

Butler

United States  
Department of  
Agriculture

Soil  
Conservation  
Service

517 Gold Ave., SW, Room 3301  
Albuquerque, New Mexico  
87102

April 10, 1992

NATIONAL ENGINEERING MANUAL  
210-V  
AMENDMENT NM34

SUBJECT: ENG - PART 501 - AUTHORIZATIONS

Purpose. To transmit supplements to the National Engineering Manual.

Effective Date. Upon receipt.

Pen-and-Ink Change. On page NM501-3(4), please delete the second sentence in paragraph NM501.04(a)(2)(v)(E)[1]. The sentence to be deleted reads: "Approved and sealed plans will be forwarded to the NMSE with only periodic spot reviews."

Filing Instructions.

<u>Remove Page(s)</u>	<u>Dated</u>	<u>Insert Page(s)</u>	<u>Dated</u>
NM501-3(1) and NM501-3(2)	10/82	NM501-3(1) and NM501-3(2)	3/92
NM501-13(1) through NM501-13(9)	10/83	NM501-11(1) through NM501-11(7)	3/92
NM501-33(3) and NM501-33(4)	7/80	NM501-33(3) and NM501-33(4)	3/92

Receipt of this transmittal should be posted to the New Mexico tabulation sheet and to the Table of Contents for Subchapter A.



RAY T. MARGO, JR.  
State Conservationist

Attachments

DIST: NEM

Subpart A - Review and Approval

NM501.03(b)(5)

NM501.03 Compliance of engineering work with laws and regulations.

(b) All jobs which require the review and approval of any state or federal agency for construction permit or cost-share purposes are to be divided into two types of jobs: Type 1 jobs are dams higher than 10 feet constructed for erosion control with a total reservoir capacity (both temporary and permanent) of 3 acre-feet or less, and are designed in accordance with Conservation Practice Standard 378 and New Mexico Supplement 378; type 1 jobs also include agricultural waste management practices, Job Classes 1 through 4. Type 2 jobs are all other jobs, regardless of their magnitude or complexity.

(1) Type 1 jobs are to be reviewed and approved according to job approval authority procedure and provided to the producer. Type 1 dam jobs do not need to meet the requirements of Exhibits A and B, but as-built drawings of sufficient detail for construction purposes are to be submitted to the NMSE within 90 days after completion. The as-built drawings are to be reviewed and submitted to the NMSE by the AE. The landowner or operator may make permit application for type 1 dams on permit form from the NMSE (Exhibit E) before the design is approved.

(2) Type 2 jobs are to be checked and approved by the AE and then forwarded to the SCE. All type 2 jobs will be reviewed and coapproved by the SCE, who will then transmit the design to the responsible state or federal agency for their review and approval.

(3) These review and approval requirements apply to: new structures, replacement or repair of existing structures, and changes or modifications which affect the functional integrity or cost of the job.

(4) All plans forwarded for review are to be complete, appropriately signed as approved or initialed as checked, and in accordance with SCS practice and design standards. When plans are prepared for the review and approval of other agencies, such as the NMSE Office and New Mexico Environment Department, their criteria and standards are also to be incorporated into the design. Unless otherwise required, designs and construction drawings shall be prepared in accordance with the National Engineering Manual.

(5) All type 2 job plans to be submitted to the NMSE Office for water rights filing must meet the requirements of Exhibits A and B. Plans that do not require water rights filing and are submitted for construction permits must meet the requirements of Exhibit B. The following definitions shall apply for use in Exhibit B:

NM501-3(1)

Part 501 - Authorizations

NM501.03(b)(5)

(i) Flood pool - Volume between the design sediment elevation and the emergency spillway crest.

(ii) Principal spillway - The structure, structures, or portion of a structure (e.g., first stage of a two-stage riser) which allows discharge of the design principal spillway hydrograph runoff event through the floodwater detention dam.

(iii) Emergency spillway - The structure, structures, or portion of a structure (e.g., second stage of a two-stage riser) which allows discharge of floodwater above the detained volume which was a result of the design principal spillway hydrograph runoff event.

(6) Development of stage-storage relationships for use in Exhibit B may use the approximation method set forth in NM534.00-80, if applicable, to allocate sediment storage.

(7) Exception to any of the criteria in Exhibits A or B may be approved by the NMSE when adequate justification is provided and a variance is requested. When a variance is requested for a floodwater detention dam regarding item 18 in Exhibit B, the following information shall be included along with any other justification:

(i) The maximum detained floodwater volume (i.e., above the sediment pool for the routed hydrograph) for both of the following: the 25-year runoff event; and the 100-year runoff event or the design life, whichever is less.

(ii) The drawdown time for both of the volumes in (i) above. These volumes shall not include any inflow which occurs from the resulting hydrograph after the peak detention elevation is reached, nor shall they include the last 10 acre-feet remaining during drawdown.

(8) All type 2 job plans shall be accompanied by a brief design report. The report should state the applicable practice standard and describe the project purpose, alternatives considered, and design procedures used in plan development. Computation sheets and other supporting data should also accompany the plan.

(9) All contacts with state or federal agencies requesting cost sharing or water rights for type 2 jobs are to be made by the landowner or operator after the plans and specifications have been approved.

NM501-3(2)

(210-V-NEM, Amend. NM34, March 1992)

Subpart G - Exhibits

NM501.73-80

Exhibit C

U.S. Department of Agriculture  
Soil Conservation Service

NM-ENG-2(Rev.6)(4/92)  
File Code: 40-1-5

**ENGINEERING JOB APPROVAL AUTHORITY**

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Location: \_\_\_\_\_

Date: \_\_\_\_\_

The above named employee is assigned engineering job approval authority up to the limits shown for the practices listed below:

Code No.	Engineering Practice	Approval Authority Class		
		I&E & PR	Design	Const
560	Access Road	_____	_____	_____
326	Clearing and Snagging	_____	_____	_____
348	Dam, Diversion	_____	_____	_____
402	Dam, Floodwater Retarding	_____	_____	_____
349	Dam, Multipurpose	_____	_____	_____
356	Dike	_____	_____	_____
362	Diversion	_____	_____	_____
362A	Diversion, Minor Structure	_____	_____	_____
362B	Diversion, Net Wire	_____	_____	_____
462	Drainage Land Grading	_____	_____	_____
400	Floodwater Diversion	_____	_____	_____
404	Floodway	_____	_____	_____
410	Grade Stabilization Structure	_____	_____	_____
410A	Grade Stabilization Structure - Rock and Brush	_____	_____	_____
410B	Grade Stabilization Structure - Log Drop	_____	_____	_____
412	Grassed Waterway or Outlet	_____	_____	_____
561	Heavy Use Area Protection	_____	_____	_____
320	Irrigation Canal or Lateral	_____	_____	_____
388	Irrigation Field Ditch	_____	_____	_____
464	Irrigation Land Leveling	_____	_____	_____
552	Irrigation Pit or Regulating Reservoir	_____	_____	_____
436	Irrigation Storage Reservoir	_____	_____	_____
441	Irrigation System Drip	_____	_____	_____
442	Irrigation System Sprinkler	_____	_____	_____
443	Irrigation System Surface and Subsurface	_____	_____	_____
447	Irrigation System - Tailwater	_____	_____	_____
428	Irrigation Water Conveyance Ditch and Canal Lining	_____	_____	_____
430	Irrigation Pipeline	_____	_____	_____
449	Irrigation Water Management	_____	_____	_____
460	Land Clearing	_____	_____	_____
466	Land Smoothing	_____	_____	_____
468	Lined Waterway or Outlet	_____	_____	_____
500	Obstruction Removal	_____	_____	_____
582	Open Channel	_____	_____	_____

NM501-33(3)

(210-V-NEM, Amend. NM34, March 1992)

Part 501 - Authorizations

NM501.73-80

<u>Code No.</u>	<u>Engineering Practice</u>	<u>I&amp;E &amp; PR</u>	<u>Approval Authority Class</u>	
			<u>Design</u>	<u>Const</u>
516	Pipeline	_____	_____	_____
378	Pond	_____	_____	_____
521	Pond Sealing	_____	_____	_____
532	Pumped Well Drain	_____	_____	_____
533	Pumping Plant for Water Control	_____	_____	_____
566	Recreation Land - Grading and Shaping	_____	_____	_____
568	Recreation Trail & Walkway	_____	_____	_____
554	Regulating Water in Drainage Systems	_____	_____	_____
557	Row Arrangement	_____	_____	_____
570	Runoff Management System	_____	_____	_____
350	Sediment Basin	_____	_____	_____
572	Spoilbank Spreading	_____	_____	_____
574	Spring Development	_____	_____	_____
580	Streambank Protection	_____	_____	_____
584	Stream Channel Stabilization	_____	_____	_____
587	Structure for Water Control	_____	_____	_____
606	Subsurface Drain	_____	_____	_____
607	Subsurface Drain - Field Ditch	_____	_____	_____
608	Subsurface Drain - Main or Lateral Terrace	_____	_____	_____
600	Terrace	_____	_____	_____
614	Trough or Tank	_____	_____	_____
614F	Fiberglass Trough and Tanks	_____	_____	_____
620	Underground Outlet	_____	_____	_____
312	Waste Management System	_____	_____	_____
425	Waste Storage Pond	_____	_____	_____
313	Waste Storage Structure	_____	_____	_____
359	Waste Treatment Lagoon	_____	_____	_____
636	Water-Harvesting Catchment	_____	_____	_____
640	Waterspreading	_____	_____	_____
642	Well	_____	_____	_____

See part 501 of NEM for guidance in assigning authority. Fill in all blanks under Class. Insert a dash where no authority is assigned. Prepare four copies: original to employee, 1 copy to district conservationist, 1 copy to area conservationist, and 1 copy to state conservation engineer.

Recommended by: \_\_\_\_\_  
 (Title) (Date)

Concurred by: \_\_\_\_\_  
 (Title) (Date)

Issued by: \_\_\_\_\_  
 (Title) (Date)