



## JIM POTTER, PE PMP

Transmission Group Manager / Senior Engineer  
Stanley Consultants  
Experience Since 1996.

### Education

University of Iowa - M.S., Structural Engineering, 1996.

Iowa State University - B.S., Civil Engineering, 1994.

### Professional Registration

Civil Engineering, NV, WA, NM, FL, CO, IA, KY, AL, AR, GA, MS, MI, TN, AZ, OK

Structural Engineering, UT

Project Management Professional (PMP)

National Council of Examiners of Eng. & Surveying

Jim has served on design teams responsible for 69, 115, 138, 230 and 345 kV transmission lines. Served as Transmission Engineer for a 345 kV transmission line project with responsibilities including steel pole shop drawing and calculation reviews, davit arm vibration study/analysis, interphase spacer research and recommendations, and mechanical strength testing lab observations.

Jim has experience as Project Manager for projects involving construction bid packages, construction services support, 69/138 kV preliminary route studies, 115/230 kV transmission line final design, and 115/230 kV steel pole upgrade projects. Project Manager for multiple projects involving environmentally sensitive areas, including a 115 kV transmission line which required four working pads/foundations consisting of sheet piling, vibratory steel caissons, and concrete piers in a wetland area. principles.

### PROJECT EXPERIENCE

#### 345 kV Brookings County to Hampton Transmission Line; GRE, MN

Transmission Engineer on a project team responsible for providing engineering design services for approximately 250-miles of 345 kV transmission line between Brookings, SD, and Hampton, MN. This was the largest of the CapX2020 series of transmission projects; CapX2020 was a joint initiative of 11 transmission owning utilities in MN, ND, SD, and WI.

Transmission Engineer responsibilities included vibration studies and reports on davit arms on steel transmission structures that will initially be installed without any conductors. Also, responsible for reviewing steel pole vendors structure shop drawings and calculations for the 250-mile project.

#### Rocky Ford-Columbia 230kV Transmission Line Construction Management; GCPU; Grant County, WA

Project Manager for a 35-mile 230kV transmission line responsible for construction services support, construction bid package, project specifications, monthly status reports, invoicing and change order reviews. Provided engineering support for strength testing of steel davit deadend arms that were under-designed by the steel pole vendor. Steel davit arms were retrofitted in the field based on laboratory strength test results, which included testing the arms to over 100% of the expected maximum loads.

#### Butterfield – Pantano 230 kV Line Angle Structure Replacements; Confidential Client

Project Manager - responsible for budget, schedule control, and design of new self-supporting steel poles which replaced existing wood guyed poles. Project activities involved reviewing the existing PLS-CADD model to determine a structure configuration that would have minimum impact to the surround structures.

#### 115 kV Transmission Line 55 Preliminary Engineering; City of Tallahassee, FL

Project Manager responsible for performing preliminary engineering and permitting services to assist the City of Tallahassee in developing the design criteria for the 115 kV, 3.25-mile Line 55 project. Services included coordinating with the Florida DOT on tree replanting requirements, determining construction work zone limits, developing a LiDAR/ground survey RFP and coordinating with other key environmental stakeholders.

**115/230 kV Transmission Line 55/35 Engineer-of-Record; City of Tallahassee, FL** Project Manager responsible for preparing reports for becoming Engineer-of-Record for a dual circuit 115 kV/230 kV line which was design by a different consultant. The 115 kV line was a rebuild of an existing transmission line, the 230 kV line was a new line that was added to the existing transmission corridor. Team activities included reviewing previous consultant's transmission design criteria, PLS-CADD model, structure drawings, assembly drawings, stringing charts, transmission specifications, vendor drawings, and staking sheets. In reviewing the previous consultant's Issued for Bid documents, Stanley Consultants discovered an error in the PLS-CADD weather criteria file. Weather criteria error resulted in 29 new steel pole structures having structure utilizations and insulator utilizations greater than 100 percent. Stanley Consultants updated the PLS-CADD model and developed structure-specific mitigation solutions for all 29 steel poles that did not require any new steel pole sections from the steel pole vendor or any additional right-of-way for the owner. Mitigation measures included pole shifting, conductor tension modifications, guying, and upgrading of the insulators. Project Management activities included creating and monitoring project schedule as well as monitoring project scope, quality assurance activities and issuing change orders to the owner. Responsibilities also included providing construction support, which included material procurement bid reviews, RFI responses and updating project documents to reflect owner requested changes at pole locations due to existing underground utilities.

**115 kV Transmission Line 55 Final Engineering; City of Tallahassee, FL**

Project Manager responsible for providing project management services for final transmission design services and construction phase support. Project Management activities included creating and monitoring project schedule as well as monitoring project scope and quality assurance activities. Project coordination tasks included site visits; project meetings; design review; all city, county, state, and federal permits; and spare 115 kV transmission materials. Environmental tasks included environmental studies for permits and preconstruction environmental clearance. Structure locations were coordinated with the environmental permits/agencies to reduce the impact to the three wetlands identified on the project. Construction drawings included plans and profile drawings, damper installation, structure drawings, insulator assemblies, shield wire connection details, point loads, sag and tension charts, and structure framing details. Coordinated with owner to determine typical structure configurations that would satisfy requirements of multiple stakeholders as well as providing a design that could be maintained by the owner. Bill of Materials was developed utilizing owner preferred hardware to help minimize the number of new parts that would need to be stored in their warehouse. Determined conductor reel lengths based on owner's equipment limitations. Construction support included reviewing material procurement bids and verifying their conformance with the design documents.

**Big River to Poston 69 kV Transmission Line Design and Environmental Assessment; Bureau of Indian Affairs, AZ**

Project Manager responsible for providing project schedule, coordination between BIA and project team, Quality Control reviews, weekly updates, monitoring project scope, issuing change orders, and budget control for a 69 kV transmission line. Project increased the redundancy in the client's network by connecting two existing 69 kV transmission lines with a new 69 kV transmission line, effectively providing a "closed loop system" in which electrical power can be accessed from multiple directions and multiple generation sources. The new 69 kV transmission line was located in an existing distribution easement. This resulted in the new transmission steel poles being designed to support the new 69 kV line, as well as the existing distribution circuits and communication lines. Stanley was able to develop site specific structure configurations that minimally impacted adjacent structures that could not be replaced due to project constraints. Bill of Material for the transmission and distribution circuits was developed to reflect owner's preferred materials and standards. Project also included a 750-foot span over the Colorado River.

**Bottineau-Dunning 115 kV Working Pads; KBM, Inc., ND**

Project Manager and Structural Engineer responsible for the design of four working pads/foundations consisting of sheet piling, vibratory steel caissons and concrete piers for a 115kV transmission line. The four working pads/foundations were located in an environmental wetland, thus Stanley had to evaluate multiple foundation options to determine which one option could be constructed with the least amount of impact to the wetland.