



Construction Contracts 101



Contracts 101

Design

- Design – Bid – Build process
- Follow State Procurement and Federal Regulations
- Standard Specifications
- Design Standards, NTC's, Special Provisions
- Multiple design reviews by functional groups, maintenance, designers, construction personnel



Contracts 101

Bidding

- Advertisement – puts interested bidders on notice
- Web-based bidding system to get bid package, plan set, specifications and notices
- Contractor responsible for reviewing bid package and make site visits prior to submitting a bid
- Bid price includes anticipated profit, O/H, indirect costs

Prequalification



Contracts 101

Construction

- Specifications, plans, notices
- Technical Training Certification Program (TTCP)
- Non-conformances
- Liquidated damages
- Prequalification
 - Claims
 - Disincentives
 - LD's
 - Non-conformances
 - Safety
 - Prompt Pay



The New Mexico Department of Transportation (NMDOT) has been requested to discuss briefly highway contracts, and how NMDOT is able to require a contractor provide guarantees on the date of final delivery, workmanship and materials.

Design

As a state agency and recipient of state capital funds as well as federal aid funds for public works construction projects, NMDOT must comply with applicable state procurement rules and federal regulations which govern use of the specified funds.

Design criteria may address roadway width, anticipated travel speeds and use, pavement requirements, safety features, drainage concerns and other project specific requirements. The NMDOT engineers and consulting engineers use a variety of sources for the specific standards, which have been authorized for use by the U.S. Federal Highway Administration. The use of such standards is considered to be common industry use and engineering standard practice for highway and bridge construction.

For each proposed project, the design appropriate to the nature of the work incorporates standard specifications for road and bridge design, as well as site specific specifications to ensure the design meets the road or bridge criteria needed for the project. The Standard Specifications are updated every 4-5 years. This helps the NMDOT to adjust to new construction methods and helps to ensure the quality of construction workmanship and materials are incorporated into a particular project.

The plans and accompanying contract book are reviewed by designers, traffic design personnel, construction and maintenance personnel, etc to help reduce and address constructability issues (a quality control measure).

Bidding

NMDOT procures highway and bridge construction, public works projects, primarily through what is described as a design-bid-build procurement method. In the Design-Bid-Build procurement system, a particular project design will be advertised by the NMDOT for bidding. The advertisement places interested bidders on notice of the project, the source of funding for the project and other general information guiding the submission of bids.

In addition to the engineering plan set and specifications compiled for a particular project, through the use of Notices to Contractors or Special Provisions, NMDOT can also establish other contractually mandatory requirements for a project, such as a mandatory completion date, or restrictions on times that a project may impact the traveling public.

Companies interested in bidding on a particular project are directed to the web-based bidding system and given instruction where the bid package, plan set, specifications and notices may be located for each particular project.

Before submitting a bid, a bidder/contractor is expected to have fully reviewed the plan sets, specifications and any other notices specifically identified as relevant for a particular job. The bidder's obligation also extends to making site visits prior to submitting a bid.

When a bidder submits a bid on a project, the prices for each unit bid item are required to reflect the total cost for performing the proposed work. The prices should reflect the cost of the work under the circumstances unique to the project, plus a proportionate share of the bidder's anticipated profit, overhead costs and other indirect costs.

The bids are based on an estimated quantity of work provided in the bid documents and on the engineering design for the project, with consideration of any other special circumstances for the project.

At bid opening, all bids received for a particular "call" are listed by the total bid amount for each bid. Depending on the source of funding and other applicable notices, the value for the bids for consideration of award may be altered, such as to provide for a Resident Business Preference required for state funded procurements.

The NMDOT awards the construction contract to the lowest responsible and responsive bid, after any applicable adjustment, due to prequalification scores.

Construction

The awarded contractor is expected to perform the contract to the specifications set out in the plan set, specifications and notices upon which the bids were based. During the project the estimated quantities for bid items will be adjusted up or down based on actual site conditions, and in accordance with the construction contract.

NMDOT enforces contractual compliance with contractual terms, including quality of workmanship and materials, as well as other administrative requirements, through its project oversight, quality assurance inspections, and contract management obligations, all of which are found in the contract specifications and notices.

The NMDOT uses inspectors that have gone through the Technical Training Certification Program (TTCP). The inspectors and contractors learn to test and inspect material for compliance in soils, aggregate, asphalt and concrete. The program also offers other training required by FHWA that we have a program to ensure consistent testing and quality of material. A contractor that fails to produce work in accordance with the contractual requirements, such as quality minimums, may be required to remedy the non-conformance at its own expense, may face a reduction in pay from the unit prices for an item, or in extreme circumstances may face breach of contract and/or suspension and debarment if the failure is so merit. If a project is not completed within the contract time, they may be assessed liquidated damages for the time it takes between contract time and substantial completion.

All contractors are aware of the potential results for a failure to perform to the contract's specifications because all of the terms are in the contract documents, including the notices and applicable specifications.

NMDOT has a Prequalification Program (prequal) that measures several items on a project that help determine if the materials and the workmanship were placed and performed to high quality standards. The program is meant to reward contractors that perform the work according to the contract. The program measures:

- a) Claims – The unsuccessful demand for additional compensation or time beyond what the Cabinet Secretary has allowed
- b) Disincentives - Paving, smoothness and quality of material
- c) Liquidated Damages - not completing on time
- d) Non-Conformances – the measure of the Contractor's compliance with the terms and conditions of the contract
- e) Safety
- f) Contractor's prompt payment of first tier subcontractors

The contractor is assigned a prequal score for each project completed. The three-year average is calculated each January and the performance factor is applied to bids over five million dollars, starting with the March letting. The factor does not decrease the bid, but gives a modified bid amount that may alter the order of the bidders.

New Mexico Department of Transportation

Project Lettings - 2018

Letting	Project	# bids	District	County	Route	Termini (MP)	Type of Work
3/9/18	E100160	3	1	Dona Ana	NM 273	0.8-3.1 (Race-track Drive to Ross Road)	Roadway Reconstruction ADA, Drainage, path
	A301344	6	3	Various	I-25, NM 528	I-25 214-214.5 (Rio Grande) NM 528 3.5-3.8 (Rio Grande)	Bridge Deck Overlays
	9900742	3	1	Luna	Deming BL	3-4.5 (Exit 85 Deming)	Lighting
	1101530	4	1	Dona Ana	NM 26	45.3-45.8 (west of Hatch)	Road Rehab - Drainage Improvements
	S100540	4	5	Santa Fe	I-25/NM 466	Various locations	Bridge preservation
	5101281	1	5	Santa Fe	US 285	277.54-277.45 (San Cristobal Creek)	Bridge Rehabilitation
	2101890	1	2	Eddy	NM 200	1-3.7 (Carlsbad Relief Route)	Bridge preservation
	6100901	3	6	McKinley	I-40	37.6-42.8 (Canyon Road to Coolidge)	Road - Add Capacity/Widening
	2101400	4	2	Curry	US 70	4409.9-4441.2 (Clovis Prince Street Overpass)	Bridge Rehabilitation
	4101500	3	4	Colfax	I-25	426.1-426.2 (NM 445 Maxwell Interchange)	Bridge Rehabilitation
9900730R/9900731R	9900730R	2	4	Quay, San Miguel	US 54, I-25	US 54 389.489-354.993, I-25 309.24-317.579	Guardrail Installation
	9900721R	2	1	Dona Ana	I-10	133-164 (Las Cruces)	Guardrail Installation
	1101740	3	1	Hidalgo	I-10	0-25 (AZ State line to Lordsburg)	Dust Storm Project
5/18/18	4100840	2	4	San Miguel	L00015	0-1.8 (Las Vegas Grand Avenue)	Roadway Major Rehabilitation
	9900744	2	1	Dona Ana	US 70	166-178 (White Sands Intch to Otero Co Line)	Guardrail Updates
	2102180	8	2	Lincoln	NM 48	16.5-17.5 (Capitan)	Bridge Preservation
	M501010	1	5	San Juan	US 64	62.79-65.954	Sidewalk, Curb and Gutter, Turnouts
	S100520	5	5	Santa Fe	I-25	290.4-294.1 (Canoncito to Eldorado)	Road Resurfacing
6/15/18	E100170	3	1	Dona Ana	NM 404	0-0.8 (Community College to NM 460)	Multi Use Path
	4101620	1	4	Mora	NM 434	0-17.2 (intersection of NM 518 north)	Signing/Guardrail
	6101120R	1	6	Sandoval	US 550	51.4-55.9 (South of Cuba)	Safety - Game Fence

New Mexico Department of Transportation

Project Lettings - 2018 con't

	6100833 1101540	3 1	6 1	Cibola Socorro	I-40 NM 169	119.8-120.8 (Arroyo Conchas) 30.6-30.8 (Magdalena)	Bridge Rehabilitation Bridge Preservation
8/24/18	F100112F100113	2	5	San Juan	US 64	54-58	Road - Add Capacity
9/21/18	6101040 1100950 1101520 5101284	4 4 5 1	6 1 1 5	Sandoval Sierra Socorro Torrance	NM 4 NM 181 NM 1 FR-4073	18.2-19.2 (North of Village of Jemez Springs) 3.2-4.2 (Yappa Arroyo Bridge north of T or C) 60.2-60.5 (Socorro Patrol) 0.02-0.13 Bridge over I-40, east of Clines Corners)	Bridge Replacement/Add Capacity Bridge Replacement Drainage/Erosion Control Bridge Rehabilitation
10/19/18	6100902 2100780 A301444 S100580 4101630R	2 3 3 1 2	6 2 3 5 4	McKinley Chaves Bernalillo Santa Fe Union	I-40 US 285 NM 14 NM 599 US64/87	39.8-42.5 (Refinery Interchange) 101.8-106.4 (NM 2 to SE Main Street) 0-4 (Casa Loma Rd to Snowline Road) Intersection with Via Veteranos 399.3-399.6 (East of Dees Moines)	Add Capacity/Widening Pavement Rehabilitation & ADA Pavement pres, ADA, trail, drainage, erosion mitigation Road Interchange/Intersection Bridge Rehabilitation
11/16/18	1101640 6101131 F100310 2104280 2104120 4101510	3 4 4 2 2 2	1 6 5 2 2 4	Luna McKinley San Juan Roosevelt Chaves Guadalupe	I-10 I-40 NM 170 US 60 US 70/US 380 I-40	91.7-116.5 (between Deming and Las Cruces) 44-5.4 (Manuelito Canyon) 2-8 (US 64 for 6 miles) 350.7-352.1 (Cannon AFB turn lane) multiple bridge locations multiple bridge locations	Pavement Preservation Bridge Replacement/Add Capacity Road Reconstruction/Rehabilitation Accel/Decel lanes, Intersection Impr. Bridge Preservation Bridge Rehabilitation
12/21/18	6101270 4101260	3 4	6 4	McKinley Union	US 491 US 87	23.4-30.2 (Tohatchi north) Stateline west	Road Major Rehabilitation (FDR) Pavement Rehabilitation

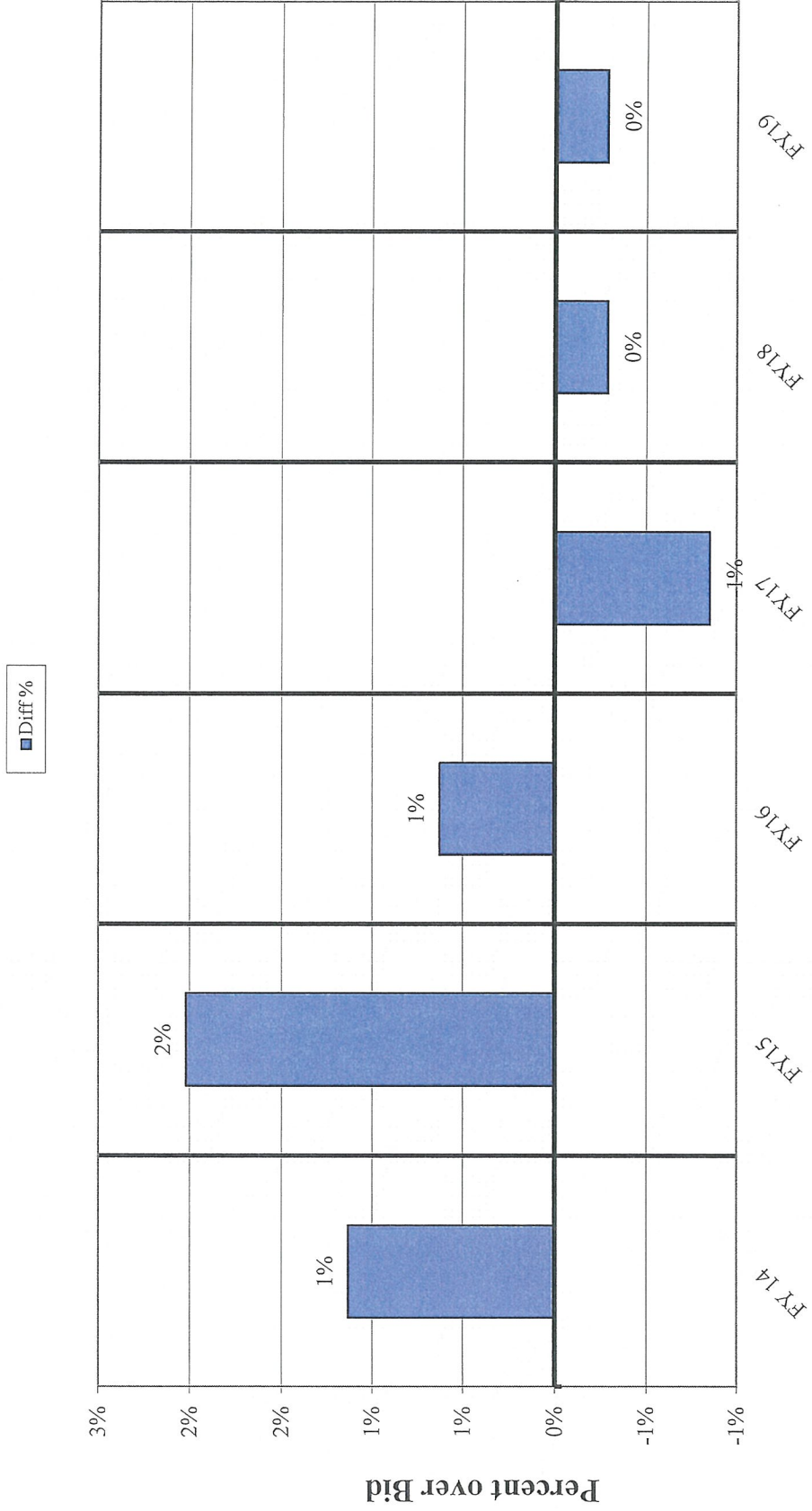
New Mexico Department of Transportation

Project Lettings - 2019

Letting	Project	# bids	District	County	Route	Termini (MP)	Type of Work
2/15/19	2104310	2	2	DeBaca	US 84	0.62-6.74 (Fort Sumner)	Road Rehabilitation
	A301445	5	3	Bernalillo	NM 14	4-6 (Melcor De Canonicity to Frost Road)	Road Reconstruction/Rehabilitation/ADA/trail
	2102170	4	2	Otero	US 70	199-200 (entrance to White Sands)	Safety Improvements
3/15/19	4101660	2	4	Mora	NM 518	36-44.23 (Holman Hill)	Guardrail, Signing, Striping
	4101520	4	4	Mora	NM 434	0.05-0.1 (Mora River Bridge)	Bridge Rehabilitation
	9900745R	3	2	Otero	US 54/ US 70	8.1-64 (Dog Canyon to US 70)/265-302 (Ruizoso Downs to Picacho)	Guardrail
4/19/19	LC00250	5	2	Dona Ana	I-25	0.5-2 (University Interchange)	Bridge Replacement, Ramps, Recon, Multi-Use Path
	2100920M200706	2	2	Otero	US 70/US 54	MP 228.2-229.5/78.8-79.3 (Tularosa)	Pavement Pres, ADA & Sidewalk Improvements
	5101285	3	5	Torrance	FR-4066	MP 189, 204, 197 (Williams Ranch Road)	Bridge Rehabilitation
	6101280R	2	6	Cibola, McKinley, Sandoval		Various Locations	Crushing Project
5/17/19	4100822	2	4	Colfax	I-25	MP 454.25-460.8 (Raton Pass)	Road Recons/Rehab
	LC00300	2	1	Dona Ana	US 70	149.8-151 (Elks Drive to Del Rey Blvd)	Road Resurfacing
6/21/19	4100831	3	4	Quay	US 54	302.53-304 (Tucumcar)	Add Capacity - Widening
6/28/19	A301234	4	3	Sandoval	US 550	0.6-3 (NM 313 to NM 528)	Construction and Widening
7/19/19	4101330	4	4	Colfax	I-25	420.9-427 (North of Springer)	Pavement Rehabilitation
	2100260	2	2	Lincoln	NM 532	6.8-7.05 (Alto to Lincoln/Otero Co Line)	Hazardous Curve Correction and Drainage
	2103100	1	2	Lea	US 82	170.7-171.4 (Lovington 9th Street to Main Avenue)	ADA Improvements
	4101610	2	4	Taos	US 64	271.2-430 (Angel Fire to Clayton)	Striping
	6101430	2	6				
8/16/19	A300423	3	3	Valencia	NM6	34.41-36 (Rio Grande Bridge Carson Dr to Edeal Rd)	Bridge Replacement
	6100904	3	6	McKinley	I-40	37.6-42.7 (Sixmile Canyon Area)	Pavement Reconstruction
	9900807	3	1	Sierra/Socorro	I-25	74-150 (Williamsburg to Socorro)	Guardrail Updates
	9900805	3	1	Socorro	US 60	90-141 (VLA to I-25 Intersection)	Signal/Signs
	6101241	2	6	McKinley	US 491	8-16 (near Ram Springs Rd to near Navajo Service Rd 9)	Striping
	5101261	2	5	San Juan	US 64	21.5-24.5 (Shiprock HS to MP 24.5)	ADA Improvements

Average Percent over Bid Price - Statewide

State Fiscal Year 2014 -2019



State Fiscal Year Quarter

New Mexico Department of Transportation

Construction and Civil Rights Bureau

Average Percent over Bid SFY2014 thru SFY2019

Fiscal Year	District	Total Projects	Adjusted Actual Cost (Less GRT)	Low Bid	Diff \$	Diff %	
SFY2014	D1	17	\$112,774,927.11	\$112,907,220.22	(132,293)	0%	
	D2	9	\$22,104,107.50	\$21,659,202.26	444,905	2%	
	D3	11	\$30,494,890.11	\$29,644,690.85	850,199	3%	
	D4	15	\$85,775,224.55	\$82,420,495.03	3,354,730	4%	
	D5	12	\$26,681,986.65	\$25,719,745.74	962,241	4%	
	D6	10	\$32,751,210.06	\$33,196,647.05	(445,437)	-1%	
	SFY14 Statewide Totals		74	\$310,582,345.98	\$305,548,001.15	5,034,345	1.65%
	D1	17	\$60,400,486.78	\$58,124,897.46	2,275,589	4%	
	D2	24	\$119,062,509.07	\$112,469,825.56	6,592,684	6%	
	D3	14	\$48,510,074.54	\$48,924,754.15	(414,680)	-1%	
	D4	8	\$23,238,259.40	\$22,710,236.40	528,023	2%	
	D5	10	\$44,329,087.19	\$46,236,653.38	(1,907,566)	-4%	
	D6	18	\$25,768,525	\$27,336,488.01	(1,567,963)	-6%	
	SFY15 Statewide Totals		91	\$321,308,942	\$315,802,854.96	5,506,087	1.74%
SFY2015	D1	7	\$13,315,863.20	\$14,101,547.99	(785,685)	-6%	
	D2	7	\$28,063,835.18	\$29,150,361.85	(1,086,527)	-4%	
	D3	17	\$78,336,600.04	\$74,876,237.70	3,460,362	10%	
	D4	11	\$26,503,823.72	\$27,832,079.90	(1,328,256)	-5%	
	D5	7	\$21,865,009.83	\$21,881,470.39	(16,461)	0%	
	D6	12	\$37,578,063.04	\$37,162,892.70	415,170	1%	
	SFY16 Statewide Totals		61	\$205,663,195.01	\$205,004,590.53	658,604	0.32%
	D1	16	\$64,273,468.40	\$67,859,098.43	(3,585,630)	-5%	
	D2	12	\$74,557,042.93	\$75,942,118.72	(1,385,076)	-2%	
	D3	11	\$56,094,002.93	\$57,178,962.36	(1,084,959)	-2%	
	D4	10	\$24,512,443.40	\$25,442,578.62	(930,135)	-4%	
	D5	7	\$24,539,556.12	\$22,717,394.38	1,822,162	8%	
	D6	5	\$18,913,024.36	\$19,200,564.80	(287,540)	-1%	
	SFY17 Statewide Totals		61	\$262,889,538.14	\$268,340,717.31	(5,451,179)	-2.03%
SFY2017	D1	15	\$72,246,928.29	\$74,953,139.76	(2,706,211)	-4%	
	D2	12	\$42,470,986.52	\$43,309,413.18	(838,427)	-2%	
	D3	3	\$7,184,571.84	\$6,782,254.75	402,317	6%	
	D4	5	\$13,482,686.57	\$13,716,181.37	(233,495)	-2%	
	D5	17	\$64,432,379.67	\$62,327,902.47	2,104,477	3%	
	D6	5	\$22,514,271.14	\$22,089,333.45	424,938	2%	
	SFY18 Statewide Totals		57	\$222,331,824.03	\$223,178,224.98	(846,401)	-0.38%
	SFY2018	D1	10	\$50,273,692.43	\$51,216,065.55	(942,373)	-2%
		D2	3	\$9,617,169.68	\$9,999,241.42	(382,072)	-4%
		D3	6	\$32,059,695.13	\$31,198,786.56	860,909	3%
		D4	6	\$25,896,958.31	\$26,479,290.30	(582,332)	-2%
		D5	4	\$22,529,828.60	\$21,820,280.97	709,548	3%
		D6	10	\$137,271,837.48	\$138,289,071.44	(1,017,234)	-1%
		SFY19 Statewide Totals		39	\$277,649,181.63	\$279,002,736.24	(1,353,555)