

SBEL 4812: MATERIAL AND SPECIFICATIONS

ASSIGNMENT 1:

Sustainable Materials for Kolej Tuanku Canselor (KTC)
Landmark, UTM

Prepared by:

The Composer

DESIGN 01: Akmal Rafiq | A20BE0008 Shahida Bahari | B18BE0037 DESIGN 02: Nurul Syazwani | A20BE0251 Nur Amalia Izzati | B18BE0032



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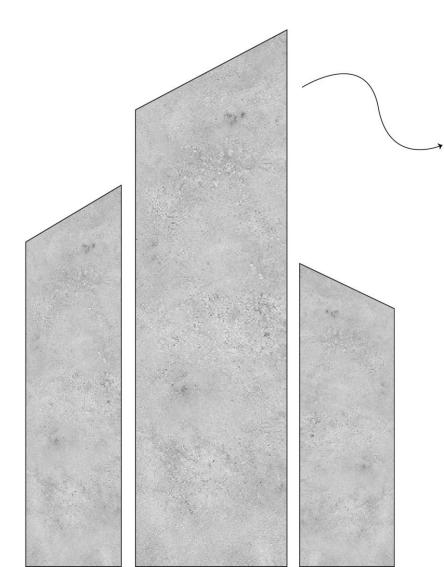
SITE INTRODUCTION

The position is perfect for landmark placement since it is adjacent to the main road where the UTM annual convocation ceremony takes place.

As a result, it can also catch the attention of regular road users. By constructing the landmark, people would be able to learn more about ktc. Furthermore, it could be a place where people would stop and take pictures as a memory, especially for KTC students.

Since the site is in an open field, the landmark would be made of a long-lasting and weather-resistant material to save it from being torn down. The landmark must be visually appealing because it will be one of the first places where tourists will see the picture of KTC. Visitors will interpret this landmark as their first experience of KTC in this case.

DESIGN APPROACH

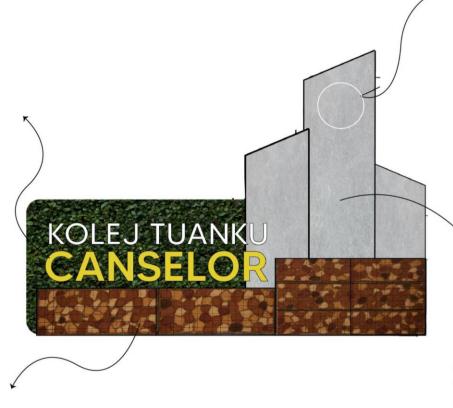


3 Pillars That Symbolize The Unity of Kolej Tuanku Canselor

The highest pillar represent the important member of KTC which is the student. Student of KTC play a vital role to form a competitive and conducive envrionment. The left pillar represent that Lecturer as they are the one who will encourage and guide citizen of KTC for them to benefits the college, university and community. Last but not least, the last pillar is the staff of KTC that keep the place in good condition as well providing necessity to citizen of KTC.

YELLOW AS CONTRAST

Yellow colour become synonym with KTC logo and the bright colour make it appear more attractive



REUSING EXISTING MATERIAL

Exisiting granite block material from the abandoned signage will be reuse by putting them into gabion cage

KTC Logo

KTC logo will be put at highest pillar to symbolize the greatness of KTC being at the top.

INTEGRATION OF THE PILLARS

Symbolize the interaction, teamwork and support from each member of KTC



+ AIM

- TO CREATE A LANDMARK THAT REPRESENT KTC'S RESIDENT
- TO PROVIDE A LANDMARK THAT IS RECOGNIZABLE AND STANDS OUT FROM ITS NEAR ENVIRONMENT.

+ DESIGN INSPIRATION



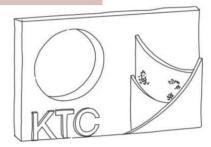
- · THREE ROOFS THAT REPRESENT THE ARCHITECTURAL BUILDING OF COLLEGE
- · YELLOW COLOUR THAT REPRESENT ROYALTY
- · BLACK AS A SYMBOL OF COURAGE
- · ROUND SHAPE TO REPRESENT THE MOON

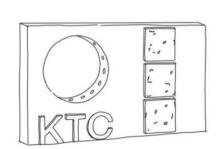
+ SOFTSCAPE

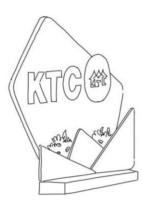


- · REMOVE TOXIC POLLUTANTS
- LESS MAINTENANCE
- · COULD LIVE WITHOUT GETTING WATER OVER A MONTH

+ DESIGN DEVELOPMENT



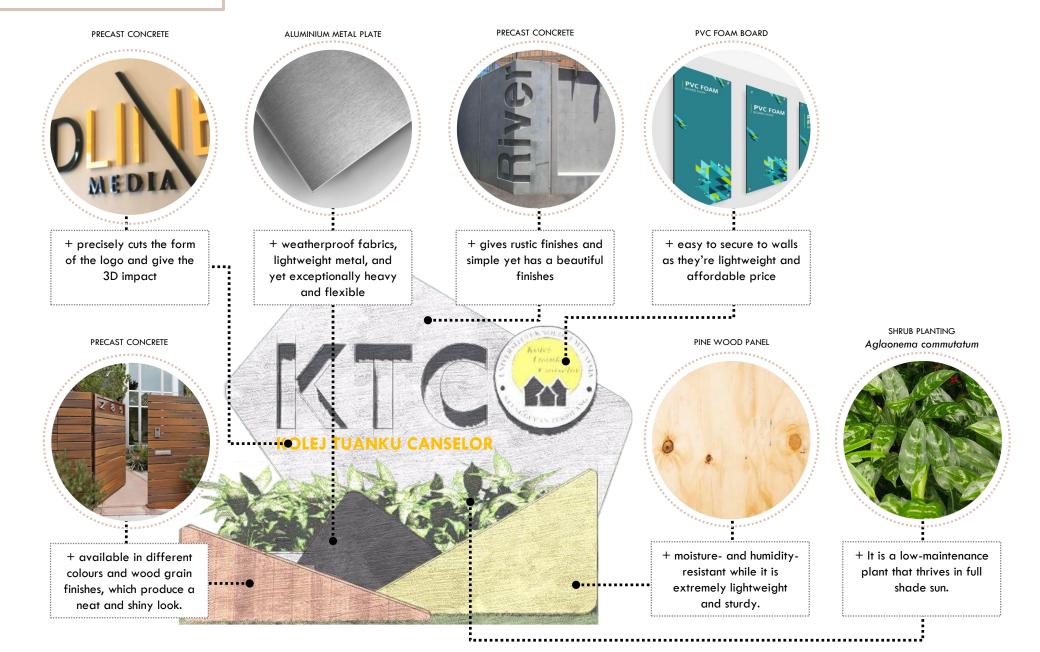


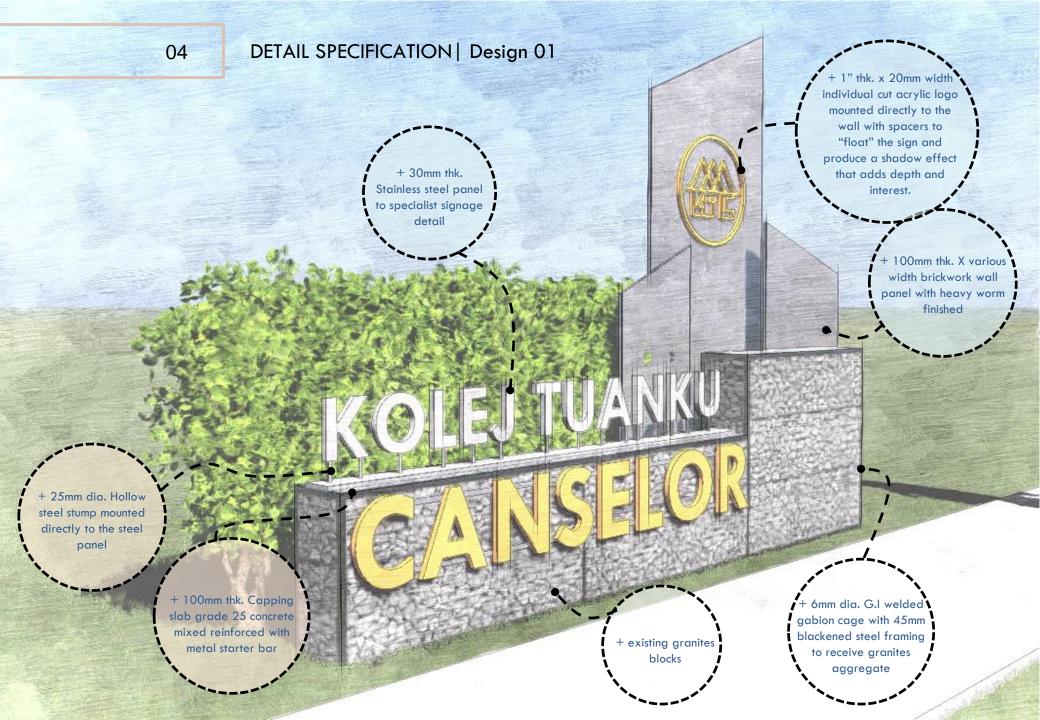


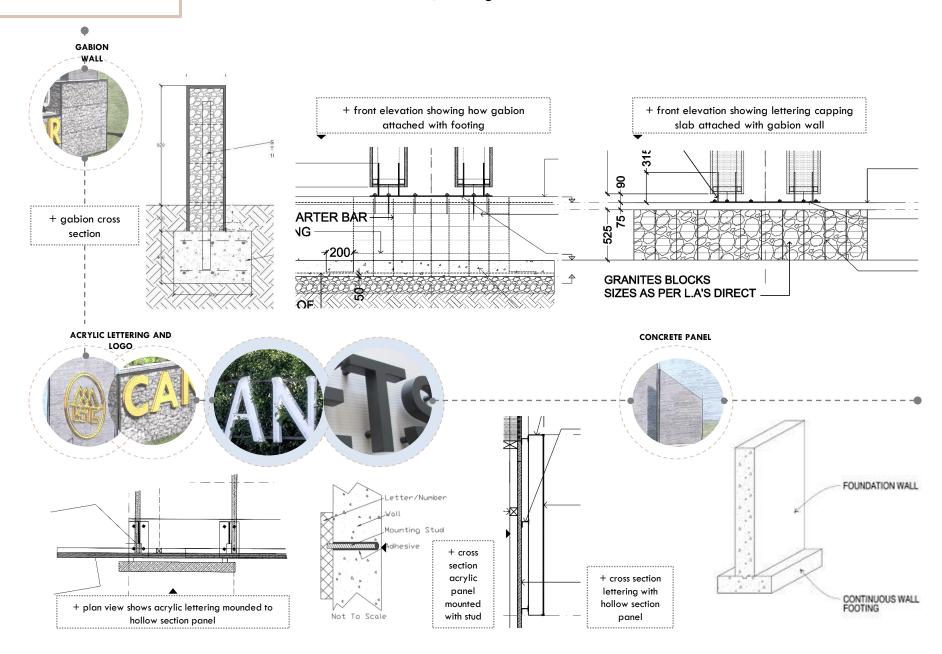
MATERIAL SELECTION | Design 01

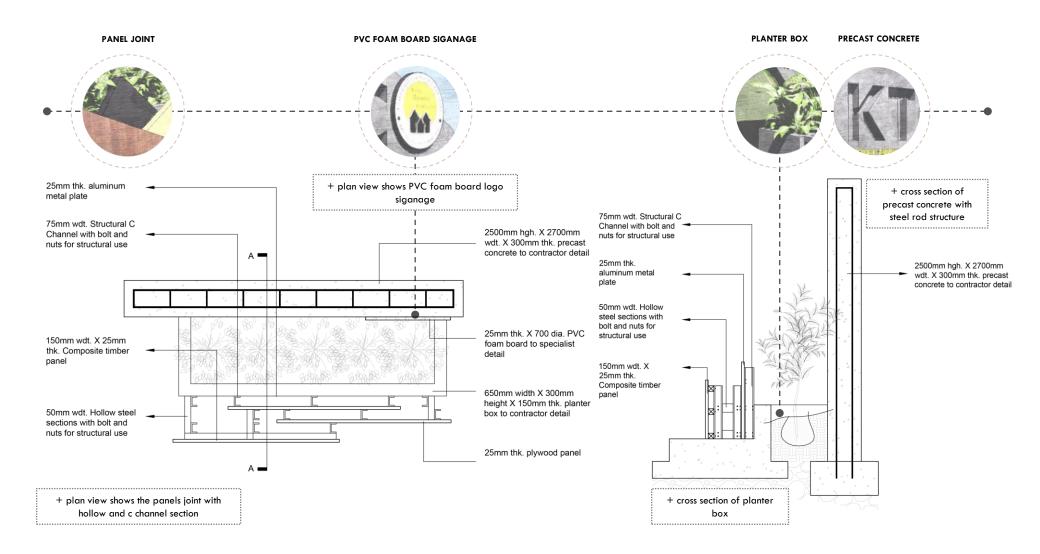


MATERIAL SELECTION | Design 02









ST ESTIM	ATE								
ITEM	DESCRIPTION	СОММОН	UNIT	OVR HGT.	CLEAR TK.HGT	TRUNK DIA	QTY	RATE	AMOUNT
1.00	SOFTSCAPE	NAME		(MM)	(MM)	(MM)		(RM)	(RM)
1.00	The following nursery grown plant								
	materials including transport,								
	labour, fertilizing, pruning, watering								
	and insecticide.								
	and inscended								
1.01	<u>SHRUB</u>								
	Baphia nitida	Camwood	Nos	1200	-	-	10	20.00	30
	TO COLLECTION								30
ITEM	DESCRIPTION					UNIT	QTY	RATE	AMOUNT
2.00	EXCAVATION OF PLANTING HOLE							(RM)	(RM)
	To excavate for planting hole as of the foll	owing :							
	All hole excavated shall be inspected & approved by E.R. before any backfill of soil mixture is allowed. The bottom half before any backfill of soil mixture is allowed. The bottom half excavated materials are to be carted away or spread out as and when directed by E.R. while the top half to be filled as instructed. The Landscape Contractor is allowed in his rate								
	to excavate any materials, such as clay, sai broken concrete rubble, rubbish, any const payment for the excavation of the above n	ruction debris, etc. an	ıd no claim fo						
2.01	300mm x 300mm x 300mm for shrub holes					Nos	10	5.00	5

ITEM	DESCRIPTION	UNIT	QTY	RATE (RM)	AMOUNT (RM)
3.00	SOIL TRANSPORT AND MIXTURE			(KIN)	(KVV)
	The topsoil shall be natural, fertile, agriculture soil, capable of sustaining vigorous plant growth. It shall be uniform composition without a mixture of subsoil. It shall be free of stones, lumps, live plants & thin roots, sticks and other exhaust matter. The pH shall be in the range of pH6 to pH7.5 Top soil does not included soil from swampy area, padi field, or tin mining areas, and free from oil particles.				
	All manure or compost used as admixture to the soil mixture shall be procured from an approved source. Manure shall be chickendung with minimum admixture of materials. Each must be conditioned in storage piles, not wet or waterlogged (well decomposed). Dry sludge & peat be used at the discretion of Engineer.				
	Phosphorous shall be applied in the form of CIRP (Christmas Island Rock Phosphate) or Triple Super Phosphorous at the rate of 0.5 kg per cubic meter tree hole. It shall be well-mixed with soil mixture before planting operation is carried out.				
	 To supply and transport the following soil mixture: a. 2/3 approved top soil b. 1/3 approved sludge or organic fertilisers or compost as approved by Engineer 				
3.01	Topsoil mixture for shrubs (10nos x 0.027m3)	м3	0.27	35.00	9.45
4.00	MULCHING To lay 25mm thk coconut fibre at surface of each plant				
4.01	Shrubs (300mm Dia.)	Nos	10	1.00	10.00
	TO COLLECTION				19.45

ITEM	DESCRIPTION	UNIT	QTY	RATE (RM)	AMOUNT (RM)
5.00	HARDSCAPE			(K/VI)	(K/VI)
	SIGNAGE				
5.01	"KOLEJ" Acrylic Lettering	L/sum	-	407.00	407.00
	"Kolej" lettering of 50mm thk x 200mm height acrylic box typet letter painted with white painted finish complete with 25mm dia hollow section steel stump mounted directly to the steel panel with 100mm thk capping slab grade 25 concrete mixed reinforced with metal starter bar to L.A's approval				
5.02	"CANSELOR' Acrylic lettering "Canselor" lettering of 50mm thk x 300mm height acrylic box type letter with yellow painted finish complete with backing frame to signage specialist detail	L/sum	-	744.00	744.00
5.03	Gabion wall	L/sum	-	4,200.00	4,200.00
	2800mm width x 250mm thk gabion wall B9 G.I wire mesh with 45mm blackened steel framing to receive existing granites aggregate to receive 400mm thk x 600mm width reinforced concrete strip footing with SHS galvanised steel post central to gabion @ 400mm centers to within 100mm of top of wall as per L.A's approval				
5.04	Acrylic logo				
	1" thk. x 20mm width individual cut acrylic logo mounted directly to the wall with spacers to be finished with yellow paint to L.A's approval	L/sum	-	170.00	170.00
5.05	Concrete panel				
i.	2500mm max height x 600mm width x 150mm thk reinforced concrete wall to be finished with colour cement plaster and to receive 250mm thk x 250mm width reinforced concrete strip footing	L/sum	-	293.00	293.00
ii.	1700mm max height x 500mm width x 150mm thk reinforced concrete wall to be finished with colour cement plaster and to receive 250mm thk x 250mm width reinforced concrete strip footing	L/sum	-	166.00	166.00
iii.	1600mm max height x 450mm width x 150mm thk reinforced concrete wall to be finished with colour cement plaster and to receive 250mm thk x 250mm width reinforced concrete strip footing	L/sum	-	142.00	142.00
	TO COLLECTION				6,122.00

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
				(RM)	(RM)
6.00 MAINTE	NANCE	Months	12		3,600.00
6.01 SOFT LA	INDSCAPE				

Supply all labour, transport, equipment and materials to maintain all landscape areas including:

- L. Cutting, watering, weeding, aeration or spiking, fertilising and pest/disease control of all grass areas as required.
- b. Pruning of all trees, palms and adjustment of stakes and guy wires as necessary.
- c. Fertilising of all plant materials as required.
- d. Mulching of all plant materials as required.
- e. Insects, fungus and pest control.
- f. Watering of all plant materials as required.
- g. Removal of all debris, fallen leaves, branches, clipping and other rubbish from landscape areas.
- h. Weeding of all planted areas.
- i. Cultivation of soil areas as required by compacted soil conditions
- j. Replacement of dead/diseased/missing plants.

The expense of replacement of plant material during the maintenance period shall be borne by the landscape contractor.

6.02 HARD LANDSCAPE

a. GENERAL

- i General maintenance for each item of hardscape as specified as follows:
- To provide product manufacturer's warranty, maintenance manual and catalogues and necessary manual of operation for consultants and client
- iii General cleaning to make sure the site is free from debris and unwanted material at all times
- iv To check associate equipments are in working condition
- v To repair and service any damage such as cracks of hardscape components and necessary replacement of damage to hardscape items.

NOTE:

ALL MAINTENANCE WORKS TO BE EVALUARED BASED ON MONTHLY EVALUATION OF LANDSCAPE MAINTENANCE WORKS GUIDELINE. VALUE PAYABLE TO THE CONTRACTOR SHALL BE BASED ON THE PERCENTAGE DURING INSPECTION

ITEM	DESCRIPTION	AMOUNT (RM)
7.00	COLLECTION	
	Page 1	30.00
	Page 1	50.00
	Page 2	 19.45
	Page 3	 6,122.00
	Page 4	 3,600.00
	GRAND TOTAL	9,821.45

ST ESTIM.	ΔTF								
ITEM	DESCRIPTION	СОММОН	UNIT	OVR HGT.	CLEAR TK.HGT	TRUNK DIA	QTY	RATE	AMOUNT
		NAME		(MM)	(MM)	(MM)		(RM)	(RM)
1.00	SOFTSCAPE								
	The following nursery grown plant								
	materials including transport,								
	labour, fertilizing, pruning, watering								
	and insecticide.								
1.01	<u>SHRUB</u>								
	Aglaonema commutatum	Camwood	Nos	600	-	-	5	50.00	50.
	TO COLLECTION								50
TEM	DESCRIPTION					UNIT	QTY	RATE (RM)	AMOUNT (RM)
2.00	EXCAVATION OF PLANTING HOLE								, ,
	To excavate for planting hole as of the foll	owing :							
	All hole excavated shall be inspected & approved by E.R. before any backfill of soil mixture is allowed. The bottom half before any backfill of soil mixture is allowed. The bottom half excavated materials are to be carted away or spread out as and when directed by E.R.								
	while the top half to be filled as instructed.								
	to excavate any materials, such as clay, sand, sandstone, buried materials, limestone, broken concrete rubble, rubbish, any construction debris, etc. and no claim for extra								
	payment for the excavation of the above n			n exilu					
2.01	300mm x 300mm x 300mm for shrub holes					Nos	5	5.00	25

ITEM	DESCRIPTION	UNIT	QTY	RATE (RM)	AMOUNT (RM)
3.00	SOIL TRANSPORT AND MIXTURE			(K/YI)	(KOVI)
	The topsoil shall be natural, fertile, agriculture soil, capable of sustaining vigorous plant growth. It shall be uniform composition without a mixture of subsoil. It shall be free of stones, lumps, live plants & thin roots, sticks and other exhaust matter. The pH shall be in the range of pH6 to pH7.5 Top soil does not included soil from swampy area, padi field, or tin mining areas, and free from oil particles.				
	All manure or compost used as admixture to the soil mixture shall be procured from an approved source. Manure shall be chickendung with minimum admixture of materials. Each must be conditioned in storage piles, not wet or waterlogged (well decomposed). Dry sludge & peat be used at the discretion of Engineer.				
	Phosphorous shall be applied in the form of CIRP (Christmas Island Rock Phosphate) or Triple Super Phosphorous at the rate of 0.5 kg per cubic meter tree hole. It shall be well-mixed with soil mixture before planting operation is carried out.				
	To supply and transport the following soil mixture: a. 2/3 approved top soil b. 1/3 approved sludge or organic fertilisers or compost as approved by Engineer				
3.01	Topsoil mixture for shrubs (5nos x 0.027m3)	M3	0.14	35.00	4.90
4.00	MULCHING To lay 25mm thk coconut fibre at surface of each plant				
4.01	Shrubs (300mm Dia.)	Nos	5	1.00	5.00
	TO COLLECTION				9.90

ITEM	DESCRIPTION	UNIT	QTY	RATE (RM)	AMOUNT (RM)
5.00	<u>HARDSCAPE</u>			(K/VI)	(K/W)
	SIGNAGE				
5.01	"KOLEJ TUANKU CANCELOR" Acrylic Lettering	Nos	19	180.00	3,420.00
	"KOLEJ TUANKU CANCELOR" lettering of 50mm thk x 200mm height galvanized sheet 3D boxtype with yellow spray paint finishing complete with double sided tape installation				
5.02	PVC Foam board signage	L/sum	-	100.00	100.00
	25mm thk x 700mm radius expanded PVC foam board signage printed with KTC logo to be cut to size with silver frame				
5.03	Planter box 300mm height x 2000mm length x 450mm width x 150mm thk planter box complete with cement finishes to LA approval	m2	1.47	200.00	294.00
5.04	Precast concrete wall 2300mm height x 2800mm width x 300mm thk precast concrete wall to be engraved with 450mm height x 450mm width x 75mm thk "KTC" lettering complete w/ excavation, BRC A7, formwork, 50mm crusher run, cement finishes to LA approval.	m2	4.24	325.00	1,378.00
5.05	Composite timber panel Various height x 150mm width x25mm thk composite timber panel with original surface finish appearance to be paint with teak colour to specialist detail	Nos	6	80.00	480.00
5.06	Aluminium Metal Plate	L/sum	_	500.00	500.00
	Various height x various width x 25mm thk aluminium metal plate material 6061 T6 to be custom cut with black paint finishes to specialist detail				
5.07	Plywood panel Various size x 25mm thk WBP (Weather and Boil Proof) and MR (Moisture Resistant) glue type structural panel plywood to be custom cut with natural wood finish to specialist detail	L/sum	-	200.00	200.00

TO COLLECTION 5, 672.00

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
				(RM)	(RM)
6.00 MAINT	ENANCE	Months	12	40	480.00
6.01 SOFT L	ANDSCAPE				

Supply all labour, transport, equipment and materials to maintain all landscape areas including:

- L. Cutting, watering, weeding, aeration or spiking, fertilising and pest/disease control of all grass areas as required.
- b. Pruning of all trees, palms and adjustment of stakes and guy wires as necessary.
- c. Fertilising of all plant materials as required.
- d. Mulching of all plant materials as required.
- e. Insects, fungus and pest control.
- f. Watering of all plant materials as required.
- g. Removal of all debris, fallen leaves, branches, clipping and other rubbish from landscape areas.
- h. Weeding of all planted areas.
- i. Cultivation of soil areas as required by compacted soil conditions
- j. Replacement of dead/diseased/missing plants.

The expense of replacement of plant material during the maintenance period shall be borne by the landscape contractor.

6.02 HARD LANDSCAPE

a. GENERAL

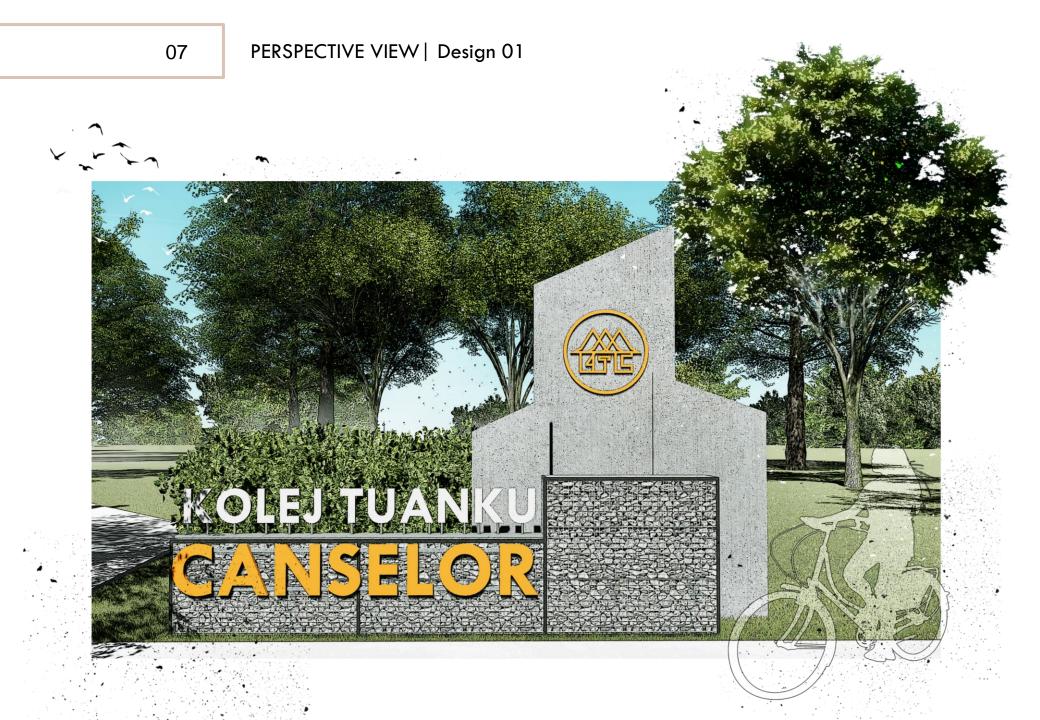
- General maintenance for each item of hardscape as specified as follows:
- To provide product manufacturer's warranty, maintenance manual and catalogues and necessary manual of operation for consultants and client
- iii General cleaning to make sure the site is free from debris and unwanted material at all times
- iv To check associate equipments are in working condition
- v To repair and service any damage such as cracks of hardscape components and necessary replacement of damage to hardscape items.

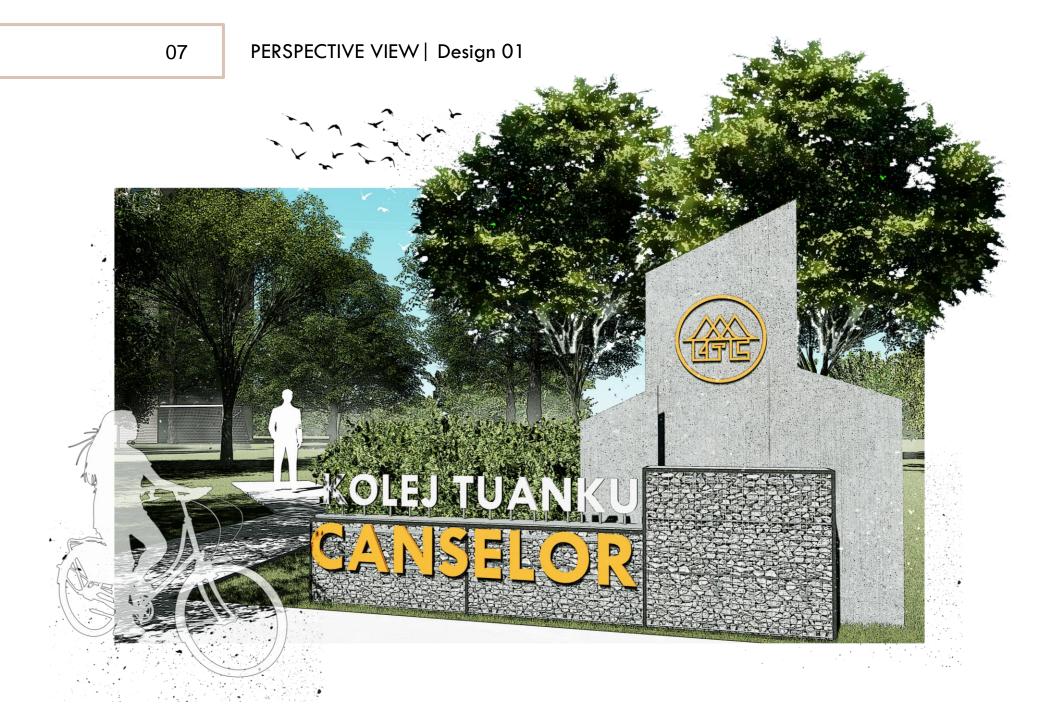
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TO COLLECTION 480.00

ITEM		DESCRIPTION	AMOUNT (RM)
7.00	COLLECTION		
	Page 1		 50.00
	Page 1		 25.00
	Page 2		 9.90
	Page 3		 5, 672.00
	Page 4		 480.00
	GRAND TO	OTAL	6, 236.90









SITE PLAN SCALE 1:100

LAND OWNER:



SULTAN IBRAHIM CHANCELLERY BUILDING, JALAN IMAN, 81310 SKUDAI, IOHOR

TEL: 07-553 3333

CLIENT:



Kolej Tuanku Canselor, UTM Skudai

LANDSCAPE ARCHITECT CONSULTANT:

AKMAL RAFIQ BIN ABDUL HALIM A20BE0008



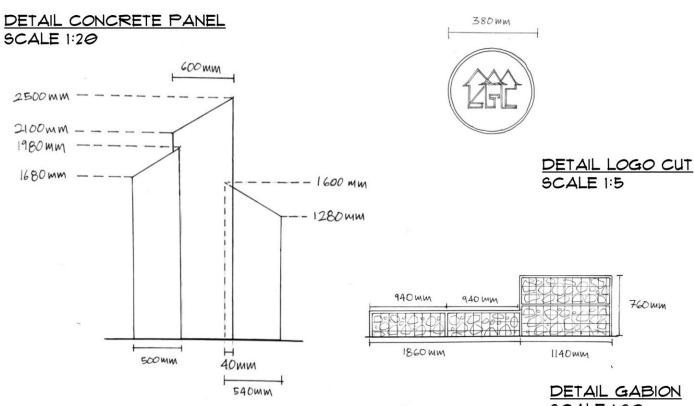
AKMALANA STUDIO TEL: 0192191921 EMAIL: akmalrafiq2@gmail.com

PROJECT TITLE:

APPLICATION FOR LANDSCAPE PLANNING FOR KOLEJ TUANKU CANSELOR AT UNIVERSITI TEKNOLOGI MALA -LANDMARK

DRAWING TITLE:

LANDMARK KOLEJ TUANKU CANSELOR, UTM



SCALE 1:20

DETAIL LETTERING PANEL SCALE 1:10

1182mm 110 mm 200 mm 130 mm 100mm 100mm 150mm 110mm 150mm, 220mm 210mm 210mm 140mm 160mm 170mm 200mm 250mm LAND OWNER:



SULTAN IBRAHIM CHANCELLERY BUILDING, JALAN IMAN, 81310 SKUDAI, **JOHOR**

TEL: 07-553 3333

CLIENT:



Kolej Tuanku Canselor, UTM Skudai

LANDSCAPE ARCHITECT CONSULTANT:

AKMAL RAFIQ BIN ABDUL HALIM A20BE0008



AKMALANA STUDIO TEL: 0192191921 EMAIL: akmalrafig2@gmail.com

PROJECT TITLE:

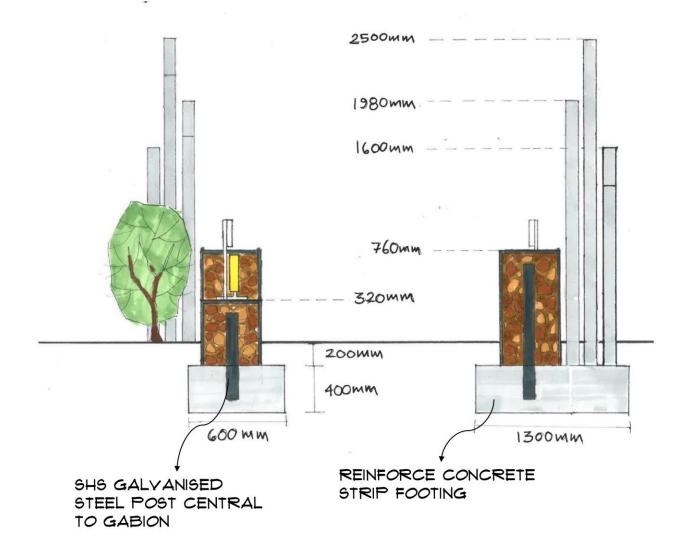
APPLICATION FOR LANDSCAPE PLANNING FOR KOLEJ TUANKU CANSELOR AT UNIVERSITI TEKNOLOGI MALA LANDMARK

DRAWING TITLE:

LANDMARK KOLEJ TUANKU CANSELOR, UTM

LEFT SECTION ELEVATION SCALE 1:20

RIGHT SECTION ELEVATION SCALE 1:20



LAND OWNER:



SULTAN IBRAHIM CHANCELLERY BUILDING, JALAN IMAN, 81310 SKUDAI, JOHOR

TEL: 07-553 3333

CLIENT:



Kolej Tuanku Canselor, UTM Skudai

LANDSCAPE ARCHITECT CONSULTANT:

AKMAL RAFIQ BIN ABDUL HALIM A20BE0008



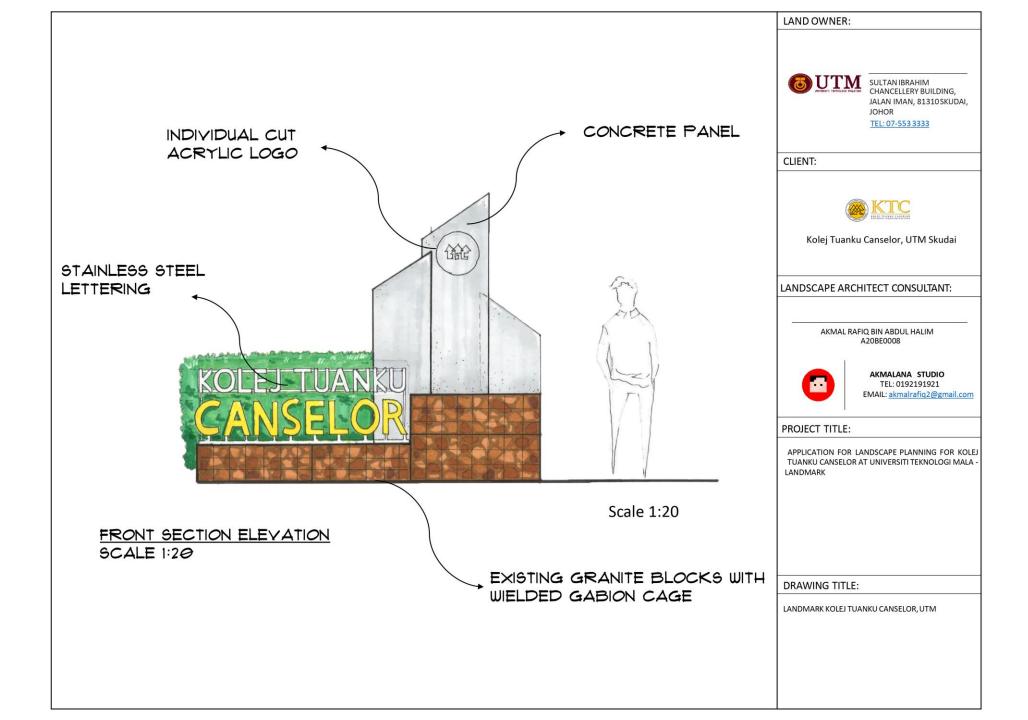
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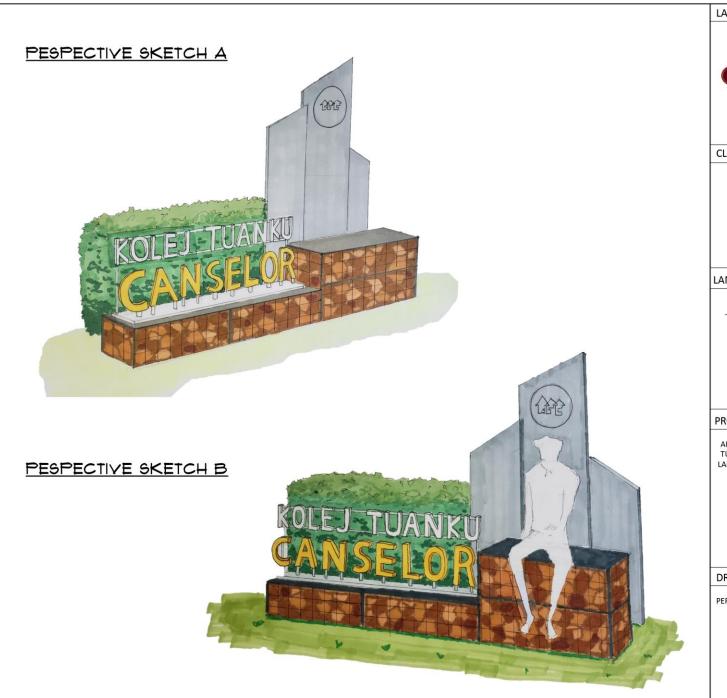
PROJECT TITLE:

APPLICATION FOR LANDSCAPE PLANNING FOR KOLEJ TUANKU CANSELOR AT UNIVERSITI TEKNOLOGI MALA -LANDMARK

DRAWING TITLE:

LANDMARK KOLEJ TUANKU CANSELOR, UTM





LAND OWNER:



SULTAN IBRAHIM CHANCELLERY BUILDING, JALAN IMAN, 81310 SKUDAI, JOHOR

TEL: 07-553 3333

CLIENT:



Kolej Tuanku Canselor, UTM Skudai

LANDSCAPE ARCHITECT CONSULTANT:

AKMAL RAFIQ BIN ABDUL HALIM A20BE0008



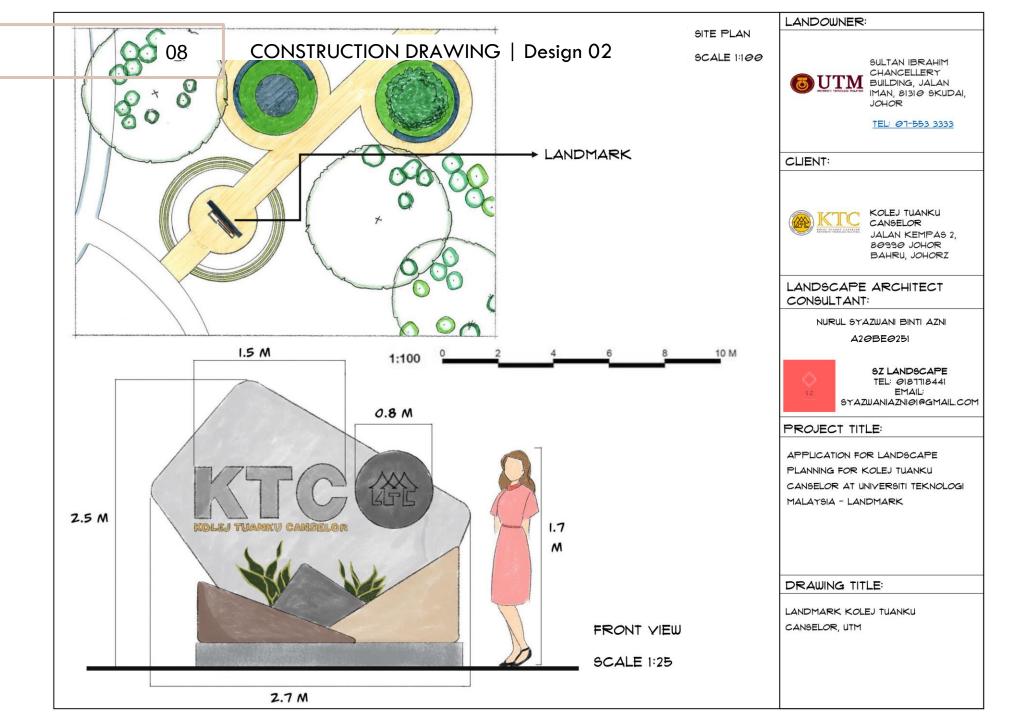
AKMALANA STUDIO TEL: 0192191921 EMAIL: akmalrafiq2@gmail.com

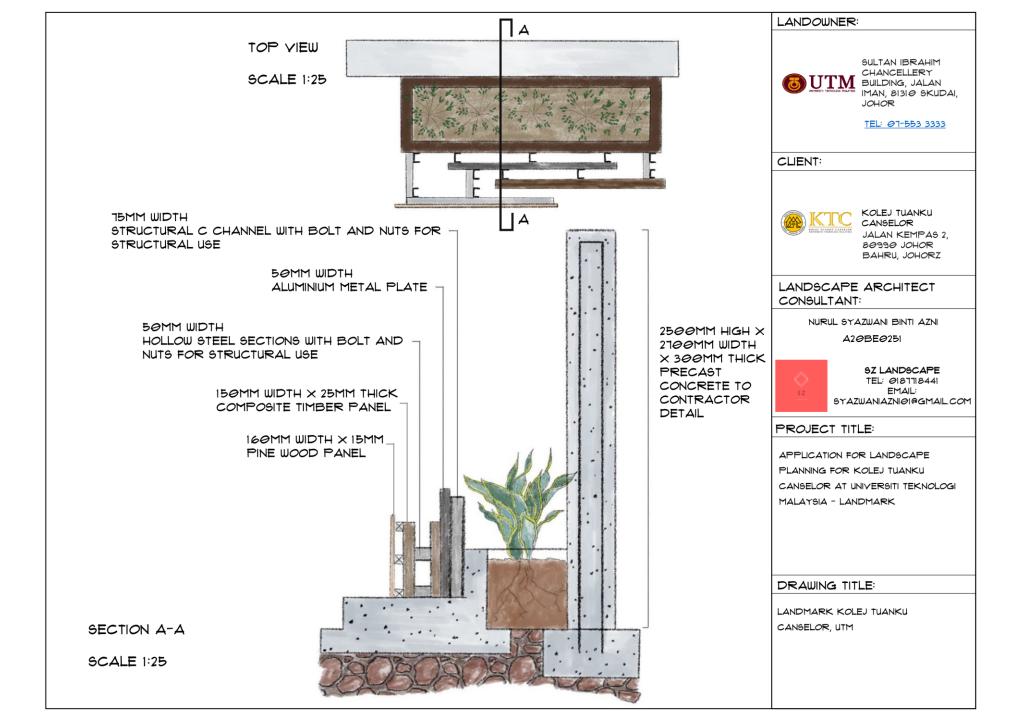
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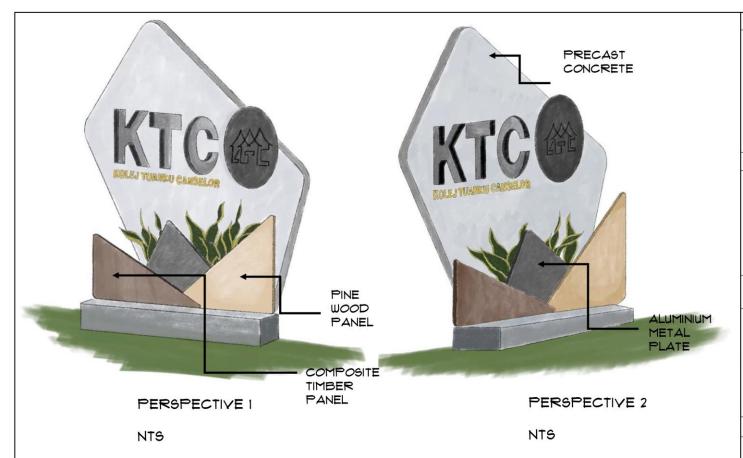
APPLICATION FOR LANDSCAPE PLANNING FOR KOLEJ TUANKU CANSELOR AT UNIVERSITI TEKNOLOGI MALA -LANDMARK

DRAWING TITLE:

PERSPECTIVE SKETCH







[KOLEJ TUANKU GANSELOR]*** 20

MM



LETTERING DETAILS SCALE 1:25

LANDOWNER:



SULTAN IBRAHIM CHANCELLERY IJTM BUILDING, JALAN IMAN, 81310 SKUDAI, JOHOR

TEL: 07-553 3333

CLIENT:



KOLEJ TUANKU CANSELOR JALAN KEMPAS 2. 80990 JOHOR BAHRU, JOHORZ

LANDSCAPE ARCHITECT CONSULTANT:

NURUL SYAZWANI BINTI AZNI A20BE0251



SZ LANDSCAPE TEL: 0187718441 EMAIL: SYAZWANIAZNI@I@GMAIL.COM

PROJECT TITLE:

APPLICATION FOR LANDSCAPE PLANNING FOR KOLEJ TUANKU CANSELOR AT UNIVERSITI TEKNOLOGI MALAYSIA - LANDMARK

DRAWING TITLE:

LANDMARK KOLEJ TUANKU CANSELOR, UTM