



FIRM CAPABILITIES – ENGINEERING SERVICES

SAFETY, QUALITY, and CLIENT SATISFACTION is our #1 priority. At EsKay, every project is a safety project, and we are committed to delivering top-notch services that meet your needs and exceed your expectations.

Sachin Kunagalli, PE, oversees the day-to-day operations and project delivery at EsKay Group. As a former TxDOT employee, with an impressive career spanning over 22 years in Transportation Design (Highways and Airport), Sachin brings an extensive wealth of experience to the forefront of our endeavors.

CORE COMPETENCIES AND TRAITS

HIGHWAYS

- ✓ Engineering Design – **Schematics and Roadway Design**
- ✓ **Procurement** Support – Highway Design-Build
- ✓ Construction Engineering and Inspection (**CEI**)
- ✓ **Operations & Maintenance** Support– Highway Design-Build
- ✓ **Pavement Design** and Analysis
- ✓ **Pavement Inspection and Pavement Management System**
- ✓ **Risk Analysis** (Risk Register and Mitigation)
- ✓ **Project Management Plan** (Major Projects)
- ✓ **Financial Plans** (IFP and FPAU)
- ✓ **Plan Reviews**
- ✓ **Constructability Reviews**
- ✓ Program and Project **Audits**
- ✓ **Cost Estimation** (Construction)
- ✓ **Cost Estimation (Operations & Maintenance)** – Highway Design-Build
- ✓ Owner Verification, Testing and Inspection (**OVTI**) – Highway Design-Build

AIRPORTS

- | | |
|--|--|
| ✓ Airport Design and Management (Airside) | ✓ Runway and Taxiway Structural Evaluations |
| ✓ Runway Safety Area Improvements | ✓ Pavement Design and Analysis |
| ✓ Runway and Taxiway Markings | ✓ Pavement Management System |
| ✓ Runway, Taxiway, Hangar, and Apron Design | |



Highway Project Experience - Traditional Delivery (Design-Bid-Build) / Alternative Delivery (Design-Build and Progressive Design-Build)			YRS of Exp	KEY PROJECTS - HIGHWAY																															
				Oak Hill ParkwayProject, Austin, TX	SH 130Segments 5&6, Austin, TX	IH-35from Chandler Rd to Westinghouse Rd, Austin, TX	US 181 Harbor BridgeReplacement, Corpus Christi, TX	US 287Roadway Improvements, Corsicana, TX	DCTA Commuter Rail Geometric Design, Dallas, TX	SH 183 Midtown Express Dallas, TX	Horseshoe Project, Dallas, TX	IH-635 Managed LaneProject, Dallas, TX	IH 635 LBJ EastProject, Dallas, TX	I-35E Managed LanesProject, Dallas, TX	I-35E Phase 2Project, Dallas, TX	Loop 375 Border Highway West Extension El Paso, TX	North Tarrant Express 1&2W Fort Worth, TX	North Tarrant Express Segment 3 Fort Worth, TX	SH360 Project Fort Worth, TX	DFW Connector, Fort Worth, TX	South East Connector Project, Fort Worth, TX	SH 288 Toll LanesProject, Houston, TX	Grand Parkway Seg F&G, Houston, TX	Grand Parkway Seg H&I Houston, TX	SH 249 Extension Houston, TX	I-2/I-69C InterchangesProject, Pharr, TX	I-35 NEX CentralProject, San Antonio, TX	Loop 1604Schematic Design, San Antonio, TX	AEP Haul Road- Roadway Design, Vernon, TX	PDB ProgrammaticSupport for KYTC, KY	Mountain Parkway- Programmatic / Procurement, KY	Licking River Bridge, KY	East End Tunnel- O&M, KY		
AREAS OF EXPERTISE	Schematics Design	5+								✓																		✓							
	Roadway Design / Bikepath Design	5+						✓	✓																				✓						
	Procurement Support – Design-Build	10+	✓							✓		✓		✓						✓						✓	✓								
	Design & Construction Support– Design-Build D&C	10+	✓				✓			✓				✓	✓		✓			✓			✓	✓	✓	✓	✓								
	Operations & Maintenance Support– Design-Build O&M	10+		✓						✓	✓	✓		✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓									
	Owner Verification, Testing and Inspection (OVTI) – Design-Build	3									✓											✓													
	Progressive Design-Build (PDB)	1																																	
	Cost Estimation (Operations & Maintenance) – Design-Build	5+								✓		✓		✓	✓	✓		✓	✓	✓		✓	✓	✓		✓								✓	
	Cost Estimation (Construction)	10+						✓	✓	✓																		✓	✓						
	Construction Engineering and Inspection (CEI)	20+								✓		✓																							
	Project Management Plan (PMP -Major Projects)	10+	✓							✓		✓						✓								✓									
	Financial Plans (IFP and FPAU)	5+	✓	✓			✓			✓		✓		✓	✓		✓	✓		✓	✓		✓	✓	✓	✓	✓								
	Risk Analysis and Mitigation	10+	✓	✓			✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓								
	Program and Project Audits	5+		✓			✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓									
	Constructability Reviews	5+						✓		✓		✓																							
	Plan Reviews	5+								✓		✓																							
	Pavement Design / Analysis	15+			✓			✓		✓		✓																							



Airport Project Experience - (Commercial and DOD Airports)		Years of Exp	KEY PROJECTS - AIRPORT												
			Airfield Pavement Rehab & Airfield Lighting Improvements, Austin-Bergstrom International Airport, Austin, Texas	Sterile Area Repaving, Title I (Design) Services, Laughlin Air Force Base, Del Rio, Texas	2nd Street Storm Drain Improvement, Laughlin Air force Base, Del Rio, Texas	Repair and Repave Sterile Area Pavement Design, Laughlin Air Force Base, Del Rio, Texas	Apron & Fueling Improvements at Kickapoo Downtown Airport, Wichita Falls, Texas	Runway 4R-22L Runway Safety Area Improvement (EMAS), Lafayette Regional Airport, Lafayette, Louisiana	New Cargo Apron Design, Lafayette Regional Airport, Lafayette, Louisiana	San Jose Airport Terminal Nose Road Pavement Design, San Jose, California	Pavement Management System, Valley International Airport, Harlingen, Texas	Rehabilitate Taxiway EASI at Abilene Regional Airport, Abilene, Texas	GA Apron Reconstruction at Laredo International Airport, Laredo, Texas	T-Hangar Taxilane Reconstruction at Abilene Regional Airport, Abilene, Texas	Airport Pavement Evaluation at New Orleans Lakefront Airport, New Orleans, Louisiana
AREAS OF EXPERTISE	Airport Design (Runway/Taxiway/Apron)	5+	✓			✓	✓	✓	✓			✓	✓	✓	
	Airport Construction Management	5+	✓		✓			✓							
	Pavement Inspection & Evaluation	20+	✓			✓		✓	✓		✓				✓
	Airport Pavement Management System	5+	✓								✓				✓
	Cost Estimation , Schedule	5+	✓				✓	✓	✓			✓	✓	✓	
	Airport Pavement Design	15+	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓	



Local Government Project Experience		Years of Exp	KEY PROJECTS - LOCAL GOVERNMENTS/PRIVATE												
			Denton Carrollton Commuter Rail Geometric Design, Dallas, Texas	Roadway Design (Horizontal & Vertical Alignment), AEP Haul Road, Vernon, Texas	Rehabilitation Improvements for the Rio Grande Canalization, Hatch, New Mexico	City of San Antonio Pavement Management Services, San Antonio, Texas	City of Houston Pavement Management Services, Houston, Texas	Fort Bend County Pavement Management Services, Fort Bend, Texas	City of Laredo Pavement Management Services, Laredo, Texas	Rybovich Marina Pavement Design, West Palm Beach, Florida	Stuart & Stevenson Tactical Vehicle Facility – Forensic Study and Pavement Design, Sealy, Texas	City of Rowlett Pavement Design, Rowlett, Texas	City of Austin - 7th Street Rehabilitation, Austin, Texas	City of Austin - ADA Ramps at Spicewood PKWY, Austin, Texas	City of Austin - Riverside Dr (IH 35 to Burton Dr), Austin, Texas
AREAS OF EXPERTISE	Roadway Design / Bikepath Design	5+	✓	✓											
	Cost Estimation (Construction)	10+	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓	
	Construction Management	20+			✓								✓		
	Pavement Inspection & Evaluation	20+				✓	✓	✓	✓		✓	✓		✓	
	Pavement Design and Analysis	16		✓						✓	✓	✓		✓	
	Pavement Management System	16				✓	✓	✓	✓						



TxDOT Pre-certifications (Firm)

Work Category	Description of Work Category
3.2.1	Route Studies & Schematic Design
4.2.1	Roadway Design
4.5.1	Constructability Review
8.1.1	Signing, Pavement Marking, And Channelization
9.1.1	Bicycle and Pedestrian Facility Devel. (Retired Category)
11.1.1	Roadway Construction Management And Inspection
12.1.1	Asphaltic Concrete Production
12.1.2	Portland Cement Concrete
12.4.1	Pavement Design Services
12.5.1	Pavement Evaluation
22.1.1	Owner Verification Testing and Inspection-Project Manager
23.1.1	Alternative Delivery Procurement Manager
23.2.1	Alternative Delivery Design & Construction Support Engineer
23.3.1	Operations and Maintenance Support
23.5.1	Alternative Delivery Cost Estimator
23.6.1	Document Control Using Electronic Content Mgmt Syst (ECMS)
23.9.1	General Engr. Consultant (GEC) Project Svcs. (Contract PM)
23.11.1	Plan Review
23.12.1	QA/QC Process Verification
24.1.1	Operations and Maintenance (O&M) Project Manager (PM)
24.2.1	Financial Plan Review and Development
24.3.1	Maintenance Cost Estimating
24.4.1	Operations and Maintenance (O&M) Assessment
24.4.2	Operations and Maintenance (O&M) Inspection
24.5.1	Operations and Maintenance Program Support

Firm Certification



Texas Board of Professional Engineers and Land Surveyors

Firm Registration #: F-24507