

## Earthwork Balance Sheet

PROJECT: A-0009CA COUNTY: Graham DATE: 5/19/2022 COMPILED BY: SGM SHEET \_\_ OF \_\_ SHEETS

STATION	STATION Onsite Deto	EXCAVATION					EMBANKMENT				BORROW	WASTE					
		TOTAL UNCLASS.	ROCK	UNDERCUT	UNSUIT. UNCLASS.	SUITABLE UNCLASS.	TOTAL	ROCK	EARTH	EMBANK. +15%		ROCK	SUITABLE	UNSUIT.	TOTAL		
Onsite Detours																	
Det S5 10+00.00	Det S5 23+33.00	682				682	2,109		2,109	2,425	1,743						
Det S8 10+00.00	Det S8 22+25.00	4,047				4,047	3,185		3,185	3,663							
Det DR1A 10+00.00	Det DR1A 14+00.15	92				92	4,295		4,295	4,939	4,847						
<b>SUBTOTAL 1</b>		<b>4,821</b>				<b>4,821</b>	<b>9,589</b>		<b>9,589</b>	<b>11,027</b>	<b>6,590</b>						
Detour Removal																	
Removal of Detour Det. S5		94				94	1,088		1,088	1,251	1,157						
Removal of detour Det. S8		38				38	2,961		2,961	3,405	3,367						
Removal of Detour Det. DR1A		4,295				4,295	72		72	83			4,212				4,212
<b>SUBTOTAL 2</b>		<b>4,427</b>				<b>4,427</b>	<b>4,121</b>		<b>4,121</b>	<b>4,739</b>	<b>4,524</b>		<b>4,212</b>				<b>4,212</b>
-L- 10+20.02	-L- 40+00.00	2,560				2,560	5,044		5,044	5,801	3,241						
-L- 35+25.00	-L- 36+75.00			400										400			400
Dry Detention Basin # 2		400				400											
-Y1- 13+70.00	-Y1- 36+70.00	629				629	1,854		1,854	2,132	1,503						
Dry Detention Basin # 1		210				210								210			210
-DR2- 10+26.60	-DR2- 11+60.00	329				329	1		1	1				328			328
<b>SUBTOTAL 3</b>		<b>4,128</b>		<b>400</b>		<b>4,128</b>	<b>6,899</b>		<b>6,899</b>	<b>7,934</b>	<b>4,744</b>		<b>538</b>				<b>938</b>
-L- 40+00.00	-L- 70+50.00	8,572				8,572	11,505		11,505	13,231	4,659						
-L- 42+25.00	-L- 45+75.00			550										550			550
-L- 56+25.00	-L- 59+75.00			740										740			740
-Y6- 11+05.00	-Y6- 12+85.70	7				7	13		13	15	8						
<b>SUBTOTAL 4</b>		<b>8,579</b>		<b>1,290</b>		<b>8,579</b>	<b>11,518</b>		<b>11,518</b>	<b>13,246</b>	<b>4,667</b>				<b>1,290</b>		<b>1,290</b>
-L- 70+50.00	-L- 100+00.00	44,928			500	44,428	30,690		30,690	35,294			9,134	500			9,634
-L- 71+25.00	-L- 72+75.00			690										690			690
<b>SUBTOTAL 5</b>		<b>44,928</b>		<b>690</b>	<b>500</b>	<b>44,428</b>	<b>30,690</b>		<b>30,690</b>	<b>35,294</b>			<b>9,134</b>		<b>1,190</b>		<b>10,324</b>
-L- 100+00.00	-L- 129+00.00	4,819				4,819	7,456		7,456	8,574	3,755						
-L- 108+25.00	-L- 108+75.00			140										140			140
-L- 113+75.00	-L- 119+25.00			1,460										1,460			1,460
<b>SUBTOTAL 6</b>		<b>4,819</b>		<b>1,600</b>		<b>4,819</b>	<b>7,456</b>		<b>7,456</b>	<b>8,574</b>	<b>3,755</b>			<b>1,600</b>			<b>1,600</b>
-L- 129+00.00	-L- 158+00.00	8,868				8,868	12,133		12,133	13,953	5,085						
-L- 133+25.00	-L- 139+25.00			1,870										1,870			1,870
-L- 149+25.00	-L- 150+75.00			250										250			250
<b>SUBTOTAL 7</b>		<b>8,868</b>		<b>2,120</b>		<b>8,868</b>	<b>12,133</b>		<b>12,133</b>	<b>13,953</b>	<b>5,085</b>			<b>2,120</b>			<b>2,120</b>
-L- 158+00.00	-L- 185+00.00	1,052				1,052	14,386		14,386	16,544	15,492						
-L- 157+25.00	-L- 160+75.00			560										560			560
-L- 162+75.00	-L- 164+75.00			380										380			380
-L- 171+75.00	-L- 175+25.00			970										970			970
-L- 179+25.00	-L- 185+00.00			1,454										1,454			1,454
-DR1A- 10+05.00	-DR1A- 11+07.00	13				13	740		740	851	838						
-DR1- 10+20.00	-DR1- 11+71.39	1				1	481		481	553	552						
<b>SUBTOTAL 8</b>		<b>1,066</b>		<b>3,364</b>		<b>1,066</b>	<b>15,607</b>		<b>15,607</b>	<b>17,948</b>	<b>16,882</b>			<b>3,364</b>			<b>3,364</b>
-L- 185+00.00	-L- 208+00.00	3,734	3,139			595	9,381	3,139	6,242	10,317	6,583						
-L- 185+00.00	-L- 187+75.00			696										696			696
-L- 205+25.00	-L- 208+00.00			490										490			490
<b>SUBTOTAL 9</b>		<b>3,734</b>	<b>3,139</b>	<b>1,186</b>		<b>595</b>	<b>9,381</b>	<b>3,139</b>	<b>6,242</b>	<b>10,317</b>	<b>6,583</b>			<b>1,186</b>			<b>1,186</b>
<b>TOTAL</b>		<b>85,370</b>	<b>3,139</b>	<b>10,650</b>	<b>500</b>	<b>81,731</b>	<b>107,394</b>	<b>3,139</b>	<b>104,255</b>	<b>123,032</b>	<b>52,830</b>		<b>13,884</b>	<b>10,750</b>			<b>25,034</b>
MATERIAL FOR SHOULDER CONSTRUCTION																	
LOSS DUE TO CLEARING & GRUBBING		-2,500				-2,500					2,500						
ADDITIONAL UNDERCUT (EMBANKMENT & SUBGRADE STABILITY)				1,850										1,850			1,850
ROCK WASTE TO REPLACE BORROW																	
ADJUST FOR ROCK WASTE																	
WASTE IN LIEU OF BORROW													-13,884				-13,884
<b>PROJECT TOTAL</b>		<b>82,870</b>	<b>3,139</b>	<b>12,500</b>	<b>500</b>	<b>79,231</b>	<b>107,394</b>	<b>3,139</b>	<b>104,255</b>	<b>123,032</b>	<b>41,446</b>			<b>12,600</b>			<b>13,000</b>
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT											2,072						
<b>GRAND TOTAL</b>		<b>82,870</b>	<b>3,139</b>	<b>12,500</b>	<b>500</b>	<b>79,231</b>	<b>107,394</b>	<b>3,139</b>	<b>104,255</b>	<b>123,032</b>	<b>43,518</b>			<b>12,600</b>			<b>13,000</b>
<b>SAY</b>		<b>84,000</b>		<b>12,500</b>							<b>44,000</b>						

NOTE: EARTHWORK QUANTITIES ARE CALCULATED BY THE ROADWAY DESIGN UNIT. THESE EARTHWORK QUANTITIES ARE BASED IN PART ON SUBSURFACE DATA PROVIDED BY THE GEOTECHNICAL ENGINEERING UNIT.

EST. DDE = 1,370 CUBIC YARDS

SELECT GRANULAR MATERIAL, CLASS III = 1,000 CY

SELECT GRANULAR MATERIAL = 12,500 CY

EST. SHALLOW UNDERCUT = 1,000 CY

PER GEOTECH RECOMMENDATION, ESTIMATED 3,850 CUBIC YARDS OF UNDERCUT FOR TOE SHEAR KEY.

PAVEMENT STRUCTURE VOLUME = 1103 CY