



**CRONOGRAMA VALORIZADO DE AVANCE DE OBRA**

Item	Descripción	Und	Medido	P. Unit. \$/	Parcial \$/	Mes 1			Mes 2			Mes 3			Mes 4			
						Medido	Parcial	%	Medido	Parcial	%	Medido	Parcial	%	Medido	Parcial	%	
<b>01</b>	<b>OBRAS PRELIMINARES</b>				<b>672,018.19</b>													
01.01	MOVILIZACION DE MAQUINARIAS HERRAMIENTAS PARA LA OBRA	gdb	1.00	414,011.41	414,011.41	0.50	207,005.71	49.54%										207,005.71
01.02	TOPOGRAFIA Y GEOREFERENCIACION	km	29.60	1,169.13	34,606.25	19.73	23,070.83		9.87	11,535.42	7.66%							39,956.06
01.03	MANUTENIMIENTO DE TRANSITO Y SEGURIDAD VAL	mes	4.00	39,956.06	159,824.24	1.00	39,956.06		1.00	39,956.06								39,956.06
01.04	ACCESOS A CANTERAS, DME, PLANTAS Y FUENTES DE AGUA	km	2.62	24,265.78	63,576.29	2.62	63,576.29		0.00									
<b>02</b>	<b>PAVIMENTOS</b>				<b>5,154,185.49</b>			<b>19.82%</b>			<b>1,905,062.91</b>	<b>75.15%</b>						<b>1,099,281.81</b>
<b>02.01</b>	<b>CALZADA</b>				<b>2,953,788.98</b>			<b>8.48%</b>			<b>992,417.71</b>	<b>33.48%</b>						<b>724,215.81</b>
02.01.01	FRESADO DE CARPETA ASFALTICA E-2.5 CM	m2	7,200.00	374	26,928.00	1,800.00	6,732.00		3,600.00	13,464.00		1,800.00	6,732.00					0.00
02.01.05	BACHEO SUPERFICIAL	m2	2,361.12	59.16	139,683.86	196.76	11,640.32		787.04	46,561.29		787.04	46,561.29					590.28
02.01.06	RIEGO DE LIGA	m2	143,175.48	0.52	74,451.25	11,931.29	6,504.27		47,725.16	24,817.08		47,725.16	24,817.08					35,793.87
02.01.07	EMULSION ASFALTICA DE ROTURA LENTA	L	443,614.99	2.29	1,015,876.33	36,967.92	84,556.54		147,871.66	338,626.10		147,871.66	338,626.10					110,803.75
02.01.08	RECAPADO ASFALTICO	m3	2,844.42	122.35	348,014.79	237.04	29,001.84		948.14	116,004.93		948.14	116,004.93					711.11
02.01.09	CEMENTO ASFALTICO PEN 60 - 70	L	375,131.73	2.48	934,070.01	31,280.98	77,839.84		125,043.91	311,359.34		125,043.91	311,359.34					93,782.93
02.01.10	FILLER	kg	59,732.84	0.61	36,437.03	4,977.74	3,036.42		19,910.95	12,145.68		19,910.95	12,145.68					14,933.21
02.01.11	ADITIVO MEJORADOR DE ADHERENCIA	kg	1,991.09	17.02	33,888.35	165.92	2,823.96		663.70	11,296.17		663.70	11,296.17					497.77
02.01.12	SUPURY SEAL	m2	167,976.00	2.11	354,423.36	13,998.00	29,535.78		55,992.00	118,143.12		55,992.00	118,143.12					41,994.00
<b>02.02</b>	<b>BERMAS</b>				<b>2,190,396.51</b>			<b>8.33%</b>			<b>912,865.20</b>	<b>41.67%</b>						<b>365,066.00</b>
02.02.01	ESCARIFICADO DE BERMAS	m2	93,295.70	0.58	54,111.51	7,774.64	4,509.29		38,873.21	22,546.46		31,098.57	18,037.17					15,548.28
02.02.02	RECONFORMACION DE BERMAS CON ADICION DE RAP	m3	13,994.36	12.60	176,329.94	1,166.20	14,594.12		5,830.98	73,470.35		4,664.79	58,776.31					2,332.39
02.02.03	IMPRIMACION ASFALTICA EN BERMAS	m2	93,295.70	0.94	87,697.96	7,774.64	7,308.16		38,873.21	36,540.82		31,098.57	29,232.65					15,548.28
02.02.04	ASFALTO DILUIDO MC-30	L	93,295.70	2.76	257,496.13	7,774.64	21,458.01		38,873.21	107,290.06		31,098.57	85,882.04					42,916.01
02.02.05	TRATAMIENTO SUPERFICIAL BICAPA	m2	93,295.70	6.13	571,902.84	7,774.64	47,658.54		38,873.21	238,292.78		31,098.57	190,634.21					15,548.28
02.02.06	EMULSION ASFALTICA DE ROTURA RAPIDA	L	429,160.22	2.43	1,042,859.33	35,765.35	86,904.94		178,816.76	434,524.73		143,053.41	347,619.78					71,526.70
<b>03</b>	<b>OBRAS DE ARTE Y DRENAJE</b>				<b>33,631.33</b>			<b>60.00%</b>			<b>13,452.54</b>	<b>40.00%</b>						<b>0.00</b>
<b>03.01</b>	<b>OBRAS DE ARTE MENORES</b>				<b>33,631.33</b>			<b>60.00%</b>			<b>13,452.54</b>	<b>40.00%</b>						<b>0.00</b>
03.01.01	ROCE	m2	683.20	7.95	5,431.44	409.92	3,258.86		273.28	2,172.58								0.00%
03.01.02	LIMPIEZA DE ALCANTARILLAS	m3	128.80	32.92	4,240.10	77.28	2,544.06		51.52	1,696.04								0.00%
03.01.03	DESCOLMATAION DE ALCANTARILLAS	m3	540.36	33.12	17,886.72	324.22	10,738.03		216.14	7,158.69								0.00%
03.01.04	REPARACION DE CABEZALES ALCANTARILLA	m3	7.16	785.10	5,637.02	4.31	3,382.21		2.87	2,254.81								0.00%
03.01.05	REPARACION SUPERFICIAL DE CONCRETO	m2	7.80	42.73	333.29	4.68	199.98		3.12	133.32								0.00%
03.01.06	PINTURA ASFALTICA	m2	10.05	9.23	92.76	6.03	55.66		4.02	37.10								0.00%
<b>04</b>	<b>TRANSPORTE</b>				<b>313,159.26</b>			<b>24.69%</b>			<b>93,607.50</b>	<b>29.89%</b>						<b>41,011.14</b>
04.01	TRANSPORTE DE MATERIAL GRANULAR D<= 1 KM	m3k	1,806.20	6.98	12,607.28	301.03	2,101.19		301.03	2,101.21		602.07	4,202.43					4,202.43
04.02	TRANSPORTE DE MATERIAL GRANULAR D> 1 KM	m3k	31,176.34	1.06	33,046.92	5,196.06	5,507.82		5,196.06	5,507.82		10,392.11	11,015.64					11,015.64
04.03	TRANSPORTE DE MATERIAL EXCEDENTE D<= 1 KM	m3k	1,085.79	7.57	8,219.43	271.45	2,054.88		271.45	2,054.88		271.45	2,054.88					2,054.88
04.04	TRANSPORTE DE MATERIAL EXCEDENTE D> 1 KM	m3k	26,157.23	1.14	29,819.24	6,539.31	7,454.81		6,539.31	7,454.81		6,539.31	7,454.81					7,454.81

J.V.I.B.A.  
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**CRONOGRAMA VALORIZADO DE AVANCE DE OBRA**

Item	Descripción	Und	Medido	P. Unit. S/.	Parcial S/.	Mes 1			Mes 2			Mes 3			Mes 4				
						Medido	Parcial	%	Medido	Parcial	%	Medido	Parcial	%	Medido	Parcial	%		
04.05	TRANSPORTE DE MEZCLA ASFALTICA D<= 1 KM	m3k	2,844.41	10.16	28,899.21	474.07	4,816.53	948.14	9,633.07	948.14	9,633.07	23.40	13,319.98	23.40	13,319.98	23.91	11,608.07	23.91	11,608.07
04.06	TRANSPORTE DE MEZCLA ASFALTICA D> 1 KM	m3k	60,351.93	1.14	68,801.20	10,058.66	11,466.87	20,117.31	22,933.73	20,117.31	22,933.73	12.00	345.60	12.00	345.60	5.50	2,423.03	5.50	2,423.03
04.07	TRANSPORTE DE MATERIAL RAD D<= 1 KM	m3k	2,088.44	7.57	15,809.49	696.15	5,269.83	696.15	5,269.83	696.15	5,269.83	33.905.41	38,652.16	33.905.41	38,652.16	106,798.59	37.53%	177,764.34	62.47%
04.08	TRANSPORTE DE MATERIAL RAD D> 1 KM	m3k	101,716.22	1.14	115,956.49	33,905.41	38,652.16	33,905.41	38,652.16	33,905.41	38,652.16	5.50	2,423.03	5.50	2,423.03	9.50	4,169.17	9.50	4,169.17
05	SEÑALIZACION Y SEGURIDAD VIAL				284,552.81	0.00	0.00%	0.00	0.00%	0.00	0.00%								
05.01	SEÑAL PREVENTIVA DE 0.75 X 0.75 M	u	23.00	259.19	5,961.37			11.50	2,980.69	11.50	2,980.69	8.50	244.80	8.50	244.80				
05.02	REEMPLAZO DE SEÑAL PREVENTIVA DE 0.75 X 0.75 M	u	10.00	279.77	2,797.70			5.00	1,398.85	5.00	1,398.85	12.00	345.60	12.00	345.60				
05.03	MANTENIMIENTO DE SEÑAL PREVENTIVA	u	24.00	28.80	691.20			23.40	13,319.98	23.40	13,319.98	23.91	11,608.07	23.91	11,608.07				
05.04	SEÑAL REGLAMENTARIA DE 0.80 X 1.20 M.	u	11.00	440.55	4,846.05			9.50	4,169.17	9.50	4,169.17	8.50	244.80	8.50	244.80				
05.04.01	REEMPLAZO DE SEÑAL REGLAMENTARIA DE 0.80 X 1.20 M.	u	19.00	438.96	8,339.34			8.50	244.80	8.50	244.80								
05.05	MANTENIMIENTO DE SEÑAL REGLAMENTARIA	u	17.00	28.80	489.60			23.40	13,319.98	23.40	13,319.98	23.91	11,608.07	23.91	11,608.07				
05.06	SEÑAL INFORMATIVA	m2	46.80	569.23	26,639.96			4.44	345.79	4.44	345.79	10.50	2,553.71	10.50	2,553.71				
05.07	REEMPLAZO DE SEÑAL INFORMATIVA	m2	47.82	495.49	23,216.13			4.44	345.79	4.44	345.79	10.50	2,553.71	10.50	2,553.71				
05.08	MANTENIMIENTO DE SEÑAL INFORMATIVA	m2	8.88	77.88	691.57			4.44	345.79	4.44	345.79	10.50	2,553.71	10.50	2,553.71				
05.09	REEMPLAZO DE POSTE DE SOPORTE DE SEÑAL	u	21.00	243.21	5,107.41			10.50	2,553.71	10.50	2,553.71								
05.10	MANTENIMIENTO DE POSTE DE SOPORTE DE SEÑAL	u	49.00	21.94	1,075.06			7.00	151.27	7.00	151.27								
05.11	ESTRUCTURAS DE SOPORTE DE SEÑALES	u	12.00	1,057.98	12,694.56			1,350.00	12,987.00	1,350.00	12,987.00								
05.12	REEMPLAZO DE ESTRUCTURAS DE SOPORTE DE SEÑALES	u	6.00	1,086.23	6,517.38			8,743.05	67,408.92	8,743.05	67,408.92								
05.13	MANTENIMIENTO DE ESTRUCTURAS DE SOPORTE DE SEÑAL	u	11.00	21.94	241.34			7.00	151.27	7.00	151.27								
05.16	MANTENIMIENTO DE POSTES DELINEADORES	u	7.00	21.61	151.27			1,350.00	12,987.00	1,350.00	12,987.00								
05.17	TACHAS RETROREFLECTIVAS	u	1,350.00	9.62	12,987.00			8,743.05	67,408.92	8,743.05	67,408.92								
05.18	MARCAS EN EL PAVIMENTO	m2	17,486.09	7.71	134,817.75			7.00	151.27	7.00	151.27								
05.19	MANTENIMIENTO DE GUARDAVIAS	u	170.00	18.88	3,209.60			7.00	151.27	7.00	151.27								
05.25	POSTE KILOMETRICOS	u	6.00	96.72	580.32			6.00	580.32	6.00	580.32								
05.26	MANTENIMIENTO DE POSTE KILOMETRICO	u	24.00	29.41	705.84			24.00	705.84	24.00	705.84								
05.27	REDUCTORES DE VELOCIDAD	u	2.00	7,257.14	14,514.28			2.00	14,514.28	2.00	14,514.28								
05.28	POSTE DELINEADOR	u	98.00	112.08	10,983.84			98.00	10,983.84	98.00	10,983.84								
05.29	POSTES DE SOPORTE DE SEÑALES	u	34.00	214.86	7,305.24			34.00	7,305.24	34.00	7,305.24								
06	PROTECCION AMBIENTAL				65,375.43	0.00	0.00%	0.00	0.00%	33,187.73	50.00%	33,187.73	50.00%	33,187.73	50.00%	33,187.73	50.00%	33,187.73	50.00%
06.01	ACONDICIONAMIENTO DE DEPÓSITO DE MATERIAL EXCEDENTE	m3	1,085.79	2.43	2,638.47			542.90	1,319.25	542.90	1,319.25								
06.02	READECUACION AMBIENTAL DE CANTERAS, PLANTAS DE CHANCADO Y ASFALTO	m2	30,840.00	1.34	41,325.60			15,420.00	20,662.80	15,420.00	20,662.80								
06.03	READECUACION AMBIENTAL DE CAMPAMENTOS, ALMACENES Y PATIOS DE MAQUINAS	m2	5,140.00	1.09	5,602.60			2,570.00	2,801.30	2,570.00	2,801.30								
06.04	SEÑALIZACION AMBIENTAL	u	4.00	2,902.18	11,608.76			2.00	5,804.38	2.00	5,804.38								
06.05	MONITOREO AIRE RUIDO	gb	1.00	700.00	700.00			0.50	350.00	0.50	350.00								
06.07	CAPACITACION AMBIENTAL	gb	1.00	4,500.00	4,500.00			0.50	2,250.00	0.50	2,250.00								
<b>Costo Directo</b>					<b>6,523,932.51</b>			<b>865,115.81</b>	<b>2,063,634.42</b>	<b>1,996,976.74</b>	<b>1,598,205.54</b>								
<b>Gastos Generales</b>								<b>209,088.98</b>	<b>489,760.13</b>	<b>482,649.63</b>	<b>386,270.55</b>								
<b>Unidad</b>								<b>86,511.58</b>	<b>206,583.44</b>	<b>199,897.67</b>	<b>159,820.55</b>								
<b>Sub-Total</b>								<b>1,160,717.27</b>	<b>2,769,757.99</b>	<b>2,679,324.04</b>	<b>2,144,296.64</b>								
<b>Impuesto General a las Ventas</b>								<b>208,929.13</b>	<b>489,376.44</b>	<b>482,278.33</b>	<b>385,973.39</b>								
<b>Total Final</b>								<b>1,369,646.50</b>	<b>3,259,134.43</b>	<b>3,161,602.37</b>	<b>2,530,270.03</b>								