Integrated Midstream Services

Don't Settle for the Status Quo
The margin of error, at any time during your asset’s lifecycle – from development to operations – has been reduced from razor thin to practically nonexistent. One minor delay, one break in communication, or one missed opportunity to get ahead of opposition can have drastic consequences on the ability to get a project off the ground, expected rate of return, and could potentially cost lives.

At TRC, one of the most comprehensive service providers in the midstream industry, we understand the changing landscape of the Oil & Gas industry and the challenges, new and old, which operators face. For these reasons, we have aligned and integrated our services from permitting and project execution, through to integrity engineering and maintenance, bringing you closer to the work and closer to your team. We are consultants who think and work like contractors and we understand the dynamic forces that drive project success and how to manage cost, schedule and quality during the execution phase and beyond.

Our complete suite of services allows you to achieve your execution and operational goals using proprietary technical and commercial tools coupled with our expertise to understand and mitigate risk, both known and unknown. We are here to be your trusted adviser, leveraging our experts, our databases, our tools and software, and our home-grown talent, to be there to help you realize your goals.
Integrated Project Execution Services

Integrating our services to deliver efficiency and effectiveness for less

Reinventing Project Execution TRC has reinvented the way pipeline projects are delivered, integrating services to cover everything from routing, permitting and surveying to engineering and construction management. By integrating these services, we remove the interface and communication barriers and delays that multiply with each additional contractor that’s involved.

Instead, our team is able to communicate and collaborate effortlessly, unencumbered by the organizational and technological obstacles faced by multiple service providers. We bridge cost and risk when creating our execution strategies, helping you make the right decision at the right time. By approaching the various work scopes as one project, we reduce the overall project risk, allowing us to jointly address those risks early-on through efficient and effective decision-making and maximizing the potential for success.

The benefits of our model:
- Reduced schedule and cost
- Single point-of-contact for project execution
- Smaller internal project teams
- Greater tolerance for change
- Earlier, more accurate estimates
- Earlier ordering of items with long-lead items
- Collaborative risk identification

Executing our Integrated Services Model with the Cheniere MIDSHIP Pipeline Project

TRC is using the Integrated Services Model to save Cheniere time and money

Starting with the design phase, TRC was responsible for routing, engineering, surveying, conducting environmental analysis and securing permits for the right-of-way between Kingfisher County and Bennington, Oklahoma.

Few contractors possess the capabilities and collaborative technology to take on such a contract, and it is only through our Integrated Services package that we can execute such a project. When construction starts, TRC will provide engineering support on the pipeline. TRC is also the EPC(m) contractor on the three associated mainline compressor stations.

Services Provided
- Pipeline Routing
- Survey
- Right-of-Way
- Environmental and FERC Permitting
- Pipeline Engineering
- Procurement
- Construction Management
We assemble multi-disciplinary teams to achieve project goals

Land/Right-of-Way
As a full-service provider of Land / Right-of-Way services, we understand the importance of managing landowner relationships and recognize this as a key value to project success. Our professionals solve even the most difficult problems with proven processes, committed agents and state of the art technologies.

Our corporate structure allows TRC to assemble project teams with the best possible mix of technical expertise and geographic proximity to our clients' locations. We take the time to understand our clients' needs and goals. We solve even the most difficult problems with proven processes, committed agents and state of the art technologies. Our project approach includes agent tracking, goal setting, intense strategy development and high levels of client collaboration. By providing smart, innovative, integrated solutions to help reduce business risks, we can satisfy project objectives and achieve our clients' goals.

Right-of-Way Services
- Feasibility & Conceptual Studies
- Project training
- Records research
- Due diligence
- ROW and work space acquisition
- Public Outreach and Stakeholder Engagement
- Site assessments and acquisition
- Survey permission and permit crossings
- Line list development
- Database management
- Tactical planning & implementation
- Damage settlement

Knowledge to plan smarter and engage faster

Survey Services
TRC provides full-service surveying, managed by licensed professionals. Our survey team is ready to assist our clients bring their project from vision to reality, beginning with the initial preliminary survey and continuing until the last feature of the as-built survey is complete. Utilizing automated plat and legal land description generation, survey data are downloaded and reviewed on a daily basis to maintain project schedules. Changes made to the raw survey data during processing are tracked, with an emphasis on transparency and integrity of the data during the project.

Services
- Above Ground Marker (AGM) Surveys
- Certified Plats and Legal Descriptions
- Class Location and HCA Surveys
- Facility Site Surveys
- Geodetic Control Surveys
- Mapping Grade GIS Inventory Surveys
- Topographic Site Surveys
- Tree and land use surveys
- Access Road Surveys
- Easement acquisition surveys
- Preliminary pipeline route surveys
- Pipeline route selection
- Profile surveys
- Staking Services
- Easement layout
- Construction workspace
- Proposed pipeline route
- Well pad sites
- As-Built Survey Services
- As-built alignment sheets
- As-built easement plats
- Pipeline and facility as-builts
- Post-restoration surveys
Dynamic services for an evolving market

Permitting and compliance
With one of the largest multimedia air and land permitting teams in the country, TRC is able to quickly identify environmental resource issues and formulate practical, cost-effective mitigation measures to support the development of your project. Our experience with construction and post-construction monitoring and reporting requirements provides avenues for realistic implementation measures and planning for successful project completion and asset operation.

Our Services
- Federal, state, and local permitting
- EIS & EA preparation
- EHS & HAZMAT systems
- Biological, rare species, cultural resources, air quality, noise impact assessment and mitigation planning
- SWPPP and SPCC plan preparation
- Emissions testing and monitoring
- Erosion and sediment control
- Wetland/waterbody construction planning
- Regulatory interface and support
- Compliance training
- Site civil engineering

Regulatory Permitting for Florida Gas Transmission Company’s Pipeline Expansion Project

TRC assisted with the extensive permitting process required for the FGT Phase VIII Expansion Project.

Scope of Work
Florida Gas Transmission Company, LLC (FGT) proposed to expand its existing natural gas system by constructing 485 miles of new pipeline, acquiring 22.7 miles of existing pipeline, and constructing one new station and increasing compression at nine existing stations. This required both FERC and USACE federal permits, as well as local and state water and forestry permits.

Services Delivered
TRC prepared and filed all necessary permit applications, including the Environmental Report in support of the FERC application. In addition, TRC supported the pre-construction planning leading to the FERC’s Notice to Proceed with construction of the Project. As a result of TRC’s permitting and compliance work, FGT was able to meet the contractual construction start date that will allow FGT to increase the certificated capacity on its existing system.
Engaging early, lowering costs and ensuring success

TRC provides end-to-end engineering and project execution services that help clients construct or expand their expand pipeline systems, compressor & pump stations, terminals, underground & surface storage, and infield gathering and production facilities. Backed by decades of experience, the experts at TRC help clients conceptualize, design, engineer, construct and optimize their assets. Our engineers engage as early as possible, delivering a market-driven, commercially-viable project roadmap.

We approach each project with a seamless organizational structure that links every service discipline together and forms the backbone of our service offering.

Our services

• Feasibility & conceptual studies
• Cost estimates
• Front end engineering design (FEED)
• Detailed design
• Procurement management
• Construction management
• Project management
• On-site construction inspection
• Commissioning/start-up

Transaction Advisory Services

Mitigating risk and maximizing investment value

With billions in closed deals every year, TRC is the industry leader in helping you ensure that when it is time to add or divest from your portfolio, you get the most out of your investments. Our consultants provide the technical analysis to appropriately value your asset or target, understand the risks, to price those risks into your investment, so that you ensure you reach your financial goals. We know how to ask the right questions, identify potential risks and mobilize quickly, deploying the right team with the right plan to execute the work.

We provide education and training on:

Services

• Complete technical due diligence
• Data room review and asset evaluation
• Down-side risk cost estimating
• Upside post-acquisition opportunities
• Purchase sales agreements
• Independent and owner’s engineer
• Field survey
• System operations assessment
• Technology verification
• CapEx/OpEx assurance studies and verification
• Liability quantification
• First 100-day integration plan
Bridging the gap between technology and experience

Driven by the aggregation, management and monetization of data, the oil and gas industry is at an inflection point for how it builds, operates and maintains pipelines and facilities. Integrity and operations data must be utilized to drive profitability through safe, effective and efficient operations. Powered by pioneering computing tools and decades of experience, TRC is perfectly positioned to help our clients reach these goals.

Not satisfied with standardized solutions, our experts provide carefully tailored integrity solutions that solve your problems within your corporate framework and budget. TRC has every discipline under one roof, performing full-service integrity management services including program development, data services, risk analysis, corrosion evaluation, integrity engineering and integrity construction.

Integrity & Operations Services
- Integrity management programming
- Class location determination
- HCA and threat identification
- MAOP/MOP calculation
- ILI program management
- NDT Services
- CP design and AC mitigation
- Cost Estimates
- Complete GIS suite of services
- Data integration
- Cloud-based integrity solutions
- Front end engineering design
- Regulatory support, compliance and training
- Full TVC services

Training the Trainers: Helping our Clients Comply with CFR 191, 192 and 195

Through our regulatory experts, TRC is able to educate and train on a variety of new guidelines

Our instructors provide onsite or local venue training and are ideal for operators seeking enhanced expertise on pipeline safety regulations.

We provide education and training on:
- CFR Part 191, 192, and 195 reporting requirements
- Proper indentification and classification of pipeline segments
- MAOP/Pressure testing
- Corrosion control requirements
- Transmission Integrity management requirements

TRC EXPERTS HAVE TRAINED OVER 2,600 FEDERAL INSPECTORS
**Why TRC?**

We put clients first by:

- Envisioning new possibilities and engineering sustainable solutions
- Creating collaborative work relationships that drive better results
- Anticipating issues and quickly resolving them

**About TRC**

Groundbreaker. Game changer. Pioneer. Since the 1960s TRC has set the bar for clients who require more than just engineering, combining science with the latest technology to devise innovative solutions that stand the test of time.

Today we are a global consulting firm for the oil and gas, power, environmental and infrastructure markets. TRC’s 5,000 professionals work with a broad range of commercial, industrial and government clients and the communities they serve. We deliver breakthrough solutions that address local needs – so our clients can better succeed in an ever-changing world.