Preliminary Design Review Pre-Submission Checklist

WILLIAM & MARY
CHARTERED 1693

Project Title

W&M Project Number

The Preliminary Design Package is made up by four (4) components:
1. Cost Estimate
2. Design Drawings
3. Basis of Design Narrative
4. Building Systems Checklist

Cost Estimate: The A/E shall submit estimate of the construction cost of the proposed design without regard to available funds:

	Yes	No	N/A
Estimate relates only to the estimated amount for the construction shown and shall not include fees or unknown contingencies	◯	◯	◯
Estimate summary includes any built-in equipment, even if such equipment is bid separately	◯	◯	◯
Any proposed additive bid items are justified and indicated by a separately stated estimate amount.	◯	◯	◯
For utilities, sitework, civil and other special projects, estimated on a quantitative basis for the major components, and a lump sum estimate for the remainder.	◯	◯	◯

Title Sheet(s): drawings show the following information:

	Yes	No	N/A
Project Identification: Project Code, Appropriation Act number, and/or College PIMS (or Work Order #)	◯	◯	◯
Location and vicinity maps	◯	◯	◯
Tabulation of floor areas (new and renovated), total area, volume	◯	◯	◯
Tabulation of units: Number of parking spaces, auditorium seats, bedrooms etc	◯	◯	◯
Listing of applicable codes with dates and Building Purpose/Occupancy	◯	◯	◯
Use Group(s), Construction Type, and Occupancy Load(s) per VUSBC	◯	◯	◯
Index of drawings	◯	◯	◯

Site Plans: Site/improvement plan & composite utility plan show:

	Yes	No	N/A
Scale and north arrow	○	○	○
New and existing contours affected by the new work	○	○	○
Floor and contour elevations	○	○	○
Applicable boundaries with survey computations	○	○	○
Dimensioned relationship Location of major components of the new work to with respect to boundaries and existing structures	○	○	○
Location of test borings	○	○	○
General parking and handicap parking	○	○	○
Handicapped-accessible routes	○	○	○
Pedestrian traffic routes	○	○	○
Demolitions: structures, walks, utilities, trees, etc.	○	○	○
Proposed landscaping (planting materials)	○	○	○
Existing and new utilities: storm sewers, sanitary sewers, water supply, gas, steam distribution pipes and tunnels, electric and telephone poles and lines, hydrant locations and data on fire flowtest.	○	○	○
Site improvements such as fencing, lighting, etc.	○	○	○
Typical paving section for proposed types/thicknesses	○	○	○
Identify/show special earthwork recommended and construction considerations noted in soils report	○	○	○
Archaeology Features	○	○	○

Demolition Drawings: For interior demolition:

	Yes	No	N/A
Work to be removed is clearly shown	○	○	○
Results of asbestos survey have been noted	○	○	○
Results of lead based paint survey have been noted	○	○	○

Demolition Drawings: For total building demolition

	Yes	No	N/A
Floor plan showing building size has been prepared	○	○	○
Description of existing material /construction to be removed	○	○	○
Results of asbestos survey have been noted	○	○	○
Results of lead based paint survey have been noted	○	○	○

Architectural Drawings: Floor Plans (for each floor):

	Yes	No	N/A
Plans of each floor are 1/8" = 1'-0" preferred (1/16" = 1'-0" must be justified and have written approval of College Code Review Team)	○	○	○
Overall dimensions are shown	○	○	○
Space names and/or numbers assigned by the College, and number of occupants of all spaces are shown	○	○	○
Design shows the relationship of new to existing spaces	○	○	○
Distinguishes new from existing construction	○	○	○
Shows demolition on the architectural plans or separate plans	○	○	○
Indicates all openings, entrances, delivery areas	○	○	○
Indicates handicap access and Areas of Rescue Assistance	○	○	○
Scale and north arrow is shown	○	○	○

Architectural Drawings: Roof Plan:

	Yes	No	N/A
All proposed and existing drains, including emergency drains are shown	○	○	○
Roof slopes are 1/4" per 1'-0" to drain minimum for all areas (unless waived for reroofing)	○	○	○
Indicates slope (high to low) with direction arrows	○	○	○
All new and existing matrials/equipment are shown	○	○	○
All roof penetrations and structures are shown	○	○	○
Typical roofing section identify's materials	○	○	○
Access to roof is shown	○	○	○

Architectural Drawings: Exterior Elevations:

	Yes	No	N/A
Drawing scale is 1/16" = 1'0" minimum			◯
All openings: windows (including operable notation), doors,louvers, and vents are shown	◯	◯	◯
Percentage of glass vs. gross wall area is identified	◯	◯	◯
Floor elevations (above sea level) are shown (subsurface construction is dotted in)	◯	◯	◯
Identify of all major finishes	◯	◯	◯
All stairs, ramps, and railings are identified	◯	◯	◯
Rooftop and sidewall equipment and structures are shown	◯	◯	◯
Expansion and control joints are identified	◯	◯	◯
Grade at the face of the building wall is clearly shown	◯	◯	◯
Existing and new work is clearly distinguished	◯	◯	◯

Architectural Drawings: Small Scale Sections:

	Yes	No	N/A
Scale 1/16" = 1'0" minimum	◯	◯	◯
Envelope; one longitudinal and one transverse section minimum	◯	◯	◯
Show all floor levels on sections	◯	◯	◯
Indicate ceilings in proper relation to floors	◯	◯	◯
Method and extent of insulating exterior	◯	◯	◯

Architectural Drawings: Detail Sections:

	Yes	No	N/A
Scale: 3/4" = 1'-0" minimum	◯	◯	◯
One section for each type of wall construction	◯	◯	◯
Identify all major materials and components	◯	◯	◯
Identify insulation and note ”R” value	◯	◯	◯

Architectural Drawings: Finish Schedule:

	Yes	No	N/A
Indicate proposed finishes for all spaces, either in Basis of Design narrative or on drawing.			◯
Notes existing finishes to remain	◯	◯	◯
Ceiling heights of interior spaces are identified	◯	◯	◯

Architectural Drawings: Furnishing/Equipment Plans:

	Yes	No	N/A
Shows all major equipment to approximate scale	◯	◯	◯
Shows all built-in furnishings to scale	◯	◯	◯
Designated space in which furniture/furnishings will be places are shown with outlines	◯	◯	◯

Structural Drawings:

	Yes	No	N/A
Shows Live Loads, Wind Loads, and Seismic Criteria used for structural design	◯	◯	◯
Shows design bearing / support capacity (soil bearing, pile capacity, caisson capacity) for foundation system geo-tech design criteria for shallow and deep foundations and earth structures	◯	◯	◯
Foundation Plan indicates type & tentative sizes	◯	◯	◯
Foundation details show any improvements to bearing strata and outline any special requirements	◯	◯	◯
Floor and Roof Framing Plans of each level indicate type of system, tentative member sizes/depths and column spacing with defined grid lines	◯	◯	◯
Typical Section(s) of framing identifying materials, tentative member sizes, thickness and depths proposed are shown	◯	◯	◯
Typical Section of floor system, indicate structural construction materials and properties are drawn	◯	◯	◯
Details of connections to existing buildings, if applicable are shown	◯	◯	◯
Elements identifying a proposed lateral force resisting system are shown	◯	◯	◯

Fire Protection (FP) Information & Sprinkler Plans: Plan of each level show the following:

	Yes	No	N/A
Fire protection information (may be provided in Basis of Design narrative)			◯
Height and area calculations in accord with VUSBC	◯	◯	◯
Total building perimeter (linear feet)	◯	◯	◯
Location of all 30’ wide open perimeter spaces served from a street by a minimum 18’ wide posted fire lane (must be shown on a drawing)	◯	◯	◯
Tabulation of area for each building level, story, or floor indicating number of occupants accommodated by each. If the project is an addition, list new and existing areas and occupancies.	◯	◯	◯
Water flow test data required by NFPA 13	◯	◯	◯
Required or intended fire protection systems, fire detection and alarm systems, fire pump systems, smoke control systems per Chapter 8 of DCM	◯	◯	◯
Use Group area(s) shown with its VUSBC Use Group classification (A-1, A-2, etc.)	◯	◯	◯

Plumbing Drawings: Plan show the following:

	Yes	No	N/A
Plans of each floor note fixture locations & types & routing of main distribution lines with tentative sizes	◯	◯	◯
Show general or schematic arrangement of all piping systems	◯	◯	◯
Show location of water, sanitary sewer, storm drain & sprinkler services to building	◯	◯	◯
Show tentative fixture schedule	◯	◯	◯
Show location, sizes and types of Hot Water Heaters/ Heat Exchangers, Storage Tanks, and flues	◯	◯	◯
Show gas piping layout and connected load, if applicable	◯	◯	◯

Mechanical (HVAC) Drawings: Plan show the following:

	Yes	No	N/A
Each floor showing single line duct layouts, tentative air supply, return, exhaust quantities, equipment locations, and layouts and general routing of heating/cooling piping	◯	◯	◯
Equipment schedules with tentative sizes, capacities, ID #, features, etc.	◯	◯	◯
Locations and sizes of fans, pumps, compressors, conveyors, etc. are indicated	◯	◯	◯
Schematic layout and elevation of equipment room and/or central system showing configuration, tie-ins, etc. as necessary to describe system	◯	◯	◯
Preliminary control diagrams	◯	◯	◯

Electrical Drawings:

	Yes	No	N/A
Lighting plans for each floor show approximate fixture locations, type, and lighting levels required	◯	◯	◯
Power distribution plans shows location of incoming service (transformers and primary switches), generators, main switchgear, motor control centers and panel boards	◯	◯	◯
Interface points, service entrances, main control panels and backboards for communications, fire alarm, EMCS and other pertinent systems are shown	◯	◯	◯
Plans for each floor show locations of receptacles, data outlets, switches, fire alarm and other devices	◯	◯	◯

Preliminary Basis of Design Narrative: The following format is for a new building construction project, but is applicable to renovation and addition projects by addressing those portions relevant to that particular project. When a project consists primarily of mechanical, electrical, structural, or another discipline, the basis of design shall provide more detailed information for the major discipline. The narrative shall address or list the factors indicated for each section. Data may be presented in tabular form where appropriate

Preliminary Basis of Design Narrative: Architectural

	Yes	No	N/A
Narrative details functions to be housed in the building & the VUSBC Use Group Classification(s).	◯	◯	◯
Min. space/area requirements and criteria used to develop the design has been provided	◯	◯	◯
An analysis of VUSBC and referenced standards (and NFPA 101, Life Safety Code, if applicable) requirements of all occupancies involved has been provided	◯	◯	◯
Occupancy classifications and computed occupant load, number of units of exit and other requirements have been detailed	◯	◯	◯
Any unusual or critical code requirements have been indicate and compliance has been described	◯	◯	◯
The VUSBC Type of Construction selected with reference to degree of fire resistance has been stated	◯	◯	◯
Systems/materials to achieve the construction type/fire resistance rating have been described	◯	◯	◯
Computation of gross floor area per Section 7B and Building Efficiency factor/ratio are provided	◯	◯	◯
Statement as to the types of thermal insulation is provided, where required, and the value of the "U" factors for the various portions of the structure, i.e., roof, walls, floors, etc. have been provided	◯	◯	◯
Narrative describes the color design concept related to architectural finishes and colors	◯	◯	◯
Materials for all major items of construction and all interior and exterior finishes have been described	◯	◯	◯
A description of items not considered to be a permanent part of the structure, such as work benches, shelving, bins and removable partitions, has been provided	◯	◯	◯
A list details areas of high noise and vibration of which acoustic design principles will be applied	◯	◯	◯
Accessible design features to be used by the physically handicapped conform to Section 7A.2	◯	◯	◯
Special items within the facility i.e. barred windows, special wall/roof, etc. have been described	◯	◯	◯

Preliminary Basis of Design Narrative: Structural

	Yes	No	N/A
Narrative describes foundation conditions, type of foundation, method by which the allowable bearing values are to be determined, and maximum allowable bearing capacity for the foundations.			○
Geotechnical information is included with field boring notes and foundation design recommendations	○	○	○
Statement of the type of construction adopted and reason therefore, with capacity, dimensions, or other size criteria has been provided	○	○	○
List of materials selected with design strengths and ASTM, AISC, ACI, etc. standards are specified	○	○	○
Outline has been provided of any special features to be included in the structures which are not evident from the drawings	○	○	○
Description address the Lateral Force Resisting System proposed with appropriate materials and dimensions	○	○	○
Statement provided of live loading to be used, to include floor loads, wind, snow, earthquake, etc. with data to justify.	○	○	○
Statement of any special considerations that affect the design, (e.g., special corrosion resistance requirements, detention facilities, cranes, etc.).	○	○	○

Preliminary Basis of Design Narrative: Plumbing

	Yes	No	N/A
System to be utilized on each part of the project has been described	○	○	○
Calculation of number of each type of fixture based on VUSBC occupancy load has been provided.	○	○	○
Narrative contains the estimated number of fixture units and water demand in gpm for all plumbing fixtures	○	○	○
Narrative states the maximum and minimum water pressure at each building and indicate if booster pumping will be required	○	○	○
The type, size, materials, and design temperature of domestic water heater and distribution system has been identified	○	○	○
Statement has been provided as to whether heat recovery is contemplated for domestic water heating	○	○	○
Narrative Address- any special needs such as sumps, interceptors, pumps, pipe guides, lift pumps for sewerage, etc., and indicate tentative sizes, capacities and quality standards to be specified.	○	○	○

Preliminary Basis of Design Narrative: Heating, Ventilating and Air Conditioning: Design Conditions

	Yes	No	N/A
A list and description of the indoor and outdoor design conditions that will be used in the design of systems, has been provided	○	○	○

Preliminary Basis of Design Narrative: Heating, Ventilating and Air Conditioning: Heating

	Yes	No	N/A
Description of the source of heat energy to be used, such as extension of central high pressure steam with meter, hot water with meter, or independent heating equipment with type of fuel to be utilized, has been provided			○
Statement as to whether a condensate return system is to be utilized. (Indicate the maximum hourly production of condensate, and overall waste)	○	○	○
Schematics of the type of heating medium and system to be used within the buildings has been provided, with reasons for selection of this system over others available.	○	○	○
A description of the HVAC Control System has been provided	○	○	○

Preliminary Basis of Design Narrative: Heating, Ventilating and Air Conditioning: Ventilation

	Yes	No	N/A
Quantity of outside air per person in all areas, the type of filtration, and whether OSHA requirements are applicable, has been provided	○	○	○
Statement to whether smoke removal/control systems are to be included/required	○	○	○
Operation of the system in summer and winter modes has been described	○	○	○
Methods to reduce or minimize outside airflow have been described	○	○	○

Preliminary Basis of Design Narrative: Heating, Ventilating and Air Conditioning: Air Conditioning

	Yes	No	N/A
Complete description has been provided of the proposed air conditioning system, including an explanation of why this system is preferred over others. (Larger systems which qualify under Energy Conservation, a computerized comparison between at least two systems is required)	○	○	○
Areas to be air conditioned has been defined	○	○	○
Special humidification or de-humidification requirements, as well as special filtration requirements, have been identified	○	○	○
Description of any special architectural features being incorporated to reduce cooling loads	○	○	○

Preliminary Basis of Design Narrative: Heating, Ventilating and Air Conditioning: Combination System

	Yes	No	N/A
Changeover procedures and requirements have been listed	○	○	○

Preliminary Basis of Design Narrative: Heating, Ventilating and Air Conditioning: Energy Conservation

	Yes	No	N/A
Computer energy analysis (block load type) has been provided for buildings larger than 8,000 square feet requiring heating and cooling and larger than 20,000 square feet requiring heating only shall be used to study energy conservation features.			○
The total annual energy consumption estimate is be clearly stated	○	○	○
Methods to reduce energy usage and peakloads have been described	○	○	○
Controls for each system and indicated intended sequence of operation has been provided	○	○	○
Testing and balancing requirements are provided	○	○	○

Preliminary Basis of Design Narrative: Environmental Pollution Control

	Yes	No	N/A
Expected environmental pollution and the proposed method of control has been provided	○	○	○
A detailed description has been provided for facilities directly related to controlling air and water pollution such as sewage treatment plants, industrial treatment facilities, incinerators, smoke elimination facilities, and other similar projects.	○	○	○
If subsurface tile filtration is being considered for sewage disposal, a soil percolation test will be required for each such disposal system	○	○	○
All environmental control permits and notifications are listed	○	○	○

Preliminary Basis of Design Narrative: Asbestos, Lead-Based Paint and Hazardous Material

	Yes	No	N/A
A statement has been provided in the Basis of Design addressing asbestos, lead based paint, and other hazardous material (including leakage from underground storage tanks) presence or potential presence on the project	○	○	○
Information has been provided if Agency has secured an asbestos, lead based paint, or hazardous material investigation of the project area for renovation projects.	○	○	○
Information has been provided to how the presence of these materials will affect this project, (i.e., removed by separate project, removal included in this project, left in place and encapsulated, etc.)	○	○	○
A description of work being separate, phases or delayed has been explained	○	○	○

Preliminary Basis of Design Narrative: Special Mechanical Systems:

	Yes	No	N/A
Description of any special mechanical systems such as compressed air, hydraulic, nitrogen, etc.,	◯	◯	◯

Preliminary Basis of Design Narrative: Special Mechanical Systems: Central Heating and Heating Plant Additions:

	Yes	No	N/A
An energy analysis is included in the form of an Energy Analysis Summary, with describes criteria and assumptions, as well as justifies the system(s) proposed.	◯	◯	◯
Description of the environmental constraints such as applicable regulations, liquid wastes, gaseous emissions, treatments required, etc., have been provided	◯	◯	◯
New boilers including rating, flow, temperature, pressure and type have been described	◯	◯	◯
Control systems has been described	◯	◯	◯
New auxiliaries to be added have been listed with their source of power identified for their operation.	◯	◯	◯

Preliminary Basis of Design Narrative: Special Mechanical Systems: Refrigeration (Cold Storage)

	Yes	No	N/A
Description has been included that identifies the areas to be refrigerated, their usage, temperatures to be maintained, and type of equipment/system.	◯	◯	◯

Preliminary Basis of Design Narrative: Special Mechanical Systems: Thermal Storage

	Yes	No	N/A
Description has been included that identifies the type (static or dynamic) of storage being considered, cooling profile, and equipment/tank sizes.	◯	◯	◯

Preliminary Basis of Design Narrative: Special Mechanical Systems: Fire Protection System

	Yes	No	N/A
Description of the type(s) of automatic sprinkler and gaseous extinguishing systems to be utilized and note locations to be protected have been provided	○	○	○
Description of the fire detection and alarm systems including location of detectors, manual stations, audible devices, control panels, etc. has been provided	○	○	○
Hazard classification of occupancy and applicable Code reference	○	○	○
Flow test have been provided that lists the water supply available at point of connection (static pres-sure and residual pressure at design flow).	○	○	○
Approximate water demand for sprinkler system has been listed	○	○	○
Statement provided detailing the adequacy/inadequacy of water supply	○	○	○

Preliminary Basis of Design Narrative: Electrical: Interior Distribution Systems:

	Yes	No	N/A
Electrical characteristics (phase, voltage, & #of conductors in main distribution circuits) are provided	○	○	○
Lighting load and convenience outlet load have been listed separately	○	○	○
Power load for building equipment such as heating, air conditioning, etc. has been provided	○	○	○
Loads for special operating equipment such as compressors, generators, pumps, and for power receptacles haveeen identified.	○	○	○
Type of wiring system, such as rigid conduit, electrical metallic tubing, non metallic sheathed cable, etc., and where proposed to use has been stated.	○	○	○
Type of conductors has been stated, such as rubber insulated, thermoplastic insulated, polyvinyl chloride jacket, etc.,	○	○	○
A statement describing proposed pertinent standards of design, such as voltage drop (include calculations), lighting intensities (include calculations), and type of lighting fixtures, and a statement regarding the use of selective switching or other energy conserving features.	○	○	○
A determination of short-circuit duty required for all service entrance protective devices and switchgear	○	○	○
Information from the owner has been obtained and a description is listed pertaining to the space required for telecommunication equipment, point of connection to telephone utility, size of incoming duct/conduit and size of equipment mounting backboard to be provided.	○	○	○
Statement has been provided relative to interface provision for multi-use systems (i.e., intercom, telephone, etc.). A/E must provide all facility support for proposed telephone equipment installations, i.e., conduit, duct, and backboard. (Design and procurement of telephone system to be accomplished by the College)	○	○	○

Preliminary Basis of Design Narrative: Electrical: Outside Distribution Systems:

	Yes	No	N/A
Facilities Utility Department has been consulted for location and characteristics of nearest service capable of meeting project supply requirement			○
Statement relative to the adequacy of the primary supply at the point of take-off. If primary source is inadequate, measures have been described to correct the deficiency	○	○	○
Electrical characteristics of power supply to the site including circuit interrupting requirements and voltage regulation has been stated	○	○	○
An Estimate of total connected load and resulting kilowatt demand load by applying proper demand and diversity factors and power factor, if a group of loads is involved has been provided	○	○	○
Basis for selection of primary and/or secondary distribution voltage has been stated	○	○	○
Type of conductors and where proposed to use has been stated	○	○	○
A statement has been provided that describes pertinent standards for design, such as voltage drop, physical characteristic of overhead or underground circuits, type of lighting units and lighting intensities	○	○	○
An outline of the type and adequacy of signal and fire alarm systems, including a statement as to spare capacity on fire alarm circuit has been provided	○	○	○
Description of type, adequacy and routing of supporting structure(s) for telecommunication cable, has been provided	○	○	○

Preliminary Basis of Design Narrative: Electronic Systems:

	Yes	No	N/A
Narrative addresses the proposed type of system, its functions and the interrelationships if the system is a multi-use system.	○	○	○
Circuit requirements have been described	○	○	○
Equipment selection has ben provided in such categories as: College furnished equipment; standard manufacturers or commercially available items; and special equipment.	○	○	○
Description of site or location considerations have been provided	○	○	○
Bonding and grounding requirements are listed	○	○	○
Communication and control cables and radio links, have been described	○	○	○
Equipment, instrumentation, arrangement, and space requirements indicating requirements for racks, consoles, and individual mountings, have been described	○	○	○
Wiring and cabling requirements plus terminations, are identified	○	○	○
Power and lighting requirements, including emergency or standby requirements, are identified	○	○	○
Air conditioning, humidity and dust control requirements are addressed for electronic systems	○	○	○
Interference and clearance requirements are addressed	○	○	○

Preliminary Basis of Design Narrative: State security requirements for Security/Entry Control System/Intrusion Detection System (IDS):

	Yes	No	N/A
IDS has been identify separately from the other project elements, and any of the following items and their interconnecting circuits are described: Annunciation Panels and Cabinets, Visual and Audible Annunciators, Magnetic Switches, Proximity Sensors, Volumetric Sensors, Wire Grids, Vibration Detectors, Power Supplies Integral to Items on this List, Closed Circuit Television Cameras and Monitors, and Video Recorders used for Intrusion Detection Purposes	○	○	○
The IDS installation has been divided into three general functional categories: (1) Sensitive compartmented information facilities. (2) Conventional arms, ammunition, and explosives storage sites (AA & E). (3) All other (including but not limited to communication facilities, special training facilities, special operational facilities, intelligence facilities, etc.).	○	○	○
A describe has been provided for other access control equipment (versus IDS), its outline location(s), function, and area of control	○	○	○

Preliminary Basis of Design Narrative: Energy Monitoring and Control System (ECMS):

	Yes	No	N/A
A determination has been made if a EMCS will be utilized, whether it will be stand alone or tied into central system, if a sole source is required for tie in, and a description of the EMCS to be used.	○	○	○

Preliminary Basis of Design Narrative: Site and Landscaping:

	Yes	No	N/A
Description of the site and facility location with give reasons for selection and orientation, has been stated	○	○	○
Narrative address existing utilities available at the site, existing vegetation, bodies of water, topography, soil conditions, existing site improvements to remain, to be altered, and to be demolished	○	○	○
Description identifies existing pedestrian and vehicular access, roads, sidewalks, and parking to include accessibility for the disabled	○	○	○
Narrative of proposed site improvements, proposed contours, bodies of water, and landscaping improvements has been provided	○	○	○

Preliminary Basis of Design Narrative: Water Supply:

	Yes	No	N/A
The existing system indicating particularly the type, capacity, condition, present water use, and unsatisfactory elements has been stated	○	○	○
Type of construction proposed, materials for water mains, type of well, etc. has been identified	○	○	○

Preliminary Basis of Design Narrative: Sewers and Sewage Disposal Systems:

	Yes	No	N/A
The existing system indicating particularly the type, capacity, condition, present flow and unsatisfactory elements has been stated			○
Degree of treatment for necessary by effluent requirements and units is stated	○	○	○
Design factors with present and projected design population loads for sewage treatment plants have been provided and designer has coordination with appropriate state/local regulatory agencies	○	○	○
Materials to be used for sewer systems and sewage treatment plants has been stated	○	○	○
Governing Standards for the design has been identify (federal, state, local)	○	○	○
The impact of steam condensate &cooling water discharges on existing sewer lines &sewage treatment plants & estimated cost of distribution & treatment of additional loading has been provided	○	○	○

Preliminary Basis of Design Narrative: Roads, Driveways, Parking Areas and Walks:

	Yes	No	N/A
General soil conditions is stated, with a brief outline of soil exploration and testing performed	○	○	○
CBR value and pavement recommendations are provided	○	○	○
A description of the type and volume of traffic, controlling wheel loads and types or classes of roads under consideration is explained and justification is given for deviations from criteria thickness for these classes	○	○	○

Preliminary Basis of Design Narrative: Dust and Erosion Control:

	Yes	No	N/A
Narrative outlines the type of treatment selected to control dust and erosion, affected areas, and reasons for selection of type and determination of areas	○	○	○

Preliminary Basis of Design Narrative: Fencing:

	Yes	No	N/A
Type, heights, and justification for fencing is stated	○	○	○

Preliminary Basis of Design Narrative: Stormwater Management:

	Yes	No	N/A
Measures to be taken and/or features/structures required to comply with Stormwater Management Regulations are described			○