#### JABATAN KERJA RAYA MALAYSIA

#### KERJA-KERJA MENAIKTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATAN PUSPAKOM KE KAMPUNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU

#### SENARAI KUANTITI

Kami seperti nama syarikat di bawah mengesahkan tawaran harga yang tersenarai di dalam senarai kuantiti ini adalah sama sepertimana di dalam Borang Tender yang dihasilkan di dalam sistem dan sebarang percanggahan akan menyebabkan tawaran kami ditolak.

A. Nama Syarikat: Nama Petender

B. CIDB/UPKJ/PUKONSA No.: No.Pendaftaran Petender

C. Harga Tawaran: Harga Tawaran Petender

D. No. Siri Tender: **TEND/JKRNT/BKUB/15/2024** 

E. Tarikh Cipta Senarai Kuantiti: 3/12/2024

Senarai kuantiti ini dikeluarkan oleh JKR TERENGGANU. Sebarang pertanyaan boleh berhubung dengan pegawai yang menyediakan tender dan maklumat pegawai untuk dihubungi boleh didapati di laman iklan.

# **JABATAN KERJA RAYA MALAYSIA**

# KERJA-KERJA MENAIKTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATAN PUSPAKOM KE KAMPUNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU

#### SENARAI KUANTITI

No. Tender: TEND/JKRNT/BKUB/15/2024

#### **RINGKASAN TENDER**

# KERJA-KERJA MENAIKTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATAN PUSPAKOM KE KAMPUNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU

ITEM	DESCRIPTION	PAGE NO.	AMOUNT(RM)				
1	GENERAL ITEMS	4/4/4					
		1/4/4					
2	DEMOLITION AND SITE CLEARANCE	2/1/1					
3	EARTHWORKS	3/1/1					
4	DRAINAGE WORKS	4/1/1					
5	PAVEMENT WORKS	5/5/5					
6	ROAD FURNITURE	6/4/4					
7	GEOTECHNICAL WORKS	7/7/7					
8.1	STRUCTURES - BRIDGE	8.1/12/12					
8.2	STRUCTURES - ELEVATED STRUCTURES	8.2/9/9					
9	TRAFFIC MANAGEMENT AND CONTROL	9/4/4					
10	ENVIRONMENTAL PROTECTION & ENHANCEMENT WORK	10/8/8					
11	ROUTINE MAINTENANCE WORKS	11/5/5					
12	OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT	12/3/3					
13	PROVISIONAL SUM	13/1/1					
14	PRIME COST SUM	14/1/1					
	Jumlah di bawa ke Borang Tender						
	DT/4						

#### 1 GENERAL ITEMS

1 Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
	A100	CONTRACTUAL REQUIREMENTS				
	A111	Performance Bond				
Α		Performance bond; Banker's/Insurance/Financial Institution Guarantee*  * Do not price if tenderer opt for Performance Guarantee Sum	sum			
	A120	<u>Insurances</u>				
В	A121	Insurance of Works	sum			
С	A122	Public liability insurance	sum			
D	A123	SOCSO/Workmen compensation insurance	sum			
	A140	Statutory Obligations				
Е		Compliance with law, regulations or by laws, or any order or directive issued by public authorities.	sum			
	A200	SO REQUIREMENTS				
	A210	<u>Facilities</u>				
		Establishment and removal of office as per specification. Rate shall be deem to include the provision of water supply, electricity and communication facilities				
F	A211	JKR Design / Relocatable Type / Rent Shoplot	sum			
G	A212	Maintenance of Office	mth	24		
	A240	Attendance for the SO's Representative				
Н	A245	Provide 1 no. of licensed Security guard	man-mth	24		
		KTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA UNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

1/1/4

# 1 GENERAL ITEMS (CONT'D)

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
	A200	SO REQUIREMENTS (Cont'd)				
	A250	Submission of documents				
Α	A254	Works Programme in Microsoft Project on a Gantt Chart format and required personnel to update the programme as per Specification	sum			
	A260	<u>Miscellaneous</u>				
В	A262	Project signboard	nr	1		
С	A263	As built drawings as per specification	sum			
D	A269	Project report in 5 sets comprising of progress report and quality control report. All the reports to be converted/scanned to a digital copy (in pdf format or equivalent and stored in CD) and to be enclosed with each set of the Project Report including compilation of Progress photographs and Video recording	mth	24		
		i) Photographic and video capture of the work progress on ground using camera.				
		ii) Aerial Photography and Aerial Video capture of the work progress using Drone or Unmaned Aerial Vehicle/UAV				
	A300	PROJECT REQUIREMENTS				
	A310	Survey and setting out				
Е		Survey and setting out by licensed surveyor	sum			
	A321	Quality Assurance/Quality Control (QA/QC)				
F		QA/QC Plan as per specification.	sum			
	A360	Clearance of site upon completion				
G		Clearance of site upon completion shall be deemed to include making good all affected works	sum			
		] KTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA UNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

1/2/4

# 1 GENERAL ITEMS (CONT'D)

1 Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
	A500	CONTRACTOR'S REQUIREMENTS				
		Contractor's Facilities				
		Item shall be deemed to include the provision of water supply, electricity, and sanitary facilities and their continuing operation and maintenance				
Α	A511	Establishment, maintenance and removal of office as per specification	sum			
В	A512	Provision and maintenance of office equipment; remove upon completion	sum			
С	A515	Establishment, maintenance and removal of stores as per specification	sum			
D	A517	Establishment, maintenance and removal of workmen accomodation as per specification	sum			
	A550	Site Management (inclusive all staff)				
		Provide, maintain and removal of supervision; fixed and time related charges (detail stated):				
Е	A551	Supervision	sum			
F	A552	Administration	sum			
G	A553	Labour team	sum			
	A560	Mobilisation and demobilisation				
Н		Mobilisation and demobilisation of any construction plants and equipments; fixed charge excluding piling and other specialist works	sum			
		(TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA ING KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

1/3/4

# 1 GENERAL ITEMS (CONT'D)

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		COLLECTION				
		From Page				
		1/1/4				
		1/2/4				
		1/3/4				
KERJA-KE	RJA MENAIK	TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA	N		To "Ringkasan Tender"	

#### 2 DEMOLITION AND SITE CLEARANCE

# (PROVISIONAL QUANTITY)

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		Items for demolition and site clearance shall be deemed to include disposal of the materials arising at the contractor's own disposal site outside the R.O.W as approved by the S.O/P.D.				
	E100	GENERAL CLEARANCE				
	E120	Water bodies				
Α		General clearance at water bodies; at swamp; for objects either floating, submerged or at the bed of water bodies	ha	1.2		
		DEMOLITION AND REMOVAL FROM SITE OF ALL BUILDINGS AND EXISTING STRUCTURES				
	E400	<u>STRUCTURES</u>				
		<u>Timber</u>				
В		Demolish and removal of existing timber structures – 5 units with a gross built–up area not exceeding 100m2	sum			
С		Demolish and removal of existing timber structures – 11 units with a gross built–up area exceeding 100m2	sum			
		<u>Concrete</u>				
D		Demolish below ground concrete structure; Twin box culverts including headwall, wingwall, inlett, outlet and foundation overall 16m long x 2.4m wide	sum			
		Equipment And Accessories				
	E441	Dismantle and send to store for reuse as directed by S.O. for the following item :-				
Е		Guardrails	sum			
F		Signboard	sum			
G		Three (3) nos. road lighting pole	sum			
		(TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To "Ringkasan Tender"	

KERJA-KERJA MENAIKTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA PUSPAKOM KE KAMPUNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU 3 EARTHWORKS

(PROVISIONAL QUANTITY)

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
А		Stripping Of Topsoil  Stripping topsoil of average depth of 150mm and disposed to the Contractor's dumpsite as approved by the S.O.	m²	3500		
		SPREAD, GRADE AND COMPACT  GENERAL  The following items for filling shall include compaction, testing and confirmation material and additional filling necessitated by settlement or penetration into underlying material as applicable				
В	F322	Embankments Imported material from Contactor's own source as per Specification to form embankment  LANDSCAPING	m³	3500		
		Items for landscaping shall be deemed to include digging, planting media, bedding, stalking, protection, watering, weeding, required fertilising, and replacement of dead item until the vegetation is established				
С	F410.2	Close turfing to slopes as per specification	m²	1200		
		KTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA UNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To "Ringkasan Tender"	

3/1/1

#### **DRAINAGE WORKS**

# (PROVISIONAL QUANTITY)

preparation of surplus excavation, removal of Original Surplus and Origi	n in Earth  avation shall be deemed to include on of surfaces, double handling, disposal a excavated material, upholding sides of on, allowance for joints, backfilling and			
A 450mm U-sh B 300mm chai C 750mm (bas sizes as sho	f dead services and reinstatement of urface unless covered by separate items trench in earth; Depth not exceeding			
C 750mm (bas sizes as sho	shaped drain	m	50	
sizes as sho	annel drain	m	550	
	ase width) earth channels to shapes and nown in the drawings	m	700	
Q230 Roadside D	<u>Drain</u>			
D 450mm RC	C U-shaped	m	50	
E 300mm Cha	nannel drain	m	550	
<u>SUMPS</u>				
Q141 Excavation	n in Earth			
F Excavate su	sumps in earth; 750mm x 750mm	m³	4	
Q720 Precast Con	oncrete Sump			
G Precast coci steel grating	crete; Sump 750mm x 750mm including mild ag cover	nr	4	

#### **PAVEMENT WORKS** 5

# (PROVISIONAL QUANTITY)

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		FLEXIBLE PAVEMENT  In accordance to latest Standard Specification for Road Works hereafter referred to as the Specification (rate to include all the tests required)				
		NEW PAVEMENT				
	R100	Subgrade Preparation				
Α	R110	Earth material to receive road pavement. Rate to include clearing, grubbing, stripping topsoil, scarifying, levelling, and compaction of the top 300mm of the subgrade	m²	4700		
		CARRIAGEWAY AND PAVED SHOULDER				
	R200	<u>Sub-base</u>				
	R220	Sub-base course				
	R221	150mm thick granular material with a CBR value of not less than 30%, complying with grading limits of the Specification				
В		Carriageway and Paved Shoulder	m²	4340		
С		Median and Island	m²	160		
D		Access Road	m²	200		
	R300	Roadbase				
	R320	350mm thick crushed aggregates with a CBR value of not less than 80%, complying with the Specification				
Е		Carriageway and Paved Shoulder	m²	4340		
F		Median and Island	m²	160		
G		Access Road	m²	200		
		CTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA				

PAVEMENT WORKS (CONTID)

(PROVISIONAL QUANTITY)

5	PAVEN	MENT WORKS (CONT'D)		(PROVISI	ONAL QUANT	ITY)
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		FLEXIBLE PAVEMENT (Cont'd)				
		In accordance to latest Standard Specification (Cont'd)				
		NEW PAVEMENT (Cont'd)				
	R500	Bituminious Pavement Courses				
	R520	Bituminous prime coat to be applied at a rate as stated in Specification				
А		Carriageway and Paved Shoulder	m²	4340		
В		Median and Island	m²	160		
С		Access Road	m²	200		
	R530.1	Bituminiuos tack coat to be applied at a rate as stated in Specification				
D		Carriageway and Paved Shoulder	m²	7271		
E		Access Road	m²	200		
	R541	60mm Thick asphaltic concrete binder course (AC28); as per Specification				
F		Carriageway and Paved Shoulder	m²	4340		
G		Access Road	m²	200		
	R551. 2	50mm Thick asphaltic concrete wearing course (AC14); as per Specification				
Н		Carriageway and Paved Shoulder	m²	7271		
J		Access Road	m²	200		
	R410	Fill Material On Unpaved Shoulder				
K	R410.2	625mm Thick earth shoulder; as per Specification; imported suitable material from Contractor's own source	m²	160		
		I TTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

PAVEMENT WORKS (CONTID)

(PROVISIONAL QUANTITY)

5	PAVEN	IENT WORKS (CONT'D)		(PROVISI	ONAL QUANT	ITY)
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		FLEXIBLE PAVEMENT (Cont'd) In accordance to latest Standard Specification (Cont'd)				
	R570	TREATMENT TO EXISTING PAVEMENT				
	R579.1	<u>Patching</u>				
A		Mark, cut and break up existing pavement; Cart away and disposed; Patching and compacting with patching material including tack coat; Brooming and cleaning; All other items necessary for the proper execution and completion of the works	m²	50		
	R590	RECONSTRUCTION OF EXISTING PAVEMENT				
В		Scarifying and breaking up of existing pavement	m²	50		
	R200	Sub-base				
	R220	Sub-base course				
С	R221	150mm thick granular material with a CBR value of not less than 30%, complying with grading limits of the Specification	m²	50		
	R300	Roadbase				
D	R320	350mm thick crushed aggregates with a CBR value of not less than 80%, complying with the Specification	m²	50		
KERJA-KE	RJA MENAIR	(TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA	N		To Collection Page	
		JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU			. J Conconon i age	

5 PAVEMENT WORKS (CONT'D)

(PROVISIONAL QUANTITY)

5	PAVEMENT WORKS (CONT'D)				(PROVISIONAL QUANTITY)			
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)		
		FLEXIBLE PAVEMENT (Cont'd)						
		In accordance to latest Standard Specification (Cont'd)						
		RECONSTRUCTION OF EXISTING PAVEMENT (Cont'd)						
	R500	Bituminious Pavement Courses						
Α	R520	Bituminous prime coat to be applied at a rate as stated in Specification	m²	50				
В	R530.1	Bituminiuos tack coat to be applied at a rate as stated in Specification	m²	50				
С	R541	60mm Thick asphaltic concrete binder course (AC28); as per Specification	m²	50				
D	R551.2	50mm Thick asphaltic concrete wearing course (AC14); as per Specification	m²	50				
KERJA-KE	RJA MENAII	TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA	N		To Collection Page			
		UNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU			To Conection Fage			

5 PAVEMENT WORKS (CONT'D)

(PROVISIONAL QUANTITY)

5 Item	Code No.	Description	Unit	Quantity	Rate	Amount
					(RM)	(RM)
		COLLECTION				
		<u>From Page</u>				
		5/1/5				
		5/2/5				
		5/3/5				
		5/4/5				
		(TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATAI ING KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To "Ringkasan Tender"	

5/5/5

#### **6 ROAD FURNITURE**

#### (PROVISIONAL QUANTITY)

<u> </u>	I	FURNITURE		(FROVISI	ONAL QUANT	1
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
	R810	<u>SIGNAGE</u>				
	R811	Warning and Regulatory Traffic Signs				
		Traffic signs shall generally be in accordance with the latest version of ArahanTeknik (Jalan) 2A/85. Post mounted signages shall be deemed to include foundations, support posts, purlins frame and connections, excavation, preparation of surfaces, disposal of excavated material, upholding sides of excavation, backfilling, concrete, reinforcement, and joints.				
		Non-illuminated high intensity prismatic retro- reflective mounted on aluminium alloy sign plate for :-				
А		Type 'RP 13'	nr	1		
В		Type 'RP 7(b)'	nr	1		
С		Type 'WD 20'	nr	1		
D		Type 'WD 36'	nr	1		
Е		Type 'WD 23'	nr	1		
F		Type 'WD 24a'	nr	6		
G		Type 'WD 24b'	nr	6		
н		Type 'WD 31'	nr	1		
J		Type 'RM 4'	nr	2		
		TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

6 ROAD FURNITURE (CONT'D)

(PROVISIONAL QUANTITY)

6	ROAD	FURNITURE (CONT'D)	(PROVISIONAL QUANTITY)				
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)	
	R820	PAVEMENT MARKING					
		Hot-applied reflectorised thermoplastic road markings					
		Pavement markings shall generally be hot-applied reflectorised thermoplastic and inaccordance with the latest version of Standard Specification for Road Works: Section 6: Road Furniture (Road Markings)					
	R823	Intermittent line					
А		Type 4 - Give-Way Line	m	20			
В		Type 6 - No Passing Zone (Double Line)	m	40			
	R822	Continous line					
С		Type 1 - Continuity line;	m	20			
D		Type 2 - Centre Line / Lane Line.	m	800			
Е		Type 3 - Edge Line	m	1600			
	R824	Chevron marking					
F		Chevron marking (Merging)	m²	10			
	R821	Direction arrow and pavement marking					
G		Single straight directional arrow	nr	5			
Н		Single turning directional arrow	nr	1			
J		Double headed directional arrow	nr	2			
		TTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA ING KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page		

6 ROAD FURNITURE (CONT'D)

(PROVISIONAL QUANTITY)

6	ROAD	FURNITURE (CONT'D)	(PROVISIONAL QUANTITY)			
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		KERBS, CHANNEL, AND EDGINGS  Rate for kerbs, channels, and edgings shall be deemed to include beds, backings, reinforcement, joints, and cutting.				
A		Cast In-Situ Concrete Kerb In-situ concrete kerbs; Type SM 1;	m	150		
		DELINEATORS  Detroyalises Road Stud				
		Retroreflective Road Stud  Raised Reflective Pavement Marker (RRPM) shall generally be in accordance with the latest version of Arahan Teknik (Jalan) 2D/85				
В		Retroreflective roadstud as per Drawing	nr	50		
	R850	MISCELLANEOUS				
С		Kilometre Post  Kilometre post inclusive of all necessary works at location and details as shown in the drawing or as directed by the S.O/P.D*	nr	1		
		KTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

6/3/4

6 ROAD FURNITURE (CONT'D)

(PROVISIONAL QUANTITY)

6		FURNITURE (CONT'D)		(1170110	IONAL QUANT	
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		COLLECTION				
		From Page				
		6/1/4				
		6/2/4				
		6/3/4				
		TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA ING KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To "Ringkasan Tender"	

# 7 GEOTECHNICAL WORKS

# (PROVISIONAL QUANTITY)

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		GROUND TREATMENT  SOFT GROUND REPLACEMENT / STABILITY				
		Geotextile  Item for geotextile shall be deemed to include cost of storage at site with neccessary protection against exposure to direct sun				
А	G570	High Strength Woven Geotextile  Woven geotextile HS 300/50 or equivalent with minimum long term design strength of as separator	m²	2000		
		Replacement of Unsuitable Material and/or Soft Soil  Items for filling shall include filling earth in layers,compaction, and additional filling necessitated by settlement or penetration into underlying material as applicable				
В	F332	Imported Suitable Material Imported suitable material from Contractor's own source with grading limits as per Specification to replace unsuitable material	m³	1830		
С	F141	RETAINING STRUCTURES  EARTHWORK FOR RETAINING STRUCTURES  Excavation For Foundation And Working Space Excavate in any material except rock to any depth for structural foundation	m³	410		
KERJA-KE	RJA MENAI	TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA	N		To Collection Page	

KERJA-KERJA MENAIKTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATAI PUSPAKOM KE KAMPUNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU

(PROVISIONAL QUANTITY)

7	GEOIE	CHNICAL WORKS (CONT'D)	(PROVISIONAL QUANTITY)				
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)	
		RETAINING STRUCTURES (Cont'd)					
		PILING WORKS FOR FOUNDATION OF RETAINING STRUCTURES					
Α	H110	Plant And Equipment Provision of all necessary piling plant and equipment, transportation to the site, handling, assembling, and removal of the site after completion of operation	sum				
В	H120	Moving and handling of all piling plant and equipment within the site and from location to location as often as is, and whenever necessary for the execution of the whole piling operation	sum				
С	H130	Provision of temporary staging for piling work	sum				
		Precast Reinforced Concrete Piles (200mm x 200mm)					
D	H261	Supply Length Supply and deliver to site initial piles with shoes in 9m supplied length	nr	120			
Е		Supply and deliver to site extension piles in 9m supplied length	nr	120			
F	H262	<u>Driven</u> Handle, pitch and drive vertical piles	m	1080			
G		Handle, pitch and drive raked piles	m	1080			
Н	H264	Lenghtening Piles By Jointing Jointing with butt weld all round	nr	120			
J	H266	Cut-off Cut-off piles	nr	120			
K	H267	<u>Preparing heads</u> Preparing head of piles	nr	120			
		TTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA ING KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page		

(PROVISIONAL QUANTITY)

7	GEOTE	ECHNICAL WORKS (CONT'D)	(PROVISIONAL QUANTITY)				
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)	
		RETAINING STRUCTURES (Cont'd)					
		PILING WORKS FOR FOUNDATION OF RETAINING STRUCTURES (Cont'd)					
		Precast Reinforced Concrete Piles (200mm x 200mm) (Cont'd)					
		Pile Tests					
		Rate for pile test deemed to include necessary equipments,inserts and accessories and others related works					
А	H510	Static Load Test Initial static load test (maintain load test) up to two times working load of 190kN (Test load of 380kN)	nr	1			
В	H520	Pile Driving Analyser (PDA) Pile Dynamic Analyzer (PDA) test	nr	6			
		REINFORCED CONCRETE RETAINING WALL					
		Concrete Work					
		<u>Formwork</u>					
		Rate for formwork shall be deemed to include the projectionsand intrusions and any temporary staging required					
С	l511	Rough finish for buried surfaces	m²	600			
D	l514	Smooth finish for exposed surfaces	m²	190			
		Reinforcement					
		Rate for reinforcement shall be deemed to include labour forcutting, bending and placing					
E	1625	<u>High tensile bars</u> Nominal diameter: 16 mm	t	35			
		I (TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page		

7/3/7

(PROVISIONAL QUANTITY)

7	GEOTE	CHNICAL WORKS (CONT'D)	(PROVISIONAL QUANTITY)				
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)	
		RETAINING STRUCTURES (Cont'd)					
		REINFORCED CONCRETE RETAINING WALL (Cont'd)					
		Concrete Work (Cont'd)					
		In Situ Concrete Design Mix					
Α	l111	Blinding Mass Concrete Grade C12/15; 50mm thick to bases	m²	410			
В	l142	Reinforced Concrete Grade C32/40	m³	240			
		<u>Drainage Blanket</u>					
С		Compacted Gravel 200mm thick 20mm single size aggregate as drainage blanket including Type 'A' non woven geotextile as filter	m²	175			
		<u>Joints</u>					
D	I174	Rubber Waterstop 625mm wide PVC waterstop for construction joint as shown in Drawing	m	4			
		Sub-Surface Drain					
Е	Q320	PVC Pipe Drain  100mm dia. PVC pipes at 1500mm centres wrapped with approved filter cloth	nr	206			
KERJA-KEI	RJA MENAIK	TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA	N		To Collection Page		
		ING KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU			To Conection Fage		

7 Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		RETAINING STRUCTURES (Cont'd)  REINFORCED CONCRETE RETAINING WALL (Cont'd)				
		<u>Tar Paint</u>				
	N631	Bituminous/Coal				
		Protective coating shall be deemed to include preparation of surfaces, application of base primer/sealer required before painting and all necessary temporary staging				
		The protective coating shall consist of a dual protective system formed by two coats of silane-siloxane based primer or equivalent and two coats of solvent based methacrylate pigmented or equivalent as the top coat				
А		Internal surfaces of retaining wall	m²	285		
KERJA-KE	RJA MENAII	TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA	N		To Collection Page	

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		IN-SITU CONCRETE PARAPET WALL				
		Concrete Work				
		<u>Formwork</u>				
		Rate for formwork shall be deemed to include the projectionsand intrusions and any temporary staging required				
Α	l514	Smooth finish for exposed surfaces	m²	190		
		Reinforcement				
		Rate for reinforcement shall be deemed to include labour forcutting, bending and placing				
В	1625	<u>High tensile bars</u> Nominal diameter: 16 mm	t	6		
		In Situ Concrete Design Mix				
С	I175	Reinforced Concrete Grade C32/40	m³	28		
D	Q434	UPVC Pipe For Cable 100mm diameter UPVC service duct in two (2) nos.	m	105		
		<u>HANDRAIL</u>				
Е	L240	Handrail and Post On New Jersey Parapet Galvanised iron post and handrail at parapet and other acessories as shown in the drawing	m	105		
		I (TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

7/6/7

# 7 GEOTECHNICAL WORKS

# (PROVISIONAL QUANTITY)

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		COLLECTION				
		<u>From Page</u>				
		7/1/7				
		7/2/7				
		7/3/7				
		7/4/7				
		7/5/7				
		7/6/7				
KERJA-KE PUSPAKO	I RJA MENAIK M KE KAMPU	   TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA   ING KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To "Ringkasan Tender"	

7/7/7

#### 8.1 STRUCTURES - BRIDGE

# (PROVISIONAL QUANTITY)

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		TEMPORARY ROAD & TRAFFIC DIVERSION, ACCESS ROAD AND BRIDGE CROSSING				
		Contractor shall propose the configuration, dimensions, material and method of construction of this temporary road and crossing and must seek approval from related agencies				
		Design and proposed shop drawing with endorsed by Professional Engineer with Practising Certificate (PEPC) to be submitted and approved by S.O				
		Rate not to include temporary traffic signs, barriers and barricades, temporary road markings, temporary traffic signals, and road lighting				
	A300	Project Requirements				
Α	A371	Temporary Road & Traffic Diversion  Design, supply, install and construct temporary road and traffic diversion for existing road as per specification and typical drawing	sum			
В	A353	Routine Maintenance Temporary road diversion; Routine maintenance	sum			
С	A354	Periodic Maintenance Temporary road diversion; Periodic maintenance	sum			
D	A360	Clearance of Site Upon Completion  Remove upon completion; temporary road and traffic diversion; fixed charge includes reinstatement of the site	sum			
Е	A374	Temporary Bridge Crossing (Culvert)  Design, supply, install, construct, maintained and remove upon completion temporary precast box culvert as per specification and typical drawing	sum			
		END OF TEMPORARY WORKS				
		 KTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATAI UNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

KERJA-KERJA MENAIKTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN 1100 DARI BULATA PUSPAKOM KE KAMPUNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU

8.1/1/12

(PROVISIONAL QUANTITY)

8.1	JIRUC	TURES - BRIDGE (CONT'D)	ROVISIONAL QUANTITY)			
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		BRIDGE OVER SG. BOKOR				
		PILING WORKS				
		FILING WORKS				
Α	H110	PLANT AND EQUIPMENT Provision of all necessary piling plant and equipment, transportation to the site, handling, assembling, and removal of the site after completion of operation	sum			
В	H120	Moving and handling of all piling plant and equipment within the site and from location to location as often as is, and whenever necessary for the execution of the whole piling operation	sum			
С	H130	Provision of temporary staging for piling work	sum			
	H210	BORED PILES				
		900mm Diameter Bored Piles				
D	H211	Boring Vertical Holes Bored piles; 900mm Ø boring in earth	m	330		
E		Bored piles; 900mm Ø drilling through hard soil layer (hard fragment) SPT > 50	m	30		
F	H213	Casing Bored piles; Drive and remove 12.7mm thick mild steel temporary casings	m	80		
G	H214	High Tensile Reinforcement - Straight Bars 32mm Diameter	t	18		
н	H215	High Tensile Reinforcement - Helical Bars 12mm Diameter	t	37		
	H216	Concrete Grade C32/40				
J		Concrete of bored piles	m	360		
		 (TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

(PROVISIONAL QUANTITY)

8.1	STRUC	TURES - BRIDGE (CONT'D)		ITY)		
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		BRIDGE OVER SG. BOKOR (Cont'd)				
		PILING WORKS (Cont'd)				
	H210	BORED PILES (Cont'd)				
		900mm Diameter Bored Piles (Cont'd)				
Α	H217	Cutting of Pile Head Bored piles; Cut-off piles	nr	10		
В	H218	Preparing Heads Bored piles; Preparing heads	nr	10		
	H500	PILE TEST				
		Rate for pile test deemed to include necessary equipments,inserts and accessories and others related works				
С	H510	Static/Maintained Load Test Pile test; Initial static load test on 900mm Ø bored pile up to two times working load of 6,000 kN	nr	1		
D		Pile test; Subsequent static load test on 900mm Ø bored pile up to two times working load of 6,000 kN	nr	1		
E		Sonic Logging Test Pile test; Sonic logging test on 900mm Ø bored piles	nr	2		
		END OF PILING WORKS				
		TTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

PUSPAKOM KE KAMPUNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU

8.1/3/12

(PROVISIONAL QUANTITY)

8.1	SIRUC	CTURES - BRIDGE (CONT'D)	(PROVIS	PROVISIONAL QUANTITY)		
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		BRIDGE OVER SG. BOKOR (Cont'd)				
		SUB STRUCTURE				
		<u>ABUTMENTS</u>				
	A500	CONTRACTOR'S REQUIREMENT				
Α	A560	Mobilisation and demobilisation  Mobilisation and demobilisation; fixed charge to and from both river bank sand to access site area including all neccesary works for the purpose of construction of the abutments and piers	sum			
В	A527	Temporary Staging and Working Platform  Design, supply, install ,construct, maintaine and remove after completion temporary staging and working platform over Sg. Bokor; fixed charge including installation, handling, assembling and other related works for the purpose of construction of the abutments and piers	sum			
		<u>EARTHWORK</u>				
		Cut and dispose				
		Excavation in cut shall be deemed to include trimming and preparation of excavated surface and transportation from source to place of disposal				
С	F131	Excavate in earth material and dispose off-site at contractor dump site	m³	93		
D	F342	Filling General filling; Imported suitable material from Contractor's own sources	m³	156		
		GROUTED STONE PITCHING STEP				
E	L240	Handrail Galvanised mild steel handrail and post and 1150mm width grouted stone pitching steps at abutment for inspection purposes as shown in the Drawing	m	9		
		 KTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

(PROVISIONAL QUANTITY)

8.1	STRUCTURES - BRIDGE (CONT'D) (PROVIS			PROVISIONAL QUANTITY)		
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		BRIDGE OVER SG. BOKOR (Cont'd)				
		SUB STRUCTURE (Cont'd)				
		ABUTMENTS (Cont'd)				
		GABION				
	G211					
Α	GZII	PVC Coated Wire Mesh Gabion Box Gabion; 1.0 x 1.0 x 2.0m] rock-filled with PVC-coated hot dipped GI wire gauge size of 2.7mm with and including 50mm thick screed	m³	144		
	G212	PVC Coated Wire Mesh Gabion Mattress Forming Slopes and Berms				
В		Gabion matress; 300mm thick rock-filled with PVC-coated hot dipped GI wire gauge size of 2.7mm forming slopes and berms with and including 150mm thick sand bedding	m²	238		
		SUBSURFACE DRAINS				
С	Q310	UPVC Perforated Pipe Subsoil Drain with Wrapping Subsurface drains; 150mm diameter PVC perforated pipe including aggregate (20mm–40mm) wrapped with approved filter cloth	m	11		
		PERMEABLE LAYER				
D	R211	Crushed Stone 300mm thick permeable layer comprising of 20mm-40mm crushed stone as per Specification	m²	24		
		Bituminous Coating on Rough Surface				
Е	N691	Prepare and apply two (2) coats of bituminous to buried surfaces: rough concrete surfaces of class F1 of abutment and wingwalls	m²	253		
WED						
		(TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

PUSPAKOM KE KAMPUNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU

8.1/5/12

(PROVISIONAL QUANTITY)

8.1	STRUC	TURES - BRIDGE (CONT'D)	(PROVISIONAL QUANTITY)				
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)	
		BRIDGE OVER SG. BOKOR (Cont'd)					
		SUB STRUCTURE (Cont'd)					
		ABUTMENTS (Cont'd)					
		CONCRETE WORK					
		In Situ Concrete Design Mix					
		Grade C12/15 Concrete					
	l1111	Lean concrete at permeable layer, approach slab, abutment and pile cap					
Α		150mm Thick	m²	7			
В		50mm Thick	m²	80			
С	l174	Grade C32/40 Concrete At abutments, wingwall, parapet wall, approach slab and pile cap	m³	130			
		<u>Formwork</u>					
		Rate for formwork shall be deemed to include the projections and intrusions and any temporary staging required					
	I531	Formwork at abutment, wingwall, parapet wall, approach slab and pile cap					
D		F1: rough finish for buried surfaces	m²	362			
E		F2: smooth finish for exposed surfaces	m²	215			
KERJA-KF	RJA MENAIR	(TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA	N		To Collection Do		
		JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU			To Collection Page		

(PROVISIONAL QUANTITY)

8.1	STRUCTURES - BRIDGE (CONT'D) (PROVISION (PROVISION PROVISION PROVI					ONAL QUANTITY)		
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)		
		BRIDGE OVER SG. BOKOR (Cont'd)						
		SUB STRUCTURE WORK (Cont'd)						
		ABUTMENTS (Cont'd)						
		CONCRETE WORK (Cont'd)						
		Reinforcement						
		High Tensile Reinforcement for Abutment, Wing Walls, Parapet Wall, Approach Slab and Pile Cap						
Α	1624	Nominal diameter: 12 mm Ø (T12)	t	0.5				
В	1625	Nominal diameter: 16 mm Ø (T16)	t	19				
С	1626	Nominal diameter: 20 mm Ø (T20)	t	6				
	I717	Dowel Bar (Sleeve and Capped)						
D		Dowels bar; hot dip galvanised mild steel; 16mm dia. x 200mm long steel bars	nr	73				
		END OF SUB STRUCTURE WORKS						
		TTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page			

8.1/7/12

(PROVISIONAL QUANTITY)

8.1	SIKUU	TURES - BRIDGE (CONT'D)		(PROVISI	OVISIONAL QUANTITY)		
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)	
		BRIDGE OVER SG. BOKOR (Cont'd)					
		SUPER STRUCTURE WORK					
	A500	CONTRACTOR'S REQUIREMENT					
Α		Mobilisation and demobilisation  Mobilisation and demobilisation; to and from both river					
		banks and to access site area fixed charge including all plant, equipment and all necessary works for operation of beam launching	sum				
	A527	Temporary Staging and Working Platform					
В		Design, supply, install ,construct, maintaine and remove after completion temporary staging and					
		working platform over Sg. Bokor; fixed charge including installation, handling, assembling and other related	sum				
		works for the purpose of beam launching operation					
		PRESTRESSED BEAMS					
	1430	Pre-Tensioned Prestressed Beams					
		Item for precast concrete shall be deemed to					
		include supply, erection, launching to its final position, machineries and all temporary works required as shown in the drawings					
		Rate for prestressing shall be deemed to include					
		tendon, ducts, jacking, grouting, anchorage and other components and tasks ancillary to prestressing					
С		Precast pre-tensioned beam, M-beam 20m long as per Drawing and Specification	nr	10			
_	I717	Dowel Bar (Sleeve and Capped)					
D		Galvanised H.Y.S dowels bars with capping; T32mm diameter x 600mm long with 42mm diameter dowel cap	nr	20			

8.1/8/12

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		BRIDGE OVER SG. BOKOR (Cont'd)				
		SUPER STRUCTURE WORK (Cont'd)				
		DECK SLAB, DIAPHRAGM & PARAPET WALL				
		CONCRETE WORK				
		In Situ Concrete Design Mix				
Α	I178	Grade C32/40 Concrete At deck slab, diaphragm and parapet wall	m³	52		
		<u>Formwork</u>				
В	I531	Formwork at deck slab, diaphragm and parapet wall F2: Fair finish to deck slabs and diaphragm	m²	11		
С	I525	Permanent formwork at deck slab F3:Smooth finish to 25mm thick cement board permanent formwork as shown in Drawing including all temporary strut or bracings	m²	94		
		Reinforcement				
D	1625	High Tensile Reinforcement for deck slab, diaphragm and parapet wall Nominal diameter: 16 mm Ø (T16)	t	13		
E	1626	Nominal diameter: 20 mm Ø (T20)	t	0.6		
		<u>HANDRAIL</u>				
F	L240	Handrail and Post On New Jersey Parapet Galvanised cast iron post and handrail at parapet and other acessories as shown in the drawing	m	40		
		KTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATAI UNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

8.1/9/12

(PROVISIONAL QUANTITY)

8.1	STRUC	TURES - BRIDGE (CONT'D)	(PROVISIONAL QUANTITY)			
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		BRIDGE OVER SG. BOKOR (Cont'd)				
		SUPER STRUCTURE WORK (Cont'd)				
		DECK SLAB, DIAPHRAGM & PARAPET WALL (Cont'd)				
		BRIDGE BEARING				
		Supply and install the following bearings inclusive of mortar grout, epoxy mortar and all temporary work				
Α	V415	Laminated Elastomeric Bearings 350mm x 275mm x 70mm thick elastomeric bearing pad with 6 nos. of 334mm x 269mm x 3mm thick mild steel plate and 7 elastometer layer complete with 15mm thick epoxy resin mortar on RC plinth all accordance as per Drawing	nr	20		
В	A322	Testing Of Bearing Testing of materials; 350mm x 275mm x 70mm thick Laminated Elastomeric bearings all in accordance specification	nr	2		
		MISCELLANEOUS WORK				
	I715	Joints To Parapet Wall / Approach Slab				
С		Joint filler or joint sealant, 25mm wide to approach slabs	m	22		
D		Joint sealant all round, 75mm wide to parapets.	m	2		
E	V320	Brass Plaque Brass plaque 420mm x 300mm x 3.2mm thick as shown on the drawing	nr	1		
		 (TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

PUSPAKOM KE KAMPUNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU

8.1/10/12

#### 8.1 STRUCTURES - BRIDGE (CONT'D)

#### (PROVISIONAL QUANTITY)

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		BRIDGE OVER SG. BOKOR (Cont'd)				
		SUPER STRUCTURE WORK (Cont'd)				
		DECK SLAB, DIAPHRAGM & PARAPET WALL (Cont'd)				
		MISCELLANEOUS WORK (Cont'd)				
		PROTECTIVE COATING FOR DURABILITY AND AESTHETICAL SURFACE COATING				
		Protective coating shall be deemed to include preparation of surfaces, application of base primer/sealer required before painting and all necessary temporary staging				
		The protective coating shall consist of a dual protective system formed by two coats of silane-siloxane based primer or equivalent and two coats of solvent based methacrylate pigmented or equivalent as the top coat				
А	N331	Smooth Surface Smooth surfaces; Surfaces of members exceeding 300mm girth; exposed surfaces of beams, diaphragms and parapets	m²	666		
В		Smooth surfaces; Surfaces of members exceeding 300mm girth; exposed surfaces of abutments and piers above water	m²	180		
		SUBSURFACE DRAINS				
С	Q320	UPVC Outlet Drain Subsurface drains; 100mm diameter UPVC drain pipe	m	10		
		CABLING WORKS				
D	Q434	UPVC For Street Lighting Cable At Parapet 100mm diameter UPVC service duct in two (2) nos.	m	40		
		(TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

8.1 STRUCTURES - BRIDGE (CONT'D)

(PROVISIONAL QUANTITY)

ltem	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		COLLECTION				
		From Page				
		8.1/1/12				
		8.1/2/12				
		8.1/3/12				
		8.1/4/12				
		8.1/5/12				
		8.1/6/12				
		8.1/7/12				
		8.1/8/12				
		8.1/9/12				
		8.1/10/12				
		8.1/11/12				

8.1/12/12

#### 8.2 STRUCTURES - ELEVATED STRUCTURES

#### (PROVISIONAL QUANTITY)

ELEVATED STRUCTURES  PILING WORKS  PLANT AND EQUIPMENT  Provision of all necessary piling plant and equipment, transportation to the site, handling, assembling, and removal of the site after completion of operation  B H120 Moving and handling of all piling plant and equipment within the site and from location to location as often as is, and whenever necessary for the execution of the whole piling operation  C H130 Provision of temporary staging for piling work  H270 PRECAST PRESTRESSED CONCRETE SPUN PILE  600mm Diameter PC Spun Piles (Class : C)		(RM)	(RM)
PILING WORKS  PLANT AND EQUIPMENT Provision of all necessary piling plant and equipment, transportation to the site, handling, assembling, and removal of the site after completion of operation  B H120 Moving and handling of all piling plant and equipment within the site and from location to location as often as is, and whenever necessary for the execution of the whole piling operation  C H130 Provision of temporary staging for piling work  H270 PRECAST PRESTRESSED CONCRETE SPUN PILE  600mm Diameter PC Spun Piles (Class : C)			
H110 PLANT AND EQUIPMENT Provision of all necessary piling plant and equipment, transportation to the site, handling, assembling, and removal of the site after completion of operation  B H120 Moving and handling of all piling plant and equipment within the site and from location to location as often as is, and whenever necessary for the execution of the whole piling operation  C H130 Provision of temporary staging for piling work  H270 PRECAST PRESTRESSED CONCRETE SPUN PILE 600mm Diameter PC Spun Piles (Class : C)			
H110 Provision of all necessary piling plant and equipment, transportation to the site, handling, assembling, and removal of the site after completion of operation  B H120 Moving and handling of all piling plant and equipment within the site and from location to location as often as is, and whenever necessary for the execution of the whole piling operation  C H130 Provision of temporary staging for piling work  H270 PRECAST PRESTRESSED CONCRETE SPUN PILE  600mm Diameter PC Spun Piles (Class : C)			
transportation to the site, handling, assembling, and removal of the site after completion of operation  B H120 Moving and handling of all piling plant and equipment within the site and from location to location as often as is, and whenever necessary for the execution of the whole piling operation  C H130 Provision of temporary staging for piling work  H270 PRECAST PRESTRESSED CONCRETE SPUN PILE  600mm Diameter PC Spun Piles (Class : C)			
within the site and from location to location as often as is, and whenever necessary for the execution of the whole piling operation  C H130 Provision of temporary staging for piling work sum  H270 PRECAST PRESTRESSED CONCRETE SPUN PILE  600mm Diameter PC Spun Piles (Class : C)			
H270 PRECAST PRESTRESSED CONCRETE SPUN PILE  600mm Diameter PC Spun Piles (Class : C)			
600mm Diameter PC Spun Piles (Class : C)			
D Supply Length Supply and deliver to site initial piles with shoes in 12m supplied length	92		
E Supply and deliver to site extension piles in 12m supplied length	92		
F Supply and deliver to site extension piles in 6m supplied length	92		
G H272 Driven Handle, pitch and drive vertical piles m	2760		
H Lenghtening Piles By Jointing Jointing with butt weld all round nr	184		
H275  In Situ Concrete - in pile hollow section  Filling hollow piles with concrete Grade C16/20 shall be deemed to include reinforcement and mild steel plate (pile plug) as stated in the Preambles	92		
K H276 Cutting of Pile Head Cut-off piles nr	92		
H277 Preparing heads  Preparing head of piles nr	92		

KERJA-KERJA MENAIKTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATAN PUSPAKOM KE KAMPUNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU

To Collection Page

(PROVISIONAL QUANTITY)

8.2	STRUCTURES - ELEVATED STRUCTURES (CONT'D) (PROVISIONAL QUANTITY)					
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		ELEVATED STRUCTURES (Cont'd)				
		PILING WORKS (Cont'd)				
	H270	PRECAST PRESTRESSED CONCRETE SPUN PILE (Cont'd)				
		600mm Diameter PC Spun Piles (Class : C) (Cont'd)				
	H500	PILE TEST				
		Rate for pile test deemed to include necessary equipments,inserts and accessories and others related works				
Α	H510	Static/Maintained Load Test Initial static load test (maintain load test) up to two times working load of 1400kN (Test load of 2800kN)	nr	1		
В		Subsequent static load test (maintain load test) up to two times working load of 1400kN (Test load of 2800kN)	nr	1		
С	H520	Pile Driving Analyser (PDA) Pile Dynamic Analyzer (PDA) test	nr	6		
D	H540	Sonic Logging Test Sonic logging test	nr	14		
J		Some logging test	""	14		
		END OF PILING WORKS				
KERJA-KEI	RJA MENAIK	TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATAI	N		To Collection Page	
		ING KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU			To Collection Page	

(PROVISIONAL QUANTITY)

8.2 Item	Code No.	TURES - ELEVATED STRUCTURES (CONT'D)  Description	Unit	Quantity	Rate	Amount
					(RM)	(RM)
		ELEVATED STRUCTURES (Cont'd)				
		SUB STRUCTURE WORK				
		ABUTMENTS AND PIER				
	A500	CONTRACTOR'S REQUIREMENT				
Α	A560	Mobilisation and demobilisation  Mobilisation and demobilisation; fixed charge to access site area including all neccesary works for the purpose of construction of the abutments and piers	sum			
В	A527	Temporary Staging and Working Platform  Design, supply, install ,construct, maintaine and remove after completion temporary staging and working platform; fixed charge including installation, handling, assembling and other related works for the purpose of construction of the abutments and piers	sum			
		<u>EARTHWORK</u>				
		Cut and dispose				
		Excavation in cut shall be deemed to include trimming and preparation of excavated surface and transportation from source to place of disposal				
С	F131	Excavate in earth material and dispose off-site at contractor dump site	m³	19		
D	F342	Filling General filling; Imported suitable material from Contractor's own sources	m³	1900		
		GROUTED STONE PITCHING STEP				
E		Handrail Galvanised mild steel handrail and post and 1150mm width grouted stone pitching steps at abutment for inspection purposes as shown in the Drawing	m	6		
ED IA VE	D IA MENA!	KTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA	N		To Collection Page	

8.2/3/9

(PROVISIONAL QUANTITY)

Item   Code No.   Description   Unit   Quantity   Rate (RM)   Amount (RM)	8.2	2 STRUCTURES - ELEVATED STRUCTURES (CONT'D) (PROVISIONAL QUANTITY)						
ABUTMENTS AND PIER (Cont'd)  SUBSURFACE DRAINS  Q310  PVC Perforated Pipe Subsoil Drain with Wrapping Subsurface drains; 150mm diameter PVC perforated pipe including aggregate (20mm–40mm) wrapped with approved filter cloth  PERMEABLE LAYER  R211  Crushed Stone 300mm thick permeable layer comprising of 20mm–40mm crushed stone as per Specification  Bituminous Coating on Rough Surface  C  N691  Prepare and apply two (2) coats of bituminous to buried surfaces: rough concrete surfaces of class F1 of abutment and wingwalls  CONCRETE WORK  In Situ Concrete Design Mix  Grade C12/15 Concrete  Lean concrete at permeable layer, abutment and pile cap  D  Command Thick  Somm Thick  Somm Thick  Mar 2 230  Grade C32/40 Concrete  At abutments, wingwall, parapet wall and pile cap  m³ 480	Item	Code No.	Description	Unit	Quantity			
ABUTMENTS AND PIER (Cont'd) SUBSURFACE DRAINS  Q310 PVC Perforated Pipe Subsoil Drain with Wrapping Subsurface drains; 150mm diameter PVC perforated pipe including aggregate (20mm–40mm) wrapped with approved filter cloth  PERMEABLE LAYER  R211 Crushed Stone 300mm thick permeable layer comprising of 20mm- 40mm crushed stone as per Specification Bituminous Coating on Rough Surface  Prepare and apply two (2) coats of bituminous to buried surfaces: rough concrete surfaces of class F1 of abutment and wingwalls  CONCRETE WORK In Situ Concrete Design Mix Grade C12/15 Concrete  I111 Lean concrete at permeable layer, abutment and pile cap 150mm Thick  F Cracke C32/40 Concrete At abutments, wingwall, parapet wall and pile cap m³ 480			ELEVATED STRUCTURES (Cont'd)					
A Q310 PVC Perforated Pipe Subsoil Drain with Wrapping Subsurface drains; 150mm diameter PVC perforated pipe including aggregate (20mm–40mm) wrapped with approved filter cloth  PERMEABLE LAYER  R211 Crushed Stone 300mm thick permeable layer comprising of 20mm–40mm crushed stone as per Specification Bituminous Coating on Rough Surface  C N691 Prepare and apply two (2) coats of bituminous to buried surfaces: rough concrete surfaces of class F1 of abutment and wingwalls  CONCRETE WORK In Situ Concrete Design Mix Grade C12/15 Concrete  I111 Lean concrete at permeable layer, abutment and pile cap 150mm Thick  E Somm Thick  Grade C32/40 Concrete At abutments, wingwall, parapet wall and pile cap  m³ 480			SUB STRUCTURE WORK (Cont'd)					
A Q310 PVC Perforated Pipe Subsoil Drain with Wrapping Subsurface drains; 150mm diameter PVC perforated pipe including aggregate (20mm–40mm) wrapped with approved filter cloth  PERMEABLE LAYER  R211 Crushed Stone 300mm thick permeable layer comprising of 20mm-40mm crushed stone as per Specification  Bituminous Coating on Rough Surface  C N691 Prepare and apply two (2) coats of bituminous to buried surfaces: rough concrete surfaces of class F1 of abutment and wingwalls  CONCRETE WORK  In Situ Concrete Design Mix  Grade C12/15 Concrete  Lean concrete at permeable layer, abutment and pile cap 150mm Thick  E Somm Thick  Grade C32/40 Concrete  At abutments, wingwall, parapet wall and pile cap  m³ 480			ABUTMENTS AND PIER (Cont'd)					
Subsurface drains; 150mm diameter PVC perforated pipe including aggregate (20mm–40mm) wrapped with approved filter cloth  PERMEABLE LAYER  R211  B  R211  Crushed Stone 300mm thick permeable layer comprising of 20mm-40mm crushed stone as per Specification  Bituminous Coating on Rough Surface  Prepare and apply two (2) coats of bituminous to buried surfaces: rough concrete surfaces of class F1 of abutment and wingwalls  CONCRETE WORK  In Situ Concrete Design Mix  Grade C12/15 Concrete  Lean concrete at permeable layer, abutment and pile cap 150mm Thick  m²  6  50mm Thick  m²  6  6  6  727  727			SUBSURFACE DRAINS					
R211 Crushed Stone 300mm thick permeable layer comprising of 20mm- 40mm crushed stone as per Specification  Bituminous Coating on Rough Surface  C N691 Prepare and apply two (2) coats of bituminous to buried surfaces: rough concrete surfaces of class F1 of abutment and wingwalls  CONCRETE WORK  In Situ Concrete Design Mix  Grade C12/15 Concrete  I111 Lean concrete at permeable layer, abutment and pile cap  D Somm Thick  E Somm Thick  M 2 230  I172 Grade C32/40 Concrete  At abutments, wingwall, parapet wall and pile cap  m³ 480	А	Q310	Subsurface drains; 150mm diameter PVC perforated pipe including aggregate (20mm–40mm) wrapped with	m	21			
B 300mm thick permeable layer comprising of 20mm-40mm crushed stone as per Specification  Bituminous Coating on Rough Surface  C N691 Prepare and apply two (2) coats of bituminous to buried surfaces: rough concrete surfaces of class F1 of abutment and wingwalls  CONCRETE WORK In Situ Concrete Design Mix Grade C12/15 Concrete  Lean concrete at permeable layer, abutment and pile cap 150mm Thick  E Somm Thick  M² 42  42  42  42  42  42  42  42  42  42			PERMEABLE LAYER					
C N691 Prepare and apply two (2) coats of bituminous to buried surfaces: rough concrete surfaces of class F1 of abutment and wingwalls  CONCRETE WORK  In Situ Concrete Design Mix  Grade C12/15 Concrete  Lean concrete at permeable layer, abutment and pile cap 150mm Thick  m² 6  50mm Thick  m² 230  I172 Grade C32/40 Concrete  At abutments, wingwall, parapet wall and pile cap  m³ 480	В	R211	300mm thick permeable layer comprising of 20mm-	m²	42			
surfaces: rough concrete surfaces of class F1 of abutment and wingwalls  CONCRETE WORK  In Situ Concrete Design Mix  Grade C12/15 Concrete  Lean concrete at permeable layer, abutment and pile cap 150mm Thick  m² 6  50mm Thick  m² 230  Grade C32/40 Concrete  At abutments, wingwall, parapet wall and pile cap m³ 480			Bituminous Coating on Rough Surface					
In Situ Concrete Design Mix  Grade C12/15 Concrete  I1111 Lean concrete at permeable layer, abutment and pile cap 150mm Thick  F  Grade C32/40 Concrete At abutments, wingwall, parapet wall and pile cap  m³  480	С	N691	surfaces: rough concrete surfaces of class F1 of	m²	727			
Grade C12/15 Concrete  I1111 Lean concrete at permeable layer, abutment and pile cap 150mm Thick m² 6  E 50mm Thick m² 230  F Grade C32/40 Concrete At abutments, wingwall, parapet wall and pile cap m³ 480			CONCRETE WORK					
I111 Lean concrete at permeable layer, abutment and pile cap 150mm Thick m² 6  E 50mm Thick m² 230  Grade C32/40 Concrete At abutments, wingwall, parapet wall and pile cap m³ 480			In Situ Concrete Design Mix					
D   pile cap   150mm Thick   m²   6			Grade C12/15 Concrete					
D 150mm Thick m <sup>2</sup> 6 E 50mm Thick m <sup>2</sup> 230  Grade C32/40 Concrete At abutments, wingwall, parapet wall and pile cap m <sup>3</sup> 480		l1111						
F Grade C32/40 Concrete  At abutments, wingwall, parapet wall and pile cap m³ 480	D			m²	6			
F At abutments, wingwall, parapet wall and pile cap m³ 480	E			m²	230			
KER IA-KER IA MENAIKTAPAE IAI AN DAN I AIN-I AIN KER IA BERKAITAN DI IAI IIAN T100 DARI BIJI ATAN	F	l172		m³	480			
PUSPAKOM KE KAMPUNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU			(TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA ING KUBANG IKAN DAFRAH KUAI A TERENGGANU TERENGGANU	N		To Collection Page		

(PROVISIONAL QUANTITY)

8.2							
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)	
		ELEVATED STRUCTURES (Cont'd)					
		SUB STRUCTURE WORK (Cont'd)					
		ABUTMENTS AND PIER (Cont'd)					
		CONCRETE WORK (Cont'd)					
		<u>Formwork</u>					
		Rate for formwork shall be deemed to include the projections and intrusions and any temporary staging required					
	I531	Formwork at abutment, wingwall, parapet wall and					
Α		pile cap F1: rough finish for buried surfaces	m²	281			
В		F2: smooth finish for exposed surfaces	m²	2280			
		Reinforcement					
		High Tensile Reinforcement for Abutment, Wing Walls, Parapet Wall and Pile Cap					
С	1624	Nominal diameter: 12 mm Ø (T12)	t	8			
D	1625	Nominal diameter: 16 mm Ø (T16)	t	45			
Е	1626	Nominal diameter: 20 mm Ø (T20)	t	5			
F	11627	Nominal diameter: 25 mm Ø (T25)	t	18			
G	1628	Nominal diameter: 32 mm Ø or bigger	t	2			
	1717	Dowel Bar (Sleeve and Capped)					
Н		Dowels bar; hot dip galvanised mild steel; 16mm dia. x 200mm long steel bars	nr	84			
		END OF SUB STRUCTURE WORKS					
		KTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA UNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page		

(PROVISIONAL QUANTITY)

8.2	3.2 STRUCTURES - ELEVATED STRUCTURES (CONT'D) (PROVISIONAL QUANTITY)						
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)	
		ELEVATED STRUCTURES (Cont'd) SUPER STRUCTURE WORK					
	A500	CONTRACTOR'S REQUIREMENT					
Α	A527	Temporary Staging and Working Platform  Design, supply, install ,construct, maintaine and remove after completion temporary staging and working platform; fixed charge including installation, handling, assembling and other related works for the purpose of beam launching operation	sum				
		CONCRETE WORK  In Situ Concrete Design Mix					
В	l174	Grade C32/40 Concrete At piers, tie beam and deck slab	m³	1220			
		<u>Formwork</u>					
		Rate for formwork shall be deemed to include the projections and intrusions and any temporary staging required					
С	I531	Formwork at approach slab, tie beam and pier F2: smooth finish for exposed surfaces	m²	4516			
		Reinforcement					
		<u>High Tensile Reinforcement for Approach Slab, Pier</u> <u>and Tie Beam</u>					
D	1625	Nominal diameter: 16 mm Ø (T16)	t	160			
Е	1626	Nominal diameter: 20 mm Ø (T20)	t	50			
F	I1627	Nominal diameter: 25 mm Ø (T25)	t	94			
KERJA-KE	RJA MENAIF	(TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA	N		To Collection Page		

(PROVISIONAL QUANTITY)

8.2	2 STRUCTURES - ELEVATED STRUCTURES (CONT'D) (PROVISIONAL QUANTITY)					
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		ELEVATED STRUCTURES (Cont'd)				
		SUPER STRUCTURE WORK (Cont'd)				
		<u>HANDRAIL</u>				
Α	L240	Handrail and Post On New Jersey Parapet Galvanised cast iron post and handrail at parapet and other acessories as shown in the drawing	m	40		
		MISCELLANEOUS WORK				
В	I715	Joints To Parapet Wall / Approach Slab				
		Joint filler or joint sealant, 25mm wide to approach slabs	m	21		
С		Joint sealant all round, 75mm wide to parapets.	m	2		
D	V320	Brass Plaque Brass plaque 420mm x 300mm x 3.2mm thick as shown on the drawing	nr	1		
		PROTECTIVE COATING FOR DURABILITY AND AESTHETICAL SURFACE COATING				
		Protective coating shall be deemed to include preparation of surfaces, application of base primer/sealer required before painting and all necessary temporary staging				
		The protective coating shall consist of a dual protective system formed by two coats of silane-siloxane based primer or equivalent and two coats of solvent based methacrylate pigmented or equivalent as the top coat				
E	N331	Smooth Surface Smooth surfaces; Surfaces of members exceeding 300mm girth; exposed surfaces of beams, diaphragms and parapets	m²	660		
		(TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATAI JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

(PROVISIONAL QUANTITY)

8.2	STRUC	TURES - ELEVATED STRUCTURES (CONT'D)	IONAL QUANT	ITY)		
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		ELEVATED STRUCTURES (Cont'd)				
		SUPER STRUCTURE WORK (Cont'd)				
		SUBSURFACE DRAINS				
Α	Q310	<u>UPVC Outlet Drain Drain</u> Subsurface drains; 100mm diameter UPVC drain pipe	m	114		
		CABLING WORKS				
В	Q434	UPVC For Street Lighting Cable At Parapet  100mm diameter UPVC service duct in two (2) nos.	m	340		
		(TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA	N		To Collection Page	
PUSPAKON	M KE KAMPI	JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU			3.9	

8.2/8/9

(PROVISIONAL QUANTITY)

8.2	STRUCTURES - ELEVATED STRUCTURES (CONT'D) (PROVISIONAL QUANTITY)					
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		COLLECTION				
		From Page				
		8.2/1/9				
		8.2/2/9				
		8.2/3/9				
		8.2/4/9				
		8.2/5/9				
		8.2/6/9				
		8.2/7/9				
		8.2/8/9				
		TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA	N		To "Ringkasan Tender"	
PUSPAKOI	M KE KAMPU	JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU			<b>5</b>	

8.2/9/9

#### 9 TRAFFIC MANAGEMENT AND CONTROL

#### (PROVISIONAL QUANTITY)

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
	C100	TRAFFIC MANAGEMENT PLAN  Traffic Management Plan and the associated work shall be in accordance with the latest version of			(run)	(ixiii)
А	C120	Specification for Road Works: Section 19  Preparation of Traffic Management Plan including Emergency Response Plan (ERP). Rate to include the cost of any survey required, literature, references, consultations, and the production of the document. It shall also include the cost for the engagement of Qualified Traffic Engineer with experience in road	sum			
	C130	construction required for carrying out the respective study and the preparation of the Traffic Management Plan  TRAFFIC MANAGEMENT TEAM (TMT) / EMERGENCY RESPONSE TEAM (ERT)				
		Traffic Management Team (TMT) / Emergency Response Team (ERT) shall be in accordance with the latest version Specification for Road Works : Section 19				
В	C133	Appointment of Qualified and Trained TMT Supervisor	man-mth	4		
С	C139.1	Traffic controller; Flagman - 3 person	man-mth	12		
KERJA-KEF	RJA MENAIH	(TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA	N		To Collection Page	

9/1/4

TRAFFIC MANAGEMENT AND CONTROL (CONT'D)

(PROVISIONAL QUANTITY)

ltem	Code No.	Description	Unit	l	Rate	Amount
		2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	Unit	Quantity	(RM)	(RM)
		TEMPORARY ROAD FURNITURE  Items for temporary road furniture shall be deemed to include the supply, installation, maintenance and				
		removal upon completion.  The supply of temporary road furniture shall be deemed to include base preparation, cost of materials, fabrication, and fixing including posts, struts, bolts and nuts, base, storage and transportation. Installation of temporary road furniture shall be deemed to include cost for multiple shifting within the contractual boundaries and its vicinities that is affected by the traffic management plan.  Temporary road furniture shall be deemed to include cost for the inspection, immediate repair				
	C210	and replacement of any damaged, missing or stolen items throughout the duration of the construction, and removal upon completion.  Temporary traffic signs				
	C211	Temporary traffic signs shall be in accordance with Specification for Road Works: Section 19  Non-Iluminated Retro-Reflective Sheeting				
Α		Portable floresence orange prismatic retro-reflective sheeting not exceeding 1.0m2	nr	15		
В	C211.2	Portable floresence orange prismatic retro-reflective sheeting exceeding 1.0 but not exceeding 2.0m2	nr	10		
	C220	Barriers and Barricades				
С	C229	Light Weight Movable Plastic Hoarding	nr	20		

TRAFFIC MANAGEMENT AND CONTROL (CONT'D) 9

(PROVISIONAL QUANTITY)

9 Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
	C200	TEMPORARY ROAD FURNITURE (Cont'd)			,	,
		Items for temporary road furniture (Cont'd)				
	C230	<u>Delineators</u>				
Α	C231.1	Portable traffic guidance cones with reflective bands	nr	75		
В	C232	Double-sided reflective string delineators	m	200		
С	C233.1	Battery operated flashing arrows	nr	2		
D	C235.1	Battery operated polycarbonate lens blinkers	nr	60		
	C240	Temporary Road Markings				
		Removal the unwanted road markings shall be removed from the pavement in such a way so as to avoid any possible confusion of motorist especially in wet conditions				
		All temporary road marking that more than one (1) month shall be of thermoplastic type. The rate include removal temporary road marking upon completion as per specification				
Е	C242.1	150 mm width Edge line	m	350		
F	C242.2	100 mm width Centre line	m	175		
	C300	TRAFFIC MANAGEMENT REPORT				
G	C310	Submission 6 sets of Traffic Management Safety Report once in every 3 months (quarterly). Rate to include the cost of any survey required, literatures, references, consultations, and the production of the document	sum			
		TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

9/3/4

9 TRAFFIC MANAGEMENT AND CONTROL (CONT'D)

(PROVISIONAL QUANTITY)

9 Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		COLLECTION				
		From Page				
		9/1/4				
		9/2/4				
		9/3/4				
		TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA ING KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To "Ringkasan Tender"	

9/4/4

(PROVISIONAL QUANTITY)

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		ENVIRONMENTAL MANAGEMENT PLAN (EMP)  Preparation of EMP shall be deemed to include the cost of any survey required, literature, references, consultation and the production of the documents. It shall also include the cost for the engagement of registered environmental consultant required for carrying out the preparation of the said report in accordance with Department Of Environment (DOE) Guidelines:				
A	B110	Preparation, submission and approval of EMP by environmental consultant registered with DOE including:  a) Land-Disturbing Pollution Prevention and Mitigation Measures (LD-P2M2) b) Erosion and Sediment Control Plan c) Any other plan required*  * if applicable	sum			
В	B120	APPOINTMENT OF ENVIRONMENTAL OFFICER (E.O.)  Provision of a full time environmental officer (E.O.) for environmental management works only, throughout the contract period for the implementation of EIA / PMM / non-EIA projects.  For Non-EIA Project* E.O. shall have a degree in Civil Engineering or Environmental Science with minimum three (3) years of related experience in environmental management works and must be certified as CESSWI/CISEC/CePSWaM or equivalent	man-mth	24		
ERJA-KF	RJA MENAIP	CTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA	N		To Collection Page	

10/1/8

#### (PROVISIONAL QUANTITY)

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		NON-PHYSICAL WORKS (Cont'd)				
		WATER QUALITY CONTROL AND MONITORING				
		Water Quality Sampling and In Situ Testing				
		Water quality testing shall be deemed to include testing by accredited laboratory :				
Α	B349.1	Conduct in-situ monthly river/stream/other waterbody quality monitoring as specified and as shown in the drawing for the following parameters or as directed by the S.O throughout the contract period	sum			
В	B349.2	Conduct in-situ monthly water quality monitoring of the effluent discharge at accommodation, workshop and canteen area as specified for the following parameters or as directed by the S.O. throughout the contract period	sum			
		Water Quality Sampling and Laboratory Testing				
		Water quality testing shall be deemed to include testing by accredited laboratory :				
С	B359.1	Conduct monthly river/stream/other water body quality monitoring as specified and as shown in the drawing for the following parameters or as directed by the S.O. throughout the contract period	sum			
D	B359.2	Conduct monthly water quality monitoring of the effluent discharge at accommodation, workshop and canteen area as specified for the following parameters or as directed by the S.O. throughout the contract period	sum			
E		Conduct monthly water quality monitoring at the discharge outlet of silt trap, sediment pond, sediment basin as specified for Total Suspended Solids (TSS) and Turbidity or as directed by the S.O. throughout the contract period	sum			

10/2/8

## (PROVISIONAL QUANTITY)

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		NON-PHYSICAL WORKS (Cont'd)  AIR QUALITY CONTROL AND MONITORING				
		Air Quality Sampling  Air quality sampling shall be deemed to include				
Α	B459	testing by accredited laboratory  Conduct monthly air quality monitoring for Particulate Matter (PM <sub>10</sub> ), Particulate Matter (PM <sub>2·5</sub> ), NO <sub>2</sub> , SO <sub>2</sub> , CO and O <sub>3</sub> for 24-hour period including wind velocity and direction as specified throughout the contract period. All equipment or generator set that produce heat and power shall be monitored for NO <sub>2</sub> and CO periodically	sum			
		NOISE AND VIBRATION CONTROL AND MONITORING  Noise Level Measurement  Noise level measurement shall be deemed to include monitoring by accredited laboratory				
В	B539	Conduct quarterly noise level monitoring for a representative sample of locations, existing noise zones; identification of the major sources of sound including LAeq, L <sub>10</sub> , L <sub>90</sub> , Lmin and Lmax as specified or as shown in drawing or as directed by the S.O throughout the contract period for	sum			
С	B541	Vibration Measurement Vibration measurement shall be deemed to include monitoring by accredited laboratory  Conduct vibration monitoring as specified or as required throughout the contract period; Ground vibration monitoring	sum			

10/3/8

## (PROVISIONAL QUANTITY)

Item	Code No.	(CONT'D)  Description	Unit	Quantity	Rate (RM)	Amount (RM)
		NON-PHYSICAL WORKS (Cont'd)  ENVIRONMENTAL MONITORING REPORT				
		Preparation of five (5) hardcopy and five (5) softcopy (per month)of the following report in accordance with DOE/EPD/JKR Malaysia requirement throughout the contract period				
А	B810	Monthly environmental monitoring report (EMR) / environmental compliance report (ECR), including aerial view photo or video (if applicable)	sum			
		ENVIRONMENTAL AUDIT  This audit where applicable shall be in accordance with DOE requirements:				
В	B820	Conduct quarterly 3rd party audit as specified including preparation of five (5)copies of Environmental Audit Report (per audit) throughout the contract period	sum			
С	B830	Conduct an environmental closure audit prior to issuance of certificate of practical completion including preparation of five (5) copies of the report	sum			
D	B850	Conduct audit prior to commencement of construction works	sum			
		TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA ING KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

10/4/8

#### (PROVISIONAL QUANTITY)

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		PHYSICAL WORKS				
		DUST AND MUD CONTROL				
Α	B410	Tyre Washing Facilities  Tyre washing facilities; Provision, operation and maintenance of portable water jet including operator, water tank and other necessary equipments as specified for carring out cleaning of vehicle tyres at various exits of the worksites or as directed by the S.O./P.D.*	Set	1		
В	B430	Water Browser Truck Water browser truck; Provision, operation and maintenance of browser truck including operator, pumping of water, water tank and other necessary equipments as specified for carrying out water spraying along haul/access roads, existing roads and near settlements or as directed by the S.O./P.D.*	nr	1		
		SURFACE RUN-ON OR RUN-OFF CONTROL				
С	B210	Silt Fence Construction of 1.0m high silt fence including non-woven geotextile and wooden post with dimension as specified and as per drawing or as directed by the S.O.	m	120		
D	B230	Sand Bag Supply and lay gunny sack (or equivalent) size (350-500mm x 600-700mm) filled with sand as specified and as shown in the drawing or as directed by the S.O	nr	200		
		SEDIMENT CONTROL				
E	B272.1	<u>Silt Trap</u> Sand bedding for silt traps	m³	10		
F	B272.2	Stone filling at inlet and outlet	m³	10		
G	B272.3	Aggregate filling including geotextile	m³	10		
RJA-KE	RJA MENAIK	(TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA	N		To Collection Page	

10/5/8

#### (PROVISIONAL QUANTITY)

Item	Code No.	(CONT'D)  Description	Unit	Quantity	Rate (RM)	Amount (RM)
		PHYSICAL WORKS (Cont'd)				
		MAINTENANCE				
		Items for maintenance shall be deemed to include disposal of accumulated debris, sediment and silt to an approved site, unless otherwise stated				
Α	B281	Silt fence	sum			
В	B283	Sand bags	sum			
С	B287	Silt trap	sum			
D	B310	FUEL SPILLAGE MANAGEMENT  Skid Tank Bund  Construct impervious concrete base as per drawing to contain 110% volume of stored fuel including grease trap and shall be deemed to include traps, oil and grease separators, and its maintenance and removal upon completion	sum			
		WASTE MANAGEMENT				
		Item for scheduled waste shall be deemed to include storage, labelling and transportation from site by a licensed contractor for disposal as per Department of Environment (DOE) Regulation:				
Е	B610	Scheduled wastes storage as per drawing and disposal	sum			
F	B620	Household solid waste separation, storage/Mobile Garbage Bin (MGB) and disposal	sum			
G	B630	Construction solid waste separation, storage / Roll - on Roll - off (RORO) and disposal	sum			
Н	B690	Provision and maintenance of grease traps at kitchen and accommodation areas, site office, workshop and scheduled waste storage	nr	3		
		(TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA UNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

10/6/8

#### (PROVISIONAL QUANTITY)

Item	Code No.	(CONT'D)  Description	Unit	Quantity	Rate (RM)	Amount (RM)
		PHYSICAL WORKS (Cont'd)  WASTE MANAGEMENT (Cont'd)  Item for scheduled waste shall be (Cont'd)				
Α	В930	Management Of Disposal Site For Surplus Materials Item coverage shall be deemed to include all necessary works as mentioned in the 'Instruction to contractors on disposal of surplus cut material' drawing and 'Surplus material disposal embankment' drawing	sum			
		TTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

10/7/8

## (PROVISIONAL QUANTITY)

Item	Code No.	(CONT'D)  Description	Unit	Quantity	Rate (RM)	Amount (RM)
		COLLECTION				
		From Page				
		10/1/8				
		10/2/8				
		10/3/8				
		10/4/8				
		10/5/8				
		10/6/8				
		10/7/8				
ERJA-KE	RJA MENAIK M KE KAMPU	TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA ING KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N	•	To "Ringkasan Tender"	

10/8/8

#### 11 ROUTINE MAINTENANCE WORKS

#### (PROVISIONAL QUANTITY)

11 Item	Code No.	NE MAINTENANCE WORKS  Description	Unit	Quantity	Rate	Amount
	1	Decemparent	<b>5</b>	Quantity	(RM)	(RM)
		ROUTINE MAINTENANCE ACTIVITIES DURING CONSTRUCTION PERIOD				
		MAINTAIN THE EXISTING ROAD				
		Provision of all labour, equipments, tools, material, transport and whatever necessary to all the works stated below as per standard JKR road specification:				
Α	A351.1	Maintenance of Pavement Surface The works shall comprise of : a) Patching of potholes to be commenced immediately within a day b) Treatment/sealing of surface cracks	km-mth	0.5		
		c) Reinstate edge deterioration of back filled trenches d) Treatment to stripping of aggreagate e) Treatment for rutting f) Treatment to deterioration of concrete pavement surface g) Repair to concrete pavement joints h) Repair to paving blocks and slabs				
В	A351.2	Maintenance of Road Shoulder The works shall comprise of: a) Re-grading and clearing of vegetation. b) Topping up of shoulder with suitable filling material. c) Filling of irregularities in unsealed shoulders. d) Filling of pavement/shoulder level differences. e) Clear vegetation on paved shoulder.	km-mth	0.5		
С	A351.3	Grass Cutting The works shall comprise grass cutting, disposal of cut grass and debris. The frequency of grass cutting shall be carried out once a month. The limit and extent as described below:  a) Road shoulder (both side)	km-mth	0.5		
		<ul> <li>a) Road shoulder (both side)</li> <li>b) Slope area (both side)</li> <li>c) Berm drain, interceptor drain and all other types of drain on slopes (both side)</li> <li>d) Median (both side)</li> <li>e) Clear vegetation on paved surface (both side)</li> </ul>				
CED IA KE	D IA MENAIL	TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA	N		To Collection Page	

(PROVISIONAL QUANTITY)

11	ROUTINE MAINTENANCE WORKS (CONT'D)			(PROVISIONAL QUANTITY)			
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)	
		ROUTINE MAINTENANCE ACTIVITIES DURING CONSTRUCTION PERIOD (Cont'd)					
		MAINTAIN THE EXISTING ROAD (Cont'd)					
		Provision of all labour, equipments, (Cont'd)					
A	A351.4	Road Furnitures The works shall comprise of cleaning works and shall be carried out 4 cycles/year of cleaning of: a) Guardrails and barriers b) Signages and posts c) Kilometer post and delineator post d) Traffic signal aspects	cycle	8			
В	A351.8	Drainage The works shall comprise of cleaning debris, desilting and repair works and shall be carried out 4 cycles/year: a) Debris in lined drains. b) Debris in unlined drains. c) Debris in sump.	cycle	8			
		d) Debris in culverts. e) Repair to damaged drains and sumps. f) Repair to misaligned unlined drains.  Litter Collection and Disposal of Minor					
С	A351.9	Obstruction/Debris The works shall comprise of all the works stated below and to the satisfaction of the S.O.:- a) Litter collection and disposal and shall be carried out as and when required b) Removal and disposal of loose material and debris as and when required b) Removal and disposal of carcass as and when required	sum				
		CTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA					

(PROVISIONAL QUANTITY)

11	ROUTII	OUTINE MAINTENANCE WORKS (CONT'D) (PROVISIONAL Q				ITY)
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		ROUTINE MAINTENANCE ACTIVITIES DURING DEFECTLIABILITY PERIOD				
		MAINTAIN THE COMPLETED ROAD				
		Provision of all labour, equipments, tools, material, transport and whatever necessary to all the works stated below as per standard JKR road specification:				
А		Grass Cutting The works shall comprise grass cutting, disposal of cut grass and debris. The frequency of grass cutting shall be carried out once a month. The limit and extent as described below:	km-mth	0.3		
		<ul> <li>a) Road shoulder (both side)</li> <li>b) Slope area (both side)</li> <li>c) Berm drain, interceptor drain and all other types of drain on slopes (both side)</li> <li>d) Median (both side)</li> <li>e) Clear vegetation on paved surface (both side)</li> </ul>				
В	A359.2	Road Furnitures The works shall comprise of cleaning works and shall be carried out 4 cycles/year of cleaning of: a) Guardrails and barriers b) Signages and posts c) Kilometer post and delineator post d) Traffic signal aspects	cycle	4		
С	A359.3	Bridges and Culverts The works shall comprise of cleaning works and shall be carried out 4 cycles/year of cleaning of : a) Expansion joints. b) Weep holes.	cycle	4		
		<ul> <li>c) Parapets.</li> <li>d) Bearing shelves.</li> <li>e) Grafiti and markings.</li> <li>f) Waterway or culvert opening and bridge carriageway</li> <li>g) Removal of vegetation and lubricating and greasing operation for steel bearings.</li> <li>h) Water down pipe.</li> </ul>				
		TTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA ING KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

(PROVISIONAL QUANTITY)

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		ROUTINE MAINTENANCE ACTIVITIES DURING DEFECTLIABILITY PERIOD (Cont'd)				
		MAINTAIN THE COMPLETED ROAD (Cont'd)  Provision of all labour, equipments, (Cont'd)				
Α		Drainage The works shall comprise of cleaning debris and desilting works and shall be carried out 4 cycles/year: a) Debris in lined drains b) Debris in unlined drains c) Debris in sump d) Debris in culverts	cycle	4		
В	A359.5	e) Blocked gratings  Litter Collection and Disposal of Minor  Obstruction/Debris  The works shall comprise of all the works stated below and to the satisfaction of the S.O.:-  a) Litter collection and disposal and shall be carried out	sum			
		a) Effection and disposal and shall be carried out as and when required b) Removal and disposal of loose material and debris as and when required b) Removal and disposal of carcass as and when required				
С		Landscaping Items for maintaining all landscaping shall be deemed to include digging, planting media, bedding, stalking, protection, watering, weeding, required fertilising and replacement of dead item until the vegetationis established	km-mth	4		
		The works shall comprise of :- a) Watering at every alternate day. b)Cutting and trimming and shall be carried out once a month. c)Weeding, fertilising, insect pest and disease control, pruning and mulching shall be carried out once a month				
		L (TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

11/4/5

(PROVISIONAL QUANTITY)

Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		COLLECTION				
		<u>From Page</u>				
		11/1/5				
		11/2/5				
		11/3/5				
		11/4/5				
		TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATAI				

11/5/5

12 OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT

(PROVISIONAL QUANTITY)

12	OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT (PROV			(PROVIS	SIONAL QUANTITY)		
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)	
		PLANNING FOR SAFETY & HEALTH MANAGEMENT SYSTEM					
A	A411.1	Prepare and submit safety and health plan (S-plan) as per latest Specifications For Occupational Safety And Health In Engineering Construction Works	nr	1			
В	A414	Prepare and submit monthly safety & health report as per latest Specifications For Occupational Safety And Health In Engineering Construction Works.(Five (5) copies per month)	nr	24			
		RESOURCES FOR SITE SAFETY					
С	A412.2	Employment of a Site Safety & Health Supervisor (SSS) and to the satisfaction of the S.O for the entire duration of the construction period to be stationed minimum 15 hours a week at the site	man-mth	24			
		PROTECTIVE EQUIPMENT					
	A413	Personal Protective Equipment to S.O. Staffs					
		Provision and maintenance of Personal Protective Equipment to S.O staffs at Site of adequate quantity and of approved quality.The equipment shall include but not be limited to the following:					
D		Safety boots.	nr	10			
Е		Safety helmets	nr	10			
F		Protective Gloves	nr	10			
G		Safety jackets of reflective type	nr	10			
Н		Ear plugs and muffs	nr	10			
J		Dust masks	nr	10			
		(TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page		

12 OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT (CONT'D) (PROVISIONAL QUANTITY)

12	OCCU	PATIONAL SAFETY AND HEALTH MANAGEMENT	(CONT'D) (PROVISIONAL QUANTITY)			
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
		PROTECTIVE EQUIPMENT (Cont'd)				
	A413	Personal Protective Equipment to S.O. Staffs (Cont'd)				
		Safety Equipments				
Α		Fire extinguishers	nr	3		
В		Hazard tape	m	200		
	A416	Site Safety Signage and Information Board				
С		Safety signages as per Malaysian Standard Specification	sum			
		(TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To Collection Page	

12/2/3

12 OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT (CONT'D (PROVISIONAL QUANTITY)

12 OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT	,	IT (CONT'D (PROVISIONAL QUANTITY)			
Item Code No. Description	Unit	Quantity	Rate (RM)	Amount (RM)	
COLLECTION					
From Page					
12/1/3					
12/2/3					
KERJA-KERJA MENAIKTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BUL PUSPAKOM KE KAMPUNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	ATAN		To "Ringkasan Tender"		

12/3/3

#### 13 PROVISIONAL SUM

13 Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
	W100	PROVISIONAL SUM				
		ADDITIONAL SI WORKS DURING CONSTRUCTION				
Α		Allow a Provisional Sum of Ringgit Malaysia Three Thousand Only (RM3,000.00) for the additional SI works during construction to be expended as directed by the Superintending Officer or deducted in whole or in part if not expended	sum			3,000.00
		UNDERGROUND MAPPING				
В		Allow a Provisional Sum of Ringgit Malaysia Six Thousand Five Hundred Only (RM6,500.00) for the underground mapping before construction to be expended as directed by the Superintending Officer or deducted in whole or in part if not expended	sum			6,500.00
		RELOCATION AND PROTECTION OF UTILITIES SERVICES				
С		Allow a Provisional Sum of Ringgit Malaysia One Million One Hundred Forty Thousand Only (RM1,140,000.00) for the protection and/or relocation of the existing utilities services to be expended as directed by the Superintending Officer or deducted in whole or in part if not expended	sum			1,140,000.00
D		Attendance	sum			
Е		Profit	%			
		TTARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To "Ringkasan Tender"	

13/1/1

#### 14 PRIME COST SUM

14	PRIME	COST SUM		]		-
Item	Code No.	Description	Unit	Quantity	Rate (RM)	Amount (RM)
	W300	PRIME COST SUM STREET LIGHTINGS				
Α		Allow a Provisional Sum of Ringgit Malaysia One Hundred Sixty Five Thousand Only (RM165,000.00) for the Street Lightings to be expended as directed by the Superintending Officer or deducted in whole or in part if not expended	sum			165,000.00
В		Attendance	sum			
С		Profit	%			
		TARAF JALAN DAN LAIN-LAIN KERJA BERKAITAN DI LALUAN T100 DARI BULATA JNG KUBANG IKAN, DAERAH KUALA TERENGGANU, TERENGGANU	N		To "Ringkasan Tender"	

14/1/1