Include the following information in the Preliminary Basis of Design narrative. See DCSM sections 2.1 and 2.6 for additional details.

**Instructions**:

Indicate your response to each item in the checklist. Select ‘Yes’ if the checklist item has been completed in full. Select ‘No’ or ‘N/A’ if that item is not included or not required for the specific project. Explain why that item has not been included in the submittal.

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| **RESPONSE** | **REQUIREMENTS** |
|  | **Electrical**  **Interior Distribution Systems** |
| Choose an item. | Provide the electrical characteristics (phase, voltage, and number of conductors in main distribution circuits). |
| Choose an item. | Provide a tabular breakdown of the estimated connected load to show: the lighting load and convenience outlet load separately; the power load for building equipment such as heating, air conditioning, etc.; and the loads for special operating equipment such as compressors, generators, pumps, and power receptacles for use in energizing special equipment. Apply an appropriate demand factor to each to compute total demand load. |
| Choose an item. | Provide the type and proposed location of wiring system, such as rigid conduit, electrical metallic tubing, nonmetallic sheathed cable, etc. Confirm that conduit, pipe, bars, anchors, or other aluminum parts will not be embedded in concrete unless protected, per the National Electrical Code (NEC). |
| Choose an item. | Provide type of conductors, such as rubber insulated, thermoplastic insulated, polyvinyl chloride jacket, etc., and proposed location for use. |
| Choose an item. | Provide a statement describing proposed pertinent standards of design, such as voltage drop (include calculations), lighting intensities (include calculations), and type of lighting fixtures. Include a statement regarding the use of selective switching or other energy conserving features. |
| Choose an item. | Provide a determination of short-circuit duty required for all service entrance protective devices and switchgear. Include cost premiums in cost estimate. |
| Choose an item. | Describe interface provision for multi-use systems, such as telephone, intercom, and data. Confirm that the A/E will provide all facility support for proposed telephone equipment installations (e.g., conduit, duct, and backboard). The University is responsible for design and procurement of telephone and data systems. |
| Choose an item. | Provide type and arrangement of cable television systems (CATV), closed circuit television systems (CCTV), nurse call, intercom, sound, assistive listening systems, signal, and fire alarm systems. Identify the number and location of telecommunication outlets (telephone, computer, word processing, etc.). |
| Choose an item. | Indicate the space required for telecommunication equipment, point of connection to telephone utility, size of incoming duct or conduit, and size of equipment mounting backboard to be provided. |
| Choose an item. | Confirm that A/E has provided an analysis of recommended assistive listening systems for all Special Occupancies. |
| Choose an item. | Indicate interior lighting on lighting plans. |
|  | **Electrical**  **Outside Distribution Systems** |
| Choose an item. | Contact the utility companies for the location and characteristics of the nearest service facility capable of meeting the project supply requirement and the cost-of-service information for economic analysis. |
| Choose an item. | Provide a statement relative to the adequacy of the primary supply at the point of take-off. If the primary source is inadequate, state measures proposed to correct the deficiency. |
| Choose an item. | Provide the electrical characteristics of the power supply to the site. Include circuit interrupting requirements and voltage regulation. |
| Choose an item. | Provide an estimate of the total connected load and resulting kilowatt demand load. Apply proper demand and diversity factors, if a group of loads is involved. |
| Choose an item. | Provide the basis for selection of primary and/or secondary distribution voltage. |
| Choose an item. | Provide the type of conductors, such as copper or aluminum, and provide proposed location for use. |
| Choose an item. | Provide a statement describing pertinent standards for design, such as voltage drop, physical characteristics of overhead or underground circuits, type of lighting units, and lighting intensities. |
| Choose an item. | Provide the type and adequacy of signal and fire alarm systems. Include a statement regarding spare capacity on the fire alarm circuit. |
| Choose an item. | Provide the type, adequacy, and routing of supporting structure(s) for telecommunication cable. |
|  | **Electronic Systems** |
| Choose an item. | Provide system engineering concepts. Describe the proposed type of system, the functions, and the interrelationships if the system is a multi-use system. |
| Choose an item. | Indicate circuit requirements. |
| Choose an item. | Indicate equipment selection including equipment furnished by the University, standards manufacturers or commercially available items, and special equipment. |
| Choose an item. | Describe site or location considerations. |
| Choose an item. | Describe bonding and grounding requirements. |
| Choose an item. | Describe communication and control cables and radio links. |
| Choose an item. | Identify test equipment, repair shop, and spare parts storage requirements. |
| Choose an item. | Describe equipment, instrumentation, arrangement, and space requirements. Indicate requirements for racks, consoles, and individual mountings. Provide the most economical design in first cost, in operation and maintenance costs, and with operating conditions conforming to best engineering concepts. |
| Choose an item. | Identify wiring and cabling requirements plus terminations. |
| Choose an item. | Identify power and lighting requirements, including emergency or standby requirements. |
| Choose an item. | Describe air conditioning, including humidity and dust control requirements. |
| Choose an item. | Identify interference and clearance requirements. |
| Choose an item. | State security requirements for security and entry control systems. |
| Choose an item. | Identify the requirements for intrusion detection systems (IDS) separately from the other project elements. See DCSM section 2.6.4.4 for the list of items, circuitry, and installation categories for the IDS. |
| Choose an item. | Describe access control equipment and intrusion detection systems. Outline when and where the systems will be required. Note the locations, functions, and areas of control. |