

Energy Services

713.953.5200
LJA.com

Houston
Alice
Arlington
Austin
Beaumont
Cedar Park
College Station
Conroe
Corpus Christi
Dallas
Deer Park

East Houston
Fort Worth
Galveston
Hempstead
Katy
Lake Jackson
McKinney
Midland
Plano
Richardson
Round Rock

San Antonio
Spring
Sweeny
The Woodlands
Jacksonville, FL
Tulsa, OK
Chattanooga, TN
Knoxville, TN
Murfreesboro, TN



UPDATED 8.16.23



Energy Services

LJA's Energy sector provides comprehensive engineering services for capital, maintenance, and integrity projects related to the transportation and storage of petroleum commodities. Our experience includes pipelines, pipeline facilities, and terminals on both greenfield and brownfield sites. Our team of energy specialists offers unique solutions and unparalleled responsiveness to every client on every project.

Whether it is a main line, lateral, or interconnecting pipeline, or related facilities such as pump, compression, and meter stations, we are the go-to team. Our expertise designing terminals covers the gamut of truck, rail, and intermodal, as well as inland and bluewater marine facilities. Quite simply, if it travels via rail, marine, truck, or pipeline we design the conveyances and storage facilities to get it there in the most expedient and cost-effective manner.



Pipelines

If you build, operate, and maintain pipeline assets, you will require route planning and assessment, system sizing and hydraulics, route survey and acquisition, construction staking, and as-built surveys. You will also need support with material selection, procurement assistance, integrity program planning, and management. LJA can provide all of these services from initial planning and environmental assessment to detailed engineering and ongoing integrity management, with the associated surveying, engineering, and environmental support that you need.

Pipeline Facilities

The development and design of a pipeline facility that handles gas or liquids requires a diverse set of services and skills. We work with our clients on site selection and acquisition, permitting and mitigation, planning and general arrangement, process flow diagrams, and piping and instrumentation diagrams. LJA provides detailed engineering for equipment sizing and selection, piping design and pipe stress analysis, site grading and drainage, and foundation and structural design, along with power and instrumentation design, and facility HAZOP/PHA.



Terminals

Rail terminals, truck terminals, and marine terminals are highly complex facilities that require expertise beyond "pumps, pipes, tanks, and valves." Let our Transportation Engineering group optimize your traffic flow to maximize commodity throughput, while our Rail Services group provides the expertise that North American main line railroads, and port and terminal rail system operators rely upon.

Our Marine Facilities group lends valuable guidance with the waterfront structures you need to berth the vessels that carry your commodities. We cover it all from tank trucks, tank cars, tanker barges, and blue water tankers with the expertise to execute your terminal project. Whether you need transportation planning for a large truck terminal, rail design, or operational optimization for a rail terminal, or new water front infrastructure for a marine terminal, LJA has you covered.

Services

- Site Plan
- Equipment Layout
- Electrical One Line Drawings
- Building Electrical Plans, Elevations, Sections, and Details
- Electrical Load Calculations
- Major Equipment Specifications and Data Sheets
- Instrument Data Sheets
- Bulk and Commodity Materials Lists
- Conduit Fill Calculations
- Power System Studies
- Power Quality Analysis
- Power Factor Correction Capacitors and Load Banks
- Transformer Sizing
- Security Systems - Electrical
- UPS Sizing - HD Acceptance
- Electrical Ladder Logic Diagrams
- Conduit Layout
- Electrical Details
- Panel Layout Outlines
- Building Lighting Schematics/Drawings
- Street/Parking Lot Lighting Schematics/Drawings
- Landscape Lighting
- Control Schematics
- Equipment and Instrument Listing
- Hazardous Area Classification
- Grounding Plot Plan
- Conduit Schedule Sheets
- Electrical Interconnect Diagrams
- Completed Material Listing of Bulk Items
- Equipment and Instrumentation Listing
- Loop Diagrams
- Calibration Information
- Motor (Hp) Sizing
- Variable Frequency Drives/Adjustable Speed Drives
- Generator Sizing
- Motor Control Centers [Low Voltage (<600V) to Medium Voltage (36kV)]
- Lift Station - Electrical/Instrumentation/ Controls Work