



July 5, 2023

Denny Garner  
Blount County Government Facilities Coordinator  
940 East Lamar Alexander Parkway  
Maryville, TN 37804  
O:865.273.5350  
C:865.712.5230

RE: Blount County Probation Center – 1006 East Lamar Alexander Pkwy, Maryville, TN 37804  
– Roof Specification, Design, & Project Monitoring.

Dear Mr. Garner,

I would like to thank you for the opportunity to assist you with providing roof consulting services. A quotation to provide services of the facilities of immediate interest is included here along with a description of the type of information we will generate.

The following scope of work will be performed:

**Roof Survey:**

- Survey and document a thorough review of each roof area
- Identify any drainage issues.
  - Recommend procedures for improving drainage in areas where there is significant ponding. The ponding water will accelerate the deterioration of any roof system and potentially challenge the structural integrity of the roof.
  - Establish procedures for improving drainage issues that will be incorporated into future roof replacement scope of work.
- Evaluate previous repairs.
  - Determine the condition of previous repairs and the level of performance expected going forward.
- Obtain all available documents regarding current roof systems.
  - Classify the existing roof system by material and roof type.
- Confirm the condition of all roof areas by cross-referencing data with photographs.
- Establish a budget to upgrade roofs based on long and short-term goals.

- Provide solution options with recommendations for the course of action that should be taken with each particular roof section.
- Prioritize various roof areas based on the condition of the current waterproofing system, interior sensitivity, structural condition, and customer need.
- Provide detailed CAD drawings of each roof area.
  - Detail drawings will be provided to scale.
  - Perimeter details will be identified.
  - Penetrations will be categorized by type and their locations will be marked.
  - The existing roof system composition will be detailed.
- Core cuts will be taken, as needed, on all non-warranted roofs to determine the composition and number of existing roofing systems.
  - Core cuts provide accurate information on the number of plies, type and thickness of insulation and coatings, and the type and condition of structural decking that supports the existing roof system. Core samples can be analyzed for asbestos content, water infiltration, and roof system integrity. A representative number of core cut samples for each roofing section or more as needed.
  - Determination of the condition of roofing system components
- Reports on the current roof construction, classification, and material types
  - A Roof Database will be created, including photos and data collected from surveys.

### **Moisture Diagnostic Surveys:**

- Perform a Moisture Diagnostic Scan on the designated roof sections.
  - Moisture Diagnostic Scans provide a powerful tool in the process of identifying roof areas with moisture content. By evaluating the results, you can establish whether the water infiltration is localized or is widespread across an entire roof area.
    - Reports containing all of the findings, as well as the methods employed while completing the scan.
      - Confirm the condition of all roof areas by cross-referencing data with photographs.
    - Readings taken from a moisture meter are used to verify scan results.
    - Outlines of wet areas will be painted using highly visible marking paint.
    - Core cuts provide accurate information on the number of plies, type and thickness of insulation and coatings, and the type and condition of structural decking that supports the existing roof system. Core samples can be analyzed for asbestos content, water infiltration, and roof system integrity.

- A representative number of core cut samples for each roofing section or more as needed.
- Determination of the condition of roofing system components
- Drawings of each roof area will indicate the location of each wet area.
  - Detailed drawings will be provided.
  - Perimeter details will be identified.
  - Penetrations will be categorized by type and their locations will be marked.
  - The existing roof system composition will be detailed.

## **Specifications and Project Management**

### **Phase I**

- Meet with owner representative and facility directors on site to determine working conditions, limitations, expectations, general concerns, and review financial parameters.
- Discuss client's goals and desires for sustainable building solutions.
- Discuss required permits from the City, County, and State Governments.
- Discuss existing roof system evaluation procedure (ie. Asbestos Testing Requirements, R-Value Requirements, Structural Concerns)
- Review multiple roofing manufacturer guidelines and procedures.
- Establish a project specific roofing budget.
- Review payment performance bond requirements with representatives.
- Perform an inspection of the desired roof area and produce a report with data and photos.
- Review solution options with the owner and determine if the project will proceed.

### **Phase II**

- Project Team will generate a detailed performance-based specification. \*\*Architectural stamped plans and drawings complete with wind-uplift calculations, snow calculations, drainage calculations, and project specific details can be produced upon request (*Estimated Cost for Architectural Stamp - \$3,000.00*).
- Present project specifications to the owner and make any necessary changes to the specifications.
- If the project is to proceed, the necessary steps will be taken to schedule a pre-bid meeting.
- The pre-bid conference will be held on site to familiarize the contractors with facility and campus requirements. Here we will address any questions or concerns of the contractors.
- Issue any addenda if required.
- Review the contractor bid results with the client and make recommendations.

### **Phase III**

- Organize a pre-construction conference on site with owner representatives, awarded contractor, material manufacturer (if desired), and BMC Project Team.
- Provide architectural schedule of values that will be submitted by the awarded contractor.

- Start project – BMC will perform site inspections and generate written progress reports complete with photos. (Weekly (1) Progress Inspection and a Final Inspection will be included. Additional Progress Inspections can be performed upon request.)
- Review any progress payment submitted by the contractor and approved if justified.
- Once project is completed, owner representatives, contractor, material manufacturer, and BMC Project Team will meet on site to determine if a project punch list is required.
- Oversee the completion of punch list requirements and provide a written report with photos.
- The contractor is required to furnish BMC with the specified manufacturer’s warranty.

**Asbestos Survey:**

- Core cuts will be taken, as needed, to determine the composition and number of existing roofing systems.
  - Core cuts provide accurate information on the number of plies, type and thickness of insulation and coatings, and the type and condition of structural decking that supports the existing roof system. They provide the most tangible information for roof system diagnostics. When core cuts are performed the following services will be provided:
    - A representative number of core cut samples for each roofing section or more as needed.
    - Determination of the condition of roofing system components
- CAD Drawings - Provide CAD drawings of each roof section.
  - Drawings will be provided to scale.
  - Perimeter details will be identified.
  - Primary Roof Penetrations will be categorized by type and their locations will be marked.
  - Existing roof system composition will be detailed.
- A report with test results will be provided including photos and a CAD drawing with core locations detailed.
  - Independent lab results will be included.

EPA regulation 40 CFR Part 763: specifies the minimum number of samples to be taken of each homogenous area of suspected ACM based on the type and quantity of the material as illustrated in the following table:

<b>Size of Homogeneous Area</b>	<b>Minimum Number of Samples to be Collected</b>	<b>Recommended Number of Samples to be Collected</b>
Less than 1,000 sq. / ft.	3	9
Between 1,000 & 5,000 sq./ ft.	5	9
Greater than 5,000 sq. / ft.	7	9

**Homogeneous Area** - In accordance with Asbestos Hazard and Emergency Response Act (AHERA) definitions, an area of surfacing materials, thermal surface insulation, or miscellaneous material that is uniform in color and texture.

**Structural Evaluation – if required**

- Perform Structural Evaluation of current decking system(s).
  - Calculations cover all code required load combinations and analysis of the structural members under the most severe load combinations.
  - Provide written report from licensed structural engineer based on the results and conclusions of the analysis.
  - Calculations and report would be checked-in-house by engineering firm and issued after any required resolutions.

**The following scope will be performed for the sum of:**



- Roof Assessments:
  - *Included in Phase I*
- Moisture Diagnostic Scan performed on roofs that are determined to be candidates for scanning.
  - *Included in Phase I*
- Asbestos Sampling:
  - *Included in Phase I*

Phase I, II, & III Consulting

- First Step of Organizing Projects with Inspections and Meetings
- Generate Detailed Specifications and Manage Project
- Conduct Pre-construction meeting and project monitoring duties.
  - **\$27,500.00**
  
- Structural Decking Evaluation
  - Price to perform the services described above: not to exceed **\$5,000.00**.

**TOTAL Consulting Fees (\$27,500.00) + Structural Evaluation (\$5,000.00) = \$32,500.00**

Thank you again for the opportunity to assist you with your roof project. Please call me directly with any questions you may have.

Sincerely,



Nicholas T. Losh  
President