



MEMBER		No OF	BARS		DIA.	LENGTH		TOTAL		MARK	S C	B E N D I N G				
			PER MEMB					NUM-BER				A	B	C	D	E/r
ROOF SLAB	2	18	Y12	2950	36	A	38	100	2800	100						
		2	Y12	1950	4	B	38	100	1800	100						
		2	Y12	500	4	C	38	100	350	(100)						
		28	Y12	2950	56	D	38	100	2800	(100)						
		2	Y12	500	4	E	38	100	350	(100)						
		2	Y12	950	4	F	38	100	800	100						
		4	Y12	1000	8	G	20	1000								
		9	Y12	950	18	H	83	250	150	250	250					
		STARTER BARS	2	56	Y16	1550	112	J	37	250	1350					
GROUND SLAB	2	17	Y16	3400	34	K	38	100	3250	(100)						
		4	Y16	1750	8	L	38	100	1600	(100)						
		4	Y16	650	8	M	38	100	500	(100)						
		13	Y16	4250	26	N	38	100	4100	(100)						
		4	Y16	2600	8	P	38	100	2450	(100)						
		4	Y16	650	8	Q	38	100	500	(100)						
		12	Y12	1150	24	S	83	250	250		250					
		4	Y12	1000	8	R	20	1000								
CHAMBER WALL	2	56	Y16	3650	112	T	37	100	3600							
		4	Y12	3650	76	U	38	100	3500	(100)						
		4	Y12	2850	76	V	38	100	2700	(100)						
	1	30	Y10	400	30	W	38	100	(250)	100						
PLINTH	2	6	Y12	1600	12	X	54	250	1300	(100)						
		5	Y12	2200	10	Y	38	150	1300	150						
	1	2	Y12	450	2	Z	38	100	250	(100)						
CHAMBER SUMP	2	7	Y12	3100	14	AA	53	100	700	1600	700	100				
		5	Y12	2250	10	AB	53	100	500	1150	500	100				
		2	Y12	1750	8	AC	38	100	1600	100						
	2	15	Y12	1300	30	AD	38	100	1150	100						
PIPE OPENING		4	2	Y12	1200	8	AE	20	1200							
LIFTING HOOK		2	4	Y12	1100	8	AF	53	300	245	75	245	(300)			
	8	10	12	16	20	25	32	40	TOT	BENDING SCHEDULE						
R										PROPOSED CHAMBER # 09						
Y		7	879	1347					2234							
TOT		7	879	1347					2234							

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JOHANNESBURG WATER

THESE NOTES SERVE AS AN ADDENDUM TO THE SPECIFICATION IN THE BILL OF QUANTITIES (BOQ). IN THOSE CASES WHERE THE BOQ SPECIFICATIONS DIFFER FROM THESE NOTES, THESE NOTES SHALL TAKE PRECEDENCE ON ORIGINAL

Engineer:
T.Chikwata Pr Eng (20140009)

Drawn By: B. Manyawu
Designed By: T.Chikwata
Checked By: T.Chikwata

Signature: [Signature]
Date: SEPT 2023

Signature: [Signature]
Date: SEPT 2023

Signature: [Signature]
Date: SEPT 2023

CONCRETE NOTES:
1.0 SETTING OUT AND GENERAL
1.1 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ARCHITECTS' DRAWINGS.
1.2 ALL DIMENSIONS AND HEIGHTS ARE TO BE CHECKED ON SITE BEFORE WORK IS PUT IN HAND.
1.3 REPORT DISCREPANCIES TO ARCHITECT OR ENGINEER.
1.4 THIS DRAWING MUST NOT BE USED TO SCALE OFF. USE ONLY WRITTEN DIMENSIONS. CONTACT THE ENGINEER OR ARCHITECT WHERE CLARITY IS SOUGHT.
1.5 FOR SETTING OUT DATA, SETTING OUT POINTS AND DATUM LEVELS REFER TO SURVEY INFORMATION AND ARCHITECTS' DRAWINGS.
1.6 STRUCTURAL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE PROJECT SPECIFICATION AND THE RELEVANT S.A.N.S. SPECIFICATIONS. ALL CONCRETE WORK IS TO BE DONE IN ACCORDANCE WITH S.A.N.S. 1200G AND EARTHWORKS IN ACCORDANCE WITH S.A.N.S. 1200G.
1.8 CONSULT RELEVANT ARCHITECTS, MECHANICAL, ELECTRICAL & PLUMBING DRAWINGS AND DETAILS AS RELEVANT FOR DRAINAGE, STORMWATER OUTLETS, RWPS AND HOLES AND SLEEVES FOR THESE SERVICES. NO HOLES ARE TO BE CORED WITHOUT ENGINEERS WRITTEN APPROVAL.
2.0 FOUNDATIONS
2.1 ALL FOUNDATION EXCAVATIONS TO BE INSPECTED AND APPROVED IN WRITING BY THE ENGINEER BEFORE CONCRETE IS CAST.
3.0 CONCRETE CHARACTERISTIC 28 DAY STRENGTH: BASES 25MPa / 19mm STRIP FOOTINGS: 25MPa / 19mm SURFACE BEDS: 30MPa / 19mm SUSPENDED SLABS & BEAMS: 30MPa / 19mm COLUMNS: 30MPa / 19mm
3.2 CONCRETE MIX DESIGNS FOR ALL GRADES OF CONCRETE TO BE GIVEN TO ENGINEER FOR PERUSAL AND COMMENT. CONCRETE MIX DESIGNS FOR SURFACE BEDS TO HAVE MINIMUM BLEED CHARACTERISTICS.
3.3 ALL CONCRETE TO BE ADEQUATELY CURED BY KEEPING SURFACES CONTINUOUSLY DAMP FOR AT LEAST 5 DAYS AFTER CASTING.
4.0 NO FOUNDATIONS ARE TO BE CAST IN FILL MATERIAL. A 50mm THICK LAYER OF 10MPa / 19mm BLINDING CONCRETE IS TO BE CAST UNDER ALL REINFORCED BASES, REINFORCED STRIP FOOTINGS AND GROUND BEAMS.
4.1 ANY OVER EXCAVATIONS ARE TO BE MADE GOOD WITH 10MPa / 19mm CONCRETE AT THE CONTRACTORS EXPENSE.
4.2 BACKFILLING OVER COLUMN BASES SHALL BE DONE WITH AN APPROVED MATERIAL COMPACTED IN LAYERS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
4.3 ALLOWABLE BEARING PRESSURE UNDER: CONCRETE BASES = 150kPa STRIP FOOTINGS = 100kPa
4.4 CONCRETE CHARACTERISTIC 28 DAY STRENGTH: BASES 25MPa / 19mm STRIP FOOTINGS: 25MPa / 19mm SURFACE BEDS: 30MPa / 19mm SUSPENDED SLABS & BEAMS: 30MPa / 19mm COLUMNS: 30MPa / 19mm
4.5 CONCRETE MIX DESIGNS FOR ALL GRADES OF CONCRETE TO BE GIVEN TO ENGINEER FOR PERUSAL AND COMMENT. CONCRETE MIX DESIGNS FOR SURFACE BEDS TO HAVE MINIMUM BLEED CHARACTERISTICS.
4.6 COVER TO REINFORCEMENT: STRIP FOOTINGS: 50mm BASES: 50mm COLUMNS AND WALLS: 30mm SUSPENDED SLABS: 30mm
5.0 ALL CONCRETE TO BE CONSTRUCTED TO THE S.A.N.S. 1200G PERMISSIBLE DEVIATION DEGREE OF ACCURACY CLASS II UNLESS SPECIFIED OTHERWISE.
5.1 CONCRETE CUBE TEST RESULTS TO BE SUBMITTED TIMELY TO ENGINEER FOR PERUSAL, RECORDS, COMMENT AND APPROVAL.
5.2 REINFORCEMENT: CHARACTERISTIC STRENGTH: MILD STEEL 250N/mm² HIGH YIELD STEEL 450N/mm²
5.3 ALL REINFORCEMENT TO BE CHECKED AND APPROVED BY ENGINEER BEFORE ANY CONCRETE IS CAST. 48 HOURS WRITTEN NOTICE TO BE GIVEN TO ENGINEER BEFORE TIME OF INSPECTION.
5.4 LAP LENGTH TO REINFORCING TO BE MINIMUM 50 x SMALLER BAR DIAMETER, UNLESS OTHERWISE NOTED.
5.5 MESH REINFORCEMENT REFERENCE AS TO BE PLACED IN SLAB (TOP) MINIMUM LAPS = 300mm UNLESS OTHERWISE NOTED.
5.6 THE CONTRACTOR MUST TAKE PARTICULAR CARE TO ENSURE THAT THE SPECIFIED COVER TO ALL REINFORCEMENT HAS BEEN ATTAINED THROUGHOUT BEFORE THE ENGINEER IS CALLED TO SITE FOR INSPECTION OF THE REINFORCEMENT.
5.7 COVER TO REINFORCEMENT: STRIP FOOTINGS: 50mm BASES: 50mm COLUMNS AND WALLS: 30mm SUSPENDED SLABS: 30mm
5.8 SUSPENDED BEAMS: 30mm
5.9 CONTRACTOR IS TO CONDUCT HIS OWN INSPECTION OF REINFORCEMENT BEFORE CALLING THE ENGINEER FOR INSPECTION.
5.10 FORMWORK AND PROPPING
5.11 STRIPPING TIMES FOR: COLUMN AND WALL SHUTTERING: 1.5 DAYS BEAM SHUTTERING: 7 DAYS IN HOT WEATHER, 12 DAYS IN COLD WEATHER. 4 DAYS IN HOT WEATHER, 7 DAYS IN COLD WEATHER.
5.12 FLAT SLABS:
5.13 PROPPING TIMES FOR: SLABS AND BEAMS: 21 DAYS IN HOT WEATHER, 21 DAYS IN COLD WEATHER
5.14 CANTILEVER SLABS AND BEAMS: 21 DAYS (SUBJECT TO CUBE TEST RESULTS BEING SUBMITTED TIMELY TO ENGINEER FOR APPROVAL).
5.15 NO DE PROPPING OF SUSPENDED ELEMENTS UNTIL INSTRUCTED BY ENGINEER.
5.16 CONCRETE FINISHES: UNLESS NOTED OTHERWISE COLUMNS AND WALLS: OFF SHUTTER BEAMS AND SLAB SOFFIT: OFF SHUTTER TOP OF SUSPENDED SLABS: STEEL FLOAT SURFACE BEDS: POWER FLOAT SIDES OF GROUND BEAMS TO BE SHUTTERED.

Refer To Drawing No:

Key Plan:

No Date Details Revisions Chd Appl

Project: JW14406 - LINBRO PARK (WITH ASSOCIATED WORKS)

Description: PROPOSED VALVE CHAMBER #09 REBAR LAYOUT

Issued For: TENDER

Size: A1 Scale: As Shown Sheet No: 4 OF 4 Original Date: SEPT 2023

Project No: C01486 Drawing No: PS-04 Revision: T0