



NMSU FACILITIES PLANNING AND CONSTRUCTION DESIGN PROCEDURES

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LIST OF ABBREVIATIONS

ADA	Americans with Disabilities Act
AHJ	Authority Having Jurisdiction – NMSU Fire Chief
ANSI	American National Standards Institute
CD	Construction Documents
DD	Design Development
FS	NMSU Facilities & Services
GIS	Geographic Information System
HVAC	Heating, Ventilating, and Air Conditioning
IBC	International Building Code
NFPA	National Fire Protection Association
NMBC	New Mexico Building Code
NMSU	New Mexico State University
SD	Schematic Design
UBC	Uniform Building Code



1.0 GROUND RULES

1.1 INTRODUCTION

This manual is intended to serve as a guide to architects, engineers, and other consultants (Design Professionals) providing professional design services for all new construction, addition, alteration, rehabilitation, and maintenance projects at New Mexico State University (NMSU). The manual identifies those requirements that are unique or special to NMSU, and which could not otherwise be known to a qualified design firm. In the absence of specific requirements, accepted standards of practice are used. The manual is not a complete guide to requirements for NMSU projects. The Design Professional must establish the requirements for the project he is responsible for and include these NMSU guidelines where applicable to his project. If any part of this guideline conflicts with the Agreement between the Design Professional and NMSU, the terms of the Agreement will take precedence.

NMSU has two departments that work together to manage and administer design and construction projects. NMSU'S Facilities Planning and Construction is directed by the University Architect's Office under the University Architect. NMSU Facilities Planning and Construction is in charge of all large capital improvement projects at NMSU (new buildings, major additions, and major renovations). The NMSU Facilities & Services is directed by the Assistant Vice-President for Facilities, and is charged with maintenance, operations, and engineering oversight of all Las Cruces Campus facilities, utilities, and infrastructure.

1.2 PARKING

NMSU requires that all consultants working on campus shall purchase a parking permit for each vehicle. The consultant shall take a copy of his Agreement when requesting a permit at the University Parking Department.

1.3 RESPONSIBILITIES OF THE UNIVERSITY ARCHITECT

The Owner is the NMSU Board of Regents. The Owner's duly authorized representative involved with major capital improvement projects is the University Architect. The University Architect is responsible for developing and implementing the NMSU Master Plan and to guide the physical development of NMSU. He or she participates in selection of the Design Professional, establishes the project budget, schedule, scope and overall design, and processes payment requests. He or she assists NMSU Administration in the selection of the project site, and assists the User Group in determining the building program.

On certain designated capital improvement projects, the NMSU Facilities & Services will be authorized by the NMSU Board of Regents to direct the project. In such cases, the project roles normally performed by the University Architect, as described in these procedures, will be performed by the NMSU Facilities & Services.

1.4 BUDGET

The project budget is prepared by the University Architect. Any change to the budget must be authorized by the University Architect.

2.0 GENERAL PROCEDURES

2.1 DESIGN OBJECTIVES

The design of all projects for NMSU will normally be guided by the following objectives:

- A. Fulfilling the needs of the User Group.
- B. Compliance with the NMSU Master Plan. (Dated 2006)
- C. High level of aesthetic and functional design within the context of NMSU.
- D. Economic balance between initial construction cost, building permanence, and operation-maintenance costs.
- E. Balance between quality of construction and maximum useable area.
- F. Compliance with all applicable codes, including health, life, safety, fire, and those pertaining to Americans with Disabilities Act (ADA).
- G. The project utility connections to be designed with sufficient utility capacities and access to the same.

The Construction Document Phase must meet all design objectives for a complete and usable facility including site drainage infrastructure. The Design Professional shall be responsible for completeness, coordination of consultants, and quality control of the final documents, except for those portions provided by NMSU.

2.2 DESIGN PROFESSIONAL SELECTION

The Purchasing Act of the State of New Mexico and the regulations of the NMSU Board of Regents control the selection of architectural and engineering consultants by NMSU. When the professional design services fee will be greater than \$50,000 (including taxes), the Purchasing Act requires NMSU to advertise for professional design services on proposed projects either for individual projects or for open-end services for several projects. Requests for proposals from qualified Design Professionals will be directed by the NMSU Purchasing Department in accordance with state regulations and the Procurement Act.

Proposals received by the advertised date will be reviewed by members of a Professional Services Selection Committee and ranked for invitation to interview.

Design Professional firms invited to interview will be given a written notice by the University Architect of the date and time of interview. Presentations to and interviews by the Professional Services Selection Committee will be ranked to determine the selected firm. NMSU Purchasing will notify the successful Design Professional(s) in writing.

2.3 CONTRACT, FEE NEGOTIATION, APPROVALS

Upon notification of selection, the Design Professional selected will enter into negotiations for the fee on the project. The University Architect will meet with the Design Professional to define the scope of the project and to answer any questions. The Design Professional, after review of the scope and visit to the project site, will submit a written fee proposal for services to the University Architect. If acceptable, an NMSU Agreement for Professional Services will be drawn and executed. A Certificate of Professional Liability Insurance will be submitted by the Design Professional with the executed Agreement. Required levels of liability coverage are established by the NMSU Central Purchasing Office.

The Design Professional will not perform any work under the Agreement until they receive all of the following documents:

- A. Executed Agreement
- B. Purchase Order from NMSU Central Purchasing Office

If the University Architect is unable to negotiate an acceptable fee with the Design Professional, he will so inform the Design Professional in writing and will seek other means to accomplish the project including negotiations with the next-ranked firm from the interviews.

Should the scope of the project be changed after signing of the Agreement for Professional Services, the Design Professional will be notified in writing of the extent of the scope change. Within 10 days of the date of the written notification of scope change, the Design Professional will respond in writing to the University Architect if there is a fee change and, if so, the proposed fee change will be submitted at that time. The revised fee will be reflected in a Professional Services Agreement Revision that must be signed by all parties, and a Purchase Order issued by NMSU Purchasing.

3.0 PROJECT PROCEDURES

3.1 PROJECT ORGANIZATION

The University Architect will assign a University Project Manager at the beginning of the project. Any decisions on project design have to be routed through the University Project Manager and the Design Professional. All communications must be directed through the University Project Manager and the Design Professional.

The Design Professional shall designate a Project Design Manager for the project, who will coordinate communications between the User Group, the University Project Manager, and consultants throughout the course of the project. If information or data is obtained from sources other than the University Project Manager, the Design Project Manager will submit the information in writing to the University Project Manager for review and verification that the information is correct and may be incorporated in the design.

3.2 PROJECT TEAM ORGANIZATION

The Design Professional will be responsible for all documents and services provided under the Professional Services Agreement. Consultants employed by the Design Professional to provide necessary services on the project will be identified to the University Architect as required by the Professional Services Agreement. In addition, the names and telephone numbers of consultant representatives will be provided.

3.3 SCHEDULES

The Design Professional must provide a time schedule for production of all phases of design and construction. This Project Schedule shall include the phases of the design development, reviews by the University Architect's Office, and shall take into consideration all factors known at the time of the Project Schedule creation.

The importance of the Project Schedule is its relation to the academic year of NMSU and to the University Architect's Office workload. When their approvals are required, the schedules of the NMSU Board of Regents, the NM Higher Education Department, and the NM State Board of Finance can significantly affect the project schedule. The Design Professional will coordinate the approval schedule with the University Architect. No construction can commence without these approvals, when required.

The Project Schedule will be reviewed by the University Architect. Revisions to the Project Schedule may be negotiated with the Design Professional and approved in writing by the University Architect as a schedule which the Design Professional will meet in the production of the project documents. Any delay, as soon as it becomes known, must be discussed with the University Architect, its potential impact evaluated, and it must be approved by the University Architect.

3.4 NMSU REVIEW PROCESS

As part of the design process, the Design Professional will submit copies of the documents at each phase for review. The University Project Manager will distribute all documents internally for review, and collect and collate all review comments, including those from the Building Committee. The reviews by NMSU are intended to help the Design Professional to accomplish a better building. In the event the Design Professional disagrees on aesthetic, technical, functional, cost, maintenance, programmatic, contract conflict, code, regulations, or any other legitimate concern, the Design Professional will respond in writing stating his reasons.

3.5 BUDGETS

Budgets for all projects are prepared by the University Architect. The scope and budget of construction cost for a project will be defined in the Professional Services Agreement as the Maximum Allowable Construction Cost (MACC), and will be the limit of funds available for construction of the project. By signing the agreement, the Design Professional obligates himself to design a project that can be built within that

budget and to redesign it without additional fees, reproduction costs, or any other cost if the lowest bid exceeds this budget. During the development of the project design, the User Group, through the University Project Manager, can be expected to request additional expansion of the project beyond the scope outlined in the program. This is a natural direction for the User Group to take, however, the Design Professional, as a contracted professional responsible for budget control, must balance these additional User Group requests with the limitations of the budget. Any decision or communication with the User Group which impacts the project's scope, budget, or its material or performance quality shall be brought to the attention of the University Architect in writing. No revision to the program scope or budget shall be made without explicit written approval of the University Architect.

4.0 PROJECT PROCESS

4.1 ASBESTOS-CONTAINING MATERIALS (ACM) ABATEMENT

The University Architect may arrange for removal and disposal of asbestos-containing materials (ACM) encountered in renovation projects. Whether or not this will be done by the Design Professional or by the University Architect is determined individually for each project. When the work is arranged by the University Architect, the Design Professional coordinates the project design and construction with the abatement work to achieve the least costly and most beneficial solution to NMSU. In such cases, the University Architect will contract separately for investigation of ACM and the preparation of an abatement design package. The Design Professional will coordinate with the ACM designer to assure buildable construction documents. The Design Professional's construction documents will reflect and coordinate with the requirements for ACM removal, phasing, demolition, plans, and construction.

4.2 SURVEYS

The University Architect's Office will provide topographical drawings from its GIS documents for the use of the Design Professional. This information is not deemed of sufficient accuracy for construction documents, but will suffice for initial concept drawings. The Design Professional will obtain a certified survey for the project site according to the following procedure.

- A. The Design Professional will obtain and submit to the University Architect a survey cost proposal for approval.
- B. Upon approval, the Design Professional will instruct the surveyor performing the site survey that a utility locate must be requested from the NMSU Utilities Department and New Mexico One Call through A Work Order placed by the University Project Manager.
- C. All utilities marked by the utility locate will be recorded by the surveyor on the site survey including size and depth. This will include all known utility information, underground structures, as well as normal survey information of surface features.

Surveys for projects shall incorporate and recognize the following requirements:

- A. Surveys shall tie to University Coordinate System. The University Project Manager will identify tie points for the surveyor.
- B. Definition of any property lines and boundaries shall be established through review of appropriate deeds of record at the Office of Real Estate.
- C. Locate information identified by the NMSU Utilities Department and New Mexico One Call.
- D. Location of surrounding buildings with ground floor elevation.

4.3 GEO-TECHNICAL

An appropriate soils investigation will be performed for each project which requires foundation design. The Design Professional will define the scope of services by giving the information on project type, size, number and location of test borings, depth, and any other needed information. A geo-technical report will be prepared based on soils borings of the site, analysis of samples, and tests performed to define the characteristics of the soil affecting the bearing capacity and stability of the soil to support the project planned for the site. Three (3) copies of the soils investigation report will be provided to the Design Professional and the University Architect's Office.

4.4 TESTING:

All testing during construction shall comply with the general conditions and the contract documents.

4.5 DOCUMENTS

All review documents (drawings, specifications, and reports) shall be marked on the cover, or first sheet, with:

- A. Project Title
- B. Location
- C. Date
- D. Scale & Orientation on drawings
- E. Phase Percentage or Title
- F. Request for Proposal # (RFP #) on 100% construction documents

The Design Professional is responsible for incorporation of all agreed corrections into the design and contract documents.

A Design Professional preparing designs for excavation on campus shall request a utilities locate from the University Project Manager in sufficient time (minimum of 48 hours) to include data from the locate in the construction documents. This locate shall be requested prior to the surveyor making site surveys in order for the surveyor

to include utilities on the survey. NMSU requires that the University Project Manager be notified two (2) working days (48 hours) prior to the locate.

The NMSU Boilerplate sections are a legally binding element of the contract documents prepared by NMSU Legal Counsel. The Design Professional's specifications shall be edited in such a manner that there is no conflict between the NMSU Boilerplate and the Design Professional's specifications.

The University Project Manager will furnish the Design Professional with an NMSU GIS survey of the project site, in AutoCAD disk and/or reproducible hard copy form, showing 1 foot contours, surface features, and surface location of utilities and other material available.

The University Architect's Office expects delivery of 100% completed documents with the quality and completeness such that they are ready for bid and require a minimum of addenda and change orders. The 100% review, as well as other reviews to be performed by the University Architect's Office, is to verify compliance of the design with the program and project scope. However, the University Architect's Office review does not release the Design Professional from his responsibility. Quality control is a part of the design process and the cost of it is included in the Professional Service Agreement.

The University Architect's Office expects to issue change orders and issue addenda due to unforeseen conditions, not for avoidable errors due to lack of completeness, accuracy, or coordination. Such avoidable errors include:

- A. Dimensions of all drawings not coordinated and accurate so that all sub-strings of dimensions total the overall building or detail dimension.
- B. Section and detail cuts not properly located or accurately referenced to the location where drawn on the drawings.
- C. Notes not accurately identified and referenced.
- D. Detailing not sufficiently complete for the Contractor to estimate the costs and build the project.
- E. Drawings not complete and coordinated with civil, landscaping, structural, mechanical, electrical, and any other discipline required producing the design.
- F. Insufficient coordination of new equipment and requirements with existing conditions, e.g., mechanical equipment needing electrical power not having power requirements shown and coordinated with correct voltage, amperage, and phase.
- G. Project manual not complete with all materials, equipment, and systems properly specified, referenced, and coordinated between disciplines. (Note: Most materials and building systems shall mention "or approved equal", since use of public funds cannot exclude "equal" materials or systems.)

The above referenced requirements are the very minimum expectations from a professional architect or engineer. The Design Professional is responsible for the performance of all his consultants and will be held liable for their performance. Drawings and specifications that are incomplete, in the opinion of the University Architect, will be returned to the Design Professional for completion. At the discretion of the University Architect, drawings will not be issued for bidding until they are acceptable to the University Architect.

4.6 REPRODUCTION OF DOCUMENTS

Proposal documents, after approval by the University Architect for bidding, will be reproduced for distribution by a reproduction firm holding a contract with NMSU for reproduction services. The Design Professional will deliver original documents to the reproduction firm. The reproduction firm will reproduce the required sets and deliver those to the Design Professional for distribution. The reproduction firm will invoice NMSU directly.

5.0 DESIGN

5.1 DESIGN GUIDELINES

The intent of the guidelines is not to prescribe design vocabulary, but rather to guide designers in the spirit NMSU wishes to develop the campus. All new construction and major renovation will be reviewed by the University Architect for conformance to the Master Plan.

A copy of the current NMSU Master Plan can be accessed online at <http://masterplan.nmsu.edu>.

5.2 PRE-DESIGN CONFERENCE, SCHEDULES, BUDGETS

A Pre-Design Conference will be scheduled with the Design Professional before commencing work on contracts for services. The Design Professional will attend the conference prepared to participate in the following agenda:

- A. Develop and present a time schedule for design services. This schedule must be realistic and include all factors which are known at the time of the conference.
- B. Determine and commit to their ability to design the project within the funds budgeted for the project. If the Design Professional deems the budget inadequate, they should be prepared to identify reasons for its being inadequate and offer recommendations to modify the project scope which will keep the project within budgeted funds.

It is normally a contractual requirement that in the event the lowest bid exceeds the Maximum Allowable Construction Cost (MACC), and the Design Professional failed to notify the owner, the Design Professional is responsible to redesign the project

without any cost to NMSU (including labor, materials, reproduction of new bid documents, etc.).

The University Architect will provide information about the site and available drawings of existing buildings (if a renovation or add-on project), and surveys. Information will also be provided on NMSU systems for utilities, telephone, cable TV, and computer network. If the project is on a site other than the Las Cruces campus, the University Architect will ensure that information available will be provided. If the University Architect determines that an archaeological study is required, he will authorize the study as an “additional service” to be performed by qualified archaeological firm as a consultant to the Design Professional. The archaeological firm will be required to submit four (4) copies of the final report directly to the University Architect and required copies to the State of New Mexico.

The representatives of the User Group will be requested to participate in the Pre-Design Conference. The User Group may contribute ideas and answer questions; however, the final decision on matters affecting the project scope and budget will rest with the University Architect.

5.3 PROGRAMMING

NMSU is responsible, either in-house or by consultant, for preparation of a program. The program statement will generally include:

- A. Project objectives and scope
- B. Statistical data
- C. Space and facility requirements, including itemized space listing
- D. Inter-relationships and proximities
- E. Systems and equipment requirements
- F. Relationship to campus plan and adjacent physical elements
- G. Site development requirements
- H. Appearance requirements
- I. Phased development when applicable
- J. Special requirements
- K. Overall time schedule
- L. Overall cost of construction
- M. Budget

The program statement is the basis for conceptual design.

5.4 SCHEMATIC DESIGN PHASE

Specific requirements include:

- A. **SITE PLAN:** Show footprint of building; distinguish between new and existing structures, existing and proposed topography, landscaping features, roads, walks, and major new and existing construction. Topography (spot elevations) and utility extensions may be diagrammatic. Scale of 1 inch = 20 feet preferred.
- B. **TYPICAL FLOOR PLAN(S):** May be single line drawings. Label room names to coincide with program. Structural grid shown. State the gross area of each floor and total gross area of the building. Scale of 1/8 inch = 1 foot preferred.
- C. **PLANS OF SPECIAL FLOORS OR AREAS:** Locations and scale required.
- D. **ROOF PLAN:** Show slopes, drains, and special features. Scale 1/8 inch = 1 foot preferred.
- E. **ELEVATIONS:** Not fewer than 2. Sketches are acceptable as long as the character, proportions, and material are evident. Scale of 1/8 inch = 1 foot preferred.
- F. **DIAGRAMMATIC SECTIONS:** Illustrate diagrammatically the structure, mechanical spaces, and any special construction. Scale of 1/8 inch = 1 foot preferred.
- G. **EQUIPMENT AND FURNISHINGS:** Show any special equipment and mechanical systems that influence design.

5.5 DESIGN DEVELOPMENT PHASE

Specific submittal requirements for review include:

- A. Site and civil drawings (scale of 1 inch = 20 feet preferred)
 - 1) Vicinity map should show locations of site in relation to surrounding areas and significance of salient features.
 - 2) Location, outline, designation of existing buildings, walks, drives, parking, service, utilities, trees, and plantings; include and indicate any demolition.
 - 3) Location of new walks, drives, parking, and other exterior facilities proposed for the project, including accessibility for the disabled, service area, tree relocation plan, and site lighting.
 - 4) Site and roof drainage, pond areas, and anything in relation to the overall campus drainage system located.
 - 5) Drainage analysis for 100 year storm event.
 - 6) Floor elevations of building, footprint, and contour lines establishing existing and finished grades included.

- 7) Show vertical section through site if topography requires and existing and new tunnels, depth of foundation, basement, etc.
- B. Architectural drawings (scale 1/8 inch = 1 foot minimum for plans)
- 1) Floor plans: Show dimensions, spaces, and indicate seating capacity, rated walls, corridor widths, door sizes, enlarged floor plans of proposed toilet rooms, stairs, etc.
 - 2) Reflected ceiling plans: Show lighting fixture and HVAC diffusers/grilles.
 - 3) Show all exterior elevations: Dimension floor to floor and overall height; indicate materials used and finished grades.
 - 4) Longitudinal section and cross section: Show floor and ceiling heights; indicate materials used and finished grades.
 - 5) Preliminary rooms finish schedule and door and window schedules.
- C. Structural drawings
- 1) Indicate floor and roof live loads, wind loads, seismic design, and any special loads.
 - 2) Foundation plan: Show typical and critical sections of footings and slabs, including size, depth, reinforcing, and dimensions.
 - 3) Typical structural sections: Walls, stairs, elevator shaft, etc.
 - 4) Beam joist, column, pier, footing, truss, and slab schedule.
 - 5) Structural calculations.
- D. Mechanical drawings
- 1) Single line duct plans with size, dampers, and other elements.
 - 2) Mechanical equipment schedule enlarged mechanical room plans, and critical mechanical details.
 - 3) Equipment sizes and weights.
 - 4) Utility load calculations and utility impact data.
- E. Plumbing drawings
- 1) Show plumbing plans and plumbing fixture schedules.
 - 2) Invert elevations and details.
- F. Electrical drawings
- 1) Load calculations, typical lighting plan and typical power plan of all areas, typical special system plans of all areas.
 - 2) Single line diagram: Power panel, electrical panel, lighting fixture, equipment schedules, grounding, etc.

G. General information

- 1) Gross area and net area as defined by the NM Higher Education Department: Summary of space compared to project program.
- 2) Analysis of ADA, ANSI, UBC, Life Safety, NFPA, and NMBC requirements. Occupancy classification, construction, construction type, fire resistance, occupancy load-basis, number of exits required, minimum width of exits and toilet room requirements.
- 3) Results of archeological survey (if required)

H. Reports of data: The following items, which apply to renovation projects and/or building additions, may be required based on the nature and scope of the design project.

- 1) Structural system analysis: Proposed structural system based on economy, time of construction, and structural calculations.
- 2) Fire life safety report: Proposed life safety provisions to be incorporated in the projects.
- 3) Room acoustics: Identify problem areas and make recommendations.
- 4) Energy conservation report: Include efficiencies of mechanical and electric systems, etc.
- 5) Asbestos-Containing Material (ACM) report: The University Architect will provide a report on the content, type, quantity, and cost of asbestos abatement.
- 6) Time schedules: Establish critical dates for bidding documents and construction, with University Architect input.

I. Specifications

- 1) Provide an outline draft of the table of contents
- 2) Outline specifications shall describe the proposed work with reference to materials and equipment in such detail that a basis for systems review is possible.
- 3) Specifications shall follow CSI 2004 format.

J. Equipment and furnishings

- 1) Include a list of existing and proposed equipment and locations.
- 2) Existing equipment shall be identified in present location and new location.
- 3) Note any modifications that will be required to existing equipment.

K. Design development construction cost estimate

- 1) Prepare a detailed, itemized construction cost estimate.
- 2) If early construction estimates indicate that the design may exceed the construction budget, the Design Professional shall notify the

University Project Manager, as soon as the estimate is completed, that an adjustment in program is necessary.

5.6 CONSTRUCTION DOCUMENTS PHASE

After written approval of the design development phase, proceed with the preparation of the construction documents, in a form suitable for bidding and construction, and as prescribed herein.

Drawings: NMSU expects clear, complete, comprehensive drawings at appropriate scales of high, professional quality, accurate, thoroughly coordinated, and including compliance with boilerplate, and conducive to narrow range bidding. Additional requirements which may not be common practice are:

- A. In addition to prints, all drawings shall be presented in AutoCAD 2012 format. The files must include all fonts and support files needed to allow them to be processed as-is using AutoCAD 2012. No other formats will be accepted. Files will be accompanied by a file manifest listing the file names, size, and date. The manifest must also list the name of a contact person to assist in resolving problems.
- B. Cover sheet: General building data shall include building and net square footage, design load criteria, code requirements, ADA requirements, and all other information required in order to obtain a building permit from Construction Industries.
- C. Civil, landscape, and site drawings: Incorporate site survey including utility information, but qualify that its inclusion is for bidding convenience only.
 - 1) Site Plan: Location and datum elevation of the nearest official benchmark as defined by the campus GIS, limit of contractor's work area, vehicle access, and allowable parking, fence requirements, and test boring data and locations.
 - 2) Incorporate all landscaping requirements if part of the project program.
 - 3) Surface and underground drainage: Include surface and invert elevations; show foundations on drainage drawings.
 - 4) With information furnished by the University Architect during the design development phase, the Design Professional shall show construction limits and phasing, and Contractor fencing, parking and staging and storage areas. This shall be reviewed with the Contractor at the pre-proposal meeting.
- D. Architectural drawings: Complete drawings including plans, elevations, reflected ceiling plans, sections, details, schedules, and legends. Show all equipment included in construction contract and equipment not part of the contract where anchorage is required or when advisable to facilitate delivery and installation coordination. Coordination equipment utility requirements with mechanical and electrical drawings.

- E. Mechanical Drawings: Complete drawings including plans, details, and schedules and coordinate with equipment shown on architectural drawings. Equipment room plans at no less than ¼ inch scale, showing multiple plan levels when required for clarity. Also include sections for equipment, piping, and duct work occurring in restricted areas.
- F. Electrical drawings:
 - 1) Plans/reflected ceilings: Show ceiling light fixtures, other ceiling mounted electrical equipment, air diffusers and return air grilles.
 - 2) Roof plan: Show lightning protection if needed, electrical equipment on roof, lighting and WP convenience outlets.
 - 3) Panel Schedules: Use NMSU format.
 - 4) Motor control schedules: Include size and type of starters, interlock devices and disconnects.
 - 5) Coordinate power and lighting requirements of equipment shown on architectural drawings.
- G. Specifications: The University Architect's Office will prepare and furnish to the Design Professional the following information: Instructions for Proposals, Proposal Form, Standard Agreement Form (NMSU Board of Regents/Contractor), General Conditions, Supplementary Conditions, and Wage Rates Schedule. NMSU general and supplementary conditions of the contract differ somewhat from, but contain basically the same provisions, as the AIA General Conditions and Supplementary Conditions.

To avoid unnecessary repetition and the possible weakening of the contract documents, NMSU uses only those sections of Division 1 which include necessary additional information or extensions of the information provided in the conditions of the contract. All Division 1 sections used should be carefully edited to be completely accurate and project-specific.

NMSU general conditions establish the order of precedence of the drawings and specifications. This should not be repeated or contradicted by other specifications sections.

NMSU policy does not permit use of allowances in contracts. When additive alternates are used, they must be awarded in order of listing on the bid form. NMSU is not allowed to negotiate the bid amount with the apparent low bidder by substantially altering the scope of the work. In proposals (responses to RFP's), NMSU may request additional information and final prices from the Proposer. NMSU does not make attendance at pre-bid meetings or site visits mandatory. The requirements of Federal, State, and Local laws, and Licensing and Regulatory Agencies are required by the contract as stated in the NMSU Boilerplate and need not be repeated in the technical sections. Applicable industry standards should by all means be stated. Please delete all references to non-existent sections of the NMSU Boilerplate and technical sections.

NMSU enters into one contract, namely with the Contractor, and consequently maintains an arm's-length distance from the prime's employees, whether employed directly or indirectly by sub-contract. Therefore, the NMSU preference in the technical specifications and on the drawings is to omit "working by Division XX" and "work done by XX contractor".

If furnishing and installation schedule for control and other equipment is used in the specifications or on the drawings, NMSU will require just before the schedule the following:

"The following information and schedule is furnished as a suggestion and guideline only. Bidders and Contractor are reminded that the terms and general conditions, paragraph 1.2 and 4.3 take precedence over the information provided below or in any of the technical specifications and drawings".

Delete all references to compliance with "applicable" provisions; if there are some provisions not applicable; please edit them out, as NMSU intends to enforce the contract documents in totality.

Define all work to be performed. Eliminate all "owner furnished/contractor installed material" work. Eliminate any notes reflecting "salvage to the Owner". NMSU generally does not want refuge from a demolition project unless specifically requested. The gathering of information and design responsibility shall not be left to the Contractor. Only if the project is intended to be design/build, shall the Contractor be held responsible for design, etc.

Mechanical and electrical specifications shall not exclude the University Architect. The University Architect is the representative of the NMSU Board of Regents; therefore specifications should define the University Architect as the Owner's Representative. Some specifications state the terminology to be used on the approvals stamp. This is acceptable, if the stamp used actually includes the word "approved" when that is the intent, and the language of the technical specification agrees with such a stamp. Whether such language is included in the specifications or not, NMSU Legal Counsel requires that the stamp used for approvals actually "approve" the submittal when it is acceptable.

When a list of systems is required to be designed and/or installed by the Contractor or sub-contractors, or if applicator or systems certification is required, it is NMSU's position that this list and or certification is of no value unless obtained and used to qualify the installer/agency/system before award of the contract. Therefore, language is used in the NMSU Boilerplate to require submittal of such certification by the apparent low Proposer after the opening of proposals and before execution of the contract. This works well for requirements other than the pre-approval of equals before proposal opening (with which it is sometimes confused), and eliminates the need for all Proposers to provide such documentation. Language in the technical specifications sections requiring applicator or systems certification is acceptable when corresponding to similar language which will be inserted by the University

Architect's Office in the NMSU Boilerplate and on the advertisement and proposal sheet.

Standard Construction Testing, unless otherwise specified, is paid by the Contractor. Testing should be defined by IBC standards and intervals of occurrence of each test by area and/or volume in each applicable section of the specifications.

Temporary electrical power and water for construction on the main campus are usually provided by NMSU to the Contractor without charge for the actual power and water used, with the requirement that NMSU make all connections and disconnections, provide all transforming, switching, lines, piping, and valves necessary for the temporary installation.

The Design Professional shall inform its consultants concerning the NMSU Boilerplate documents with which their work must conform. Drawings and specifications shall be coordinated and reviewed by the Design Professional before transmittal to the University Architect's Office.

The NMSU Contract Manager administers construction contracts on behalf of the University Architect. Though he is usually involved somewhat during the design and contract documents phases, he assumes active administration by scheduling a pre-construction meeting and delivery of the notice to proceed to the Contractor. From that point through closeout of the contract, all communications to NMSU regarding its administration should be routed through the NMSU Contract Manager.

It is proper that User Groups have input during design, bidding, award and construction phases. However, after the design is determined, User Group contact with bidders, the Contractor, or the Design Professional should be discouraged except as routed through, and with direct involvement of the University Architect or the NMSU Contract Manager.

5.7 ADDITIONAL SERVICES

Additional services will be performed only after approval by the University Architect in writing. Requests for such services may be initiated by the University Architect, by the Design Professional, or by the User Group. Regardless of the origin of the request, the scope of the additional services requested will be developed by the University Architect and transmitted to the Design Professional for preparation of a fee proposal. Upon receipt of the fee proposal prepared by the Design Professional, the University Architect will review the proposal and, if acceptable, notify the Design Professional to prepare and submit Schedule A of the Professional Services Agreement for acceptance. If the fee proposed is not acceptable, the University Architect will notify the Design Professional and negotiate with him until an acceptable fee is reached.

5.8 PROPOSAL PHASE

The Design Professional will be responsible for delivering the approved originals of plans and specifications to a firm on contract with NMSU for reproduction of the approved quantity of sets of documents at NMSU's expense. He will receive and issue the reproduced documents to interested bidders. A record will be kept of each set and to who issued, and addenda issued.

The Design Professional will prepare addenda to correct or add items to the documents necessary for the project; submit them to the University Architect for approval signature, and issue to bidders. The Design Professional will transmit copies of addenda to the University Architect and all Proposers and plan rooms. After issuance of the final addenda, the Design Professional will not answer further questions from Proposers on interpretation of the intent of the documents. If a major problem is discovered and brought to the attention of the Design Professional after the final addendum is issued, the Design Professional will immediately notify the University Architect for instructions on how to proceed. The University Architect may give authorization for an addendum to be issued to correct the problem, delay the proposal due date, or any other procedure which will address the problem. The Design Professional will not make the decision on how to resolve the problem without consulting the University Architect.

5.9 PRE-PROPOSAL CONFERENCE

A pre-proposal conference will be held at a location which will be identified in the advertisement for proposals and will provide a review of the project scope for interested Proposers and answer questions raised. Attendance is not mandatory, but is encouraged. The agenda will include the following:

- A. Introduction of NMSU representatives
- B. Review of project scope
- C. Review of construction documents
- D. Site visit
- E. Receipt of questions

Questions will be reviewed by the University Project Manager. All questions which require an answer to provide clarification of the documents will be answered by inclusion in an addendum sent to all holders of record.

6.0 CONSTRUCTION

6.1 PRE-CONSTRUCTION CONFERENCE

The Pre-Construction Conference will be scheduled by the NMSU Contract Manager who will issue the notice to proceed letter to the Contractor at the conference. The conference will cover items as determined by the NMSU Contract Manager to include the following and such other items which may be specifically related to the project:

- A. Review of contract documents

- B. Review of project construction schedule
- C. Review of sub-contractor list
- D. Contractor's office and construction materials storage
- E. Submittals
- F. Contractor's requests for payment
- G. Change orders
- H. Project closeout requirements
- I. Project acceptance
- J. User Group's role(s) – contact person
- K. NMSU Facilities & Services participation
- L. Utility outages
- M. Inspections: State of New Mexico, Design Professional, and the NMSU Contract Manager

6.2 CONSTRUCTION PHASE

The Design Professional will perform construction administration as required by his contract for services. The services will include periodic site visits by the Design Professional and his design consultants. The Design Professional will coordinate the scheduling of his consultants with the progress of the project. The Design Professional will submit a monthly report of the construction progress, including copies of his record of the site visits and visits by his design consultants.

The Design Professional or his authorized representative will attend monthly progress meetings during construction of the project. The Design Professional will record minutes of the meetings and distribute copies of the minutes within seven (7) working days of the date of the meeting. The Design Professional will review contractor pay requests and verify percentages before signing pay requests. The Design Professional will perform such other duties necessary to coordinate the review of construction progress and will alert the NMSU Contract Manager to any problems which may come to his attention.

The Design Professional will prepare all change orders working with the Contractor to obtain information and necessary time extension and costs of changes. He will submit change orders, four (4) copies on approved forms, to the NMSU Contract Manager within seven (7) days of receipt of contractor costs. The NMSU Contract Manager will review change orders and, except where the project design is affected, will approve the change order within seven (7) days of receipt. In changes affecting the design, the NMSU Contract Manager will obtain the approval of the University Architect or his representative, and approve the change order within fourteen (14) days of receipt or return it for revision as required. The NMSU Contract Manager may authorize the use of field orders for changes involving money or extensions of time as means to prevent unnecessary delays in construction. The Design

Professional will prepare and submit the field order in the same procedure as that for change orders.

The Design Professional, in preparing for completion of the project, will prepare a “punch list” of deficiencies as required by his contract for services and the general conditions of the contract documents. This punch list will include all deficient items recorded by the Design Professional and his design consultants. The Design Professional will distribute punch list copies as required by the NMSU Contract Manager.

The Design Professional will submit progress payment invoices during construction to the NMSU Contract Manager who will coordinate approval with the University Architect.

The Design Professional will perform a warranty inspection with the NMSU Contract Manager eleven (11) months after the date of substantial completion of the project. The Design Professional will submit a list of deficiencies to the NMSU Contract Manager as required by his contract for services and the general conditions of the contract documents.

6.3 ROLES OF INSPECTORS

The NMSU Contract Manager may personally perform construction administration for a project or he may assign an inspector who will perform construction administration. The role of the NMSU Contract Manager or inspector performing construction administration will be as follows.

Projects with full-time Design Professional representatives as authorized by the Design Professional contract:

- 1) Perform overview of all construction activities.
- 2) Review all Contractor pay requests and change orders.
- 3) Review all stored materials lists.
- 4) Communicate all construction concerns and problems encountered to the Design Professional representative.
- 5) Represent NMSU in regard to all questions concerning utilities, site information, NMSU procedures, etc.
- 6) Make field trips to the project as needed.

6.4 PROJECT CLOSEOUT

Project closeout procedures will comply with the closeout procedures provided by the University Architect. The Design Professional will receive all closeout documents required from the Contractor, prepare required record drawings, and submit all to the NMSU Contract Manager.

6.5 BUILDING ACCEPTANCE/COMMISSIONING

The building acceptance will be accomplished by the NMSU Contract Manager after the closeout documents have been received, all punch list items have been completed satisfactorily, and all required submittals, training, and warranties have been accomplished. The Design Professional will follow the requirements of the general conditions in submitting a letter of completion to the NMSU Contract Manager. Upon receipt of the letter and final Contractor request for payment and Design Professional invoice, the NMSU Contract Manager will formalize the building acceptance in writing with copies to all parties involved in the construction of the project.