the bricks SABS 0400 approved?	
Are the minimum strength of the bricks as per specification?	yes
Does mortar mix comply with SABS 0164? - 1 part cement to 5 parts of sand • Madman) 28 day strength > 5 MPh	yes
- Sand to be free of organic material	
is damp proof installed between the raft and ad walls?	YES
Is the brick force installed according to the specification? - Minimum diorneter of brickforce to be 2.Snim - (very 4th course - Every course above doors and windows - 8rickforce to be bent of right angles at corners	<u>ves</u>
Toothing is not allowed!	
Does the wall have a 20rnm overlap on the raft?	yes
Have the wails been set out according to the layout plan?	
Are the walls plumb?	_ <u>Y</u> es
Are all the walls being constructed concurrently to <i>ensure</i> proper interlock between internal and external walls)	yes
Have ail the door frames been placed in the correct position, plumbed and square? Ensure that the are in the correct position for hingescorrect opening and closing.	l yes
Are the thick nes of steel/wooden doors and frames according to specification?	[yes
Are the roof ties according to specification? • Minimum depth of roof ties is 6 cources	[yes
Principal Agent, Engineer Name Enias Kadzviti Signature	Date <u>120-05-2015</u>
Clerk of Works Name Davey Dyantji Upon sign off at this stage. roofin Maycommence!	Date 20-05-2015
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CL___Checklist for House Super Structure

Employer		Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Combiza
Contract	•	PSIHS23-2013
Contractor	:	Bankuna Construction and Engineering
Date		14-05.2015
File	•	

	been can icci out to the required star	ndards and specifications,		_
drawings.				
House,Number	36878			
BRICK WORK				
Is the bricks SABS 0400 approved	?	Ī	<u>yes</u>	
Are the minimum strength of the b	oricks as per specification>		ves	
Does mortar mix comply with SAS	S 0164?	-	yes	
- 1 port cement to 5 parts of sand				
Minimum 28 day strength 5 M				
Sand to be free of organic mater	rial			
Is damp proof installed between t	the raft and all walls?	-	YES	
Is the brick force installed accord	ing to the specification?	ı		
- Minimum diameter of brickforce			yes	
- Every 4th course				
- Every course obove doors and w	vindows			
- 8rickforce to be bent or right an	gles at Comer;			
root hing is not allowed!				
Does the wall have a 20mm over	rlap on tire raft?		<u>ves</u>	
Have the walls been set out acco	ording to the layout plan?		<u>r</u> — <u>yes</u>	
Are the walls plumb?			yes	<u>-</u>
Are all the walls being construct	ed concurrently10 ensure proper inter	lock between	L	
internal and external walls?				
Have all the door frames been p	laced in the correct position, olurnhed	and square?	yes	
Ensure that the are in the correct	ct position fin hingescon ect opening a	nd closing.		
Are the thicknes of steel/woode	n doors and frames according to spec	fication?	yes	
Ate the roof ties according to sp	pecification?		yes	
- Minimum depth of roof ties is			you	
Principal Agent, Engineer	(Å)	- Athuri	D-4-	400.05.0040
Name <u>Enias Kadzviti</u>	Signature	()	Date	<u>120-05-201S</u>
Clerk of Works		Net of		
Name !Davey <u>Dyantji</u>	Signature	Paret	Date	<u>ip-OS-2016</u>
\s_4	Upon sign oti at this stage,	ooling. a _ommence!		

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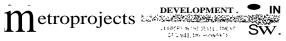
Checklist for House Super Structure

Employer	:	Ekurhuleni Metropolitan Municipality
Project	•	Etwatwa Ext 35 - Comtriza
Contract	:	PSIHS23-2013
Contractor	!	Bankuna Construction and Engineering
Date	:	14-05-2015
File	•	

BRICK WORK Is the bricks SABS 0400 approved? Are the minimum strength of the bricks as per specification? Does mortar mix compiy with SASS 0164? 1 port cement to 5 ports of sand • Minimum 28 day strength> 5 MPA • Sand to be free of organic material	
Is the bricks SABS 0400 approved? Are the minimum strength of the bricks as per specification? Does mortar mix compiy with SASS 0164? 1 port cement to 5 ports of sand • Minimum 28 day strength > 5 MPA	
Are the minimum strength of the bricks as per specification? Poes mortar mix compiy with SASS 0164? 1 port cement to 5 ports of sand Minimum 28 day strength > 5 MPA	
Does mortar mix compiy with SASS 0164? 1 port cement to 5 ports of sand • Minimum 28 day strength> 5 MPA	
1 port cement to 5 ports of sand • Minimum 28 day strength> 5 MPA	
1 port cement to 5 ports of sand • Minimum 28 day strength> 5 MPA	
Sand to be free of organic material	
T- down and first-ll-d between the art and all modes	
Is damp proof installed between the raft and all wails?	
is the brick force installed ascot ding to the specification?	
- Minimum diameter of bnrkforce to be 2.8mm	
• leery 4th course	
Every course obove doors and windows Printfoice to be bent at tight angles at corners	
- Brickfoice to be bent at tight ongles nt corners	
Toothing is not allowed!	
Does the wall have a 20mm overlap on the raft? yes	
Have me walls been set out according to the layout plan? <u>ves</u>	
Are the walls plumb?	
Are the walls plumb? Yes	
Are all the walls being constructed concurrently to ensure proper interlock between	
internal and external walls?	
Have all the door frames been placed in the correct position, plumbed and square? yes	
Fnsure that the are in the correct position for hingescarrect opening and dosing.	
Are the thicknes of steel/wooden doors and frames according to specification? yes	
· · · · · · · · · · · · · · · · · · ·	
Are the roof ties according to specification?	
- Minimum depth of roof ties is 6 cources	
Principal Agent, Engineer	
Name <u>IEnias Kadzviti</u> J Signature Date <u>21-08-2015</u>	
Clerk of Works	
Name <u>tDavey Dyantfi</u> Signature Date 20-05-Z015	
Upon sign off at this stage, I out aycornmence! 1 t7WATVCTAlt oop xarrrare hepon,,,; knvi.,, wyS-	











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Employer	:	Ekurhuleni Metropolitan Municipality
Project	•	Etwatwa Ext 35 - Combiza
Contract		PS114=-2013
Contractor	:	Bankuna Construction and Engineering
Date	•	14-05-2015
File		

House_Numbei	368	396 j			
BRICK WORK					
Is the bricks SABS 040	0 approveci?			<u>Tes</u>	
Are the minimum stre	ngth of the bricks as p	per specification)		<u>yes</u>	
Does mortar mix comp	ly with SARS 0164?			yes	
 1 por t cement to S per 					
 Minimum 28 day stre 	ength > 5 MPA	·			
• Send to be free of or;	ganic moteriol				
Is damp proof installe	ed between the raft ar	nd a3 walls?		<u>yt: s</u>	
is the brick force insta	alled act.ording to the	-		yes	
• Every 4th course					
• Every course above	doors and windows				
Brickforce to be ben	t of right tingles of co	rners			
Toothing is not allow	red!				
Does the wall have a	20mm overlap on the	e rah?		L yeS	
Have the walls been	set out according to t	he layout plan?		yes	
Are the walls plumb	?			yes	
Are all the walls being internal and external	=	rently to <i>ensure</i> prope	er inter lock between	yes	
		he correct position. pl		vas_	
Are the thicknes of	steel/wooden doors a	nd frames according to	o specification?	yes	
	ording to specificatio roof ties is 6 sources	n?		<u>ves</u> _	
Principal Agent, En		Signature	(Shot	Date	20 0 01.5
Clerk of Works			1. N. W		
Name <u>Davey D</u>	yantji	Signature	Marin II	Date	120-05-2015
	Ţ	U pon sign off at this st	age, roofing for y commence!		





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Checklist for House Super Structure

Employer		Ekurhuleni Metropolitan Municipality
Project	•	Etwatwa Ext 35 -Corribiza
Contract		PS/HS23-2013
Contractor	:	Bankuna Construction and Engineering
Date	1	14-05-2015
File		

House Number f 36897			
BRICK WORK			
Is the bricks SABS 0400 approved?	yes		
. Are the minimum strength of the bricks as per specification?	yes		_ <u>I1</u>
Does mortar mix comply with SABS 0164?	1_{yes}		
1 part cement to 5 ports of sand	1 7 2 2		
• Minimum 28 day strength > 5 MPA			
Sand to be free of organic material			
is damp proof installed between the raft and 32 walls?	<u>YES</u>		
Is the brick force installed aci Ord ing to the specification?	yes		
Achnimurn diameter of brirkforce to be ?Snit'?			
Every 4th course			
Every course ubove doors and windows			
brick force to be bent of right angles of corners			
Toothing is not allowed!			
Does the wall have a 20inin overlap on the raft	<u>ves</u>		1
Have the walls been set out according to the layout plan?	yes		
Are the walls pluinla?			
Are all the walls being constructed concurrently to ensure proper interlock between internal and external walls?	yes		
Have all the door frames been placed in the correct position, plumbed and square? Ensure that the <i>are</i> in the correct position for hingescorrect opening and closing.	yes		
Are the thicknes of steel/wooden doors and frames accordinp, to specification)	<u>yes</u>	_	
Are the roof ties according to specification? • Minimum depth of roof ties is 6 cources	<u>r</u> yes		
Principal Agent, Engineer			
Name <u>Enias Kadzviti</u> 1 Signature	Date	217-95-201S	
Clerk of Works			
Name <u>Davey Dyantji</u> Signature	Date	120-05-2015	
Lines sign off at this stage, it cofin may remove a minimum	Date	120-03-2013	



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CL Checklist for Hodse Super Structure

Employer	:	Ekurhuleni Metropolitan Municipality
Project	•	Etwatwa Ext 35 - Combiza
Contract		PSIHS23-2013
Contractor		Bankuna Construction and Engineering
Date	•	14-05-2015
File	:	

ouse Number		
RICK WORK		
the bricks SABS 0400 appr	oved?	<u>yes</u>
Are the minimum strength of	yes	
Does mortar mix comply with	SABS 0164?	yes
I port cement to 5 ports of	sand	
- Mirirnum 28 doy strength :	> 5 MPA	
- Sond to be free of orgoint r	naterial	
Is damp proot installed betw	reen the rail and all walls?	YES
;s the brick force installed ac	ecording to the specification?	yes
Mirernurn diameter of brick	force to be 210 in n	
EVerY 4th course		
• Every course obuve doors	and windows	
Brick force to be bent of rig	ht angles of corners	
Toothing is not allowed!		
Does the wall have a 20mm	aver lap on the raft?	<u>yes</u>
Have the walls been set out	according to the layout plan?	<u>yes</u>
Are the walls plurith?	L. <u>Yes</u>	
Are all the walls being con internal and external walls	structed conctirreotly to ensure proper interlock bety?	ween
	een placed in the correct position, plumbed aria squa prect position for hingescorrect opening and closing	•
Are the thicknes of steel/w	ooden doors and frames according to specification?	L <u>ves</u>
Are the roof ties according	to specification?	<u>yes</u>
Minimum depth of roof tie		<u> </u>
Principal Agent, Engineer	ـــــــــــــــــــــــــــــــــــــ	
Name Enias Kadzviti	Signature of All	Date <u>20.0S-201.5</u>
Clerk of Works		<u> </u>
Name (Davey Dyantji		Date 20z9S-2015











:	Ekurhuleni Metropolitan Municipality
•	Etwatera Est 35 - Combiza
	PSIHS23.2013
	Bankuna Construction and Engineering
	14-054055
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	•

 $\textbf{the C} \\ \text{Contractor has established that these controlled works have } \\ \textit{beer}) \\ \text{constructed to the correct horizontal anti-vertical alignment} \\$ and position, that such work has been carried out to the required standards and specifications, as set Out in the document and

drawings.		
House Number [36908]		
BRICK W0111		
Is the bricks SABS 0400 approved?	yes]
Are the minimum strength of the bricks as per specification?	yes	i
Does mortar mix comply with SABS 0i64?	yes	
• 1 port cement to 5 ports of sand		
• Minimum 28 doy strength > 5 MPA		
Sand to be free of organic materra;		
IS damp proof installed between the raft and ah walls?	YkS	
Is the brick force installed according to the specification?	yes	—
• Minimum diameter of brief:force lobe 2.3mm • Every 41/r course		
• Every course above doors rind windows		
Brickforce to be bent at right angles at ccwirer;		
m 41: 1: 4 H		
Toothing is not allowed!		
Does the wall have a 20rnm overlap on tree raft	yes	I
Have the walls been set out according to tow layout plan?	E. Yes	· ·
Are the walls plumb?	yeS	I
Are all the walls being constructed tont Ulrently to ensure proper interlock between internal and external walls?	yes_	
Have all the door frames been placed in the correct positron, plumbed and square ' Ensure that the are in the correct position for hingescorrect opening and closing.	<u>Vats</u> .	-
Are the thicknes of steel/wooden doors and frames according to specification?	<u>r</u> ves_	
Are the roof ties according to specification? - Minimum depth of tool ties is 6 cources	yes	
Principal Agent, Engineer		
Name Enias Nadzyiti 1 Signature	Date	20-05.2015
Clerk of Works		
Name <u>Davey Dyantji</u> Signature	Date	[20.05-2015
Upon sign off at this stage, toofiti commence! iie7r3Virr771TTOSIT e9ua. ;1>p***victus neps		











Employer	•	Ekurhuleni Metropolitan Municipality
Project	!	Etwatwa Exl 35Cornbiza
Contract	•	PSIH\$23.2013
Contractor	•	Bankuna Construction and Engineering
Date	=	14.05-2015
File	•	

House Number		36972				
BRICK <u>WORK</u>						
Is the bricks SAGS 0400 approved?					<u>yes</u>	 -I
Are the minimum strength of the bricks as per specification?				yes		
Does mortar mix comply with SASS 0161 ?						,
• I port cement to 5 p	oi is of sand					
- Minimum 28 doy stre	ength > 5 MF	PA				
• Scud to be free of or	gonic motes/	al				
Is damp proof rnsta;le	d between tl	ne raft and al	ll walls?		EYES	
;5 the brick force insta	lled accordin	g Pr tne spe	cif 'cation?		yes	
Minimum diameter Every 4th course	of brickfonT	to be 2 8min)			
Every course above	doors and w	indows				
Brick force to be ber			rs .			
Toothing is not allow	red!					
Does the wall have a	70mm over	ap on the 'af	t?		yes	
Have the walls been	set out accor	d,ne, to the la	ayout plan?		<u>ves</u>	
Are the watt plumb?	,				<u> </u>	
Are all <i>the</i> walls being constructed concurrently to ensure proper interlock between internal and external walls?					<u> </u>	
Have all the door frames been placed in the correct positron, plumbed and square? Ensure, that the are in the correct position for hingescorrect opening and closing.					<u>vet</u>	
Are the thicknes of steel/wooden doors and frames according to specification?				<u>r</u> <u>ve.</u> .		
Are the roof ties acc					yes_	
Principal Agent, En	gineer					
Name <u>IEnias K</u>			Signature		Date	[20-05-2015
Clerk of Works	·			1 ا		
Name 'Davey [)vantii		Signature	(N. 18 97) 177 70	Date	PO.OS-201S







Checklist for House Super Structure

Employer	•	Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 -Combiza
Contract		PS/HS23-2013
Contractor	,	Bankuna Construction and Engineering
Date	•	14-05-2015
File	1	

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment

and position, that such work has been carried out to the required standards and specifica drawings.	tions, as set out in the document and		
tis,g Number 369/3			
BRICK WORK			
is the bricks SARS 0400 approved?	yes		
Are the minimum strength of the bricks as per specification?	<u>yes</u>		
Does mortar mix comply with SAGS 0364 ?	yes		
- I port cement to \$ parts of Bond	•		
• Minimum 28 day strength > 5 MPA			
- Sand to be free of organic motet iot			
Is damp proof installed between the raft and air waits?	I YES		
Is the brick force installed according to the specification?	[
- Minimum diameter of iwickfotce to be 2.8frint	· · · · · · · · · · · · · · · · · · ·		
• Fvery 4111 course			
- Fvery course above doors and windows			
Brick force to be bent at right angles at corners			
Toothing is not allowed!			
Does the wall haw a 20mm overlap on ihe rah?	[yes		
Have the wails been set Out according to the layout plan?	ves		
Are the walls plumb?	yes		
Are all the walls being constructed concurrently to ensure proper interlock between internal and external walls?	ſ yet.		
Have all the door frames been placed in the correct position. plumbed and square? Ensure that the are in the correct position for hingescorrect opening and closing.	yes		
Are the thicknes of steeljwooden doors and frames according to specification?	[<u>ves</u>		
Are the roof ties according to specification? - Minimum depth of roof lies is 6 coerces	7s		
Principal Agent, Engineer Name <u>IEnias Kaclzviti</u> Signature	Date <u>120-05-2015</u>		
Clerk of Works Name Davey Dyantji Signature	Date 120-05-2015		
Linear eign off at this stage, we all g/rney commons	ol		





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Checklist for House Super Structure

Employer : Ekurhuleni Metropolitan Municipality
Project Etwatwa Ext 35 - Combiza

Contract PS/HS23 - 2013

Contractor Bankuna Construction and Engineering
Date 14-05-2015

File

The Contractor has established that these controlled works have been const: ucted to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

House Number	<u>36974</u>	
BRICK <u>WORK</u>		
is the bricks SASS 0400	approved?	yes
Are the minimum streng	gth of the lie irks as per specification'	I <u>yes</u>
Does mortar mix compl	y with SASS 0164)	<u>ves</u> .
! port cement to 5 por	ts of send	
• Muumuu) 28 day stre	ngth 5 MPA	
Sand to be free of or g	oitre moterio!	
is damp proof Installed	between the raft and all walls?	I <u>YES</u>
is the brisk force instal	led according to the specification?	yes
• Mininrunr !hammer of	brick force^ to be) 8rom	•
• (very 4th course		
(very course above d	oors undwinoows	
• Dockforce to he bent	of right angles or iortir	
Toothing is not allowed	ed!.	
Uoes the wail have a 2	Omm ow-rap on the raft?	L ye≊.
Have the walls been se	et out according to the layout plan?	yes
Are the walls plumb?		<u>ves</u>
Are al the walls being internal and external	constructed concurrently to ensure proper interlock between walls?	ves
	nes been placed in the correct position, plumbed and square.' the correct position for hinp,esrorrect opening and dosing.	E yes
Ann the thicknes of st	eeVwooden doors and frames according to specification?	yes
Are the roof lies acco	rding to specification?	
• Minimum depth of r		
	,	·/
Principal Agent, Eng	neer	`
Name <u>frjas Kad</u>	zviti Signature	Date 20-05-2015
Clerk of Works	Mr. 1	





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Checklist for House Super Structure

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 • Comhiza
Contract	A54-1523-2013
Contractor	'Bankuna Construction and Engineering
Date	14-0S-2015
File	

The Contractor has established that these connoted works have been constructed to the correct hori?ontai and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the doe.urrient and drawings.

House P ¹ 9:n!;Tf.	36975		
BRICK WORK			
Is the bricks SABS 0400 approved'		<u>yes</u>	
is the crieks Bribb o too upproved		<u>yes</u>	
Are the minimum strength of the bric	eks as per specification?	yes	
Does mortar mix comply with SABS 0	0164 ?	yes	
- I oar: cement to 5 ports of sand		j	
- Minimum 28 day strength > S MPA			
- Sand to be free of organic Motet ;al			
is clamp pool instated between the	raft and all walls?	<u>YES</u>	
Is the brick force installed according	to tlie specification?	yes	
Minimum diameter of brirkforce to Every 4th course	be 2.Snun		
Every course above doors and wind	lows.		
Brickforce to be bent or right angle			
Toothing is not allowed!			
Does the wail <i>have</i> a 20mm overlap	no the. raft)	yes	
Have the walls been set Out accordi	ng to the layout piar.?	<u>Lye:</u>	
Are the walls plumb?		<u>I Yes</u>	
Are all the walls being i:onslrocted internal and external walls?	concurrently to ensuie propr interlock	between yes	
	ed in the correct position, plumbed and osition for hingescoriect opening and cl	: —	
Are the thicknes of steel/wooden d	oors and frames according to specificat	ion? I <u>yes</u>	
Are the roof ties according to speci Minimum depth of ma! net is 6 cc		yes	
Principal Agent, Engineer			
Name Ltnias Kadzviti	=1 Signature	Date	120-05-201S
		THE TYPE IN S	20 00 2010
Clerk of Works		Carl Grand	
Name Davey Dyantji	Signature	Date	120-05-203.5
	upon sign off at this stage, roofi	may commence!	1.





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Checklist for House Super Structure

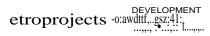
Employer		Ekurhuleni Metropolitan Municipality
Project	•	Etwatwa Ext 35 - Combiza
Contract	•	PS/HS23-2013
Contractor	•	Bankuna Construction and Engineering
Date	ė.	14-05-2015
File	-	

The. Contractor has established that these controlled works have been constructed to the correct horitontal and vertical alignment

House NopAer	3699	<u> 94</u>			
BRICK WORK					
Is the bricks SAGS 040	00 approved?			yes	
Are the minimum stre	ngth of the bricks as p	er specification?		ves_	—
Does mortar mix com	ply with sass 0164?			γ <u>es</u>	
- I port cement to S p				<u> </u>	
Minimum 28 day stre					
Sand to be free of or	-				
Is damp proof instate	d between the raft and	d all walls?		EYES_	
Is the brick force insta	alled acierding to the s	specification?		[yes	
	of wick farce to be 2 Si			L!.	
i- very drh course	or wick large to be 2 or	, m, r			
• Every course above	doors and windows				
-	nt at riont angles at cor	ners			
Toothing is not allow	ved!				
Does the wall have a	2(1mm overlap on the	raft?		yes	
have the walls been	set out according to t	it layout plan?		yeS	
Are the walls plumb	?			yes	
	-	rently to ensure pro	oper interlock between	yes	
internal and externa	al walls?				
Have all the door fra	ames <i>been</i> placed in th	e correct position.	plumbed aria square?	yes	·· ·_ ·_ ·_ ·_ ·_ ·
Ensure that the are	in the rotted position f	or hingescorrect o	pening and closing.		
Are the thicknes of	steel/wooden doors an	d frames according	g to specification?	yes	
Are the roof ties acc	cording to specification	?		 [yes	
• Minimum depth of	roof ties is 6 coerces			<u> </u>	
<u></u>					
Principal <u>Agent,</u> En	gineer		4	Λ ·	
Name Enias Ka	adzviti	Signature	- / FLAMMIN	Date	E20-05-2015
Clerk of Works	_		May 2		
· —	_		1980 HA 118 - 118 - 119	Date	120-05-2015











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Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2011
Contractor	Etanktina Construction and Engineering
Date	14-05-2015
File	
The Contractor has estab	ished that these controlled works haw been constructed to the correct horizontal and vertical alignment
and position, that such we	ork has been carried out to the recluired standards and specifications, as set out in the document and

The Contractor has established that these cor	ntrolled works haw	been constructed to the	correct horizontal	and vertical alignment
and position, that such work has been carried	d out to the recluir	ed standards and specific	ations, as set out	in the document and
drawings.				
House Number 36995	51			
BRICK WORK				
is the bricks SABS 0400 apoloved?			<u>yes</u>	
Are the minimum strength of the bricks as per	r specification?		yes	_
Does mortar mix comply with SABS 0164?			yes	
•1 port cement to S parts of sand				
tviirtimum IS cloy strength > i VIPA				
Sand to be free of organ,c material				
Is damp proof installed between du-rafi and a	all waqs?		IYES	
is the hick force installed ai cording to the spe	ec:ficaticip?		yes	
- Minimum rhomerer al brickfcrce t:;• be 2.Smi	ni			
- r very 411, coarse				
• ivery course obove doors and windows				
-13hckforce to be bent al right angle's in corne	ers			
Toothing is not allowed!				
Does the wal! have a 20rom overtap or the	ijlt		<u>I yes</u>	
Have the walls beer, set out according to the	layout p:as)		yes	
Are the walls plumb?			L Yes-	
Are all the wells tising constructed consurre	nthy to analyse and	mal interlegic have an	r _{ves}	
Are all the walls tieing constructed concurre internal and external walls?	nuy to ensure pro	per interiock boween	<u>■</u> <u>yes</u>	
Have all the door frames been placed in the	correct position, p	lumbed and square?	yes	
Ensure that the are in the correct position for	r hingescorrect ope	ening, and closing.		
Are the thickees of steel/wooden doors and	frames according,	to specification?	<u>ľ</u> <u>yes</u>	
Are the roof ties according to sPet IfIcation?			<u>yes</u>	
- Minimum depth of roof ties is 6 cources				
Principal <u>Agent,</u> Engineer				
Name Enias Kadzviti —1	Signature	MOW	Date	20-05-2015
Clerk of Works		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Name <u>Davey Dyantii</u>	Signature	Total of The Control	Date	20-05-2015





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Checklist for House Super Structure

Employer	•	Ekurhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Combiza
Contract		PSiHS23-2013
Contractor		Bankuna Construction and Engineering
Date	:	14-05-2015
File	•	

I he Contractor has established that these con:rotted works lwve been constructed to the ow ect hos izontal and vertical alignment and position, that such work has been ,.armed ore to the wiluired stadoards and c)ecifications. as set ;nit that (roc , merit and drawings House Number 3(99i; BRICK WORK Is the Cricks SAM 0400 approved? Are the minimum strength of the ririi ks as ;)er specification? Does mortar mix comply with SAM 0104 ? yes parr cornea: to 5 ports of sand • Minimum ?8 clay Sand In he free Of aiwpm: foulene/ the raft and all wags? ti clamp ProOr ts the brick for Le in-.: 1.7.nrcirne to the spec:f icat Minimr,ni altimeter of ti.; be 2.Srna) F very 4th cool se f vciv course °Uwe donrs and vondows gricklbtee to be ben: a; right angles at corners Toothing is not allowed! Ooes the wall have a ?Orron overlap on the raft? Have the walls been set out accerding to the layout plan? Are. the sva.ls pitni lb? Are all the walls being constructed concurrently to ensure proper interlock between internal and external walls? Have all the door frames been placed in the correct position, plumbed and square? Ensure that the **are** in the correct position for hingescorrect opening and closing. Are the thrcknes of steel/wooden doors and frames according to specification? Are the roof ties auurding to speciticauori? • Minimum depth of roof ties is 6 motes Principal Agent, Engineer FdaT0adzviti Name **I** Signature Date p0-05-2015 Clerk of Works Name (Davey Oyantji_ Signature Date

Upon sign off at this stage, roofing May commence





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Employer		Ekraltuleni Metropolitan Municipality
Project		Etwatwa Ext 35 - Combiza
Contract	•	PS!HS23•2013
Contractor	•	Bankuna Construction and Engineering
Date	!	14-05.2015
File		

The Contractor has established that these controlled works have heen constructed to the cos re and position, that such work <i>has</i> been carried out to the rertured stanri.ods and specificatio drawings.		-	
House Number 36999			
BRICK WORK			
is the hi icks SAI3S 0400 approved?	<u> Yes</u>		
Are the MirthIllinI Strength of lire bricks aS per Sperihca!ion?	yes		
Does mortar mix comply with SAM 0164>	yes		
•1 owl cement to 5 ports of wild			
Minimum 28 tiny strenoth» !, MP/.			
Sand to be free of organic mnlrer irr			
is damp proof installed between the rats and ali	$\underline{\mathbf{r}}$ yes		
is tne brick force installed aC:rir dint* tne spec ilicetron?	ı yes		J
• Minimum diameter briocloeee t, be). Soso	L '		
• Every 4th coarse			
Every course above rloui5 nod			
Brick force to be bent n; right orifges a: corners			
Toothing is not allowed!			
Does the wall have a 201111n an (1,•,;ii,?	E <u>ves</u>		
Hak1_the wdtk beer set era eC,'Ordif%!-:1::. the ldyr,iit pion ³	[yes		·:
Are the :V.31iS	LYes		
Are all the walls being iorntructed concurrently to ensure proper oilerlock between internal and external wails?	yes	_	
Have all the door frames been piac ed in the correct position, pitrmbed and square? Ensure that the are in the correct position for hingescorrect opening and closing.	yes		I
Are the thickres of steel/wooden doors and frames according to st:recificatro:!?	yes		
Are the roof ties according to specification? • Minimum depth of roof ties is 6 cootces	yes		
Principal <u>Agent</u> , Engineer Name <u>IEnias</u> Kadzviti Signature	Date	20-05-2015	
Clerk of Works Name Oavey Dyantii Signature Upon sign off at this stage. roofing secommencet KePIN ti 1. APJ J*	Date	1271-131721.15	







Checklist for House Super Structure

mployer .	Ekurhuleni Metropolitan Municipality	
roject	Etwatwa Ext 35 - Combiza	
Contract	PS/HS23-2013	
Contractor	Bankuna Construction and Engineering	
	14-05.2015	
ile		
and position, that such wor drawings. House Number	k has been carried out to the required standards and specif	fications, as wt our in the document
BRIc151NOf		_
is the bricks SASS 0400 app	rovilit?	yes
		• —
Are the minimum strength of	the brir is.; as reel mon?	<u>yeN</u>
Does mortar mix comply w	ith SAM 0164 ⁷	yes
.1 part cement to 5 ports a		
Mmimum 28 day strength		
• 5vori to be fret" of organic		
	•	
is damp proof installer: bet	wiieri the raft and all walls?	L YFS
Is thi ⁻ brick instated a	riarting to the appairiantitiu?	
• Minuritirn diaMelel C.4 hi	r:ort:ing to the specificatitiu?	
• ivory 4th COURP	KIOTUI 10 LE 2.5II/III	
Every course above dno:s	and windows	
- 8tirkforre to be bent at 1,9		
durkione to be bein at 1,5	on. anoics at comery	
Toothing is not allowed!		
Dors the wall have a 70rnn	n overlap on the raft ?	<u></u>
Have the waits tipeci set or	it according to tne layout plan?	,
riave the waits fiecei set of	t according to the layout plan.	<u>yes</u>
Are the walls plumb?		yes
Are all the walls being con	strix red concurrently to ensure proper interlock 1.),tween	l <u>ye</u>
internal and external walls	s?	
Have all the door frames b	een placed in the correct position, plumbed and square?	Ĺ <u>Yes</u>
Ensure that the are in the	con ect positron for hingescorrect opening and closing.	
Are the thicknes of steel/v	vooden doors and frames according to specification?	<u> Yes </u>
Amenth a manet of the con-	As area Win a Library	,
Are the root ties according		L γ ^{eS}
- Minimum depth of roof		
Principal Agent Engineer		
Principal Agent, Enginee Name Enias Kadzvit	man and the many	Date 20-05-2015
Ellias Nauzvil	Julian IIIIArCe/5	Date 20-05-2015
į		
Clerk of Works	±36°c. 1 s.	





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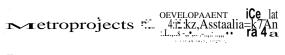
Employer		Ektirhuleni Metropolitan Municipality
Project		Etwatwa Ext 35 • Combiza
Contract	•	PSIHS23-2013
Contractor	:	Bankuna Construction and Engineering
Date	•	14-05.2015 .
File		

the Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and dr

drawings.	
House Number <u>C</u> 3/003	
BRICK WORK	
Is the bricks SABS 0400 approved?	yes
Are the ininicnint strength of the f,rirk5 AC Pei Sple ifirdtiOn?	Lye
Does mortar mix compty with SABS 0164?	
• 1 pail cement to 5 norts of sand	• • • • • • • • • • • • • • • • • • • •
Minimum 2R day strength WA	
- Sand to be PEE of oigonic material	
ts clamp proof installed between the Tait and alt wails?	LYFs
is the brick force installed au:circling to the specification?	F yes
Minimum diameter of brickforce to be 2.8mni	
Fiery 4th course	
Evety course above doors and windows	
Rrickforce to be bent at tight angles at corners	
Toothing is not allowed!	
Does the wall have a 20mm overlap on the <i>raft?</i>	{yes
Have the walls been set nut dr:finding to the favour plan?	(Yos
Are the walls plumb?	yes
Ate all the walls being constructed concur i emly to ratsure proper :merlon teetween	yes
internal and external wells?	
!lave all the door frames been placed in the co; iect position, plumbed and square?	yes
Ensure that the are in the correct position for hingescurreCr Opening dor! closing.	
Are the thicknes of steel/wooden doors and frames JCCOI ding to specification?	1 <u>yes</u>
Are the roof ties according to specification?	T voc
· Minimum depth of roof ties is 6 coerces	<u> </u>
Principal Agent, Engineer	
Name Enias Kadzviti Signature	Date 20-05-2015
Clerk of Works	
Name Davey Dyantji Signature	Date 120-05-2015
Upon sign off at this stage, tooling inay. onunerice	<u> </u>











		<i>:</i>	
Employer	Ekurhirleni Metropolitan Municipality]
Project	Etwatwa Ext 35 • Combiza		
Contract	P5114523-2013		
Contractor	Bankuna Construction and Engineering		
Date	14-05-2015		
File : :			
	these ci)raidtied works have been constructed to the co		-
Souse Number	3 70(14		
BRICK WORK			
is the bucks SASS 0400 approved -		yes	
Ate the minim _{um} stteligtri of the br	ricks as per specification?	<u>yes</u>	
Does mortar mix comply wth SAM	016:1?	L	
I port cement to 5 parts of tote!	•		
 Amman' 2S dm/ strength s 5 mp/ Sand in be free of organic M011110 			
cana in se nee er ergame me rrin	•		
Is damp proof installed between th	e rail and all waits)	FiES	
;s the brick force installed accordin • Minimum drnmerei buckforce to		Ye s	
Every 4th.			
 Every coolie above doors and wir Boactorce m be bent at right angle 			
- boactorce in be bent at right angi-	es or corners		
Toothing is nut allowed!			
Does the wall have a ;Kamm overla	pp Or' the raft?	γes	
i ave the walls been set out ac::orta	ing, to the ta'iout plan?	yes	
Are the walls pluinh?		L Ye∙	
Are all the walls being •zonstiucte internal and external walls?'	d concurrently to ensure proper interlock between	7 .sc—	
	nced in the correct position, plumbed and square? position for hingescorrect opening anci closing.	i <u>yes</u>	
Are the thicknes of steeliwoodan	doors and flames according to specification?	I <u>yes</u>	
Are the roof ties according ie spec	cification?	ves	
• Minimum depth of roof tie is 6 o		<u>ves</u>	
Principal Agent, Engineer			
Name Enias Kadzviti	1 Signature	Date <u>120-05-201</u>	5
Clark of Warles	r.1		
Clerk of Works		_ #0.0F.004	E
Name <u>Davey Dyantji</u>	Upon sign off at tillis stage, raofil ginay commence&A . 5.icnap ,,, i.e he,nl.! VOI j.t.0.4 inIXtrniNrSITI)(TOTinTNICIrn	Date <u>ri0-05-201</u>	<u>~</u>



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Checklist for House Super Structure

mployer	Ekurtiuleni Metropolitan N	Municipality		
Project	Etwatwa Ext 35 - Combiza	a		
Contract	PSifiS23.2013			
Contractor	: Bankuna Construction an	nd Engineering		
Date	14.05-2015			
File				
	d that these controlled works haw, nas been carried cut to the require			_
House Number	.31007			
BRICK WORK				
Is the bricks SAGS 0400 approv	ved?		yes	
			· -	
Are the minimum strength of	the bricks as per specification'		<u>r yes</u>	
Does mortar mix comply with S	SABS 0164?		<u> </u>	···································
- 1 port cement to 5 parts of s	and		:	
- Minimum 28 duy strength > S				
- Sum to be free of organic m	aterial			
Is damp proof installed between	en the raft and al walls?		YES	
Is the brick fciir installed aCC Minuntim diameter of brirkfc every 4th cowrie	- · · · · · · · · · · · · · · · · · · ·		<u>yes</u>	
• Every course above doors ar ariaInrre to be bent at right				
Toothing is not allowed!				
D0e5 the wall have a 20mm of	overlap on Inc! raft!		yes	
I lave the walk hee:: T.el out	according to the layout pion?		$\mathbf{r}_{ ext{ves}}$	
Are the walls ,dumb"			yes.	
Are all the walls beteg construinternal and external walls?	ructed concurrently to ensure prop	per interlock between	<u>γes</u>	
	en placed in the correct position, pl		Yes	
Are the thickiles of steel/wo	oden doors and frames according t	to specification?	<u>r</u> yes	
Are the reef ties asserding t	o specification?		Ţ	
Are the roof ties according to Minimum death of roof ties			i <u>Y</u> i ^e >	
Principal Agent, Engineer				
Name <u>rErlias Kadzviti</u>		I LITERATOR	Date	120-OS-2015
Clark of Works		196		
	Signature		Date	20:05-201S
Clerk of Works Name <u>fFa::TOyantji</u>	Signature Upon sign off at this st	tage, roof may, ornmence	Date	20:05-20





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Checklist for House Super Structure

Employer	•	Ekurhuleni Metropolitan Municipality
Project	=	Etwatwa Ext 35 - Combiza
Contract	:	PShiS23.2013
Contractor	:	Aanktina Construction and Engineering
Date	=	14-05-2015
File	1	

The Contractor has established that these controlled works have been constructed to the corral t hor7ontal and vertical alignment and position, that such wort, has been carried out to the required standards and specifications, as set out no the document and drawings.

House Number 37008	
BRICK WORK	Vec
Is the br icks SAIIS 1)400 approved?	<u>yes</u>
Are the irimioilen strength of the bricks ac per spec if katuin?	
Does mortar firs comply with SABS 0164)	
- 1 purl cerrh.rn to 5 ports of sand	
- 28 day strength s r, MPA	
Sand to be free o/ orgvnir mote; rai	
Is damp proof installed between toe raft ano ail walls?	L <u>YFS</u>
Is the hri,.s force instalptl ar,:orrling to ;he specification?	<u>yes</u>
• Minimum decimeter VI re to be 2.3nun	
•f very 4th course	
•t. very course above doors and windows	
8!icilorce to he bent of right angles at at Geis	
Toothing is not allowed!	
Does the wall have a IOmm overlap on the ratt?	<u>L</u> <u>Yes</u>
'lave thc• walls been set out according to the layout plan?	Cis
Are the walls plumb>	<u>yes</u>
Are al! the wails being constructed coricuirently to ensure proper interlock between	1 <u>yes</u>
internal and external walls?	•
Have all the door <i>frames</i> been placed in the correct position, plumbed and square>	laa
Insure that the <i>are</i> in the correct position for hingescorrect opening and closing.	<u>'es</u>
Are the thicknes of steel/wooden doors and frames according to specificatioc?	↑ yes
Are the roof ties according to specification?	0
M,nimtnn depth of roof ries is 6 eources	∪. <u>∨</u> es
Principal Agent, Engineer	A7) - 400 05 051-
Name Enias Kadzviti Signature	120-05-2015
Clerk of Works	
Name <u>Davey Dyantji</u> Signature	Date <u>20.05-2015</u>



Upon sign **off at this s**• S.1. 1t4. With 012 expo.

Upon sign off at this stage, roofin fnay'commence!
• S.1.,1/4, With 012 expo,...,,"3tt wonn. • Piri\$ AluctirrNITJ....



Metroprojects gate,

111'





Checklist for House Super Structure

Employer	Ekurhuleni Metropolitan Municipality	
Project	Etwatwa Ext 35 - Combiza	
Contract	PS/H523-2013	
Contractor	Bankuna Construction and Engineering	
Date	14-05-2015	
File		

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried Out to the required standards and specifications, as set out in the document and drawings.

House Number 3 7009	
BRICK <u>WORK</u>	
s the bricks SAGS 0400 approved?	yes
	· · · · · · · · · · · · · · · · · · ·
Are the minimum strength of the bricks as per specification?	yes
Does mortar mix comply with SABS 0164?	yes
I port cement to S ports of sand	
Minunurn 28 day strength > S MPA	•
Sand to be free of organic moteria!	·
is damp proof installed between the raft and all walls?	YES
Is the brick force installed according to the specification?	yes
Mininiurndiorneter of brirkforce to be 2.81"r:1	<u> </u>
- Every 4th course	
- Every course above doors and windows	
- Brickforce to be bent at right angles at corners	
Toothing is not allowed!	
Does the wall have a 70mm overlap on the raft?	C Yes
Have the walls been set out according to the layout plan?	yes
Are the walls plumb?	<u>yes</u>
Are all the walls being constructed concur rently to ensure proper interlock be	etween yes
internal and external walls?	
Have all the door frames been placed in the correct position, plumbed and squ	uare? yes
Ensure that the are in the correct position for hingescorrect opening and closing	
Are the thicknes of steel/wooden doors arid frames according to specification?	? <u>r yes</u>
Are the roof ties according to specification?	yes
- Minimum depth of roof ties is 6 cources	, , , , , , , , , , , , , , , , , , , ,
Principal Agent, Engineer	
Name Enias Kadzviti Signature	Date 20-05-2015
Clerk of Works	
Name Davey Dyantji Signature	20-05-2015
Upon sign off at this stage, roofin: m	SEL []









Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS1HS23-2013
Contractor	Bankuna Construction and Engineering
Date	14-05-2015
File	

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

ĎĎľOV WÔĎV	•			
BŘÍCK WÔŘK				
Is the bricks SASS 0400 approved?			<u>yes</u>	
Are the minimum strength of the bricks as per s	pecification?		[
Are the minimum strength of the bricks as per sp	becilication:		yes	
Does mortar mix comply with 5ABS 0164?			yes	
- 1 port cement to 5 ports of sand			h,	
- Minimum 28 day strength > 5 MPA				
- Sand to be free of organic material				
Is damp proof installed between the raft and all	walls?		YES	
is the brick force installed according to the spec	ification?		yes	
- Minimum diameter of brick force to be $2.8mm$				
Every 4th course				
- Every course above doors and windows				
- auckforce to be bent 01 right angles at corners				
Toothing is not allowed!				
Does the wall have a 70mm overlap on the raft	?		<u>yes</u>	
Have the walls been set out according to the la	yout plan?		yes	
Are the walls plumb?			yes	
Are all the walls being constructed concurrent	ly to ensure proper	r interlock between	yes	
internal and external walls?				
Have all the door frames been placed in the co Ensure that the are in the correct position for h		=	<u>yes</u>	
Are the thicknes of steel/wooden doors and fra	ames according to	specification?	yes	
Are the roof ties according to specification?			yes	
- Minimum depth of roof ties is 6 cources			. Jes	
Principal Agent, Engineer		<	· · · · · · · · · · · · · · · · · · ·	
Name Enias Kadzviti	Signature	petition	Date	20-05-2015
Clerk of Works		61 1		
Name Davey Oyantji	Signature		Date	20-05-2015









Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/EIS23 2013
Contractor	Bankuna Construction and Engineering
Date	14-05-2015
File	

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

yes yes yes	
yes	
yes	
yes	
YĒŠ	
yes	
yes	
<u>yes</u>	
yes	
yes	
yes	
yes	
	yes yes yes yes yes











20-05-2015

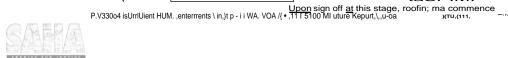


Checklist for House Super Structure

Etwatwa Ext 35 - Combiza PSIHS23-2013 Bankuna Construction and En 14-05-2015 nese controlled works have been n carried out to the required sta 36862 as as per specification?	n constructed to the c		
Bankuna Construction and En 14-05-2015 nese controlled works have been n carried out to the required sta 36862	n constructed to the c	yes	
14-05-2015 nese controlled works have been n carried out to the required states a second sec	n constructed to the c	yes	
nese controlled works have been n carried out to the required standard and a second stan		yes	
n carried out to the required standard		yes	
n carried out to the required standard		yes	
		yes	
		yes	
164?		yes	
104:		yes	
aft and all walls?		YES	
		yes	
at comers			
on the raft?		yes _	<u>-</u>
ng to the layout plan?		yes	
		yes	
concurrently to ensure proper int	terlock between	yes	
		yes	
oors and frames according to spe	ecification?	yes	
		<u></u>	
		yes	
erces			
	·	·	
	1 Haran Rott	FF.	
Signature (Date	20-05 20 5
	ed in the correct position, plumber position for hingescorrect opening pors and frames according to specification?	to the specification? be 2.8min ows at corners on the raft? on the layout plan? concurrently to ensure proper interlock between ed in the correct position, plumbed and square? osition for hingescorrect opening and closing. oors and frames according to specification? fication? erces	to the specification? be 2.8min ows at corners on the raft? yes yes yes yes concurrently to ensure proper interlock between yes din the correct position, plumbed and square? osition for hingescorrect opening and closing. oors and frames according to specification? yes yes

Signature

taSPIMI



Davey Dyantji











Employer	Ekurhuieni Metropolitan Municipality
Project	Etwatwa Ext 35 Combiza
Contract	PSIHS23-2013
Contractor	Bankuna Construction and Engineering
Date	14-05-2015
File	
The Contractor has estab	lished that these controlled works have been constructed to the correct horizontal and vertical alignment

House Number	368	363			
BRICK WORK					
s the bricks SAGS 0400	approved?			yes	
Are the minimum stren	gth of the bricks as p	per specification?		yes	
Does mortar mix compl	y with SABS 0164?			yes	
- 1 part cement to .5 po	rts of sand				
- Minimum 28 day strei	ngth > 5 MPA				
- Sand to be free of org	anic material				
is damp proof installed	between the raft an	d all walls?		YES	
is the brick force instal	led according to the	specification?		yes	
Minimum diameter of	brickforce to be 2.80	01m			
Every 4th course					
Every course above of	loors and windows				
- 8rickforce to be bent	at right angles at co.	rners			
Toothing is not allowed	ed!				
Does the wall have a	20mm overlap on the	e raft?		yes	
Have the walls been s	et out according to t	he layout plan?		yes	
Are the walls plumb?				<u> уез</u>	
Are all the walls being internal and external		rrently to ensure prop	er interlock between	<u>√es</u>	
Have all the door fram	nes been placed in t	ne correct position, pl	umbed and square?	yes	
Ensure that the are in				,,,,	
Are the thicknes of st	eel/wooden doors a	nd frames according	to specification?	yes	
Are the roof ties acco	ording to specification	n?		yes	
- Minimum depth of re	oof ties is 6 cources			1	
		·			·
Principal Agent, Eng		Ī	UA INTERNATION		
Name Enias Kad	dzviti	Signature	(LAND	Date	20 OS 2015
Clerk of Works			Yest.		
Name Davey D		Signature	(DE)	Date	20 05 2015











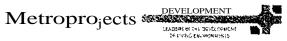
Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 Combiza
Contract	PS/1-1523 2013
Contractor	Bankuna Construction and Engineering
Date	14-05-2015
File	

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment

House Number	36864					
BRICK WORK						
s the bricks SAGS 040	00 approved?				yes	
Are the minimum stre	ngth of the bricks as per	specification?		· –		
Does mortar mix com	olv with SABS 0164?				yes	
- 1 port cement to 5 p						
· Minimum 28 day stre						
Sand to be free of o						
					_	
1s damp proof installe	ed between the raft and a	II walls?		(_	YES	
Is the brick force insta	alled according to the spe	ecification?		E.	T/es	
- Minimum diameter	of brickforce to be 2.8mo)				
- Every 4th course						
- Every course above	doors and windows					
- Brickforce to be ber	nt at right angles of corner	rs				
Toothing is not allow	ved!					
Does the wall have a	20mm overlap on the ra	ft?			yes	
Have the walls been	set out according to the I	ayout plan?		·	yes	
Are the walls plumb	?			7	yes	
				_	· ·	
Are all the walls being internal and external	ng constructed concurren al walls?	tly to ensure prop	er interlock between	L	yes	
	•	•		_		
Have all the door fra	mes been placed in the o	correct position, plu	ımbed and square?	Ţ	yes	
Ensure that the are	in the correct position for	hingescorrect ope	ning and closing.			
Are the thicknes of	steel/wooden doors and f	rames according t	o specification?	[yes	
A == +h= ==== +i== ===	andina ta anasifiaatian?			١		
	cording to specification?			L	yes	
- Minimum depth of	roof ties is 6 cources					
Principal Agent En	ginoor		A # 1	— من	- ,	
Principal Agent, En		Cimpot	W MARINE	-	Date	00.05.0045
Name Enias K	auzviti	Signature	MATANTA	_ >	Date	20-05-2015
			' 1			
Clerk of Works			35 x /			









Employer		Ekurhuteni Metropolitan Municipality
Project		Etwatwa Ext 35 - Combiza
Contract		PSIHS23-2013
Contractor	•	Bankuna Construction and Engineering
Date		14-05-2015
Fife		

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and

drawings.	, that such work has se	on carried out to the require	sa samanas ana specimento	ns, as set su	and deciment and
House Numb	<u>ber</u>	36865 I			
BRICK WORK	=				
Is the bricks	SAPS 0400 approved?			yes	
Are the mini	mum strength of the bri	cks as per specification?		yes	
Does mortar	mix comply with SABS	0164?		yes	
	ent to 5 parts of sand				
- Minimum 2	8 day strength > 5 MPA				
Sand to be	free of organic material				
is damp pro	of installed between the	raft and all walls?		YES	
	force installed according			yes	
	diameter of bnckforce to	be 2.8mm			
- Every 4th o		,			
	se above doors and wind				
- Brickforce	to be bent at right angle	s at corners			
Toothing is	not allowed!				
Does the w	all have a 20mm overla	on the raft?		yes	
Have the w	alls been set out accord	ng to the layout plan?		res	
Are the wa	lls plumb?			yes	
Are all the	walls being constructed	concurrently to ensure prope	er interlock between	yes	
internal an	d external walls?				
Have all th	e door frames been plac	ed in the correct position, ple	umbed and square?	yes	
	_	osition for hingescorrect open	=		
Are the thi	cknes of steel/wooden of	loors and frames according to	o specification?	yes	
A dl	- 6 di	: C 1 0			
	of ties according to spec in depth of roof ties is 6			yes	
1	· · · · · · · · · · · · · · · · · · ·				
Principal A	Agent, Engineer		5-6		
Name	Enias Kadzviti	Signature		Date	20-05-2015
Clerk of V	Vorks		if which		
Name	Davey Dyantli	Signature		Date	20-05-2015
61 Elonntntrnrhui	nidn sTatemuns	Upon sign off <u>at</u> this sta	age, roofi g may commence) 3-Dg.11n; ';S us' 'on Mr-trepan	· ·	····





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Checklist for House Super Structure

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PSIHS23-2013
Contractor	Bankuna Construction and Engineering
Date	02-Apr-15
File	

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

_					
House Number	36898				
BRICK WORK					
ls the bricks SABS 0400 ap	proved?			yes	
Are the minimum strength	of the bricks as per s	pecification?		yes	
Does mortar mix comply w	ith SABS 0164?			yes	
- 1 part cement to 5 parts	of sand			•	
 Minimum 28 day strength 	1 -> 5 MPA				
- Sand to be free of organi	ic material				
Is damp proof installed be	tween the raft and all	walls?		YES	
s the brick force. installed	according to the spec	cification?		yes	
Minimum diameter of bri	ickforce to be 2.8mm			-	
- Every 4th course					
- Every course above door					
- Brickforce to be bent at I	right angles at corners	3			
Toothing is not allowed!					
Does the wall have a 20n	nm overlap on the raft	?		yes	
Have the walls been set of	out according to the la	yout plan?		yes	
Are the walls plumb?				yes	
Are all the walls being co	onstructed concurrent	ly to ensure prope	er interlock between	yes	
internal and external wa		,			
Have all the door frames	heen placed in the co	orrect position all	imbed and square?	VOS	
Ensure that the are in the				yes	
Enouro that the are in the	o con cot pociacin to: .	goodadat apa	ining and oldering.		
Are the thicknes of steel	/wooden doors and fra	ames according to	o specification?	yes	
Are the roof ties according	-			yes	
- Minimum depth of roof	ties is 6 cources				
		***************************************	· 7		
Principal Agent, Engine	er		(a- 1	_	<u> </u>
Name <u>E' • 16:4</u>		Signature		Date	12 - CH - 7015
Clerk of Works					
Name e.'"\	",	Signature		Date	[4-64-7/15]
	Upon	sign off at this sta	age, rooting may Commence		





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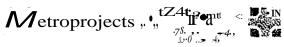
Checklist for House Super Structure

Employer	Ekurhuleni Metropolitan Municipality				
Project	Etwatwa Ext 35 - Combiza				
Contract	PS/HS23-2013				
Contractor	Bankuna Construction and Engineering	Bankuna Construction and Engineering			
Date	02-Apr-15				
File					
		icted to the correct horizontal and vertical alignment and specifications, as set out in the document and			
House Number	36899				
BRICK WORK					
is the bricks SAGS 0400 approved?		yes			
Are the minimum strength of the b	ricks as per specification?	yes			
Does mortar mix comply with SAGS port cement to 5 ports of sand	S 0164?	yes			
- Minimum 28 day strength > 5 MF	PA				
- Sand to be free of organic materi	ial				
is damp proof installed between the	ne raft and all walls?	YES			
is the brick force installed according	ng to the specification?	yes			
· Minimum diameter of brickforce	•	1			
- Every 4th course					
- Every course above doors and w	indows				
Brickforce to be bent at right and	gles of corners				
Toothing is not allowed!					
Does the wall have a 20mm over	lan on the raft?	voc			

is damp proof installed between the raft and all walls?	YES	
is the brick force installed according to the specification? Minimum diameter of brickforce to be 2.8mrh Every 4th course Every course above doors and windows	yes	
Brickforce to be bent at right angles of corners		
Toothing is not allowed!		
Does the wall have a 20mm overlap on the raft?	yes	
Have the walls been set out according to the layout plan?	yes	
Are the walls plumb?	yes	
Are all the walls being constructed concurrently to ensure proper interlock between internal and external walls?	yes .	
Have all the door frames been placed in the correct position, plumbed and square? Ensure that the are in the correct position for hingescorrect opening and closing.	yes	
Are the thicknes of steel/wooden doors and frames according to specification?	yes	
Are the roof ties according to specification? • Minimum depth of roof ties is 6 cources	yes	
Principal Agent, Engineer Name (- Signature	Date	7.641.765
Clerk of Works Name Upon sign off at this stage, roofing/may commence!	Date	Z - v. (crt)







Ekurhuleni Metropolitan Municipality

Etwatwa Ext 35 - Cornbiza





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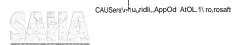
Date

Employer Project

Checklist for House Super Structure

Contract	PS/HS23-2013	
Contractor	Bankuna Construction and Engineering	
Date	02-Apr-15	
File		
	se controlled works have been constructed to the co carried out to the required standards and specifica	
House Number	36901	
BRICK WORK		
Is the bricks SAIIS 0400 approved?	•	yes
K.K.		
Are the minimum strength of the brick	s as per specification?	yes
Does mortar mix comply with SABS 01	54?	ves
- I port cement to Sports of send		
- Minimum 28 day strength > \$ MPA		
- Sand to be free of organic material		
is damp proof installed between the ra	ft and all walls?	YES
Is the brick force installed according to	the specification?	yes
- Minimum diameter of bockforce to be	_	
- Every 4th course		
- Every course above doors and window	ws	
- Brickforce to be bent at right angles a	at corners	
Toothing is not allowed!		
Does the wall have a 20mm overlap o	n the raft?	yes
Have the walls been set out according	to the layout plan?	yes
Are the walls plumb?		yes
Are all the walls being constructed cointernal and external walls?	oncurrently to ensure proper interlock between	yes
Have all the door frames been placed	in the correct position, plumbed and square?	yes
	ition for hingescorrect opening and closing.	-
Are the thicknes of steel/wooden doo	ors and frames according to specification?	yes
Are the roof ties according to specific		<u>I—yes</u>
- Minimum depth of roof ties is 6 coul	rces	
Principal Agent, Engineer		~/
Name <u>v.</u> (Ad ,	Signature	Date 7 61-261

Upon sign off at this stage, roofing r ay e'ommence!



Clerk of Works



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Checklist for House Super Structure

Employer	Ekurhuleni Metropolitan Municipality	
Project	Etwatwa Ext 35 -Combiza	
Contract	PS/I-IS23-2013	
Contractor	Bankuna Construction and Engineering	
Date	02-Apr-15	
File		

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The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

Hot	se Number 36902			
BRI	CK WORK			
Is t	ne bricks SAGS 0400 approved?	yes		
Are	the minimum strength of the bricks as per specification?	<u>yes</u>		
Do	s mortar mix comply with SAM 0164?	yes		
- 1	port cement to 5 ports of sand			
- M	inimum 28 day strength > 5 MPA			
- S	and to be free of organic material			
Is	lamp proof installed between the raft and all walls?	YES		
Is	he brick force installed according to the specification)	yes		
- N	inimum diameter of brrckforce to be 2.8trim			
- E	very 4th course			
- E	very course above doors and windows			
- b	rickforce to be bent of right angles at corners			
To	ot hing is not al/owed!			
De	es the wall have a 20mm overlap on the raft?	yes		
н	ave the walls been set out according to the layout plan?	yes		
	the tile wants been set but according to the layout plan.	yes		
A	re the walls plumb?	yes		
		3		
Α	e all the walls being constructed concurrently to ensure proper interlock between	yes		
	aternal and external walls?			
Н	ave all the door frames been placed in the correct position, plumbed and square?	yes		
E	nsure that the are in the correct position for hingescorrect opening and closing.			
A	re the thicknes of steel/wooden doors and frames according to specification?	yes		
A	re the roof ties according to specification?	yes		
	Minimum depth of roof ties is 6 courfes			
_	······································	.		
I	rincipal Agent, Engineer			
I	Signature Signature	Date	<u>L,/</u>	2401
ľ	Clerk of Works		F3	
1	Name Signature	Date	16 00	_Zas_
ers¦talii	Upon sign off at this stage, roof in commence I			









Checklist for House Super Structure

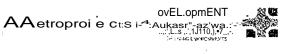
<u></u>	
Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS!HS23-2013
Contractor	Bankuna Construction and Engineering
Date	02-Apr-15
File	

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

RICK WORK		
s the bricks SABS 0400 approved?	yes	
		<u></u>
are the minimum strength of the bricks as per specification?	yes	
December with CAPO 04040		
Opes mortar mix comply with SABS 0164?	yes	
I port cement to 5 purrs of sand Minimum 28 day strongth a 5 MPA		
Minimum 28 day strength a 5 MPA		
Sand to he free of organic material		
s damp proof installed between the raft and all walls?	YES	
s the brick force installed according to the specification?	yes	
Minimum diameter of hi ickforce to be 2.8mm		
- Every 4th course		
Every course above doors and windows		
Brickforce to be bent at right angles at corners		
Toothing is not allowed!		
Does the wall have a 20mm overlap on the raft?	yes	
Have the walls been set out according to the layout plan?	yes	
Are the walls plumb?	yes	
Are all the walls being constructed concurrently to ensure proper interlock between	yes	
internal and external walls?	yes	
mona are oxona naio.		
Have all the door frames been placed in the correct position, plumbed and square?	yes	
Ensure that the are in the correct position for hingescorrect opening and closing.	<u> </u>	
Are the thicknes of steel/wooden doors and frames according to specification?	yes	
Are the roof ties according to specification?	yes	
Minimum depth of roof ties is 6 cources		
		· · · · · · · · · · · · · · · · · · ·
Principal Agent, Engineer		
Name 7 Curl 7 Signature	Date	7-64-76
Clerk of Works		
Name Name TIMM	Date	īz- i 7.











G	- <u></u>
Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Cornbiza
Contract	PSMS23-2013
Contractor	Bankuna Construction and Engineering
Date	02-Apr-15
File	
	. see controlled works have been constructed to the correct horizontal and vertical alignment carried out to the required standards and specifications, as set out in the document and
House Number F	36906
BRICK WORK Ils the bricks SABS 0400 approved?	yes

Are the minimum strength of the bricks as per specification?	yes
Does mortar mix comply with SABS 0164?	yes
- 1 port cement to 5 ports of sand	
· Minimum 28 day strength > 5 MPA	2 🧦
- Sand to be free of organic material	_ #/
Is damp proof installed between the raft and all walls?	YES

yes		

	/
Is damp proof installed between the raft and all walls?	YES
Is the brick force installed according to the specification? - Minimum diameter of brickforce to be 2.8mm	yes
- Every 4th course	
- Every course above doors and windows	
- Brickforce to be bent at right angles at corners	
Toothing is not allowed!	
Does the wall have a 20mm overlap on the raft?	yes
Have the walls been set out according to the layout plan?	yes
· Are the walls plumb?	yes
Are all the walls being constructed concurrently to ensure proper interlock between internal and external walls?	yes
Have all the door frames been placed in the correct position, plumbed and square? Ensure that the are in the correct position for hingescorrect opening and closing.	yes
Are the thicknes of steel/wooden doors and frames according to specification?	yes
Are the roof ties according to specification? - Minimum depth of roof ties is 6 cources	yes
- Millimum deput of foot lies is a cources	

	Principal Name	Agent, Engineer	T	Signature		Date	/ iCk
	 Clerk of	Morks					
	1	VVOIKS			~ ~&	_	
	Name	<u>-11\</u>	<u>.5 7</u>	Signature	To Want	Date	(- ccl- (L ⁵)
			Upor	n sign off at this st	age, roofing- nay commence!		
Arr	iiiiariari r.	lakOto 11141 Su 1	Lel nnu ar liael	m 'nee' oncerittlung	6/Tri 7717-3 4/av- IOD 11r1 1 11-k KV/ OR 32		





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Checklist for House Super Structure

	
Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PSIHS23-2013
Contractor	Bankuna Construction and Engineering
Date	02-Apr-15
File	

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has *been* carried out to the Inquired standards and specifications, as set out in the document and drawings.

drawings.		
House Number 36907		
BRICK WORK		
Is the bricks SABS 0400 approved?	_ <u>ves</u>	
Are the minimum strength of the bricks as per specification?	yes	
Does mortar ;nix comply with SABS 0164?	yes	
I port cement to Sports of sand		
Minimum 28 day strength > 5 MPA		
Sand to be free of organic material		
Is damp proof installed between the raft and all walls?	YES	
Is the brick force installed according to the specification?	yes	
· Minimum diameter of brickforce to be 2.8nn		
- Every 4th course		
Every course above doors and windows		
- 8rickforce to he bent at right angles at corners		
Toothing is not allowed!		
Does the wall have a 20mm overlap on the raft?	yes	
Have the walls been set out according to the layout plan?	yes	
Are the walls plumb?	yes	
	yes	
Are all the walls being constructed concurrently to ensure proper interlock between	yes	
internal and external walls?		
Have all the door frames been placed in the correct position, plumbed and square?	yes	
Ensure that the are in the correct position for hingescorrect opening and closing.		
Are the thicknes of steel/wooden doors and frames according to specification?		
Are the thicknes of steel/wooden doors and frames according to specification?	yes	
Are the roof ties according to specification?	yes	
Minimum depth of roof ties is 6 sources		
		· <u>··</u> ····
Principal Agent, Engineer		
Name Signature	Date	7-64-165
Clerk of Works		
Name Signature	Date	7 Let (15)
Upon sign off at this stage, roofing n'ay commence!		





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Checklist for House Super Structure

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	02-Apr-15
File	

the Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

House Number 36900		
BRICK WORK		
is the bricks SABS 0400 approved?	yes	
	·	
Are the minimum strength of the bricks as per specification?	yes	
Does mortar mix comply with SABS 0164?	yes	
- 1 part cement to 5 parts of sand	1	
- Minimum 28 day strength > 5 MPA		
- Sand to be free of organic material		
Is damp proof installed between the raft and all walls?	YES	
Is the brick force installed according to the specification?	yes	
- Minimum diameter of brirkforce to be 2.8tnn5		, <u> </u>
• Every 4th course		
- Every course above doors and windows		
- Brickforce to be bent at right angles at corners		
Toothing is not allowed!		
Does the wall have a 20mm overlap on the raft?	yes_	
lave the walls been set out according to the layout plan?	yes	
Are the walls plumb?	yes	
Are all the walls being constructed concurrently to ensure proper interlock between internal and external walls?	yes	
Have all the door frames been placed in the correct position, plumbed and square? Ensure that the are in the correct position for hingescorrect opening and closing.	yes	
Are the thickne.s of steel/wooden doors and frames according to specification?	<u>Yes</u>	
Are the roof ties according to specification? - Minimum depth of roof ties is 6 courtes	yes	
Principal Agent, Engineer		
Name 5 gnature	Date	17.44-665
Clerk of Works		
Name Mail Signature	Date	7 54-745
Upon sign off at this stage, roofi may commence!	50	



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Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/H523-2013
Contractor	Bankuna Construction and Engineering
Date	02-Apr-15
File	

The Contractor has **established** that these controlled works have been constructed to the, correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

drawings.				
<u> Jouse Number</u>	36911			
BRICK <u>WORK</u>				
s the bricks SABS 0400 app	roved?		yes	
Are the minimum strength o	of the bricks as per specification?		yes	
Does mortar mix comply with	SABS 0164?		yes	
-7 part Cement to S ports of	sand			
- Minimum 28 day strength	> \$ MPA			
- Sand to be free of organic	material			
Is damp proof installed between	veen the raft and all walls?		L YES	
Is the brick force installed a	ccording to the specification?		yes	
- Every 4th course				
- Every course above doors	and windows			
Brickforce to be bent at rig				
Toothing is not allowed!				
Does the wall have a 20mm	n overlap on the raft?		yes	
Have the wails been set ou	at according to the layout plan?		yes	
Are the walls plumb?			yes	
Are ail the walls being cor	structed concurrently to ensure propose?	er interlock between	yes	
	een placed in the correct position, plu		yes	
Ensure that the are in the	correct position for hingescorrect ope	ning and closing.		
Are the thicknes of steel/v	vooden doors and frames according to	o specification?	<u>L</u> <u>Yes</u>	
At e the roof ties according Minimum depth of roof t			yes	
Principal Agent, Engineer		the second	·	
Name	Signature		Date	7.41.7.5
Clerk of Works		- it		
Name <u>h</u>	Signature Upon sign off at this st	age, roofing may commence!	Date	17:04:15.



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Opon sign off at this stage, SM11 fary Mut no: -1,G•• Urneru, ,

roofing may commence! - rap SITU UWE K;77,17



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Checklist for House Super Structure

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 -Combiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	02-Apr-15
File	
The Contractor has estable	ished that these controlled works have been constructed to the correct horizontal and vertical alignment
and position, that such w	ork has been carried out to the requited standards and specifications, as set out in the document and
drawinge	

drawings. House Number 36912 BRICK WORK Is the bricks SABS 0400 approved? yes Are the minimum strength of the bricks as per specification? yes Does mortar mix comply with SABS 0164? - 1 part cement to 5 ports of sand • Minimum 28 day strength > 5 MPA - Sand to be free of organic material YES Is damp proof installed between the raft and all walls? Is the brick force installed according to the specification? - Minimum diameter of brickforce to be 2.8mm - Every 4th course - Every course above doors and windows - Brickforce to be bent of right angles at corners Toothing is not allowed! Does the wall have a 20rnm overlap on the raft? yes Have the walls been set out according to the layout plan? Are the wails plumb? ves Are all the walls being constructed concurrently to ensure proper interlock between yes internal and external walls? Have all the door frames been placed in the correct position, plumbed and square? yes Ensure that the are in the correct position for hingescorrect opening and closing. Are the thicknes of steel/wooden doors and frames according to specification? Are the roof ties according to specification? • Minimum depth of roof ties is 6 coerces Principal Agent, Engineer Name Signature Date de - 260 Clerk of Works Signature Date

Upon sign off at this stage, roofing ay commence , $M01 \ en$ "T1CT CD- a Ut LOW, SD9.7-1DP CMCKUP…

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Employer





Ekurhuleni Metropolitan Municipality



Checklist for House Super Structure

roject	Etwatwa Ext 35 - Cornbiza	
ontract	PS/HS23-2013	
ontractor	Bankuna Construction and Engineering	
ate	02-Apr-15	
ile		
	I that these controlled works have been constructed to the coas been carried out to the required standards and specifica	
House Number	36913	
BDICK WORK		
<u>BRICK WORK</u> s the bricks SABS 0400 approv	ed?	Voc
a the blicks GABG 0400 approv	ou:	yes
Are the minimum strength of the	e bricks as per specification?	yes
Does mortar mix comply with S	ABS 0164?	yes
I part cement to 5 ports of sa		, , ,
· Minimum 28 day strength > 5		
- Sond to be free of organic mo	terior	
ls damp proof installed betwee	en the raft and all walls?	L <u>YES</u>
is the brick force installed acco	ording to the specification?	yes
- Mininxun diameter of brickfo	rce to be 1.8mm	
- Every 4th course		
 Every course above doors an 	d windows	
- !Irickforce to be bent of right	angles at corners	
Toothing is not allowed!		
Does the wall have a 20rnm of	verlap on the raft?	yes
Have the walls been set out a	ccording to the layout plan?	yes
Are the walls plumb?		yes
Are all the walls being construction internal and external walls?	ucted concurrently to ensure proper interlock between	yes
Have all the door frames bee	n placed in the correct position, plumbed and square?	yes
	rect position for hingescorrect opening and closing.	
Are the thicknes of steel/woo	den doors and frames according to specification?	yes
Are the roof ties according to	specification?	yes

Signature

Date

Name P Signature
Upon sign off at this stage, rooting may-c mnience!



Clerk of Works



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Checklist for House Super Structure

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Cornbiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	02-Apr-15
File	

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

ar awings.				
House Numbel	36911			
BRICK WORK				
is the bricks SAPS 0400 a	approved?		yes	
Are the minimum strengt	h of the bricks as per specification?		yes	
Does mortar mix comply	with SABS 0164?		yes	
1 part cement to S ports	s of sand			
 Minimum 28 day streng 	gth > 5 MPA			
Send to be free of orga	nic material			
Is damp proof installed l	between the raft and all walls?		YES	
Is the brick force installe	ed according to the specification?		yes	
- Minimum diameter of b	orickforce to be 2.8nun			
- Every 4th course				
- Every course above do	ors ond windows			
- Brickforce to be bent a	t right angles at rorners			
Toothing is not allowed	!!			
Does the wall have a 20	mm overlap on the raft?	[yes	
Have the walls been set	out according to the layout plan?	1	yes	
Are the walls plumb?			yes	
Are ail the walls being	constructed concurrently to ensure proper inte	rlock between	yes	
internal and external v				
Have all the door fram	es been placed in the correct position, plumbe	d and square?	yes	
Ensure that the are in t	he correct position for hingescorrect opening a	and closing.		
Are the thicknes of ste	el/wooden doors and frames according to spec	ification?.	yes	
Are the roof ties accord			yes	
		·		
		1 Sec. 10		
Principal Agent, Engir	neer .	<u> </u>		
Name <u>t Lc</u>	1? i I Signature		Date	6-14 745
Clerk of Works		. .		
Name Name	Signature Lipon sign off at this stage of	De rocat	Date	7 - 5 - 6 - 6 - 6 - 5
A DOMESTIC AND A STATE OF THE PARTY OF THE P	Upon sign off at this stage, r	oomigunay c rimencel		 · -





Employer

Project

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DEVELOPMENT

Ekurhuleni Metropolitan Municipality

Etwatwa Ext 35 - Combiza



Checklist for House Super Structure

Contract	PS/HS23-2013		
Contractor	Banktina Construction and Engineering		
Date	02-Apr-15		
File			
The Contractor has established that the	se controlled works have been constructed to the con	rrect horizontal and ver	tical alignment
	carried out to the required standards and specific		_
drawings.		,	
House Number	36915		
BRICK_WORK			
Is the bricks SABS 0400 approved?		yes	
Are the minimum strength of the bricks	s as per specification?	yes	
		· 	
Does mortar mix comply with SABS 010	64?	yes	
- I port cement to 5 ports of sand			
- Minimum 28 day strength > 5 MPA			
- Sand to be free of organic material			
	6 1 H H O	MEG	
Is damp proof installed between the rai	tt and all walls?	YES	
Is the brick force installed according to		yes	
- Minimum diameter of bockforce to l	oe 2.8nn		
- Every 4th course			
- Every course above doors and window			
- Brickforce to be bent at right angles a	tt corners		
Toothing is not allowed!			
Does the wall have a 20mm overlap or	n the raft?	yes	
Have the walls been set out according	to the layout plan?	yes	
			\
Are the walls plumb?		yës	
Are all the walls being constructed con	ncurrently to ensure proper interlock between	yes	
internal and external walls?		·	
Have all the door frames been placed	in the correct position, plumbed and square?	yes	
-	ition for hingescorrect opening and closing.	L	
F			
Are the thicknes of steel/wooden door	rs and frames according to specification?	ves	
The the thickness of steel wooden door	to and rumes according to specification.	<u> </u>	
Are the roof ties according to specific	ation?	yes	
· Minimum depth of roof ties is 6 cour		L	
Principal Agent, Engineer			
Name	Signature ————	Date	
			2
Clerk of Works			
			(. 7

Upon sign off at this *stage*, *roofi*; ma commence! 531"5-1117,1117MTE roo—











Employer	Ekurhuleni Metropolitan Municipality	
Project	Etwatwa Ext 35 - Combiza	
Contract	PSIHS23-2013	
Contractor	Bankuna Construction and Engineering	
Date	02-Apr-15	
File		
and position, that such work has drawings.	hat these controlled works have been constructed to the cost been carried out to the required standards and specifications and specifications are seen to the cost of the cost	
House Number	30910	
BRICK WORK		
Is the bricks SASS0400 approved	1?	yes
Are the minimum strength of the	bricks as per specification?	yes
Does mortar mix comply with SAS	SS 0164 ⁾	yes
- 1 port cement to 5 posts of sand		L
- Minimum 28 day strength > 5 M		
- Sand to be free of organic mate		
G		
Is damp proof installed between	the raft and all walls?	YES
is the brick force installed accord	ding to the specification?	yes
- Mininwm diameter of brickford	e to be 2_8mm	
Every 4th course		
- Even/ course above doors and		
Brickforce to be bent at right an	ngles at corners	
Toothing is not allowed!		
Does the wall have a 20rnm over	erlan on the raft?	yes
		Ē
Have the walls been set out acc	cording to the layout plan?	yes
	3	
Are the walls plumb?		yes
Are ail the walls being construc	cted concurrently to ensure proper interlock between	yes
internal and external walls?		
Have all the deep former been	aloud in the course to a siting about a dead and a success.	
	placed in the correct position, plumbed and square?	yes
Ensure that the are in the corre	ect position for hingescorrect opening and closing.	
Are the thicknes of steel/wood	en doors and frames according to specification?	yes
Are the roof ties according to s	specification?	yes
 Minimum depth of roof ties is 	6 cources	
, _n		
	and the second	and the second
Principal Agent, Engineer		
Name [<u>î</u> r	Signature	Date
Clerk of Works		
LOIGIN OF AAOINO		

Signature

Upon sign off at this Stage, roo ena commence!

Date



Name



Metroprojects



Ekurhuleni Metropolitan Municipality





Employer

Checklist for House Super Structure

Contract PSIHS23-2013 Contractor Bankuna Construction and Engine Date 02-Apr-15	eering
Date 02-Apr-15	eering
File	
the Contractor has established that these controlled works have been countrolled works have been countrolled works have been carried out to the required standard drawings.	
House Number 369/3	
BRICK WORK	
is the bricks SASS 0400 approved?	yes
·	
Are the minimum strength of the bricks as per specification?	yes
Does mortar mix comply with SAGS 0164?	yes
- 1 port cement to 5 parts of sand	,,,,
- Minimum 28 day strength r 5 MPA	
- Sand to be free of organic material	
Zama is as a significant material	
Is damp proof installed between the raft and all walls?	■ YES
in the height force in talled according to the energia atom.	<u></u>
is the brick force installed according to the specification?	
- Minimum diameter of brickforce to be 2.8min	
- Every arh course - Every course above doors and windows	
- Brick force to be bent as right angles of corners	
- Brick force to be bent as right angles of corners	
Toothing is not allowed!	
Does the wall have a 20rrim overlap on the raft?	yes
Have the walls been set out according to the layout plan?	yes
Are the walls plumb?	yes
Are all the walls being constructed concurrently to ensure proper interleginternal and external walls?	ock between yes
Have all the door frames been placed in the correct position, plumbed a Ensure that the are in the correct position for hingescorrect opening and	\ <u></u> -
Are the thicknes of steel/wooden doors and frames according to specific	ication? yes
Are the roof ties according to specification? Minimum depth of roof ties A 6 court	yes

Name

Name

-<u>Nliq 071-1</u>

Signature

Signature

Upon sign off at this stage, roofing saycommence!
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Date

Date



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Checklist for House Super Structure

_ 	
Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/HS23-2013
Contractor	Bankuna Construction and Engineering
Date	02-Apr-15
File	

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and

House Number	36980						
BRICK WORK							
			Г				
s the bricks SABS 0400 appr	oved?	•	L	yes			
Are the minimum strength of	of the bricks as per specificatio	n?	I_	<u>ves</u>		=	
Does mortar mix comply with	h SAGS 0164?		ĺ	ves			
- 1 port cement to 5 parts of	sand		=	-			
- Minimum 28 day strength							
- Sand to be free of organic			•				
Is damp proof installed bet	ween the rah and all walls?		[<u>YES</u>			
is the brick force installed a	. according to the specification?		ſ	yes -			\neg
Minimum diameter of brick			,				
Every 4th course	Words to be 2.6mm						
Every course abase doors	and windows	•					
- Brickforce to be bent at rig							
Znomoree to be bont at ne	ynt angree et comerc						
Toothing is not allowed!							
Does the wall have a 20mm	n overlap on the raft?		ļ	yes			
	-		:	<u> </u>			
Have the walls been set ou	It according to the layout plan?	•	1	yes			
							 ,
Are the walls plumb?				<u> </u>			j
Are all the walls being con	structed concurrently to ensu	re proper interlock bet	ween	yes			-
internal and external wall				I			
							. —
Have all the door frames b	peen placed in the correct position	tion, plumbed and squ	are?	yPS			
Ensure that the are in the	correct position for hingescorr	rect opening and closin	ıg.			•	
				<u> </u>			
Ate the thicknes of steel/w	ooden doors and frames acco	rding to specification?	<i>!</i>	yes			
Are the roof ties according	g to specification?						
- Minimum depth of roof t				·		~	
		19					
Principal Agent, Engineer	- -						
Name [7 ksd]	7 Signatu	re		Date	ζ <u>ι</u>	'cL - (<u>ci^</u> _
i							
Clerk of Works		4	·· ·		<u>+</u> .		
Name 1	HITTI Signatu	<i>مر</i> تعالم الكراب	النابة	Date	7	<u>د رک</u>	<u>(4.)</u>
	upon sign off a	t this stage, roofin a	ay commence=.				





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Checklist for House Super Structure

	Ekurhuleni Metropolitan Municipality		
Project	Etwatwa Ext 35 - Combiza		
Contract	PS/11323-2013		
Contractor	Bacteria Construction and Engineering		
Date	02-Apr-15		
-ile			
	t these controlled works have been constructed to the controlled out to the required standards and specificates.		_
House Number	36982		
BRICK <u>WORK</u>			
Is the bricks SABS 0400 approved?		V00	
2 1 211010 57.20 0400 approved:		yes	
Are the minimum strength of the br	icks as per specification?	yes	
Does mortar mix comply with SAES	0164?	yes	
- 1 port cement to S ports of sand		•	
- Minimum 28 day strength a 5 MP.	A		
- Sand to be free of organic materu	ıi		
is damp proof installed between th	e raft and all walls?	YES	
Is the brick force installed according	ng to the specification?	yes	
Minimum diameter of bt ickfoi re		,,,,,	
- Every 4th course			
- Every course above doors and win	ndows		
Brickforce to be bent at right angl			
Toothing is not allowed!			
Does the wall have a 20mm overla	ap on the raft?	yes	
Have the walls been set out accord	ding to the layout plan?	ı <u>yr-s</u>	
Are the walls plumb?		yes	
Are all the walls being constructor	d concurrently to ensure proper interlock between	V06	
internal and external walls?	a concurrently to ensure proper interiock between	yes	
	aced in the correct position, plumbed and square? t position for hingescorrect opening and closing.	yes	
Are the thicknes of steel/wooden	doors and frames according to specification?	yes	
Are the roof ties according to spe Minimum depth of roof ties is 6		yes	
Principal Agent, Engineer		-	
	 Signature	Date	

Upon sign off at this stage, roofin may eommence I



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Checklist for House Super Structure

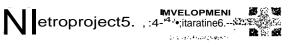
Employer	Ekurhuleni Metropolitan Municipality			
Project	Etwatwa Eat 35 - Cornbiza			
Contract	PS/HS23-2013			
Contractor	Bankuna Construction and En	gineering		
Date	02-Apr-15			
File				
	ed that these controlled works have been has been carried out to the required standard standa			•
BRICK WORK				
Is the bricks SAGS 0400 approved?			yes	
Are the minimum strength of the bricks as per specification?			yes	
Does mortar mix comply with	SABS 0164?		yes	
- 1 part cement to 5 ports of			,	
- Minimum 28 day strength	5 MPA			
- Sand to be free of organic r	naterial			
Is damp proof installed between the raft and all walls?			YES	
is The brick force installed error ding to the specification?			yes	
· Minimum diameter of brick			7	
- Every 4th course				
• Every course above doors	and windows			
Brickforce to he bent at rig	ht finales ut corners			
Toothing is not allowed!				
Does the wall have a 20mm overlap on the raft?			yes	
Have the walls been set out according to the layout plan?			yes	
Are the walls plumb?			yes	
Are all the walls being constructed Concurrently to ensure proper interlock between. internal and external walls?			yes	
Have all the door frames been placed in the correct position, plumbed and square? Ensure that the are in the correct position for hingescorrect opening and closing.			yes	
Are the thic.knes of steel/wooden doors and frames according to specification?			ı <u>yes</u>	
Are The roof ties according •Minimum depth of roof tie	•		<u>ves</u>	
Principal Agent, Engineer		<u> </u>	Ун 	
Name <u>F</u>	i Signature		Date	
Clerk of Works		D1144-		
Name <u>№1111</u>	41T Signature	DIVE	Date	<u> 4 - 645 - P</u>



Signature Upon sign Off at this stage, roofing mat' commence!











Checklist for House Super Structure

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS/1-1S23-2013
Contractor	Bankuna Construction and Engineering
Date	02-Ay-IS
File	

The Contractor has established that these controlled works have been constructed to the correct horizontal and vei [kat alignment

and position, that such work has been carried out to the required standards and specification drawings	ns, as set out in the document and
House Numbey 36990	
BRICK WORK	
Is the bricks SAM 0400 approved?	yes
Are the minimum strength of the bricks as per specification?	yes
Does mortar mix comply with 5ABS 0164?	yes
- 1 port cement to 5 owls of sand	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
- Minimum 28 day strength > 5 MPA	
- Sand to he free of organic material	
Is damp proof installed between the raft and all walls?	YES
Is the brick forme installed according to the specification?	yes
- Minimum diameter of brickforce to be 2.11nun	
- Ivory 4th course	
- Every course above doors and windows	
Brickfonce to be bent at right angles at corners	
Toothing is not allowed!	
Does the wall have a 10mm overlap on the raft?	yės
H _{ave} the walls been set out according to the layout plan?	yes
Are the walls plumb?	Yes
Are all the walls being constructed concurrently to ensure propel interlock between internal and external walls?	yes
Have all the door frames been placed in the correct position, plumbed and square? Ensure that the are in the correct position for hingescorrect opening and closing.	yes
Are the thicknes of steel/wooden doors arid frames according to specification?	yes
Are the roof ties according to specification? - Minimum depth of roof ties is 6 cources	yes
Principal Agent, Engineer	<u> </u>
Name I<	Date (- C C + - C C)
Clerk of Works	
Name 42 ZIT Signature r;.11111	Date 4-1-/
Upon sign off at this stage, roofing may commence! ssynthautean,	



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Checklist for House Super Structure

Employer	aurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Cornbiza
Contract	PSIHS23-2013
Contractor	Bankuna Construction and Engineering
Date	02-Apr-15
File	
	-

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards arid specifications, as set out in the document and drawings.

House Number 36991		
BRICK WORK		
Is the bricks SAPS 0400 approved?	yes	
**		· · · · · · · · · · · · · · · · · · ·
Are the minimum strength of the bricks as per specification?	yes	
Does mortar mix comply with SAPS 0164?	yes	
• I part cement to 5 ports of sand		
Minimum 28 day strength > 5 MPA		
Sand to be free of organic material		
Is damp proof installed between the raft and all walls?	YES	
is the brick force installed according to the specification?	yes	
- Minimum diameter of bock farce to be 2.Srnni	L	······································
- Every 4th course		
- Every course above doors and windows		
- Brickforce to he bent at right angles 01 comers		
Toothing is not allowed!		
Does the wall have a 20mm overlap on the raft?	yes	
Have the walls been set out according to the layout plan?	yes	
Are the walls plumb?	yes	
Are all the walls being constructed concurrently to ensure proper interlock between internal and external walls?	yes	
Have all the door frames been placed in the correct position, plumbed and square? Ensure that the are in the correct position for hingescorrect opening and closing.	yes	
Are the thicknes of steel/wooden doors and frames according to specification?	I <u>yes</u>	
Are the roof ties according to specification? - Minimum depth of roof ties is 6 cources	yes	
Principal Agent, Engineer Name Signature	Date	<u> </u>
Clerk of Works, Name Signature Upon sign off at this stage. rodingimay ommencel	. Date	7 34 (05)





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Checklist for House Super Structure

Employer	Ekurhuleni Metropolitan Municipality
Project	Etwatwa Ext 35 - Combiza
Contract	PS1HS23-2013
Contractor	Bankuna Construction and Engineering
Date	02-Apr-15
File	

The. Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

House <u>Number</u>	36992					
BRICK <u>WORK</u>				<u> </u>		
Is the bricks SAGS 0400 a	pproved?			yes		
Are the minimum strength	of the bricks as per	Specification?		yes		
Does mortar mix comply	with SAM 0164?			yes		
7 port cement to 5 ports	s of sand					
- Minimum 28 day streng	nth > 5 MPA					
- Sand to be free of organ	nic material					
is clamp proof installed b	etween the raft and a	ll walls?		YES		,
is the brick force installed	d according to the spe	ecification?		yes		
- Minimum diameter of b	rickforce to be 2.8nur	1				
- Fvery 4th course						
Every course above dod	ors and windows					
grickforce to be bent at	right ongles of corner	rs				
Toothing is not allowed:	?					
Does the wall have a 20	mm overlap on the ra	ft?		yes		
Have the walls been set	out according to the I	ayout plan?		yes		
Are the walls plumb?				yes		
Are all the walls being of	constructed concurrer	ntly to ensure prop	er interlock between	yes		
internal and external w	ralls?					
Have all the door frame				yes		
Ensure that the are in t	he correct position for	r hingescorrea ope	ning and closing.			
Are the thicknes of stee	el/wooden doors and f	rames according t	o specification?	yes		
Are the roof ties according to specification? Minimum depth of roof ties is 6 cources			yes			
ічінтат аерін өт гос	J. 1163 13 U CUUICES					
Principal Agent, Engine	eer					
Name <u>'t V,-t(</u>	Α	Signature		Date		
Clerk of Works						
Name	<u>t i =t 1</u>	Signature		Date	Н	<u>`1"</u> ——
er,,imarivrrexr===rtri.iiii:sa	Upo af MOM:. Oamom an: in C	on sign off at this s One.!.	tage, roofing- ayc4mm r	encei		_











Checklist for House Super Structure

Employer	Ekurhuleni Metropolitan Mui	nicipality		
Project	Etwatwa Ext 35 - Combiza		· · · ——·	
Contract	: PS/HS23.2013			
Contractor	: Bankuna Construction and E	naineerina		
Date	: 02-Apr-15			
File				<u> </u>
				
	nat these controlled works have be been carried out to the required			_
House Number	36908			
BRICK WORK				
is the bricks SASS 0400 approved	?		ye	
Are the minimum strength of the I	bricks as per specification?		yes	
Does mortar mix comply with SAN	NS 0164?		yes	
- 1 port cement to Sports of sand			,,,,	
 Minimum 28 day strength > 5 M 				
Sond to be free of araotnc mate				
Is damp proof installed between	the raft and all walls?		1 yFs	
is the brick force installed accord	-		yes	
- Minimum diameter of brickforce	e to be 2.8mm			
- 1- very 4th course				
Every course above doors and v	vindows			
- Brickforce to be bent at right an	gles at corners			
Toothing is not allowed!				
Does the wall have a 20mm ove	rlap on the raft?		yes	
Have the walls been set out according	ording to the layout plan?		ycs	
Are the well best 6				
Are the walls plumb?			L yes	
Annual de annual de la constant	to do a susual attack	anticular also be anti-	<u></u>	-• <i></i>
Are all the walls being construct internal and external walls?	ted concurrently to ensure proper	птепоск ретмеей	yes	
Have all the door frames boon r	placed in the correct position, plum	ned and square?	yes	
•	Have all the door frames been placed in the correct position, plumbed and square? Ensure that the are in the correct position for hingescorrect opening and closing.			
Are the thicknes of steel/woode	en doors and frames according to s	pecification?	y es	
Are .the roof ties according to s			yes	
Minirnurn depth of roof ties is o	6 sources			
Principal Agent Engineer		4 6		
Principal Agent, Engineer Name I	Signature		Date	Court.
!				
Clerk of Works		· C		



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Checklist for House Super Structure

Ekurhuleni Metropolitan Municipality		
Etwatwa Ext 35 - Combi7a		
PS/HS23-2013		
Bankuna Construction and Engineering		
02-Apr-15		

The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment arid position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

House Number	37000		
BRICK WORK			
is the bricks SASS 0400 approved?		<u>yes</u>	
**		<u>,,</u>	
Are the minimum strength of the brice	ks as per specification?	1 yes	
D	1640		
Does mortar mix comply with SAGS 0 2 port cement to S parts of sand	164?	yes	
Minimum 28 day strength a 5 MPA			
• Sand to be free of organic moterial			
is damp proof installed between the	raft and all walls?	YIs	
Is the brick force installed according t	o the specification?	Voc.	
- Minimum diameter Of brirkforce to	-	yes	
- Every 4th course	, c. c. c. c. c. c. c. c. c. c. c. c. c.		
- Every course above doors and winde	ows		
- Brickjorce to be heat at right angles			
Toothing is not allowed!			
Door the and I have a 20 min and a	the reft?		
Does the wall have a 20rum overlap	on the rate:	yes	
Have the walls been set out according	ng to the layout plan?	I <u>yes</u>	
	3 · · · · · · · · · · · · · · · · · · ·		
Are the walls plumb?		yos	
	oncoct ently to ensure propel interlock between	yes	
internal and external walls?			
Have all the door frames been piece	d in the correct position, plumbed and square?	[yes	
	sition lot hingescorrect opening and closing.	<u>yes</u>	
	and the same same same same same same same sam		
Are the thicknes of steel/wooden do	pors and frames according to specification?	<u>yes</u>	
		_	
Are the roof ties according to specif	ication?	yes	
- Minimum depth of roof ties is 6 cou	urses		
Principal Agent, Engineer			
· <u> </u>	Signatura	ъ.	
Name <u>FT</u>	Signature	Date	LZIPSELÇAŞ
Clerk of Works			
Name	Signature	Date	
	Upon sign off at this stage, roofI7*rhaycomme.ncef	_ 440	











Checklist for House Super Structure

Ekurtuileni Metropolitan Municipality
Etwatwa Ext 35 - Combiza
PS/F-1523-2013
Bankuna Construction and Engineering
02-Apr-15

the Contractor has established that these controlled works have been constructed to the correct honiontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and

House Number	3/011			
BRICK WORK				
Is the bricks SAGS 0400 appr	roved?		yes	
			L., <u></u> ,	
Are the minimum strength o	of the bricks as per specification?		yes	
Does mortar mix comply with	n SAPS 0164?		yes	
- 1 part cement to 5 ports of		•		
- Minimum 28 day strength	> 5 MPA			
- Sand to be free of organic	material			
Is damp proof installed betw	ween the raft and all walls?		YES	
Is the brick force installed a	according to the specification?		yes	
- Minimum diameter of brici			,,,,	
Every 4th course				
Every course above doors	and windows			
Brickforce to be bent at rig	ght angles at corners			
Toothing is not allowed!				
Does the wall have a 20min	n overlan on the raft?		yes	
Does the wall have a zonili	n overlap on the rait:			
Have the walls been set or	ut according to the layout plan?		1,65	
riave the walls been set of	at according to the layout plans		\yes	
Are the walls plumb?			yes	
·			, , , ,	
Are ail the walls being con	structed concurrently to ensure proper	interlock between	yes	
internal and external walls	s?			
	peen placed in the correct position, plurn		<u>yes</u>	·
Ensure that the are in the	correct position for hingescorrect opening	ng and closing.		
Are the thicknes of steel/w	vooden doors and frames according to s	enecification?	[yes	
vite the thiothes of steel, w	recording to a	poomoatori.	1463_	
Are the roof ties according	to specification?		yes	
Minimum depth of roof ti			٠	
		1/2		
Principal Agent, Engineer	<u> </u>			
Name	Signature		Date	La - 1 - 3 - 3 - 6
Clerk of Works				·
Name ttls , *k1	1 ∕¹ - ") Signature	148 3 = 3 = 3	Date	17. Jan - 354
<u></u> , "		ge, roofing ma/commence!		





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Checklist for House Super Structure

Employer	Ekurhuleni Metropolitan Municipality	
Project	Etwatwa Ext 35 - Combiza	
Contract	PS/11523-2013	
Contractor	Bankuna Construction and Engineering	
Date	02-Apr-15	
File		

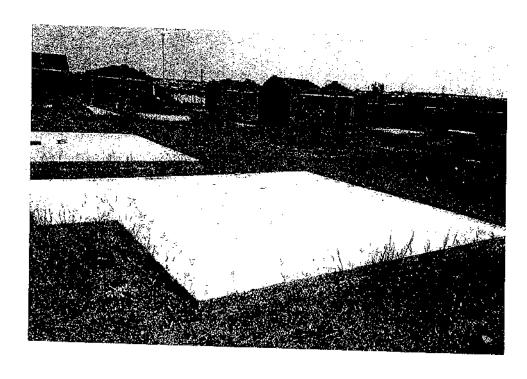
The Contractor has established that these controlled works have been constructed to the correct horizontal and vertical alignment and position, that such work has been carried out to the required standards and specifications, as set out in the document and drawings.

BRICK WORK		
Is the bricks SABS 0400 approved)	yes	
Are the minimum strength of the bricks as per specification?	<u>ynx</u>	
Does mortar mix comply with SABS 0164?	L ves	
· I port cement to S party of sand		
Minimum 28 day strength > 5 MPA		
Sond to be free of organic material		
Is damp proof installed between the raft and all walls?	YES	
Is the brick force installed according to the specification?	yes	
- Minimum diameter of brick force to be 1.8mm		
- Leery 4th course		
- Leery course above doors and windows		
Bock farce to be bent at right angles at corners		
Toothing is not allowed!		
Does the wall have a 20mm overlap r.in the raft?	yes	
Have the walls been set out according to the layout plan?	yes	
Are the walls plumb?	yes	
Are all the walls being constructed concurrently to ensure proper interlock between	<u>r ves</u>	
internal and external walls?	<u> </u>	
Have all the door frames been placed in the correct position, plumbed and square? Ensure that the are in the correct position for hingescors ect opening and closing.	<u>yes</u>	
Endure that the dream the correct position for imagescore out sperming that discong.		
Are the thicknes of steel/wooden doors and frames according to specification?	yes	
Are the roof ties according to specification?	yes	
- Minimum depth of roof ties is 6 colimps	,	
Principal Agent, Engineer		
Name DC Signature	– Date	<u>C¹4</u> ■
	Date	<u>∪-4</u>
Clerk of Works	_	
Name 1 I () k '/ 1'17. J Signature	Date	



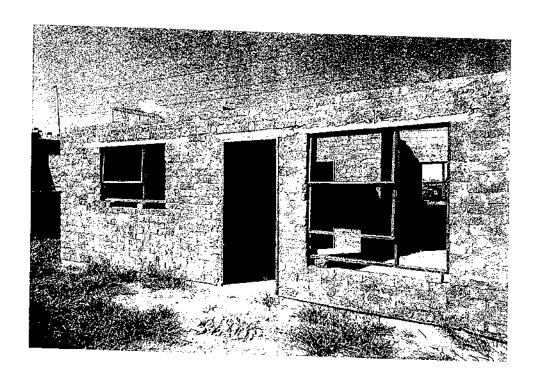
SITE PHOTOS















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3.1Summary of Labour Stats



LABOUR STATS FOR JULY2014/JUNE2015

MONTH	LABOUR	COMMENTS
JULY 2014	14	NO ACTIVITY ON SITE
AUGUST 2014	10	NO ACTIVITY ON SITE
SEPTEMBER 2014	10	NO ACTIVITY ON SITE
OCTOBER 2014	23	
NOVEMBER 2014	23	
DECEMBER 2014	14	BUILDERS BREAK
JANUARY 2015	14	NO ACTIVITY ON SITE
FEBRUARY 2015	23	
MARCH 2015	25	
APRIL 2015	24	
MAY 2015	66	
JUNE 2015	34	
TOTAL	280	

