The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header 1

List View

General Information | Contact | Default Values | Discount | Document Information | Clarification Request

Procurement Folder: 1220208
Procurement Type: Central Purchase Order
Vendor ID: VS0000042755
Legal Name: Pond and Company, Inc.
Alias/DBA: Pond and Company, Inc.
Total Bid: $0.00
Response Date: 05/11/2023
Response Time: 13:10
Responded By User ID: Pond&Co-GuardPgm
First Name: Craig
Last Name: Rezac
Email: Craig.Rezac@pondco.com
Phone: 3092645269

SO Doc Code: CEOI
SO Dept: 0603
SO Doc ID: ADJ2300000004
Published Date: 4/27/23
Close Date: 5/11/23
Close Time: 13:30
Status: Closed
Solicitation Description: EOI- BUILDER Site Assessments & Facility Inspections
Total of Header Attachments: 1
Total of All Attachments: 1

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Solicitation Response

Proc Folder:	1220208
Solicitation Description:	EOI- BUILDER Site Assessments & Facility Inspections
Proc Type:	Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2023-05-11 13:30	SR 0603 ESR05112300000005753	1

VENDOR

VS0000042755
Pond and Company, Inc.

Solicitation Number: CEOI 0603 ADJ2300000004

Total Bid: 0 **Response Date:** 2023-05-11 **Response Time:** 13:10:06

Comments:

FOR INFORMATION CONTACT THE BUYER
David H Pauline
304-558-0067
david.h.pauline@wv.gov

Vendor
Signature X **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	EOI- BUILDER Site Assessments & Facility Inspections				

Comm Code	Manufacturer	Specification	Model #
81101508			

Commodity Line Comments: Cost not required with Two-part evaluation.

Extended Description:

Provide professional engineering services for the BUILDER Sustainment Management System Implementation, including Site Assessments & Facility Inspections, for facilities throughout WV, per the attached documentation.









Statement of Qualifications

EOI | BUILDER Site Assessments & Facility Inspections

State of West Virginia | Solicitation # CEOI 0603 ADJ2300000004

MAY 11, 2023

POND

POND

Table of Contents

3500 Parkway Lane, Suite 500
Peachtree Corners, Georgia 30092

T: 678.336.7740 | F: 678.336.7744
www.pondco.com

11 May 2023

Mr. David H Pauline
Department of Administration | Purchasing Division
2019 Washington St E
Charleston, WV 25305
david.h.pauline@wv.gov

Re: WVARNG BUILDER Site Assessments & Facility Inspections | CEOI 0603 ADJ2300000004

Dear Mr. Pauline:

Pond is pleased to submit our qualifications for BUILDER Site Assessments & Facility Inspections services for the West Virginia Army National Guard. We bring our core values and commitment for exceptional customer service to this contract along with a core team of 65 BUILDER SMS subject matter experts backed by a diverse team of over 500 architects, engineers and facility survey leaders to provide the services your project requires. To this project, we bring:

- **Our Commitment to the West Virginia Army National Guard Program:** There is no substitute for passionate, knowledgeable and skilled people. We have built a Team for this project of proven BUILDER SMS FCA experts, architects, and engineers with experience serving the Army National Guard for similar initiatives. Pond has completed over 440 NGB projects, including multiple BUILDER SMS projects in the past 35 years which encompasses over 200,000,000 GSF of assessments and $1.2 billion in construction value. Locally, we have successfully partnered with the West Virginia Guard on seven completed projects including BUILDER SMS and other facility assessments. This experience ensures an outcome that enhances mission readiness while reducing risk of project execution.
- **Our Commitment to Quality:** High-quality, technically sound analyses and documents are the best way to avoid change orders and additional costs. We utilize our extensive experience and use of the latest plan modeling software to give us the advantage of a fully collaborative BUILDER SMS planning process, where we are able to resolve conflicts as the project progresses and correct issues immediately. Before any submittal leaves our office, it is reviewed by Senior Technical Staff. Moreover, before a project is finalized it will have been through a multi-discipline review by senior level BUILDER SMS FCA and ARNG subject matter experts to review the project from beginning to end and ensure it is technically sound and executable. This dedication to quality ensures a fully auditable, programmable and executable product, ensuring mission-readiness and maximizing your return on investment.
- **Knowledge of the BUILDER Site Assessment & Facility Inspection Process:** The Pond team has first-hand knowledge of the BUILDER SMS FCA process through highly successful execution of multiple studies for DoD totaling over 200,000,000 GSF, including statewide BUILDER SMS Assessments for WVARNG and LAARNG, as well as BUILDER SMS Assessments for SCARNG. Pond is an active BUILDER SMS partner to the ARNG, providing niche service subject matter expertise in the development of BUILDER SMS based on our understand of the initiative and ARNG requirements.

Pond has enjoyed the opportunity to work with the National Guard for many years. We have proven that you can rely on our team to guide you through the most challenging projects. With our location, experience and dedication to the NGB BUILDER SMS process we truly believe that our team is the best choice for this project.

We look forward to the opportunity to present our qualifications to you in person!

Sincerely,

Pond

Sam Briuglio, GISP
Senior Vice President
briuglios@pondco.com | 504.913.0249

Architects
Engineers
Planners
Constructors

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Centralized Expression of Interest

Proc Folder:	1220208
Doc Description:	EOI- BUILDER Site Assessments & Facility Inspections
Proc Type:	Central Purchase Order
Reason for Modification:	

Date Issued	Solicitation Closes	Solicitation No	Version
2023-04-27	2023-05-11 13:30	CEOI 0603 ADJ2300000004	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code: VS0000042755

Vendor Name : Pond & Company

Address :

Street : 3500 Parkway Lane | Suite 500

City : Peachtree Corners

State : Georgia **Country : USA** **Zip : 30092**

Principal Contact : Sam Briuglio, GISP, SVP/Principal-in-Charge

Vendor Contact Phone: 504.913.0249 **Extension: N/A**

FOR INFORMATION CONTACT THE BUYER
David H Pauline
304-558-0067
david.h.pauline@wv.gov

Vendor Signature X  **FEIN#** 58-1639128 **DATE** 5/11/2023

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION
The West Virginia Purchasing Division, for the agency, the West Virginia Army National Guard, Construction and Facilities Management Office, is soliciting Expressions of Interest from qualified firms to provide professional engineering services for the BUILDER Sustainment Management System Implementation, including Site Assessments & Facility Inspections, for facilities throughout WV, per the attached documentation.

INVOICE TO	SHIP TO
ADJUTANT GENERALS OFFICE 1707 COONSKIN DR CHARLESTON WV 25311 US	ADJUTANT GENERALS OFFICE 1707 COONSKIN DR CHARLESTON WV 25311 US

Line	Comm Ln Desc	Qty	Unit Issue
1	EOI- BUILDER Site Assessments & Facility Inspections		

Comm Code	Manufacturer	Specification	Model #
81101508			

Extended Description:

Provide professional engineering services for the BUILDER Sustainment Management System Implementation, including Site Assessments & Facility Inspections, for facilities throughout WV, per the attached documentation.

SCHEDULE OF EVENTS

Line	Event	Event Date

	Document Phase	Document Description	Page 3
ADJ2300000004	Final	EOI- BUILDER Site Assessments & Facility Inspections	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions









Section I. Qualifications, Experience, and Past Performance

POND

SECTION I. QUALIFICATIONS, EXPERIENCE, AND PAST PERFORMANCE

POND TEAM ADVANTAGE

BUILDER SMS Assessment Subject Matter Expertise The Pond Team has demonstrated experience completing **BUILDER SMS assessments** for multiple DoD agencies, including the **Army National Guard**, Army, Navy, Air Force, and Air National Guard. Our team includes a deep bench of architects and engineers ready to support this contract. We have experienced **BUILDER SMS assessment teams** that have been working in **BUILDER SMS** since mandated by the Department of Defense and up to present day and are intimately familiar with its architecture. Our team members have taken the time to **know the BUILDER SMS process intimately** and will access the database set to assess and display the condition and results using the **latest BUILDER SMS techniques**. Pond, working with our subconsultant DIGON Systems, is on the leading edge of applying other technologies to BUILDER SMS, allowing for **easier consumption of BUILDER SMS data**, and **enabling key stakeholders to immediately visualize the benefits of BUILDER SMS** as an assessment tool.

In-Depth Knowledge of WVARNG Facility Conditions Statewide **Over the past 5 years we have successfully executed two task orders for BUILDER SMS with WVARNG totaling 2,146,761 GSF at 18 sites throughout the state**. This established relationship, knowledge of WVARNG facilities and infrastructure, and technical expertise helps to eliminate the learning curve for this project, ultimately minimizing risk to the government. From this analysis, Pond brings in-depth knowledge of WVARNG's portfolio of sites, existing facility plans, facility conditions, facility personnel, and utilities infrastructure.

Pond's BUILDER SMS expertise combined with our knowledge of WVARNG facilities ensures the WVARNG receives high quality data that produces auditable and actionable recommendations for future programming requirements.

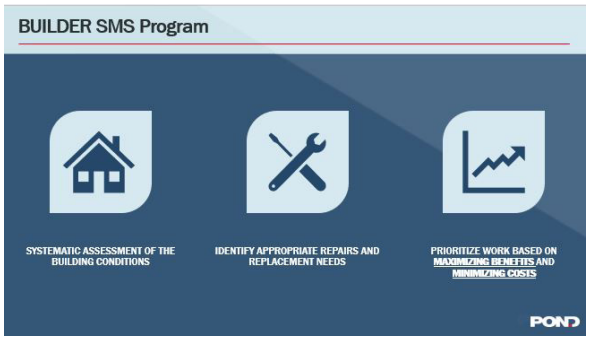
POND | Project Management, Quality Assurance, BUILDER SMS Assessments (Architectural, Mechanical, Electrical, Fire Protection, Structural, and Civil Engineering)

- Pond brings a 57-year history of managing facility assessment, including BUILDER SMS Facility Condition Assessments, planning and design projects.
- Over the last 5 years, Pond has completed BUILDER Site Assessments and Facility Inspections at 18 ARNG sites across West Virginia.
- Experts in application of Department of Defense and United Facilities Criteria.
- Over the last 33 years, Pond has continuously worked with National Guard at both the Federal and State levels, ensuring familiarity with facility types and mission requirements.
- In the last four years alone, Pond has performed BUILDER SMS assessments for over 1,150 ARNG facilities and has assessed over 200M SF of facilities worldwide.

DIGON SYSTEMS | BUILDER SMS Subject Matter Expertise (SME)

- Founded in 2008, DIGON is a small business 100% dedicated to the BUILDER community.
- Brings unmatched technical expertise, having served as BUILDER SME on 200M SF of facilities.
- Six year working relationship with Pond, serving as a subconsultant on eight BUILDER SMS assessment projects, of which five projects for the Army National Guard.
- Teamed with Pond for two previous phases of WVARNG BUILDER Site Assessments and Facility Inspections, which included 18 ARNG sites across West Virginia.
- DIGON holds a Cooperative Research and Development Agreement and is an authorized provider for BUILDER with CERL.
- Trained thousands of users in-person and with their self-paced online training program, developed a data-entry app to increase the walk rate and accuracy of assessment teams, created the only tool that lets BUILDER talk to any CMMS, reviewed over 3M BUILDER sections for data quality issues, and host the annual BUILDER Summit conference in San Antonio, TX.

POND'S ESTABLISHED BUILDER SMS PROGRAM

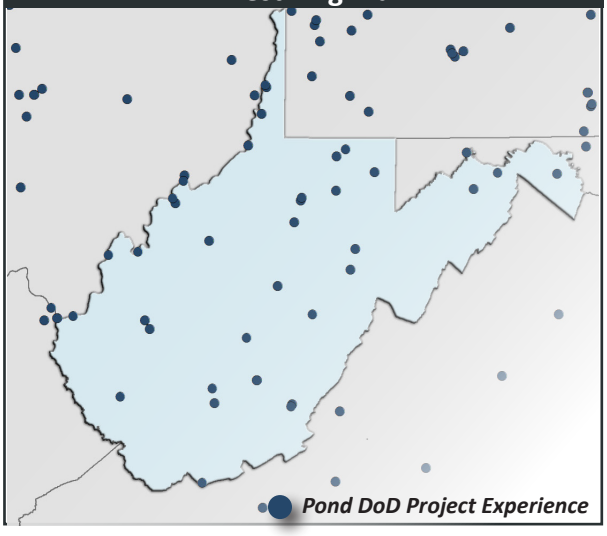


Pond has demonstrated experience completing **BUILDER SMS assessments** for multiple DoD agencies including Army National Guard, Army, Navy, Air Force, and Air National Guard. Our team includes a deep bench of **65 personnel including BUILDER SMS SMEs, architects and engineers** ready to support this contract with one of the **most experienced BUILDER SMS assessment teams since BUILDER SMS was mandated for facilities assessments**. Our team members have completed **facility condition assessments for over 200,000,000 SF of DoD facilities** through CONUS and OCONUS, taking the time to **know the BUILDER SMS software intimately**, and will implement this experience to assess all relevant facility components, run analysis, develop a prioritized project list for facility lifecycle improvements and **train WVARNG personnel on the BUILDER SMS process**. Pond is on the leading edge of applying other technologies to **BUILDER SMS** such as GIS-based dashboards, graphics, and other methods, allowing for easier consumption of **BUILDER SMS** data, enabling key stakeholders to immediately visualize the benefits of **BUILDER SMS** as an assessment tool.

Army National Guard: Our team has captured existing building information and entered building materials, system types, and quantities into BUILDER SMS using the direct assessment method for 13 different building systems for over 10,000,000 SF of ARNG facilities. The results of our assessments were then used to support justification for planning Sustainment, Restoration, and Modernization (SRM) projects.

In addition, we have held multiple **training sessions for ARNG personnel, ensuring that they are able to carry BUILDER SMS management and maintenance best practices forward.** Specific to this proposed task order, Pond has direct **experience performing BUILDER SMS surveys for WVARNG**, and has an **intimate knowledge of WVARNG facilities throughout the state.** ***Over the past 5 years we have successfully executed two task orders for BUILDER SMS with WVARNG totaling 2,146,761 GSF at 18 sites throughout the state. This established relationship, knowledge of WVARNG facilities and infrastructure, and technical expertise helps to eliminate the learning curve for this project, ultimately minimizing risk to the government.***

Pond DoD Project Experience Across West Virginia



Relevant Experience Utilizing BUILDER SMS

The Pond Team has conducted millions of square feet of BUILDER SMS assessments across multiple DoD agencies. The following table provides a quick snapshot of Pond's BUILDER experience

CLIENT	YR WORK PERFORMED	# OF EMPLOYEES	PRODUCTION RATE (SF/DAY)	# OF SITES	# OF BLDGS ASSESSED	TOTAL SF ASSESSED
West Virginia Army National Guard	2021	8	75,000	11	38	736,761 SF
West Virginia Army National Guard	2018	8	56,000	7	77	1,410,000 SF
Louisiana Army National Guard	2022	12	75,000	50	635	2,147,342 SF
Red River Army Depot, TX and Holston Army Ammunition Plant, TN	2022	12	100,000	2	229	4,574,946 SF
Louisiana Army National Guard	2020	8	75,000	3	151	687,214 SF
South Carolina Army National Guard	2019	8	27,618	1	19	552,372 SF
JB San Antonio, Fort Sam Houston	2016	8	110,000	1	1	330,000 SF
Georgia Army National Guard	2013	6	63,400	21	95	1,327,000 SF

POND TEAM'S KEY PERSONNEL FOR THE BUILDER SITE ASSESSMENTS & FACILITY INSPECTIONS

Pond's Team, led by Project Manager, Kermit Lewis, GISP, specializes in providing technical services for site assessment and facility inspection projects utilizing the BUILDER SMS application to support future planning, programming, design and construction activities, and has completed over 200,000,000 GSF of relevant deliverables. As detailed in the staff introductions and detailed resumes, Kermit and Pond's seasoned team of architects and engineers possess the necessary professional qualifications and relevant DoD project experience, including BUILDER site assessments and facility inspections, studies and investigations of real property assets to ensure a successful execution.

PROGRAM PRINCIPAL
Sam Briuglio, GISP

QA/QC MANAGER
Kurt Sorensen

PROJECT MANAGEMENT
Project Manager
(Primary Point of Contact)
Kermit Lewis, GISP ★

PROJECT IMPLEMENTATION & DATA VALIDATION
BUILDER SME/Information Manager
Paul Schowalter ★

POND FIELD ASSESSMENT TEAM

Mechanical Engineer
Jennifer Naizer, PE, LEED AP ★
Alexandra Yankey, PE

Architect
Lorraine White, AIA, LEED AP ★
Leslie Harris, AIA, LEED AP, CDT

Structural Engineer
Chris Jenkins, PE, LEED AP BD+C ★
Donald Gentry, PE, SE

Electrical Engineer
Tom Higgins PE, RCDD, LEED AP ★
Joe Stitt, PE, LEED AP

Fire Protection Engineer
Brandon Hofstead, FPE ★
Dan Brace, FPE

Site/Infrastructure Engineer
Tanya Norman, PE ★
Kevin Hendrix, PE

Bold Type ★ = Qualifications provided on the subsequent pages, followed by detailed resumes.

DEDICATED NGB TEAM WITH ARNG BUILDER SMS EXPERTISE

Under 2 consecutive nationwide IDIQs and state IDIQs in West Virginia, South Carolina, Texas, Georgia, Florida and Louisiana, Pond has completed over 440 NGB projects in the past 35 years, totaling over $1.2B in construction value. In just the last four years, ***Pond has completed 5 ARNG BUILDER Site Assessments and Facility Inspections, 5 Installation Energy & Water Plans with ASHRAE Level II Audits, and 5 regional plans for Army National Guard clients****. This in-depth experience ensures* ***expertise in utilizing the most current version of the BUILDER SMS application****, as well as qualifies our team as a* **current BUILDER SMS trainer** *for our ARNG clients.*

PRIMARY POINT OF CONTACT

Kermit Lewis, GISP, LSP | Project Manager | Primary Point of Contact

- 27 years of asset management experience working for DoD agencies including Army and Air Force, with a specialization in ARNG BUILDER SMS Implementation and training.
- Specializes in providing technical management for Facility Inspection projects and BUILDER implementation to support future planning, programming, design and construction activities, and has managed over 200,000,000 GSF of relevant deliverables.
- Extensive experience leading site assessments and facility inspections for the ARNG, including the WVARNG utilizing the most current version of the BUILDER SMS application.

Paul Schowalter | Information Manager

- 37 years of architectural design, facility condition assessment, and project management experience for a variety of clients throughout the US.
- Worked as a sub to Pond on eight BUILDER SMS assessment projects, of which five projects for the Army National Guard, including two phases of WVARNG BUILDER SMS Implementation covering facilities statewide.
- Expertise utilizing the most current version of the BUILDER SMS application.

Jennifer Naizer, PE, LEED AP BD+C | Mechanical Engineer

- 10 years of large-scale facility condition assessment (BUILDER SMS) and mechanical design experience on projects for DoD, federal and state clients,
- Extensive NGB experience providing the design and assessment for 40+ Army and Air National Guard projects.

Lorraine White, AIA, NCARB, LEED AP BD+C | Architect

- 19 years of design, planning, and facility inspection (BUILDER SMS) experience.
- Performed site inspections and facility assessments for WVARNG, SCARNG, and other DOD clients nationwide. Adept at performing existing facility assessments, space planning, code reviews (UFC, NFPA 101, IBC, and ADA) and programming.

Chris Jenkins, PE, LEED AP BD+C | Structural Engineer

- 27 years of experience providing project management and structural engineering design and facility assessments (BUILDER SMS) for DoD projects.
- 18 years experience working on 145 NGB projects, including WVARNG BUILDER Assessments, ensures familiarity with mission requirements and local site conditions.

Tom Higgins, PE, RCDD, LEED AP | Electrical Engineer

- 15 years of electrical engineering analysis and design experience on DoD projects ranging from BUILDER SMS and FCAs to vertical facilities to aircraft maintenance hangars.
- Specializes in code compliance (NFPA, IBC, Local), as well as delivering designs that comply with ANG ETL 15-01, ANSI/TIA-EIA-942 & 606, UFC 3-580-01, and UFC 4-141-04.

Brandon Hofstead, FPE | Fire Protection Engineer

- 15 years of experience providing fire protection systems design, BUILDER SMS assessments, means of egress analysis, accessibility oversight, acceptance/ maintenance testing, and code equivalency documentation.
- Provided fire suppression and alarm design for 47 NGB projects.

Tanya Norman, PE, GPCP | Site/Infrastructure Engineer

- 17 years of site/civil design and site assessment (BUILDER SMS) experience, including 14 years of executing projects at DoD installations
- Specializations include site layout with respect to AT/FP requirements; pavement design using PCASE software; storm drainage design; utility and grading plan preparation.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
KERMIT LEWIS, GISP	Project Manager	27	6

15. FIRM NAME AND LOCATION *(City and State)*

Pond – Metairie, LA

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
MS, Geography: University of New Orleans, 2002; BA, Geography: Grambling State University, 1995	Geographic Information Systems Professional (GISP): LA #91123

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

- 27 years of **Asset Management** experience working for the DoD including Army National Guard, USAF, and Army clients at the Installation and Major Command level, as well as state, local government, and agency clients.
- Specializes in providing technical management for **Facility Condition Assessment** (**FCA)** production projects and **BUILDER SMS** implementation to support **future planning, programming**, **design and construction activities**, and has managed over 200,000,000 GSF of relevant deliverables.
- Excels in leading and managing the development of large-scale **Facility Condition Assessment** (**FCA**) projects utilizing the **most current version of the BUILDER SMS application**.
- Extensive experience with Army and Air Force survey and development, field data collection techniques for **BUILDER** and **FCA** development, ePRISMS, data conversion and analysis, space utilization dataset (SUDs) development/management, space file geolocation and GPS data accuracy validation, and application programming experience.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
West Virginia Army National Guard | BUILDER SMS Implementation, Phase 2, Statewide, WV	2021	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Project Manager – Kermit led Phase 2 of the **BUILDER SMS for the Army National Guard facilities** in West Virginia, which included **facility condition assessments of 38 facilities totaling 736,761 SF across 11 locations**. Over the three (3) one-week site visits, a team of engineers (electrical, fire protection, HVAC, plumbing and structural) and architects performed inventory and condition-rating of building systems and components with the results input into BUILDER. *Fee: $249,500*

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Louisiana Army National Guard | BUILDER SMS Implementation, Phase 2, Various Locations, Statewide	2020	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Project Manager – Kermit led Phase 2 of **BUILDER SMS Implementation** for the Louisiana National Guard, which included **151 buildings totaling 687,214 SF**. Kermit was able to reduce travel cost, increase client interaction, and provide on-site technical support and training. This project was an opportunity for Pond to work with people from our state's communities to improve the National Guard facilities in our state. The team's performance led directly to Pond being awarded the subsequent BUILDER contract phases 3 and 4. *Fee: $243,960*

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Louisiana Army National Guard | BUILDER SMS Implementation, Phases 3 & 4, Various Locations, Statewide	2022	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Project Manager – Kermit led Phase 3 & 4 of **BUILDER SMS Implementation** for the Louisiana National Guard, which included 584 buildings totaling 2,147,342 SF spread across 53 sites throughout Louisiana. Kermit was able to reduce travel cost, increase client interaction, and provide on-site technical support and training. *Fee: $810,697*

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Facility Condition Assessments and BUILDER SMS Implementation for Army Materiel Command, Red River Army Depot, TX and Holston Army Ammunition Plant, TN	2022	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Project Manager – Kermit performed project **oversight, managed resources, and aided the field team manager** and **BUILDER assessment** in this data collection and creation effort that suffered COVID-19 induced schedule challenges covering more than 2.7M SF at the Red River Army Depot and 2.3M SF at Holston Army Ammunition Plant. *Fee: $1,984,694*

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Reconstitute Defenders Initiative Strategic Master Plan, 37th Training Wing, Joint Base San Antonio, Lackland AFB, TX	2020	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Project Manager – Kermit led the team of the **FUS**/**FCA** portion of this many-faceted project in support of the USAF at JBSA. The **FCA/FUS** was conducted for all Security Forces Academy facilities by a team of engineers, architectural specialists, and planners. The structure, foundation and building systems were evaluated to include plumbing, electrical, HVAC, and fire protection. All buildings were analyzed with building occupants and users to evaluate the functional adequacy of each facility. Facility records were updated in **BUILDER SMS** and the **Real Property system** of record. The end goal was to evaluate each building's current and near-term future use to assess **code compliance** and maximum utility to support the assigned mission. *Fee: $1,301,516*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
PAUL SCHOWALTER	BUILDER SME / Information Manager	37	8

15. FIRM NAME AND LOCATION *(City and State)*

Digon Systems – Fort Collins, CO

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
MS, Geography: University of New Orleans, 2002; BA, Geography: Grambling State University, 1995	Geographic Information Systems Professional (GISP): LA #91123

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

- 37 years of architectural design, facility condition assessments (BUILDER SMS), and project management experience for a variety of clients throughout the US.
- Worked as a **sub to Pond on eight BUILDER SMS assessment projects, of which five projects for the Army National Guard, including the WVARNG BUILDER Site Assessments and Facility Inspections at 18 sites across the state.**
- Extreme attention to detail and ability to shepherd projects to completion ensures seamless **BUILDER SMS.**
- Expertise utilizing the **most current version of the BUILDER SMS application**.
- Paul has trained thousands of users in-person and through Digon's self-paced online training program, developed a data-entry app to increase the walk rate and accuracy of assessment teams, created the only tool that lets BUILDER talk to any CMMS, reviewed over 3M BUILDER sections for data quality issues, and host the annual BUILDER Summit conference in San Antonio, Texas.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
West Virginia Army National Guard | BUILDER SMS Implementation, Phase 2, Statewide, WV	2021	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

BUILDER SME/Information Manager – Paul provided Quality Control for Phase 2 of the **BUILDER SMS for the Army National Guard facilities** in West Virginia, which included f**acility condition assessments of 38 facilities totaling 736,761 SF across 11 installations**. Paul reviewd the results of data inventory and condition-rating of building systems and components, prior to the results being input into BUILDER. *Fee: $249,500*

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
West Virginia Army National Guard | BUILDER SMS Implementation, Phase 1, WV	2018	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

BUILDER SME/Information Manager – Paul worked as a subconsultant to Pond to successfully implemented the first phase of the **BUILDER SMS** for West Virginia Army National Guard (WVARNG) facilities, which included site assessments and facility inspections of 77 facilities, totaling 1.41 million SF across seven installations. Paul provided initial technical training to the team of architects and engineers, as well as provided quality control throughout the project. He reviewd the results of data inventory and condition-rating of 13 building systems and components, prior to the results being input into BUILDER SMS. *Fee: $455,335*

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Louisiana Army National Guard | BUILDER SMS Implementation, Phase 2, Various Locations, Statewide, LA	2020	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

BUILDER SME/Information Manager – Working as a subconsultant to Pond, Paul provided training to field teams and quality assurance for Phase 2 of **BUILDER SMS Implementation** for the Louisiana National Guard, which included **three sites and 151 buildings totaling 687,214 SF**. DIGON gave a 3-hour BUILDER SMS Technical Briefing to all stakeholders after the In-brief. The Technical Briefing covered all aspects of assessing and rating facilities using BRED and uploading the data into BUILDER for Quality Checks. In addition, Paul provided general consulting and QA/QC services for the project. Paul's technical guidance ensure a seamless execution, which resulted in Pond being awarded the subsequent BUILDER contract phases 3 and 4. *Fee: $243,960*

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Louisiana Army National Guard | BUILDER SMS Implementation, Phases 3 & 4, Various Locations, Statewide, LA	2022	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

BUILDER SME/Information Manager – Paul performed Quality Control reviews for Phase 3 & 4 of **BUILDER SMS Implementation** for the Louisiana National Guard, which included 584 buildings totaling 2,147,342 SF spread across 53 sites throughout Louisiana. Paul also provided on-site technical support and training to LAARNG stakeholders. *Fee: $810,697*

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
South Carolina Army National Guard | BUILDER Sustainment Management System Implementation, McEntire Joint National Guard Base, Eastover, SC	2019	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

BUILDER SME/Information Manager – Paul provided in-person BUILDER SMS training and field oversight for Pond's seven-person team, comprised of architects and mechanical, electrical and structural engineers, who performed **on-site assessments of nineteen (19) facilities totaling 552,372 SF at McEntire Joint National Guard Base**. *Fee: $298,350*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
JENNIFER NAIZER, PE, LEED AP BD+C	Mechanical Engineer	10	10

15. FIRM NAME AND LOCATION *(City and State)*

Pond – Peachtree Corners, GA

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
BS, Mechanical Engineering, 2013	Professional Engineer (Mechanical): GA #042854, SC #38299, IL #62.072653, FL #88124; NCEES #042854; LEED AP BD+C #10840733

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

- 10 years of mechanical design and large-scale facility **inspections and site assessments (BUILDER SMS)**, on projects for DoD, federal, state, and municipal clients.
- Responsible for carrying out mechanical facility assessment walk-throughs and data collection at over 25 military sites.
- Professional Awards: 2017, Pond Employee of the Year; 2015, Pond Project Customer Service Award
- Supports DoD clients with expertise in Life Cycle Cost Analysis, High Performance Sustainable Building requirements, and Utility Monitoring and Control Systems.
- Expertise and proven track record integrating DoD UFC 1-200-02, 3-401-01, 3-410-01, 4-010-01, 4-010-05; State Building Codes; ANG ETL 15-01-04, ARNG DG 415-1, ARNG DG 415-5.
- Specializes in the utilization of BUILDER SMS, Trane Trace 700, Revit 2020, Carrier HAP v5.11, and Carrier Economic Analysis v3.01

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
West Virginia Army National Guard | BUILDER SMS Implementation, Phase 1, WV	2018	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Mechanical Engineer – Jennifer provided BUILDER site assessments and facility inspections rating the condition of the HVAC and plumbing systems for 77 facilities, totaling 1.41 million SF across seven installations. The results of the condition-ratings were uploaded into **BUILDER**. *Fee: $455,335*

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
South Carolina Army National Guard | Installation Energy and Water Plan (IEWP), Statewide, SC	2020	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Mechanical Engineer – Jennifer provided mechanical engineering support for the SCARNG IEWP. He performed **facility condition assessments and ASHRAE Level II Audits performed on 72 facilities throughout South Carolina deemed critical to the SCARNG mission** – including McCrady Training Center, McEntire Joint National Guard Base, Pine Ridge Joint Operations Center/ Emergency Management Division HQ, Columbia/TAG Complex, Greenville Joint Readiness Center and Army Aviation Support Facility, 7 Facility Maintenance Shops, and 26 Readiness Centers. Jennifer interviewed stakeholders and facility managers, as well as analyzed data collected during site visits to establish baseline metrics and trends in E&W consumption. Jennifer used data from the site visits to run ASHRAE Level II energy audits and recommend energy conservation measures. *Fee: $560,965*

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Florida Army National Guard | Installation Energy and Water Plan (IEWP), Statewide, FL	2022	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Mechanical Engineer – Jennifer provided mechanical engineering support for two IEWPs for the FLARNG: one IEWP for the state's critical readiness center locations and another IEWP for critical facilities at Camp Blanding Joint Training Center (CBJTC). She performed **facility condition assessments and ASHRAE Level II Audits performed on 56 facilities throughout Florida deemed critical to the FLARNG mission.** These site visits, during which Jennifer interviewed stakeholders and facility managers, were crucial to understanding and verifying facility and infrastructure conditions and capacities. Data from the ASHRAE Audits was utilized to model facility energy usage and to make recommendations for energy and water reduction measures. *Fee: $504,559*

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Louisiana Army National Guard | BUILDER SMS Implementation, Phases 3 & 4, Various Locations, Statewide, LA	2022	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Mechanical Engineer – Jennifer provided mechanical and plumbing system assessments for Phase 3 & 4 of **BUILDER SMS Implementation** for the Louisiana National Guard, which included 584 buildings totaling 2,147,342 SF spread across 53 sites throughout Louisiana. The assessment team of engineers and architects performed inventory and condition-rating of building systems and components and input the results into BUILDER. *Fee: $810,697*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
LORRAINE WHITE, AIA, LEED AP, NCARB	Architect	19	19

15. FIRM NAME AND LOCATION *(City and State)*

Pond – Columbia, SC

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
BA, Architecture: University of Notre Dame, 2003	American Institute of Architects (AIA) #38547832, Registered Architect (RA) SC #9392, Leadership in Energy and Environmental Design (LEED AP) #10095226/ SC, National Council of Architectural Board (NCARB) #83886

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

- 19 years of **architectural design, planning, programming, and facility condition assessments (BUILDER SMS) experience**
- In the past five years, Lorraine provided architectural design and BUILDER SMS assessments for 14 NGB task orders at 6 installations throughout SC, with construction values ranging from $17K to $8.4M
- Extensive BIM Training includes REVIT for Architectural Design, REVIT, AutoCAD, and VR Walkthru Technology
- Extensive experience leading design and **planning charrettes** for various project types including **BUILDER SMS, ADPs, IDPs, Airfield Studies, Sustainability Plans, Requirements Analyses, AT/FP analysis and other products under UFC 2-100-01**
- Skilled at working with complex clients to reach successful project completion and highly adept at performing existing **facility assessments, space planning, code reviews** (UFC, NFPA 101, IBC, and ADA), **programming**, conceptual designs, as well as CSI specifications

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
West Virginia Army National Guard | BUILDER SMS Implementation, Phase 1, WV	2018	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Architect – Lorraine provided BUILDER site assessments and facility inspections rating the condition of the architectural systems and components for 77 facilities, totaling 1.41 million SF across seven installations. The results of the condition-ratings were uploaded into **BUILDER SMS**. *Fee: $455,335*

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
South Carolina Army National Guard | BUILDER Sustainment Management System Implementation, McEntire Joint National Guard Base, Eastover, SC	2019	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Architect – Lorraine was part of the seven-person team, comprised of architects and mechanical, electrical and structural engineers, that performed on-site assessments of nineteen (19) facilities totaling 552,372 SF at McEntire Joint National Guard Base. During four (4) one-week site visits, this team rated each facility's condition in the following areas: Foundations, Basement Construction, Superstructure, Exterior Enclosures, Roofing, Interior Construction, Stairs, Interior Finishes, Conveying Systems, Plumbing, HVAC System/Components, Fire Protection, Electrical, Specialty Equipment. *Fee: $298,350*

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Reconstitute Defenders Initiative Strategic Master Plan, 37th Training Wing, Joint Base San Antonio, Lackland AFB, TX	2020	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Architect – Lorraine provided architectural design and analysis for development of planning actions to ensure that all components of the **capital improvement plan** were fully implementable. Provided expertise to support execution of planning charrettes, **facility assessments**, and transition planning for **Strategic Master Plan** (**SMP**). Assisted in development of project layouts, high quality graphics, and course of action development for the sub-component of the RDI SMP. *Fee: $ 1,301,516*

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Facility Condition Assessment, US Army Combat Capabilities Development Command Chemical Biological Center, Aberdeen Proving Ground, Edgewood, MD	2019	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Architect – Lorraine provided architectural support for **facility improvements analysis and programming** at APG. The effort included a full-breadth **facility condition assessment**, **facility space utilization survey**, **full building systems analysis**, building **code compliance analysis**, and **programming analysis** and recommendations for renovation of 170,000 SF of mission-unique facility space. Lorraine conducted architectural systems investigations and stakeholder interviews at (3) buildings totaling 183,494 SF to determine remaining useful life and compliance with codes and standards. Lorraine led the development of programming concept illustrations of the facility using Revit software to encourage visualization of the potential updated facility. *Fee: $339,583*

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
SCARNG | Sumter Armory Drill Hall Roof Replacement, Sumter, SC	2018	2019

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Architect – Lorraine managed the demolition and roof design for the 6,655 SF Sumter Armory Drill Hall, as well as the kitchen and the adjacent hallway. The tectum decking and bulb tees remained, but the design revised the edge to provide for exterior roof gutters and downspouts and features new roof flashings, roof insulation and an SBS Modified Bituminous Membrane Roofing "Hybrid". The existing roof drains were removed at the roof line, and the old roof leaders abandoned in-place. *Cost: $163,500*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
CHRIS JENKINS, PE, SE, LEED AP BD+C	Structural Engineer	27	18

15. FIRM NAME AND LOCATION *(City and State)*

Pond – Peachtree Corners, GA

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
MS, Structural Engineering: Auburn University, 1994; BS, Civil Engineering: Auburn University, 1992	Professional Engineer (PE) Structural: GA #25486, AK #10305, FL #76436, PR #18541, TX #115371; LEED AP BD+C #10066448

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

- 27 years of experience providing project management and structural engineering for DoD projects, including vertical facilities, administrative, support, and aircraft maintenance, with SME **BUILDER SMS and facility condition assessments.**
- For the last 15 years, his work has been primarily focused on Army, Navy, and Air Force projects. Chris currently manages special projects and serves as a client liaison to federal clients worldwide.
- Training: Structural Analysis Design Software, AT/FP, Progressive Collapse Design, BIM, DrChecks, SpecsIntact
- Member: SAME, American Council of Engineering Companies

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
West Virginia Army National Guard | BUILDER SMS Implementation, Phase 1, WV	2018	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Structural Engineer – Pond successfully implemented the first phase of the **BUILDER SMS** for West Virginia Army National Guard (WVARNG) facilities, which included FCAs of 77 facilities, totaling 1.41 million SF across seven installations. Chris provided structural engineering assessments, and along with the rest of the FCA team, that built inventory and provided condition-ratings of building systems and components in FLOW, which contains the BUILDER Remote Entry Database (BRED). The results were uploaded into BUILDER. *Fee: $455,335*

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Louisiana Army National Guard | BUILDER SMS Implementation, Phase 2, Various Locations, Statewide	2020	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Structural Engineer – Chris provided structural **on-site BUILDER assessments of 151 facilities at three ARNG installations** located across the state. During three weeklong site visits, Chris and the assessment team rated each facility's condition in the following areas: foundations, basement construction, superstructure, exterior enclosure, roofing, interior construction, stairs, interior finishes, conveying systems, plumbing, HVAC, fire protection, electrical, and specialty equipment. *Fee: $243,960*

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
IMCOM, ePRISMS Assessment, Fort Leavenworth, KS, Fort Riley, KS, Detroit Arsenal, MI, Fort Jackson, SC, Fort Huachuca, AZ, Redstone Arsenal, AL	2017	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Structural Engineer – Chris oversaw the execution of assessment services for the structural elements of IMCOM Installation facilities totaling over 67,000,000 GSF at Fort Leavenworth, KS, Fort Riley, KS, Detroit Arsenal, MI, Fort Jackson, SC, Fort Huachuca, AZ, and Redstone Arsenal, AL. Chris oversaw the structural discipline specific work for the property Inventory data to ensure the data could be used as a precursor for developing BUILDER database management services and identifying potential issues with the Real Property data for development of future corrective actions. *Fee: $6.35M*

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Facility Condition Assessment, US Army Combat Capabilities Development Command Chemical Biological Center, Aberdeen Proving Ground, Edgewood, MD	2019	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — [X] Check if project performed with current firm

Structural Engineer – Chris provided structural engineering oversight for this integrated, multi-task project that required working with Army Futures Command / CCDC for RDT&E facility improvements analysis and programming at APG. The effort included a full-breadth **facility condition assessment**, **facility space utilization survey**, **full building systems analysis**, **building code compliance analysis**, **Life, Health and Safety Analysis**, and **programming analysis** and recommendations for mission-unique facility space**.** Chris oversaw the structural systems investigations and stakeholder interviews at (3) buildings totaling 183,494 SF at CCDC CBC to determine remaining useful life and **compliance with codes** and standards. Based on the determination that renovation of the facility was the most viable option for the mission, Chris oversaw the development of the structural design criteria working with the mission users to develop the scale of renovation and ensuring interior and exterior renovations adhered to modern building codes and construction standards to provide personnel with quality work environments. *Fee: $339,583*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
TOM HIGGINS, PE, RCDD, LEED AP	Electrical Engineer	15	8

15. FIRM NAME AND LOCATION *(City and State)*

Pond – Peachtree Corners, GA

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
BS, Electrical Engineering Technology: Southern Polytechnic State University, 2007	Professional Engineer (Electrical): GA #PE040534, AZ #66561, PA #16837, NJ #24GE05721800, DE #26385, ME #PE16993; LEED Accredited Professional; Registered Communications Distribution Designer #348504

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

- **15 years of electrical engineering analysis design experience during which he has worked on a variety of DoD projects ranging from BUILDER SMS and FCAs** to vertical facilities to aircraft maintenance hangars, to cyber security facilities
- Over last eight years, he has completed 50+ DoD/Federal projects, and specializes in underground overhead distribution systems, lighting, grounding, control systems, emergency power security (e.g., access control, intrusion detection, CCTV), and design of copper and optical fiber
- Specializes in **code compliance (NFPA, IBC, Local),** as well as delivering designs that meet the requirements of ANG ETL 15-01, ANSI/TIA-EIA-942 & 606, UFC 3-580-01, UFC 4-141-04, and UFC 4-010-06
- Designed cabling infrastructure to support Unclassified Internet Protocol Router Network (NIPR), Secret Internet Protocol Router Network (SIPR), Joint Worldwide Intelligence Communications System Network (JWICS), and other user required secure network cabling systems

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
West Virginia Army National Guard | BUILDER SMS Implementation, Phase 1, WV	2018	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	[X] Check if project performed with current firm	

Electrical Engineer – Tom provided on-site assessment rating the condition of the electrical systems. The results of the condition-ratings were uploaded into **BUILDER**. Under this task order, Pond successfully implemented the first phase of the BUILDER SMS for WVARNG facilities, which included FCAs of 77 facilities, totaling 1.41 million SF across seven installations. *Fee: $455,335*

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Reconstitute Defenders Initiative Strategic Master Plan, 37th Training Wing, Joint Base San Antonio, Lackland AFB, TX	2020	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	[X] Check if project performed with current firm	

Electrical Engineer- Tom oversaw the electrical efforts for the Reconstitute Defenders Initiative project which was a comprehensive planning approach to transforming the Security Forces Academy to better sustain and train the 38,000 Airmen across 120 installations worldwide and to ensure there are sufficient facilities to complete their training mission. **Working closely with the users over several on-site visits** allowed for an in-depth understanding of the nature of their training operations and provided the USAF with a **long-term, executable implementation program**. *Fee: $1,301,516*

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Fort Sill Installation Energy and Water Plan, Lawton, OK	2020	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	[X] Check if project performed with current firm	

Electrical Engineer – Tom oversaw all electrical engineering efforts for the Fort Sill IEWP. **In developing the baseline analysis, the team utilized USACE Energy Manager applications, which tracks E&W to understand utility usage patterns and to identify inefficient facilities and individual sites and regions with outsized usage profiles.** This ensured critical facilities and their associated E&W systems could be identified and prioritized for investment. Tom **assessed the condition and capacity** of the existing on-post electrical grid and worked with the planning team to develop project recommendations to improve the resiliency and reliability of the existing system. *Fee: $249,821*

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Facility Condition Assessment, US Army Combat Capabilities Development Command Chemical Biological Center, Aberdeen Proving Ground, Edgewood, MD	2019	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	[X] Check if project performed with current firm	

Electrical Engineer – Tom provided **electrical analysis** as part of a dynamic team of planners, architects and engineers, to perform a comprehensive **Facility Condition Assessment (FCA) and develop courses of action** to remedy the facility's deficiencies, in support of the Edgewood Chemical and Biological Center / Combat Capabilities Development Command Chemical Biological Center (ECBC/CCDC CBC) mission. Tom oversaw stakeholder interviews and electrical, telecommunications, security and fire protection systems **investigations to determine remaining useful life and compliance with codes and standards**. *Fee: $339,583*

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Georgia Army National Guard | Level II Energy Audits, Statewide, GA	2015	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	[X] Check if project performed with current firm	

Electrical Engineer – Tom provided data gathering of utility billings and **site investigations to document the building envelope, equipment, and lighting**. Baseline calculations were performed for both power and water consumption. Energy Conservation Opportunities and Energy Conservation Measures were proposed, and an Energy Master Plan was prepared summarizing methodology, life cycle cost and recommendations. *Fee: $240,000*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
BRANDON HOFSTEAD, FPE	Fire Protection Engineer	15	8

15. FIRM NAME AND LOCATION *(City and State)*

Pond – Peachtree Corners, GA

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
MS, Fire Protection Engineering, University of Maryland 2012; BS, Mechanical Engineering, Clarkson University, 2007	Professional Fire Protection Engineer (FPE): AL #36948-E, GA #037581, FL #83797, SC #35884, NC #048541, RI #11852, VA #0402056389, MD #36581, PA #085971, TX #131692, OK #30969, NY #101155, CA #FP2038, NM #25589, AR #19019, TN #122803, IL #062-071833, CT #34215; National Council of Examiners for Engineering and Surveyors (NCEES) #13-858-72

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

- 15 years of experience providing **facility condition assessments (BUILDER SMS)**, fire protection systems design, means of egress analysis, accessibility oversight, acceptance/ maintenance testing, and code equivalency documentation. Provided fire suppression and alarm design for 47 NGB projects.
- Specializes in evacuation plans, building code plan review, shop drawing reviews, fire protection scheme design.
- Building/fire codes expertise, including ANG ETL 01-1-1, UFC 3-600-01, NFPA NFC, ICC, ETL 98-8, ETL 02-15, UFC 3-600-1.
- Experienced in designing and testing all types of FP/LS systems including sprinkler, AFFF, HI-EX, fire alarm & detection, mass notification, halon 1301, clean agents, life safety, fire pumps, water tanks and standpipes.
- Affiliations: Society of Fire Protection Engineers (SFPE); NFPA; ICC; Presentations: SFPE Carolina Chapter, *"Building Code Requirements of Means of Egress"* – 4/2016.
- Training includes REVIT for Mechanical Design, AutoCAD, VR Walkthru Technology, BUILDER SMS.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Louisiana Army National Guard | BUILDER SMS Implementation, Phase 2, Various Locations, Statewide	2020	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	[X] Check if project performed with current firm	

Fire Protection Engineer – Brandon provided fire protection assessments of the **151 facilities** at three ARNG installations located across the state. Using customized, tablet-based FLOW software, he performed the fire protection assessments onsite and took photographs relating to each building's condition. In the office, Brandon and the team loaded the data into BUILDER SMS database and performed quality control using the **BUILDER SMS Quality Reports** before submitting the data to the client. Once completed, this assessment establishes ranked, baseline data on existing building conditions. *Fee: $243,960*

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Facility Condition Assessment, US Army Combat Capabilities Development Command Chemical Biological Center, Aberdeen Proving Ground, Edgewood, MD	2019	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	[X] Check if project performed with current firm	

Fire Protection Engineer - Brandon assessed all fire protections systems throughout Building E3330 to ensure code compliance with applicable NFPA, IBC and UFC standards. The evaluation included fire suppression, fire alarm systems, and means of egress. With all systems receiving poor or deficient condition ratings, Brandon recommended the following upgrades: consolidated whole-building fire suppression system; new addressable fire alarm/mass notification system (per UFC 3-600-01); and clear signage for fire department connections. *Fee: $339,583*

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
SCANG | Repair Security Forces Facility & Construct CATS/CATM Facility, 169 FW, McEntire JNGB, Eastover, SC	2019	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	[X] Check if project performed with current firm	

Fire Protection Engineer - Brandon led the fire protection design for the reconfiguration of existing Security Forces Facility to meet the mission requirements of the Base Defense Operations Center (BDOC), as well as 3,00 SF addition for the new CATM/CATS facility. The NFPA 101 compliant design consists of a new automatic wet pipe fire sprinkler protection system with a new Siamese wall mounted FDC. To comply with UFC 3-600-01, Section 9-3.3.2, the existing 4" underground fire protection Service Lateral will be abandoned in place and replaced with a new 6" Service Lateral with its 6" flanged spigot service entrance location located in Mechanical Room 125. The existing facility and addition will be equipped with an addressable fire detection/alarm and mass notification system with manual pull box stations, smoke detectors, duct detectors, strobes, speaker/strobes. *Cost: $4.2M*

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Reconstitute Defenders Initiative Strategic Master Plan, 37th Training Wing, Joint Base San Antonio, Lackland AFB, TX	2020	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	[X] Check if project performed with current firm	

Fire Protection Engineer - Brandon assessed all fire protections systems for the **FUS**/**FCA** portion of this many-faceted project in support of the USAF at JBSA. The **FCA/FUS** was conducted for all Security Forces Academy facilities by a team of engineers, architectural specialists, and planners. All buildings were analyzed with building occupants and users to evaluate the functional adequacy of each facility. Facility records were updated in the **BUILDER SMS** and the **Real Property system** of record. The end goal was to evaluate each building's current and near-term future use to assess **code compliance** and maximum utility to support the assigned mission. *Fee: $1,301,516*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
TANYA NORMAN, PE	Site/Infrastructure Engineer	18	15

15. FIRM NAME AND LOCATION *(City and State)*

Pond – Peachtree Corners, GA

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
BS, Civil Engineering: Southern Polytechnic State University, 2004	Professional Engineer (Civil) GA #038055/GA; Georgia Soil and Water Conservation Commission, Level II Certified Design Professional and Level IB Certified Inspector GA #58386

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

- 18 years of **site/civil design and analysis, BUILDER SMS assessments** including 15 years of executing projects at DoD installations
- Specializations include site layout with respect to **AT/FP requirements**; pavement design using PCASE software; storm drainage design; utility and grading plan preparation; stormwater management and water quality BMPs design, including hydrologic and hydraulic studies; sanitary sewer design; floodplain studies; erosion and sediment control design; and wetlands encroachment coordination
- Expertise in analysis and design of entry control facilities in **compliance with UFCs**, SDDCTEA Pamphlet 55-15, DoD Anti-Ram Vehicle Barrier List, and applicable codes
- Experience calculating response times for various threat scenarios, designing passive barriers, selecting active vehicle barriers, and designing roadway geometry with safety and pedestrian access considerations
- Extensive AOR experience ensures familiarity with codes and regulations

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
West Virginia Army National Guard | BUILDER SMS Implementation, Phase 1, WV	2018	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	[X] Check if project performed with current firm	

Site/Infrastructure Engineer – Tanya led civil design and coordinated with others on the multidisciplinary design team for the assessment of condition-ratings of building systems and components in FLOW, which contains the **BUILDER Remote Entry Database (BRED)**. The results were uploaded into BUILDER. The **FCAs consisted of 77 facilities, totaling 1.41 million SF across seven installations** and included following building systems: foundations, basement construction, superstructure, exterior enclosure, roofing, interior construction, stairs, interior finishes, conveying, plumbing, HVAC, fire protection, and electrical. *Fee:*

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Facility Condition Assessment, US Army Combat Capabilities Development Command Chemical Biological Center, Aberdeen Proving Ground, Edgewood, MD	2019	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	[X] Check if project performed with current firm	

Site/Infrastructure Engineer- Tanya provided **site analysis of storm sewer, water distribution, sanitary sewer, fixed site features, parking and roadways for this comprehensive Facility Condition Assessment (FCA)**. Tanya developed civil site plans working with the mission users to support the renovation. The FCA effort integrated the existing conditions analysis with the ability to address the issues identified and provided programming documentation to pursue funding to completely renovate / redevelop the facility. *Fee: $339,583*

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
Reconstitute Defenders Initiative Strategic Master Plan, 37th Training Wing, Joint Base San Antonio, Lackland AFB, TX	2020	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	[X] Check if project performed with current firm	

Site/Infrastructure Engineer- Tanya provided technical oversight and reviews for the **civil/traffic analysis**, **planning**, and preliminary design components for the **Planning Charrette Report** and **User Requirements Document** deliverables for the redevelopment of (6) entry control facilities. This integrated, multi-faceted project also included **Facilities Assessments**, **space use and facility requirements calculations**, **Master Plan Development**, and **Programming Documentation**. The **Strategic Master Plan** provides a roadmap for a multi-year phased facility and infrastructure development and revitalization. Fee: $1,301,516

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If Applicable)*
PCRs/DD1391s & Area Development Plan for Laughlin Air Force Base, TX	2021	N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	[X] Check if project performed with current firm	

Site/Infrastructure Engineer- Tanya provided c**ivil engineering analysis and design in support of developing (3) PCR/C2R** and an **ADP/DDP** for the renovation of Buildings 320/328, Addition/Alteration to Building 241, and a Flightline ADP/DDP. Responsibilities included validation of **Utility Infrastructure and capacities**, and subsequently development of a **site analysis package** to ensure the vetted feasibility of facility siting. *Fee: $354,278*

EXPERIENCE AND PAST PERFORMANCE ON SIMILAR PROJECTS

To demonstrate our relevant experience executing **BUILDER site assessments and facility inspections,** the Pond Team has selected 10 previous projects. These projects showcase our experience working with military clients and at Army National Guard facilities, including WVARNG locations throughout the state, partnering with outside team members, delivering large-scale facility inspections using the **BUILDER SMS application**. The matrix below lists these projects and identifies experience with the project deliverables identified in the SOW.

POND TEAM

PROJECT EXPERIENCE RELEVANT TO WVARNG GOALS & OBJECTIVES

Project Title & Location	*Client*	Populated building asset life-cycle system inventory of components into latest version of BUILDER SMS	Performed baseline visual inspections of building components using BUILDER methodology	Conduct site assessments at ARNG locations around the state	Deliverables provided on schedule
1. WVARNG | BUILDER Sustainment Management System Implementation, Phase I, Statewide, WV	West Virginia Army National Guard	■	■	■	■
2. WVARNG | BUILDER Sustainment Management System Implementation, Phase 2, Statewide, WV	West Virginia Army National Guard	■	■	■	■
3. SCARNG | BUILDER Sustainment Management System Implementation, McEntire JNGB, Eastover, SC	South Carolina Army National Guard	■	■	■	■
4. LAARNG | BUILDER Sustainment Management System Implementation, Phase 2, Statewide, LA	Louisiana Army National Guard	■	■	■	■
5. LAARNG | BUILDER Sustainment Management System Implementation, Phases 3 & 4, Statewide, LA	Louisiana Army National Guard	■	■	■	■
6. BUILDER SMS for Army Materiel Command, Red River Army Depot, TX and Holston Army Ammunition Plant, TN	USACE, Huntsville Center	■	■		■
7. Facility Condition Assessment, US Army Combat Capabilities Development Command Chemical Biological Center, Aberdeen Proving Ground, Edgewood, MD	USACE, Huntsville Center	■	■		■
8. ePRISMS Asset Management for IMCOM, Fort Gordon, GA; Fort Stewart, GA; Fort Jackson, SC; Fort Bliss, TX; Fort Leavenworth, KS	USACE, Fort Worth District		■		■
9. ePRISMS Assessment, Fort Leavenworth, KS, Fort Riley, KS, Detroit Arsenal, MI, Fort Jackson, SC, Fort Huachuca, AZ, Redstone Arsenal, AL	IMCOM		■		■
10. South Carolina Army National Guard | Installation Energy and Water Plan (IEWP), Statewide, SC	South Carolina Army National Guard		■	■	■

Project #1

West Virginia Army National Guard | BUILDER Sustainment Management System Implementation, Phase 1, Statewide, WV

CLIENT REFERENCE

Matthew Corcoran, Project Manager, WV ARNG – USPFO-WV | 304.473.5016 | matthew.d.corcoran.mil@mail.mil

PROJECT DESCRIPTION

This project demonstrates Pond's capabilities to perform site inspections and facility inspections utilizing BUILDER SMS for Army National Guard facilities spread across the state.

Under this task order, Pond successfully implemented the first phase of the BUILDER SMS for WVARNG facilities, which included site assessments and facility inspections of 77 facilities, totaling 1.41 million SF across seven locations. The Pond team included structural, mechanical, electrical, and fire protection engineers and two architects that built inventory and provided condition-ratings of building systems and components in FLOW, which contains the BUILDER Remote Entry Database (BRED). The results were uploaded into BUILDER SMS.

The assessments were performed on the following building systems: foundations, basement construction, superstructure, exterior enclosure, roofing, interior construction, stairs, interior finishes, conveying, plumbing, HVAC, fire protection, and electrical. The WVARNG does not have special equipment in their facilities. Therefore, they excluded special equipment from the scope of work. Pond's deliverables consisted of the following:

- QC 05I – Section Details with Inspection Report
- BUILDER 10 Year Work Plan for each site (digital and hardcopy)
- Real Property Discrepancy List
- BUILDER Lessons Learned Report
- Data Upload Memorandum
- Transmittal Letter

Prior to the **BUILDER SMS assessment,** Pond scheduled coordination calls with project stakeholders at each site. The Assessment Team used the coordination calls to discuss the **BUILDER SMS** assessment schedule, coordinate full access to the facilities and request building drawings, base maps, and other supporting information. In addition, Pond provided

Onsite, Pond met with local points of contact (POCs), including maintenance staff and individual facility managers. Each onsite visit started with a safety minute and a discussion with the facilities manager and the maintenance team to learn about facility issues, deferred maintenance, and recent renovations. At the conclusion of the meeting, the team did an onsite B**UILDER SMS assessment of the 13 buildings systems** required by the Army and the National Guard Bureau. The assessments included entering the **Inventory, Sectioning** the components and systems, quantifying the building materials, taking photos, and providing **onsite ratings.** At the conclusion of each assessment, the Team met with the facility managers to review the findings and safety hazards identified during the BUILDER SMS assessment.

PROJECT COSTS & DATES
Cost (Fee):$455,335
Size: 1,410,000 SF
Period of Performance: 09/2017 – 09/2018

RELEVANCE & KEY HIGHLIGHTS
• **Multi-Site, Multi-Facility Condition Assessment Project for the Army National Guard**
• **Completed Within Past 5 Years**
• **Real Property Inventory**
• **Most current version of BUILDER SMS Application**
• **Work Package Development**

The team delivered a Trip Report after each trip that provided a list of facilities assessed, the total square footage, and updated POC information for each facility. The Trip Report also provided an executive level summary of the overall condition of each site.

Pond provided many deliverables over the course of this project including a **Project Management Plan, Work Action Plan, a Monthly Execution Schedule, Data Entry and Report Generation and Facility Condition Assessment Reports for each site.**

Based on the outcome of this **BUILDER SMS Implementation**, the WVARNG received a fully a**uditable and executable set of work items** to keep them mission-ready today and in the future, with a baseline that controls future maintenance costs.

PAST PERFORMANCE

(CPARS) - Quality: Exceptional | Schedule: Exceptional | Cost Control: Exceptional | Management: Exceptional

"Overall Exceptional performance no known issues, I would recommend them for any A-E Requirement."

– Matthew Corcoran, Contract Officer, USPFO-WV

Project #2

West Virginia Army National Guard | BUILDER Sustainment Management System Implementation, Phase 2, Statewide, WV

CLIENT REFERENCE

CPT Joshua Marcum, Project Manager, WV ARNG – USPFO-WV | 304.561.6582 | joshua.m.marcum2.mil@mail.mil

PROJECT DESCRIPTION

Pond successfully implemented the second phase of the BUILDER SMS for the ARNG facilities in West Virginia, which included facility condition assessments of 38 facilities totaling 736,761 SF across eleven installations. The assessments were executed by a team of engineers (electrical, fire protection, HVAC, plumbing and structural) and architects performing inventory and condition-rating of building systems and components with the results input into BUILDER.

During three (3) one-week site visits, the team rated each facility's condition in the following areas: foundations, basement construction, superstructure, exterior enclosure, roofing, interior construction, stairs, interior finishes, conveying systems, plumbing, HVAC system/components, fire protection, electrical, and specialty equipment.

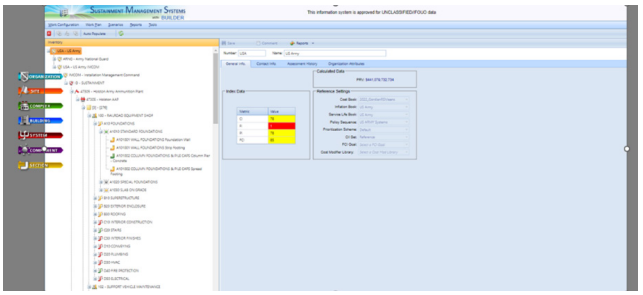
Pond realized the importance of completing this project on-time as the WVARNG BUILDER assessment started in July of 2020 at the height of the COVID-19 pandemic. Pond's safety team developed a comprehensive safety process to minimize the team's exposure to COVID-19.

Using customized, tablet-based FLOW software, the assessors performed the assessments onsite and took photographs relating to each building's condition. In the office the team loaded the data into BUILDER SMS database and performed quality control using the BUILDER SMS Quality Reports before submitting the data to the client.

Once completed, this assessment ranked baseline data on existing building conditions. WVARNG is using this user-friendly, interactive database as a long-range planning tool to prioritize building repairs, pursue Federal/State Sustainment, Restoration, Modernization (SRM) funding, and update condition rankings as repairs occur.

PROJECT COSTS & DATES
Cost (Fee): $249,500
Size: 736,761 SF
Period of Performance: 09/2019 – 07/2021

RELEVANCE & KEY HIGHLIGHTS
• **Multi-Site, Multi-Facility Condition Assessment Project for the Army National Guard**
• **Completed Within Past 5 Years**
• **Real Property Inventory**
• **Facility Condition Assessments**
• **Utilized the most current version of BUILDER SMS Application**
• **Work Package Development**
• **Design Using AT/FP, IBC, and UFCs**



PAST PERFORMANCE

(CPARS) - Quality: Very Good | Schedule: Very Good | Cost Control: Satisfactory| Management: Very Good

"Overall professional contractor to do business with, competent and professional in all areas, Met and exceeded all expectations of the Statement of Work."

– Matthew Corcoran, Contract Officer, USPFO-WV

Project #3

South Carolina Army National Guard | BUILDER Sustainment Management System Implementation, McEntire Joint National Guard Base, Eastover, SC

CLIENT REFERENCE

Mr. Frank Sprankle, Project Manager | 803.315.1688 | spranklefp@tag.scmd.state.sc.us

PROJECT DESCRIPTION

Demonstrates Pond experience executing facility condition assessments utilizing BUILDER SMS for the Army National Guard. Pond deployed a seven-person team, comprised of architects and mechanical, electrical and structural engineers, to perform on-site assessments of 19 facilities totaling 552,372 SF at McEntire Joint National Guard Base.

To fulfill a United States Army mandate, the South Carolina Military Department commissioned Pond to perform comprehensive assessments on all South Carolina National Guard facilities using the BUILDER Sustainment Management System.

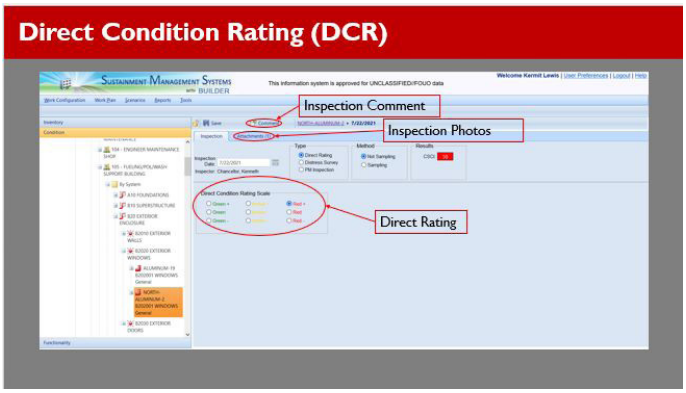
Pond deployed a seven-person team, comprised of architects and mechanical, electrical and structural engineers, to perform on-site assessments of nineteen (19) facilities totaling 552,372 SF at McEntire Joint National Guard Base. During four (4) one-week site visits, this team rated each facility's condition in the following building systems: Foundations, Basement Construction, Superstructure, Exterior Enclosure, Roofing, Interior Construction, Stairs, Interior Finishes, Conveying Systems, Plumbing, HVAC, Fire Protection, Electrical, Specialty Equipment.

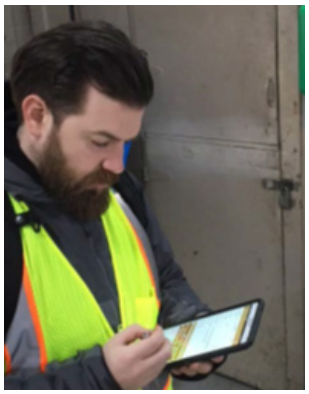
Using customized, tablet-based FLOW software, each assessor input field data and photographs relating to each building's condition; this data was then imported into BUILDER SMS database.

Once completed, this assessment established ranked, baseline data on existing building conditions. SCMD can use this user-friendly, interactive database as a long-range planning tool to prioritize building repairs, pursue Federal/State Sustainment, Restoration, Modernization (SRM) funding, and update condition rankings as repairs occur.

PROJECT COSTS & DATES
Cost (Fee): $298,350
Size: 552,372 SF
Period of Performance: 07/2018 – 12/2019

RELEVANCE & KEY HIGHLIGHTS
• **Multi-Facility Inspections and Site Assessment Project for the Army National Guard**
• **Completed Within Past 5 Years**
• **Real Property Inventory**
• **Facility Condition Assessments**
• **Utilized the most current version of BUILDER SMS Application**
• **Infrastructure assessments and report writing.**





Project #4

Louisiana Army National Guard | BUILDER Sustainment Management System Implementation, Phase 2, Statewide, LA

CLIENT REFERENCE

Lt Col Steven Belford, Project Manager, LAARNG – USPFO-LA | 318.290.5281 | steven.belford@la.gov

PROJECT DESCRIPTION

The Louisiana Army National Guard (LAARNG) awarded Pond Phase 2 of the BUILDER SMS Implementation. Pond deployed 2- six-person teams, comprised of architects and mechanical, electrical, and structural engineers, to perform on-site assessments of 151 facilities totaling 687,214 SF at three ARNG locations located across the state.

Prior to the **BUILDER SMS assessment,** Pond coordinated with LAARNG staff to schedule the BUILDER SMS Assessments. The Assessment Team worked with the Construction Facilities Management Office (CFMO) to schedule the BUILDER SMS assessment at each site, coordinate full access to the facilities and gather facility drawings, base maps, and other supporting information.

The Assessment Team completed the **onsite BUILDER SMS assessments** in three (3) one-week site trips. Using customized, tablet-based FLOW software, we populated the building asset **life-cycle system inventory of components into the latest version of BUILDER™ SMS.** Using FLOW we provided baseline visual inspections of building components and inventoried the components using BUILDER™ methodology. The assessors provided onsite ratings and took photographs to document the conditions for the following systems: foundations, basement construction, superstructure, exterior enclosure, roofing, interior construction, stairs, interior finishes, conveying systems, plumbing, HVAC, fire protection, electrical, and specialty equipment. After the assessments, the team loaded the data into BUILDER SMS and performed quality control using the BUILDER SMS Quality Reports.

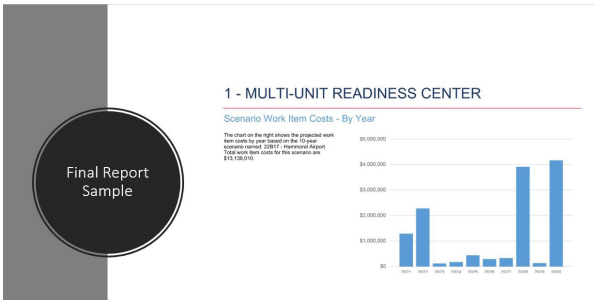
These site assessments and facility inspections established rank and provided baseline data on existing building conditions, which allowed the LAARNG to use this user-friendly, interactive database as a long-range planning tool to prioritize building repairs, pursue Federal/ State Sustainment, Restoration, Modernization funding, and update condition rankings as repairs occur.

The project deliverables included a Kickoff Conference Call, Project Management Plan, Calibration Plan, QC plan, a Real Property Discrepancy List, Monthly Execution Schedule, QC Report, BUILDER Lessons Learned Report, Information Upload Report, Inventory and Inspection Information, a Final BUILDER Upload Memo and a Final Location Report.

Utilizing staff in local offices, Pond reduced travel cost, increased client interaction, and provided on-site technical support and training. This project was an opportunity for Pond to work with LAARNG facility managers and users to improve the National Guard facilities in our state. Our successful performance led to the LAARNG awarding Pond the subsequent BUILDER SMS contract for Phases 3 & 4.

PROJECT COSTS & DATES
Cost (Fee): $243,960
Size: 687,214 SF
Period of Performance: 10/2019 – 10/2020

RELEVANCE & KEY HIGHLIGHTS
• **Multi-Facility Inspections and Site Assessment Project for the Army National Guard Statewide**
• **Completed Within Past 5 Years**
• **Real Property Inventory**
• **Facility Condition Assessments**
• **Most current version of BUILDER SMS Application**
• **Work Package Development**



Project #5

Louisiana Army National Guard | BUILDER Sustainment Management System Implementation, Phases 3 & 4, Statewide, LA

CLIENT REFERENCE

Captain Brittley Caldwell Project Manager, LAARNG – USPFO-LA | 318.290.5085 |Brittley.A.Caldwell.mil@mail.mil

PROJECT DESCRIPTION

The Louisiana Army National Guard awarded Pond Phases 3 and 4 of the BUILDER SMS Implementation. Pond deployed (2) six-person teams, comprised of architects and mechanical, electrical, and structural engineers, to perform on-site assessments of 635 facilities totaling 2,147,342 SF at 53 ARNG installations located across the state.

Pond worked with the CFMO to schedule the **BUILDER SMS assessment** at each site, coordinate full access to the facilities and gather facility drawings, base maps, and other supporting information. The coordination included risk management measures to mitigate the potential for the spread of COVID-19 and the coordination of facility assessment support after a major hurricane.

Each onsite visit started with a safety minute and a discussion with the facilities manager and the maintenance team to learn about facility issues, deferred maintenance, and recent renovations. At the conclusion of the meeting, the team did an **onsite BUILDER SMS assessment of the 13 buildings systems** required by the Army and the National Guard Bureau. The assessments included entering the **Inventory, Sectioning** the components and systems, quantifying the building materials, taking photos, and providing **onsite ratings.** At the conclusion of each assessment, the Team met with the facility managers to review the findings and **safety hazards** identified during the **BUILDER SMS assessment.** Over multiple one-week site visits, the assessment team rated each facility's condition in the following areas: foundations, basement construction, superstructure, exterior enclosure, roofing, interior construction, stairs, interior finishes, conveying systems, plumbing, HVAC, fire protection, electrical, and specialty equipment. Using customized, tablet-based FLOW software, the team performed the assessments onsite and took photographs relating to each building's condition.

The project deliverables included:

- Accident Prevention Plan
- Project Management Plan
- Calibration Plan
- QC plan / QC Report
- Real Property Discrepancy List
- Monthly Execution Schedule
- BUILDER Lessons Learned Report
- Information Upload Report / Inventory and Inspection Reports
- Final BUILDER Upload Memo / Final Location Report

After the assessment, the team loaded the data into **BUILDER SMS** and performed quality control using the **BUILDER SMS** Quality Reports before submitting the data to the client. Once completed, the assessment team conducted an onsite data review and work planning charrette with LAARNG. The contract included support efforts after the charrette to train ARNG personnel.

Through our extensive experience, Pond reduced travel cost, increased client interaction, and provided on-site technical support and training. Pond started this project at the height of the COVID-19 pandemic.

PROJECT COSTS & DATES
Cost (Fee): $810,697
Size: 2,147,342SF
Period of Performance: 06/2020 – 04/2022
RELEVANCE & KEY HIGHLIGHTS
• **Multi-Facility Inspections and Site Assessment Project for the Army National Guard Statewide**
• **Completed Within Past 5 Years**
• **Real Property Inventory**
• **Most current version of BUILDER SMS Application**
• **Work Package Development**
• **Provided BUILDER SMS Training to ARNG Users**

Project #6

Facility Condition Assessments (BUILDER SMS) for Army Materiel Command, Red River Army Depot, TX and Holston Army Ammunition Plant, TN

CLIENT REFERENCE

Matthew Harris, Project Manager, USACE - Huntsville Center| 256.541.9164 | matthew.m.harris@usace.army.mil

PROJECT DESCRIPTION

Demonstrates Pond experience executing large-scale facility condition assessments utilizing BUILDER SMS. Pond deployed a 2-six-person teams, comprised of architects and mechanical, electrical and structural engineers, to perform on-site assessments of 595 facilities totaling 4,574,946 SF at 2 Army Materiel Installations located in Eastern Texas and Eastern Tennessee.

Pond successfully implemented the **BUILDER Sustainment Management System** for the Army Materiel Command at the Red River Army Depot, TX and the Holston Army Ammunition Plant, TN which included facility condition assessments for **597 facilities** totaling **4,574,946 SF** across two installations. Pond worked on an expedited schedule due to the COVID-19 pandemic. The team consisted of electrical, fire protection, mechanical, and structural engineers, and architects.

While on site, the Pond Team completed the inventory, sectioning and direct condition ratings using customized, tablet-based FLOW software. The assessors input data and photographs relating to each building's condition into BRED onsite and uploaded the file into **BUILDER SMS** daily. Once the **site assessments and facility inspections** were complete the team conducted an onsite data review and work planning charrette for each site. This session included hands-on exercises to teach the facility engineers how to maintain the **BUILDER data.**

During 12 one-week site visits, the team assessed conditions in the following areas, creating a total of 10,000 line-items: foundations, basement construction, superstructure, exterior enclosures, roofing, interior construction, stairs, interior finishes, conveying systems, plumbing, HVAC system/components, fire protection, electrical, specialty equipment.

The final deliverables included an **Installation Facility Condition Assessment Report** that provided a Building Condition Index, System Condition Index, Data Analysis Report, and a Real Property Discrepancy List. Pond's **BUILDER SMEs** lead a three-day Data Review and Work Planning Charrette with each Installation and provided 30 days of Reach Back Support

PROJECT COSTS & DATES
Cost (Fee): $1,984,694
Size: 4,574,946 SF
Period of Performance: 09/2020 – 05/2022

RELEVANCE & KEY HIGHLIGHTS
• **Multi-Site, Multi-Facility Condition Assessment Project utilizing BUILDER SMS for DoD facilities**
• **Completed Within Past 5 Years**
• **Site Assessments**
• **Facility Inspections**
• **Utilized the most current version of BUILDER SMS Application**
• **Work Package Development**
• **To measure the success of the project USACE validated 30% of the data collected and 100% of the data input. The validation process found that the data was highly accurate and IMCOM adopted the drawings as the official drawings of record.**
• **Pond delivered and IMCOM accepted 100% of the data on the first delivery program.**

Project #7

Facility Condition Assessment, US Army Combat Capabilities Development Command Chemical Biological Center, Aberdeen Proving Ground, Edgewood, MD,

CLIENT REFERENCE

Michael Braddock, Project Manager, USACE - Huntsville Center| 256.895.1656 | Michael.W.Braddock@usace.army.mil

PROJECT DESCRIPTION

This highly unique project is illustrative of the Pond Team's ability to see the possibilities for a facility that may not initially be readily apparent. This project evaluated a very large, unique 1940s-era facility set that was in poor condition, with asbestos and other potential contaminants – and using a Facilities Condition Assessment methodology, prioritized items for renovation, replacement, and addition / alteration.

Pond provided a dynamic team of planners, architects, engineers, and analysts to perform a comprehensive Facility Condition Assessment (FCA) in support of the Edgewood Chemical and Biological Center / Combat Capabilities Development Command Chemical Biological Center (ECBC/CCDC CBC) mission. The mission requires a facility to accommodate administrative space, secure space, and laboratory space for the research, development, testing and evaluation (RDT&E) of chemical and biological systems for the Army and other agencies. Aside from the multitude of notable deficiencies on the exterior of the outdated building shell, facility materials were analyzed and determined to host environmentally-hazardous construction materials and minimal life safety systems. The FCA effort integrated the existing conditions analysis with the ability to address the issues identified and provided programming documentation to pursue funding to completely renovate / redevelop the facility. The Pond Team also developed DD Form 1391 front-page elements, to include a full parametric cost estimate, and DD 1391 Tab C with an economic alternatives analysis.

The FCA determined that a large-scale renovation of the facility was justified and provided qualitative and quantitative considerations for the path forward. This perspective creates an innovative approach to the typical master planning theories by establishing where the legacy facility currently stands and what needs to occur to create the objective facility the mission requires. Based on a full parametric cost estimate, facility renovation would cost approximately $53M – and per the RPLANS Plant Replacement Value (PRV) calculations, a facility replacement is anticipated to cost $87M, resulting in a renovation vs. replacement value of 60.8% of the PRV; the team conducted a cost-benefit analysis to determine that renovation was the right answer. Additionally, the team determined that renovation would allow for 170,000 GSF of usable space to be categorized as mission needs dictated, which would allow an additional 380 personnel to occupy the facility.

Based on the determination that renovation of the facility was the most viable option for the mission, architectural floor plans, civil site plans, and structural design criteria were developed working with the mission users to develop the scale of renovation. Interior and exterior facility renovations must adhere to modern building codes and construction standards to provide personnel with quality work environments. At the same time, it was determined that the facility should maintain its historical art-deco architectural design. With the information provided by the APG Installation Design Guide, the project team was able to create exterior and interior renderings and floor plans of the facility in its objective state.

PROJECT COSTS & DATES
Cost (Fee): $1,984,694
Size: 4,574,946 SF
Period of Performance: 09/2020 – 05/2022

RELEVANCE & KEY HIGHLIGHTS
• **Multi-Site, Multi-Facility Condition Assessment Project utilizing BUILDER SMS for DoD facilities**
• **Completed Within Past 5 Years**
• **Real Property Inventory**
• **Facility Condition Assessments**
• **Following the FUS and FCA, developed a Facility Optimization Analysis to maximize building utility and efficiency, while re-allocating space to ensure Building Code Compliance and Historical Integrity**
• **Completed 3 months ahead of scheduled POP.**

PAST PERFORMANCE

(CPARS) -Quality: Very Good | Schedule: Very Good | Cost Control: N/A | Management: Very Good

"The high-quality planning products provided the government with exceptional tools for effective decision-making."

—Brandon Lee, Supervisory Contracting Specialist, Huntsville COE

Project #8

ePRISMS Asset Management for Installation Management Command (IMCOM),

Fort Gordon, GA; Fort Stewart, GA; Fort Jackson, SC; Fort Bliss, TX; Fort Leavenworth, KS

CLIENT REFERENCE

Ryan Shackelford, Project Manager, USACE, Fort Worth District | 817.886.1717 | ryan.shackelford@usace.army.mil

PROJECT DESCRIPTION

Pond staff completed significant Asset Management tasks in support of Enterprise Real-property Interactive Space Management System data development for the Installation Management Command (IMCOM). Pond's Asset Management Team performed seamlessly across multiple Installations to collect ePRISMS data using the latest technology and an innovative approach to processing to complete the effort on schedule while delivering 100% of the data correct on the first delivery.

Pond provided professional services for Real Property Database Development and Management for Installation Management Command (IMCOM) to review, validate, and develop and standardized Enterprise Proactive Real-Property Interactive Space Management System (ePRISMS) data for optimal facilities planning and management at Fort Stewart-HAAF, GA; Fort Gordon, GA; Fort Jackson, SC; Fort Bliss, TX; and Fort Leavenworth, KS to support preparation for future GFEBS data management updates, **BUILDER SMS assessments**, and other real property inventories and evaluations.

The project included scanning and surveying facilities using LiDAR technology and developing standard ePRISMS floor plans and Space and Manpower Data for a total of 44 million SF for comprehensive facility planning, management and utilization purposes under the Army Installation Geospatial Information & Services (IGI&S) ePRISMS Quality Assurance Plan Standard. Pond developed the ePRISMS data to the highest standards of quality and validated the quality by verifying the data using the ePRISMS QC tool prior to loading the files into ePRISMS. The scope entailed the following tasks:

1. Data Collection and Development

PRISMS development through Assessments:

- Pond developed floor plan data and Facility Space Utilization per Facility Category Code in the PRISMS QAP for verification of real property data to support space utilization planning and facility management.
- Assessment data was developed through an extensive, highly coordinated data collection effort, often involving over 10 two-man teams providing field surveys at any given time.
- PRISMS data was developed to the highest level of accuracy possible to show an accurate and updated count of square footage, use by CATCODE, and occupying Unit-by-Unit Identification Code for accurate utilization analysis, space planning, and management.

BUILDER Integration:

- Ensured product and real property inventory can serve as the basis for future **BUILDER SMS** analysis.

PROJECT COSTS & DATES
Cost (Fee): $7,527,943
Size: 44,200,000 SF
Period of Performance: 09/2018 – 09/2019

RELEVANCE & KEY HIGHLIGHTS
• **Multi-Site, Multi-Facility Condition Assessment Project utilizing BUILDER SMS for DoD facilities**
• **Completed Within Past 5 Years**
• **Real Property Inventory**
• **Data was used to update ePRISMS and Real Property folders to support Real Property Audit Compliance, update 1354's and create Memorandums for the Record to support other system data such as GFEBS and BUILDER.**

2. Produce real estate assessment/utilization reports: PRISMS data is field-surveyed and developed to the highest level of accuracy possible using a peer-based approach by facility planners, architects, engineers, and asset management specialists with end-state use in mind. The Pond team ensures the highest accuracy for use in PRISMS, and to provide a foundational dataset for use in initiatives such as **BUILDER analysis**, development of fully auditable Capital Investment Strategies, and SRM projects.

3. Upload all information to the PRISMS Enterprise System: All data passes through the PRISMS QA tool successfully with minimal error, then edited and rechecked to provide a seamless, completely accurate product.

PAST PERFORMANCE

(PPQ) -Quality: Exceptional | Schedule: Exceptional | Cost Control: Exceptional | Management: Exceptional

"Pond provided the highest level of product quality and implemented an extensive quality control program to ensure data accuracy." – Ryan Shackelford, Program Manager, CESWF

Project #9

ePRISMS Assessment, Fort Leavenworth, KS, Fort Riley, KS, Detroit Arsenal, MI, Fort Jackson, SC, Fort Huachuca, AZ, Redstone Arsenal, AL

CLIENT REFERENCE

Ryan Shackelford, Project Manager, USACE, Fort Worth District | 817.886.1717 | ryan.shackelford@usace.army.mil

PROJECT DESCRIPTION

Pond staff completed significant Asset Management tasks in support of Enterprise Real-property Interactive Space Management System data development for the IMCOM. Pond performed across multiple Installations to collect ePRISMS data using the latest technology and an innovative approach to processing to complete the effort on schedule while delivering 100% of the data correct on the first delivery.

Pond supported IMCOM's initiative to inventory, collect, and develop ePRISMS data for optimal facilities planning and management throughout multiple CONUS locations.

Of the 67M GSF assessed, Pond provided assessment services for 49,000,000 GSF of IMCOM Installation facilities at Fort Leavenworth, KS; Fort Riley, KS; Detroit Arsenal, MI; Fort Jackson, SC; Fort Huachuca, AZ; and Redstone Arsenal, AL, for both analysis of Real Property Inventory data and as a precursor for developing **BUILDER database** management services and identifying potential issues with the Real Property data for development of future corrective actions. The scope entailed the following tasks:

1. **Data Collection and Development**

PRISMS development through Assessments:

- Pond developed floor plan data and Facility Space Utilization per Facility Category Code in the PRISMS QAP for verification of real property data to support space utilization planning and facility management.
- Assessment data was developed through an extensive, highly coordinated data collection effort, often involving over 10 two-man teams providing field surveys at any given time.
- PRISMS data is developed to the highest level of accuracy possible to show an accurate and update count of square footage, use by CATCODE, and occupying Unit-by-Unit Identification Code for accurate utilization analysis, space planning, and management.

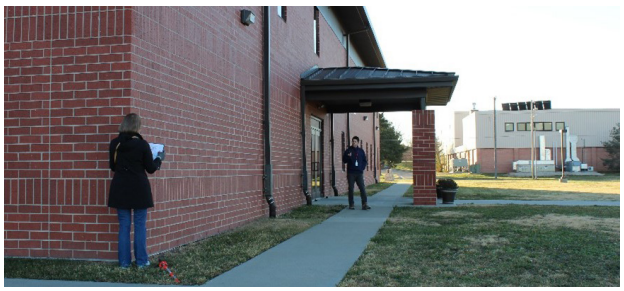
BUILDER Integration:

Ensured product and real property inventory can serve as the basis for future **BUILDER SMS** analysis.

2. **Produce real estate assessment/utilization reports:** PRISMS data is field-surveyed and developed to the highest level of accuracy possible using a peer-based approach by facility planners, architects, engineers, and asset management specialists with end-state use in mind. The Pond team ensures the highest accuracy for use in ePRISMS, and to provide a foundational dataset for use in initiatives such as BUILDER analysis, development of fully auditable Capital Investment Strategies, and SRM projects.
3. **Upload all information to the PRISMS Enterprise System:** All data passed through the ePRISMS QA tool successfully with minimal error, then provided a seamless, completely accurate product.

PROJECT COSTS & DATES
Cost (Fee): $6,350,000
Size: 67,000,000 SF
Period of Performance: 09/2016 – 09/2017

RELEVANCE & KEY HIGHLIGHTS
• **Multi-Site, Multi-Facility Condition Assessment Project utilizing BUILDER SMS for DoD facilities**
• **Completed Within Past 5 Years**
• **Real Property Inventory**
• **Facility Condition Assessments**
• **Following the FUS and FCA, developed a Facility Optimization Analysis to maximize building utility and efficiency, while re-allocating space to ensure Building Code Compliance and Historical Integrity**
• **Completed 3 months ahead of scheduled POP.**



PAST PERFORMANCE

(CPARS) -Quality: Very Good | Schedule: Very Good | Cost Control: N/A | Management: Very Good

"The high-quality planning products provided the government with exceptional tools for effective decision-making."

—Brandon Lee, Supervisory Contracting Specialist, Huntsville COE

Project #10

South Carolina Army National Guard Installation Energy and Water Plan (IEWP), Statewide, SC

CLIENT REFERENCE

Mr. John Hanson, Energy Manager, TAG-FMO | 803.299.4282 | HansonJ@tag.scmd.state.sc.us

PROJECT DESCRIPTION

This project demonstrates Pond's experience working with the South Carolina Army National Guard to develop a statewide IEWP for 101 facilities deemed critical to the State mission. The Pond team conducted ASHRAE Level II Audits for 72 of the identified facilities. Through this analysis, Pond brings in-depth knowledge of the facility conditions, an intimate understanding of the annual energy performance of the facility, as well as established relationships facility coordinators throughout the state.

Pond began working with the South Carolina Army National Guard in 2020 to develop an IEWP and complete ASHRAE Level II Audits for 101 facilities deemed critical to the State mission. Driven by DoD and federal guidance, Army Energy and Water (E&W) goals, and goals formulated specifically for SCARNG by plan stakeholders; the IEWP provides a comprehensive roadmap towards achieving E&W security, resilience, readiness, and mission assurance over the next 5 years.

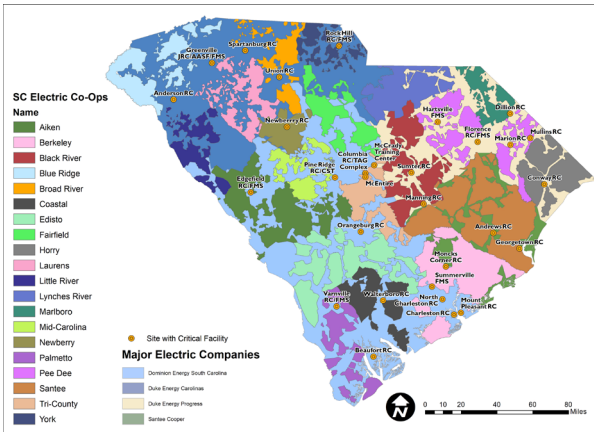
A four-step approach – including Goals and Scoping, Baselining, Risk and Opportunity Assessment, Solution Generation, and Implementation – provided the framework for the planning process. Included in the plan are detailed assessments of critical facilities and assets, including: McCrady Training Center, McEntire Joint National Guard Base, Pine Ridge Joint Operations Center/ Emergency Management Division HQ, Columbia/TAG Complex, Greenville Joint Readiness Center and Army Aviation Support Facility, 7 Facility Maintenance Shops, and 26 Readiness Centers.

Pond worked with SCARNG to compile energy and water usage data for entry into their soon-to-be-acquired Energy Manager Tool. Data collected during site visits was analyzed to establish baseline metrics and trends in E&W consumption. Pond Engineers used data from the site visits to run ASHRAE Level II energy audits and recommend energy conservation measures.

Pond Planners engaged stakeholders through virtual and in-person workshops and phone interviews to assess hazards and identify deficiencies and Installation Status Report – Mission Critical measures. A list of potential solutions was presented in a matrix where each solution can be weighed based on its ability to meet specific criteria. An implementation strategy was provided, and funding sources were identified. The SCARNG IEWP functions as a living document that can continue to be utilized for future E&W planning

PROJECT COSTS & DATES
Cost (Fee): $560,965
Size: 2,098,062 SF
Period of Performance: 09/2020 – 07/2021

RELEVANCE & KEY HIGHLIGHTS
• **Multi-Site, Multi-Facility Condition Assessments & ASHRAE Level II Audits for South Carolina Army National Guard facilities statewide**
• **Completed Within Past 5 Years**
• **On-site field verification of facility and infrastructure conditions/capacity**
• **Site Assessments and Facility Inspections**



ADDITIONAL SITE ASSESSMENT AND FACILITY INSPECTION EXPERIENCE

FACILITY CONDITION ASSESSMENTS, RECONSTITUTE DEFENDERS INITIATIVE STRATEGIC MASTER PLAN JOINT BASE SAN ANTONIO, LACKLAND AFB, TX

Pond created a cradle-to-grave Strategic Master Plan (SMP) in support of planning and programming efforts for the USAF Security Forces Academy (SFA), which is geographically distributed over three installations of Joint Base San Antonio. The Reconstitute Defenders Initiative (RDI) was a comprehensive planning approach to transform the SFA– the largest USAF enlisted career field – to better train and sustain the 38,000 Airmen across the 120 worldwide installations. The project included a multi-phased approach with Programming Documentation, Master Planning, **Facility Assessments**, and Real Property Systems of Record.

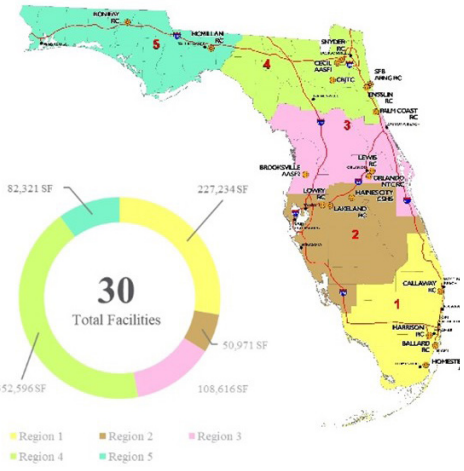
Facility Condition Assessments were conducted for 145 facilities and 9 infrastructure assets. The structure, foundation and building systems were evaluated, including plumbing, electrical, HVAC, and fire protection. Additionally, all buildings were considered with building occupants and users to evaluate the functional adequacy of each facility. **Facility records were updated in the BUILDER SMS.** The end goal was to evaluate each building's current and near-term future use to assess code compliance and maximize utility to support the assigned mission.

ARMY NATIONAL GUARD FACILITY ASSESSMENT
MARYLAND ARMY NATIONAL GUARD, CAMP FRETTERD, MD

The project consisted of a feasibility study, conceptual design and master planning services for the Camp Fretterd Military Reservation (CFMR) project for the Maryland Army National Guard. The feasibility study aimed to gather, identify, and document all pertinent project information to define the design and construction parameters of the initial relocation/beddown project for the 5th Regiment Armory of the MDARNG and to begin the preparation for a 2040 Master Plan.

Pond was responsible for the research and review of all related project documents including but not limited to; existing published data, record documents, geotechnical reports, traffic study, master plans, environmental documents, topographical data and site investigations. Pond completed detailed **facility condition assessments** for 14 buildings, totaling over 200,000 SF. Some of the buildings were historic in nature. The building systems were analyzed and recommendations for repair or replacements were made. The facility assessments laid the groundwork for future renovations.

INSTALLATION ENERGY AND WATER PLAN (IEWP),
FLORIDA ARMY NATIONAL GUARD, STATEWIDE



Pond completed two IEWPs for the Florida Army National Guard (FLARNG): one IEWP for the state's critical readiness center locations and another IEWP for critical facilities at Camp Blanding Joint Training Center (CBJTC).

These IEWPs aim to provide a roadmap for achieving increased security, resilience, readiness, and mission assurance for critical FLARNG facilities. The planning process and resulting roadmap adhere to and follow Army, DoD, and NGB guidance and requirements. The IEWP provides goals, strategies, tasks, timeline, and responsible parties for the next 5 years of energy and water (E&W) management at CBJTC and at critical armory sites for the FLARNG.

The FLARNG maintains 111 units in 54 readiness center locations across the state. Altogether, the total footprint for FLARNG readiness centers is approximately 1.5M SF not including its presence at CBJTC. As part of the IEWP requirements analysis, Pond's team performed **facility condition assessments and ASHRAE Level II Audits performed on 56 facilities** throughout Florida deemed critical to the FLARNG mission. These site visits, during which the Pond team interviewed stakeholders and facility managers, were crucial to understanding and verifying facility and infrastructure conditions and capacities. Data from the ASHRAE Audits was utilized to model facility energy usage and to make recommendations for energy and water reduction measures.

ADDITIONAL SITE ASSESSMENT AND FACILITY INSPECTION EXPERIENCE

LEVEL II ENERGY AUDITS
GEORGIA ARMY NATIONAL GUARD, STATEWIDE

Pond provided **facility auditing services for 95 GAARNG facilities totaling 1,327,000 SF** throughout the State of Georgia. Pond's architects and engineers **conducted detailed energy and water assessments of the identified facilities and their associated systems and reviewed all available utility information**.

The audit services consisted of investigating and identifying Energy Conservation Opportunities (ECOs), and developing applicable ECOs into Energy Conservation Measures (ECMs) on each facility in the following areas: renewable energy projects, mechanical, electrical, building envelopes and water conservation projects. Pond also calculated the building's Energy Usage Intensity (EUI) for each facility visited. Additionally, ECMs were summarized with their associated life cycle costs and their Savings to Investment Ratio (SIR) into one consolidated report. The established ECMs are organized and categorized in the following:

- Retro-commissioning
- Steam & Condensate Systems
- Boiler Plant Modifications
- Heating, Ventilating & Air Conditioning
- Weatherization
- Lighting Systems
- Energy Recovery Systems
- Electrical Energy Systems
- Renewable Energy Systems
- Facility Energy Improvements
- Water Conservation

MEDICAL EDUCATION TRAINING CAMPUS (METC) DORM ASSESSMENTS
JOINT BASE SAN ANTONIO, TX

Pond provided a Planning Charrette and **Facility Condition Assessments (FCAs)** for the JBSA METC Dorms. Pond's FCA team of architects and engineers performed the assessments for five METC (Type) Dorms/AIT Barracks (1,200-person facilities each; 330,000 SF assessed). Our project team reviewed design documents, and **conducted facility assessment using FLOW and uploaded assessment information into BUILDER SMS**. Our team obtained all documentation required for site assessment including past job/work orders; facility assessments; DHA assessments; maintenance inspections reports; and other Army and Navy assessments on other DoD comparable facilities.

FACILITY ANALYSIS AND SPACE PLAN ASSESSMENTS
KENTUCKY ARMY NATIONAL GUARD, STATEWIDE

Pond provided space analysis services for the Kentucky Army National Guard to assist with determining the manpower, physical size/utilization, and equipment currently located at each facility. The project scope included on **site assessments/surveys** of 21 installations encompassing 49 buildings totaling 600,000 SF of space. Pond's report compared the actual facility size, unit stationing, and support equipment to National Guard Standards of Need to determine any excess or deficit for each location.

ROOF DECK STRUCTURAL FACILITY ASSESSMENTS
ROBINS AIR FORCE BASE, WARNER ROBINS, GA

Pond provided **facility assessment** services, including non-destructive visual structural assessments of roof decking for 394 facilities totaling 4,408,735 SF at Robins AFB. The intent of the assessment was to survey the existing interior roof structural framing members, connections, and decking components and to provide a direct condition rating for immediate or future repair recommendations.

Direct condition ratings were based on standard ratings assigned by **BUILDER SMS** and professional judgment regarding the overall building condition, also accounting for characteristic distresses of each structural system as a proportion of the total building structure. All noted deficiencies, along with **BUILDER data,** were compiled into one consolidated report.









Section II. Approach and Methodology for Meeting Goals and Objectives

POND

SECTION II. APPROACH AND METHODOLOGY FOR MEETING GOALS AND OBJECTIVES

WVARNG STATEWIDE FACILITY CONDITION ASSESSMENTS (BUILDER SMS) PROJECT APPROACH

Pond's proposed execution strategy plan is developed in accordance with *Army BUILDER SMS Inventory and Assessment Implementation Guide* and based on our vast prior experience providing the Army National Guard with technical assistance to physically complete inventory and condition assessments of real property.

1. INTRODUCTION

This Project Execution Strategy Plan (ESP) outlines the work details for West Virginia Army National Guard (WVARNG) Facility Condition Assessments utilizing BUILDER Sustainment Management System (SMS). Pond will provide WVARNG technical assistance to utilize the BUILDER SMS application to physically inventory and assess the condition of real property buildings.

2. EXECUTION STRATEGY PLAN

2.1 OVERVIEW

Pre-site visit efforts include obtaining and correlating existing building drawings; BUILDER / BUILDER Remote Entry Database (BRED) training; calibrating data collection devices; reviewing field procedures; creating contingency plans for access and execution challenges; and communicating with all stakeholders to ensure consistency across the Assessment Team.

The Facility Condition Assessment (FCA) Team will consist of structural; architectural; Heating, Ventilating and Air Conditioning (HVAC); plumbing; fire protection; and electrical Subject Matter Experts (SMEs) with the architectural effort further divided into two teams – one for exterior building systems and one for interior systems. Each discipline within the FCA Team will communicate their progress, coordinate any needed assistance, and report any safety issues throughout the effort. Team members will alert the site Point of Contact (POC) if any significant issues arise.

Daily assessments will begin with a safety minute followed by a briefing to the FCA team of the previous days' progress, facility communication, health and safety issues, challenges, schedule changes, and lessons learned. The Project Manager (PM) will confirm building access and escorts for subsequent days' assessments to assure continuity and consistent progress. Every assessment will have a contingency plan to minimize the effects of interruptions to the schedule due to situational issues related to facility access, keys, and escorts or dynamic issues due to conflicting priorities.

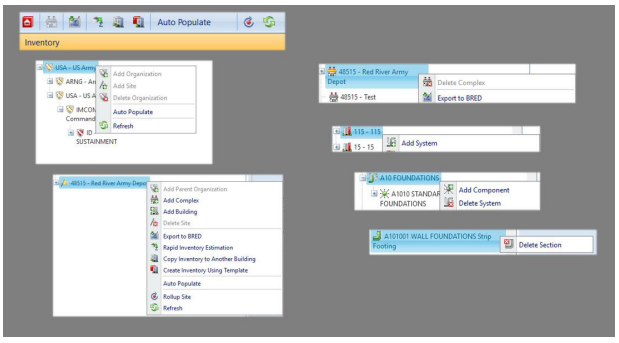
The FCA Team will convene at the end of each day to review completed assessments, components, and systems and to make note of the missing systems in each facility. The PM will create a record of safety hazards, access issues, and action items for the next day's briefing with the site POC.

Upon returning to the office, the FCA Team will perform Quality Control (QC), compile supporting information, upload the BRED files, and integrate lessons learned from previous assessments into the planning for future assessments.

2.2 DATA COLLECTION, ASSESSMENT, AND ANALYSIS

2.2.1 INVENTORY

Establishing a solid BUILDER inventory is the foundation of the FCA process. If a facility has already been assessed by WVARNG in the past and the BRED files are considered completely inventoried, Pond will update the existing inventory and add those sections that may have been missed in the previous assessment. This is part of the BUILDER Sustainment Process.



If a facility has not previously been assessed by WVARNG, the FCA Team will populate the BRED files by creating an *Inventory* of all components and systems within the facility. This is a part of the BUILDER Implementation Process. The Assessors create an *Inventory* by *Sectioning* the data into related parts.

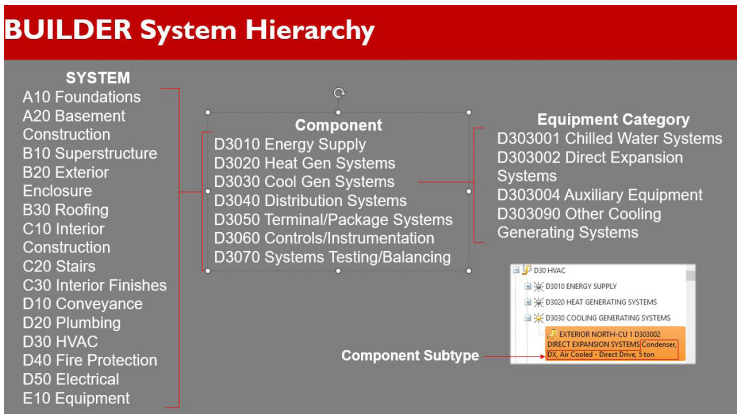
A *Section* is an individual piece of equipment, a group of similar pieces of equipment, or building components such as doors and walls. Assessors create *Sections* to make a building *Inventory* and categorize each component and system in the building using the UNIFORMAT II Classification System. The FCA Team will validate facility count, square footage totals, and perform a Direct Rating Inspection on each facility on the building list provided by WVARNG.

Assessors will verify that all rooms are accessible before starting the inventory process. The FCA Team will use the traditional Direct Rating Inspection method for all facilities and utilize tablets with cameras and laser range finders to inventory, quantify, and rate facilities onsite.

2.2.2 SYSTEM CLASSIFICATION

The assessment will include the following major building systems:

- A10 - Foundations
- A20 - Basement Construction
- B10 - Superstructure
- B20 - Exterior Enclosures
- B30 - Roofing
- C10 - Interior Construction
- C20 - Stairs
- C30 - Interior Finishes
- D10 - Conveying
- D20 - Plumbing
- D30 - HVAC
- D40 - Fire Protection
- D50 - Electrical
- E10 through E109090 - Other Specialized Fixed and Moveable Equipment valued at $250,000 or greater



2.2.3 DATA GUIDANCE AND QUALIFICATIONS

2.2.3.1 To identify and document HVAC equipment with Class II controlled compounds (e.g., hydrochlorofluorocarbons [HCFCs] or R-22 refrigerant), the highest assessment rating assigned to a piece of equipment containing these substances shall be no greater than Amber+, with an *Assessment Comment* that describes the substance.

If the equipment is in worse condition than Amber+, the assessor will adjust the rating accordingly, and provide an *Assessment Comment* stating the reason for the lower assessment rating as well as noting the presence of a Class II controlled compound.

2.2.3.2 Assessors shall incorporate user interviews, work order histories, and/or other WVARNG approved sources when determining the condition of a component *Section*, (i.e., not rating a piece of equipment Green simply because the paint looks good). Supplemental information related to the assessment provided shall be provided in the BUILDER *Assessment Comment*.

2.2.3.3 Before the project begins, FCA Team members will meet to discuss rating methodology to ensure that everyone has a comprehensive understanding of the requirements. To accomplish this, the team will cross check and compare results from different assessment teams for buildings where ratings have been completed. This standard practice shall be documented in the team's QC Plan to ensure that each discipline sees and rates deficiencies in a consistent manner and with the same result. The documented results of these cross checks can be provided to the Government upon request.

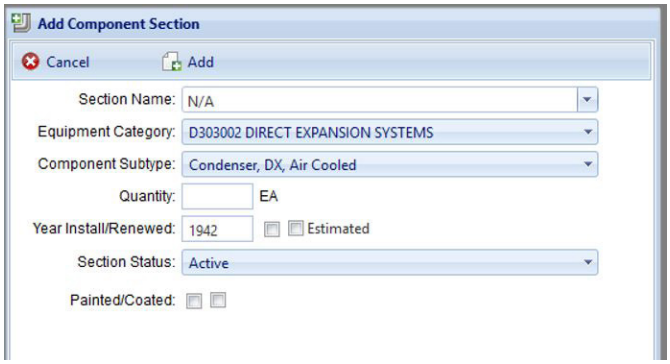
2.2.3.4 The Architecture and Engineering SMEs will provide the Construction Engineering Research Laboratory (CERL) BUILDER Support Team with a list compiling all missing systems in each building which require deletion from the BUILDER Database. The FCA Team will write a building-level comment to document each building's missing systems.

2.2.4 BUILDING TEMPLATES

When an *Inventory* is collected for a given floor in the facility with nearly identical construction and layout as subsequent floors, it can and will be copied for use as the basis for those subsequent floors. Similarly, for nearly identical buildings, the first building inventoried can and will be used as a template from which additional facilities will be assessed. Assessors will walk through subsequent facilities to verify that each building's *Inventory* is accurate, quantify the building systems, and provide a direct rating.

2.2.5 SECTIONING

Sectioning is a term used to describe how *Sections* are divided or combined when entering them into BUILDER. For example, if all sinks on the third floor are the same type and were installed in the same year, they would be combined into one *Section*.



Condition will not be used to determine *sectioning*. For example, if the hallway lighting fixtures on the fourth floor are in good condition except for one light, a separate *Section* of lighting will not be created for that one light. Rather, the condition of the one degraded fixture will be factored into the overall condition of the *Section*.

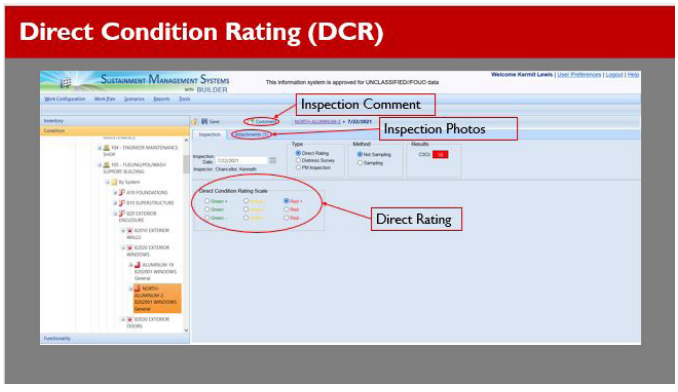
The FCA Team will coordinate and clearly define *sectioning* requirements with WVARNG Site POCs prior to conducting field work. All Assessors will use facility naming conventions consistent with the *Army BUILDER SMS Inventory and Assessment Implementation Guide*.

2.2.5.1 SECTION NAMES *Section Names* will be used to help the next assessor locate that *Section* in the future. However, not all *Sections* require a *Section Name* to be added. For example, if there is only one type of roof and it was all installed in the same year, the default *Section Name* of "N/A" is acceptable because there would be no confusion of what the *Section* is or where it was located.

Conversely, if the carpeting in the building was installed in 2013, but the carpeting in the dorm rooms was replaced in 2015, *Section Names* should be used to differentiate the two *Sections*. Using the two different years as the *Section Names* would be redundant because the years have already been entered in the "Year" field. Using the word "Carpet" would also be redundant. Recommended *Section Names* would include locations, such as "Hallways" and "Dorms" so that future assessors would know where to look for those *Sections*.

2.2.6 RATING METHODS

Once the *Inventory* is entered, the *Sections* are ready for Direct Rating Assessments. The Assessors use the Direct Rating Inspection method, supplemented with the specific 23 BUILDER distresses and their definitions, when the rating is lower than a **Green Minus**.



The Assessors defer to the BUILDER Age-Based Rating method for components which are not visible. Most building system components can be observed up close or with binoculars and can be assessed using the Direct Rating methods. However, some building components cannot be seen, e.g. A10 - Foundations, B10 - Superstructure, and D20 - Plumbing. The Assessors will include a comment in the *Inventory Section* when an Age-Based Assessment is used.

3. HARDWARE AND SOFTWARE

BUILDER data will be inventoried and assessed on tablets using FLOW™, DIGON System's proprietary data assessment application. DIGON Systems will export BRED files from BUILDER and import them into FLOW. The Assessors will receive their assessment assignment(s) via email and sync their tablets to access the building *Sections*.

At the end of each day, the Assessors will edit the daily assessment and sync the BRED files for importing into BUILDER. Multiple quality checks are performed throughout the process, by the in-house QC staff once the data is synced to BUILDER.

4. PHOTOGRAPHS

The Statement of Work (SOW) requires photographs of *Sections* with ratings below **Green Minus** (i.e., all **Amber** and **Red**). All photographs will be provided for Operations Security (OPSEC) review.

5. COMMENTS

Comments describe or clarify a condition or explain the thought process of the Assessor. BUILDER SMS Guidelines require a comment for distresses that are **Amber** or **Red**. In addition, the guidelines require the assignment of a specific stress from the 23 BUILDER distresses to characterize the defect.

6. SAMPLING

Sampling is the ability to assess only a portion of a *Section* and apply that condition to the entirety of that *Section*. It is helpful when portions of a *Section* are not accessible, or when identical *Sections* are repeated numerous times. With 600 identical rooms, an opportunity exists to sample certain *Sections*, such as toilets, sinks, interior walls, and floor and ceiling finishes. BUILDER Guidelines require a *Sample* to be at least 10% of the *Section* for statistical validity.

All *Samples* are named based on location for identification purposes. *Sample* names are descriptive (e.g., "Room 101," "NW Entrance Door," "Wall between Door 201 and Door 203," etc.). The Assessors use a consistent naming convention to help future assessors find the same *Section* and location easily.

7. WORK PLAN CONFIGURATION

BUILDER uses enterprise-level settings to determine current and future work requirements. These settings are adjusted to meet organizational needs. If CERL does not establish the enterprise-level settings prior to the assessment, the Assessment Team will assist WVARNG in determining the work plan configuration settings by incorporating existing settings or creating and testing new settings. The PM will instruct the FCA Teams on the settings and their significance.

8. FACILITY CONDITION ASSESSMENT

The processes for the pre-assessment, assessment, and post-assessment are active throughout the project. Pre-assessment efforts include obtaining and correlating existing building drawings; team training on BUILDER/BRED, data collection devices, and field procedures; contingency planning for access and execution challenges; and communication and consistency across teams and consultants.

During the assessment the FCA Team has daily progress meetings to address communication, health and safety, track progress, challenges encountered, schedule changes, equipment problems, and lessons learned. The Team will monitor and confirm building access and escorts for subsequent day's assessments to assure continuity and progress to the highest degree possible. We recognize that access, keys, and escort availability are situational and dynamic issues due to conflicting priorities/communications. Disruptions will occur and contingency plans are in place to minimize delays.

During the assessments the team will focus on structural; architectural; HVAC, plumbing, and fire protection; and electrical. The architectural effort is split between exterior building systems and interior systems. The disciplines will communicate with each other during the assessments regarding progress, coordination/need for assistance, and safety issues.

At the end of each day the FCA Team will upload assessments from BRED to BUILDER daily. In the office, Assessors perform a final QC process, compile supporting information, and assemble the final reports. The PM will integrate lessons learned

into the planning for the next visit.

8.1 SITE COORDINATION NEEDS

1. Request building drawings and available facility/equipment info. Coordinate with site POC and attendees.
2. Coordinate with site POC regarding access requirements.
3. Review of finalized building list with WVARNG project POC.

8.2 PRE-SITE VISIT TASKS

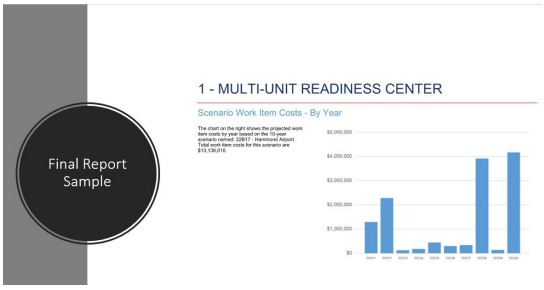
1. Create organizational tools to facilitate field work, including:
   a. A focused master building list for tracking progress, referencing available drawings, etc
   b. Labeled manila folders for each building (and each product line) to organize and facilitate data collection, notes, instructions, BUILDER reports, etc.
   c. A "quick-reference" list of all key contacts and phone numbers.
2. Develop detailed field procedures in the form of flowcharts, templates, and checklists.
3. Develop detailed QC procedures.
4. Train FCA Team on BUILDER/BRED, data collection equipment, field procedures, expectations, and QC.
5. Develop site specific Health and Safety Plans.
6. Review existing drawings to familiarize the Team with buildings, systems, and components.
7. Coordinate with site POC to finalize the site visit schedule, escorts, and any restricted access requirements.
8. Anticipate challenges and establish a contingency plan.

8.3 DURING SITE VISIT TASKS

1. Arrive early to become familiar with site layout; meet with facility coordinators, SMEs , etc.; conduct last minute refresher training; obtain recently found drawings; address last minute access coordination issues, etc.
2. Plan and attend an In-Brief Meeting.
3. Conduct a daily Health and Safety minute.
4. Conduct data collection and input.
5. Upload collected data daily from BRED.
6. Print QC reports and review them daily.
7. Redline data defects and identify omissions for the Team. Stage building folders for "CORRECTIONS REQUIRED."
8. Upload collected data to BUILDER after QC corrections are made/backchecked.
9. Brief the Team daily to report progress, challenges, schedule changes, equipment problems, lessons learned, support to/from other product lines, etc.
10. Confirm building assessments, escorts, and access for the next day's buildings.
11. Monitor photo collection and management process.

8.4 POST SITE VISIT TASKS

1. Perform QC on full data set, mapping toward final report.
2. Upload to BUILDER data that changed due to the follow-on QC effort.
3. Perform focused QC on photos for correct naming, linkage to specific components and/or deficiencies.
4. Perform focused QC on FCA corrective actions (>$20k): scope, photos, cost estimate.
5. Compile draft report in manageable segments for review.
6. Assemble complete report for final review (hardcopy). Correct and backcheck mistakes.
7. Print client hardcopy QC for completeness, appearance, and consistency with established standards.
8. Document "Lessons Learned."



9. Perform BUILDER SMS training with WVARNG personnel to ensure their understanding of the product.

9. DELIVERABLES/SUBMITTAL SCHEDULE

DELIVERABLES	WVARNG COPIES	SCHEDULE
Minutes of Kick-off Conference Call	1 each	7 working days following the call
Draft Project Management Plan (Task 4.0b)	1 each	28 working days prior to the Kick-Off Meeting
Minutes of Each Site Kick-Off Meeting	1 each	3 working days following the meeting
Draft Work Action Plan (4.7.a)	1 each	14 days prior to start of site orientation meetings
WVARNG Review		14 calendar days after receipt of Draft Work Plan
Calibration Plan (Task 4.7.i)	1 each	28 calendar days after WVARNG Review and approval of Work Action Plan
WVARNG Review		14 calendar days after receipt of Calibration Plan
Draft QC Plan (Task 4.7.d)	1 each	14 days prior to Kick-Off Meeting(s)
WVARNG Review		14 calendar days after receipt of Draft QC Plan
PRIDE Discrepancy List (Task 4.7.f)	1 each	21 calendar days after field work completion of each installation
Monthly Execution Schedule (Task 4.7.c)	1 each	Due on the 1st of each month
QC Report (Task 4.7.e)	1 each	5 calendar days after field work completion of each site
BUILDER Lessons Learned (Task 4.7.o)	1 each	21 calendar days after field work completion of each site
Data Upload Memo (Task 4.7.m), Draft BUILDER SMS Database (Task 4.2.a) Inventory and Inspection Information (Task 4.2 and 4.3), and Draft Location Report (Task 4.7.k)	1 each	30 calendar days after field work completion of each site
WVARNG Review		21 calendar days after receipt of Draft BUILDER SMS Database
Final Data Upload Memo (Task 4.7.m), Final BUILDER SMS Database (Task 4.2.a) Inventory and Inspection Information (Task 4.2 and 4.3), and Final Location Report (Task 4.7.1)	1 each	7 calendar days after receipt of WVARNG review comments for Draft BUILDER SMS Database

10. CALIBRATION AND QUALITY CONTROL PLAN

The Pond BUILDER Team will work with BUILDER SMEs to prepare for FCAs at WVARNG. The training included surveying facilities and loading the data into BUILDER using consistent processes and language. The Team will generate reports in BUILDER and review the documents for consistency in the terminology used to describe distresses and ensure that the rating standards and distresses are used correctly. After the review, the Team will assess a different facility to verify the calibration.

Pond uses one Team per site for consistency and a third-party SME validates the facilities assessed to ensure consistency and alignment with project requirements.

The calibration buildings selected should be:

1. Between approximately 15,000 and 25,000 square feet
2. Non-secure (i.e., allow electronics and the taking of photos)
3. Reflective of the most common types of facilities found on the site (e.g., administrative, laboratory, workshop, warehouse, etc.)
4. Pond will work with the WVARNG POC to ensure that the calibration facility has most of the applicable American Society of Testing and Materials (ASTM) UNIFORMAT II systems. The Assessment Team will NOT select large storage buildings, since they may not have fire protection and HVAC.

5. Such that multiple teams are provided assess simultaneously (i.e., not housing, barracks, command buildings)
6. Of average condition - NOT the worst quality buildings on site
7. Documented with floor plan drawings available to the Assessors

At the beginning of the assessments, the Team will assess several facilities that are reflective of the most common facilities. An independent SME will review these assessments using the Final 9 Facility System Quick View Report, the Quality Control 5, and Quality Control 6 Reports. These reports provide information about the facility systems, section details and inspection details. The SME will provide guidance and document inconsistencies. The PM documents the feedback received from the SME in the lessons learned and report these back during the In-brief..

11. QUALITY MANAGEMENT

The Pond Team is committed to providing high quality products and services to WVARNG in accordance with the SOW. Pond process brings all deliverables through stringent Quality Assurance / Quality Control (QA/QC) procedures, in accordance with contract requirements. **The Team will follow the QA/QC Plan detailed in *Section III. Project Management, Quality and Cost Control Plans* of the proposal.**

12. DATA REVIEW & WORK PLANNING CHARRETTE

12.1 Within fourteen (14) calendar days of the Draft FCA Report delivery, the Pond will lead a three (3) business days Data Review & Work Planning Charrettes with the WVARNG personnel.

12.2 Pond will provide the charrette agenda and other presentation materials to the WVARNG seven (7) business days prior to performance of the Data Review and Work Planning Charrettes.

12.3 The Data Review WVARNG technical personnel who will conduct on- site BUILDER assessments at some point in the future (such as for those buildings not covered in the National Guard Bureau Business Rules). **Pond will provide writen and hands on instructon to the WVARNG technical staff demonstratng how to secton sectoned, collect, and compile FCA data for entry into BRED.** The Training Team will discuss and demonstrate quality control and quality assurance methodology and standards. This is a hands-on assessment exercise to ensure that the participants have a thorough understanding of BUILDER SMS processes.

12.4 The Work Planning portion is with WVARNG technical personnel that are responsible for accessing data in BUILDER and using that data to plan and program SRM projects and related funding. In the Work Planning Session Pond will identify, review, and demonstrate how to create and analyze BUILDER reports. The Team will also review NGB BUILDER Business Rules and provide hands on instruction regarding the methods and tools used for work forecasting, work planning, and data sustainment.

12.5 Location: The WVARNG will decide the location of the Data Review & Work Planning Charrettes.

12.6 Pond will provide copies of all pertinent BUILDER reports, work plans, and presentations generated over the course of the Charrette within three (3) business days following the Charrette.









Section III. Project Management, Quality and Cost Control Plans

POND

SECTION III. PROJECT MANAGEMENT, QUALITY AND COST CONTROL PLANS

PROJECT MANAGEMENT

Pond has an established project management procedures and methods for successful BUILDER assessments. The Pond team understands that only the contracting officer is empowered to award, agree to or sign any contract (including delivery orders) or contract modification or in any way to obligate the payment of money by the Government. The contracting officer is responsible for all contractual agreements, commitments or modifications that involve price, quantity, quality, delivery schedules or other terms and conditions. If the Pond team needs to make adjustment to the contract or delivery orders the Pond team can either work directly with the contracting officer or through the contracting officer's representative.

Weekly Teleconference: A weekly teleconference will be held with project stakeholders to discuss the upcoming site schedule, potential issues, data review, and other topics relevant to the performance of the contract.

Daily Meetings:

Beginning of day. Each day will begin with a brief, full-team meeting to confirm the day's schedule required escorts and/or Facility Manager coordination, safety minute, unfinished business, and client questions or feedback.

End of day. At the end of each day a full-team meeting will be held to discuss the day's progress, challenges and successes, lessons learned, and plans and schedule for tomorrow's work.

Site Coordination: The PM will facilitate Task Order execution with the facility coordinators. Site coordination is critical to prevent delays due to lack of access to facilities.

It is Pond's responsibility to coordinate with the site Facility Managers and Building Managers for their actual work schedule. Pond will take all precautions available to minimize disruptions to functions during performance under this Task Order.

Pond will maintain an adequate workforce for the uninterrupted performance of all tasks defined within this SOW when the Government facility is not closed for the above reasons.

POND BUILDER SITE ASSESSMENTS AND FACILITY INSPECTION METHODS

Our project teams utilize BRED and FLOW programs for data collection and quality control. BRED was created by the same creators of BUILDER SMS. However, Pond has improved upon the BRED platform, titled FLOW, a tablet-based field assessment application integrated with BUILDER and designed to allow users to operate more efficiently.

The Pond team of architects, engineers, and planners are trained, experienced, and proficient in the use of both platforms. Below is a list of benefits obtained using our enhanced program, FLOW.

Field Assessment Efficiency: Increases the walk-rate of the assessor in the field, allowing more square footage to be covered.

- Photos can be instantly added to the database, eliminating complicated photo-linking procedures.
- Comments can be added by voice recognition.
- Touch screen icons are optimized for all users. No need to retrain BUILDER users.

Data Quality: Ensures accurate, consistent data, and reduces errors in several ways.

- Real-time feedback prompts the user to fix issues as they occur.
- Custom-programmed quality checks specific to each project or contract.
- Internal and private, ensuring top-quality data before uploading to BUILDER.
- Framework for integration with any existing Computerized Maintenance Management System (CMMS).

Workflow: Provides a consistent, logical process that is designed for real-world field work.

- Assessors can be assigned to specific systems and buildings.
- Every assessor's progress and data status is reported and available.
- Designed the way field assessors work.
- While assessors are in the field, team leaders can review and approve assessment data or send comments.

QUALITY MANAGEMENT

The team is committed to providing high quality products and services to the Government in accordance with the SOW. All contract deliverables will be processed through Pond Quality Assurance / Quality Control (QA/QC) procedures, in accordance with contract requirements. The execution team will follow the QA/QC Plan described below to ensure that all submittals meet Government expectations, and are compliant with the SOW and all applicable standards and criteria.

QUALITY ASSURANCE

Quality Assurance (QA) establishes the protocols to be followed to prevent mistakes and errors. The following QA guidelines are in place:

- Assign highly trained, well-qualified staff with appropriate technical qualifications.
- Begin coordination with stakeholders at least 30 days in advance of on-site visits.
- Provide informational memo, flyers, agendas, or other materials for distribution to maximize stakeholder participation.
- During data collection visits, photograph (where permitted) site and facilities to document conditions or provide examples of project related information.
- Follow the prepared data collection agenda.
- Follow BUILDER guidelines to ensure a standardized process and set of products.
- Compile and organize notes, photographs, and work products immediately following an on-site event to prevent loss of information.
- Utilize report and BUILDER templates and follow data standards.
- Utilize submittal checklists to ensure all SOW requirements have been met.
- Perform periodic plan / approach, records, and project file audits to ensure conformance.
- Implement corrective actions to re-establish conformance and mitigate any impacts.
- Identify continuous improvement in technical approach.
- Ensure that all personnel are properly trained in government data control techniques and requirements per SOW (e.g. Anti-terrorism, Security, and OPSEC).

QUALITY CONTROL

Quality Control (QC) procedures assess the products to identify errors and consequent steps of resolution. One week prior to submitting work products to the Government, the team will perform necessary reviews to examine technical quality, standards/criteria compliance, and overall completeness of each scheduled document submittal. The following items will be checked during the review process for all preliminary and final deliverables:

- BUILDER QC Checks
- Spelling, grammar, syntax
- Content corresponds to data collection
- Compliance with SOW, meeting notes, Government comments, etc.
- Technical review back-check

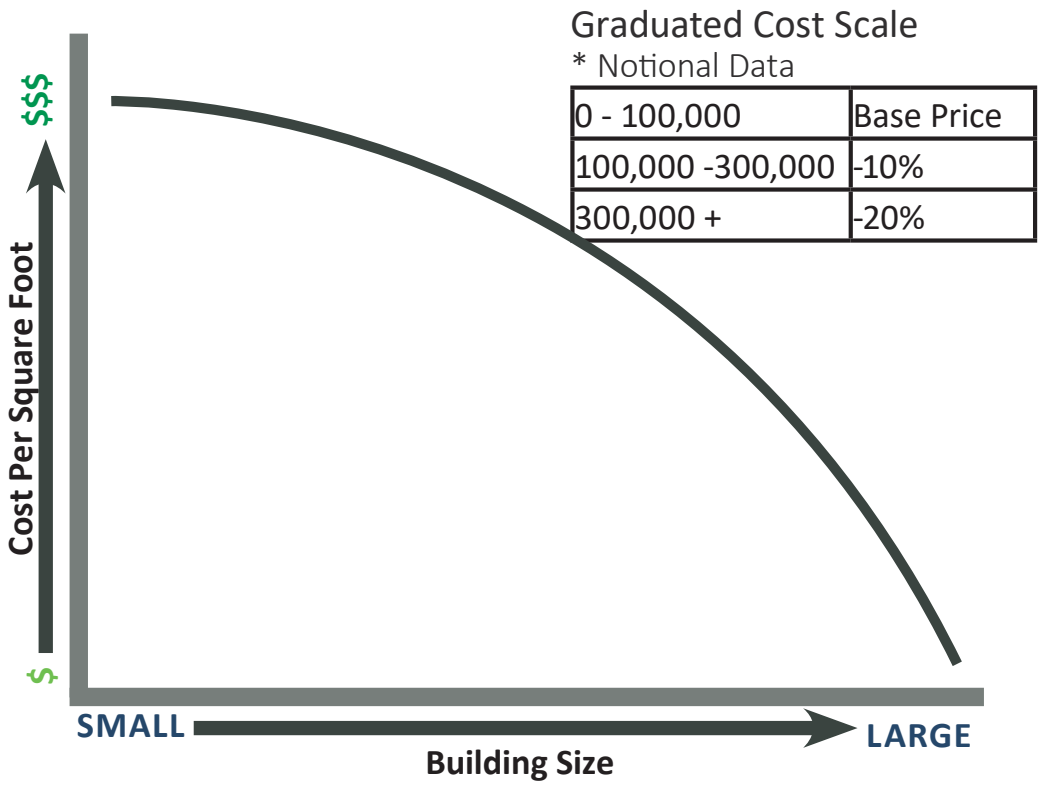
All documents will be reviewed by the following Assessment Team members:

- Senior Engineers
- Senior Project Manager
- WVARNG Quality Control Personnel

COST CONTROL

Our goal is to be fiscally prudent to maximize WVARNG's building funds.

The cost of inspection, inventorying and uploading data will be developed as a blended rate based on the square footage and complexity of the facility inventory. Since all buildings have the same BUILDER SMS uniformat system types, we have found that the building size dictates how long an assessment team would need to complete the assessment more so than the complexity of the systems (although both would factor into the development of the proposed assessment cost). **Pond's extensive experience in BUILDER SMS projects ensures that we are able to manage our cost control without fail. We have not called for a cost modification on a single BUILDER SMS to date based on our price per GSF method.** The following representative chart shows how an increase in building square footage reduces the cost per square foot that would be proposed.



SCHEDULE MANAGEMENT

Working with you, we will create realistic schedules for on-time delivery.

At Pond, we recognize and are committed to meeting the deadlines and time constraints of your project. The project schedule is one of our best management tools when executing statewide facility condition assessments utilizing BUILDER SMS. We view BUILDER SMS schedules not as a hindrance, but simply as a management tool for seamless project execution.

Schedules are living documents that adapt to a project's changing demands. Pond is experienced and adept in adjusting quickly to changing schedules and in assisting owners with options to fulfill critical path goals. Our direct knowledge of and extensive experience performing statewide ARNG FCAs utilizing BUILDER SMS ensures our ability to develop an achievable project schedule that keeps WVARNG's initiative on track and minimizes risk to project execution.

POND'S PROVEN SCHEDULE MANAGEMENT PROCESS

The Project Manager will develop a schedule for this project. This schedule will be integrated into the master schedule that the Program Manager maintains to use for planning and resource management purposes. In consultation with the PM, field team and BUILDER SMS analysts, they address the requirements of multiple, concurrent task orders at different locations. Our experience managing task orders with accelerated or compressed schedules enables us to effectively plan priorities and streamline processes to meet tight delivery schedules. These procedures include the following:

- Development of schedule milestones.
- Identification of critical path activities.
- Weekly tracking of staff availability based on different assignments.
- Weekly review by PMs of schedule completions versus milestones.
- Routine status meetings to confirm team members are performing on schedule and identify corrective actions.
- Monthly projections of staffing needs.

Maintaining project schedules is a critical part of the project execution process. Our Project Managers are trained to use the tools, such as Microsoft Project, OneNote, Neforma and web-based project management applications to maintain the integrity of the schedule throughout. If there is concern about maintaining the schedule, these tools are designed to alert the senior staff, up to the Project Manager that an issue needs to be addressed. Additionally, our Program Manager holds a weekly meeting with the Project Management team specifically to ensure the integrity of the schedule throughout the project. During these meetings either a Project Manager can identify a specific issue, or a Program Manager can identify a project issue through strategic questions that can negatively affect schedule if it goes unchecked. The Program Manager will assign resources to address any scheduling shortfalls. It is all part of our overlapping "trust but verify" Project Management system.

BUILDER SMS BEST PRACTICES TO DRIVE SCHEDULE EFFICIENCIES

Pond's subconsultant, DIGON Systems, created FLOW, a tablet-based field assessment application, which has been successfully implemented on two statewide **WVARNG BUILDER SMS** projects. FLOW is integrated with BUILDER and built with the assessor in mind to maximize field assessment efficiency. The following features ultimately increase the walk-rate of the Pond assessors in the field, allowing more square footage to be covered.

- Photos can be instantly added to the database, eliminating complicated photo-linking procedures.
- Comments can be added by voice recognition.
- Touch screen icons are optimized for all users. No need to retrain BUILDER users.
- Activity Log Metrics - Provides device activity of completed Systems, recent Syncs, & Sections modified/created/deleted
- Inspection Comment Generator – Select the 23 distresses form a drop-down menu and increase productivity.
- Flexible Building List – assessors can create smaller projects within the building list.
- Dynamic Age Based Comments - Fully customize and automatically generate inventory comments per the Army Guide
- Pin and Copy Sections - Lookup frequently occurring sections during inspections and duplicate any to populate your tablet inventory rapidly
- Effective Navigation Sidebar - View Building down to Section in one glance and locate what you need in one tap
- Seamless Resync - Managers review details in the Sync Log that show who synced and when, and if/when data has been pushed to BUILDER

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