

## &lt; Estimates for Construction Cost VR simulation data &gt;

FORUM8 Co., Ltd  
 2-1-1 Nakameguro GT Tower 15F  
 KamiMeguro Meguro-ku Tokyo  
 TEL.:03-5773-1888 FAX:03-5720-5688

## UC - win / Road Cost Estimation - Breakdown

## Summary of work

100 meters of construction zone within around 500 meters of road extend distance, and traffic lane regulation related with it, including traffic lights and signals controlling are expressed. Construction zone is displayed by arranging models with scene switching. There are 3 phases of scene switching, including current state.

Estimated distance	Par section	Correction Coefficient	Quantity	Estimated distance
The total extended distance (km)		1.0	0.500	0.500
	sectional change	1.5	0.100	0.150
	Crossing	2.0	0.100	0.200
	IC·JCT	1.7	0.000	0.000
	Tunnel part	1.0	0.000	0.000
	Bridge part	1.5	0.000	0.000
	General section	1.3	0.000	0.000
	Others	0.5	0.000	0.000
<b>A</b>	Subtotal(A) Estimated extension distance	1.00	0.700	0.850

Item classification	Item Breakdown	Correction Coefficient	Standard work unit	Man-day input	Estimated Man-Day
Geographical feature (Man day)	Standard 50m mesh use	1.0	(0.15-0.4)	0.150	0.150
	Par geographical feature edit	1.0	(0.1-1.5)	0.000	0.000
	Space base use	1.0	0.2	0.000	0.000
	Aerial photograph use	1.0	(0.2-0.3)	0.000	0.000
	DXF conversion	0.5	(1.0-3.0)	0.000	0.000
	XML	1.0	(1.0-2.0)	0.000	0.000
	Subtotal	0.2			
Alignment definition (Man day)	P calculation work	1.0	0.3	0.300	0.300
	P input	1.0	0.15	0.150	0.150
	VC input	1.0	0.2	0.200	0.200
	Classification Setup	1.0	0.2	0.200	0.200
	Subtotal	0.9			
A cross-sectional definition (Man day)	Cross-sectional definition	1.0	0.8	0.800	0.800
	Cross-sectional texture setup	1.0	0.3	0.300	0.300
	Subtotal	1.1			
3D Model · Texture (Man day)	Accuracy-Draft	1.0	1.0	0.000	0.000
	Accuracy-Average	1.0	2.0	2.000	2.000
	Accuracy-High Precision	1.0	3.0	0.000	0.000
	Accuracy-Excellent Precision	1.0	(3.0-5.0)	0.000	0.000
	Subtotal	2.0			
<b>B</b>	Subtotal(B) The work in Man-day per km				4.100

Optional Item Classification	Item Breakdown	Correction Coefficient	Standard work unit	Man-day input	Estimated Man-Day
3DModel・Texture	3DModel	70 Elements	1.0	3.500	3.500
	MD3Model	1Body	1.0	0.000	0.000
	3DTrees	2 Kinds	0.8	0.000	0.000
	(Man day) Texture	5 Textures	0.5	1.000	1.000
	Subtotal	4.5			
Simulation various setup, adjustment	Traffic setup	Ten roads	0.5	0.100	0.100
	Signal control setup	One crossing	0.5	0.500	0.500
	(Man day) A model of operation and a WAY-P setup	TOP/2OPT	1.2	0.000	0.000
	Flight path setup	20PT	0.3	0.150	0.150
	Default/Before/After setup	BFR/AFT	0.5	1.000	1.000
	Lake setup	50PT	0.5	0.000	0.000
	Stream setup	10 Sections	0.5	0.000	0.000
	Script setup		1.0	0.000	0.000
	Data adjustment		1.0	1.500	1.500
	Subtotal	3.3			
Output	Screen output	A41 sheet	0.07	0.000	0.000
		(Man day) A31 sheet	0.1	0.000	0.000
	AVI output (1 minute)	Rough	1.0	0.000	0.000
		Normal	2.0	0.000	0.000
		Excellent	4.0	0.000	0.000
		Sound	Sound Setup	別途見積	0.000
		Audio input	別途見積	0.000	0.000
		BGM	別途見積	0.000	0.000
		Guide	別途見積	0.000	0.000
	AVI composition	Normal	別途見積	0.000	0.000
		Excellent	別途見積	0.000	0.000
	Perspective view creation	Rough	別途見積	0.000	0.000
		Normal	別途見積	0.000	0.000
		Excellent	別途見積	0.000	0.000
	Subtotal	0.0			
<b>C</b>	Subtotal(C) Option work classification				7.750

Engineer's standardized work breakdown list				
Man day unit price of an Engineer	EngineerA	10%	3,830	38,300
	EngineerB	30%	9,150	30,500
	EngineerC	40%	10,400	26,000
	Engineer	20%	4,420	22,100
<b>D</b>	Man day unit price(D) 27,740円		27,800	

Direct personnel expenses				
<b>E</b>	Sum total E = (AxB+C)xD			¥312,333

Administrative expenses	20% of direct personnel expenses	20%		
<b>F</b>	Administrative expenses(F)			¥62,467

Cost				
	Technical cost(Field survey expense etc.)			¥30,000
	Express charges(25% Premium overtime work etc.)			
	Software & hardware purchase expenses			
	Satellite photography expenses			¥0
	Apparatus rental and transportation			
	Transportation-expenses cost price			
	Work management expenses			
	Others		discount	¥-4,800
<b>G</b>	Subtotal of costs (G)			¥25,200

Summation	Estimated Grand Total(E+ F+ G)			¥400,000
-----------	--------------------------------	--	--	----------

This excludes the cost of any local taxes that may be levied upon the project.