Consultant Prequalification Manual

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Revision 2.10
Atlanta, GA 30308

GDOT
Georgia Department of Transportation

Consultant Prequalification Manual Governs the Qualifications of Professional Consultants to Perform Work for the Georgia Department of Transportation

Revision Summary

Revision Number	Revision Date	Revision Summary
2.0	2/12/15	Reformatted to new standard template
2.1	6/15/15	Pages iii - 104 - Changed revision date to 6/15/2015 throughout manual Section 11, pages 3-4 – Revised definition of bona fide employee; Added a reference back to "professional" in all the area class definitions
2.2	9/10/15	Section 7, Transportation Planning – Added Section 1.06(h) Bat Surveys qualification requirements
2.3	1/14/16	Section 4 – Added info regarding Plan of Correction procedures
2.4	3/1/16	Section 10 – Updated Area Class 4.01, 4.02 and 4.03 Appendix B – Updated summary description of Area Class 4.01, 4.02 and 4.03
2.5	3/18/16	Section 10 – Added new Area Class 4.01(b) Appendix B – Added summary description of new Area Class 4.01(b)
2.6	12/2/16	Chapter 2 – Added notification to the Director of Program Delivery of changes to a firm's prequalification status.
2.7	1/23/18	Section 7 – Area 1.03 and 1.08 Added description to area class. Added Add'l personnel requirements Area Class 1.10 – Changed description to Traffic Projections Section 8 – Area Class 2.09 Added description to area class. Added Add'l personnel requirements Appendix A – Updated minor info regarding meeting minutes Appendix B – Area Class 1.10 – Changed description to Traffic Projections
2.8	6/23/20	Section 11 – Updated and added new Area Classes Appendix B – Updated and added new Area Classes
2.9	10/14/21	Section 13 – Added new area class 8.02 Airport Construction Administration and Observation
2.10	9/6/24	Updated GDOT branding logo throughout Section 8 – Changed Area Class 2.09 Airport Design into two sections Area Class 2.09(a) and 2.09(b)

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Section I. Purpose

This manual governs the minimum qualifications of professional architectural and engineering firms that perform design and any related work for the Georgia Department of Transportation including firms providing other ancillary services to support design work.

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Section II. Definitions

The following terms as used in these Regulations, shall have the following meanings unless the text thereof indicates to the contrary.

A. “Bona-Fide Employee” as used herein shall mean a W-2 employee of a single prequalified firm or firm seeking prequalification status.

B. "Chief Engineer" as used herein shall mean the Chief Engineer of the Department of Transportation of the State of Georgia as provided for in O.C.G.A. 32-2-42(b).

C. "Commissioner" as used herein shall mean the Commissioner of the Department of Transportation of the State of Georgia.

D. "Consultant" as used herein shall mean an individual or firm seeking a contract to perform professional services for the Department of Transportation of the State of Georgia.

E. "Consultant Prequalification Committee" as used herein shall mean a Committee consisting of seven members, all of whom shall be active full-time employees of the Department. In addition, the Director of Engineering shall also be a member, and shall be chairman. The members of the Committee shall each be assigned by the chairman to represent portions of the classes of work for which prequalification of consultants is desired. Classes of work shall generally be represented by Committee members with commensurate work experience. All members shall be recommended by the Chief Engineer, and appointed by the Commissioner. The Committee shall conduct its business in accordance with the Committee Bylaws attached hereto as “Appendix A.”

F. "Department" as used herein shall mean the Department of Transportation of the State of Georgia.

G. "Professional" as used herein shall mean an individual who has been educated and who has received advanced training in a specialized field or discipline of work, and has demonstrated an ethical and competent practice in said field. This individual must be a bona fide employee of the prequalified firm or firm seeking prequalification. For any area of work regulated by Georgia Law, the individual must be registered in accordance with rules and regulations as administered in the Office of the Secretary of State.

H. "Professional Accountant" shall refer to a professional employed by the firm who is a duly registered Certified Public Accountant (CPA) within the State of Georgia.

I. “Professional Architect” shall refer to a professional employed by the firm who is a duly registered Professional Architect within the State of Georgia, etc.

J. “Professional Engineer” shall refer to a professional employed by the firm who is a duly registered Professional Engineer (PE) within the State of Georgia.

K. “Professional Erosion and Sediment Control Designer” shall refer to a professional employed by the firm who is a duly registered Certified Professional in Erosion and Sediment Control (CPESC) within the State of Georgia.

L. “Professional Forester” shall refer to a professional employed by the firm who is a duly registered Professional Forester within the State of Georgia.

M. “Professional Geologist” shall refer to a professional employed by the firm who is a duly registered Professional Geologist within the State of Georgia.

N. “Professional Land Surveyor” shall refer to a professional employed by the firm who is a duly registered Professional Land Surveyor within the State of Georgia.

O. “Professional Landscape Architect” shall refer to a professional employed by the firm who is a duly registered Professional Landscape Architect within the State of Georgia.

P. “Professional Planner” shall refer to a professional employed by the firm who is a Professional Planner certified by the American Institute of Certified Planners (AICP), the American Planning Association's professional institute.

Q. "Review Committee" as used herein shall mean a committee consisting of not less than three members, all of whom shall be active full-time employees of the Department. The Chief Engineer shall be a member and shall be the chairman. The other members shall be appointed by the Commissioner from the remaining Division Directors of the Department. The Review Committee shall review appeals from firms that have been suspended by the Consultant Prequalification Committee in one or more area classes. The Committee shall appoint a secretary who shall keep a complete record of the proceedings and decisions of the Committee.

R. “Suspension” as used herein shall mean a provisional condition whereby a firm’s prequalification status is temporarily removed for a specified period of time; until their proper disposition can be determined. All suspensions will be determined on a case by case nature. A suspension can be for unsatisfactory work performance or any other violations of contractual agreements and Department policies. See Section VI below.

Section III. Qualification Process

Applications for qualification with the Department shall be submitted using forms and procedures established by the Department.

A. The Consultant's application shall be examined by the Consultant Prequalification Committee to determine the Consultant's ability to perform one or more of the classes of work set forth in below. The Consultant Prequalification Committee typically meets monthly and votes on whether to issue a CERTIFICATE OF QUALIFICATION with an expiration date indicated thereon which shall be three years from the first month in the calendar year in which the consultant was found qualified to perform any of the several classes of work.

   Should the consultant be dissatisfied with the decision of the Prequalification Committee as to the assigned class(es) of work, the consultant may file an appeal with the Review Committee as provided in Section VI of this Procedure.

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Section IV. Maintenance of Prequalification Status

A. Each certified consultant who desires to maintain qualification status shall initiate and submit a renewal application every three (3) years. This renewal application shall be submitted within three (3) months prior to the anniversary of the initial qualification for a Class of Work. This submittal shall include updated work experience for all the key personnel and the firm, and other information as requested in the application forms.

B. It is the responsibility of prequalified firms to report to the Department any personnel changes that may affect that firm's prequalification status within 30 calendar days of occurrence. Failure to do so may result in a suspension of prequalification status as provided in Section VI of this Procedure.

C. If the Area Class Reviewer determines that a firm's quality of work is insufficient, the Area Class Reviewer may require a Plan of Correction be prepared by the firm. This intermediate action is independent of and is not required by Section VI of this Procedure and cannot be appealed.

   It is the responsibility of the prequalified firm to provide a Plan of Correction to the Area Class Reviewer, if requested, within 30 calendar days of the date of the request. Failure to do so may result in a suspension of prequalification status as provided in Section VI of this Procedure.

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Section V. Minimum Qualification Standards by Class of Work

The following criteria apply to the qualification of consultants.

A. Any consultant firm requesting qualification with the Department for a class of work that is governed by the Secretary of State shall be registered accordingly with the Secretary of State.

B. If the practice of work described by a class of work is governed by the Secretary of State, the individual, firm, and/or appropriate full-time employees thereof must be registered with the governing board designated for the profession by the state and shall have all appropriate licenses and registrations required by Georgia Law.

C. No professional or key person may be listed as a bona fide employee of more than one firm currently qualified with the Department; meaning, as a bona-fide employee, one may not at any time provide services as an employee for any other firm that is registered with The Georgia Department of Transportation and cannot be considered for prequalification as an individual firm. If such an employee was previously employed by a firm currently qualified with the Department, the application must indicate the date that such employee was hired by the applicant. The employee shall show in writing (documented) proof that they have been deleted from the manpower capability listing of the firm with which they were previously employed, and such deletion may affect the qualification status of the previous employer.

D. The Department recognizes joint ventures for purposes of qualifying consultants to do work for the Department. Qualification of a joint venture will not qualify each individual professional or each individual firm for services separate and apart from the joint venture services.

E. Financial information may be required upon request of the Consultant Prequalification Committee. Audited financial statements may be required.

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Section VI. Suspension of Certification

The Department may suspend or revoke the certification of qualification of consultants qualified to perform work for the Department for good cause. Causes for suspension of qualifications include but are not limited to: unacceptable performance evaluation, failure to maintain an adequate accounting system, Suspension as defined in the Federal Acquisition Regulations (FAR), and adverse actions taken by the Office of Secretary of State, State Board of Registration for Professional Engineering and Land Surveyors. Suspension or revocation of qualification in one area class may result in same for all area classes.

A. The Prequalification Committee will notify a consulting firm in writing if their qualification status has been revoked or suspended. This correspondence shall cite specific reasons why the action was taken and shall notify the Director of Program Delivery of the change in prequalification status for handling of existing contracts. The firm shall not be eligible to perform work on future Department contracts in the area classes of work noted in the letter unless the firm is successful in an appeal as outlined below:

    1) If a firm wishes to appeal, they should make a formal appeal in writing to the Chairperson of the Review Committee (the Chief Engineer) with all of the documentation to be considered. The Review Committee shall provide the firm written notice of its decision within 21 calendar days of receipt of the appeal. If the decision of the Review Committee supports the original judgment of the Consultant Prequalification Committee, the firm will not be allowed to reapply for prequalification in the area class for a period of no less than one year from the effective date in the notification letter unless the Review Committee determines a shorter period is warranted. The decisions of the Review Committee shall be final.

B. If a firm on revocation or suspension wishes to be reinstated in any or all area classes, it shall submit a Plan of Correction to the Department no less than three months before possible reinstatement. The firm shall submit documentation showing the corrective measures implemented. The Consultant Prequalification Committee shall review the firm's documentation along with any additional documentation from on-going deliverables and make a determination to reinstate or extend the revocation or suspension.

C. If the firm's prequalification certification expires during the revocation or suspension period they can only reapply after the period has ended. If an application of renewal is submitted, it must include a copy of their corrective plan that was reviewed and approved by the Department.

D. If a firm is reinstated after a period of suspension or revocation and a second suspension or revocation is issued, their ineligibility for this area class(es) will be for a minimum of three (3) years and possibly indefinite depending on the severity of the violation.

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Section VII. Transportation Planning

Area Class: 1.01 State-Wide Systems Planning

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the determination of the optimum transportation system needed to serve specific state-wide corridors or the entire state, taking into consideration all modes of transportation.

Additional Description of Area Class:

Basic elements of this class of study are data collection, evaluating traffic capacity, engineering feasibility, interchanges, comparison of cost to benefits, modeling, alternate systems tests and cost estimates. The work may also include ecological and community value determinations, attitude and economic surveys and others. Although recommendations as to the type, number and approximate location of facilities are to be made under this class of work, the class does not include determination of the precise location or the design of facilities or systems. Qualification for this class of work will generally require a larger professional staff with an extremely broad background in all aspects of transportation planning.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- Not regulated by Georgia Law. A “qualified professional” will be determined by the Department through evaluation of the employee’s educational background, past record and capability of satisfactorily completing the transportation planning documentation in this class of work. At a minimum, a professional shall possess a BS or BA in transportation planning or a closely related field and a minimum of 8 years directly related experience in conducting the work described in this Area Class.

Required Training:

- n/a

Additional Personnel Requirements:

- Combined experience must include: data collection, evaluating traffic capacity, engineering feasibility, interchanges, comparison of cost to benefits, modeling, alternate systems test and cost estimates. Additionally, advanced experience with transportation demand modeling software is preferred.
- Experience with the determination of the optimum transportation system needed to serve specific state-wide corridors or the entire state, taking into consideration all modes of transportation, must be demonstrated.

Equipment and/or Software Requirements:

- n/a

Area Class: 1.02 Urban Area and Regional Transportation Planning

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work consists of making a comprehensive study of all factors affecting total transportation within a defined urban or regional area, forecasting future transportation needs for a 20 or 30 year period and developing a recommended plan for meeting these needs.

Additional Description of Area Class:

Included in this class of work are data collection, modeling, alternate systems tests and cost determinations. Consideration of ecological and community value factors may also be involved. This class of work does not include determination of the precise location of a transportation facility, nor does it include preparation of construction plans for highways, bridges, drainage systems, subways, monorails or other physical features of transportation systems.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- Not regulated by Georgia Law. A “qualified professional” will be determined by the Department through evaluation of the employee’s educational background, past record and capability of satisfactorily completing the transportation planning documentation in this class of work. At a minimum, a professional shall possess a BS or BA in transportation planning or a closely related field and a minimum of 8 years directly related experience in conducting the work described in this Area Class.

Required Training:

- n/a

Additional Personnel Requirements:

- Combined experience must at a minimum include: data collection, current transportation demand modeling software and alternate systems tests and cost determinations.
- Applicant must have thorough knowledge of current transportation demand modeling software.

Equipment and/or Software Requirements:

- n/a

Area Class: 1.03 Aviation Systems Planning

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work consists of evaluating the adequacy of the existing airport system for large areas of the State or for the entire State, the determination of future needs, and the formulation of recommended plans for future development which will be compatible with other transportation planning within the State and with the airport plans of adjoining states and the nation.

Additional Description of Area Class:

Typical elements of this class of work include inventory of existing airports, collection of other necessary data, modeling, examination of ecological and socio-economic features of the system, and forecast of demands for five, ten and twenty year periods. This class of work is limited to making general recommendations as to locations and types of airport facilities. It does not include determination of precise locations or the design of the facilities. Projects not meeting the requirements of this area class include: stand-alone economic impact studies; or aviation emergency plans.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) professional** is required.
- Not regulated by Georgia Law. “Professional Status” will be determined by the Department through its evaluation of the applicant's past record and experience in this class of work.

Required Training:

- n/a

Additional Personnel Requirements:

- The Aviation Planning Consultant will detail their experience in developing typical statewide or regional system planning scopes. Experience and previous work should include performing inventories of existing airports, establishing systems goals and objectives, system performance evaluation, forecast demands for 5, 10, and 20 year planning horizons, analyzing existing and future system roles, system requirements, implementation and development priorities, and cost estimates.

Equipment and/or Software Requirements:

- n/a

Area Class: 1.04 Mass and Rapid Transportation Planning

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work involves analyzing and implementing solutions serving the movement of people efficiently, economically, safely and comfortably via public transportation.
Additional Description of Area Class: Modes of transportation include bus and rail transit vehicles and such other technologies determined to be technologically adequate. This class of work may include the comparison and selection of the best system among several alternatives as well as improvement or expansion of existing systems. This class of work may include system planning, system operations, and terminal design and transit vehicle evaluations.
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) Professional Planner** certified by the American Institute of Certified Planners **(AICP)** is required.
Required Training: • n/a
Additional Personnel Requirements: • n/a
Equipment and/or Software Requirements: • n/a

Area Class: 1.05 Alternate Systems Planning

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work includes the evaluation of alternate transportation systems, taking into consideration various modes of transportation.
Additional Description of Area Class: It also includes studies of individual corridors for specific transportation improvements, including but not limited to railroads, waterways, and terminal transfer facilities. The work involves evaluating system capacity, engineering feasibility, comparison of cost to benefits, and the social, economic and environmental impacts of proposed transportation improvements or systems to the extent necessary to select the best improvement or system. This class of work is limited to the evaluation of various alternatives for transportation improvement and does not include the detailed design nor the determination of the precise location of a facility.
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) professional** is required. • Professionals may be either a **Georgia Professional Engineer** with proven proficiency in the field of Civil Engineering or a **Professional Planner** certified by the American Institute of Certified Planners **(AICP).**
Required Training: • n/a
Additional Personnel Requirements: • n/a
Equipment and/or Software Requirements: • n/a

Area Class: 1.06(a) NEPA Documentation

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as compiling and writing entire National Environmental Policy Act (NEPA) documents for transportation projects, including the estimation of the effects of proposed transportation improvements on the cultural, physical and social environments.

Additional Description of Area Class:

This work is limited to the study of the environmental effects of proposed transportation improvements. Factors assessed do not include determination of traffic capacity or engineering feasibility, nor involve the design of the transportation improvement.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- Not regulated by Georgia Law. A "qualified professional" will be determined by the Department through evaluation of the employee's educational background, past record and capability of satisfactorily completing environmental documentation for transportation projects in this class of work.

Required Training:

- At least 3 years of experience must be demonstrated in the activities required by this class by the employee, or the employee must demonstrate at least one year minimum experience and the completion of the required training courses found on the Employee Qualification Statement.

Additional Personnel Requirements:

- A *curriculum vitae* for each employee must be included in the application.

Equipment and/or Software Requirements:

- n/a

Area Class: 1.06(b) History

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the study and documentation of historical resources, and the estimation and documentation of effects of proposed transportation improvements on historical resources.

Additional Description of Area Class:

This work is limited to the study of the environmental effects of proposed transportation improvements. Factors assessed do not include determination of traffic capacity or engineering feasibility, nor involve the design of the transportation improvement.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- Not regulated by Georgia Law. A "qualified professional" will be determined by the Department through evaluation of the employee's educational background, past record and capability of satisfactorily completing environmental documentation for transportation projects in this class of work.

Required Training:

- At least 3 years of experience must be demonstrated in the activities required by this class by the employee, or the employee must demonstrate at least one year minimum experience and the completion of the required training courses found on the Employee Qualification Statement.

Additional Personnel Requirements:

- Professional qualifications for architectural historian are defined by the Secretary of the Interior Guidelines and are published in 36CFR Part 61. These guidelines set forth several minimum criteria for being qualified to conduct a Section 106 assessment. Qualifications include: (a) a professional who meets the minimum qualifications as defined by the Secretary of the Interior; (b) a demonstrated ability in carrying out this work.
- Personnel should have demonstrated experience in performing all phases of Section 106 assessments including fieldwork (survey), resource identification, resource evaluation and mitigation. This would include use of background documentation (courthouse research, county surveys, maps, site files, context studies, etc.), supervision, HABS/HAER documentation and photography.
- A *curriculum vitae* for each employee must be included in the application.

Equipment and/or Software Requirements:

- n/a

Area Class: 1.06(c) Air Studies

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the study and documentation of air quality, and the estimation and documentation of effects of proposed transportation improvements on air quality.

Additional Description of Area Class:

This work is limited to the study of the environmental effects of proposed transportation improvements. Factors assessed do not include determination of traffic capacity or engineering feasibility, nor involve the design of the transportation improvement.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- Not regulated by Georgia Law. A "qualified professional" will be determined by the Department through evaluation of the employee's educational background, past record and capability of satisfactorily completing environmental documentation for transportation projects in this class of work.

Required Training:

- At least 3 years of experience must be demonstrated in the activities required by this class by the employee, or the employee must demonstrate at least one year minimum experience and the completion of the required training courses found on the Employee Qualification Statement.

Additional Personnel Requirements:

- Personnel must have training and proficiency in current air quality modeling, some may include: MOVES, CAL3QHC. Applicants must have licensed copies of the software. Personnel must demonstrate experience (listing of transportation related projects) in using the modeling for highway transportation projects.
- A *curriculum vitae* for each employee must be included in the application.

Equipment and/or Software Requirements:

- n/a

Area Class: 1.06(d) Noise Studies

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the study and documentation of noise, and the estimation and documentation of effects of proposed transportation improvements on sound levels.

Additional Description of Area Class:

This work is limited to the study of the environmental effects of proposed transportation improvements. Factors assessed do not include determination of traffic capacity or engineering feasibility, nor involve the design of the transportation improvement.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- Not regulated by Georgia Law. A "qualified professional" will be determined by the Department through evaluation of the employee's educational background, past record and capability of satisfactorily completing environmental documentation for transportation projects in this class of work.

Required Training:

- At least 3 years of experience must be demonstrated in the activities required by this class by the employee, or the employee must demonstrate at least one year minimum experience and the completion of the required training courses found on the Employee Qualification Statement.

Additional Personnel Requirements:

- Personnel must have training and proficiency in TRAFFIC NOISE MODEL (TNM) 2.5 noise modeling software. Applicant must have licensed copies of the software. Personnel must demonstrate experience (listing of the transportation related projects) in using the modeling for highway transportation projects.
- A *curriculum vitae* for each employee must be included in the application.

Equipment and/or Software Requirements:

- n/a

Area Class: 1.06(e) Ecology

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the study and documentation of ecological resources, and the estimation and documentation of effects of proposed transportation improvements on ecological resources.

Additional Description of Area Class:

This work is limited to the study of the environmental and ecological effects of proposed transportation improvements. Factors assessed do not include determination of traffic capacity or engineering feasibility, nor involve the design of the transportation improvement.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- Not regulated by Georgia Law. A "qualified professional" will be determined by the Department through evaluation of the employee's educational background, past record and capability of satisfactorily completing environmental documentation for transportation projects in this class of work.

Required Training:

- At least 3 years of experience must be demonstrated in the activities required by this class by the employee, or the employee must demonstrate at least one year minimum experience and the completion of the required training courses found on the Employee Qualification Statement.

Additional Personnel Requirements:

- Personnel must demonstrate experience in successfully completing wetland, stream, other waters of the U.S. delineation; identification of migratory bird habitat; identification of essential fish habitat; and the completion of Threatened and Endangered species surveys, to include coordination with U.S. Fish and Wildlife Service (USFWS).
- Ecological project managers must demonstrate having provided documentation necessary for both U.S. Army Corps of Engineers General and Individual permits, resulting in obtaining such permits
- Ecological project managers must also demonstrate having provided documentation necessary for a stream buffer variance, resulting in obtaining such variances.
- A *curriculum vitae* for each employee must be included in the application.

Equipment and/or Software Requirements:

- n/a

Area Class: 1.06(f) Archaeology

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the study and documentation of archaeological resources, and the estimation and documentation of effects of proposed transportation improvements on archaeological resources.

Additional Description of Area Class:

This work is limited to the study of the environmental effects of proposed transportation improvements. Factors assessed do not include determination of traffic capacity or engineering feasibility, nor involve the design of the transportation improvement.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- Not regulated by Georgia Law. A "qualified professional" will be determined by the Department through evaluation of the employee's educational background, past record and capability of satisfactorily completing environmental documentation for transportation projects in this class of work.

Required Training:

- At least 3 years of experience must be demonstrated in the activities required by this class by the employee, or the employee must demonstrate at least one year minimum experience and the completion of the required training courses found on the Employee Qualification Statement.

Additional Personnel Requirements:

- Professional qualifications for archaeology are defined by the Secretary of the Interior Guidelines and are published in 36CFR Part 61. These guidelines set forth several minimum criteria for being qualified to conduct a Section 106 assessment. Qualifications include: (a) a qualified professional who meets the minimum qualifications as defined by the Secretary of the Interior and (b) a demonstrated ability in carrying out this work.
- The qualified professional must have:
    - A Master's Degree in Archaeology, Anthropology, or a closely related field;
    - At least one year of full-time professional experience or equivalent specialized training in archaeological research, administration or management within the southeastern region of the United States which for purposes of this prequalification is defined as the states of Arkansas, Florida, Georgia, South Carolina, North Carolina, Virginia, Kentucky, Tennessee, Alabama, Mississippi, and Louisiana;
    - At least four months of supervised field and analytical experience in general North American archaeology; and
    - Demonstrated the ability to carry archaeological research to completion.
- Personnel should have experience in performing all phases of Section 106 assessments including

Minimum Qualification Requirements

fieldwork (survey), resource identification, resource evaluation and mitigation. This would include use of background documentation (courthouse research, county surveys, maps, site files, context studies, etc.), excavation (phase III), supervision, testing (phase II), documentation and photography. The ability to professionally accomplish satisfactory studies in archaeology requires advanced knowledge of the material culture and environmental parameters of the region in which the archaeologist is working. In order to carry out adequate archaeological assessments in Georgia, the consultant must demonstrate expertise and a working knowledge of the pre-contact and historic archaeological cultural history and material culture of the southeastern region of the United States and a working familiarity of the environmental parameters existing within this geographical area. In addition to the qualifications set forth in the Secretary of the Interior's Guideline for persons serving as Principal Investigators for archaeology, the consultant should demonstrate field experience working in and must be located within the southeastern region of the United States.

- A *curriculum vitae* for each employee must be included in the application.

Equipment and/or Software Requirements:

- n/a

Area Class: 1.06(g) Freshwater Aquatic Surveys

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the study and documentation of freshwater aquatic resources, and the estimation and documentation of effects of proposed transportation improvements on freshwater aquatic resources.

Additional Description of Area Class:

This work is limited to the study of the environmental and ecological effects of proposed transportation improvements. Factors assessed do not include determination of traffic capacity or engineering feasibility, nor involve the design of the transportation improvement.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- Not regulated by Georgia Law. A "qualified professional" will be determined by the Department through evaluation of the employee's educational background, past record and capability of satisfactorily completing environmental documentation for transportation projects in this class of work.

Required Training:

- At least 3 years of experience must be demonstrated in the activities required by this class by the employee, or the employee must demonstrate at least one year minimum experience and the completion of the required training courses found on the Employee Qualification Statement.

Additional Personnel Requirements:

- Personnel must demonstrate sufficient ability to survey for and identify freshwater fish, mussel and snail species. This ability is demonstrated by the holding of appropriate State and Federal permits. Copies of the permits shall be submitted with the application. Personnel shall also demonstrate familiarity with all applicable provisions of Chapter 4 of Title 27 of the Official Code of Georgia Annotated relating to fish.
- At least one professional who has obtained a section 10(a)(1)(A) recovery permit from the U.S. Fish and Wildlife Service and a scientific collecting permit from the Special Permit Unit of the Wildlife Resources Division of the Georgia Department of Natural Resources which has been issued to the person that will be conducting the surveys is required. The section 10(a) (1) (A) recovery permit must allow the permit holder to handle federally threatened and/or endangered freshwater fishes and mussels in Georgia. The scientific collecting permit must allow the permit holder to handle freshwater fishes, mussels, and snails in Georgia.
- A *curriculum vitae* for each employee must be included in the application.

Equipment and/or Software Requirements:

- n/a

Area Class: 1.06(h) Bat Surveys

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the survey and identification of bat species, and the estimation and documentation of the effects of proposed transportation improvements on bat populations.

Additional Description of Area Class:

This work is limited to the study of the environmental and ecological effects of proposed transportation improvements. Factors assessed do not include determination of traffic capacity or engineering feasibility, nor involve the design of the transportation improvement.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- Not regulated by Georgia Law. A “qualified professional” will be determined by the Department through evaluation of the employee’s permits, educational background, past record and capability of satisfactorily completing environmental documentation for transportation projects in this class of work.

Required Training:

- At least 3 years of experience must be demonstrated in the activities required by this class by the employee, or the employee must demonstrate at least one year minimum experience and the completion of the required training courses found on the Employee Qualification Statement.

Additional Personnel Requirements:

- At least one professional who has obtained both a section 10(a)(1)(A) recovery permit from the U.S. Fish and Wildlife Service and a scientific collecting permit from the Special Permit Unit of the Wildlife Resources Division of the Georgia Department of Natural Resources is required. These permits must be issued to the person who will be conducting the surveys. The section 10(a) (1) (A) recovery permit must allow the permit holder to handle federally threatened and/or endangered bats in Georgia.
- Copies of the permits shall be submitted with the application. The professional shall demonstrate familiarity with all applicable provisions of Chapter 5 of Title 27 of the Official Code of Georgia Annotated relating to wildlife.

Equipment and/or Software Requirements:

- n/a

Area Class: 1.07 Attitude, Opinion and Community Value Studies

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work consists of collecting and interpreting data as to public opinions, attitudes and community values by means of questionnaires administered by mail, telephone, the internet, or personal interview.

Additional Description of Area Class:

This class of work also involves the design of questionnaires and the analysis of results. Typical professional personnel required would include psychologists, sociologists, statisticians, mathematicians, demographic specialists and economists.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- Not regulated by Georgia Law. A “qualified professional” will be determined by the Department through evaluation of applicant's past record, experience and capability in this class of work.

Required Training:

- At least 3 years of experience must be demonstrated in the activities required by this class by the employee, or the employee must demonstrate at least one year minimum experience and the completion of the required training courses found on the Employee Qualification Statement.

Additional Personnel Requirements:

- n/a

Equipment and/or Software Requirements:

- n/a

Area Class: 1.08 Airport Master Planning

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work consists of determining the extent and nature of airport development needed at a specific existing or proposed publicly owned airport.

Additional Description of Area Class:

The planning is to be based on short, intermediate and long-range (approximately five, ten and twenty year) aeronautical service demands of the area which the airport development is intended to serve. The planning may be concerned with the expansion and modernization of existing airports or with the establishment of new airports. It will include the location and nature of existing and proposed airport facilities and of their proposed modifications and extensions. The location of existing and proposed non-aviation areas and their existing improvements will also be included. This class of work does not include the detailed design of airport facilities. Projects not qualifying for this area class include: roadway, terminal, gate, or other landside area planning or landside capacity projects; benefit-cost analyses; business planning, or environmental planning.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) professional** is required.
- Not regulated by Georgia Law. “Professional Status” will be determined by the Department through its evaluation of the applicant's past record and experience in this class of work.

Required Training:

- n/a

Additional Personnel Requirements:

- Airport Planner will explain the scope of the project and detail their experience relative to standard airport master planning or airport layout planning elements. Additional information should be provided regarding inventory, forecasting, facility requirements, alternatives analysis, and airport layout plan production in accordance with FAA Advisory Circular 150/5070-6, latest edition. This class of work does not include detailed design of airport facilities or landside facilities projects.

Equipment and/or Software Requirements:

- n/a

Area Class: 1.09 Location Studies

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as all those professional and technical efforts required to provide engineering location studies of alternative corridors, engineering feasibility, corridor alternates, design assumptions, participation in location public hearings, define the recommended alternate and preparation of location study report.
Additional Description of Area Class: Also required will be the gathering of data and preparation of a report to be presented at the location public hearing to assure the public that adequate consideration has been given to relocation of people and businesses. The class of work may require coordination with other consultants doing environmental studies and traffic and revenue studies.
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) Georgia Professional Engineer** is required.
Required Training: • n/a
Additional Personnel Requirements: • n/a
Equipment and/or Software Requirements: • n/a

Area Class: 1.10 Traffic Projections

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as the gathering of traffic data on the existing system in and near a proposed corridor and the assignment of traffic to the new facility and the corridor for present and design years.
Additional Description of Area Class: Close coordination may be required with other consultants doing location studies.
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) Georgia Professional Engineer** is required.
Required Training: • n/a
Additional Personnel Requirements: • n/a
Equipment and/or Software Requirements: • n/a

Area Class: 1.11 Traffic and Toll Revenue Studies

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as those professional and technical efforts (planning, engineering, actuarial, economic and business) required to develop traffic and toll revenue studies.
Additional Description of Area Class: Areas of expertise shall include various levels of study and complexity including exploratory (Level 1), preliminary (Level 2) revenue projections. Market-rated investment-grade revenue projections experience is preferred, however is not required for minimum qualifications. Consultant shall have proven track record with regard to the understanding and development of toll facility traffic projections, stated preference surveys, travel demand and micro simulation modeling, value of time estimates, willingness to pay estimates, assignment of toll rates, diversionary impacts, ramp-up, macroeconomic forecasting, land-use evaluations, financial feasibility and pricing policy.
Professional Registration, Certification, Education and/or Qualifications: • At least **two (2) professionals** are required. Not regulated by Georgia Law. A “qualified professional” will be determined by the Department through evaluation of applicant's past record, experience and capability in this class of work. • One of the professionals is required to perform independent checks of data, calculations and reports of the other.
Required Training: • n/a
Additional Personnel Requirements: • n/a
Equipment and/or Software Requirements: • n/a

Area Class: 1.12 Major Investment Studies

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work consists of conducting studies which address transportation needs on a corridor or sub-area scale, and which will likely lead to high type transportation investments.
Additional Description of Area Class: These corridors or sub-areas will have a substantial capital investment and a regional transportation impact. Included in this class of work are problem definition, alternative solution definition and evaluation techniques, proactive citizen involvement throughout the study, analysis of costs, benefits and financing, environmental analyses at a level suitable for use in draft environmental impact studies, air quality analyses, evaluations of final alternatives, and study documentation.
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) qualified professional** is required. • Not regulated by Georgia Law. A “qualified professional” will be determined by the Department through evaluation of the employee’s educational background, past record and capability of satisfactorily completing the transportation planning documentation in this class of work. At a minimum, a professional shall possess a BS or BA in transportation planning or a closely related field and a minimum of 8 years directly related experience in conducting the work described in this Area Class.
Required Training: • n/a
Additional Personnel Requirements: • Applicant must have general knowledge of the Major Investment Studies requirements as stated in the Intermodal Surface Transportation Efficiency Act of 1991, and subsequent guidelines.
Equipment and/or Software Requirements: • n/a

Area Class: 1.13 Non-Motorized Transportation Planning

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work consists of the evaluation of bicycle and pedestrian needs related to safety, mobility and accessibility, and the development of plans that meet these needs.

Additional Description of Area Class:

Included in this class of work are data collection and analysis, route planning (including consideration of impacts to other modes of traffic), comparison of cost to benefits and consideration of the social, economic and environmental impacts of proposed improvements. This class of work includes planning and evaluation of on-street and off-street bicycle facilities, walkways and crossing treatments, however does not include preparation of construction plans for bicycle and pedestrian facilities, highways, bridges, drainage systems or other physical features of transportation systems.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) professional** is required.
- Professionals may be either a **Georgia Professional Engineer or an AICP certified planner** with proven proficiency in the field of bicycle or pedestrian planning.

Required Training:

- n/a

Additional Personnel Requirements:

- Advanced experience with assessments of bicycle or pedestrian demand, levels of service or quality, suitability mapping, or national design best-practices are preferred.

Equipment and/or Software Requirements:

- n/a

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Section VIII. Intermodal and Mass Transit Operations

Area Class: 2.01 Mass Transit Program (Systems) Management

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the overall management of a mass or rapid transit system from concept to operational readiness.

Additional Description of Area Class:

The Program Management Consultant will be the principal coordinator between state, local and federal agencies, and the affiliated consultants and contractors; and will have an established management organization staffed with technical, economic, quality control, systems safety, environmental, sociological, marketing, and other disciplines as necessary for all phases of work involved. The Program Management Consultant will be responsible for program control and integration, including: work definition and plans, schedule implementation and critical path methodology, cost control; and development of program procedures and guidelines. The Program Management Consultant will have the capability to prepare and negotiate contracts for services and hardware, supervise and inspect construction and installations, test and check out components and the integrated system, issue reports, prepare operation and maintenance manuals, and provide an overall evaluation of system performance.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) professional** is required.
- Not regulated by Georgia Law. “Professional Status” will be determined by the Department through its evaluation of the applicant's past record and experience in this class of work.

Required Training:

n/a

Additional Personnel Requirements:

- n/a

Equipment and/or Software Requirements:

n/a

Area Class: 2.02 Mass Transit Feasibility and Technical Studies

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as performing studies related to the feasibility determination, management, operation, design, and equipment requirements of existing or proposed modes of transportation (excepting private automobiles, and including bus, rail, and water and state of the art devices).
Additional Description of Area Class: The Feasibility and Technical Studies Consultant will have an established project management and technical staff to organize the study and objectives; determine travel demand and system economics; determine social and environmental constraints and impacts; evaluate alternative routes; develop and participate in programs for community support; determine compatibility with regional transit and development plans; and recommend management and operation methods, operating equipment, facilities, support and maintenance equipment. The Feasibility and Technical Consultant will prepare interim and final reports, and prepare applications for capital and/or demonstration grants from state and federal agencies.
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) professional** is required. • Professionals may be either a **Georgia Professional Engineer** with proven proficiency in the field of Civil Engineering or a **Professional Planner** certified by the American Institute of Certified Planners **(AICP).**
Required Training: • n/a
Additional Personnel Requirements: • n/a
Equipment and/or Software Requirements: • n/a

Area Class: 2.03 Mass Transit Vehicle and Propulsion System

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the development of state of the art or beyond land and water vehicles or devices, associated propulsion or drive system, and vehicle sub-systems related to its operation.

Additional Description of Area Class:

The basic elements of this class of work require a capability to perform comparative, technical, economic and environmental analysis of state of the art systems; and to design, model, build, install, test, analyze, demonstrate and evaluate prototype or innovative mass and rapid transit concepts. The management and technical staff will be responsive to program objectives, including cost, quality control, systems safety, environmental impact, interfacing sub-systems, sub-contracting for services and hardware, and the preparation of technical and operational reports.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) professional** is required.
- Not regulated by Georgia Law. “Professional Status” will be determined by the Department through its evaluation of the applicant's past record and experience in this class of work.

Required Training:

- Continuing education/training in the integrated parts of mass transit vehicles and propulsion systems.

Additional Personnel Requirements:

- Combined experience must include:
  - Representing OWNER in preparation of the Specifications for the Mass Transit Vehicle;
  - Representing OWNER during the acquisition, final design, fabrication and testing of the Mass Transit Vehicle;
  - Actual Design of the Mass Transit Vehicle Frame Structure and Body;
  - Actual Design of the Mass Transit Vehicle Propulsion System and Traction Power;
  - Actual Design of the Mass Transit Vehicle Electrification;
  - Actual Design of the Mass Transit Vehicle Train Control and Communications; and
  - Actual Design of the Mass Transit Vehicle Interior Design.

Equipment and/or Software Requirements:

- n/a

Area Class: 2.04 Mass Transit Controls, Communications and Information Systems

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the modification of existing or the design, installation and checkout of new automatic or manual operation controls and signals, communications, operational equipment information, and public information displays.

Additional Description of Area Class:

The Controls, Communications and Information Systems Consultant will have an established project management and technical staff to perform independent work, or work in support of the Program Management Consultant. This class of work will include the design of vehicle and public traffic control systems: fail-safe controls for operating equipment; remote and local display of information for equipment operation; malfunction detection; position location; proximity detection; system security and safety; open and closed loop communications with operational elements and the public; and automated ticketing, fare collection, or billing systems.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) professional** is required.
- Not regulated by Georgia Law. “Professional Status” will be determined by the Department through its evaluation of the applicant's past record and experience in this class of work.

Required Training:

- Continuing education/training in the integrated parts of Mass Transit Controls, Communication and Information Systems

Additional Personnel Requirements:

- Combined experience must include:
  - Representing OWNER in preparation of the Specifications for the Mass Transit Controls, Communication and Information Systems for Mass Transit Vehicle and Mass Transit Public Traffic Controls;
  - Representing OWNER during the acquisition, final design, fabrication, installation, and testing of the Mass Transit Controls, Communication and Information Systems for Mass Transit Vehicle and Mass Transit Public Traffic Controls;
  - Actual Design of the Mass Transit Controls, Communication and Information System for Mass Transit Vehicle Traffic Controls; and
  - Actual Design of the Mass Transit Controls, Communication and Information System for Mass Transit Public Traffic Controls.

Equipment and/or Software Requirements:

- n/a

Area Class: 2.05 Mass Transit Architectural Engineering

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the design and construction supervision of single purpose and multi-modal structures, including site planning.

Additional Description of Area Class:

The Architectural Engineering Consultant will have an established project management and technical staff to provide complete design of terminals, shelters, maintenance and storage facilities, operational buildings, etc., designed and sited in consonance with program plans, existing or planned environs, and for the security of the facility and the users.

Professional Registration, Certification, Education and/or Qualifications:

- At least **two (2) professionals** are required.
- Professionals may be either a **Georgia Professional Engineer** or a **Georgia Registered Architect**.
- One of the professionals is required to perform independent checks of data, calculations and reports of the other.

Required Training:

- Continuing education/training in any of the integrated parts of Mass Transit Architectural Engineering.

Additional Personnel Requirements:

- Combined experience must include:
  - Representing OWNER in preparation of the Specifications for the Mass Transit Architectural Engineering;
  - Representing OWNER during the final architectural design, and architectural services during construction of the Mass Transit Facilities; and
  - Actual Architectural Design of the Mass Transit Facilities, including: passenger stations, support facilities, operational facilities (center control buildings, and traction power substations) and light / heavy rail vehicles maintenance and storage facilities.

Equipment and/or Software Requirements:

- n/a

Area Class: 2.06 Mass Transit Unique Structures

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This work is defined as the design of guide ways, tunnels, bridges over-under passes, monorails, and other unique structures required for a transit system, including necessary foundation/sub-soil investigation.

Additional Description of Area Class:

n/a

Professional Registration, Certification, Education and/or Qualifications:

- At least **two (2) professionals** are required.
- Professionals may be either a **Georgia Professional Engineer** or a **Georgia Registered Architect**.
- One of the professionals is required to perform independent checks of data, calculations and reports of the other.

Required Training:

- Continuing education/training in any of the integrated parts of Mass Transit Unique Structures.

Additional Personnel Requirements:

- Combined experience must include: Actual design of Mass Transit Unique Structures, including: light / heavy rail track structure, track geometry, stations, guide ways, bored tunnels, bridges, aerial structures, cut and cover box structures, at-grade structures, stations, substations, and central control facilities, including its foundations..

Equipment and/or Software Requirements:

- n/a

Area Class: 2.07 Mass Transit Electrical and Mechanical Systems

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as the electrical and/or mechanical design, specifications, installation and checkout of utilities, HVAC, stationary power sources or substation, power transmission, lighting, etc., associated with selected equipment and/or facilities.
Additional Description of Area Class: The Electrical and Mechanical Consultant will be responsive to the project manager for that particular class of work.
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) professional** is required. • Not regulated by Georgia Law. “Professional Status” will be determined by the Department through its evaluation of the applicant's past record and experience in this class of work.
Required Training: • Continuing education/training in any of the integrated parts of Mass Transit Electrical and Mechanical Systems.
Additional Personnel Requirements: • Combined experience must include: Actual design of Mass Transit Electrical and Mechanical Systems, including: traction power supply and distribution, traction power substations, auxiliary electrical systems, uninterrupted power supply (UPS) systems, mechanical utilities, heating, ventilation, and air conditioning systems, tunnel drainage and ventilation systems, light / heavy rail vehicle maintenance equipment, elevators, and escalators.
Equipment and/or Software Requirements: • n/a

Area Class: 2.08 Mass Transit Operations Management and Support Services

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as a service to a mass or rapid transit public authority as a management and technical consultant for the day-by-day operation of the system.
Additional Description of Area Class: The Operations Consultant will advise, or provide direct services as determined, in public affairs, marketing, financial operations, maintenance, planning, scheduling, equipment and system modifications, regional interfaces, and other operational aspects in order to maintain an economically sound and dependable transit system and/or to provide recommendations for expanded services.
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) qualified professional** is required. • Not regulated by Georgia Law. “Professional Status” will be determined by the Department through its evaluation of the applicant's past record and experience in this class of work.
Required Training: • n/a
Additional Personnel Requirements: • n/a
Equipment and/or Software Requirements: • n/a

Area Class: 2.09(a) Airport Design-Civil

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class. Selected projects must have been designed within the previous 5 years to demonstrate recent experience.

Summary Description of Area Class:

This class of work is defined as including the engineering design of new and modifications to existing runways, taxiways, aircraft parking aprons, safety areas, and in general airport infrastructure to meet state, local, and federal requirements.

Additional Description of Area Class:

The airport design consultant will have specific knowledge and experience in the Federal Aviation Administration Airport Grant Program as it relates to the engineering design of runways, taxiways, aircraft parking areas and in general, airport infrastructure. The consultant must be capable of conducting analysis related to feasibility and acceptability of new types of facilities and new equipment to improve airport operations.

Projects not qualifying for this area class include, utilities, mechanical, electrical, or hangar projects, fencing installation, obstruction removal, airfield crack seal and remarking, and other landside facility/terminal projects.

Professional Registration, Certification, Education and/or Qualifications:

- At least **two (2) Georgia Professional Engineers** with aviation design experience are required.

Required Training:

- n/a

Additional Personnel Requirements:

- The airport Design Consultant shall describe their experience relating to engineering, planning and assessment of airside infrastructure needs, to include runways, taxiways, aprons, and runway safety areas in accordance with FAA Advisory Circular 150/5300-latest edition, Airport Design, and FAA Advisory Circulars. Selected projects should include a reasonable level of detail, the scope of the project, and the engineer's experience in civil design and construction elements as they relate to airport design standards.

Equipment and/or Software Requirements:

- n/a

Area Class: 2.09(b) Airport Design – Electrical

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class. Selected projects must have been designed within the previous 5 years to demonstrate recent experience.

Summary Description of Area Class:

This class of work is defined as including the engineering design of new and modifications to airfield lighting systems for existing runways, taxiways, and airfield electrical vaults to meet state, local and federal requirements.

Additional Description of Area Class:

The airport design consultant will have specific knowledge and experience in the Federal Aviation Administration Airport Grant Program as it relates to the engineering design of airfield lighting systems for runways, taxiways, and electrical vaults. Experience in airport approach aids is desirable but not required. The consultant must be capable of conducting analysis related to feasibility and acceptability of new types of facilities and new equipment to improve airport operations.

NAVAID (PAPI, REIL) project experience is acceptable when in conjunction with a runway lighting project but does not qualify as a stand-alone project. Projects not qualifying for this area class include, utilities, mechanical, apron overhead lighting or hangar projects, and other landside facility/terminal projects.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) Georgia Professional Engineers** with aviation design experience is required.

Required Training:

- n/a

Additional Personnel Requirements:

- The airport Design Consultant shall describe their experience relating to engineering, planning and assessment of airside infrastructure needs, to include lighting systems for runways, taxiways, and airfield electrical vaults in accordance with FAA Advisory Circular 150/5300-latest edition, Airport Design, and FAA Advisory Circulars. Selected projects should include with reasonable level of detail, the scope of the project and the engineer's experience in electrical design and construction elements as they relate to airport design standards.

Equipment and/or Software Requirements:

- n/a

Area Class: 2.10 Mass Transit Program (Systems Marketing)

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as the marketing of a mass or rapid transit system.
Additional Description of Area Class: The marketing consultant will be the principal coordinator between the state, local, and federal agencies, and the affiliated consultants, and will have an established management organization staffed with marketing, technical, economic, environmental, sociological, and other disciplines as necessary for all phases of work involved. The program marketing consultant will be responsible for program control and integration, including transit market research, product planning, pricing, promotion, information delivery techniques, and the development of program procedures and guidelines. The program marketing consultant will have the capability to prepare and negotiate contracts and agreements for marketing services, develop, supervise, inspect and evaluate marketing strategies, issue reports, prepare marketing manuals and provide an overall evaluation of marketing program performance.
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) professional** is required. • Not regulated by Georgia Law. “Professional Status” will be determined by the Department through its evaluation of the applicant's past record and experience in this class of work.
Required Training: • n/a
Additional Personnel Requirements: • n/a
Equipment and/or Software Requirements: • n/a

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Section IX. Highway Design - Roadway

Area Class: 3.01 Rural Roadway Design

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as roadway design projects of two-lane or multi-lane facilities with free or controlled (permitted) access in rural areas with intersections or driveways generally located more than 1000 feet apart, rural drainage (ditches and cross drains only) and minimum conflicts with utilities.

Additional Description of Area Class:

This area of work may include, among other things, horizontal and vertical alignment design, open channel and culvert drainage analysis and design, sight distance analysis, clear zone analysis, staging plan design, and Right of Way Plan development.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) Georgia Professional Engineer** with proven proficiency in the field of Civil Engineering is required.

Required Training:

- n/a

Additional Personnel Requirements:

- **At least one key personnel must demonstrate a strong working knowledge of the Department's current Plan Development Process (PDP) and all appropriate Federal and State Design guides utilized for this area class.**
- Experience of design may include any aspect relating to AASHTO, GDOT or local jurisdiction design standards.

Equipment and/or Software Requirements:

- n/a

Area Class: 3.02 Urban Roadway Design

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as roadway design projects of two-lane or multi-lane facilities with free or controlled (permitted) access in urban areas with intersections or driveways generally located less than 1000 feet apart, pedestrian and/or bicycle facilities, urban drainage systems (longitudinal) and moderate conflicts with utilities.

Additional Description of Area Class:

This area of work may include, among other things, horizontal and vertical alignment design including pedestrian and/or bike accommodation, open channel drainage analysis and design, closed system drainage analysis and design including moderate utility coordination, sight distance analysis, clear zone analysis, staging plan design, and Right of Way (ROW) Plan development including moderate ROW coordination.

Professional Registration, Certification, Education and/or Qualifications:

- At least **two (2) Georgia Professional Engineers** with proven proficiency in the field of Civil Engineering are required.
- One of the professionals is required to perform independent checks of data, calculations and reports of the other.

Required Training:

- n/a

Additional Personnel Requirements:

- **At least one key personnel must demonstrate a strong working knowledge of the Department's current Plan Development Process (PDP) and all appropriate Federal and State Design guides utilized for this area class.**
- Experience of design may include any aspect relating to AASHTO, GDOT or local jurisdiction design standards.

Equipment and/or Software Requirements:

- n/a

Area Class: 3.03 Complex Urban Roadway Design

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as roadway design projects of multi-lane facilities with controlled (permitted) access in a central business district or City area with intersections or driveways generally located less than 500 feet apart, pedestrian and/or bicycle facilities, urban drainage systems (longitudinal) and many complex conflicts with utilities.

Additional Description of Area Class:

This area of work may include, among other things, horizontal and vertical alignment design including pedestrian and/or bike accommodation thru densely-populated area, closed system drainage analysis and design including complex utility coordination, sight distance analysis, staging plan design, and Right of Way (ROW) Plan development including complex ROW coordination.

Professional Registration, Certification, Education and/or Qualifications:

- At least **two (2) Georgia Professional Engineers** with proven proficiency in the field of Civil Engineering are required.
- One of the professionals is required to perform independent checks of data, calculations and reports of the other.

Required Training:

- n/a

Additional Personnel Requirements:

- **At least one key personnel must demonstrate a strong working knowledge of the Department's current Plan Development Process (PDP) and all appropriate Federal and State Design guides utilized for this area class.**
- Experience must demonstrate ability to design (engineer) one or more portions of a widened roadway with controlled access in an urban heavily developed area with many conflicts with utilities.
- Experience of design may include any aspect relating to AASHTO, GDOT or local jurisdiction design standards.

Equipment and/or Software Requirements:

- n/a

Area Class: 3.04 Rural Interstate Highway Design

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as rural interstate Highway design projects with access (limited) at interchanges generally located greater than 2 miles apart, rural type interchange design, rural drainage (ditches and cross drain only), and minimum conflicts with utilities.

Additional Description of Area Class:

This area of work may include, among other things, horizontal and vertical alignment design, open channel drainage analysis and design, clear zone analysis, staging plan design, and limited access Right of Way Plan development.

Professional Registration, Certification, Education and/or Qualifications:

- At least **two (2) Georgia Professional Engineers** with proven proficiency in the field of Civil Engineering are required.
- One of the professionals is required to perform independent checks of data, calculations and reports of the other.

Required Training:

- n/a

Additional Personnel Requirements:

- **At least one key personnel must demonstrate a strong working knowledge of the Department's current Plan Development Process (PDP) and all appropriate Federal and State Design guides utilized for this area class.**
- Experience must demonstrate ability to design (engineer) one or more portions of a new location or widened interstate highways in a rural area with minimal conflicts with utilities.
- Experience of design may include any aspect relating to AASHTO, GDOT or local jurisdiction design standards.

Equipment and/or Software Requirements:

- n/a

Area Class: 3.05 Urban Interstate Highway Design

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as urban interstate roadway design projects with access (limited) at interchanges generally located less than 2 miles apart, urban type interchange design, system to system interchanges and CD systems, urban drainage systems (longitudinal) and many conflicts with utilities.

Additional Description of Area Class:

This area of work may include, among other things, horizontal and vertical alignment design including system to system interchanges, closed system drainage analysis and design, staging plan design, and limited access Right of Way (ROW) Plan development including complex ROW coordination.

Professional Registration, Certification, Education and/or Qualifications:

- At least **two (2) Georgia Professional Engineers** with proven proficiency in the field of Civil Engineering are required.
- One of the professionals is required to perform independent checks of data, calculations and reports of the other.

Required Training:

- n/a

Additional Personnel Requirements:

- **At least one key personnel must demonstrate a strong working knowledge of the Department's current Plan Development Process (PDP) and all appropriate Federal and State Design guides utilized for this area class.**
- Experience must demonstrate ability to design (engineer) one or more portions of a widened interstate highway in an urban area including urban interchange design, CD systems, and system to system interchanges with many utility conflicts.
- Experience of design may include any aspect relating to AASHTO, GDOT or local jurisdiction design standards.

Equipment and/or Software Requirements:

- n/a

Area Class: 3.06 Traffic Operations Studies

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as studies of existing traffic problems and determination of the most effective ways to improve traffic flow and safety.
Additional Description of Area Class: Class of work is categorized by the collection and evaluation of data related to traffic volumes, speeds, crash history, delay, and roadway characteristics including the number, width, and configuration of lanes, and presence or absence of traffic control devices such as signs, signals, striping, and other pavement markings. Evaluation and interpretation of data includes capacity, queuing, and delay analyses, safety analysis, speed studies, and warrant analyses. Use of traffic simulation software is included in this area class. This class of work is limited to creation of reports that include descriptions and schematic layouts of the proposed improvements, and specifically does not include the preparation of construction plans or the writing of specifications.
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) Georgia Professional Engineer** is required.
Required Training: • n/a
Additional Personnel Requirements: •
Equipment and/or Software Requirements: • n/a

Area Class: 3.07 Traffic Operations Design

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as preparation of construction plans and/or specifications for traffic signals.
Additional Description of Area Class: n/a
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) Georgia Professional Engineer** is required.
Required Training: • n/a
Additional Personnel Requirements: •
Equipment and/or Software Requirements: • n/a

Area Class: 3.08 Landscape Architecture

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as preparation of plans, specifications, reports, and/or studies directed toward achieving maximum harmony between the transportation corridor and the general landscape through techniques such as: preservation of aesthetically pleasing existing land features, improvements oriented toward enhancing compatibility with existing surroundings, and creative utilization of the corridor to provide a satisfactory mesh with adjacent lands.

Additional Description of Area Class:

Class of work includes investigation, reconnaissance, research, site planning and design ultimately leading to the construction and development of aesthetically pleasing and functional settings and approaches for structures, roadways, walkways, trails, wayside parks, rest areas, and other appurtenant features, and includes such detailed plans as planting, irrigation, lighting, grading and drainage as they relate to aesthetics and the landscape. It does not entail judgment of engineering factors or preparation of engineering plans.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) Georgia Registered Landscape Architect** is required.

Required Training:

- n/a

Additional Personnel Requirements:

- Experience must demonstrate ability to design plans, specifications, reports, and/or studies directed toward achieving a safe and sustainable balance between the built and natural environments within and adjacent to a transportation corridor.
- Experience of design should include such detailed plans as planting, irrigation, lighting, grading and drainage, site plans, and master plans as they relate to roadsides, walkways, trails, and roadside mitigation.

Equipment and/or Software Requirements:

- n/a

Area Class: 3.09 Traffic Control Systems Analysis, Design and Implementation

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as the use of electrical engineering, electronics engineering, computer science, and traffic engineering to analyze, design and implement traffic control systems which provide an area-wide, coordinated approach to traffic control.
Additional Description of Area Class: Class of work includes preparation of specifications and/or design plans for Intelligent Transportation Systems and/or devices. This may include development of plans for fiber optic or wireless communication systems, surveillance cameras, speed detection devices, changeable message signs, variable speed limit systems, road weather information systems, application of connected or autonomous vehicle technologies, traffic signal communication plans, and/or creation of coordinated timing plans for traffic signal systems.
Professional Registration, Certification, Education and/or Qualifications: • At least **two (2) Georgia Professional Engineers** are required. • One of the professionals is required to perform independent checks of data, calculations and reports of the other.
Required Training: • n/a
Additional Personnel Requirements: •
Equipment and/or Software Requirements: • n/a

Area Class: 3.10 Utility Coordination

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the coordination of utility owner/facility issues on federally funded transportation projects and providing professional engineering services necessary to ensure that utility impacts will not delay the Department's project schedule.

Additional Description of Area Class:

To this end, utility facility conflict identification and resolution are significant tasks involved with this area class. Other activities associated with this class of work are utility relocation design, and utility impact avoidance/mitigation training. All activities shall conform to the Department's current standards, guidelines, processes, and the scope of services for Utility Coordination.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) Georgia Professional Engineer** with proven proficiency in the field of Civil Engineering with emphasis on both transportation and utility design is required.

Required Training:

- n/a

Additional Personnel Requirements:

- Knowledge of and experience with related federal, state, and local utility and transportation laws and regulations; AASHTO Design Standards; professional engineering standards; project management; and cost estimating related to transportation projects and utility relocations.
- At least one key personnel must have a minimum of 4 years of experience performing utility coordination activities on transportation projects.
- At least one key personnel must demonstrate a strong working knowledge of the GDOT's Plans Development Process (PDP), plan presentation requirements, and GDOT Utility Accommodation Policies and Standards.
- At least one key personnel must have a strong working knowledge of roadway and utility construction practices.
- At least one key personnel must demonstrate a strong working knowledge of Overhead/Subsurface Utility Engineering (SUE) and its application to increase engineering value to transportation projects.
- Must have sufficient personnel to prepare engineering plans, reports and specifications to the Department's current Electronic Data Guidelines and SUE Standards.
- Must have sufficient personnel to accommodate multiple projects simultaneously.

Equipment and/or Software Requirements:

- Must have adequate equipment to prepare engineering plans, reports and specifications to the Department's current Electronic Data Guidelines and SUE Standards.

Area Class: 3.11 Architecture

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as design and preparation of plans of transportation related buildings such as safety rest area buildings, truck weighing station buildings, toll booths, toll processing centers, and welcome centers.
Additional Description of Area Class: The architect may be required to furnish construction supervision.
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) professional** is required. • Professionals may be either a **Georgia Professional Engineer** or a **George Registered Architect**.
Required Training: • n/a
Additional Personnel Requirements: • n/a
Equipment and/or Software Requirements: • n/a

Area Class: 3.12 Hydraulic and Hydrological Studies (Roadway)

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as large-scale studies of drainage basins, stream diversions or alternate route analysis to optimize highway locations over bodies of water or marsh areas.
Additional Description of Area Class: Class of work shall include activities based on all appropriate federal, state and local municipality procedures for collecting, analyzing and modifying hydraulic and hydrologic data.
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) Georgia Professional Engineer** with proven proficiency in the field of Civil Engineering is required.
Required Training: • n/a
Additional Personnel Requirements: • n/a
Equipment and/or Software Requirements: • The Consultant shall indicate experience with flood routing procedures and computer programs including experience in the use and application of the computer programs "HY8" (or an equivalent program for culvert design) and "HEC -RAS".

Area Class 3.13 Bicycle and Pedestrian Facility Design

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as design of pedestrian and bicycle facilities adjacent to existing roadways, possibly within existing right of way or as standalone facilities**.**

Additional Description of Area Class:

n/a

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) professional** is required.
- Professionals may be either a **Georgia Professional Engineer** with proven proficiency in the field of Civil Engineering or a **Georgia Registered Landscape Architect**.

Required Training:

- n/a

Additional Personnel Requirements:

- **At least one key personnel must demonstrate a strong working knowledge of the Department's current Plan Development Process (PDP) and all appropriate Federal and State Design guides utilized for this area class.**
- Satisfactory experience must be demonstrated in the activities required by this class, or area classes 3.02 or 3.03, either by the individual, the firm, or their employees.
- Experience must demonstrate ability to design (engineer) one or more portions of pedestrian or bicycle facility adjacent to existing roadways or as a standalone facility with moderate to many conflicts with utilities.
- Experience of design may include any aspect relating to AASHTO, GDOT or local jurisdiction design standards.

Equipment and/or Software Requirements:

- n/a

Area Class: 3.14 Historic Rehabilitation

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as historic rehabilitation work for historic structures.
Additional Description of Area Class: n/a
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) Georgia Registered Architect** is required with the equivalent of two years of full time experience in historic architectural practice and with proven ability to meet the Secretary of the Interior's Standard for Historic Rehabilitation. **OR** • At least **one (1) Georgia Professional Engineer** is required with the equivalent of two years of full time experience in historic bridge rehabilitation and with the proven ability to meet the Secretary of the Interior's Standard for Historic Rehabilitation.
Required Training: • n/a
Additional Personnel Requirements: • n/a
Equipment and/or Software Requirements: • n/a

Area Class: 3.15 Highway Lighting and Outdoor Lighting

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as design and preparation of lighting plans for roadways, bridges, interchanges, tunnels, safety rest areas, truck weighing stations, park and ride lots and similar transportation facilities for vehicular and/or pedestrian traffic.

Additional Description of Area Class:

n/a

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) Georgia Professional Engineer** with sufficient proven proficiency in Electrical Engineering and the field of Illumination for area and roadway lighting is required, **OR**
- At least **one (1) Georgia Professional Engineer** with sufficient proven proficiency in Electrical Engineering **AND** at least **one (1) additional professional** with sufficient proven experience in field of illumination are required.

Required Training:

- n/a

Additional Personnel Requirements:

- Experience must demonstrate ability to perform photometric layout and/or electrical design, and must describe the design standards used for the photometric layout and the electrical design.

Equipment and/or Software Requirements:

- n/a

Area Class: 3.16 Value Engineering

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as study of transportation related projects or selected processes by multi-disciplined teams to determine the most cost effective and value added use of resources to accomplish the given functions.

Additional Description of Area Class:

n/a

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) Professional Engineer** who is currently licensed to practice in any state and is a Certified Value Specialist (CVS) by SAVE International with experience in the value engineering process and team leadership related to transportation projects as evidenced by having conducted a minimum of five transportation related value engineering studies, including one freeway project exceeding $25 million initial estimated cost.

Required Training:

- Attended a minimum of two transportation related value engineering classes in the last five years.

Additional Personnel Requirements:

- Must have knowledge of and experience with federal, state, and local regulations, AASHTO Design Standards, public involvement, professional engineering standards, project management, and cost estimating related to transportation projects.
- Must have sufficient production staff to perform transportation related value engineering team leadership, produce final value engineering study reports, and teach classes on the principles and practices of value engineering.

Equipment and/or Software Requirements:

- n/a

Area Class: 3.17 Design of Toll Facilities Infrastructure

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as studies and reports, preparation of complete construction plans for toll facilities and toll-related infrastructure.
Additional Description of Area Class: Class of work includes items such as toll plazas, toll booths, toll gantries, toll gates, toll-related ITS, toll systems, tolling technology, managed lane facility design, toll road design and toll-related infrastructure including systems associated with open road tolling.
Professional Registration, Certification, Education and/or Qualifications: • At least **two (2) Georgia Professional Engineer** with proven proficiency in the field of Civil Engineering are required • One of the professionals is required to perform independent checks of data, calculations and reports of the other.
Required Training: • n/a
Additional Personnel Requirements: • Consultant shall be capable in recommending management and operation methods, operating equipment, facilities, support, and maintenance equipment.
Equipment and/or Software Requirements: • n/a

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Section X. Highway Structures

Area Class: 4.01(a) Minor Bridge Design

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the production of competently engineered bridge plans for non-complex bridge structures generally using simple or continuous spans of reinforced concrete, pre-stressed concrete, or steel with pile bent foundations or spread footings.

Additional Description of Area Class:

Bridge plans shall conform to acceptable design standards which meet the specific requirements of the Georgia Department of Transportation, AASHTO and/or the Federal Highway Administration. Bridges in this class are conventional (i.e. one-way slabs or slabs on stringers using precast prestressed concrete, simple or continuous span steel or reinforced concrete deck girders). The foundation types for these bridges are conventional utilizing piles or spread footings. The bridges generally have simple geometrics.

Professional Registration, Certification, Education and/or Qualifications:

- At least **two (2) Georgia Professional Engineers** with demonstrated experience in the design of highway bridges as provided in this Area Class.
- One of the professionals is required to perform independent checks of data, calculations and reports of the other.

Required Training:

n/a

Additional Personnel Requirements:

- Consultant must have professional and technical support personnel capable of completing work within schedule and budget.

Equipment and/or Software Requirements:

n/a

Area Class: 4.01(b) Minor Bridge Design - CONDITIONAL

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the production of competently engineered bridge plans for non-complex bridge structures generally using simple or continuous spans of reinforced concrete, pre-stressed concrete, or steel with pile bent foundations or spread footings.

Additional Description of Area Class:

Bridge plans shall conform to acceptable design standards which meet the specific requirements of the Georgia Department of Transportation, AASHTO and/or the Federal Highway Administration. Bridges in this class are conventional (i.e. one-way slabs or slabs on stringers using precast prestressed concrete, simple or continuous span steel or reinforced concrete deck girders). The foundation types for these bridges are conventional utilizing piles or spread footings. The bridges generally have simple geometrics.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) Georgia Professional Engineer** with demonstrated experience in the design of highway bridges as provided in this Area Class.
- One additional professional is required to perform independent checks of data, calculations and reports. This professional shall be from a firm prequalified with the Department in either Area Class 4.01(a) Minor Bridge Design or 4.01(b) Minor Bridge Design - CONDITIONAL. All documents reviewed shall be signed, dated and marked with Georgia professional engineer license number.

Required Training:

n/a

Additional Personnel Requirements:

- Consultant must have professional and technical support personnel capable of completing work within schedule and budget.

Equipment and/or Software Requirements:

n/a

Area Class: 4.02 Major Bridge Design

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the production of competently engineered plans for bridge structures that exceed the limitations of Area Class 4.01.

Additional Description of Area Class:

Bridge plans shall conform to acceptable design standards which meet the specific requirements of the Georgia Department of Transportation, AASHTO and/or the Federal Highway Administration. Bridges in this class may have complex geometry (curvature, skew, varying widths, etc.), complexity in the design (including bridges with statically indeterminate superstructure components), spans estimated to be less than 300 feet, non-conventional substructures, substructures requiring ship impact design, bridges over navigable waters and bridges carrying railroad facilities. This class includes design for new construction, rehabilitation, widening or lengthening of bridges. Other bridge types included are longitudinally post-tensioned concrete beams, reinforced concrete box superstructures, post-tensioned substructures, continuous steel superstructures (steel box girders and curved steel girders) and other bridges of size and complexity as determined by the Department.

Professional Registration, Certification, Education and/or Qualifications:

- At least **two (2) Georgia Professional Engineers** with demonstrated experience in the design of highway bridges as provided in this Area Class.
- One of the professionals is required to perform independent checks of data, calculations and reports of the other.

Required Training:

n/a

Additional Personnel Requirements:

- Consultant must have professional and technical support personnel capable of completing work within schedule and budget.

Equipment and/or Software Requirements:

n/a

Area Class: 4.03 Complex Bridge Design

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the production of competently engineered plans for bridge structures that exceed the limitations of Area Class 4.02.

Additional Description of Area Class:

Bridge plans shall conform to acceptable design standards which meet the specific requirements of the Georgia Department of Transportation, AASHTO and/or the Federal Highway Administration. This Area Class includes complex bridge structures that are not included in Area Class 4.02 due to unique, specialized and uncommon types of design. Typically this includes design for new construction, rehabilitation, widening or lengthening of bridges. Types of bridges include span(s) longer than 300 feet, tunnels, cable-stayed, suspension, movable, trusses with spans longer than 300 feet, arch bridges, segmental, balance-cantilever, bridges requiring unique analytical methods or design features not commonly addressed in AASHTO and other bridges of size and complexity as determined by the Department.

Professional Registration, Certification, Education and/or Qualifications:

- At least two (2) Georgia Professional Engineers who have passed the NCEES Structural Exam with the two 8-hour components and have demonstrated experience in design of highway bridges as provided in this Area Class.
- One of the professionals is required to perform independent checks of data, calculations and reports of the other.

Required Training:

n/a

Additional Personnel Requirements:

- Consultant must have professional and technical support personnel capable of completing work within schedule and budget.

Equipment and/or Software Requirements:

n/a

Area Class: 4.04 Hydraulic and Hydrological Studies (Bridges)

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as large scale studies of drainage basins, stream diversions or alternate route analysis to optimize highway locations over bodies of water or marsh areas where bridge or culvert openings are located.

Additional Description of Area Class:

These studies must include the sizing of bridge and culvert openings and their locations, and the modifying of FEMA floodways and performing scour analysis as required. Experience in the use and application of the computer programs "WSPRO", "HY8" (for culverts), and "HEC - RAS" and familiarity with the “HEC II computer program are required. Activities must be based on all appropriate federal, state and local municipality procedures for collecting, analyzing and modifying hydraulic and hydrologic data.

Professional Registration, Certification, Education and/or Qualifications:

- At least **two (2) Georgia Professional Engineers** with proven proficiency in the field of Civil Engineering are required.
  - One of the professionals is required to perform independent checks of data, calculations and reports of the other.

Required Training:

n/a

Additional Personnel Requirements:

- Consultant must have professional and technical support personnel capable of completing work within schedule and budget.

Equipment and/or Software Requirements:

n/a

Area Class: 4.05 Bridge Inspection

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as safety inspection of bridges, including detailed inspection and documentation of bridges on the public road system.

Additional Description of Area Class:

Safety inspection of bridges shall be done in accordance with the Code of Federal Regulations Title 23, Part 650, Subpart C – National Bridge Inspection Standards as well as specific requirements of the Georgia Department of Transportation.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) Georgia Professional Engineer** with proven proficiency in the field of Civil Engineering is required.

Required Training:

Successful completion of an FHWA approved comprehensive bridge inspection training course is required for any individual in immediate charge of a bridge inspection team.

Additional Personnel Requirements:

- Experience in bridge design and/or bridge inspection standards is required of the professional to review and certify inspection data, load rating, and drawings as required by the Georgia Department of Transportation.
- Any individual in immediate charge of a bridge inspection team shall possess **at least one (1)** of the following minimum qualifications.
    - Be a **Georgia Professional Engineer** and possess three years of experience in safety bridge inspection assignments in a responsible capacity.
    - Have a minimum of five years of experience in safety bridge inspection assignments in a responsible capacity and have completed a comprehensive training course based on the “Bridge Inspectors Training Manual”, which has been developed by a joint Federal-State task force.
    - Maintain current certification as a Level III or IV Bridge Safety Instructor under the National Society of Professional Engineers program for National Certification in Engineering Technologies (NICET).

Equipment and/or Software Requirements:

n/a

Section XI. Topography

Area Class: 5.01 Land Surveying

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work includes the determination of boundaries of tracts of land by the laying off or the measurement of the lengths and directions of lines forming the boundaries of the tract.

Additional Description of Area Class:

- n/a

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) Georgia Registered Land Surveyor** is required.

Required Training:

- n/a

Additional Personnel Requirements:

- n/a

Equipment and/or Software Requirements:

- Applicant must have the equipment necessary to perform this class of work.

Area Class: 5.02 Engineering Surveying

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is concerned with making physical measurements to obtain both horizontal and vertical distances for use in the planning, design and construction of engineering projects.
Additional Description of Area Class: Included in this class of work are route surveys for transportation facilities, precise horizontal and vertical traversing based on the State Plane Coordinate System and the National Geodetic Survey datum, topographic surveys to determine the relief of a particular tract of land, and hydrographic surveys to determine the shore and bank of bodies of water, and depths at particular points.
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) Georgia Registered Land Surveyor** is required.
Required Training: • n/a
Additional Personnel Requirements: • n/a
Equipment and/or Software Requirements: • Applicant must have the equipment necessary to perform this class of work.

Area Class: 5.03 Geodetic Surveying

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work includes making precise surveys over areas of such considerable extent that the curvature of the earth must be considered.

Additional Description of Area Class:

Included in this class of work are static GPS observations, traversing (based on the State Plane Coordinate System), triangulation, trilateration, precise leveling and astronomic direction finding.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) Georgia Registered Land Surveyor** is required.

Required Training:

- n/a

Additional Personnel Requirements:

- n/a

Equipment and/or Software Requirements:

- Applicant must have the equipment necessary to perform this class of work.

Area Class: 5.04(a) Aerial Photography/ Conventional Aircraft

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work includes taking precision quality photographs from air camera station(s) which are suitable for subsequent photogrammetric mapping, and planning studies.
Additional Description of Area Class: • n/a
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) qualified professional** is required. • Not regulated by Georgia Law. “Professional Status” will be determined by the Department through evaluation of the employee’s past record, experience and capabilities in this class of work.
Required Training: • n/a
Additional Personnel Requirements: • n/a
Equipment and/or Software Requirements: • Must have the equipment necessary to perform this class of work.

Area Class: 5.04(b) Aerial Photography/Unmanned Aircraft System (Concept Grade)

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work includes using at least one Unmanned Aircraft System (UAS) for the purpose of taking precision quality photographs suitable for subsequent photogrammetric mapping, and planning studies.

Additional Description of Area Class:

Photography taken by UAS is constrained by FAA airspace limitations. These height restrictions result in the need for a large number of photographs to be taken of a space by the UAS. As a result, UAS photography will be limited to projects one mile in length or less; provided, however, that a Firm with multiple certified UAS pilots and registered UAS may be utilized for projects greater than one mile in length, especially in rural areas of the state.

Professional Registration, Certification, Education and/or Qualifications:

- At **least one (1) qualified professional** is required.
- At least **one (1) currently certified FAA Part 107 pilot per UAS**.
- **Current registration with the FAA for each UAS to be used.**
- Not regulated by Georgia Law. “Professional Status” will be determined by the Department through evaluation of the employee’s past record, experience and capabilities in this class of work.
- **Firm must be able to meet the requirements set forth Section 107.26, Unmanned Aircraft Systems, in the Standard Specifications, *Construction of Transportation Systems*, as amended**

Required Training:

- n/a

Additional Personnel Requirements:

- n/a

Equipment and/or Software Requirements:

- Applicant must have the equipment necessary to do this class of work,

Area Class: 5.04(c) Aerial Photography/Unmanned Aircraft System (Design Grade)

Minimum Qualification Requirements

Requirements for Prequalification:
In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:
This class of work includes using at least one Unmanned Aircraft System (UAS) for the purpose of taking precision quality photographs suitable for subsequent photogrammetric mapping, and planning studies.

Additional Description of Area Class:
Photography taken by UAS is constrained by FAA airspace limitations. These height restrictions result in the need for a large number of photographs to be taken of a space by the UAS. As a result, UAS photography will be limited to projects one mile in length or less; provided, however, that a Firm with multiple certified UAS pilots and registered UAS may be utilized for projects greater than one mile in length, especially in rural areas of the state. This class of data must be calibrated to project survey ground control and targets.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- At least **one** (1**) currently certified FAA Part 107 pilot per UAS.**
- **Current registration with the FAA for each UAS to be used.**
- Not regulated by Georgia Law. “Professional Status” will be determined by the Department through evaluation of the employee’s past record, experience and capabilities in this class of work.
- **Firm must be able to meet the requirements set forth Section 107.26, Unmanned Aircraft Systems, in the Standard Specifications, *Construction of Transportation Systems*, as amended.**
- **Applicant or Prime must be prequalified in Area Class 5.02.**
- The Applicant must also fly and pass the Statewide Location Bureau’s UAS test site (Contact the Statewide Location Bureau for more information). The Applicant’s test data must meet the Department’s tolerances on ground and pavement at 85% or better.

Required Training:

- n/a

Additional Personnel Requirements:

- n/a

Equipment and/or Software Requirements:

- Applicant must have the equipment necessary to do this class of work.

Area Class: 5.05 Aerial Photogrammetry

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work includes obtaining information about physical objects and environment through processes of recording, measuring and interpreting photographic images and electromagnetic energy.

Additional Description of Area Class:

Included in this class of work are the derivation and production of topographic maps and surveys based on measurements and information obtained from aerial photographs or aerial LIDAR.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- Not regulated by Georgia Law. “Professional Status” will be determined by the Department through evaluation of the employee’s past record, experience and capabilities in this class of work.

Required Training:

- n/a

Additional Personnel Requirements:

- When the Department does not have a history of experience with the consultant, the applicant must prove qualifications; references will be checked.

Equipment and/or Software Requirements:

- Applicant must have the equipment necessary to do this class of work.

Area Class: 5.06(a) Topographic Remote Sensing (LIDAR) (Conventional Aircraft, Terrestrial Sensors and Mobile Vehicle, Boat, or Rail Units) (Design Grade)

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work Includes the use of LIDAR systems that are mounted on conventional aircraft, terrestrial sensors, or mobile units to deliver design grade LIDAR for mapping and other design related tasks This class of LIDAR must be calibrated to surveyed project control and targets.

Additional Description of Area Class:

The data reduction phase of such work involves expertise in the interpretation and analysis of recorded LIDAR data by individuals in one or more of the following disciplines: civil engineering (e.g. soil and hydrology); survey geology; soil science; photogrammetry and several specialized areas of biological science, geography and urban and regional planning.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- Not regulated by Georgia Law. “Professional Status” will be determined by the Department through evaluation of the employee’s past record, experience and capabilities in this class of work.
- Must be prequalified in Area Class 5.02

Required Training:

- n/a

Additional Personnel Requirements:

- When the Department does not have a history of experience with the consultant, the applicant must prove qualifications; references will be checked.

Equipment and/or Software Requirements:

- Applicant must have the equipment necessary to do this class of work.

Area Class: 5.06(b) Topographic Remote Sensing (Unmanned Aircraft System LIDAR) (Design Grade)

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work includes the use of LIDAR systems that are mounted on an Unmanned Aircraft System (UAS) to record design level data. UAS LIDAR will be limited to projects one mile in length or less; provided, however, that a Firm with multiple certified UAS pilots and registered UAS may be utilized for projects greater than one mile in length, especially in rural areas of the state.

Additional Description of Area Class:

The data reduction phase of such work requires expertise in the interpretation and analysis of recorded data by individuals in one or more of the following disciplines: civil engineering (e.g. soil and hydrology); survey; geology; soil science; photogrammetry and several specialized areas of biological science, geography and urban and regional planning. The data reduction work includes LIDAR data calibration and Quality Assurance/Quality Control. The LIDAR must be calibrated and adjusted to survey ground control.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- Applicant or Prime must be **prequalified in Area Class 5.02 (Engineering Surveying).**
- If using aerial photography in conjunction with LIDAR, the Applicant or Prime must be prequalified in Area Class 5.04(c)
- At least **one (1) currently certified FAA Part 107 pilot per UAS.**
- **Current registration with the FAA for each UAS to be used.**
- Not regulated by Georgia Law. “Professional Status” will be determined by the Department through evaluation of the employee’s past record, experience and capabilities in this class of work.
- **Firm must be able to meet the requirements set forth Section 107.26, Unmanned Aircraft Systems, in the Standard Specifications, *Construction of Transportation Systems*, as amended.**
- The Applicant must also fly and pass the Statewide Location Bureau’s UAS test site (Contact the Statewide Location Bureau for more information). The Applicant’s test data must meet the Department’s tolerances on ground and pavement at 85% or better.

Required Training:

- n/a

Additional Personnel Requirements:

- When the Department does not have a history of experience with the consultant, the Applicant must prove qualifications; references will be checked.

Equipment and/or Software Requirements:

- Applicant must have the equipment necessary to do this class of work.

Area Class: 5.06(c) Topographic Remote Sensing (Unmanned Aircraft System LIDAR) (Concept Grade)

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work includes the use of LIDAR systems that are mounted on an Unmanned Aircraft System (UAS) to capture concept grade level data. If approved, UAS may be used on projects one mile or less in length; provided, however, that a Firm with multiple certified UAS pilots and registered UAS may be utilized for projects greater than one mile in length, especially in rural areas of the state.

Additional Description of Area Class:

The data reduction phase of such work involves expertise in the interpretation and analysis of recorded data by individuals in one or more of the following disciplines: civil engineering (e.g. soil and hydrology); survey; geology; soil science; photogrammetry and several specialized areas of biological science, geography and urban and regional planning. This involves the reduction and processing of LIDAR data collected from a UAS for concept grade level work. This class does not have to be calibrated to project survey control but should be on the latest National Geodetic Survey Horizontal and Vertical Datum.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- At least **one (1) currently certified FAA Part 107 pilot per UAS.**
- **Current registration with the FAA for each UAS to be used.**
- If using aerial photography in conjunction with LIDAR, the Applicant or Prime must be prequalified in Area Class 5.04(b).
- Not regulated by Georgia Law. “Professional Status” will be determined by the Department through evaluation of the employee’s past record, experience and capabilities in this class of work.
- **Firm must be able to meet the requirements set forth Section 107.26, Unmanned Aircraft Systems, in the Standard Specifications, *Construction of Transportation Systems*, as amended.**

Required Training:

- n/a

Additional Personnel Requirements:

- When the Department does not have a history of experience with the consultant, the applicant must prove qualifications; references will be checked.

Equipment and/or Software Requirements:

- Applicant must have the equipment necessary to do this class of work.

Area Class: 5.06(d) Topographic Remote Sensing (Sonar)

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work entails the use of sonar systems to collect underwater topographic features.

Additional Description of Area Class:

The data reduction phase of such work involves expertise in the interpretation and analysis of recorded data by individuals in one or more of the following disciplines: civil engineering, (e.g. soil and hydrology); survey; geology; soil science; photogrammetry and several specialized areas of biological science, geography and urban and regional planning.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- Not regulated by Georgia Law. “Professional Status” will be determined by the Department through evaluation of the employee’s past record, experience and capabilities in this class of work.

Required Training:

- n/a

Additional Personnel Requirements:

- When the Department does not have a history of experience with the consultant, the Applicant must prove qualifications; references will be checked.

Equipment and/or Software Requirements:

- Applicant must have the equipment necessary to do this class of work.

Area Class: 5.06(e) Topographic Remote Sensing Thermal and Infrared Sensors

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work entails the use of thermal and infrared equipment to collect data from mobile, terrestrial, or aerial systems. Work performed under this Area Class may be performed by the use of an Unmanned Aircraft System (UAS).

Additional Description of Area Class:

The data reduction phase of such work involves expertise in the interpretation and analysis of recorded data by individuals in one or more of the following disciplines: civil engineering (e.g. soil and hydrology); survey; geology; soil science; photogrammetry and several specialized areas of biological science, geography and urban and regional planning.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- **If** a **UAS** is to be utilized, at least **one** (**1) currently certified FAA Part 107 pilot per UAS.**
- **If UAS** is to be utilized, **each UAS must have a** c**urrent registration with the FAA.**
- Not regulated by Georgia Law. “Professional Status” will be determined by the Department through evaluation of the employee’s past record, experience and capabilities in this class of work.
- **If UAS** is to be utilized, **Firm must be able to meet the requirements set forth Section 107.26, Unmanned Aircraft Systems, in the Standard Specifications, *Construction of Transportation Systems*, as amended.**

Required Training:

- n/a

Additional Personnel Requirements:

- When the Department does not have a history of experience with the consultant, the Applicant must prove qualifications; references will be checked.

Equipment and/or Software Requirements:

- Applicant must have the equipment necessary to do this class of work.

Area Class: 5.07 Cartography

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work involves expressing graphically, by the use of maps and charts, the known physical features of the earth's surface including the works of man and his varied activities.

Additional Description of Area Class:

Variations may be in black and white or in multicolor. Cartography invariably includes assembly, evaluation, selection, rejection and presentation of data.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) qualified professional** is required.
- Not regulated by Georgia Law. “Professional Status” will be determined by the Department through evaluation of the employee’s past record, experience and capabilities in this class of work.

Required Training:

- n/a

Additional Personnel Requirements:

- n/a

Equipment and/or Software Requirements:

- n/a

Area Class: 5.08 Overhead/Subsurface Utility Engineering (SUE)

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as the engineering processes that involve managing certain risks associated with accurately and comprehensively identifying, characterizing, and mapping overhead and underground utility facilities.

Additional Description of Area Class:

The major activities include utility records research, mapping, designating, utility impact analysis, locating, and data management. Other activities associated with this class of work are utility relocation design, coordination, and training. These activities, when coordinated with utility owners, Department personnel, and surveyors, provide high quality utility information for use during project development, design, and construction. These activities should conform to standards and guidelines as described in FHWA and ASCE Subsurface Utility Engineering publications in conjunction with the Departments current standards, guidelines, and processes and SUE scope of services.

Professional Registration, Certification, Education and/or Qualifications:

- At least **two (2) professionals** are required.
- At least **one (1) Georgia Professional Engineer** with proven proficiency in the field of Civil Engineering with emphasis on transportation and utility design is required, **AND**
- At least **one (1) Georgia Registered Land Surveyor** with proven proficiency in the field of route surveying with emphasis on designating utilities is required.

Required Training:

- n/a

Additional Personnel Requirements:

- At least two designators are required.
- At least one key personnel must demonstrate a strong working knowledge of the Department's current Plans Development Process (PDP).
- The firm must have sufficient personnel to prepare engineering plans, reports and specifications to the Departments current Electronic Data Guidelines and SUE Standards.
- The firm must demonstrate to have sufficient personnel to accommodate multiple projects simultaneously.

Equipment and/or Software Requirements:

- Must have adequate equipment to demonstrate the ability to designate both metallic and non-metallic types of underground utility facilities in accordance with the current ASCE standard CI/ASCE 38-02 "Standard Guidelines for the Depiction of Existing Subsurface Utility Data".
- Must have access to adequate equipment to demonstrate the ability to locate underground utility facilities in a minimally intrusive manner.
- Must have adequate equipment to demonstrate the ability to accurately and efficiently survey and

Minimum Qualification Requirements

reduce field information.

- Must have adequate equipment to prepare engineering plans, reports and specifications to the Departments current Electronic Data Guidelines and SUE Standards.
- Must have adequate equipment to accommodate multiple projects simultaneously.

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Section XII. Soils, Foundation and Materials Testing

Area Class: 6.01(a) Soil Survey Studies

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as a comprehensive evaluation of soil and rock conditions along a roadway alignment and recommendations on use of these materials in roadway construction as well as providing guidance for mitigating conditions that could affect construction or performance of the roadway.

Additional Description of Area Class:

This class of work typically involves large scale drilling tasks, materials sampling and materials testing. This class of work also involves specialized studies such as stability analysis and settlement analysis. In addition this class requires knowledge and ability to recognize and mitigate geological problems such as sinkholes, landslide prone earth masses, and corrosive soils and rock mass stability.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1)** professional is required.
- Professionals may be either a **Georgia Professional Engineer** or a **Georgia Professional Geologist**.

Required Training:

- n/a

Additional Personnel Requirements:

- Applicants must demonstrate experience in evaluating soil, rock and groundwater conditions and their effects on roadway design and construction. Applicants must also demonstrate experience in the design of roadway foundations.

Equipment and/or Software Requirements:

- n/a

Area Class: 6.01(b) Geological and Geophysical Studies

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as comprehensive considerations, leading to a solution of highway location or relocation problems, based on known characteristics of foundation materials or a determination of the physical qualities of unknown or uncommon new foundation materials.
Additional Description of Area Class: This class of work may involve large scale geological survey programs, utilizing outcroppings of basement materials, combined with drilling tasks and geophysical techniques.
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1)** professional is required. • Professionals may be either a **Georgia Professional Engineer** or a **Georgia Professional Geologist**.
Required Training: • n/a
Additional Personnel Requirements: • Applicants must demonstrate experience in evaluating and interpreting geological and geophysical studies and their effects on roadway design and construction.
Equipment and/or Software Requirements: • n/a

Area Class: 6.02 Bridge Foundation Studies

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as determination of one or more specific sites or alternate sites for a structure, usually a bridge, where soil characteristics must be known for the design of footings or where settlement must be predicted to determine construction methods, surcharge requirements or the necessity of scheduling construction over extended time periods.

Additional Description of Area Class:

n/a

Professional Registration, Certification, Education and/or Qualifications:

- At least **two (2) professionals** are required.
- Professionals may be either a **Georgia Professional Engineer** or a **Georgia Professional Geologist**.
- One of the professionals is required to perform independent checks of data, calculations and reports of the other professional.

Required Training:

- n/a

Additional Personnel Requirements:

- Applicants must demonstrate experience in evaluating subsurface conditions and designing foundations for bridges and other structures.

Equipment and/or Software Requirements:

- n/a

Area Class: 6.03 Hydraulic and Hydrologic Studies (Soils & Foundation)

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as including large-scale studies of drainage basins, stream diversions or alternate route analyses to optimize highway locations over bodies of water or marsh areas where ground water would seriously affect sub grades and foundation conditions.
Additional Description of Area Class: n/a
Professional Registration, Certification, Education and/or Qualifications: • At least **two (2) professionals** are required. • Professionals may be either a **Georgia Professional Engineer** or a **Georgia Professional Geologist**. • One of the professionals is required to perform independent checks of data, calculations and reports of the other professional.
Required Training: • n/a
Additional Personnel Requirements: • Applicants must demonstrate experience in evaluating hydraulic and hydrologic conditions and their effect on foundation conditions.
Equipment and/or Software Requirements: • n/a

Area Class: 6.04(a) Laboratory Materials Testing

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as conducting tests in accordance with Georgia Department of Transportation approved specifications on aggregates, concrete (pipe, beam, or post products; cement; concrete additions including water or epoxies), bituminous materials including testing of field mixes, timber, metals, paints, rubber, roadway soils, clay, and/or masonry products.

Additional Description of Area Class:

Please note that all consultants that are currently approved for or those seeking prequalification for area classes 6.04a or 6.04b are not automatically approved to perform work on federally funded, non-TEA projects. Also, approval from Georgia Department of Transportation for materials testing on federally funded projects is required and contingent on the appropriate certified employees and a specific Quality Assurance plan, including IA, based on the type of work required on the project.

Professional Registration, Certification, Education and/or Qualifications:

- Professional – At least **one (1) Georgia Professional Engineer** with proven proficiency in the field of Civil Engineering is required.
- Technician – At least **one (1) technician** certified with a National Certification Board in specific area(s) of testing with proven proficiency in specific area(s) of testing.
- Laboratory – Must possess AASHTO or ISO laboratory accreditation in specified area of materials testing.

Required Training:

- n/a

Additional Personnel Requirements:

- Applicants must demonstrate experience in testing of construction materials.

Equipment and/or Software Requirements:

- n/a

Area Class: 6.04(b) Field Testing of Roadway Construction Materials

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as conducting tests in accordance with Georgia Department of Transportation approved specifications on aggregates, concrete (pipe, beam, or post products; cement; concrete additions including water or epoxies), bituminous materials including testing of field mixes, timber, metals, paints, rubber, roadway soils, clay, and/or masonry products.

Additional Description of Area Class:

Please note that all consultants that are currently approved for or those seeking prequalification for area classes 6.04a or 6.04b are not automatically approved to perform work on federally funded, non-TEA projects. Also, approval from the Georgia Department of Transportation for materials testing on federally funded projects is required and contingent on the appropriate certified employees and a specific Quality Assurance plan, including IA, based on the type of work required on the project.

Field sampling and testing will be performed in accordance with Georgia Department of Transportation test procedures listed in the Sampling Testing and Inspection Manual, or when specified, AASHTO Sampling and Testing Methods.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) technician** is required.
- Technician must possess current, Georgia Department of Transportation-issued certification to perform acceptance testing on construction materials for the Department.

Required Training:

- n/a

Additional Personnel Requirements:

- Technician must demonstrate proven proficiency in specific area(s) of testing.

Equipment and/or Software Requirements:

- n/a

Area Class: 6.05 Hazardous Waste Site Assessment Studies

Minimum Qualification Requirements

Requirements for Prequalification:

In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:

This class of work is defined as large and small scale studies of existing or proposed right-of-way where potentially hazardous materials are suspected to exist under or above ground.

Additional Description of Area Class:

These studies shall include physical testing and laboratory analysis to determine the types of hazardous materials present, an analysis of the danger caused by their presence, and an analysis of the potential liability of acquiring property with such substances present, and an analysis of what would be entailed in constructing a roadway facility safely in such an environment.

The work may involve assisting the Department in negotiating appropriate settlements with the Georgia Environmental Protection Division (GEPD) or the Environmental Protection Agency (EPA) for the protection of future liability.

If hazardous wastes are identified, the assessment report is to be supplemented by estimates by qualified engineers and environmental scientists to give a range of expected impacts on project plans, GEPD or EPA clean up requirements, and costs.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) professional** is required.
- Professionals may be either a **Georgia Professional Engineer** or a **Georgia Professional Geologist**.

Required Training:

- n/a

Additional Personnel Requirements:

- The professional must have qualifications to render the factual, legal and scientific judgments in the assessment report shall supervise the site assessment.
- Satisfactory experience must be demonstrated by references and records of prior site assessments negotiated with and accepted by the GEPD or EPA.

Equipment and/or Software Requirements:

- n/a

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Section XIII. Construction Engineering

Area Class: 8.01 Construction Engineering

Minimum Qualification Requirements

Requirements for Prequalification:
In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:
This class of work is defined as inspection and supervision of construction projects to insure construction is in accordance with the contract plans and specification.

Additional Description of Area Class:
It includes the inspection of construction activities and the maintenance of project records in accordance with the Department's construction manual and appropriate Department and Federal Highway Administration policies and procedures. The construction activities may include grading, drainage, base paving, traffic control, erosion control, bridge construction, and retaining wall construction.

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) Georgia Professional Engineer** with proven proficiency in the field of construction supervision for highway and bridge construction is required.

Required Training:

- n/a

Additional Personnel Requirements:

- Applicant must demonstrate experience in inspection of the different phases of highway and bridge construction including experience in traffic control as required by the Manual on Uniform Traffic Control Devices (MUTCD).

Equipment and/or Software Requirements:

- n/a

Area Class: 8.02 Airport Construction Administration and Observation

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as observation and supervision/administration of construction projects to ensure construction is in accordance with the contract plans and specifications.
Additional Description of Area Class: It includes the observation of construction activities and the maintenance and management of project records in accordance with appropriate Department and Federal Aviation Administration regulations, guidance, policies and procedures. The construction activities may include but are not limited to: grading, drainage, base, paving, erosion control, airfield electrical, fencing, obstruction removal, crack seal, pavement rejuvenation, pavement markings, and NAVAID installation.
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) Georgia Professional Engineer** with proven proficiency in the field of construction observation and supervision/administration for airports is required.
Required Training: • n/a
Additional Personnel Requirements: • Applicant must demonstrate experience in administration of project documents, to include but not limited to: review and accuracy of contractor pay applications, inspection logs, wage rate interviews, DBE reporting, schedule monitoring, conducting pre-construction and project coordination meetings, conducting final inspections, documentation quality assurance, and timely project close-out coordination.
Equipment and/or Software Requirements: • n/a

Section XIV. Erosion, Sedimentation and Pollution Control Plan (ESPCP)

Area Class: 9.01 Erosion, Sedimentation and Pollution Control Plan (ESPCP) Preparation

Minimum Qualification Requirements

Requirements for Prequalification: In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.
Summary Description of Area Class: This class of work is defined as the use of engineering principles, accepted guidelines, and Best Management Practices in the preparation of erosion and sedimentation control plans compliant with State of Georgia general permit GAR100002 for all transportation projects with a disturbed area equal to or greater than one acre.
Additional Description of Area Class: This area class to include the program formerly known as the Comprehensive Monitoring Program (CMP).
Professional Registration, Certification, Education and/or Qualifications: • At least **one (1) professional** who currently holds a valid **GSWCC Level II Certification** as a "Certified Design Professional" pursuant to Georgia Code 12-7-19 (b) is required. • All applicants must provide copies of GSWCC Level II Certification with legible expiration dates.
Required Training: • n/a
Additional Personnel Requirements: • The licensed or certified professional must be the individual who will prepare the ESPCP. • The firm and the licensed or certified professional designated to perform this work must list any instances of noncompliance associated with ESPCP preparation.
Equipment and/or Software Requirements: • n/a

Area Class: 9.02 Rainfall and Runoff Reporting

Minimum Qualification Requirements

Requirements for Prequalification:
In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:
This class of work is defined as the recording of rainfall and the sampling and testing of runoff in accordance with accepted guidance documents on all projects with a disturbed area greater than one acre.

Additional Description of Area Class:
n/a

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) professional** is required**.**
- Professionals must hold a valid GSWCC **Level IA Certification** as “Certified Personnel” or **Level II Certification** as a “Certified Design Professional” pursuant to Georgia Code 12-7-19 (b).
- Professionals and all inspection personnel are required to be certified as a Worksite Erosion Control Supervisor (WECS) by the Georgia Department of Transportation.

All applicants must provide copies of GSWCC Level IA or Level II Certification and GDOT WECS Certification with legible expiration dates.

Required Training:

- n/a

Additional Personnel Requirements:

- Employees are required to provide independent checks of data, calculations and reports.
- A Quality Control/Quality Assurance program must be in place for this class of work.

Equipment and/or Software Requirements:

- The firm or the individuals must possess the equipment to measure rainfall, collect runoff samples, and analyze samples in accordance with methodology and test procedures established by 40 CFR Part 136 (unless other test procedures have been approved), the guidance document titled "NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-001" and guidance documents that may be prepared by the EPD.

Area Class: 9.03 Field Inspections for Compliance of Erosion and Sedimentation Control Device Installations

Minimum Qualification Requirements

Requirements for Prequalification:
In order for a firm to become prequalified in this area class, they must meet the following requirements in addition to general requirements found in Sections I thru VI of this manual, and their employees must demonstrate experience in the activities required by this area class.

Summary Description of Area Class:
This class of work is defined as all activities involved in the inspection of the installations of erosion and sedimentation control devices on all projects with a disturbed area greater than one acre.

Additional Description of Area Class:
n/a

Professional Registration, Certification, Education and/or Qualifications:

- At least **one (1) professional** is required**.**
- Professionals must hold a valid GSWCC **Level IA Certification** as "Certified Personnel" or **Level II Certification** as a "Certified Design Professional" pursuant to Georgia Code 12-7-19 (b).
- Professionals and all inspection personnel are required to be certified as a Worksite Erosion Control Supervisor (WECS) by the Georgia Department of Transportation.
- All applicants must provide copies of GSWCC Level IA or Level II Certification and GDOT WECS Certification with legible expiration dates.

Required Training:

- n/a

Additional Personnel Requirements:

- A proven proficiency in the field of construction inspection regarding highway and bridge construction is required.
- Applicant must demonstrate experience in inspection of the different phases of highway and bridge construction activities as related to compliance with erosion and sedimentation control law and Georgia Department of Transportation practice.

Equipment and/or Software Requirements:

- n/a

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Appendix A. Prequalification Committee Bylaws

I. Name:

Consultant Prequalification Committee

II. Purpose:

The purpose of the Consultant Prequalification Committee shall be to provide for minimum and consistent standards of professional services. The committee shall be responsible for maintaining the list of approved prequalified consultants by area class according to the requirements set up within the GDOT Prequalification Manual

III. Membership:

A. Membership of the Consultant Prequalification Committee shall consist of the Director of Engineering who shall serve as chair, the State Bridge Design Engineer, State Roadway Design Engineer, State Design Policy Engineer, State Utilities Engineer, State Traffic Engineer, State Transportation Planning Administrator, and the State Environmental Administrator.

B. Members may designate other Department employees to participate in committee meetings at their discretion. Members and designees must be active, full-time employees of the Georgia Department of Transportation.

C. Members and/or designees to the committee shall be nominated by the Director of Engineering, recommended by the Chief Engineer, and appointed by the Commissioner.

D. Other Department Office Heads are encouraged to participate in committee meetings or designate other Department employees to participate in their absence.

IV. Voting:

A. Each committee member or their designee may vote. Each committee member and designee shall collectively retain only one vote.

B. If a member and their voting designee are not able to attend a meeting, they shall designate a temporary representative to attend the meeting in their place without voting privileges.

C. In the event of a tie vote during a committee meeting, the Chair shall have a casting vote.

V. Officers:

A. Officers shall consist of the Chair and a Secretary.

B. The chair shall be the Director of Engineering or his designee as recommended by the Chief Engineer and approved by the Commissioner.

C. The Secretary shall be appointed by nomination of the Procurement Administrator and approval by the Chair.

VI. Responsibilities of Members, other Office Heads and their Designees:

A. The Chair shall:

1. Call regular meetings.
2. Preside over meetings.
3. If the Chair is unable to attend, the Chair shall appoint a Department representative to preside in his absence.

B. The Secretary shall:
   1. Take accurate minutes for each meeting.
   2. Document attendance by committee members for each meeting.
   3. Submit a copy of all meeting minutes no more than 5 business days after each committee meeting to each member of the committee or their designee(s).
   4. Compile and track the prequalification applications by consultant for each committee meeting.
   5. Submit area class applications to the designated reviewer no less than 15 business days before the scheduled committee meeting.
   6. Submit a draft agenda for upcoming meetings to each member of the committee or their designee(s) no less than 2 days before each meeting.
   7. Submit prequalification certificates and/or denial letters to each consultant as approved by the committee no less than 2 business days after the committee meeting.
   8. Ensure the prequalification web site and postings are current and accurate.
   9. Track membership of the prequalification committee.
   10. Schedule the location and teleconference number for each committee meeting.
   11. Maintain a record of all consultant prequalification applications and certificates for no less than 4 years after submittal by the consultant.
   12. Maintain the electronic forms for area class applications.

C. Committee Members, other Office Heads, and their Designees shall:
   1. Review consultant prequalification applications for assigned area classes.
   2. Complete the application review and area class approval/denial recommendations of all submitted consultant prequalification applications no later than the Friday before the scheduled committee meeting.
   3. Review the submitted draft agenda for completion and accuracy before the schedule committee meeting.
   4. Review area class requirements for assigned area classes periodically for errors, omissions, or clarity issues.
   5. Make recommendations to the committee for revisions to the prequalification manual and/or application process as needed.

VII. Meetings:

A. Meetings shall be held on the second Thursday of each month unless otherwise directed by the Chair.
B. Special Meetings may be convened as directed by the Chair.
C. A quorum of the committee shall consist of at least four voting members or their designees, not including the chair, being present.
D. Discussion to obtain a consensus will be the prevailing procedure used at meetings. Parliamentary procedure will be used when a decision is to be recorded.
E. Meetings may be attended in person or via teleconference.

VIII. Attendance:

A. Attendance by committee members or their designee(s) is expected.
B. Attendance by other Office Heads or their designees is encouraged.

IX. Subcommittees:

A. Subcommittees may be established at the direction of the chair.

B. Subcommittees may be of any size.

X. Amendments:

A. The committee bylaws may be amended by a majority vote of the Consultant Prequalification Committee members.

XI. Ratification:

A. The Consultant Prequalification Committee hereby adopts these bylaws effective September10, 2014.

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Appendix B. Quick Reference Summary of Area Classes

Area Class		Summary Description of Area Class	RFQ Notes *(Future use)*
1.	**Transportation Planning**		
1.01	State-Wide Systems Planning	This class of work is defined as the determination of the optimum transportation system needed to serve specific state-wide corridors or the entire state, taking into consideration all modes of transportation.	
1.02	Urban Area and Regional Transportation Planning	This class of work consists of making a comprehensive study of all factors affecting total transportation within a defined urban or regional area, forecasting future transportation needs for a 20 or 30 year period and developing a recommended plan for meeting these needs.	
1.03	Aviation Systems Planning	This class of work consists of evaluating the adequacy of the existing airport system for large areas of the State or for the entire State, the determination of future needs, and the formulation of recommended plans for future development which will be compatible with other transportation planning within the State and with the airport plans of adjoining states and the nation.	
1.04	Mass and Rapid Transportation Planning	This class of work involves analyzing and implementing solutions serving the movement of people efficiently, economically, safely and comfortably via public transportation.	
1.05	Alternate Systems Planning	This class of work includes the evaluation of alternate transportation systems, taking into consideration various modes of transportation.	
1.06(a)	NEPA Documentation	This class of work is defined as compiling and writing entire National Environmental Policy Act (NEPA) documents for transportation projects, including the estimation of the effects of proposed transportation improvements on the cultural, physical and social environments.	

Area Class		Summary Description of Area Class	RFQ Notes *(Future use)*
1.06(b)	History	This class of work is defined as the study and documentation of historical resources, and the estimation and documentation of effects of proposed transportation improvements on historical resources.	
1.06(c)	Air Studies	This class of work is defined as the study and documentation of air quality, and the estimation and documentation of effects of proposed transportation improvements on air quality.	
1.06(d)	Noise Studies	This class of work is defined as the study and documentation of noise, and the estimation and documentation of effects of proposed transportation improvements on sound levels.	
1.06(e)	Ecology	This class of work is defined as the study and documentation of ecological resources, and the estimation and documentation of effects of proposed transportation improvements on ecological resources.	
1.06(f)	Archaeology	This class of work is defined as the study and documentation of archaeological resources, and the estimation and documentation of effects of proposed transportation improvements on archaeological resources.	
1.06(g)	Freshwater Aquatic Surveys	This class of work is defined as the study and documentation of freshwater aquatic resources, and the estimation and documentation of effects of proposed transportation improvements on freshwater aquatic resources.	
1.06 (h)	Bat Surveys	This class of work is defined as the survey and identification of bat species, and the estimation and documentation of the effects of proposed transportation improvements on bat populations.	
1.07	Attitude, Opinion and Community Value Studies	This class of work consists of collecting and interpreting data as to public opinions, attitudes and community values by means of questionnaires administered by mail, telephone, the internet, or personal interview.	

Area Class		Summary Description of Area Class	RFQ Notes *(Future use)*
1.08	Airport Master Planning	This class of work consists of determining the extent and nature of airport development needed at a specific existing or proposed publicly owned airport.	
1.09	Location Studies	This class of work is defined as all those professional and technical efforts required to provide engineering location studies of alternative corridors, engineering feasibility, corridor alternates, design assumptions, participation in location public hearings, define the recommended alternate and preparation of location study report.	
1.10	Traffic Projections	This class of work is defined as the gathering of traffic data on the existing system in and near a proposed corridor and the assignment of traffic to the new facility and the corridor for present and design years.	
1.11	Traffic and Toll Revenue Studies	This class of work is defined as those professional and technical efforts (planning, engineering, actuarial, economic and business) required to develop traffic and toll revenue studies.	
1.12	Major Investment Studies	This class of work consists of conducting studies which address transportation needs on a corridor or sub-area scale, and which will likely lead to high type transportation investments.	
1.13	Non-Motorized Transportation Planning	This class of work consists of the evaluation of bicycle and pedestrian needs related to safety, mobility and accessibility, and the development of plans that meet these needs.	
2.	**Mass Transit Operations**		
2.01	Mass Transit Program (Systems) Management	This class of work is defined as the overall management of a mass or rapid transit system from concept to operational readiness.	

Area Class		Summary Description of Area Class	RFQ Notes *(Future use)*
2.02	Mass Transit Feasibility and Technical Studies	This class of work is defined as performing studies related to the feasibility determination, management, operation, design, and equipment requirements of existing or proposed modes of transportation (excepting private automobiles, and including bus, rail, and water and state of the art devices).	
2.03	Mass Transit Vehicle and Propulsion System	This class of work is defined as the development of state of the art or beyond land and water vehicles or devices, associated propulsion or drive system, and vehicle sub-systems related to its operation.	
2.04	Mass Transit Controls, Communications and Information Systems	This class of work is defined as the modification of existing or the design, installation and checkout of new automatic or manual operation controls and signals, communications, operational equipment information, and public information displays.	
2.05	Mass Transit Architectural Engineering	This class of work is defined as the design and construction supervision of single purpose and multi-modal structures, including site planning.	
2.06	Mass Transit Unique Structures	This work is defined as the design of guide ways, tunnels, bridges over-under passes, monorails, and other unique structures required for a transit system, including necessary foundation/sub-soil investigation.	
2.07	Mass Transit Electrical and Mechanical Systems	This class of work is defined as the electrical and/or mechanical design, specifications, installation and checkout of utilities, HVAC, stationary power sources or substation, power transmission, lighting, etc., associated with selected equipment and/or facilities.	
2.08	Mass Transit Operations Management and Support Services	This class of work is defined as a service to a mass or rapid transit public authority as a management and technical consultant for the day-by-day operation of the system.	

Area Class		Summary Description of Area Class	RFQ Notes *(Future use)*
2.09(A)	Airport Design - Civil	This class of work is defined as including the engineering design of new and modifications to existing runways, taxiways, aircraft parking aprons, safety areas, and in general airport infrastructure to meet state, local, and federal requirements.	
2.09(B)	Airport Design – Electrical	This class of work is defined as including the engineering design of new and modifications to airfield lighting systems for existing runways, taxiways, and airfield electrical vaults to meet state, local and federal requirements.	
2.10	Mass Transit Program (Systems Marketing)	This class of work is defined as the marketing of a mass or rapid transit system.	
3.	**Highway Design Roadway**		
3.01	Rural Roadway Design	This class of work is defined as roadway design projects of two-lane or multi-lane facilities with free or controlled (permitted) access in rural areas with intersections or driveways generally located more than 1000 feet apart, rural drainage (ditches and cross drains only) and minimum conflicts with utilities.	
3.02	Urban Roadway Design	This class of work is defined as roadway design projects of two-lane or multi-lane facilities with free or controlled (permitted) access in urban areas with intersections or driveways generally located less than 1000 feet apart, pedestrian and/or bicycle facilities, urban drainage systems (longitudinal) and moderate conflicts with utilities.	
3.03	Complex Urban Roadway Design	This class of work is defined as roadway design projects of multi-lane facilities with controlled (permitted) access in a central business district or City area with intersections or driveways generally located less than 500 feet apart, pedestrian and/or bicycle facilities, urban drainage systems (longitudinal) and many complex conflicts with utilities.	

Area Class		Summary Description of Area Class	RFQ Notes *(Future use)*
3.04	Rural Interstate Highway Design	This class of work is defined as rural interstate Highway design projects with access (limited) at interchanges generally located greater than 2 miles apart, rural type interchange design, rural drainage (ditches and cross drain only), and minimum conflicts with utilities.	
3.05	Urban Interstate Highway Design	This class of work is defined as urban interstate roadway design projects with access (limited) at interchanges generally located less than 2 miles apart, urban type interchange design, system to system interchanges and CD systems, urban drainage systems (longitudinal) and many conflicts with utilities.	
3.06	Traffic Operations Studies	This class of work is defined as studies of existing traffic problems and determination of the most effective ways to improve traffic flow and safety.	
3.07	Traffic Operations Design	This class of work is defined as preparation of construction plans and/or specifications for traffic signals.	
3.08	Landscape Architecture	This class of work is defined as preparation of plans, specifications, reports, and/or studies directed toward achieving maximum harmony between the transportation corridor and the general landscape through techniques such as: preservation of aesthetically pleasing existing land features, improvements oriented toward enhancing compatibility with existing surroundings, and creative utilization of the corridor to provide a satisfactory mesh with adjacent lands.	
3.09	Traffic Control Systems Analysis, Design and Implementation	This class of work is defined as the use of electrical engineering, electronics engineering, computer science, and traffic engineering to analyze, design and implement traffic control systems which provide an area-wide, coordinated approach to traffic control.	

Area Class		Summary Description of Area Class	RFQ Notes *(Future use)*
3.10	Utility Coordination	This class of work is defined as the coordination of utility owner/facility issues on federally funded transportation projects and providing professional engineering services necessary to ensure that utility impacts will not delay the Department's project schedule.	
3.11	Architecture	This class of work is defined as design and preparation of plans of transportation related buildings such as safety rest area buildings, truck weighing station buildings, toll booths, toll processing centers, and welcome centers.	
3.12	Hydraulic and Hydrological Studies (Roadway)	This class of work is defined as large-scale studies of drainage basins, stream diversions or alternate route analysis to optimize highway locations over bodies of water or marsh areas.	
3.13	Bicycle and Pedestrian Facility Design	This class of work is defined as design of pedestrian and bicycle facilities adjacent to existing roadways, possibly within existing right of way or as standalone facilities**.**	
3.14	Historic Rehabilitation	This class of work is defined as historic rehabilitation work for historic structures.	
3.15	Highway Lighting and Outdoor Lighting	This class of work is defined as design and preparation of lighting plans for roadways, bridges, interchanges, tunnels, safety rest areas, truck weighing stations, park and ride lots and similar transportation facilities for vehicular and/or pedestrian traffic.	
3.16	Value Engineering	This class of work is defined as study of transportation related projects or selected processes by multi-disciplined teams to determine the most cost effective and value added use of resources to accomplish the given functions.	
3.17	Design of Toll Facilities Infrastructure	This class of work is defined as studies and reports, preparation of complete construction plans for toll facilities and toll-related infrastructure.	

4.	Highway Structures		
4.01(a)	Minor Bridge Design	This class of work is defined as the production of competently engineered bridge plans for non-complex bridge structures generally using simple or continuous steel, reinforced concrete, or prestressed concrete spans with pile bent foundations or spread footings.	
4.01(b)	Minor Bridge Design - CONDITIONAL	This class of work is defined as the production of competently engineered bridge plans for non-complex bridge structures generally using simple or continuous steel, reinforced concrete, or prestressed concrete spans with pile bent foundations or spread footings. NOTE: All documents shall be reviewed and signed, dated and marked with a Georgia professional engineer license number by an individual whose firm is prequalified in Area Class 4.01(a) Minor Bridge Design or 4.01(b) Minor Bridge Design - CONDITIONAL	
4.02	Major Bridge Design	This class of work is defined as the production of competently engineered bridge plans which exceed the limitations for Area Class 4.01 including bridges having complex geometry, continuous spans, spans under 300 feet in length, post-tensioned superstructures, post-tensioned substructures, reinforced concrete box superstructures and curved steel girders.	
4.03	Complex Bridge Design	This class of work is defined as the production of competently engineered bridge plans which exceed the limitations for Area Class 4.02 including spans longer than 300 feet, cable-stayed, suspension, tunnels, movable, truss spans exceeding 300 feet, segmental, arch, and other bridges requiring unique analytical methods not commonly addressed in AASHTO.	
4.04	Hydraulic and Hydrological Studies (Bridges)	This class of work is defined as large scale studies of drainage basins, stream diversions or alternate route analysis to optimize highway locations over bodies of water or marsh areas where bridge or culvert openings are located.	
4.05	Bridge Inspection	This class of work is defined as safety inspection of bridges, including detailed inspection and documentation of bridges on the public road system.	

5.	Topography		
5.01	Land Surveying	This class of work includes the determination of boundaries of tracts of land by the laying off or the measurement of the lengths and directions of lines forming the boundaries of the tract.	
5.02	Engineering Surveying	This class of work is concerned with making physical measurements to obtain both horizontal and vertical distances for use in the planning, design and construction of engineering projects.	
5.03	Geodetic Surveying	This class of work includes making precise surveys over areas of such considerable extent that the curvature of the earth must be considered.	
5.04(a)	Aerial Photography/ Conventional Aircraft	This class of work includes taking precision quality photographs from air camera station(s) which are suitable for subsequent photogrammetric mapping, and planning studies.	
5.04(b)	Aerial Photography/ Unmanned Aircraft System (Concept Grade)	This class of work includes using at least one Unmanned Aircraft System (UAS) for the purpose of taking precision quality photographs suitable for subsequent photogrammetric mapping, and planning studies.	
5.04(c)	Aerial Photography/ Unmanned Aircraft System (Design Grade)	This class of work includes using at least one Unmanned Aircraft System (UAS) for the purpose of taking precision quality photographs suitable for subsequent photogrammetric mapping, and planning studies.	
5.05	Aerial Photogrammetry	This class of work includes obtaining information about physical objects and environment through processes of recording, measuring and interpreting photographic images and electromagnetic energy.	
5.06(a)	Topographic Remote Sensing (LIDAR) (Conventional Aircraft, Terrestrial Sensors and Mobile Vehicle, Boat, or Rail Units) (Design Grade)	This class of work Includes the use of LIDAR systems that are mounted on conventional aircraft, terrestrial sensors, or mobile units to deliver design grade LIDAR for mapping and other design related tasks This class of LIDAR must be calibrated to surveyed project control and targets.	

5.06(b)	Topographic Remote Sensing (Unmanned Aircraft System LIDAR) (Design Grade)	This class of work includes the use of LIDAR systems that are mounted on an Unmanned Aircraft System (UAS) to record design level data. UAS LIDAR will be limited to projects one mile in length or less; provided, however, that a Firm with multiple certified UAS pilots and registered UAS may be utilized for projects greater than one mile in length, especially in rural areas of the state.	
5.06(c)	Topographic Remote Sensing (Unmanned Aircraft System LIDAR) (Concept Grade)	This class of work includes the use of LIDAR systems that are mounted on an Unmanned Aircraft System (UAS) to capture concept grade level data. If approved, UAS may be used on projects one mile or less in length; provided, however, that a Firm with multiple certified UAS pilots and registered UAS may be utilized for projects greater than one mile in length, especially in rural areas of the state.	
5.06(d)	Topographic Remote Sensing (Sonar)	This class of work entails the use of sonar systems to collect underwater topographic features.	
5.06(e)	Topographic Remote Sensing Thermal and Infrared Sensors	This class of work entails the use of thermal and infrared equipment to collect data from mobile, terrestrial, or aerial systems. Work performed under this Area Class may be performed by the use of an Unmanned Aircraft System (UAS).	
5.07	Cartography	This class of work involves expressing graphically, by the use of maps and charts, the known physical features of the earth's surface including the works of man and his varied activities.	
5.08	Overhead/ Subsurface Utility Engineering (SUE)	This class of work is defined as the engineering processes that involve managing certain risks associated with accurately and comprehensively identifying, characterizing, and mapping overhead and underground utility facilities.	

6.	Soils, Foundation & Materials Testing		
6.01(a)	Soil Survey Studies	This class of work is defined as a comprehensive evaluation of soil and rock conditions along a roadway alignment and recommendations on use of these materials in roadway construction as well as providing guidance for mitigating conditions that could affect construction or performance of the roadway.	
6.01(b)	Geological and Geophysical Studies	This class of work is defined as comprehensive considerations, leading to a solution of highway location or relocation problems, based on known characteristics of foundation materials or a determination of the physical qualities of unknown or uncommon new foundation materials.	
6.02	Bridge Foundation Studies	This class of work is defined as determination of one or more specific sites or alternate sites for a structure, usually a bridge, where soil characteristics must be known for the design of footings or where settlement must be predicted to determine construction methods, surcharge requirements or the necessity of scheduling construction over extended time periods.	
6.03	Hydraulic and Hydrologic Studies (Soils & Foundation)	This class of work is defined as including large-scale studies of drainage basins, stream diversions or alternate route analyses to optimize highway locations over bodies of water or marsh areas where ground water would seriously affect sub grades and foundation conditions.	
6.04(a)	Laboratory Materials Testing	This class of work is defined as conducting tests in accordance with Georgia Department of Transportation approved specifications on aggregates, concrete (pipe, beam, or post products; cement; concrete additions including water or epoxies), bituminous materials including testing of field mixes, timber, metals, paints, rubber, roadway soils, clay, and/or masonry products.	

6.04(b)	Field Testing of Roadway Construction Materials	This class of work is defined as conducting tests in accordance with Georgia Department of Transportation approved specifications on aggregates, concrete (pipe, beam, or post products; cement; concrete additions including water or epoxies), bituminous materials including testing of field mixes, timber, metals, paints, rubber, roadway soils, clay, and/or masonry products.	
6.05	Hazardous Waste Site Assessment Studies	This class of work is defined as large and small scale studies of existing or proposed right-of-way where potentially hazardous materials are suspected to exist under or above ground.	
8.	**Construction**		
8.01	Construction Engineering	This class of work is defined as inspection and supervision of construction projects to insure construction is in accordance with the contract plans and specification.	
9.	**Erosion and Sedimentation Control**		
9.01	Erosion, Sedimentation, and Pollution Control Plan (ESPCP) Preparation	This class of work is defined as the use of engineering principles, accepted guidelines, and Best Management Practices in the preparation of erosion and sedimentation control plans compliant with State of Georgia general permit GAR100002 for all transportation projects with a disturbed area equal to or greater than one acre.	
9.02	Rainfall and Runoff Reporting	This class of work is defined as the recording of rainfall and the sampling and testing of runoff in accordance with accepted guidance documents on all projects with a disturbed area greater than one acre.	
9.03	Field Inspections for Compliance of Erosion and Sedimentation Control Device Installations	This class of work is defined as all activities involved in the inspection of the installations of erosion and sedimentation control devices on all projects with a disturbed area greater than one acre.	