

QUALIFICATIONS FOR THE PROFESSIONAL SERVICES FOR A:

NEW ORANGE COUNTY EAC



Bay Transit Middle Peninsula Regional Transit Facility



Haywood Community College's Creative Arts Building

Innovative Design
850 W. Morgan Street Raleigh, NC 27603 919-832-6303 Fax 919-832-3339



Included in this section are:

1. Responder's Certification Form
2. Non-Collusion Affidavit
3. E-Verify Affidavit



RESPONDER'S CERTIFICATION FORM

I have carefully examined the Request for Qualifications, the sample Agreement for Design Consultant Services and any other documents accompanying or made a part of this Request for Qualification.

I hereby propose to furnish the professional design consultant services for Orange County in accordance with the instructions, terms, conditions, and requirements incorporated in this Request for Qualification. I certify that all information contained in this response is truthful to the best of my knowledge and belief. I further certify that I am duly authorized to submit this response on behalf of the firm as its act and deed and that the firm is ready, willing and able to perform if awarded the contract.

NAME OF FIRM: Innovative Design Inc.
BY: (printed name) Michael H. Nicklas
SIGNATURE: 
MAILING ADDRESS: 850 W. Morgan St.
CITY/STATE/ZIP CODE: Raleigh NC 27603
TELEPHONE NUMBER: 919-832-6303
FAX NUMBER: 919-832-3339

ACKNOWLEDGEMENT OF ADDENDA

Responder hereby acknowledges receipt of all Addenda through and including:

Addendum No.	Date	Acknowledgement
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

NON-COLLUSION AFFIDAVIT

State of North Carolina
County of Orange

Proposal Request No. 5212

Michael H. Nicklas, being first duly sworn, deposes and says that:

1. He/She is the President of Innovative Design Inc., the proposer that has submitted the attached proposal;
2. He/She is fully informed respecting the preparation and contents of the attached proposal and of all pertinent circumstances respecting such proposal;
3. Such proposal is genuine and is not a collusive or sham proposal;
4. Neither the said proposer nor any of its officers, partners, Owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other proposer firm or Person to submit a collusive or sham proposal in connection with the contract for which the attached proposal has been submitted or to refrain from proposing in connection with such contract, or has in any manner, directly or indirectly sought by agreement or collusion of communication or conference with any other proposer, firm or person to fix the price or prices in the attached proposal or of any other proposers, or to fix any overhead, profit or cost element of the proposal price of the proposal of any other proposer or to secure through collusion, conspiracy, connivance or unlawful agreement any advantage against the County of Orange or any person interested in the proposed contract; and
5. The price or prices quoted in the attached proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the proposer or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

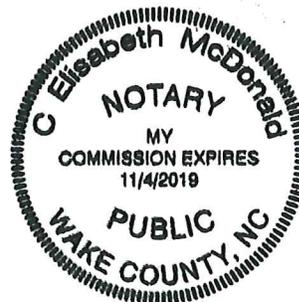
Michael Nicklas
 Signature
President
 Title

Subscribed and Sworn to Before Me,

This 24 day of August, 2015

Notary Public Elisabeth McDonald

My Commission Expires: 11/4/2019



AFFIDAVIT

ORANGE COUNTY

I, Michael H. Nicklas (the individual attesting below), being duly authorized by and on behalf of Innovative Design Inc. (the entity bidding on project hereinafter "Employer") after first being duly sworn hereby swears or affirms as follows:

1. Employer understands that E-Verify is the federal E-Verify program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law in accordance with NCGS §64-25(5).

2. Employer understands that Employers Must Use E-Verify. Each employer, after hiring an employee to work in the United States, shall verify the work authorization of the employee through E-Verify in accordance with NCGS§64-26(a).

3. Employer is a person, business entity, or other organization that transacts business in this State and that employs 25 or more employees in this State. (mark Yes or No)

a. YES , or

b. NO ✓

4. Employer's subcontractors comply with E-Verify, and if Employer is the winning bidder on this project Employer will ensure compliance with E-Verify by any subcontractors subsequently hired by Employer.

This day of , 2015.

Michael H. Nicklas
Signature of Affiant

Print or Type Name: Michael H. Nicklas

State of North Carolina Orange County

Signed and sworn to (or affirmed) before me, this the 24

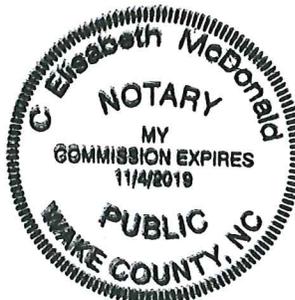
day of August, 2015.

My Commission Expires:

11/4/2019 C. Elisabeth McDonald

Notary Public

(Affix Official/Notarial Seal)



- **Firm Name:** Innovative Design, Inc.
- **Address:** 850 W Morgan St, Raleigh, NC 27603
- **Phone:** (919) 832-6303
- **Fax:** (919) 832-3339
- **Contact:** Michael H. Nicklas
- **Email:** nicklas@innovativedesign.net
- **Established:** 1977
- **Former Firm Name:** Has not changed since establishment
- **Principals of the Firm:**
 - * Michael H. Nicklas, FAIA NC
 - * Gary Bailey, AIA NC, NV
 - * Louis Gerics, AIA NC
 - * Brian Baewon Koh, AIA NY, CA
- **Types of Services**
 - * Architectural Design
 - * Master Plan
 - * Feasibility Study
 - * Programming
 - * Construction Administration
 - * Sustainable Design Consulting
 - * Daylighting and Energy Modeling
 - * Design Guidelines
 - * Solar Development



Innovative Design is pleased to present our Statement of Qualifications to provide planning services for Orange County's **Environment and Agriculture Center**.

In addressing your specific needs, we bring a team that possesses unique attributes including:

- Extensive experience in **local government facilities**.
- Experience in **site studies, programming, planning charrettes and public meetings with stakeholders** involving multiple stakeholder groups. One our most recent projects engaged 162 stakeholders participating in the programming and the other involved 1,165 participants and 65 meetings.
- Experience in **CM at Risk projects**
- Assisting a community college and county commissioners in **recruiting local firms to be engaged in construction**.
- A **fully-integrated sustainable design process** with extensive use of **energy and daylighting modeling** that, because it is initiated very early in planning and design, has resulted in significant impacts on the ultimate energy consumption as well as the initial construction cost savings. Our proposed design team has been working together on over ninety percent of Innovative Design's projects during the past decade.
- Our team's **commitment to sustainability** can be no better demonstrated than by the fact that our clients annually save over \$9 million in energy costs and have reduced their peak energy consumption by the equivalent of a 127 MW power plant. There is **no other design team in North Carolina** that has its PME engineers, civil engineer, landscape architect and architect **ALL committed to implementing the AIA's 2030 Challenge Pledge**.
- **100% of our team are small business enterprises**. Our MEP engineers and civil engineers are **women-owned businesses**.

I hereby confirm that the elements of the RFQ have been reviewed and understood.

We hope to have the opportunity to meet with you to discuss our qualifications and look forward to the opportunity to work with the Orange County.

Sincerely,

Mike Nicklas, FAIA
President and Principal-in-Charge
nicklas@innovativedesign.net



STATEMENT OF UNDERSTANDING OF THE SCOPE

The following are our key understandings of the scope of work/services of your project:

- Current, old re-purposed retail facility does not meet your space needs.
- New facility will house multiple agencies and departments, thus **functional relationships among departments are critical** as well as common shared spaces to save cost. Extensive programming working with multiple departments will be critical.
- Services include programming and typical design phases plus construction administration.
- Services also include cost estimate, FF&E, technology and schedule, 3D rendering for marketing and public meetings.
- You may engage a CM@R firm and we will work with the firm throughout the design and construction phases.

EXPEIENCE WORKING WITH FEDERAL, STATE AND LOCAL AGENCIES

We anticipate working with the following agencies on your project:

- NC DENR for stormwater management, tree protection, and other environmental issues
- NC DOT for road widening, turn lane, or traffic light if required
- Orange County Planning and Inspections Department for building code review, zoning ordinance review, and inspections
- Orange County Fire Marshal Division for fire code review and inspection

Most of our recent projects are government and public school projects that require extensive agency reviews such as NC DPI, DOI, DENR, and NC DOT as well as local permitting agencies. Our routine practice includes **contacting reviewing agencies at Schematic Design phase to receive their inputs as well as introducing the project to them.**





ORANGE COUNTY
NORTH CAROLINA



Innovative Design, Inc.

Architect and Space Planning

Mike Nicklas, FAIA – Principal-in-Charge

Louis Gerics, AIA – Project Manager/Architect

Brian Baewon Koh, AIA, LEED AP – Project Manager/Architect/LEED

Pascale Rosemain, AAIA - Design and Drafting

Ratnalee Patil, AAIA - Building and Energy Renewable Energy Systems Analyst

Paul Meyer, AAIA – Design and Drafting; Energy and Daylighting Analyst



Elm Engineering, Inc.

FPME Engineer

Kim Reitterer, PE, LEED AP

William Aldridge, PE

Derk Beutler, CPD



Lysaght & Associates, PA

Structural Engineer

Chuck Lysaght, PE

Jim Struffolino, PE



Mulford Cost Management

Cost Estimating

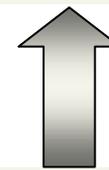
Stewart Mulford



Landis PLLC

**Environmental Site Assessment/
Landscape Architect**

Barrett Kays, PhD, FASLA



B&F Consulting, Inc.

Civil Engineer

Amber Farrelly, PE

Russ Briggs, PE

All project team members listed above are committed to the project through project completion.



Architect**Innovative Design, Inc.**

850 W. Morgan St.

Raleigh, NC 27603

Phone: 919-832-6303

Principal-in-Charge/Contact:

Mike Nicklas, FAIA

FPME Engineer**Elm Engineering, Inc.**

900 Center Park Dr., Suite E

Charlotte, NC 28217-9401

Phone: 704-335-0396

Principal-in-Charge/Contact:

Kim Reitterer, PE

Structural Engineer**Lysaght & Associates, PA**

120 St Mary's St.

Raleigh, NC 27605

Phone: 919-833-0495

Principal-in-Charge/Contact:

Chuck Lysaght, PE; President

or

Jim Struffolino, PE; Principal

Civil Engineer**B&F Consulting, Inc.**

103 Orilla Court

Cary, NC 27513

Phone: 919-389-8102

Principal-in-Charge/Contact:

Amber Farrelly, PE

**Landscape Architect / Environmental
Site Assessment**

Landis, PLLC

3908 Bentley Brook Dr.

Raleigh, NC 27612

Phone: 919-787-1617

Principal-in-Charge/Contact:

Dr. Barrett Kays, PhD, FASLA

Cost Estimator

Mulford Cost Management

1017 Ashes Drive, Suite 104

Wilmington, NC 28405

Phone: 910-509-9447

Principal-in-Charge/Contact:

Stewart Mulford

Small Business & WMBE:

100% of the firms on our team are small business enterprises.

Elm Engineering and B+F Consulting are woman-owned businesses.

Financial Capacity:

We carry liability insurance for \$1M per occurrence with a \$2M aggregate coverage.

Litigations & Claims:

Innovative Design Firm License #: 50204

No Owner has filed claims against our firm or individuals in our firm.

No architect employed by our firm has ever had their license revoked or suspended.



Architect and Space Planning: Innovative Design (Small Business Enterprise)

CARING. COMMITTED. PASSIONATE.

To Innovative Design, quality of design means that a building fits its purpose; that it is efficient, coherent, flexible, and responsive to context; and that it meets your aesthetics and uplifts your spirit.

To Innovative Design, client satisfaction means meeting these standards of quality design, while providing you a healthy and environmentally-sound facility. A facility that is truly sustainable for our environment and for you.



- **Established in 1977 in Raleigh**
- Focused on addressing each **client's unique programmatic requirements**
- **Sustainable design** having been our core philosophy for almost **forty years** of a sustained, award winning emphasis on energy-efficient design. We have been a leader, not a follower.
- Using **integrated design process** to ensure Orange County's program needs are met and that they are committed to their project's long term performance standards.
- Creating solutions to the **flexible and collaborative space planning** requirements demanded by a multi-disciplinary facility.
- Generating an overall project budget and marketing material to allow the Orange County to be prepared to advance the project into Design and Construction.

DESIGNING HEALTHY, ENERGY-EFFICIENT, ENVIRONMENTALLY-SOUND FACILITIES

- Clients' energy bills decreased by over \$139 million, \$9.1 million annually
- Clients have saved over 295 million gallons of water to date; 36 million gallons annually
- Clients' save over 1.6 billion kWh, cumulative peak energy savings exceed 127 MW
- Clients' CO₂ emissions decreased by 1,095,000 tons



Innovative Design and most of our team are members of the USGBC and are committed to the Architecture 2030 Challenge to produce carbon neutral buildings by 2030 (www.architecture2030.org).



Michael H. Nicklas, FAIA
President and Principal-in-Charge

Mr. Nicklas has been President of Innovative Design since 1977.
He will be the Principal-in-Charge of your project.



While serving as Chair of NCSEA, twice Chair of ASES and President of ISES, Mr. Nicklas led many of these societies' most significant efforts – from creating solar tax credits in the NC Legislature to having language supportive of energy-efficiency and solar energy included within the United Nations Earth Summit's Agenda 21. He has presented lectures and organized conferences around the globe to educate and encourage sustainable energy.

Experience: **Innovative Design, Inc., 1977 – Present**

Education: **North Carolina State University**
Bachelor of Architecture

Licenses: **NC (2950) & NV**

Professional Societies: **American Institute of Architects**
American Solar Energy Society
Past Chair (twice)
Past Director of Passive Architecture and Construction Division
International Solar Energy Society
Past President and Vice-President
Past Board of Directors
North Carolina Solar Energy Association
Past Chair and Director

Appointments: **NC Energy Policy Council 2000-2004**
Advisory Board of Kenan-Flagler Business School, 1999-2003
United Nations Development Programme, Advisory Committee
Wake County Citizen's Energy Advisory Commission, Chairman
Triangle J Council of Governments Energy Committee
North Carolina Solar Center, Chairman
US Office of Technology Assessment, Renewable Energy Advisory Board
AIA Committee on the Environment, Steering Committee
NC Governor's Task Force on Solar Law
Solar Advisory Committee, North Carolina Department of Public Inst.

Awards: **American Institute of Architects Fellow, 2001**
American Solar Energy Society Fellow, 2000
American Solar Energy Society
Charles Greeley Abbot Award for Contribution to Advancement of Solar Energy, 1996
International Solar Energy Society
Highest Award for Service to Society, 1993
American Solar Energy Society
Special Award for Contribution to Society, 1994



Brian Baewon Koh, AIA; LEED AP
Principal, Vice-President, and Senior Project Manager

Mr. Koh has been with Innovative Design since 2004 and eight years in his current position.

He will be the co-project manager and LEED administrator for your project.



Mr. Koh is the only USGBC Faculty in North Carolina with expertise in LEED. He has given lectures and speeches over 80 times for more than 4800 attendees around the country teaching sustainable architecture and best practices.

Experience: **Innovative Design, Inc., 2004 – Present**
Collins+Scoville Architects, P.C., Albany, NY; 1998 – 2004
Space Design Architecture and Interior, Seoul, Korea; 1996 – 1997
Sunjin Engineering & Architecture, Seoul, Korea; 1993 – 1996

Education: **Rensselaer Polytechnic Institute**
Master of Architecture
Hanyang University – Seoul, Korea
Bachelor of Architectural Engineering

Licenses: **CA & NY**

Professional Societies: **American Institute of Architects**
US Green Building Council – NC Chapter
Inaugural Board of Directors - 2013
Vice-Chair - 2014
Chairman - 2015
US Green Building Council – NC Triangle Chapter
Board of Directors Chair—2010
Korea Green Building Council
Sustainable Buildings Industry Council
(Circuit Rider)
International Solar Energy Society
American Solar Energy Society

Certifications: **LEED Accredited Professional**
USGBC LEED Faculty™

Appointments: **Town of Cary Steering Committee for Community Plan**
Durham Technical Community College Sustainability Advisory Board
Director, Global Collaboration Committee, Korea Green Building Council
Founding Steering Committee of NC Business Council
Founding Steering Committee of Better Environmental Education Now



Louis J. Gerics, AIA

Principal, Vice-President and Senior Project Manager

Mr. Gerics has been with Innovative Design since 1984 and eight years in his current position.

He will be the co-project manager for your project.



Experience: Innovative Design, Inc., 1984 – Present

Education: North Carolina State University
Bachelor Environmental Design, Architecture

Licenses: NC (6766)

Professional Societies: American Institute of Architects
American Solar Energy Society
National and Local Organizing Committees - Solar 96
International Solar Energy Society
North Carolina Solar Energy Association
Past Chair (twice) and Secretary
Environmental Federation of NC (NC EarthShare)
Founding Board of Directors
US Green Building Council

Pascale Rosemain-Trebeau, DPLG

Intern Architect

Pascale Rosemain-Trebeau has been with Innovative Design for a total of nine years.

She will be a drafter and designer for your project.



Ratnalee Patil, AAIA

Renewable Energy Analyst

Ms. Patil has been with Innovative Design for five years and five years in her current position.

She will be the energy analyst for your project.



Paul Meyer

Intern Architect and Energy Analyst

Mr. Meyer has been with innovative Design for four years and four years in his current position.

He will be a drafter, renderer and daylighting & energy analyst for your project.



6. CONSTRUCTION ADMINISTRATION DELIVERY MODEL

Our Construction Administration Services includes **not only AIA Standard services, but the following exceptional services:**

- The Project Manager who leads the design phases will perform all Construction Administration tasks. **Construction Administration will not be handed off to a construction manager.**
- The **Pre-Construction meeting covers more than typical items**, such as, long-lead items, special construction measures for which contractors need to pay special attention, indoor air quality control during construction, energy efficient measures, LEED process and proper paperwork if LEED certification is required, etc.
- We have a tool called a “**CA Issue Log**” that keeps track of open issues, RFIs, Submittals, Change Orders, color selections, etc. This tool is shared with your representative to address issues in a timely and efficient manner.
- We issue **field observation reports within forty-eight hours** of the site visit.
- With our proximity to your site, the PM will visit the site promptly upon receipt of urgent calls from the contractor.
- We utilize **digital photographs** to document deficiencies and coordination items on the field report as well as punchlist for clear communication.
- We use FaceTime or other video-call services with the contractor to communicate about construction issues occurring on site.
- We deliver not only as-built drawings but also all other construction administration documents in digital format.

Isaac Dicks on ES Construction Administration									
SUBMITTAL Log									
August 27, 2015									
Item #	Description	Section No.	Received	Reviewed by	To consultant	From consultant	Returned	Status	Remark
SUB-031.R1	Storefront & Window Combined	08-43-13	12/30/2014	ID/LA			12/30/2014	As corrected	Need sample for lever. Window 34 is alum or HM?
SUB-044	Storm Drainage Water Containment and Reuse Structure sample	33-49-33	2/19/2014	B+F/ID					Did this get approved as part of Sub-022?
SUB -060.R4	Rainwater collection - WT-1 Tank change	22-32-00	8/18/2015	E Im	8/18/2015				
SUB-102	Projection Screen Sample	11-52-13	5/23/2014	ID	n/a	n/a			Gain 0.6 Grey or 1.3 White?
SUB-103.R3	Metal roof panels	07-41-13	3/16/2015	ID	n/a	n/a			Pending on DMI's detail and mock-up
SUB-104.R1	Metal wall & roof panels resubmission	07-42-13	6/23/2014	ID	n/a	n/a	8/7/2014	Resubmit	
SUB-109	Electric Power and Monitoring Control	26-09-13	6/24/2014	E Im	7/1/2014	7/15/2014	7/24/2014	Resubmit	
SUB-112.R1	Panelboard resubmission	26-24-16	5/12/2015	E Im	5/12/2015				
SUB-120.R2	Cubicle re-resubmit	10-21-23	10/16/2014	ID	n/a	n/a	12/11/2014	Resubmit	
SUB-123	Appliances	11-31-00	7/16/2014	ID/E Im	n/a	n/a	8/5/2014	Resubmit	Due to UL rating.
SUB-140	Athletic equipment	11-68-23	9/29/2014	ID	n/a	n/a	12/11/2014	Resubmit	Shop drawings missing.
SUB-142	Visual Display Boards	10-11-01	10/6/2014	ID	n/a	n/a	12/11/2014	Resubmit	Compare to RFI-020.
SUB-143.R1	Interior Lighting Resubmission	26-51-00	2/2/2015	ID/E Im	2/4/2015	3/23/2015	3/23/2015	Resubmit	Type A: swivel for sloped ceiling. Confirm in resubmission.
SUB-143.R4	Interior Lighting - Open Items consolidated	26-51-00	6/10/2015	ID/E Im	6/10/2015				

Example: CA Issue Log—Submittals



7.

ASSISTING LOCAL ECONOMY

When we worked on the Haywood Community College Creative Arts Building, the County and the College asked for assistance in utilizing local contractors and suppliers as much as possible. Although there are bid law constraints, we completed the following activities to boost the local economy and will do similarly for Orange County:

- **Specified local materials** (i.e. local river stone) as long as desired quality is achieved.
- **Hosted a project introduction meeting** during the CD phase. Working with the Workforce and Economic Development office of the College; we invited local contractors, subcontractors, material manufacturers and suppliers to the meeting and gave them an opportunity to get to know the project and prepare for the bid in advance.
- **Collected a list of local companies and called them during the bid**, informing them the bid was open. We shared the General Contractor's list with them.
- Incorporated design features into the building that the Community College degree programs could utilize as a **job training source**—such as Photovoltaics, Masonry in Building Technologies, etc.
- During the pay application review, we review the local sales tax documents carefully.

8.

CURRENT ONGOING PROJECTS

Innovative Design can accommodate your schedule. We have adequate experienced staff for several concurrent projects and currently several Construction Administration projects are ongoing, as listed below. The Orange County EAC is ideal timing for Innovative Design.

Our team will be able to begin work immediately upon notice to proceed.

Our team, except Elm Engineering, is located within Triangle area and trips to the project site and the county office will be no problem. Elm Engineering has worked on many projects in the Triangle with Innovative Design and has had no issue in making visits.

Project	Start Date	Expected Completion Date	Total Project Cost
Isaac Dickson Elementary School	Aug. 2012	Jan. 2016 (under construction)	\$20M
Watauga County Medic Base 3	Aug. 2014	Jul. 2016 (under bid)	\$450K
UNC-Pembroke Chavis University Center Canopy	Mar. 2015	Feb. 2016 (under CD)	\$175K



9.

LIST OF PAST SIMILAR PROJECTS

We do not have direct experience in County Agriculture and Environment Service Center projects. However, we see the similarity in the following experiences we have:

- In-depth, organizational planning involving **multi-agencies and public use spaces**
- Efficient **office** design to promote **productivity and occupant health**
- **Environmentally conscious** design and construction
- **Multiple stakeholders** coordination
- **Community engagement** through public hearing, presentations, and marketing materials.
- Evaluating old building(s) to recommend **renovation or new** building options.

Considering the above similarities, the following five (5) public projects are presented on the next pages.

- A. Bay Transit Gloucester Facility
- B. Watauga County Medic Base 3
- C. Creative Arts Building at Haywood Community College
- D. Isaac Dickson Elementary School
- E. NC DOT Hwy-421 Northwest Visitor Center



9.A. BAY TRANSIT GLOUCESTER FACILITY

Our responsibilities similar to your scope were:

- Space programming
- Multiple meetings with stakeholders such as Board of Directors and neighboring residents
- Design charrette and survey among occupants
- Public presentations
- Rendering and educational materials for the owner

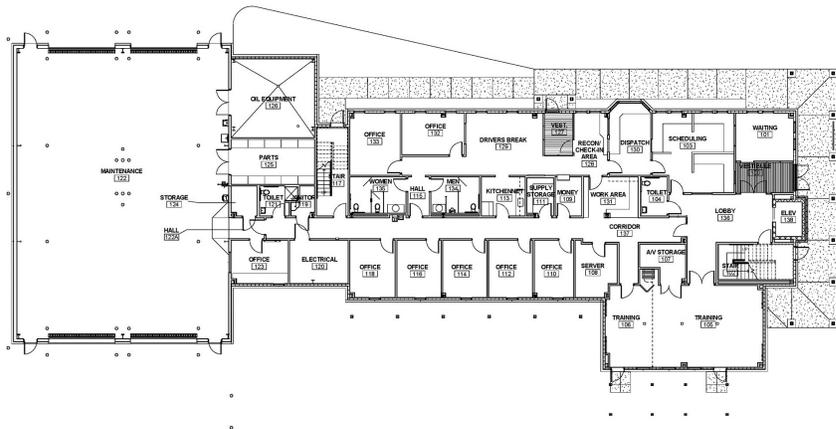
Program spaces similar to your needs include:

- Offices for multiple tenants
- Public entrance and waiting area
- Training room and conference rooms
- IT & security coordination

Key green features include:

- **LEED Gold Certification** (certification in process)
- Daylighting
- Geothermal heat pumps for cooling and heating
- Photovoltaics (PV)
- Energy efficient building shell with SIPS panel walls
- Waste-oil boiler for Maintenance Shop heating
- Heat recovery ventilation
- Efficient lighting and sensor & timer based controls
- Low-flow water fixtures
- Constructed wetland and bioswales
- Sub-metering for each zone
- Green monitoring and interpretive signs

Location	Gloucester County, VA
Built	March 2015
Owner	Bay Transit Division of Bay Aging Larry Kight 804-824-2542 lkight@bayaging.org
Project Manager	Brian Baewon Koh
Project Size	17,2850 SF
Original Contract Amount	\$4,723,417
No. of Change Orders	9
Total Change Order Amount	\$216,019 (\$172,363 was from unforeseen conditions)
Total Project Cost	\$4,939,436



9.B. WATAUGA COUNTY MEDIC BASE 3

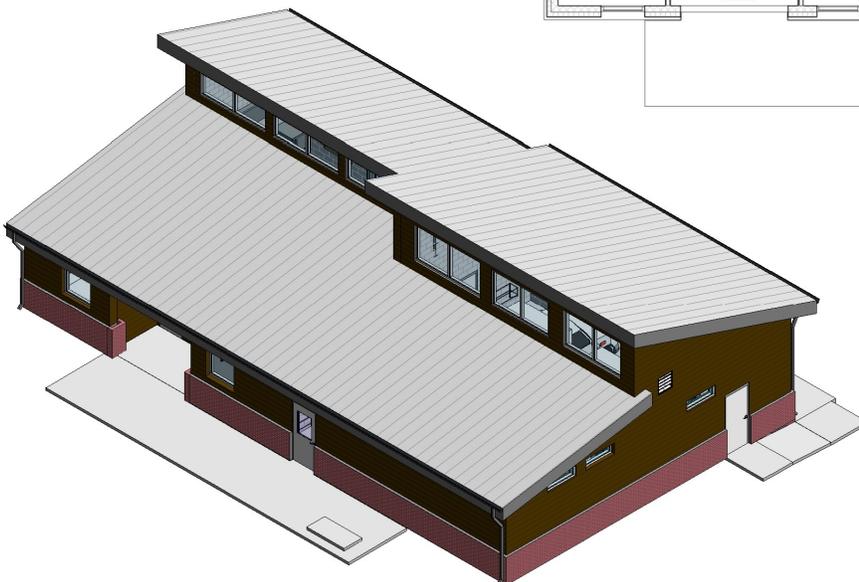
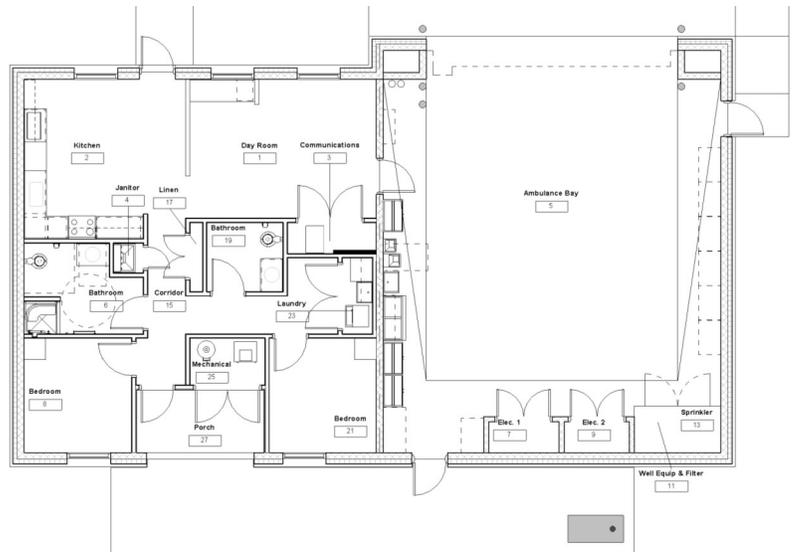
Our responsibilities similar to your scope were:

- Space programming
- Conceptual design and preliminary cost estimate
- Public presentation to the county commissioners

Key green features include:

- Energy efficient building shell
- Daylighting
- Passive solar design
- Efficient lighting and controls
- Low-flow water fixtures
- High efficiency HVAC
- **87% Energy Reduction**

Location	Vilas, NC
Built	2016
Owner	Watauga County Commissioners Robert Marsh 828-264-1430 Robert.Marsh@watgov.org
Project Manager	Louis Gerics
Project Size	2,631 SF
Project Budget	\$450,000 (currently under bid so no change order)



9.C. HAYWOOD COMMUNITY COLLEGE CREATIVE ARTS BUILDING

Responsibilities similar to your scope included:

- Advanced Planning
- Master plan study
- Extensive programming meetings, survey, interviews, workshops and design charrette with 165 participants during Advanced Planning
- Site analysis with solar access, building massing, orientations, and traffic study
- Preliminary cost estimate and LCCA using energy modeling tools

Rendering and presentation materials for the Owner Program spaces similar to your needs:

- Flexible teaching (training) spaces in various sizes.
- Offices

For no additional design fee, the building and site achieved:

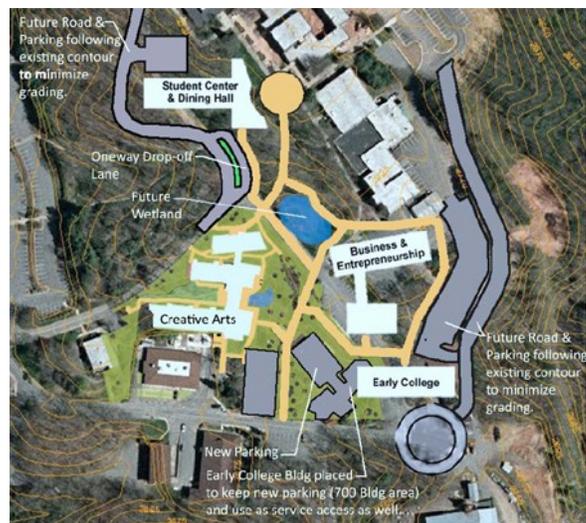
- **LEED Platinum design and an 82% reduction in energy consumption below national average**
- Water consumption 74% lower than SB 668 goals
- Final cost of \$8.8M; budget was \$9.1M.

Key green features include:

- Daylighting in all classrooms and studios
- Passive ventilation during cooling seasons
- Photovoltaics for on-site power generation
- Constructed wetlands for on-site stormwater runoff detention and treatment
- Solar domestic hot water
- Solar thermal radiant floor heating and absorption cooling systems
- Rainwater for toilet flushing and cooling towers
- Native planting and xeriscaping
- Use of regional wood and stone building materials
- Internet based energy monitoring system



Location	Clyde, NC
Built	March 2013
Owner	Haywood Community College Dr. Rose Johnson, PhD Former President Haywood Community College 828-550-2051 mtnhiker2@yahoo.com
Project Manager	Brian Baewon Koh
Project Size	41,322 SF
Original Contract Amount	\$8,385,286
No. of Change Orders	15
Total Change Order Amount	\$452,337
(A/E Errors & Omissions were \$10,860)	
Total Project Cost	\$8,810,623



9.D. ISAAC DICKSON ELEMENTARY SCHOOL

Responsibilities similar to your Phase I were:

- Evaluating old building renovation & addition vs. new building options
- Site study considering 1-story vs. 2-story options
- Programming and design charrette with many stakeholders and community — 65 meetings with 1,165 participants
- Preliminary cost estimate at conceptual design phase
- Rendering and presentation materials for the Owner

Programmed spaces similar to your needs include:

- Large bay spaces such as gymnasium and cafeteria
- Administrative offices
- Outdoor community spaces



Key green features include:

- Daylighting
- Energy efficient building shell
- High-efficiency lighting
- Geothermal HVAC system
- Rainwater cistern and low flow plumbing fixtures
- 600 kW PV system — the design team facilitated solar developer financing and installation of the system
- Solar hot water system
- Low VOC paint and finishes
- Recycled content and local materials
- Waste reduction specification
- Stormwater management
- Constructed wetland
- **Designed to LEED Platinum standards and Net Zero energy consumption**

Location	Asheville, NC
Built	2015
Owner	Asheville City Schools Charlie Glazener 828-350-6120 Charlie.Glazener@asheville.k12.nc.us
Project Manager	Brian Baewon Koh
Project Size	75,080 SF
Original Contract Amount	\$18,257,285 (Still under construction)

The design team is enhancing the 'experiential learning' mission of the school by highlighting the environmental features of the school.



9.E. NC DOT HWY-421 VISITOR CENTER



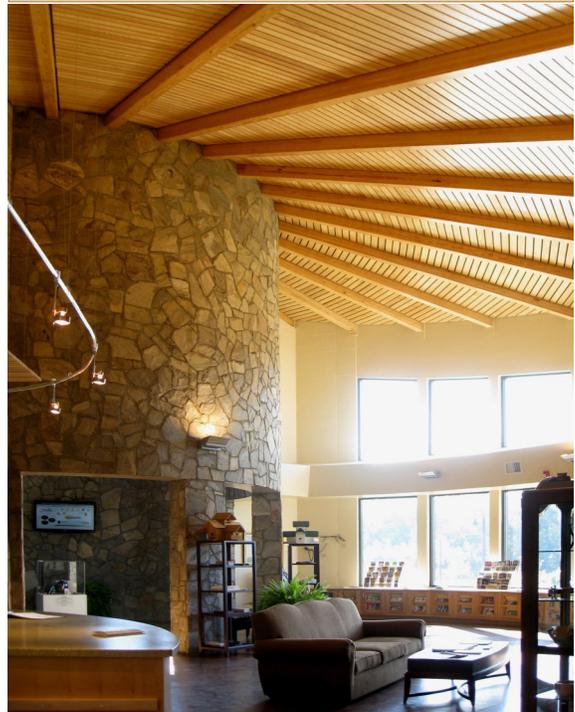
The Visitor Center serves as both a tourism center for Western North Carolina and a highway rest area. To best represent the region, the Visitor Center promotes sustainable land development, energy efficient and sustainable construction, and healthy outdoor recreation – all while providing direct contact with natural site features.

Spaces include a reception desk, literature display, office, workroom, break room, storage, a vending area and restroom facilities.

Key integrated green design features include:

- A 26,000 gallon rainwater harvesting system for toilet flushing that saves over 300,000 gallons per year;
- Internet-based green systems monitoring display for public and in-house use: (<http://ncdot.technology-view.com/wilkes>);
- Xeriscaped landscape with native vegetation;
- Bioswale and bio-retention ponds for full treatment of all parking runoff (including chemical runoff from trucks);
- Construction and post-occupancy indoor air quality management;
- A greenway trail; and
- Total energy use reduction of 68% compared to similar rest stops.

Location	N. Wilkesboro, NC
Built	2009
Owner	NC Dept. of Transportation Jennifer Pitts Project Manager 919.733.2920 jpitts@ncdot.gov
Project Manager	Brian Baewon Koh
Project Size	11,400 SF
Project Cost	\$3,551,485



FPME Engineer: Elm Engineering, Inc.
(Woman Owned, Small Business)



Elm has been Innovative Design's PME consultant for multiple projects over **ten years**.

Elm Engineering, Inc. is an engineering firm with offices in Durham and Charlotte and they are an original signatory to the Architecture 2030 Challenge to have all of their buildings be carbon neutral by 2030; a member of the U.S. Green Building Council; and an Energy Star Partner. Elm provides **HVAC, ELECTRICAL, PLUMBING, FIRE PROTECTION, TELECOMMUNICATIONS, SUSTAINABLE DESIGN and COMMISSIONING**

Kim Reitterer, PE, LEED AP

President, Electrical Engineer

Kim Reitterer, PE, LEED AP founded Elm Engineering eleven years ago and is Elm's President and majority owner.



Experience: 30 years

Education: B.S. Electrical Engineering, The Johns Hopkins University

Registrations: NC, SC, MD, TN, IA, VA, KY, MA, FL

Bill Aldridge, PE, CEA, QCxP

Principal and Mechanical Engineering Department Manager

Experience: 18 Years

Education: B.S. Mechanical Engineering, University of North Carolina at Charlotte

Registrations: NC, SC & VA, MA, FL, TX



Derk Beutler, FPET, CPD, ARCSA AP

Principal and Plumbing & Fire Protection Department Manager

Experience: 30 Years

Education: Design Engineering, South Broward Community College
 Fire Protection Technologies, Central Piedmont Community College

Registrations: NC, Fire Sprinkler Contractor



Civil Engineer: B&F Consulting, Inc.
(Woman Owned, Small Business)



B&F has been Innovative Design's civil engineering consultant for multiple projects over the past **eleven years**.

B&F Consulting is a small, woman-owned civil engineering firm located in the Triangle. B&F Consulting strives to create innovative solutions for clients that will keep construction costs to a minimum while achieving **sustainable site development**.

B&F Consulting provides services associated with **general site work, grading plans, utility development, erosion control, roadway design, land planning, and stormwater retention/routing**. Their experience totals over thirty years in North Carolina and they are extremely familiar with the State agencies such as **DENR, DOT and Orange County** and the procedures that will help ensure a speedy review and permitting process.

Amber Farrelly, P.E., M.B.A

President

Ms. Farrelly will be the civil engineer for your project. She is registered in NC, GA, KY, and VA.

Experience: 18 years

Education: **North Carolina State University**
 Masters of Business Administration

Case Western Reserve University

Bachelor of Science, Civil/Environmental Engineering, Magna cum Laude

Registration: NC, GA, KY, VA

Russell Briggs, P.E.

Vice-President

Mr. Briggs has been with B&F Consulting for fifteen years, since founding the firm with Amber Farrelly in 2000.

Experience: 35 years

Education: **North Carolina State University**
 Masters of Science, Civil Engineering

North Carolina State University

Bachelor of Science, Civil Engineering

Registration: NC



Structural Engineer: Lysaght & Associates, P.A.
(Small Business Enterprise)



Innovative Design has worked with Lysaght and Associates for over thirty years.

Started in 1983, Lysaght & Associates, P.A. includes five registered engineers, three project managers/senior draftsmen and an office manager.

Chuck Lysaght, PE

President

Mr. Lysaght will be the principal structural engineer for your project.



Chuck has over forty years of experience as the structural engineer for governmental, educational, commercial, industrial and residential projects using steel, reinforced concrete, masonry, laminated wood, light gauge steel and heavy timber. His ability to develop creative and often unexpected solutions to structural and budget challenges is just one reason why architects, contractors and clients in more than thirty-five states want Chuck and his firm as an integral part of their team.

Experience: Lysaght & Associates, 1983 - Present

Education: University of Texas
Bachelor of Architectural Engineering
North Carolina State University
Master of Civil Engineering

Registrations: NC, AL, AR, DL, GA, IN, IA, KA, LA, MD, MI, MS MI, NH, NJ, NM, OH, OK, PA, SC, TN, TX, VA, WI and WV

Jim Struffolino, PE

Principal and Senior Structural Engineer

Mr. Struffolino has been with Lysaght and Associates for thirty years.

He will be the structural engineer for your project.



He has extensive experience in structural engineering for educational, government, commercial, industrial, and residential projects. His experience includes structural designs of steel, reinforced concrete, and masonry, laminated wood, light gage steel and heavy timber.

Experience: Lysaght & Associates, 1985 - Present
Carolina Power & Light, 1983 - 1985

Education: North Carolina State University
B.S. in Civil Engineering

Registrations: NC, VA & WY



Landscape Architect/Environmental Site Assessment: Landis, PLLC
(Small Business Enterprise)



Dr. Barrett Kays, Ph.D., FASLA, the founder of Landis, PLLC, is a landscape architect and soil scientist who addresses challenging site issues in the preliminary investigation of a site, which enables us to change potential problems into positive design features. We have worked with Landis on numerous constructed wetlands, bioswales and environmentally sound site strategies resulting in minimal or no runoff and nitrogen impacts.

Landis is committed to the Architecture 2030 Challenge.

Barrett L. Kays, Ph.D., FASLA

Innovative Design has worked with Landis for fourteen years.



Education:

- North Carolina State University**
Ph.D. Degree, Honors, Soil Science
- University of North Carolina - Chapel Hill**
Minor Geology
- North Carolina State University**
Master of Landscape Architecture, Honors
Minor Environmental Planning
- Oklahoma State University**
Bachelor of Science, Honors, Agriculture and Biological Science

Professional Registration:

- Licensed Professional Soil Scientist: NC, SC and VA**
- Nationally Certified Professional Soil Scientist: SSSA**
- Certified Professional Soil Scientist: ARCPACS**
- Registered Landscape Architect: NC, IA, NY & VA**

Cost Estimator: Mulford Cost Management
(Small Business Enterprise)



Stewart Mulford, President

Stewart Mulford founded his firm in 1990 and has over thirty years experience in construction cost estimating and project management.



He has estimated over 400 separate projects in the last five years ranging in value from below \$1 million to over \$100 million.

Education:

- Heriot Watt University, Edinburgh, Scotland**
Honors Bachelor of Science in Building Economics and Quantity Surveying

Certifications:

- Certified Professional Estimator (CPE)**
- American Society of Professional Estimators (ASPE)**



Innovative Design is a small business enterprise as defined by the Small Business Administration. Although we are not a HUB business, 29% of our firm is minority owned and **a half of our staff are women and/or minorities.**

Elm Engineering and B+F Consulting are certified Woman Owned Businesses.

All consultants are small business enterprises.

12. QUALITY CONTROL AND ASSURANCE PROCESS

QUALITY MANAGEMENT

Our quality work is the result of:

- An integrated project delivery process that enables us to **address issues up front** and eliminate potential changes and errors.
- **Early and continued involvement** between Owner and the design team
- Setting **performance goals** at the beginning of design
- Systems and design analysis during Schematic Design and Design Development
- **Post-occupancy monitoring** of systems performance to ensure goals are met
- Updating our **“lessons-learned” checklist** during and after each project to use as a quality checklist for current projects.
- The Project Managers using an **“Issues Log”** to track pending issues throughout the project. This log tracks open items for decision making, coordination, and communication, so that the PM can stay on top of all issues.
- Working with the same consultants over ten years.
- **Internal QA/QC review** of submissions two weeks prior to submission due to Owner
- Taking advantage of being a consultant for other A/E firms, we have unique experience in learning from other firm’s QA/QC procedures.

COST AND SCHEDULE MANAGEMENT

- Successful track record of being within budget over thirty-eight years of public bidding.
- Detailed cost estimate at SD, DD, 60% CD and 100% CD. While most other architects perform an SD estimate based on square foot cost, we develop a CSI-division based, line item cost estimate, only made possible with an integrated, detailed SD design.
- Early Life Cycle Cost Analysis (LCCA) to make informed decisions in SD and early DD. Because decisions are based on the analysis, changes in CD occur little and typically shortens CD phase.
- Several preliminary review meetings with approval agencies during SD and DD to receive their cursory input early on, which typically reduces the final review time.



13.

LITIGATION

Innovative Design Firm License #: 50204

There have been no claims filed by an Owner against our firm or individuals in our firm for thirty eight years of our history.

No architect employed by our firm has ever had their license revoked or suspended.

14.

HOURLY BILLING RATES & REIMBURSEMENT

Hourly Rate

Principal-in-Charge	\$150/hr	Analyst	\$100/hr
Project Manager	\$120/hr	Intern Architect	\$90/hr
Project Architect	\$110/hr	Administration	\$75/hr
Project Engineer	\$120/hr		

Reimbursement Rates

Mileage and Travel: Trips to Orange County are included in the base fee.

If a trip to other than Orange County and Triangle area is required by you, the travel cost and mileage will be pre-approved by you.

Printing*:	B&W photocopies	\$.10 per 8.5x11 copy
		\$.15 per 11x17 copy
	Color Copies	\$.30 per 8.5x11 copy
		\$.45 per 11x17 copy
	B&W CAD prints	\$3.00 per 24"x36" print
	Color CAD prints	\$4.00 per 24"x36" print
	Bid Documents	at cost

Postage and Overnight Packages*: at cost

(*Printing and Postage costs shall be reimbursed only for the submission to the Owner and government agencies for review/approval.)

15.

STANDARD DESIGN CONTRACT AGREEMENT

Innovative Design will sign Orange County's Standard Contract Agreement for Design Consultant Services.



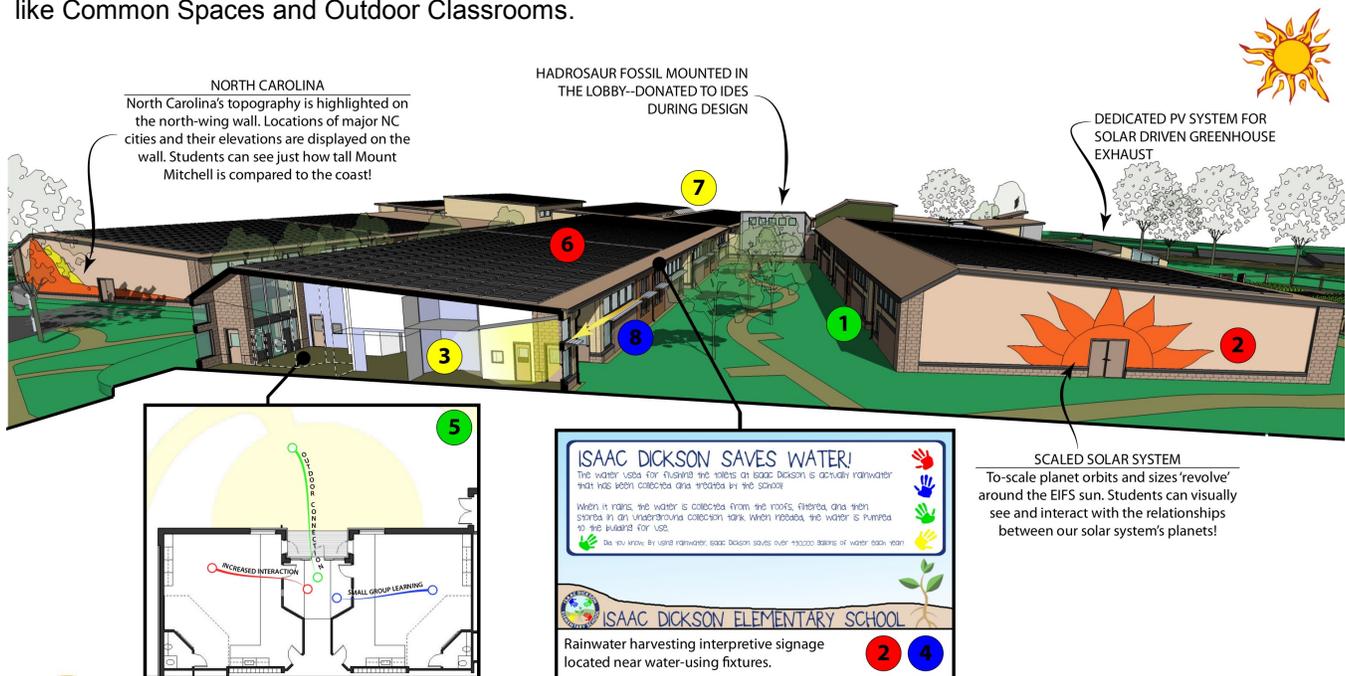
ADDITIONAL INFORMATION: INTERACTIVE SPACE PLANNING

REDUCING TRADITIONAL BARRIERS The 21st century work environments are seeing a shift in the traditional process of design and layout. Indoor spaces and environments are to be **flexible, fostering collaboration and creativity**. With the multi-department facility, that concept is to be taken in full — and the realization of this idea comes during the planning and programming phase. In efforts to create a flexible design for the Orange County’s Environments and Agriculture Center, our design team will focus on:

- ◆ Clearly defining space-by-space needs with occupant interviews and surveys to identify common tasks and create the necessary connections between the different agencies
- ◆ Develop strategies using flexible space diagrams, allowing movement and collaboration
- ◆ Defining distinct areas of privacy needs per agency—the line between communal and individual/private spaces will be present to allow all types of work
- ◆ Break-out spaces can be used for small group needs
- ◆ consider opportunities to for potential expansion from the start, both in the interior space (allowing for flexibility or ease of renovation) as well as in the entire building form (allowing for future expansion).

EXAMPLE OF INTERACTIVE SPACE PLANNING

The realm of education is undergoing a similar change in space planning to provide increase collaboration efforts and interactions for students. At Isaac Dickson Elementary School, our design team, working with teachers, used space planning to enhance the student’s learning environment by providing interactive spaces, like Common Spaces and Outdoor Classrooms.



Isaac Dickson Elementary School | Learning, Sustainably

- | | | | |
|--------------------------------------|-------------------------------|------------------------------------|-------------------------|
| 1 Energy-efficient Building Envelope | 2 Building as a Learning Tool | 3 Daylighting | 4 Rainwater Harvesting |
| 5 Flexible Learning Spaces | 6 Photovoltaics | 7 Solar Thermal domestic hot water | 8 Exterior Lightshelves |



ADDITIONAL INFORMATION: EVALUATION PROCESS

Work Together—Review Goals—Confirm Decisions

We have the unique skills of having in-house building analysts working hand-in-hand with our team to develop the most cost-effective, sustainable solutions possible. By starting the analysis process at the very beginning of design, the biggest impact can be seen, as the biggest decisions are made early. Included in our designs are:

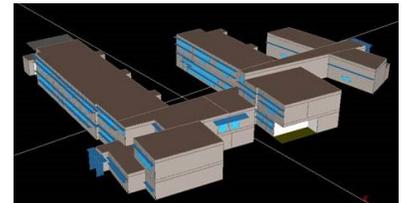
- A whole-building, whole-site design process
- Site and Master Plan analysis
- Extensive hourly daylighting analysis
- Environmental Impact Analysis
- Whole-building energy analysis
- Water consumption analysis
- Life Cycle Cost Analysis
- GHG Emissions analysis

DAYLIGHTING ANALYSIS

- Hourly, annual analysis
- Defines lighting & visual needs for every space and task
- Determines required glazing amount to meet needs
- Ensures glare-free, diffuse lighting conditions

ENERGY ANALYSIS

- Whole-building energy simulations (eQUEST) and thermal analysis (TRNSYS)
- Iterative process analyzes energy efficiency measures
- Enables key decisions to be made early when they matter most



Whole Building Energy Model

LIFE CYCLE COST ANALYSIS—A COMPREHENSIVE EVALUATION

The fruition of our team's heavy analytical capabilities is seen through our LCCA. By analyzing all major decisions early, the Owner has the ability of actually seeing why the design decisions were made. LCCA provides:

- 30 and 40 year life cycle costs of major systems
- Inclusion of maintenance and operational costs
- Initial capital costs
- Energy & Cost savings

Grandy Village, Norfolk, Virginia Case Comparison Chart - Whole Building Energy Analysis - Summary				
	Basecase (Code compliant case)	Design Case - Option 1	Design Case - Option 2	Design Case - Option 3
Conditioned Area (sq.ft.) (approx.)	74,000	74,000	74,000	74,000
Wall Insulation R-value	R-13	R-19 Batt + R-10 Rigid	R-19 Batt + R-10 Rigid	R-19 Batt + R-10 Rigid
Design Case - Option 1		Design Case - Option 2		Design Case - Option 3
Installed Lighting	1.40 (average)	1.0 (average)	1.0 (average)	1.0 (average)
System	ASHRAE 90.1-2007 Budget System # 8 Residential packaged heat pumps DX Cooling, Electric heating	Variable Refrigerant System for heating and cooling	Single-effect Absorption Chillers & Boilers (to be substituted with Solar thermal upto ~90% capacity)	Geothermal Heat Pumps
Cooling & Heating Efficiency	13 SEER, 3.2 COP	16.0 EER, 4.2 COP	Chiller COP 0.9, Boiler heat. eff 80%	16.0 EER, 4.0 COP
Daylighting	No	Yes	Yes	Yes
Cooling Peak (kbtu/hr)	1,415	1,223	898	1,234
Tons of cooling	118	102	75	103
Heating Peak (kbtu/hr)	572	591	400	547
Total Energy Use (Mbtu)	5,766	2,437	2,767	2,509
Energy Performance (kbtu/\$/yr)	77.3	32.9	37.4	33.9
% EER				
Elec	\$59,388	\$61,878	\$61,232	
Nat	55.0%	53.1%	53.6%	
Energy Cost (dollars - \$)	\$131,860	\$59,388	\$61,878	\$61,232
% Cost Savings over basecase		55.0%	53.1%	53.6%

