DRIVEWAY PAVING SPECIFICATION
Driveway Paving & Paver Installation Project
501 Runnymede Avenue
Jenkintown, PA 19046

Scope: Remove, site prepare, and replace existing asphalt driveway at 501 Runnymede Avenue, Jenkintown, PA, with a full-depth SuperPave asphalt pavement driveway installed as specified in this document and Shoemaker Inc. construction drawing 24923A.

A. REQUIREMENTS

Establishment of Grades: Grades shall be established by the contractor and grade stakes or reference points or lines shall be set to the desired elevation by the contractor to establish interim and final grade elevation points.

Perimeter Preparation: Contractor will saw cut or otherwise separate all borders of the existing driveway perimeter from existing driveway aprons, bordering driveways, retaining walls, sidewalks, or other adjacent structures.

Removal and subgrading: Contractor will remove all existing asphalt driveway, concrete, sidewalk, or other in place materials from the paving site down to the underlying aggregate and install a subgrade of stone aggregate compacted to 6 inches at 95% of dry weight density. The finished subgrade thickness shall allow for final compacted paving lifts to meet all required final elevations. Subgrading will provide a minimum slope or crown of 1.5% per foot in all final paved sections.

Base coat paving: Contractor will install and compact to final thickness, a SuperPave asphalt base coat on subgrade with the following composition: 12.5mm aggregate, PG 64-22 binder, 50 gyration compaction level, 3 inch final compacted lift thickness. Contractor will provide a base coat Job Mix Formula for owner approval no less than 5 days prior to paving. PG 64-22 binder shall conform to the specification of Appendix A.

Tack Coat: Contractor will install an asphalt tack coat over the base coat prior to final finish surface coat paving at the rate of .03 - .05 gallons per square yard. Tack coat shall conform to the specification of Appendix A.

Finish coat paving: Contractor will install and compact to final thickness, a SuperPave asphalt final finish coat on base coat with the following composition: 9.5mm aggregate, PG 64-22 binder, 50 gyration compaction level, 3 inch final compacted lift thickness. Contractor will provide a finish coat Job Mix Formula for owner approval no less than 5 days prior to paving.

Smoothness: The surface of the final compacted finish coat, when tested with a 10-foot straightedge, shall not contain irregularities in excess of ¼ inch.

Coordination with hardscape paving contractor: Contractor will coordinate with the owner and hardscape paving contractor to schedule each paving stage to accommodate the installation of hardscape pavers after base coat paving and before tack coat and finish coat paving.

Appendix A

PG 64-22 Binder Specification

These specifications cover petroleum asphalt cement for use in bituminous concrete base course, aggregate-bituminous base course, soil-bituminous base course, bituminous surface course ID-2, FJ-1, FJ-4, ID-3, FB-2, hot mix recycling, or as otherwise specified in Publication 408 or Special Provisions.

The material shall be heated, as required to yield a viscosity between 150 and 280 centistokes. The maximum delivery temperature of the material shall not exceed 177ºC (350ºF). The asphalt cement shall be homogeneous, free from water, and shall not foam when heated.

Unless otherwise specified, PG Binders shall be tested in accordance with the latest version of AASHTO M 320 and the material shall conform to the following requirements:

PG 64-22			
TESTS ON ORIGINAL BINDER			
TEST	**TEST METHOD**	**MINIMUM**	**MAXIMUM**
Flash Point, ºC	AASHTO T 48	230	N/A
Viscosity, Pa•s	AASHTO T 316	N/A	3
Dynamic Shear, G*/sin δ, kPa	AASHTO T 315	1.00	N/A
TESTS ON RTFO RESIDUE (AASHTO T 240)			
Mass Loss, Percent, %	AASHTO T 240	N/A	1.00
Dynamic Shear, G*/sin δ, kPa	AASHTO T 315	2.20	N/A
TESTS ON PAV RESIDUE (AASHTO R 28)			
Dynamic Shear, G* sin δ, kPa	AASHTO T 315	N/A	5000
Creep Stiffness, MPa	AASHTO T 313	N/A	300
m-value		0.300	N/A

Tack Specification

These specifications cover cationic or anionic emulsified asphalts used as a tack coat for conditioning and treating an existing surface or between pavement layers with an application of bituminous bonding material.

This material shall be heated, as required, for proper distributor application from 32°C (90ºF) to 65°C (150ºF). The consistency of the emulsified asphalt shall be appropriate for pumping, sampling, and applying uniform spray coverage.

TACK				
Test		**Test Method**	**Minimum**	**Maximum**
Particle Charge	Anionic	AASHTO T 59	Negative	
	Cationic		Positive	
Saybolt Furol Viscosity @ 25°C (77ºF), SFS			20	100
Storage Stability Test, 24 hour, % **(Note 1)**			N/A	1.0
Sieve Test, % **(Note 2)**			N/A	0.10
Sieve Test, % **(Note 1 and 2)**			N/A	0.30
Distillation:				
Asphalt Residue, % by mass (weight), %		AASHTO T 59	57	N/A
Oil Distillate, % by volume of total emulsion, % **(Note 3)**			N/A	2.0
Tests on Residue from Distillation:				
Penetration @ 25°C (77F), 100g, 5s, 0.1mm		AASHTO T 49	40	90
Ductility @ 25°C (77F) 5 cm/min, cm		AASHTO T 51	40	N/A
Solubility in Trichloroethylene, %		AASHTO T 44	97.5	N/A