

CCNA Certification Application with Palm Beach County

Checklist for Application

- _____ Forms I & 10-1.10 Complete
- _____ Name & contact info complete on Form I page 1
- _____ Company Name on Form I page 2
- _____ Form I signed and dated
- _____ Mark new certification categories with * and categories to be deleted with **
Provide copies of professionals' licenses with the state of Florida. Verify that all are current and in good standing.
- _____ Provide a copy of firm's license to operate with professional licensing board(s).
- _____ Provide copy of Sunbiz information
- _____ Firm Info Items complete on Form 10-1.10.
- _____ Firm Info items match sunbiz information and website. If not, add footnote to explain.
A PE is required to be listed for each example in categories:
2.0_, 3.0_, 4.0_, 8.0_, 9.0_, 10.0_, & 11.0_
- _____ A PLS is required to be listed for each example for category 5.0_
- _____ A licensed Architect is required to be listed for each example for category 7.01-7.05
- _____ A LA is required to be listed for each example for category 7.06
Experience (past/present): Are at least 5 examples given for each category checked on Form I?
(the five examples can be split between past/present)
Project descriptions detailed enough to determine if category is applicable. (i.e. does description reference work done to backup certification category)
List all FL licensed professionals on Employees Listing. Only personnel with valid FL licenses are eligible as backup for certification.
Is firm planning to submit for an RFP with the County soon? If so, note when submitting and let us know what the RFP due date is.

Notes:

- ~ Feel free to add notes to the application to clarify any item
- ~ Please include enough detail in your experience descriptions for us to see that the experience does indeed match the CCNA certification category. Most projects have multiple consultants, please describe the work done by your firm.
- ~ Additional information such as resumes, marketing info, etc is welcome
- ~ Only list professional Florida licensed personnel who are available to work on Palm Beach County projects in your application *(unless category does not require a license)*.
- ~ Email Forms I & 10-1.10 and backup information to JaeAnn Dean at jadean@pbcgov.org
- ~ If you need a certification approved quickly to be eligible for an RFP submittal, please let us know. It is recommended that you apply for only the categories which are immediately needed, and then resubmit later to add additional categories.
- ~ This certification is only for those professional services that fall under the Florida CCNA Statute

NOTICE OF PROFESSIONAL CONSULTANT CERTIFICATION

Form I

In accordance with established procedures, the Deputy County Engineer on _____ certified that you are qualified to provide consulting services to Palm Beach County in the categories of work checked below. Notice of certification is NOT notice of selection.

Firm Name: _____

Address: _____

Phone Number: _____

CONTACT INFORMATION:

	<u>Name</u>	<u>Email</u>
1	_____	_____
2	_____	_____

TRANSPORTATION PLANNING

- 1.01 Urban Area and Regional Transportation Planning
- 1.02 Aviation Systems Planning
- 1.03 Airport Master Planning
- 1.04 Waterways and Ports Planning
- 1.05 Mass and Rapid Transit Planning
- 1.06 Alternate Systems and Corridor Location Planning
- 1.07 Environmental Studies
- 1.08 Attitude, Opinion and Community Value Studies

MASS TRANSIT OPERATIONS

- 2.01 Experimental Systems Research and Development including Demonstration
- 2.02 Airport Design and Operation
- 2.03 Port and Waterway Design and Operation
- 2.04 Mass and Rapid Transit Design and Operation

HIGHWAY DESIGN ROADWAY

- 3.01 Two-lane or Multi-lane RURAL Generally Free Access Highways Design
- 3.02 Two-lane or Multi-Lane with Curb and Gutter, Generally free Access Highways Design, Including Storm Sewers
- 3.03 Multi-lane RURAL, LIMITED ACCESS Expressway Type Highway Design
- 3.04 Pre-Design Engineering Studies and Design of Urban Expressway and Urban Interstate
- 3.05 Traffic Operations Studies
- 3.06 Traffic Operations Design
- 3.07 Traffic Control Systems Analysis, Design and Implementation

HIGHWAY DESIGN BRIDGES

- 4.01 Minor Bridges Design
- 4.02 Major Bridges Design
- 4.03 Movable Span Bridge Design

TOPOGRAPHY

- 5.01 Land Surveying
- 5.02 Engineering Surveying
- 5.03 Geodetic Surveying
- 5.04 Aerial Photography
- 5.05 Aerial Photogrammetry
- 5.06 Remote Sensing
- 5.07 Cartography

SOILS AND FOUNDATION & MATERIALS TESTING

- 6.01 Geological and Geophysical Studies
- 6.02 Bridge Foundation Studies
- 6.03 Pile Foundation Studies
- 6.04 Hydraulic and Hydrologic Studies
- 6.05 Soil Treatment
- 6.06 Materials Testing

ARCHITECTURAL

- 7.01-05 Architect
- 7.06 Landscape Architecture
- 7.07 Threshold Inspection

MECHANICAL ENGINEERING

- 8.01 Waste Water Treatment Systems
- 8.02 Waste Water Collection Systems
- 8.03 Water Supply Treatment Systems
- 8.04 Water Distribution Systems
- 8.05 Heating Systems
- 8.06 Cooling Systems
- 8.07 Specialized Design

Firm Name: 0

ELECTRICAL ENGINEERING

- 9.01 Institutional Facilities
- 9.02 Recreational Facilities
- 9.03 Industrial Facilities
- 9.04 Residential Facilities
- 9.05 Highway Lighting

STRUCTURAL ENGINEERING

- 10.01 Institutional
- 10.02 Recreational
- 10.03 Industrial
- 10.04 Residential

OCEANOGRAPHY

- 11.01 Offshore Sand Studies
- 11.02 Beach Restoration
- 11.03 Underwater Investigation

ENVIRONMENTAL ENGINEERING

- 12.01 Air Quality Investigation and Air Pollution Control
- 12.02 Environmental Audit/Site Investigation
- 12.03 Soil and Groundwater Contamination Assessment and Remediation System Design
- 12.04 Solid/Hazardous Waste Management
- 12.05 Industrial Waste Management
- 12.06 Water Resource Evaluation and Development
- 12.07 Water and Wastewater Treatment Process Design

OTHER CCNA SERVICES

- 13.01 _____
- 13.02 _____

*** These categories are only to be for services that fall under the FL CCNA Statute*

Notes:

- 1 Check boxes of the categories in which certification is requested.
- 2 If category is new for the firm, add a single asterisk on the line to the left of the checkbox.
- 3 If firm had a certification in a category but wishes to delete that certification, add a double asterisk on the line to the left of the checkbox.

PALM BEACH COUNTY

CONSULTANT

By:

Name: Joanne M. Keller, P.E.
Title: Deputy County Engineer

Date:

By:

Date:

Print
Name

Title:

PROFESSIONAL CONSULTANT QUALIFICATION APPLICATION

Official (Legal) Firm Name _____

Conditions listed herein valid as of (Date) _____

Official Florida Address _____

Primary Contact: Name _____

E-mail Address _____

Secondary Contact: Name _____

E-mail Address _____

Home Office

Address _____

Person In Charge _____

Phone Number _____

Square Footage _____

Branch Offices

Cities _____

Total Square Footage _____

Number of Years in Field _____

Years Under Present Name _____

Year Established _____

State Where Established _____

Former Firm Name(s): _____

Type of Firm: (circle one) Corporation / Partnership / Limited Liability / Individual / Other: _____

Date Incorporated/Organized: _____

State Incorporated/Organized: _____

President's Name: _____

Vice President's Name: _____

Secretary's Name: _____

Treasurer's Name: _____

Type of Partnership: (circle one) General / Limited / Association / N/A

Names of Partner(s): (if applicable) _____

Date Authorized in Florida: _____

Annual Average Revenue of Firm for Past 3 Years: _____

Firm's Website Address: _____

PROFESSIONAL CONSULTANT QUALIFICATION APPLICATION

Past Experience – List 5 projects for each category that CCNA Certification is being requested on “Form I”.

(Attach Additional Pages as Necessary)

Project Name	_____	CCNA Category No.s Supported by this Project	_____
Owner: Name	_____		_____
Address	_____		_____
Phone	_____	Current Employee(s) of Firm Involved in Project	_____
E-mail	_____		_____
Start Date	_____		_____
End Date	_____		_____
<u>Brief Description of the Project and the Portion of the Work Done by the Firm's own Current Employees</u>			

Project Name	_____	CCNA Category No.s Supported by this Project	_____
Owner: Name	_____		_____
Address	_____		_____
Phone	_____	Current Employee(s) of Firm Involved in Project	_____
E-mail	_____		_____
Start Date	_____		_____
End Date	_____		_____
<u>Brief Description of the Project and the Portion of the Work Done by the Firm's own Current Employees</u>			

Project Name	_____	CCNA Category No.s Supported by this Project	_____
Owner: Name	_____		_____
Address	_____		_____
Phone	_____	Current Employee(s) of Firm Involved in Project	_____
E-mail	_____		_____
Start Date	_____		_____
End Date	_____		_____
<u>Brief Description of the Project and the Portion of the Work Done by the Firm's own Current Employees</u>			

PROFESSIONAL CONSULTANT QUALIFICATION APPLICATION

Current Projects –List 5 projects for each category that CCNA Certification is being requested on Form I.

(Attach Additional Pages as Necessary)

Project Name _____	CCNA Category No.s Supported by this Project _____
Owner: Name _____	_____
Address _____	_____
Phone _____	Current Employee(s) of Firm Involved in Project _____
E-mail _____	_____
Start Date _____	_____
% Complete _____	_____
<u>Brief Description of the Project and the Portion of the Work Done by the Firm's own Current Employees</u>	

Project Name _____	CCNA Category No.s Supported by this Project _____
Owner: Name _____	_____
Address _____	_____
Phone _____	Current Employee(s) of Firm Involved in Project _____
E-mail _____	_____
Start Date _____	_____
% Complete _____	_____
<u>Brief Description of the Project and the Portion of the Work Done by the Firm's own Current Employees</u>	

Project Name _____	CCNA Category No.s Supported by this Project _____
Owner: Name _____	_____
Address _____	_____
Phone _____	Current Employee(s) of Firm Involved in Project _____
E-mail _____	_____
Start Date _____	_____
% Complete _____	_____
<u>Brief Description of the Project and the Portion of the Work Done by the Firm's own Current Employees</u>	

PROFESSIONAL CONSULTANT QUALIFICATION APPLICATION

Personnel Summary – List the firm’s principals and all key and/or licensed personnel.

(Attach Additional Pages as Necessary)

Name	_____
Title	_____
Date Employed	_____
Status (circle one)	Temporary in FL / Permanent in FL / Out of State
Registration: No.	_____
State	_____
Type	_____
Year	_____
College: Degree	_____
Major	_____
Years Experience	_____
Experienced in CCNA Category No.s	_____

Name	_____
Title	_____
Date Employed	_____
Status (circle one)	Temporary in FL / Permanent in FL / Out of State
Registration: No.	_____
State	_____
Type	_____
Year	_____
College: Degree	_____
Major	_____
Years Experience	_____
Experienced in CCNA Category No.s	_____

Name	_____
Title	_____
Date Employed	_____
Status (circle one)	Temporary in FL / Permanent in FL / Out of State
Registration: No.	_____
State	_____
Type	_____
Year	_____
College: Degree	_____
Major	_____
Years Experience	_____
Experienced in CCNA Category No.s	_____

PROFESSIONAL CONSULTANT QUALIFICATION APPLICATION

Number of Personnel Available to work in Florida									
<i>(Provide Copies of State Licenses/Registrations, only list personnel licensed to work in FL)</i>									
	Main Office in FL		Branch Locations in Florida			Other Locations (Out of State)			Total
	rofession;	Support	Branch	rofession;	Support	Branch	rofession;	Support	
Architect									
Landscape Architect									
Engineers:									
Civil									
Traffic									
Highway									
Bridge									
Drainage									
Electrical									
Mechanical									
Structural									
Sanitary									
Surveyors:									
PSM									
Party Chief									
Instrument Technician									
Aide									
Planners:									
Architectural									
Urban									
Transportation									
Regional									
Multi-Model									
Mass Transit									
Rail									
Airport									
CAD Technician									
Specification Writer									
Estimator									

PROFESSIONAL CONSULTANT QUALIFICATION APPLICATION

Number of Personnel Available to work in Florida <i>(Provide Copies of State Licenses/Registrations, only list personnel licensed to work in FL)</i>									
	Main Office in FL		Branch Locations in Florida			Other Locations (Out of State)			Total
	rofession	Support	Branch	rofession	Support	Branch	rofession	Support	
<u>Ecologists /</u>									
<u>Environmentalists</u>									
Biologist									
Zoologist									
Botanist									
Wildlife Ecologist									
<u>Geologists:</u>									
Ground Water									
Surface Water									
Environmental									
<u>Other Categories:</u>									
Forester									
Geographer									
Sociologist									
Economist									
Acoustical Engineer									
Statistician									
Demographic Specialist									
Totals									

PALM BEACH COUNTY
PROFESSIONAL CONSULTANT QUALIFICATION APPLICATION

List, in order of preference, the types of projects in which your firm is specialized.

1	_____
2	_____
3	_____
4	_____
5	_____
6	_____
7	_____
8	_____
9	_____
10	_____

Statement of Consultant

I hereby certify that I am a duly authorized representative of the consulting firm of _____
_____ whose address is _____ and that
the statements made in this application are true and correct to the best of my/our knowledge, and hereby authorize
and request any person, firm or corporation to furnish any pertinent information requested by Palm Beach County
deemed necessary to verify the statements made in this application or regarding the standing and reputation of the
applicant.

Authorized Signature

Printed Name

Title

Date

**Instructions for Applying for
Consultants Competitive Negotiation Act (CCNA)
Certification with
Palm Beach County (PBC)**

In accordance with the Consultants' Competitive Negotiation Act (CCNA), Florida Statutes Chapter 287.055, prior to employment by Palm Beach County, Professional Consultants must apply for certification to the Palm Beach County Engineering and Public Works Department, hereinafter identified as the Department. Following the policies and procedures set forth herein the Department shall determine if the applicant is fully qualified to render the services to be certified for. Among the factors that will be considered in making this determination are: professional status, past record, experience, and the adequacy of the organization and its personnel. Applicant Consultants meeting County requirements shall be duly certified and shall have their names placed on the Palm Beach County CCNA Certified Firms list within each and every category of Professional expertise, applied and certified for.

These Policies and Procedures establish the requirements for firms and persons applying to be qualified for Professional Consultant employment by Palm Beach County. All applications must be made on the attached Form 10-1.10 Professional Consultant Qualification Application, under the provisions presented below:

- Persons or firms will be qualified by professional area of consulting service and within each area by specific categories of work (Form I of the application). Upon receipt of a complete application, the Department will review the application.
- If the applicant is found to be qualified, the County Engineer shall execute the certification and the Notice of Professional Consultant Certification (Form I) will be provided to the Consultant.
 - The Notice will indicate the specific professional areas and categories of work in which the Consultant has been qualified.
 - The Notice of Certification is NOT a notice of selection.

PBC Instructions to Apply for CCNA Certification

- The factors to be considered in determining whether or not a consultant shall be certified shall include, but not be limited to the following:
 - Past Performance.
 - Level of ability of Professional and other personnel.
 - Ability to perform services required in an approved manner.
- Qualification data must be updated annually and, also, when requested by the Department, or when conditions are altered to either increase or reduce the Consultant's capabilities. Each Consultant is encouraged to report at any time significant manpower changes or capabilities which may affect work category qualifications.
- Any corporation or limited partnership requesting qualification with the Department must be duly authorized to conduct business in the State of Florida and so registered with the Secretary of State.
- The firm and/or appropriate employees must be registered with the governing board designated for the profession by the State Department of Business and Professional
- Regulation, and shall otherwise have all appropriate licenses and registrations required by Florida Law.
- No professional or key personnel may be listed as permanent employees of more than one firm currently qualified with the County.

Forms, Instructions, and a list of currently certified firms can be found at:

<http://discover.pbcgov.org/engineering/roadwayproduction/Pages/CCNA.aspx>

Please provide this office with one copy of the following items (all information to be typed):

I. Form I – Notice of Professional Consultant Certification

- a. Enter firm's information at the top of page 1 – include both street address and post office box number (if applicable). This address will be used for all correspondence.
- b. Enter firm's name at the top of page 2
- c. Check each box that corresponds to an area for which you want certification

PBC Instructions to Apply for CCNA Certification

- i. Definitions for each category are available in the PBC Professional Consultant Qualification Application Procedures shown on our website as Form Instructions for Form 10-1.10.
- d. Do not add areas under Section 13 unless a PBC department has specifically requested you to be CCNA certified in an area not listed in Sections 1-12.
- e. For Renewals and Revisions to existing CCNA certifications place a “*” next to the check boxes of categories that are being added and a “**” next to the check boxes of categories that are being deleted.
- f. Any new application will completely replace any existing information on file once it is approved.
- g. Check all categories for which you want certification even ones for which you already have certification.
- h. Provide backup for all checked categories including ones for which you already have certification.
- i. Leave the date of certification blank.
- j. Signature and date the bottom of the second page must be by a Corporate Officer with printed name.

II. Form 10-1.10 – Professional Consultant Qualification Application

- a. The purpose of this form is to gather information on the licensed individuals at your firm who will provide the foundation for the CCNA Certification.
 - i. Do not list employees who are unlicensed to perform work which requires a license.
 - ii. Do not list employees who are ineligible to perform work in the State of Florida (i.e. do not hold a Florida license if required).
 - iii. Do not list experience from employees who are no longer with the firm.
- b. Pages may be copied if necessary to include additional information
- c. Footnotes may be added for clarification
- d. If your firm is national or international, you do not need to list all branch offices. List at least the corporate office and the Florida offices, and offices which could potential do work for the County.

PBC Instructions to Apply for CCNA Certification

- e. Office space available is referring to the size of the branch offices, not empty space.
- f. Past Experience/Present Projects
 - i. List at least 5 examples for each category checked on Form I.
 - ii. The description of the work should only include that portion of the project completed by your firm.
 - iii. Ensure that the description is detailed enough to show how the project relates to the category from Form I that it is justifying.
 - iv. List only employees that are listed on #11.
 - v. One project may be used as backup for more than one category.
 - vi. You may recreate this format in excel or another program if desired, however, keep the column headers the same.
- g. Personnel Summary –
 - i. List only Florida licensed personnel for categories that require licenses.
 - ii. For categories which do not require licenses, list only personnel who are eligible to work in Florida and may work on County projects.
 - iii. List only personnel who may work on County projects.
- h. Number of Personnel Available in Florida
 - i. A single person may count in more than one category, however footnotes should be added to explain.
 - ii. List only personnel who may work on County projects.
- i. Equipment - must be completed by any firm requesting certification in a group 5 or 6 category.

III. Required Backup Information

- a. Copies of Florida State Department of Business & Professional Regulation Licenses for the Firm (i.e. engineering, surveying, architecture, etc.)
- b. Copies of Florida State Department of Business & Professional Regulation Licenses for professional staff (i.e. engineers, surveyors, architects, etc.).
- c. Copy of Florida Department of State, Division of Corporations, corporate license for your firm.

PBC Instructions to Apply for CCNA Certification

- d. Copy of Sunbiz Information
- e. Copy of Palm Beach County Small Business Enterprise (SBE) Certificate and State of Florida M/WBE Certificate if firm is certified in these programs.
- f. Resume's of key personnel may be included but are not mandatory.

IV. Misc - Prior to contract award with Palm Beach County Board of County Commissioners firms must register with both the County's Vendor Self Service site (discover.pbcgov.org/BusinessOpportunities/Pages/default.aspx) and also the Federal E-Verify system (www.e-verify.gov). This certification is not a notice of selection and not guarantee to be selected.

V. Submitting

- a. Applications may be submitted electronically to:

JaeAnn Dean

JADEAN@PBCGOV.ORG

and copy Holly Knight

HKNIGHT@PBCGOV.ORG

- b. If a hard copy is submitted, please submit an **unbound** copy to the following address:

Palm Beach County Engineering and Public Works Department

Roadway Production Division (CCNA Section)

2300 North Jog Road 3rd Floor West

West Palm Beach, FL 33411-2745

VI. Website

Engineering & Public Works – Roadway Production: Contracts & CCNA Section

<http://discover.pbcgov.org/engineering/roadwayproduction/Pages/CCNA.aspx>

Palm Beach County
Professional Consultant Qualification
Application
Work Category Definitions

1. TRANSPORTATION PLANNING

1.01 URBAN AREA AND REGIONAL TRANSPORTATION PLANNING:

This category 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 25 year period and developing a recommended plan for meeting these needs. Consideration of ecological and community value factors may also be involved.

Included in this class of work are:

- data collection
- modeling
- alternate systems tests
- cost determinations

This class of work does not include:

- determination of the precise location of a transportation facility
- preparation of construction plans for highway, bridges, drainage systems, subways, monorails or other physical features of transportation systems

1.02 AVIATION SYSTEMS PLANNING:

This category of work consists of evaluating the adequacy of the existing airport system with the County, in adjacent Counties, large areas of the State or 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.

Typical elements of this category of work include:

- inventory of existing airports
- collection of other necessary data
- modeling
- examination of ecological and socioeconomic features of the system
- forecast of demands for 5, 10 and 20 year periods

PBC Professional Qualification Work Category Definitions

This category 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.

1.03 AIRPORT MASTER PLANNING:

This category of work consists of determining the extent and nature of airport development needed at a specific existing or proposed publicly owned airport. The planning is to be based on short, intermediate and long-range (approximately 5, 10 and 20 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. This category of work does not include the detailed design of airport facilities.

1.04 WATERWAYS AND PORTS PLANNING:

The objective in this category of work is to survey and discover needs in water transportation and port facilities and to determine suitable answers to these needs.

Subjects may include:

- inland waterways
- selection of sites for new port facilities
- suggested improvements for port facilities
- passenger ferry systems
- cargo handling systems
- terminal facilities

This category of work is limited to determining broad needs and general answers to problems connected with water transportation and ports.

It does not include:

- precise location of facilities or routes
- design of the facilities, systems or carriers

PBC Professional Qualification Work Category Definitions

1.05 MASS AND RAPID TRANSIT PLANNING:

This category of work is concerned with solutions to problems involving the movement of large numbers of people efficiently, economically and comfortably.

Typical areas in mass transit are:

- bus travel
- local and long distance
- rail travel including local travel and inter-city
- new systems such as monorail, tracked air cushion vehicles, hovercraft
- other modes

This category of work may include the comparison and selection of the best system among several alternatives or it may be concerned with ways of improving or expanding existing systems. The Mass and Rapid Transit category of work includes general recommendations regarding transit systems or operations but does not include the design of specific transit vehicles, terminals or systems.

1.06 ALTERNATE SYSTEMS AND CORRIDOR LOCATION PLANNING:

This category of work includes the evaluation of alternate transportation systems, taking into consideration all modes of transportation. It also includes studies comparing alternate corridor locations for specific transportation improvements, including but not limited to highways, railroads, waterways, interchanges and terminal transfer facilities.

The work involves evaluating traffic capacity, engineering feasibility and the social, economic and environmental impacts of alternate transportation improvements or systems to the extent necessary to select the best improvement or system.

The category of work is limited to the evaluation of various alternatives for transportation improvements but does not include the detailed design or determination of the precise location of a facility.

PBC Professional Qualification Work Category Definitions

1.07 ENVIRONMENTAL STUDIES:

This category of work is defined as the estimation of the effects of proposed transportation improvements on the environment and on human, animal and plant life.

Factors to be assessed include:

- effects on natural resources
- erosion and sedimentation
- wildlife habitat and migration
- air, water and soil pollution
- noise levels
- esthetics
- human social and cultural patterns
- human and animal comfort and well-being

This work is limited to the study of the environmental and ecological effects of proposed transportation improvements.

It does not include determinations of traffic capacity or engineering feasibility, nor does it involve the design of the transportation improvement.

1.08 ATTITUDE, OPINION AND COMMUNITY VALUE STUDIES:

This category of work consists of collecting and interpreting data as to public opinions, attitudes, and community values by means of questionnaires administered by mail, telephone or personal interview. It involves also the design of questionnaires and the analysis of results. Typical professional personnel required would include psychologists, sociologists, statisticians, mathematicians, demographic specialists and economists.

PBC Professional Qualification Work Category Definitions

2. MASS TRANSIT OPERATIONS

2.01 EXPERIMENTAL SYSTEMS RESEARCH AND DEVELOPMENT INCLUDING DEMONSTRATION:

This category of work is defined to include:

- establishing and maintaining a State-of-the-Art-and-Beyond Manufacturers Data Library on all known application and experimental systems, equipment and facilities for potential future integration into the overall transportation system
- developing and maintaining knowledge and awareness of National Transportation System Test Programs
- analyzing the results thereof for possible application in Florida
- coordinating with State, Local and Federal Agencies and equipment manufacturers for possible establishment of test sites or facilities for advanced systems or equipment proving
- participating in and/or coordinating Demonstration Projects separately or in conjunction with other areas to test feasibility and applicability of systems, equipment or concepts for use in Florida
- participation in preparation of proposals for funding by furnishing applicable expertise and data

2.02 AIRPORT DESIGN AND OPERATION:

This category of work is defined as including the

- design and construction of new and modifications to existing Runways, Taxiways, Terminals, Lighting Systems and other Airport facilities to meet State, Local and Federal requirements
- analyses related to feasibility and acceptability of new facilities and equipment
- application of new and more effective connecting modes of transportation
- implementation of demonstration projects to test model application and/or to provide data for use in future application

2.03 PORT AND WATERWAY DESIGN AND OPERATION:

This category of work includes:

- design and construction of new and modifications to existing seaports and waterways, docking and off-loading facilities to meet Federal, State and Local requirements (including ability to support new concepts in shipping such as Containerization, Unitized Cargo Ship, Roll-on/Roll-off, Lash and Seabee systems).
- It includes the determination of the feasibility and location of new facilities or

PBC Professional Qualification Work Category Definitions

modification to existing and implementation of Demonstration Projects to test the application of new modes (such as Hydroski, Hovercraft, Hydrofoil, etc.) and provide data for subsequent use

2.04 MASS AND RAPID TRANSIT DESIGN AND OPERATION:

This category of work is defined to include the design and construction of new, and modifications to existing, mass and rapid transit systems and their support facilities as necessary to facilitate efficient movement of people and goods.

These systems with associated guideways, controls, power, etc., include all modes of intra-city and inter-city transportation (except the private automobile). Guideways will be other than conventional highways unless specifically designed for other than private automobile use, such as exclusive bus lanes. Support facilities include such items as multi-modal terminals, public transportation shelters, bus pullout bays, route and schedule signs, etc.

It also includes conducting Technical Studies and performing analyses related to management, operations, capital requirements, economic activities in preparation for the construction, acquisition or improved operation of mass and rapid transportation systems facilities and equipment; developing methodology to improve and maintain cognizance of existing operations; coordination, design and construction of Demonstration Projects to test the practicality and applicability of new equipment and systems (or new application of existing) such as Rail-use, Steam Bus, Tracked Air Cushion Vehicle (TACV) and Electric Train.

PBC Professional Qualification Work Category Definitions

3. HIGHWAY DESIGN ROADWAY

3.01 TWO-LANE OR MULTI-LANE RURAL, GENERALLY FREE ACCESS HIGHWAYS DESIGN:

This category of work is defined as the production of competently engineered highway plans which conform with acceptable design standards and which meet the specific requirements of the County, and if required, those of the Florida Department of Transportation or the Federal Highway Administration, including accommodation of utilities and creative utilization of roadsides for two-lane or multi-lane rural generally free access highways.

3.02 TWO-LANE OR MULTI-LANE WITH CURB AND GUTTER GENERALLY FREE ACCESS HIGHWAYS DESIGN INCLUDING STORM SEWERS:

This category of work is defined as the production of competently engineered highway plans which conform with acceptable standards and which meet the specific requirements of the County, and if required, those of the Florida Department of Transportation or the Federal Highway Administration, including accommodation of utilities and creative utilization of roadsides for two-lane or multi-lane municipal type highways with curb and gutter, generally free access, including storm sewers.

3.03 MULTI-LANE RURAL, LIMITED ACCESS EXPRESSWAY TYPE HIGHWAY DESIGN:

This category of work is defined as the production of competently engineered highway plans which conform with acceptable design standards and which meet the specific requirements of the County, and if required, those of the Florida Department of Transportation or the Federal Highway Administration, including creative utilization of roadsides and including plans for adjustment of utilities crossing the facility but specifically excluding the accommodation of utilities along and within the highway right-of-way for multi-lane rural limited access expressway type highways.

3.04 PRE-DESIGN ENGINEERING STUDIES AND DESIGN OF URBAN EXPRESSWAY:

This category of work is defined as the production of competently engineered highway plans which conform to acceptable design standards and which meet the specific requirements of the County, and if required, those of the Florida Department of Transportation or the Federal Highway Administration.

PBC Professional Qualification Work Category Definitions

It includes the location studies and reports, design studies and reports, preparation of complete construction plans for urban expressway projects.

Plans for urban expressway projects will include plans for adjustment of utilities crossing the facility but specifically excluding the accommodation of utilities along and within the highway right-of-way.

3.05 TRAFFIC OPERATIONS STUDIES:

This category of work includes studies of existing traffic problems within an urban area and determination of the most effective ways to improve traffic flow and safety, largely by the application of traffic engineering techniques and other corrective measures.

It includes:

- street and signal inventories
- intersection and crossing diagrams
- highway lighting information at high night accident locations
- analysis of:
 - accident reports
 - traffic counts
 - travel times
 - parking practices
 - laws and ordinances effecting transportation

This category of work is limited to generalized descriptions and schematic layouts of the proposed improvements including right-of-way requirements and specifically does not include the preparation of construction plans or the writing of specifications.

3.06 TRAFFIC OPERATIONS DESIGN:

This category of work includes the preparation of construction plans and/or specifications for the improvements proposed in category of work 3.05 above.

It includes design of improvements oriented to relieving major traffic problems including:

- signalization
- pavement marking
- signing
- lighting
- minor highway reconstruction
- determination of right-of-way requirements necessary to implement the proposed improvements

PBC Professional Qualification Work Category Definitions

3.07 TRAFFIC CONTROL SYSTEMS ANALYSIS, DESIGN AND IMPLEMENTATION:

This category of work involves the use of electrical engineering, electronics, engineering, computer science, and traffic engineering to analyze, design and implement Traffic Control System which provide an area wide coordinated approach to traffic control.

It includes system performance and cost analysis, system hardware and software design, development of management plans, supervision of system installation and operation, system testing and "de-bugging", system documentation, and the training of operating personnel.

PBC Professional Qualification Work Category Definitions

4. HIGHWAY DESIGN BRIDGES

4.01 MINOR BRIDGES DESIGN: (Pile Bent, Pedestal Pier, or comparable Foundation)

This category of work is defined as the production of competently engineered bridge plans which conform to acceptable design standards and which meet the specific requirements of the County, and if required, those of the Florida Department of Transportation or the Federal Highway Administration.

It includes preparation of construction plans for non-complex bridge structures generally using simple span reinforced, pre-stressed concrete, or steel with pile bent foundations or spread footings.

4.02 MAJOR BRIDGES DESIGN:

This category of work is defined as the production of competently engineered bridge plans which conform to acceptable design standards and which meet the specific requirements of the County, and, if required, those of the Florida Department of Transportation or the Federal Highway Administration.

This category specifically includes the preparation of construction plans for high level structures with underwater piers, complex interchange structures with curved girders or other major non-movable bridge structures.

4.03 MOVABLE SPAN BRIDGES DESIGN:

This category of work is defined as the production of competently engineered bridge plans which conform to acceptable design standards and which meet the specific requirements of the County, and, if required, those of the Florida Department of Transportation or the Federal Highway Administration, specifically relating to the preparation of Construction plans for bascule or other movable span bridges.

PBC Professional Qualification Work Category Definitions

5. TOPOGRAPHY

5.01 LAND SURVEYING:

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

5.02 ENGINEERING SURVEYING:

This category 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.

It includes:

- route surveys for transportation facilities
- topographic surveys to determine the relief of a particular tract of land
- hydrographic surveys to determine the shore and bank of bodies of water, and depths at particular points

5.03 GEODETIC SURVEYING:

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

It includes:

- traverse
- triangulation
- trilateration
- precise leveling
- astronomic direction finding

5.04 AERIAL PHOTOGRAPHY:

This category of work includes taking precise quality photographs from air camera station(s) which are suitable for subsequent photogrammetric mapping and planning studies.

PBC Professional Qualification Work Category Definitions

5.05 AERIAL PHOTOGRAMMETRY:

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

It includes derivation and production of topographic maps and surveys based on measurements and information obtained from aerial photographs.

5.06 REMOTE SENSING:

This category of work entails, basically, the acquisition of information about an object or phenomenon utilizing an information gathering device that does not have to come in contact with the object under investigation.

The data reduction phase of such work involves expertise in the interpretation and analysis of sensor records by individuals competent in one, or more, of the following disciplines:

- Civil Engineering (e.g. soil mechanics and hydrology)
- Engineering Geology
- Social Science
- several specialized areas of Biological Sciences, Geography and Urban and Regional Planning

5.07 CARTOGRAPHY:

This category 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. Such variations may be in black and white or multicolor.

Cartography invariably includes assembly, evaluation, selection, rejection and presentation of data.

PBC Professional Qualification Work Category Definitions

6. SOILS, FOUNDATION, AND MATERIAL TESTING

6.01 GEOLOGICAL AND GEOPHYSICAL STUDIES:

This category of work includes 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 and quantities of unknown or uncommon new foundation materials.

This category of work may involve large scale geological survey programs, utilizing outcroppings of basement materials, combined with drilling tasks and geophysical techniques.

6.02 BRIDGE FOUNDATION STUDIES:

This category of work includes 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 PILE FOUNDATION STUDIES:

This category of work encompasses alternatives or supplements to footing designs described in 6.02 above.

These involve many of the soil and rock sampling tasks required in all foundation studies but additionally they require:

- pile design
- manufacturing considerations
- driving and testing techniques
- special specification and/or contract payment provisions

6.04 HYDRAULIC AND HYDROLOGIC STUDIES:

This category of work includes large scale studies of drainage basins, stream diversions or alternate route analysis to optimize highway locations over bodies of water or marsh area where ground water would seriously affect subgrades and foundation conditions.

PBC Professional Qualification Work Category Definitions

6.05 SOIL TREATMENT:

This category of work includes special advisory problems where the use of economically available fill material depends upon the use of chemical stabilizers such as lime, cement or other commercial additives.

6.06 MATERIALS TESTING:

This category of work involves conducting tests in accordance with Department of Transportation approved specifications on:

- aggregate
- concrete (pipe, beams or posts products; cement; concrete additions including water and epoxies)
- bituminous material including testing of field mixes
- timber
- metals
- paints
- rubber
- soils
- clay
- masonry products

PBC Professional Qualification Work Category Definitions

7. ARCHITECTURAL

7.01-7.05 ARCHITECT:

This category of work is defined as the rendering of services in connection with the design and construction of new and modifications to existing structure or group of structures which have as their principal purpose human habitation or use, and the utilization of space within and surrounding such structures.

These services include:

- planning
- providing preliminary study designs, drawings, and specifications
- architectural supervision
- jobsite inspection
- administration of construction contracts

7.06 LANDSCAPE ARCHITECTURE:

This category of work is defined as the 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
- creative utilization of the corridor to provide a satisfactory mesh with adjacent lands

It includes work such as:

- investigation
- reconnaissance
- research
- site planning
- 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
 - other appurtenant features

PBC Professional Qualification Work Category Definitions

- detail 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.

7.07 THRESHOLD INSPECTION:

Must be certified, licensed, or registered under Florida Statutes Chapter 471 or 481 per Florida Statutes Section 553.79(5).

8. MECHANICAL ENGINEERING

8.01 WASTE WATER TREATMENT SYSTEMS

8.02 WASTE WATER COLLECTION SYSTEMS

8.03 WATER SUPPLY TREATMENT SYSTEMS

8.04 WATER DISTRIBUTION SYSTEMS

8.05 HEATING SYSTEMS

8.06 COOLING SYSTEMS

8.07 SPECIALIZED DESIGN:

This category of work is concerned with specialized design services which require judgment of engineering factors and/or preparation of engineering plans.

Individual firm qualification will be reviewed with respect to the project specifications under consideration prior to the negotiation of an agreement.

This category of work includes, but is not limited to, such specialized services as the design of:

- small sewage treatment plants
- small water supply systems
- irrigation systems, etc.

Professional engineering judgment is required.

PBC Professional Qualification Work Category Definitions

9. ELECTRICAL ENGINEERING

- 9.01 INSTITUTIONAL FACILITIES**
- 9.02 RECREATIONAL FACILITIES**
- 9.03 INDUSTRIAL FACILITIES**
- 9.04 RESIDENTIAL FACILITIES**
- 9.05 HIGHWAY LIGHTING**

10. STRUCTURAL ENGINEERING

- 10.01 INSTITUTIONAL**
- 10.02 RECREATIONAL**
- 10.03 INDUSTRIAL**
- 10.04 RESIDENTIAL**

11. OCEANOGRAPHY

- 11.01 OFFSHORE SAND STUDIES**
- 11.02 BEACH RESTORATION**
- 11.03 UNDERWATER INVESTIGATION**

PBC Professional Qualification Work Category Definitions

12. ENVIRONMENTAL ENGINEERING

12.01 AIR QUALITY INVESTIGATION & AIR POLLUTION CONTROL:

Work associated with air quality investigation consists of utilizing EPA/DEP approved test equipment and test methods or equivalent for the detection in the outdoor atmosphere of dust, fumes, mist, smoke, other particulate matter, vapor, gas, or odorous substances.

Air pollution control consists of the design of any equipment or facility intended to eliminate, prevent, reduce, or control the emission of specified air contaminants to the outdoor atmosphere such that federal, state and local air quality standards are met.

Acquisition of appropriate federal, state and local permits may be required.

12.02 ENVIRONMENTAL AUDIT/SITE INVESTIGATION:

An environmental audit is an assessment of the current status of a property's compliance with applicable federal, state, and local environmental requirements.

The work could consist of a Phase I and/or Phase II audit.

A Phase I audit is a preliminary review of records and documents together with a site visit and should indicate whether sufficient potential for environmental problems exists to warrant actual sampling and analysis. All habitable structures may be required to be tested for radon, asbestos, and lead paint by a qualified professional.

A Phase II audit typically follows a Phase I audit and includes sampling the soil and groundwater in areas where contamination is suspected.

12.03 SOIL & GROUNDWATER CONTAMINATION ASSESSMENT & REMEDIATION SYSTEM DESIGN

Work associated with contamination assessment involves data collection, review of pertinent historical information and site hydrogeological characterization to determine the nature and extent of the soil and groundwater contamination. This may include analysis of soil borings, an aquifer pump test, installation and sampling of groundwater monitoring wells, and review of current and historical aerial photos.

Remediation system design consists of technically feasible and cost effective soil and/or groundwater contamination cleanup designs that prevent or minimize the release or migration of hazardous substances.

PBC Professional Qualification Work Category Definitions

Remediation of contaminated groundwater may include design of:

- groundwater recovery
- piping
- treatment
- effluent disposal system

Remediation of contaminated soil may include the design of:

- soil vapor extraction and treatment system
- other technology for soil remediation

Groundwater monitoring is required to evaluate the effectiveness of the remediation system. Acquisition of appropriate federal, state and local permits may be required.

12.04 SOLID/HAZARDOUS WASTE MANAGEMENT

Hazardous Waste Management

The scope of work for this category involves the systematic control and/or design of a collection, source separation, storage, processing, treatment, recovery, transportation, or disposal system for hazardous waste.

Acquisition of appropriate federal, state and local permits may be required.

Solid Waste Management

This category of work includes the systematic administration and/or design of activities which provide for the collection, source separation, storage, transportation, transfer, processing, treatment, and disposal of solid waste.

Acquisition of appropriate federal, state, and local permits may be required.

12.05 INDUSTRIAL WASTE MANAGEMENT

This category of work involves the design of any collection, treatment, or disposal system which modifies the solid, semisolid, or liquid waste generated by a manufacturing or processing plant such that the effluent discharge will meet state and federal water quality standards and the waste sludge generated is environmentally acceptable for disposal.

Acquisition of appropriate federal, state and local permits may be required.

PBC Professional Qualification Work Category Definitions

12.06 WATER RESOURCE EVALUATION AND DEVELOPMENT

This category of work involves the evaluation and development of surface and groundwater reservoirs in order to evaluate their potential for exploitation as a source of potable water.

Included in this category are studies performed to promote conservation and minimize pollution of the potable water supply.

Specific examples of work include:

- groundwater modeling and mapping
- aquifer pump test design and analysis
- water use permitting
- preparation of groundwater and surface water monitoring plans

12.07 WATER AND WASTEWATER TREATMENT PROCESS DESIGN

Work associated with water treatment includes the design of the collection, treatment, storage and distribution of potable water from source to consumer. The treatment system should be designed to produce potable water that meets all state and federal drinking water quality standards.

Acquisition of appropriate federal, state and local permits may be required.

Work associated with domestic wastewater treatment includes the design of the collection, treatment, and the effluent reuse or disposal system. The treatment system should be designed to produce an effluent that meets appropriate state and federal water quality standards and the waste sludge generated should be environmentally acceptable for disposal.

Acquisition of appropriate federal, state and local permits may be required.

13. OTHER

This category is reserved for specific requests by Palm Beach County Departments and should only be used for services that fall under the CCNA Statute and are not included in any other categories.