

General Tips for Professional Services Prequalification Resume Submission

Please refer to <u>Rule 14-75, F.A.C.</u> for detailed descriptions of each standard work type and requirements for qualification. In an effort to assist with a smooth review of your application for Professional Services Prequalification, we have provided helpful hints and resume samples to keep in mind when assembling the resumes for your firm. These tips and samples are gleaned from resumes that have been previously approved and are not an amplification of Rule.

- First, carefully read Section 14-75.003, "Minimum Technical Qualification Standards by Type of Work". The qualifications requirements for each work type are very explicit, and there are no waivers from the experience requirements. If your firm does not have the minimum required experienced personnel, the firm will be found insufficient for that work type.
- 2. Marketing resumes do not contain sufficient detail for review and, if submitted, will be returned to your firm for updates. Additionally, marketing information regarding the firm's history and collective experience do not contain sufficient detail for review, as prequalification is based upon the experience of the qualifying individuals, not the firm as a whole.
- 3. The Rule requires experience to be measured in years, not projects, so there is no required number of projects. Some individuals may have sufficient experience to qualify after one project and others may require multiple projects to accumulate the required amount of experience. Resumes should reflect the time the individual spent on each project, not the length of the project as a whole. The total time reflected must end to end equal the time required by the Rule. To assist the technical evaluators in measuring this time, include beginning and ending dates for each project. Be sure to list the months and year for each date (i.e. 10/2009-06/2012).
- 4. Clearly identify the individual's position on each project. Regardless of the position, the components that were actually designed must be listed in detail. We need to know the details of your personal duties/activities in that position on each project.
- 5. Once a completed application or modification package is received, the Department has 30 days to review the submitted information. Be sure to submit your documentation and resumes well in advance of any project response deadlines you are interested in to prevent any difficulty should the Department require additional information. If additional information is needed, you will be notified by email of the deficiencies so that you can update and resubmit the required information or resumes.

If you have any additional questions, please contact the Qualification Administrator, Marie Castaneda, by email at <u>marie.castaneda@dot.state.fl.us</u> or by phone at 850-414-4597.

<u>Tips for Prequalification in Work Group 4 – Bridge Design</u>

Please refer to <u>Rule 14-75, F.A.C.</u> for detailed descriptions of each standard work type and requirements for qualification. In an effort to assist with a smooth review of your application for Professional Services Prequalification, we have provided helpful hints and format samples to keep in mind when assembling the experience for your firm. These tips and samples are gleaned from experience that has been previously approved and are not an amplification of Rule.

Marketing resumes for the company cannot be utilized. The resume must clearly delineate the role of the individual, not the firm. The project scope of the firm will not enhance the possibility of getting prequalified.

Experience for qualifying individuals should utilize the <u>Work Group 4 Sample Format</u> rather than a traditional resume. These should identify the individual's name, Florida PE number, ungraduated engineering degree date, and post-graduate degree dates. The experience is broken out by project and should include the project's name, the applicable work type, attributes of the project that meet the minimum requirements for the work type as outlined in Rule 14-75, F.A.C., the individual's specific technical role with description, beginning and ending dates of individual's design involvement, and the total number of months of involvement on that project that do not overlap with other projects (overlapping dates can only count toward one relevant project). Words such as "Principal in Charge", "Project Manager", "Project Engineer", and "Responsible Charge" do not in themselves describe the activities in detail enough to allow for qualification.

Submit separate forms for each group 4 work type requested. Forms are required for technicians as well as licensed PEs, such as clerical, CADD technicians, surveyors, estimators etc. in the package for bridge qualification. Qualifications are based upon design experience of the individual engineers/technicians, not on the firm's history.

Tips for Prequalification in Work Group 8 – Surveying and Mapping

Please refer to <u>Rule 14-75, F.A.C.</u> for detailed descriptions of each standard work type and requirements for qualification. In an effort to assist with a smooth review of your application for Professional Services Prequalification, we have provided helpful hints and resume samples to keep in mind when assembling the resumes for your firm. These tips and samples are gleaned from resumes that have been previously approved and are not an amplification of Rule.

The following information is important and should be clearly addressed in each resume – and each project listed in the resume. These are the key elements that make a successful resume for qualification.

- Projects listed must clearly identify the beginning and ending date of the projects. Each candidate must validate one year of experience for each requested work type. PSM experience **must occur** after Florida licensure. Clearly identifying the timeline of the project is critical to measurement of the one year experience requirement.
- 2. Projects listed should be route corridor/road and/or bridge projects. Each candidate must validate work experience demonstrating an ability to perform the activities normally associated with the particular type of work or sub-category for which qualification is sought. FDOT work is normally performed on road and bridge projects and is the experience most suitable for determining this validation.
- 3. The activities identified in the projects listed must clearly state which requested work type the activity applies to. Not all experience on a project may be applicable to all requested work types.
- 4. The activities identified must be clearly defined as to what Surveying and Mapping tasks were performed. Generic terms are not acceptable. For example stating a candidate "did" or "performed" 8.1 tasks does not provide sufficient detail to recommend qualification. Stating a candidate "ran Bench Level Circuits in the field, processed and adjusted them for final publication" does present a clear picture of what activities were performed.
- 5. The level of responsibility for each project listed must be clearly identified. Not all activities performed on a project are applicable for qualification purposes. The performance of original surveying and mapping work, supervision of original surveying and mapping work, quality control (QC) review of original surveying and mapping work are all considered valid for experience. These responsibility levels require similar knowledge, skill and ability to perform. Project management, which primarily manages resources, is not considered valid as qualification experience.

Please submit resumes for group 8 work types using the following format for projects:

Project Name: Location: Anywhere, FL Project Dates: Begin day in DD/MM/YEAR – End Date in DD/MM/YEAR Contact Person: (NAME) Contact Phone: (000) 000-0000 Project Description: (Project Description - Show apples to apples comparison to Route Corridor Road, Bridge or Rail projects if they are not FDOT projects) Person's Role in Project: (Surveyor or Technician)

Work Activities performed for this project:

Work Type for # Months - Show a reasonable cross section of experience in the related Work Activities as shown for each Work Type.

Group 8 Example Project:

Project Name: Big Lake Roberts Bridge Replacement

Location: Anywhere, FL

Project Dates: 01/01/20013 – 09/30/2013

Contact Person: Mr. Check Signer

Contact Phone: (000) 000-0000

Project Description: FDOT District (#), (Name of County) County from DD/MM/YEAR to DD/MM/YEAR. As the Project Surveyor for this 4.8 mile Advance Surveying and Mapping project, Mr. SURVEYOR is responsible for all field survey activities, Control Survey Maps and Right of Way Maps. In addition, (Firm Name) is preparing a Design Survey for a portion of the project to support the proposed bridge replacement across Big Lake Roberts.

Person's Role in Project: Project Manager and Surveyor of Record

Work Activities for this project:

8.1 Control Surveying for 2 Months- Horizontal Control 1 Month and Vertical Control 1 month.

8.2 Design, Right of Way and Construction Surveying for 5 Months- Design Survey 3 months, Utility Locates .5 month, Section Retracement 1 month, and RW Monumentation .5 months.

8.4 Right of Way Mapping for 2 Months- - Development of Control Survey Map 1 month and Development of Right of Way Map 1 month.

Tips for Prequalification in Work Group 9: Soil Exploration, Material Testing, and Foundations

Please refer to <u>Rule 14-75, F.A.C.</u> for detailed descriptions of each standard work type and requirements for qualification. In an effort to assist with a smooth review of your application for Professional Services Prequalification, we have provided helpful hints and resume samples to keep in mind when assembling the resumes for your firm. These tips and samples are gleaned from resumes that have been previously approved and are not an amplification of Rule.

Experience should be broken out by work type. Review the requirements for each work type per Rule 14-75, F.A.C., copied below. All submissions should include a list of equipment inventory that includes the required equipment for each work type per the Rule.

9.1 Soil Exploration - Rule 14-75(5)(h)(1)a, F.A.C.

"This type of work includes acquisition and reporting of subsurface material, hydrological, and environmental information to be used for the planning, design, construction, and performance of transportation facilities. The methodology involved includes on-site investigations by performing borings, Standard Penetration tests, Cone Penetration tests, and rock coring; the use of specialized test equipment, such as the field vane, pressuremeter, or dilatometer; and the use of geophysical methods. Also included is the field classification of materials and acquisition of soil and rock samples."

Qualifying Staff Requirements - Rule 14-75(5)(h)(2)a, F.A.C.

"This type of work requires one professional engineer, registered with the Florida Board of Professional Engineers, having a minimum of five years of experience in activities normally associated with soil exploration."

Equipment Requirements - Rule 14-75(5)(h)(2)a, F.A.C.

"The consultant must have equipment (in-house or subcontracted) necessary to perform the work. It should be noted that the qualified consultant shall be solely responsible for any and all explorations work, whether performed by the consultant or its subcontractor."

Drill Rig
Standard Penetration Tests
Cone Penetration Tests
Rock Coring

Specialized Test Equipment (Vane Shear, Pressuremeter, Dilatometer, & Geophysical tools)

9.2 Geotechnical Classification Lab Testing - Rule 14-75(5)(h)(1)b, F.A.C.

"This type of work includes conducting tests on soil and rock according to Department approved specifications for the purpose of classifying materials. The methodology involved includes testing moisture content, grain size, Atterberg limits, compaction, and Limerock Bearing Ratio (LBR) tests."

Qualifying Staff Requirements - Rule 14-75(5)(h)(2)b, F.A.C.

"This type of work requires one professional engineer, registered with the Florida Board of Professional Engineers, having a minimum of five years of experience in activities normally associated with geotechnical testing."

"The consultant must have at least one technician with a minimum of two years of experience in geotechnical testing and LBR Technician qualification under the Department's Construction Training Qualification Program."

"The consultant must have in-house the following equipment:"					
Oven	Liquid Limit Device/ Grooving				
Balance	Tool				
Stirring Apparatus	Proctor molds				
Hydrometer Bulb/Bath	Compaction hammer				
Thermometer	Straightedge				
Sieves/Sieve Shaker	LBR loading device with				
Pycnometer	penetration piston				

Equipment Requirements - Rule 14-75(5)(h)(2)b, F.A.C.

9.3 Highway Materials Testing - Rule 14-75(5)(h)(1)c, F.A.C.

"This type of work includes sampling and testing various materials and reporting results and recommendations. Work will be performed at mines, quarries, mills, refineries, processors, producers, fabricators, constructors, laboratories, and project construction sites; some of which will be outside the State of Florida. Materials to be tested include aggregates; concrete products; cements and additives, including water, epoxies, and curing compounds; bituminous materials, mixtures, additives, and joint fillers; metals; galvanizing, rubber, paints, and other coatings; and soils and limerock."

Qualifying Staff Requirements - Rule 14-75(5)(h)(2)c, F.A.C.

"One professional engineer, registered with the Florida Board of Professional Engineers, having a minimum of five years of experience in activities normally associated with highway materials testing."

"Among the consultant's personnel, at least one individual must possess" the following qualifications under the Department's Construction Training Qualification Program:

LBR Technician gualification

Asphalt Plant Level I gualification

Concrete Field Testing Technician Level I

Nuclear gauge operator certification as provided by a gauge manufacturer

Equipment Requirements - Rule 14-75(5)(h)(2)c, F.A.C.

Oven	Jaw crusher apparatus
Balances	Splitter or quartering device
Sieves/Mechanical Shaker	Los Angeles machine
Colorimetric kit	Flowmeter
Compression testing machine	Water bath
Moisture curing room or tanks	Muffle furnace
Slump cone	Proctor molds/ hammer
Air meters	Muffle furnace
Gravity apparatus	LBR loading device with
Thermometers	penetration piston
Pycnometer	Soak tanks
Pulverizing apparatus	Ignition Furnace

9.4.1 Standard Foundation Studies - Rule 14-75(5)(h)(1)(d)I, F.A.C.

"This type of work includes producing reports which include selection of the type (shallow foundations, piles, and redundant drilled shafts) and depth of foundation for bridges and other structures; bearing capacity and the predicted settlement of the selected foundation; slope stability; surcharge or stage construction time schedules for construction over soft ground; pile load tests; soil treatment; stabilization; and direction of field instrumentation installation, including the interpretation of data obtained and other foundation studies using the applicable Department Standard Specifications for Road and Bridge Construction, and Federal Highway Administration guidelines and checklist."

Qualifying Staff Requirements - Rule 14-75(5)(h)(2)(d)I, F.A.C.

"One professional engineer, registered with the Florida Board of Professional Engineers, having a minimum of five years of experience in activities normally associated with standard foundation studies."

9.5 Geotechnical Specialty Lab Testing - Rule 14-75(5)(h)(1)e, F.A.C.

"This type of work includes conducting tests on soil and rock according to Department approved specifications for the purpose of identifying their physical properties. The methodology involved includes testing permeability, consolidation, unconfined compression, direct shear, splitting tensile, and triaxial."

Qualifying Staff Requirements - Rule 14-75.003(5)(h)(2)(d)III, F.A.C.

"The consultant must have at least one staff member with at least four years of experience performing the tests, or an equivalent bachelor's degree."

Equipment Requirements

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"In addition, the consultant must have (in-house) at least the following test equipment:"					
Oven		Load frame			
Balances		Direct shear machine			
Permeameter		Triaxial panel			
Consolidation load device		Triaxial cell			

Tips for Prequalification in Work Group 10 – Construction Engineering Inspection (CEI)

Please refer to <u>Rule 14-75, F.A.C.</u> for detailed descriptions of each standard work type and requirements for qualification. In an effort to assist with a smooth review of your application for Professional Services Prequalification, we have provided helpful hints and resume samples to keep in mind when assembling the resumes for your firm. These tips and samples are gleaned from resumes that have been previously approved and are not an amplification of Rule.

Resumes should be customized toward the CEI work types that are being applied for, and not be written as a marketing resume of the firm. The resume must clearly identify the month and year for the beginning and ending dates of the project, and should delineate the role of the individual, not the firm. The project scope of the firm will not enhance the possibility of getting prequalified.

Qualifications are based upon CEI experience of the individual engineers/technicians, not on the firm's history or non-technical personnel.

Sample Resume

John Smith, P.E. Fla. License No. 0123 (06/1995) BSCE from UF in 1990

John has worked in the area of CEI with the firm since 1991. He started out as an engineering assistant and now serves as the Chief Engineer supervising 7 other engineers and technicians staff. John has experience in the inspection of pile and drilled shaft installation, simple and complex structures as noted below. John has experience in the inspection of excavation, embankment, concrete curb & gutter, concrete sidewalk, drainage inlets & pipes, and roadway base & asphalt as noted below.

Category 10.1: Roadway CEI

SR- 2000 in Ace, Florida – 01/1999-12/2002

This 1.37 mile roadway project consisted of raising the existing roadway approximately 3 inches and the addition of a new travel and auxiliary lanes. The project also consisted of constructing of

3 new tollbooths on the mainline, extending the existing MSE wall approximately 200 IF. Also included is the construction of a new 5' x 1 0' x 250lf of box culvert, excavation, embankment, pavement marking, base and asphalt. John served as the Project Engineer and supervised all of the inspectors and was responsible for the overall inspection of the roadway construction.

SR 10 in Perry, Alabama – 01/2003-12/2006

This 2.5 mile roadway project consisted of milling and resurfacing north and south bound existing roadway and also consisted of constructing 4' widening shoulder on the outside lane of both the north and south bound roadway. Also included in the project is the construction of drainage pipes, excavation, embankment, pavement marking, base and asphalt John served as the Project Engineer and supervised all of the inspectors and was responsible for the overall inspection of the roadway construction.

Category 10.3: Construction Materials Inspection SR- 2000 in Ace, Florida – 01/1999-12/2002

This 1.37 mile roadway project consisted of raising the existing roadway approximately 3 inches and the addition of a new travel and auxiliary lanes. The project also consisted of constructing of three new tollbooths on the mainline, extending the existing MSE wall approximately 200 lf. Also included is the construction of a new 5' x 10' x 250lf of box culvert, excavation, embankment, pavement marking, base and asphalt. John served as the Project Engineer and supervised all of the inspectors and was responsible for the overall inspection of the roadway construction. John also was responsible for all of the sampling and tracking of all construction materials, asphalt, concrete, earthwork and all other construction materials involved in this roadway project.

SR 10 in Perry, Alabama – 01/2003-12/2006

This 2.5 mile roadway project consisted of milling and resurfacing north and south bound existing roadway and also consisted of constructing 4' widening shoulder on the outside lane of both the north and south bound roadway. Also included in the project is the construction of drainage pipes, excavation, embankment, pavement marking, base and asphalt John served as the Project Engineer and supervised all of the inspectors and was responsible for the overall inspection of the roadway construction. John also was responsible for all of the sampling and tracking of all construction materials, asphalt, concrete, earthwork and all other construction materials involved in this roadway project.

Category 10.4: Minor Bridge

Johns Bridge Over 1-10 in Ace, Florida – 01/2000-12/2002

This structure is a 120' 3 span Type II AASHTO girder bridge with a continuous CIP deck and prestressed concrete pile foundations. John served as the Project Engineer and was responsible for the overall inspection of the bridge. John supervised the inspection of the girders and deck for this bridge and performed QA of the remaining structural components.

SR 10 Over Little River in Perry, Alabama – 01/2003-12/2006

This structure is a 600' CIP flat slab structure with 30' spans. John served as a Project Engineer and supervised the inspection of pile bents, abutments, and deck using AASHTO LRFD Bridge Specifications. He was also involved in checking the contractors repair procedures for defects during construction.

Category 10.5.1: Concrete

SR 62 Over Muddy River - 03/1997-12/2002

This structure consists of a 2000' long medium level bridge. The foundations consist of 30" precast prestressed concrete piles in varying size groups. The approach superstructure is 150' Florida 78" Bulb-T beams, simple span, with a continuous deck. The main unit is a 200'-240'-

200' drop-in 78" Bulb-T post tensioned system. John was a Project Engineer and supervised the inspection of simple span and continuous span girders and deck, the foundations and the piers.

CR 99 Over I-10 - 10/1995-02/1997

This structure consists of a 312' two span post tensioned 78" Bulb-T bridge. The center pier is twin columns supported by 8' diameter drilled shafts. John was the Project Engineer and supervised the inspection on all the substructure and superstructure using the AASHTO LRFD Department Specifications.

Category 10.5.2: Steel

I-10 / I-595 Interchange – 10/1993-02/1995

This interchange consists of 4 curved steel box girder bridges with spans ranging between 150' and 326'. Two of the bridges were twin boxes with a 900' radius and the other two structures were four boxes wide and on a straight alignment. John was the Project Engineer and supervised the inspection of the piers, piles and also he also inspected the deck and abutments.

SR 48 Over Big River – 10/1990-02/1993

This structure consist of a 3000' long steel plate girder high level bridge with a typical span length of 250' and a main unit of 1040'. The main span is 400' long with 320' flanking spans. The substructure consists of waterline footings with large single column piers. The foundations are 72" drilled shafts in groups of 6, 8 and 12. John served as the Project Engineer and supervised the inspection of the steel plate girders and foundations.