

**ENCLOSURE 2  
ATTACHMENT 30**

**SHINE MEDICAL TECHNOLOGIES, INC.**

**SHINE MEDICAL TECHNOLOGIES, INC. APPLICATION FOR CONSTRUCTION PERMIT  
RESPONSE TO ENVIRONMENTAL REQUESTS FOR ADDITIONAL INFORMATION**

**TNM 2.5 ROADWAY INPUT DATA**

INPUT: ROADWAYS

SHINE

SHINE

16 August 2013

TNM 2.5

INPUT: ROADWAYS  
PROJECT/CONTRACT:  
RUN:

SHINE  
Highway 51 Noise Model

Average pavement type shall be used unless  
a State highway agency substantiates the use  
of a different type with the approval of FHWA

Roadway Name	Width	Points					Flow Control			Segment	
		Name	No.	Coordinates (pavement)			Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			X ft	Y ft	Z ft		mph	%		
Roadway12	48.0	point734	734	1,724.6	6,705.7	0.00				Average	
		point735	735	1,694.6	9,736.9	0.00					
Roadway13	48.0	point736	736	1,770.5	6,482.1	0.00				Average	
		point737	737	1,770.3	6,482.5	0.00				Average	
		point738	738	1,770.0	6,483.3	0.00				Average	
		point739	739	1,769.7	6,484.1	0.00				Average	
		point740	740	1,769.3	6,484.9	0.00				Average	
		point741	741	1,769.0	6,485.6	0.00				Average	
		point742	742	1,768.7	6,486.4	0.00				Average	
		point743	743	1,768.4	6,487.2	0.00				Average	
		point744	744	1,768.1	6,487.9	0.00				Average	
		point745	745	1,767.8	6,488.7	0.00				Average	
		point746	746	1,767.5	6,489.5	0.00				Average	
		point747	747	1,767.2	6,490.3	0.00				Average	
		point748	748	1,766.8	6,491.0	0.00				Average	
		point749	749	1,766.5	6,491.8	0.00				Average	
		point750	750	1,766.2	6,492.6	0.00				Average	
		point751	751	1,765.9	6,493.4	0.00				Average	
point752	752	1,765.6	6,494.1	0.00				Average			
point753	753	1,765.3	6,494.9	0.00				Average			
point754	754	1,765.0	6,495.7	0.00				Average			
point755	755	1,764.7	6,496.5	0.00				Average			
point756	756	1,764.4	6,497.2	0.00				Average			
point757	757	1,764.1	6,498.0	0.00				Average			
point758	758	1,763.8	6,498.8	0.00				Average			

INPUT: ROADWAYS

SHINE

	point759	759	1,763.5	6,499.6	0.00		Average
	point760	760	1,763.2	6,500.4	0.00		Average
	point761	761	1,762.9	6,501.1	0.00		Average
	point762	762	1,762.6	6,501.9	0.00		Average
	point763	763	1,762.3	6,502.7	0.00		Average
	point764	764	1,762.1	6,503.5	0.00		Average
	point765	765	1,761.8	6,504.3	0.00		Average
	point766	766	1,761.5	6,505.0	0.00		Average
	point767	767	1,761.2	6,505.8	0.00		Average
	point768	768	1,760.9	6,506.6	0.00		Average
	point769	769	1,760.6	6,507.4	0.00		Average
	point770	770	1,760.3	6,508.2	0.00		Average
	point771	771	1,760.1	6,509.0	0.00		Average
	point772	772	1,759.8	6,509.7	0.00		Average
	point773	773	1,759.5	6,510.5	0.00		Average
	point774	774	1,759.2	6,511.3	0.00		Average
	point775	775	1,758.9	6,512.1	0.00		Average
	point776	776	1,758.6	6,512.9	0.00		Average
	point777	777	1,758.4	6,513.7	0.00		Average
	point778	778	1,758.1	6,514.5	0.00		Average
	point779	779	1,757.8	6,515.2	0.00		Average
	point780	780	1,757.5	6,516.0	0.00		Average
	point781	781	1,757.3	6,516.8	0.00		Average
	point782	782	1,757.0	6,517.6	0.00		Average
	point783	783	1,756.7	6,518.4	0.00		Average
	point784	784	1,756.5	6,519.2	0.00		Average
	point785	785	1,756.2	6,520.0	0.00		Average
	point786	786	1,755.9	6,520.8	0.00		Average
	point787	787	1,755.7	6,521.5	0.00		Average
	point788	788	1,755.4	6,522.3	0.00		Average
	point789	789	1,755.1	6,523.1	0.00		Average
	point790	790	1,754.9	6,523.9	0.00		Average
	point791	791	1,754.6	6,524.7	0.00		Average
	point792	792	1,754.4	6,525.5	0.00		Average
	point793	793	1,754.1	6,526.3	0.00		Average
	point794	794	1,753.8	6,527.1	0.00		Average
	point795	795	1,753.6	6,527.9	0.00		Average
	point796	796	1,753.3	6,528.7	0.00		Average

INPUT: ROADWAYS

SHINE

	point797	797	1,753.1	6,529.5	0.00		Average
	point798	798	1,752.8	6,530.3	0.00		Average
	point799	799	1,752.6	6,531.1	0.00		Average
	point800	800	1,752.3	6,531.8	0.00		Average
	point801	801	1,752.1	6,532.6	0.00		Average
	point802	802	1,751.8	6,533.4	0.00		Average
	point803	803	1,751.6	6,534.2	0.00		Average
	point804	804	1,751.3	6,535.0	0.00		Average
	point805	805	1,751.1	6,535.8	0.00		Average
	point806	806	1,750.8	6,536.6	0.00		Average
	point807	807	1,750.6	6,537.4	0.00		Average
	point808	808	1,750.3	6,538.2	0.00		Average
	point809	809	1,750.1	6,539.0	0.00		Average
	point810	810	1,749.9	6,539.8	0.00		Average
	point811	811	1,749.6	6,540.6	0.00		Average
	point812	812	1,749.4	6,541.4	0.00		Average
	point813	813	1,749.1	6,542.2	0.00		Average
	point814	814	1,748.9	6,543.0	0.00		Average
	point815	815	1,748.7	6,543.8	0.00		Average
	point816	816	1,748.4	6,544.6	0.00		Average
	point817	817	1,748.2	6,545.4	0.00		Average
	point818	818	1,748.0	6,546.2	0.00		Average
	point819	819	1,747.7	6,547.0	0.00		Average
	point820	820	1,747.5	6,547.8	0.00		Average
	point821	821	1,747.3	6,548.6	0.00		Average
	point822	822	1,747.1	6,549.4	0.00		Average
	point823	823	1,746.8	6,550.2	0.00		Average
	point824	824	1,746.6	6,551.0	0.00		Average
	point825	825	1,746.4	6,551.8	0.00		Average
	point826	826	1,746.2	6,552.6	0.00		Average
	point827	827	1,745.9	6,553.4	0.00		Average
	point828	828	1,745.7	6,554.2	0.00		Average
	point829	829	1,745.5	6,555.0	0.00		Average
	point830	830	1,745.3	6,555.8	0.00		Average
	point831	831	1,745.1	6,556.6	0.00		Average
	point832	832	1,744.8	6,557.4	0.00		Average
	point833	833	1,744.6	6,558.3	0.00		Average
	point834	834	1,744.4	6,559.1	0.00		Average

INPUT: ROADWAYS

SHINE

	point835	835	1,744.2	6,559.9	0.00		Average
	point836	836	1,744.0	6,560.7	0.00		Average
	point837	837	1,743.8	6,561.5	0.00		Average
	point838	838	1,743.6	6,562.3	0.00		Average
	point839	839	1,743.4	6,563.1	0.00		Average
	point840	840	1,743.2	6,563.9	0.00		Average
	point841	841	1,743.0	6,564.7	0.00		Average
	point842	842	1,742.8	6,565.5	0.00		Average
	point843	843	1,742.5	6,566.3	0.00		Average
	point844	844	1,742.3	6,567.1	0.00		Average
	point845	845	1,742.1	6,567.9	0.00		Average
	point846	846	1,741.9	6,568.7	0.00		Average
	point847	847	1,741.7	6,569.6	0.00		Average
	point848	848	1,741.5	6,570.4	0.00		Average
	point849	849	1,741.4	6,571.2	0.00		Average
	point850	850	1,741.2	6,572.0	0.00		Average
	point851	851	1,741.0	6,572.8	0.00		Average
	point852	852	1,740.8	6,573.6	0.00		Average
	point853	853	1,740.6	6,574.4	0.00		Average
	point854	854	1,740.4	6,575.2	0.00		Average
	point855	855	1,740.2	6,576.0	0.00		Average
	point856	856	1,740.0	6,576.9	0.00		Average
	point857	857	1,739.8	6,577.7	0.00		Average
	point858	858	1,739.6	6,578.5	0.00		Average
	point859	859	1,739.4	6,579.3	0.00		Average
	point860	860	1,739.3	6,580.1	0.00		Average
	point861	861	1,739.1	6,580.9	0.00		Average
	point862	862	1,738.9	6,581.7	0.00		Average
	point863	863	1,738.7	6,582.5	0.00		Average
	point864	864	1,738.5	6,583.4	0.00		Average
	point865	865	1,738.4	6,584.2	0.00		Average
	point866	866	1,738.2	6,585.0	0.00		Average
	point867	867	1,738.0	6,585.8	0.00		Average
	point868	868	1,737.8	6,586.6	0.00		Average
	point869	869	1,737.7	6,587.4	0.00		Average
	point870	870	1,737.5	6,588.2	0.00		Average
	point871	871	1,737.3	6,589.1	0.00		Average
	point872	872	1,737.1	6,589.9	0.00		Average

INPUT: ROADWAYS

SHINE

	point873	873	1,737.0	6,590.7	0.00		Average
	point874	874	1,736.8	6,591.5	0.00		Average
	point875	875	1,736.6	6,592.3	0.00		Average
	point876	876	1,736.5	6,593.1	0.00		Average
	point877	877	1,736.3	6,594.0	0.00		Average
	point878	878	1,736.1	6,594.8	0.00		Average
	point879	879	1,736.0	6,595.6	0.00		Average
	point880	880	1,735.8	6,596.4	0.00		Average
	point881	881	1,735.7	6,597.2	0.00		Average
	point882	882	1,735.5	6,598.0	0.00		Average
	point883	883	1,735.3	6,598.9	0.00		Average
	point884	884	1,735.2	6,599.7	0.00		Average
	point885	885	1,735.0	6,600.5	0.00		Average
	point886	886	1,734.9	6,601.3	0.00		Average
	point887	887	1,734.7	6,602.1	0.00		Average
	point888	888	1,734.6	6,603.0	0.00		Average
	point889	889	1,734.4	6,603.8	0.00		Average
	point890	890	1,734.3	6,604.6	0.00		Average
	point891	891	1,734.1	6,605.4	0.00		Average
	point892	892	1,734.0	6,606.2	0.00		Average
	point893	893	1,733.8	6,607.1	0.00		Average
	point894	894	1,733.7	6,607.9	0.00		Average
	point895	895	1,733.5	6,608.7	0.00		Average
	point896	896	1,733.4	6,609.5	0.00		Average
	point897	897	1,733.2	6,610.3	0.00		Average
	point898	898	1,733.1	6,611.2	0.00		Average
	point899	899	1,733.0	6,612.0	0.00		Average
	point900	900	1,732.8	6,612.8	0.00		Average
	point901	901	1,732.7	6,613.6	0.00		Average
	point902	902	1,732.6	6,614.4	0.00		Average
	point903	903	1,732.4	6,615.3	0.00		Average
	point904	904	1,732.3	6,616.1	0.00		Average
	point905	905	1,732.2	6,616.9	0.00		Average
	point906	906	1,732.0	6,617.7	0.00		Average
	point907	907	1,731.9	6,618.6	0.00		Average
	point908	908	1,731.8	6,619.4	0.00		Average
	point909	909	1,731.6	6,620.2	0.00		Average
	point910	910	1,731.5	6,621.0	0.00		Average



INPUT: ROADWAYS

SHINE

	point911	911	1,731.4	6,621.9	0.00		Average
	point912	912	1,731.3	6,622.7	0.00		Average
	point913	913	1,731.1	6,623.5	0.00		Average
	point914	914	1,731.0	6,624.3	0.00		Average
	point915	915	1,730.9	6,625.2	0.00		Average
	point916	916	1,730.8	6,626.0	0.00		Average
	point917	917	1,730.7	6,626.8	0.00		Average
	point918	918	1,730.5	6,627.6	0.00		Average
	point919	919	1,730.4	6,628.5	0.00		Average
	point920	920	1,730.3	6,629.3	0.00		Average
	point921	921	1,730.2	6,630.1	0.00		Average
	point922	922	1,730.1	6,630.9	0.00		Average
	point923	923	1,730.0	6,631.8	0.00		Average
	point924	924	1,729.9	6,632.6	0.00		Average
	point925	925	1,729.7	6,633.4	0.00		Average
	point926	926	1,729.6	6,634.2	0.00		Average
	point927	927	1,729.5	6,635.1	0.00		Average
	point928	928	1,729.4	6,635.9	0.00		Average
	point929	929	1,729.3	6,636.7	0.00		Average
	point930	930	1,729.2	6,637.5	0.00		Average
	point931	931	1,729.1	6,638.4	0.00		Average
	point932	932	1,729.0	6,639.2	0.00		Average
	point933	933	1,728.9	6,640.0	0.00		Average
	point934	934	1,728.8	6,640.8	0.00		Average
	point935	935	1,728.7	6,641.7	0.00		Average
	point936	936	1,728.6	6,642.5	0.00		Average
	point937	937	1,728.5	6,643.3	0.00		Average
	point938	938	1,728.4	6,644.2	0.00		Average
	point939	939	1,728.3	6,645.0	0.00		Average
	point940	940	1,728.2	6,645.8	0.00		Average
	point941	941	1,728.1	6,646.6	0.00		Average
	point942	942	1,728.1	6,647.5	0.00		Average
	point943	943	1,728.0	6,648.3	0.00		Average
	point944	944	1,727.9	6,649.1	0.00		Average
	point945	945	1,727.8	6,650.0	0.00		Average
	point946	946	1,727.7	6,650.8	0.00		Average
	point947	947	1,727.6	6,651.6	0.00		Average
	point948	948	1,727.5	6,652.4	0.00		Average

INPUT: ROADWAYS

SHINE

	point949	949	1,727.5	6,653.3	0.00		Average
	point950	950	1,727.4	6,654.1	0.00		Average
	point951	951	1,727.3	6,654.9	0.00		Average
	point952	952	1,727.2	6,655.8	0.00		Average
	point953	953	1,727.1	6,656.6	0.00		Average
	point954	954	1,727.1	6,657.4	0.00		Average
	point955	955	1,727.0	6,658.3	0.00		Average
	point956	956	1,726.9	6,659.1	0.00		Average
	point957	957	1,726.8	6,659.9	0.00		Average
	point958	958	1,726.8	6,660.7	0.00		Average
	point959	959	1,726.7	6,661.6	0.00		Average
	point960	960	1,726.6	6,662.4	0.00		Average
	point961	961	1,726.6	6,663.2	0.00		Average
	point962	962	1,726.5	6,664.1	0.00		Average
	point963	963	1,726.4	6,664.9	0.00		Average
	point964	964	1,726.4	6,665.7	0.00		Average
	point965	965	1,726.3	6,666.6	0.00		Average
	point966	966	1,726.2	6,667.4	0.00		Average
	point967	967	1,726.2	6,668.2	0.00		Average
	point968	968	1,726.1	6,669.0	0.00		Average
	point969	969	1,726.1	6,669.9	0.00		Average
	point970	970	1,726.0	6,670.7	0.00		Average
	point971	971	1,725.9	6,671.5	0.00		Average
	point972	972	1,725.9	6,672.4	0.00		Average
	point973	973	1,725.8	6,673.2	0.00		Average
	point974	974	1,725.8	6,674.0	0.00		Average
	point975	975	1,725.7	6,674.9	0.00		Average
	point976	976	1,725.7	6,675.7	0.00		Average
	point977	977	1,725.6	6,676.5	0.00		Average
	point978	978	1,725.6	6,677.4	0.00		Average
	point979	979	1,725.5	6,678.2	0.00		Average
	point980	980	1,725.5	6,679.0	0.00		Average
	point981	981	1,725.4	6,679.9	0.00		Average
	point982	982	1,725.4	6,680.7	0.00		Average
	point983	983	1,725.4	6,681.5	0.00		Average
	point984	984	1,725.3	6,682.4	0.00		Average
	point985	985	1,725.3	6,683.2	0.00		Average
	point986	986	1,725.2	6,684.0	0.00		Average



INPUT: ROADWAYS

SHINE

		point987	987	1,725.2	6,684.9	0.00		Average
		point988	988	1,725.2	6,685.7	0.00		Average
		point989	989	1,725.1	6,686.5	0.00		Average
		point990	990	1,725.1	6,687.4	0.00		Average
		point991	991	1,725.1	6,688.2	0.00		Average
		point992	992	1,725.0	6,689.0	0.00		Average
		point993	993	1,725.0	6,689.9	0.00		Average
		point994	994	1,725.0	6,690.7	0.00		Average
		point995	995	1,724.9	6,691.5	0.00		Average
		point996	996	1,724.9	6,692.4	0.00		Average
		point997	997	1,724.9	6,693.2	0.00		Average
		point998	998	1,724.9	6,694.0	0.00		Average
		point999	999	1,724.8	6,694.8	0.00		Average
		point1000	1000	1,724.8	6,695.7	0.00		Average
		point1001	1001	1,724.8	6,696.5	0.00		Average
		point1002	1002	1,724.8	6,697.3	0.00		Average
		point1003	1003	1,724.7	6,698.2	0.00		Average
		point1004	1004	1,724.7	6,699.0	0.00		Average
		point1005	1005	1,724.7	6,699.8	0.00		Average
		point1006	1006	1,724.7	6,700.7	0.00		Average
		point1007	1007	1,724.7	6,701.5	0.00		Average
		point1008	1008	1,724.7	6,702.3	0.00		Average
		point1009	1009	1,724.7	6,703.2	0.00		Average
		point1010	1010	1,724.6	6,704.0	0.00		Average
		point1011	1011	1,724.6	6,704.8	0.00		Average
		point1012	1012	1,724.6	6,705.7	0.00		Average
Roadway14	48.0	point1013	1013	1,804.0	6,401.6	0.00		Average
Roadway15	48.0	point1014	1014	1,770.5	6,482.1	0.00		Average
		point1015	1015	1,799.4	3,824.0	0.00		Average
		point1016	1016	1,805.2	3,857.8	0.00		Average
		point1017	1017	1,811.7	3,891.3	0.00		Average
		point1018	1018	1,819.0	3,924.8	0.00		Average
		point1019	1019	1,826.9	3,958.1	0.00		Average
		point1020	1020	1,835.4	3,991.3	0.00		Average
		point1021	1021	1,844.6	4,024.3	0.00		Average
		point1022	1022	1,854.3	4,057.1	0.00		Average
		point1023	1023	1,864.6	4,089.9	0.00		Average
		point1024	1024	1,875.4	4,122.4	0.00		Average

INPUT: ROADWAYS

SHINE

	point1025	1025	1,886.6	4,154.9	0.00		Average
	point1026	1026	1,886.7	4,154.9	0.00		Average
	point1027	1027	1,907.4	4,211.1	0.00		Average
	point1028	1028	1,929.1	4,267.0	0.00		Average
	point1029	1029	1,951.4	4,322.7	0.00		Average
	point1030	1030	1,974.0	4,378.2	0.00		Average
	point1031	1031	1,996.4	4,433.7	0.00		Average
	point1032	1032	2,018.3	4,489.3	0.00		Average
	point1033	1033	2,039.4	4,545.2	0.00		Average
	point1034	1034	2,059.2	4,601.4	0.00		Average
	point1035	1035	2,077.3	4,658.1	0.00		Average
	point1036	1036	2,093.4	4,715.4	0.00		Average
	point1037	1037	2,093.5	4,715.4	0.00		Average
	point1038	1038	2,106.1	4,767.7	0.00		Average
	point1039	1039	2,116.9	4,820.6	0.00		Average
	point1040	1040	2,125.8	4,873.9	0.00		Average
	point1041	1041	2,133.1	4,927.5	0.00		Average
	point1042	1042	2,138.6	4,981.4	0.00		Average
	point1043	1043	2,142.6	5,035.6	0.00		Average
	point1044	1044	2,145.1	5,089.9	0.00		Average
	point1045	1045	2,146.1	5,144.3	0.00		Average
	point1046	1046	2,145.7	5,198.6	0.00		Average
	point1047	1047	2,144.1	5,253.0	0.00		Average
	point1048	1048	2,144.0	5,253.0	0.00		Average
	point1049	1049	2,141.8	5,296.3	0.00		Average
	point1050	1050	2,138.7	5,339.5	0.00		Average
	point1051	1051	2,134.8	5,382.6	0.00		Average
	point1052	1052	2,130.1	5,425.6	0.00		Average
	point1053	1053	2,124.6	5,468.5	0.00		Average
	point1054	1054	2,118.2	5,511.2	0.00		Average
	point1055	1055	2,111.0	5,553.7	0.00		Average
	point1056	1056	2,103.0	5,596.1	0.00		Average
	point1057	1057	2,094.1	5,638.3	0.00		Average
	point1058	1058	2,084.2	5,680.3	0.00		Average
	point1059	1059	2,084.3	5,680.3	0.00		Average
	point1060	1060	2,073.4	5,723.0	0.00		Average
	point1061	1061	2,061.6	5,765.6	0.00		Average
	point1062	1062	2,049.0	5,808.0	0.00		Average

**INPUT: ROADWAYS**

**SHINE**

		point1063	1063	2,035.6	5,850.1	0.00		Average
		point1064	1064	2,021.5	5,892.0	0.00		Average
		point1065	1065	2,006.7	5,933.7	0.00		Average
		point1066	1066	1,991.3	5,975.2	0.00		Average
		point1067	1067	1,975.3	6,016.5	0.00		Average
		point1068	1068	1,958.8	6,057.5	0.00		Average
		point1069	1069	1,941.8	6,098.4	0.00		Average
		point1070	1070	1,941.9	6,098.4	0.00		Average
		point1071	1071	1,928.8	6,129.0	0.00		Average
		point1072	1072	1,915.5	6,159.6	0.00		Average
		point1073	1073	1,901.9	6,190.1	0.00		Average
		point1074	1074	1,888.3	6,220.4	0.00		Average
		point1075	1075	1,874.5	6,250.8	0.00		Average
		point1076	1076	1,860.5	6,281.0	0.00		Average
		point1077	1077	1,846.5	6,311.2	0.00		Average
		point1078	1078	1,832.4	6,341.4	0.00		Average
		point1079	1079	1,818.2	6,371.5	0.00		Average
		point1080	1080	1,804.0	6,401.6	0.00		Average
Roadway16	48.0	point1081	1081	1,799.4	3,824.0	0.00		Average
		point1082	1082	1,755.5	3,587.3	0.00		
Roadway17	48.0	point1083	1083	1,755.5	3,587.3	0.00		Average
		point1084	1084	1,791.0	0.0	0.00		