Building Mulholland Highway: The Road to Mulholland Drive Part II. Construction

By Barry Read

ABSTRACT: A sequel to the author's article in the preceding issue on the origins, purpose, and planners of Los Angeles's scenic Mulholland Drive, this article traces the phenomenal accomplishment of the 24-mile mountain road's construction in one year and under budget. It details the supervision and problem-solving by construction engineer DeWitt L. Reaburn, the bureaucratic streamlining, the use of the latest 1920s road-building technology, and the efficient manpower logistics that made this possible.

Keywords: Mulholland Drive; street construction; scenic highways; 1920s road-building; Los Angeles Bureau of Public Works

INTRODUCTION

On December 14, 1922, one hundred of Los Angeles's leading "men of business and property owners," as well as state, county, and city officials, met at the Hollywood Country Club where a proposal was put forward to build "Mulholland Scenic Road,"¹ a skyline highway

^{1.} Throughout its planning and construction, the roadway that is currently known as Mulholland Drive was generally known as Mulholland Highway or Mulholland High Way, or, less frequently, as the Mulholland Scenic Road, Mulholland Skyline Highway, or Mulholland Drive. In 1940, the City Council officially changed the name from Mulholland Highway to Mulholland Drive. (Council minutes, vol. 286, p. 600–601, August 12, 1940). In this account, the name Mulholland Highway will be retained to reflect the historical usage at the time these events took place, and to avoid

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through the Santa Monica Mountains from Cahuenga Pass westward to Topanga Canyon.² Within days, the Hollywood Foothills Improvement Association (HFIA) was organized and the campaign begun to secure financing for the construction of Mulholland Highway.³

That campaign was successfully concluded on October 9, 1923, when voters approved the creation of Municipal Improvement District No. 22 and authorized the issuance of bonds by the district to pay for the construction of Mulholland Highway.⁴ The Los Angeles City Council authorized the issuance of bonds for the highway⁵ and the sale occurred on November 16, 1923,⁶ making a million dollars available for the construction of Mulholland Highway.

Within a month of the December 14, 1922, meeting, the HFIA had taken a crucial step toward the actual construction of the roadway, hiring DeWitt L. Reaburn to survey the proposed route for the scenic highway.⁷ Born in West Virginia, Reaburn had a wide-ranging career as a surveyor, topographer, and engineer. As a young man, he had charted the course of the Mississippi River and surveyed gold fields in Alaska. In 1902, he was the topographer for the Brooks expedition that made the first scientific survey of Mount McKinley in Alaska. From 1906 to 1912, Reaburn was an assistant engineer to William Mulholland on the construction of the Owens River to Los Angeles Aqueduct. After spending 1913 in Argentina and Chile surveying a transcontinental rail line, Reaburn was appointed superintendent

- Council file 5622 (1923). Los Angeles City Council minutes and files are located at the Los Angeles City Archives, Office of the City Clerk, Piper Technical Center, Los Angeles.
- 6. "Scenic Road Bond Disposed Of," LAT, November 17, 1923.
- "Skyline Drive Is a Reality," LAT, February 9, 1923; "Ground Broken for New Road," LAT, February 11, 1923.

a confusion of names. Today, the roadway that extends through unincorporated areas of Los Angeles County from Topanga Canyon to the Pacific Ocean at Leo Carrillo State Beach is named Mulholland Highway. Although sharing the name Mulholland, the history of the county roadway is distinct from the history of Mulholland Drive. The former was constructed piecemeal by Los Angeles County over several decades, and was not part of the initial Mulholland Highway project described in this article.

^{2. &}quot;Plan Skyline Drive to Sea," Los Angeles Times [hereafter LAT], December 15, 1922; "Scenic Road on the South Hills," Van Nuys News [hereafter VNN] December 15, 1922. References to the LAT cited in this article were researched through the Historic Los Angeles Times Proquest database available through the Los Angeles Public Library and through newspaperarchive.com. References to the Van Nuys News were researched through the newspaperarchive.com database.

^{3.} See Barry Read, ""Building Mulholland Highway: The Road to Mulholland Drive. Part I: The Campaign," *Southern California Quarterly* 99:1 (Spring 2017): 46–70.

^{4. &}quot;Bond Issue on Highway Is Carried," LAT, October 10, 1923.

of Mount Rainier National Park in 1914 and then superintendent at the Grand Canyon National Park from 1919 to1922, supervising the expansion of the roadways and trails in both parks.

In 1922, Reaburn left the National Park Service and returned to Los Angeles, where he went into an engineering partnership with Edward R. Bowen, who had been a design engineer on the Los Angeles Aqueduct. The partnership worked for several clients in Los Angeles, including the real estate development firm of Sunday, Merrick and Ruddick. It was Harry Merrick of this firm who proposed that the HFIA hire Reaburn to survey the mountain-top route for the proposed scenic highway. When his involvement with the Mulholland Highway project began, Reaburn was a seasoned surveyor and engineer, a skilled construction project manager, and an experienced hand at coping with the difficulties of working in rugged environments.⁸

By February 9, 1923, while the HFIA hosted a luncheon at the Beverly Hills Hotel to kick-off the campaign to win approval and funding for the Mulholland Highway project, Reaburn's survey crew was already chopping its way through the brush on the steep slopes of the Santa Monica Mountains.⁹

Building a highway along the crest of the Santa Monica Mountains was a daunting technological and logistical challenge. Between Cahuenga Pass and Topanga Canyon, only one road—Laurel Canyon Road—crossed the mountains, and in 1922 it was hardly more than a dirt track.¹⁰ Homesteaders had hacked their way into the hills, but mostly confined themselves to one of the dozen or so major canyons that erosion had carved into the hillsides. Road construction in the mountains was going to entail large-scale excavation to carve roadbeds into mountainsides, to grade steep slopes into drivable inclines, and to fill canyons with earth. It was going to require moving workers and machines to work sites that, although in the middle of the city, were nonetheless separated from the city by miles of rugged terrain, and those workers and machines would have to be provided

^{8.} See De Witt L. Reaburn, *Engineering Reminiscences*, typed manuscript [1957?], Southern Regional Library Facility, University of California at Los Angeles (hereafter "*Reminiscences*").

^{9. &}quot;Skyline Drive Is a Reality," LAT, February 9, 1923; "Ground Broken for New Road," LAT, February 11, 1923.

Sepulveda Boulevard was not completed through the Santa Monica Mountains until 1930. "Valley-Harbor Link Opens," LAT, September 27, 1930.



"D. L. Reaburn, John Prince [City Planning Commission Engineer],???, H. H. Merrick [president of the HFIA]," with the completed survey of the Mullholland Highway right-of-way, 1923. The Hollywood Foothills Improvement Association (HFIA), a group of landowners, investors, and developers, hired DeWitt L. Reaburn to survey the route for a scenic highway along the crest of the Santa Monica Mountains. Reaburn was subsequently hired by the Los Angeles City Bureau of Public Works (BPW) as the engineer for the project. During the construction, BPW staff took photographs of construction progress. After the completion of Mullholland Highway, the photos, each with a terse caption (in quotes in this article's captions), were presented to Reaburn in a two-volume album now in the UCLA Library Special Collections. Unless otherwise noted, all illustrations are from that source. *Courtesy UCLA Library Special Collections, co94, and Los Angeles City Board of Public Works.*

with food, fuel, and water in an environment where those commodities were not to be found.

The HFIA directed Reaburn to survey a two-hundred-foot-wide right-of-way so that the exact path of the roadway could be laid out between the boundaries of that right-of-way as conditions required. Two hundred feet was a departure from the city's usual practice, which would have called for an eighty-foot or one-hundred-foot right-of-way for a two-lane roadway. The HFIA envisioned that, in addition to facilitating construction, the 200-foot right-of-way would provide ample space for "auxiliary improvements" to the scenic highway, such as walkways, bridle paths, and statuary.¹¹ In a letter

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^{11. &}quot;Organization Is Perfected," LAT, February 25, 1923; Letter, HFIA to Department of Public Service, April 5, 1923. Department of Public Service files are located in the Los Angeles Department of Water and Power archives, John Ferraro Building, Los Angeles.



"Crew clearing R.O.W. [right-of-way] ½ mile East of Camp No. 4"

written in 1926, Reaburn recalled that the right-of-way had been the subject of discussion among the directors and members of the HFIA, and that the 200-foot right-of-way was based, in part, on the expectation that any portion not occupied by the roadway would be main-tained by the city as a park.¹²

The HFIA's goal of constructing a scenic mountain road that provided distant views of the city to the south and the valley to the north necessarily meant that the road-builders would have to address the engineering problems created by the steep slopes that characterized the higher reaches of the Santa Monica Mountains. The route of the highway would also have to avoid the tight curves that could make the driving experience treacherous for motorists, particularly sightseeing motorists navigating the roadway in the automobiles of the 1920s, which were often under-powered and performance-limited.

^{12.} Letter, Reaburn to City Engineer, May 26, 1926, Council file 6317 (1926).

To the extent possible, Reaburn intended Mulholland Highway to have a grade that would not exceed six percent,¹³ and a curve radius of not less than 100 feet at any curve.¹⁴ A six percent grade appears to have been the preferred grade for a mountain road. A steeper grade was considered excessively and dangerously steep, at least for a scenic highway. A curve tighter than 100 feet meant greater centrifugal force on an automobile going through the curve, and more danger that a Model T full of folks enjoying the mountain scenery at a blistering thirty miles per hour might fly off the road and wind up at the bottom of a canyon.

In April 1923, the survey was completed. (See map of the highway after its completion on page 224.) The surveyed route started 750 feet from the crest of Cahuenga Pass and continued south to overlook Hollywood and the Hollywood Bowl. The route then crossed the ridge, where motorists could look down on the eastern end of the San Fernando Valley. After passing the heads of Nichols Canyon and Laurel Canyon, the route descended to a saddle ridge above Coldwater Canyon and Franklin Canyon, and ran on to the Whitley Saddle at Benedict Canyon.¹⁵ A four-mile climb brought the road to an altitude of 1,200 feet along the ridge above Stone Canyon. After Stone Canyon, the route crossed the crest of the Sepulveda Pass,¹⁶ then ascended past the head of Mandeville Canyon to the "Knife Edge Ridge,"¹⁷ where it

^{13.} The grade of a highway is a measure of the steepness of the road. A six percent grade means that the slope of a road climbs six feet vertically over a 100-foot horizontal distance.

^{14.} The radius of a highway curve is a measure of how tight or sharp the curve in the road is. A curve that has a 100-foot radius is tighter than a curve that has a radius of 200 feet.

^{15.} The Whitley Saddle was located between Coldwater Canyon and Sherman Oaks within the subdivision known as Whitley Park. Whitley Park was developed by Ross Whitley, and named for his father, H. J. Whitley, the developer of Whitley Heights in Hollywood and a major investor in San Fernando Valley real estate.

^{16.} Mulholland Highway originally crossed Sepulveda Pass on a narrow ridge at the crest of the Pass. When Sepulveda Boulevard was built through the Pass in 1930, the road builders tunneled through the ridge so that the boulevard passed beneath Mulholland Highway. In the early 1960s, when the San Diego Freeway was constructed through the pass, this crest was lowered 350 feet and heavily excavated to smooth the path of the freeway through the Mountains. A segment of Mulholland Drive was relocated to the south of its original position and a high bridge built to cross the Freeway. "12-Mile Link of Freeway Tough Job," LAT, February 26, 1961; "Move Over, Mohammed, Here Comes a Mountain," LAT, July 1, 1957.

^{17.} The "Knife Edge Ridge" appears to refer to the ridge located above Mandeville Canyon, west of San Vicente Mountain. "Skyline Drive Work to Start," VNN, April 10, 1923. In a report to the HFIA, Reaburn described the Knife-edge as "a rocky peak which comes to an edge that looks from a distance like a razor blade. This edge extends for a distance of 100 feet and rises to an elevation of 1,500 feet above the normal height of the rest of the ridge.... The Knife-edge ridge will be shaved

reached a maximum elevation of 1,905 feet at San Vicente Peak, south of the Encino Reservoir. From this high point, the route passed Rustic Canyon. After another half mile, the survey proposed that a forty-foot tunnel be built through the ridge to connect to the saddle above the east fork of Topanga Canyon.¹⁸ The road would then follow the ridge, alternating between the north and south sides and dropping to an altitude of 1,000 feet before intersecting Topanga Canyon Road.¹⁹

Organization

With the creation of Municipal Improvement District No. 22 accomplished and the bond funds available, primary responsibility for overseeing the construction of Mulholland Highway shifted from the HFIA to the Los Angeles City Board of Public Works.²⁰ The HFIA continued to advocate for Mulholland Highway, however, sending the board resolutions and suggestions,²¹ and keeping the project in the public eye.²²

When the Board of Public Works assumed responsibility for the project in December 1923, it made three initial decisions that shaped the administration of the Mulholland Highway project and fostered its success. These decisions were: adoption of "force account" in lieu of reliance on outside contractors, creation of the Mulholland Highway

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off as cleanly as if it were amputated by a surgeon. When the road is finished, this peak will have disappeared and in its place will be a flat, smooth surface over 100 feet wide where travelers will pass in comfort." "Road Survey Nearing End," *LAT*, February 18, 1923.

^{18. &}quot;Skyline Drive Work to Start," VNN, April 10, 1923. The tunnel was not included in the constructed roadway.

^{19. &}quot;Skyline Drive Survey Ended," LAT, April 8, 1923; "Scenic Highway for Los Angeles Assured," LAT, April 13, 1924.

^{20.} In 1923, the members of the board were Charles H. Treat, president; E. J. Delorey; and Hugh J. McGuire. Treat was replaced in January, 1924, by Arthur Eldridge. Treat's background was in the oil industry and the city auditor's office. Delorey was a "former blacksmith and active politician." McGuire was a former streetcar conductor and driver who rose to be the city's street superintendent. Eldridge was the former director of the city's Efficiency Commission. "Hugh McGuire Named Head of Public Works," LAT, January 23,1924; "C.H. Treat for McAleer's Job" LAT, December 30,1919; "One Hundred and Seventeen Municipal Primary Racers," LAT, April 22, 1917; "Pioneer Enjoys Natal Day," LAT, August 19, 1928.

^{21.} Petition, HFIA to City Council, October 24, 1923, Council file 5622 (1923); Board of Public Works [hereafter BPW] minutes, December 4, 1923. Board of Public Works minutes are located at the Los Angeles City Archives, Office of the City Clerk, Piper Technical Center, Los Angeles. Letter, HFIA to Board of Public Service Commissioners, January 25, 1924, Department of Public Service files.

^{22. &}quot;First Dirt Moved on Hill Drive," LAT, December 11, 1923; "Banquet to Start Work on Highway," LAT, December 10, 1923; "Scenic Highway Viewed," LAT, March 23, 1924; "New Scenic Highway to Take First Rank," LAT, October 10, 1924.

Department, and exemption of the project from city civil service regulations.

Twenty years earlier, similar issues had arisen during the organization of the Los Angeles Aqueduct project, and the board's decisions in the Mulholland Highway project reflected that prior experience. In "Mulholland Highway and the Engineering Culture of Los Angeles in the 1920s,"²³ historian Matthew Roth asserts that the engineers who were involved in the Mulholland Highway project "sought to reproduce the aqueduct experience"²⁴ and "viewed the project as an opportunity to install a construction regime that could approximate the autonomy of the aqueduct experience."²⁵ Roth's observation is correct insofar as the organization of the Mulholland Highway project reflected lessons learned in the building of the aqueduct. Roth is unconvincing, however, in concluding that these measures were instigated solely or even primarily by "the engineers," or that the impetus behind these decisions was that they

enabled the engineers to act on their vision of beauty as transformed landscapes of movement and flow, and because it was an opportunity to transfer crucial aspects of their aqueduct achievement to the arena of their greatest disappointment, broad-scaled road systems.²⁶

The picture drawn by the record is, rather, that the business interests, the political authorities, and the engineers involved in the Mulholland Highway project shared a practical approach to the administration of the project. Their approach was informed by lessons learned during the aqueduct project, as well as on other projects, but rather than being influenced by notions of a "vision of beauty as transformed landscapes of movement and flow," they considered their decisions appropriate to the Mulholland Highway project and likely to result in an efficiently organized work force.

Project Management Measures

1. Force Account. Typically, at that time, streets and other public works in the city were constructed by private construction companies

26. Ibid., 47.

Matthew Roth, "Mulholland Highway and the Engineering Culture of Los Angeles in the 1920s," in Metropolis in the Making: Los Angeles in the 1920s. Tom Sitton and William Deverell, eds. (Berkeley: University of California Press, 2001), 45–76.

^{24.} Ibid, 47. The Roth article does not specifically identify "the engineers" by name or title.

^{25.} Roth, 64.

under contract with the city, rather than by the city itself. The Department of Public Works would prepare detailed plans for the construction work, construction companies would bid on the project, and the city would select the qualified bidder and award a contract for the work. The alternative to the contract system was the force account system, in which the city itself managed the project using city employees and equipment owned or leased by the city, avoiding the bidding process altogether. The primary advantage of the force account system for the Mulholland Highway project was that it would enable the grading and construction crews to adjust the location and shape of the roadway to the terrain they found along the right-of-way, avoiding the need for new surveys or contract revisions.²⁷

The force account system had been used by William Mulholland throughout the construction of the Los Angeles Aqueduct, where it was concluded that

The advantage of doing work by day labor or force account lies particularly in the freedom with which plans can be changed and the line modified to meet conditions as they develop during construction.²⁸

Force account was also used for construction of the Mulholland Dam in the Hollywood Hills²⁹ and portions of the Los Angeles outfall sewer.³⁰

In November 1923, the HFIA wrote to City Engineer Griffin, recommending that the force account system be adopted for the Mulholland Highway project.³¹ A protest against the force account proposal was filed by the Southern California Association of General Contractors, which represented private road construction companies that would be shut out of the million-dollar project.³² Possibly to deflect this protest, the HFIA assured Griffin and the board that the association's members would provide any additional funds required for the project, should the cost exceed the one million dollars approved in the bond election.³³

^{27.} BPW minutes, November 27, 1923.

Complete Report on the Construction of the Los Angeles Aqueduct, (Los Angeles: Department of Public Service, 1916), 259. [hereafter referred to as "1916 Aqueduct Report"]

^{29. &}quot;City Honors Mulholland," LAT, March 18, 1925.

^{30. &}quot;Outfall Sewer Work Near End," LAT, October 19, 1924.

^{31.} BPW minutes, November 27, 1923.

^{32.} BPW minutes, November 28, 1923.

^{33.} BPW minutes, December 4, 1923.

On November 27, 1923, Griffin informed the Board of Public Works of the HFIA's recommendation and advised the board that he had "given this matter considerable thought." While not usually an advocate of force account, for the Mulholland Highway project Griffin recommended that the city "employ personnel, buy the necessary equipment, and proceed at once with the construction under force account."³⁴

Griffin pointed out that to prepare a package for construction companies to bid on would require the city to resurvey the route and prepare cross-section diagrams, specifying exactly where in the 200foot right-of-way the 40-foot-wide roadway would be constructed. The time required to prepare the survey and the drawings, as well as the time required for the city to publish the solicitation for bids from construction companies, for the companies to prepare bids, and for the city to select a contractor would delay the commencement of construction by months. Once construction began, the contract system could result in further delays since any variation in the surveyed route or the specified road contour could require another round of negotiations, plan revisions, and approvals.³⁵

The Board of Public Works adopted the force-account proposal on December 4, 1923, and forwarded a resolution to the city council requesting authority to proceed with the project by force account. In making its case to the city council, the board wrote that a prompt beginning to the construction of Mulholland Highway was essential. They emphasized that the construction of the roadway would facilitate the construction of a water line from the city's system along the crest of the Santa Monica Mountains to bring water to under-served areas, specifically including the Laurel Canyon district whose voters had approved the Municipal Improvement District No. 22 on the assurance that a water line would be constructed that would provide water and enhance fire protection in the hills.³⁶

2. Mulholland Highway Department. Once the decision had been made to use city employees and city-owned equipment to construct the roadway, the board had to determine how to fit the administration of this project into the other public works already being managed

^{34.} BPW minutes, November 27, 1923.

^{35.} Ibid.

^{36.} BPW minutes, December 4, 1923.

by the city engineering department. When the aqueduct project was being organized in 1907, the board had created an advisory committee to direct the work.³⁷ For the Mulholland Highway project, however, the board evolved a broader solution. Citing the "great volume of work now under construction by the Engineering Department of the City," and expressing concern that "the detailed work of constructing said high way [*sic*] would require more time and attention than could be devoted to it by the regular engineering forces," the board recommended to the city council that a "Mulholland Highway Department" be created under the Board of Public Works, separate from the city engineer's office.³⁸ Further, they recommended that the management of the Mulholland Highway Department be handed over to a consulting engineer whose salary would be paid out of the bond funds.³⁹

3. Civil Service. The board also addressed a potential problem in the force account system. Under the city's civil service system, the hundreds of laborers and professionals hired for the Mulholland Highway project would be considered city employees and therefore entitled to civil service benefits, including job security. Building Mulholland Highway, on the other hand, was expected to be a one-year job that would see the work force grow and shrink as the needs of the project changed, and all the workers hired to build the road would be redundant when the project was completed.

On the Los Angeles Aqueduct project, all engineering, clerical, and executive positions, down to foreman, had been subject to civil service requirements (mechanics and laborers were exempt). In the final report on the aqueduct's construction prepared by the Department of Public Service in 1916, the civil service requirements were characterized as a "decided benefit" to the work, in that they eliminated

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^{37. 1916} Aqueduct Report, 251. The advisory committee consisted of the three board members, the chief engineer (William Mulholland), the Assistant Chief Engineer (J. B. Lippincott), and the Aqueduct attorney (W. B. Mathews).

^{38.} BPW minutes, December 4, 1923. The estimated two-year backlog of road construction and improvement projects in the city engineer's office was a matter of long-standing contention between the board and City Engineer John Griffin, and led to Griffin being replaced by H. A. Van Norman in October 1924. "Van Norman Is City Engineer," LAT, October 11, 1924.

^{39.} BPW minutes, December 4, 1923; "To Speed Work," LAT, December 6, 1923. Prior to being named City Engineer, the board had hired Van Norman to a similar position as "special consulting engineer" to supervise the outfall sewer project "because of the fact that City Engineer Griffin is now overworked." "Engineer Is to Be Hired for Sewers," LAT, April 17, 1923.

political influence on hiring practices. The report also noted, however, that the Civil Service Commission had realized that

In a construction campaign, in which the organization was rapidly expanded and reduced, and moved from place to place and from one class of work to another, it was impossible to comply strictly with civil service laws...Consequently, [the Commission] liberally interpreted the provisions of the Civil Service Law.⁴⁰

Civil service exemptions had previously been sought by the board for construction projects, such as the building of the power plants at San Francisquito Canyon,⁴¹ and later for the city engineer's street improvement program.⁴²

For the Mulholland Highway project, the Board of Public Works recommended that all Mulholland Highway Department employees be exempt from the civil service system so that they could be hired and fired virtually at will, as the needs of the project changed.⁴³

Finally, so that work on the highway could begin immediately, the Board of Public Works suggested that \$25,000 from the city's general funds be deposited in the Municipal Improvement District No. 22 account. The money would be reimbursed when the funds from the bond sales became available.⁴⁴

City Council Action

The city council acted on the board's recommendations the next day, approving the use of force account, creating the Mulholland Highway Department, agreeing to the hiring of a consulting engineer at a salary of \$10,000 per year, and loaning \$25,000 to the Municipal Improvement District No. 22 account to finance an early start of construction. The council also approved the board's civil service recommendation, giving the consulting engineer the authority to hire, promote, demote, and fire workers within guidelines set by the board without prior approval from the city council or the Civil Service Commission.⁴⁵ Increases in the number and categories of workers,

^{40. 1916} Aqueduct Report, p. 252.

^{41. &}quot;City Emergency Cited as Reason for Relaxing Rules," LAT, September 20, 1919.

^{42. &}quot;City Engineer Given Men and Fund Increase," LAT, August 25, 1925.

^{43.} BPW minutes, December 4, 1923.

^{44.} Ibid.

^{45.} Council minutes, vol. 141, pp. 141–142, December 7, 1923, Council file 6517 (1923).

however, would require city council approval.⁴⁶ The city council's resolution made prominent mention of the importance of the roadway in bringing water to the large tract of mountain territory within the city limits.⁴⁷ On receiving the council's approval, the board named Reaburn to the position of construction engineer for the Mulholland Highway.⁴⁸

Logistical Matters

On his appointment, Reaburn promptly addressed the logistics of the project, assembling his staff and the personnel required for the project, convincing the board to build construction camps near the work sites, and securing the heavy equipment necessary to cut the roadway through the hills.

1. Personnel. Even before his appointment was made official,⁴⁹ Reaburn had submitted his description of the personnel and equipment needed to begin work on the Mulholland Highway.^{5°} He requested approval for an initial work force of over 400 workers, ranging from two assistant engineers to laborers and "flunkies," and including draftsmen, survey crews, a commissary steward, shovel operators, blacksmiths and helpers, miners, powder men, teamsters, and cooks.⁵¹

As his main lieutenants on the Mulholland project, Reaburn picked men with whom he had worked on previous projects. J. G. Morgan, assistant engineer, had been with Reaburn surveying railroads in Alaska and Argentina, building roads in Mount Rainier National Park, and constructing the Los Angeles Aqueduct. E. C. Knight, chief clerk, had worked as a clerk on the aqueduct project and came to the project from the accounting office of William Mulholland's Water Bureau. Louis Hospe, construction foreman, and F. J. Lalbaugh, head mechanic, had also worked on the aqueduct project. R. S. Haslam, the survey instrument man, had been part of Reaburn's team that surveyed the location of Mulholland Highway in 1923.⁵²

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^{46.} Council file 1750 (March 5, 1924).

^{47.} Council Minutes, vol. 141, pp. 55–56, December 5, 1923, Council file 5622; BPW Minutes, December 6, 1923.

^{48.} Reminiscences, 91. BPW minutes, December 12, 1923.

^{49.} BPW minutes, December 12, 1923.

^{50.} BPW minutes, December 6, 1923.

^{51.} BPW minutes, December 17, 1923, Council file 6517 (1923).

^{52.} BPW minutes, December 12, 1923.

F. E. Allen, assistant engineer, was an exception who had not worked with Reaburn previously. He came from the Arizona State Highway Department, where he had been in charge of that department's construction operations throughout the state.⁵³ Reaburn also recommended that E. R. Beardsley, who had acted as a division superintendent for the D. J. Desmond Company, the mess contractor on the aqueduct project, be appointed as commissary superintendent.⁵⁴

The proposed pay ranged from fifty dollars per month for flunkies and cooks' helpers (meals included) and four dollars a day for laborers, to two hundred dollars per month for shovel operators and eight dollars per day for blacksmiths.⁵⁵ Reaburn also hired instrument men and chainmen who had worked with him earlier in the year surveying the right-of-way through the hills. Initially, all workers were hired on a part-time basis, since the requirements of the project were uncertain.⁵⁶

It was the end of May before Reaburn considered the Mulholland Highway organization to be fully in place. He credited Assistant Engineer Allen and Chief Clerk Knight with efficiently acquiring the necessary construction equipment, building the organization, and "going at top speed to work themselves out of a job."⁵⁷ In consideration of their efforts, he recommended that the pay for Assistant Engineers Morgan and Allen and for Chief Clerk Knight be raised by \$100 per month.⁵⁸ On May 28, the city council approved Reaburn's recommendation that the salaries of the two assistant engineers be raised to \$400 per month, and that the chief clerk be raised to \$300 per month. The council also approved the addition of sixteen miners to the roster at a maximum rate of six dollars per day, and 16 rockmen at a maximum of seven dollars per day.⁵⁹

2. Construction Camps. Reaburn established four construction camps along the route of the highway to feed and house the road workers.⁶⁰ Over a decade earlier, similar camps had provided

^{53.} Ibid.

^{54.} Council minutes, vol. 141, p. 408, December 20, 1923, Council file 6772 (1923).

^{55.} BPW minutes, December 6, 1923.

^{56.} BPW minutes, December 11, 1923; BPW minutes, December 17, 1923.

^{57.} BPW minutes, May 23, 1924.

^{58.} Ibid.

^{59.} BPW minutes, May 28, 1924.

^{60.} Annual Report of the City Engineer, June 30, 1924.

temporary homes for workers on the Los Angeles Aqueduct as the canal and pipeline were pushed across the desert and through the mountains. Although the work sites in the Santa Monica Mountains were not so distant from the residential neighborhoods of Los Angeles, the roadless tangle of canyons and brush leading to the four proposed segments of Mulholland Highway construction would have made workers' daily commutes an arduous trek.



"Camp No. 4—Looking West"

Rather than contract with an outside company for the operation of the camps and their mess facilities, Reaburn persuaded the board that it would be more economical for the Mulholland Highway Department to lease mess halls and operate its own kitchens.⁶¹ By Christmas 1923, Camp No. 1 was taking shape on the grounds of the Hollywood Country Club on the San Fernando Valley side of Coldwater Canyon.⁶² Camp No. 2 (Stone Canyon) and Camp

^{61.} BPW Minutes, December 19, 1923.

^{62.} Council file 6773, (1923); "Mulholland Way Rushed," LAT, January 30, 1924.

No. 3 (Topanga Road, south of the community of Girard) were ready in March 1924.⁶³ In April 1924, Camp No. 4 opened south of Tarzana.⁶⁴ Each camp was led by a construction foreman-in-charge, who reported to Assistant Engineer Allen. A fifth camp was established at Laurel Canyon as a "mule camp," but did not include a kitchen or sleeping quarters since the men at this camp could travel to the job site from their homes in town via Laurel Canyon Road.⁶⁵

Each camp housed sixty men and included ten sleeping tents, a commissary kitchen, dining tent, bath house, vegetable storage building, and store house, as well as an office and warehouse building. Every camp had water tanks, pumps, and pipelines to bring water to the camp as well as to the steam shovels. Meals at the construction camps were provided to road workers at a cost of forty cents per meal for city employees, and fifty cents per meal for transient workers.⁶⁶

Roth comments that "the project area was generally inaccessible to vehicles, and . . . getting crews to and from the work sites would consume time and resources better spent blasting rock and bulldozing soil."⁶⁷ Consistent with his thesis that "the engineers" were seeking to "reproduce their aqueduct experience"⁶⁸ in the Santa Monica Mountains, however, Roth concludes that "the engineers' idea of heroic construction included camps, whether or not they were required by the conditions of the work." In support of this assertion, he points to the location of Camp No. 1 on the grounds of the Hollywood Country Club, describing it as "a genteel and easily accessible location."⁶⁹ This characterization may be true today, but in 1924 there were only two cross-mountain roads—Cahuenga Pass Road and Laurel Canyon Road—linking Los Angeles with the San Fernando Valley,⁷⁰ and the Valley was still primarily agricultural, making Camp No.1 remote

70. See footnote 10.

^{63.} BPW minutes, April 7, 1924.

^{64. &}quot;Scenic Highway for Los Angeles Assured," LAT, April 13, 1924; "Annual Report of the City Engineer," Reaburn to BPW, BPW minutes, April 22, 1924.

^{65.} Annual Report of the City Engineer, June 30, 1924; "City Engineer Reviews Mulholland Highway Work," VNN, August 5, 1924.

^{66.} BPW minutes, January 23, 1924; BPW minutes, January 24, 1924; "Annual Report of the City Engineer," June 30, 1924.

^{67.} Roth, 62.

^{68.} Ibid., 60.

^{69.} Ibid., 62.



"Osgood [steam] shovel 1 mile East of Topanga Canyon Road."

from residential areas and inaccessible, as a practical matter, for workers trying to commute from the city.

3. Equipment. The main work-horse of the Mulholland Highway construction project was the steam shovel. The steam shovels working on the Mulholland Highway project were expected to move 6,000 yards of earth per day, carving the road bed into the hillsides.⁷¹ The bigger Marion Model 61 shovels could move two-and-a-half cubic yards of earth and rock in a single scoop, almost four tons of earth raised and swung into a waiting dump truck. Two scoops by the Model 61 shovels could fill a truck. The shovels were operated by crews of three men—an operator, a fireman and a laborer—working two and three shifts a day, enabling the excavation to move forward at a rate of thirty to one hundred feet during each shift. Steam from the shovels' boilers also powered generators that provided electricity to run lights for night work.⁷² The project employed two Model 61

^{71.} BPW minutes, December 6, 1923.

^{72. &}quot;Scenic Highway for Los Angeles Assured," LAT, April 13, 1924.

shovels, two 1¼-cubic-yard Marion shovels, one ¾-cubic-yard Marion, and two Osgood steam shovels with a 1¼-cubic-yard capacity. Initially, road construction equipment such as steam shovels, as well as the crews to operate them, was rented from private construction companies.⁷³ After the first few weeks, the board entered into a series of contracts with equipment yards for the long-term lease of steam shovels,⁷⁴ as well as trucks,⁷⁵ road graders and caterpillar tractors,⁷⁶ air compressors,⁷⁷ mules, plows, and "fresno" scrapers (large, earthmoving metal scoops pulled by mules).⁷⁸

Where the earth was loose enough, the steam shovels could merely scoop the earth, but for much of the length of the highway the steam shovels were preceded by powder men who broke up the rock with drills and blasting powder. They drilled holes up to sixty feet deep into the hillsides and then packed them with explosives. After the explosion, the steam shovels, trucks, and mule-drawn fresnos moved in to clear the rubble. During the heaviest earth work, up to a railroad-car-load of blasting powder was used during each week of construction.⁷⁹

CONSTRUCTION

Construction on the highway began on December 10, 1923,⁸⁰ while the HFIA was still pursuing the acquisition of the 200-foot right-ofway from Laurel Canyon to Calabasas.⁸¹ Work started rapidly, then slowed when the seasonal rains started in February, but quickened again with the return of drier weather in late March and early April.⁸²

- 76. BPW minutes, February 4, 1924.
- 77. BPW minutes, February 7, 1924.
- 78. BPW minutes, April 14, 1924, April 16, 1924. Mules, with harness, were rented for \$7.45 to \$7.50 per month per mule.
- 79. "Construction of Mulholland Highway on Mountain Crest Is Big Dirt Moving Job," Southwest Builder and Contractor, January 2, 1925, 44.
- 80. "Mulholland Drive Is Now Under Way," VNN, December 11, 1923.
- Council minutes, vol. 143, p. 597, March 18, 1924, Council file 1750 (1924); BPW minutes, March 17, 1924; "Annual Report of the City Engineer" [Reaburn report to BPW], June 30, 1924; Southwest Builder and Contractor, August 1, 1924, 44.
- 82. "Scenic Highway for Los Angeles Assured," LAT, April 13, 1924.

^{73. &}quot;Annual Report of the City Engineer," June 30, 1924, p. 22; Council minutes, vol. 141, pp. 157–58, December 10, 1923, Council file 6542 (1923); BPW minutes, December 7, 1923.

^{74.} BPW minutes, January 2, 1924.

^{75.} BPW minutes, December 28, 1923.



"Blast on top of ridge ½ mile East of Whitley Saddle"

In March 1924, Reaburn invited the board and other dignitaries to inspect the progress made on the roadway near the Franklin Saddle.⁸³ The inspection began with a luncheon in the dining hall at Construction Camp No. 1. After lunch, city and county officials, businessmen, and engineers inspected the first five-mile-long graded stretch of Mulholland Highway, led by Reaburn and Mulholland. Starting at Camp No. 1, the inspection proceeded by car and on horseback. Members of the party included writer Edgar Rice Burroughs, Cornelius Vanderbilt Jr., C. R. Runyon (merchant and the owner of Runyon Canyon), and other developers and investors.⁸⁴

Through the month of March 1924, Reaburn reported expenditures of \$148, 929.97 from the Municipal Utility District bond fund.⁸⁵

^{83. &}quot;Scenic Highway Viewed," LAT, March 23, 1924; "Meet to View Highway Work," LAT, March 30, 1924.

^{84.} BPW minutes, March 20, 1924; BPW minutes, April 8, 1924; "Scenic Highway Viewed," LAT, March 23, 1924; "Meet to View Highway Work," LAT, March 30, 1924.

^{85.} Council minutes, Vol. 144, p. 260, April 7, 1924.

On April 22, 1924, Reaburn submitted a lengthy and detailed report to the board covering the activities of the Mulholland Highway Department between December 1, 1923, and April 15, 1924. He reported that, as of mid-April, fourteen miles of the proposed center line of the roadway had been staked out, and 8.25 miles of the rightof-way had been cleared to a width of 100 feet. Only 2.37 miles of the roadway had been excavated. Reaburn expected that two steam shovels would be added to the project to widen the roadway at Camp No. 4 (Tarzana). All shovels would be operated two 8-hour shifts per day, and Reaburn expected that the excavation would proceed at a pace of 2 ½ to 3 miles per month.⁸⁶ Of the one million dollars approved in the bond election, Reaburn reported, \$234,292.67 had been spent by mid-April in getting the Mulholland project equipped and construction started.⁸⁷

East of Laurel Canyon, rights-of-way still had not been acquired, but property-owners had promised to donate a 100-foot right-of-way.⁸⁸ With only one exception where eminent domain was employed,⁸⁹ all the rights-of-way acquired for the highway had been donated.

By early May, construction was moving eastward from Camp No. 3 at Topanga Canyon Road behind an Osgood steam shovel, and 2.3 miles of roadway still needed to be excavated westward from Topanga Canyon Road to Calabasas. Reaburn had planned to use a 26-mule outfit and a 12-foot blade to excavate westward from Camp No.3, but became concerned that four "rather heavy cuts" along the route for the roadway would require a steam shovel to break the way. Rather than slow down the eastward progress of the Osgood machine, Reaburn arranged to rent—for \$25 per 8-hour shift—a smaller Marion Model 21 steam shovel with 3/4 cubic yard dipper from Victor Girard's Boulevard Land Co.⁹⁰

On May 15, 1924, William Mulholland, members of the Board of Public Works, Assistant City Engineer John Price, City Engineer H. A. Van Norman, and others inspected the portion of Mulholland

^{86.} BPW minutes, April 22, 1924.

^{87.} Ibid.

^{88.} Ibid.

A tract owned by Dr. A. B. Leavelle at the head of Laurel Canyon was purchased through condemnation for \$14,000. BPW minutes, March 7, 1924; "Wide Margin Shown in Road Land Damage," LAT, May 23, 1924.

^{90.} BPW minutes, April 30, 1924. Victor Girard was a member of HFIA.

At Camp No. 3 Mullholland Highway, Highway Department. Standing, Left to Engineer; Marlowe Merrick of Merrick Board of Public Works; D. L. Reaburn, Barnes, Field Engineer, Boulevard Land May 14, 1924...Seated, Left to Right: Carl Bush, Secty Hollywood Chamber Department; Arthur Eldridge, Member Right: John M. Lyle, General Manager Department; John R. Prince, Assistant Construction Engineer, Outfall Sewer Board of Public Works; Harry Thayer, Superintendent, Mulholland Highway of Commerce; L. G. Peterson, Girard News; Edward R. Bowen, Consulting Company; Harry Fowler, Chauffeur, Construction Foreman, Mulholland Construction Engineer, Mulholland Works; E. R. Beardsley, Commissary Mulholland, Chief Engineer, Water City Engineer; H. A. Van Norman, Chauffeur for William Mulholland; H. B. Ferris, Secty, Board of Public G. R. Runyon, Capitalist (retired); & Ruddick; E. J. Delorey, member Board of Public Works; William Boulevard Land Company; J. M. Department; Louis Hospe Jr., Highway Department"



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Highway near Camp 3 (Girard).⁹¹ A Department of Public Works photographer captured the gathering on film, and took a series of photographs documenting the work being done along the highway.⁹²

By mid-May, there were seven steam shovels working two shifts a day on the roadway excavation.⁹³ Excavation was progressing at about a mile per week, and Reaburn was projecting that excavation would be done by November 1, 1924.⁹⁴ Road workers were encountering increasing amounts of rock in the cuts, however, necessitating additional blasting, especially near Camp No. 4 (Tarzana). Reaburn recommended that additional miners and "rockmen" be hired to speed the excavation through the rockier terrain that was being encountered.⁹⁵

As isolated as the Mulholland Highway work-site was, it was not removed from a degree of labor unrest. In May 1924, R. E. Coleman, the district president of the Steam Shovelmen's Union in Los Angeles, petitioned Reaburn to raise the top pay for steam shovel operators from \$225 to \$240 per month and to put the pay for other steam shovel workers—cranemen, firemen, and watchmen—on a monthly, rather than daily pay rates.⁹⁶ In a report to the board, Reaburn noted that the pay rates prevailing on the Mulholland Highway project were higher than the rates being paid for similar positions by William Mulholland's Water Bureau. He added that on the highway project the road workers also had the benefits of the camp facilities "consisting of hot and cold water, shower baths, free quarters, cots and mattresses, together with good meals at the rate of forty cents each." Reaburn made no recommendation on the union's proposal.⁹⁷

Another issue requiring Reaburn's attention arose when the HFIA petitioned the board in May 1924, seeking reimbursement from the Municipal Improvement District No. 22 bond funds for the

97. Ibid.

^{91. &}quot;Engineer Is Working Two Shifts on Highway: Seven Shovels," LAT, May 16, 1924.

^{92.} Copies of these photographs were assembled in a two-volume album presented later to Reaburn. They are now located in the Special Collections of the UCLA Library. Copies of selected photos are reproduced with this article. "Mulholland Drive Builder Offers Photos of Feats," LAT, March 25, 1951.

^{93.} BPW minutes, May 19, 1924.

^{94.} BPW minutes, May 23, 1924; "Street Program Forging Ahead," VNN, May 27, 1924.

^{95.} Ibid.

^{96.} BPW minutes, May 9, 1924.



"Looking West at a point ½ mile E. of Whitley Saddle"

\$17,596.43 that the association had spent in 1923 preparing the preliminary engineering and survey work for the proposed highway.⁹⁸ The board referred the request to Reaburn for a recommendation. Reaburn confirmed that the bond ordinance provided for funding for locating and surveying the road. He recommended that the board authorize the payment of the bill from the HFIA. Reaburn did not mention, and probably did not need to mention, that he had supervised the work in question for the association.⁹⁹

The board referred the question to the city attorney for review.¹⁰⁰ The city attorney recommended that, if the board found the expenditures reasonable and the costs proper, the board request approval from the city council to reimburse the association.¹⁰¹ When Reaburn certified that the information received from the association was

^{98.} BPW minutes, May 7, 1924.

^{99.} BPW minutes, May 13, 1924.

^{100.} Ibid.

Memorandum, City Attorney to BPW, June 5, 1924, Council File 5622 (1923); BPW minutes, June 9, 1924.

necessary to the project, the board approved the payment of \$17,596.43 to the HFIA,¹⁰² and the council ratified the decision and approved the payment to reimburse the association in July.¹⁰³

In early June 1924, Reaburn reported to the board that between January 1 and June 1, the Mulholland Highway Department had excavated 7.56 miles of roadway, with almost four miles excavated in May alone.¹⁰⁴ By mid-June, another two miles were excavated, for a total of 9.41 miles,¹⁰⁵ and by July 1 the total was 11.5 miles.¹⁰⁶ His report on the expenditure of bond funds for the month of May stated that \$348,497.75 of the million-dollar fund had been spent between the start of construction in mid-December and the end of May.¹⁰⁷

In June, the board responded to the Steam Shovelmen's Union's petition, recommending to the city council that the salary of steam shovel operators be fixed at \$240 per month, for cranemen at \$7.50 per day, for firemen at \$6.25 per day, and for watchmen at \$6.25 per day.¹⁰⁸ Subsequently, after conferring with Reaburn, the board changed its recommendation to the council and established a pay rate for steam shovel operators of \$9.25 per day, rather than \$240 per month.¹⁰⁹ The city council approved the board's recommendation, as well as the addition of four steam shovel operators, four steam shovel firemen, and five shift bosses to the Mulholland Highway Department roster, with the objective of providing enough additional personnel to operate the steam shovels three shifts per day.¹¹⁰

In July, Reaburn brought to the board's attention that in December 1923 he had requested that employees using their own vehicles be reimbursed at a rate of ten cents per mile, an increase over the usual reimbursement rate of six cents per mile paid by the city to other employees. Reaburn had argued that the rough roads and hilly terrain encountered along the Mulholland Highway route warranted the extra

- 105. BPW minutes, June 17, 1924.
- 106. BPW minutes, July 1, 1924.
- 107. BPW minutes, June 9, 1924.
- 108. BPW minutes, June 2, 1924.
- 109. BPW minutes, June 5, 1924.
- 110. BPW minutes, June 19, 1924.

^{102.} Letter, Reaburn to Council, July 18, 1924, Council file 5622 (1923); BPW minutes, July 31, 1924.

^{103.} Council resolution, June 9, 1924, Council file 5622 (1923); Council minutes, vol. 147, p. 252, July 17, 1924; Council minutes, vol. 147, pp. 356–57, July 22, 1924; BPW minutes, July 23, 1924.

^{104.} BPW minutes, June 2, 1924.

amount. The city auditor, however, had refused to pay the additional amounts, citing the established rate. The board sent a resolution to the auditor supporting Reaburn's position.¹¹¹ The auditor responded that his office did not have the authority to approve the purchase orders, even if there were good reasons for the additional amount. He suggested that the board take up the matter of amending the reimbursement resolution with the city council. The board directed Reaburn to cancel the purchase orders and adopted a resolution asking the council to approve a higher reimbursement rate for future job-related vehicle use.¹¹²

Reaburn also faced an issue with the auditor concerning the payment of overtime to the department's work force. The city council had passed a resolution restricting the payment of overtime to city employees and requiring project funds be set aside to pay anticipated overtime expenses as a precaution against overtime charges causing project budgets to be exceeded. Reaburn pointed out that the speedy completion of Mulholland Highway frequently required workers to work overtime. He also argued that the Mulholland Highway budget was fixed by the bond amount, that the city was providing quarters and meals for the workers, and that the department was paying only straight time for overtime hours (rather than a premium of time-anda-half or double time), resulting in no additional impact on the department's budget. He requested that the board allow him to continue to pay overtime on an as-needed basis, or that the board set aside \$10,000 of the bond funds for an overtime account.¹¹³ The board voted to allow Reaburn to continue paying overtime and informed the city auditor of this change in practice.¹¹⁴

By mid-July, 13.5 miles of the roadway had been excavated, and Reaburn reported that \$428,954.00 of the million-dollar bond fund had been expended.¹¹⁵ Six steam shovels were working on the roadway. One shovel was working eastward from the Franklin Saddle toward Laurel Canyon, completing the segment between Laurel Canyon and the Hollywood Country Club and opening the roadway from Laurel Canyon to Stone Canyon. Coldwater Canyon Road was

^{111.} BPW minutes, June 7, 1924.

^{112.} BPW minutes, July 18, 1924.

^{113.} BPW minutes, July 29, 1924.

^{114.} BPW minutes, July 30, 1924.

^{115.} BPW minutes, July 8, 1924; BPW minutes, July 21, 1924.

being built to intersect Mulholland Highway and then connect with Laurel Canyon through the "famous Barker and Fryman property on the north slope of the hills."¹¹⁶ By the time the steam shovel reached Laurel Canyon, it was expected that the right-of-way between Laurel Canyon and Cahuenga Pass would be secured so that the steam shovel could continue eastward.¹¹⁷

With the excavation of the roadway well underway by midsummer 1924, Reaburn turned his attention to the surfacing of the roadway. Two gravel pits had been opened in Franklin Canyon to provide decomposed granite for surfacing the roadway to a depth of six inches. The original cost estimates had specified that a layer of decomposed granite or similar material would be applied to the road as a temporary surface. Reaburn warned the board that the life of these materials would be short under the heavy traffic that was expected to follow the completion of the roadway. He also cautioned that when the road surface began to wear out, both the project and the board would be subject to criticism from motorists. He suggested that the board employ Frank Joyner as an expert consulting engineer with "very wide experience in all classes of gravel road surfacing," and pay Joyner fifty dollars per day for a day or two per week of consultation. Reaburn also said William Mulholland had agreed to review the roadway and make suggestions about surfacing.¹¹⁸

Surfacing of the roadway also required additional trucks. The Mulholland Highway Department had been renting five 3½ ton trucks from H. Franklin Shafer for \$494 per month for eight 26-hour shifts, and \$22 for each additional shift. Reaburn informed the board that additional trucks would be needed to haul surfacing material and suggested that the board contract with Shafer for additional trucks at the same rate rather than advertising for bids to cover the additional equipment. He pointed out that the department's experience with Shafer's service was satisfactory and that Shafer already had a system in place to fuel and maintain his trucks at the Mulholland Highway construction camps. The board passed the request on to the city

^{116.} Donald Barker was a prominent Los Angeles attorney and organizer of the Hollywood Foothills Improvement Association who owned a ranch between Coldwater and Laurel Canyons. Harry Fryman was a Los Angeles hotel-owner who owned property near Laurel Canyon.

^{117. &}quot;Steam Shovels Make Dirt Fly on Scenic Roads," LAT, July 6, 1924.

^{118. &}quot;Scenic Highway for Los Angeles Assured," LAT, April 13, 1924; BPW minutes, July 8, 1924.



"Showing Surfaced Road"

council.¹¹⁹ Subsequent records indicate that the number of trucks in the fleet was doubled to ten by September.¹²⁰

On August 15, Reaburn led members of the city council, Board of Public Works, William Mulholland, special guest ex-Gov. Thomas E. Campbell of Arizona, and other guests on an inspection of the progress on the highway. Five hundred men were at work on the highway, and over 15 miles of the 25-mile roadway had been excavated. Completion was now expected by February 1925,¹²¹ and just over half of the bond funds had been expended.¹²²

As the construction of the highway moved ahead, the HFIA adopted a set of restrictions for new residences and neighborhoods that were to be built along the highway. The restrictions were to remain in force for a period of fifty years and be enforced by a Mulholland High Way Protective Association, including a five-person

^{119.} BPW minutes, July 15, 1924.

^{120.} Council file 6472 (1924); BPW minutes, October 8, 1924.

^{121. &}quot;Ex-Governor Is Guest in Tour of Scenic Highway," LAT, August 16, 1924.

^{122.} BPW minutes, August 7, 1924.

architectural committee. Arnold Kruckman, secretary of the HFIA, noted that the rules were designed so that modest bungalows as well as large estates could be built along Mulholland Highway in compliance with the restrictions.¹²³

The restrictions, which were prepared by HFIA attorney Donald Barker,¹²⁴ applied to property within 500 feet of the center of the highway. Beyond the 500-foot zone, property-owners would only be subject to city and county land-use restrictions. The restrictions were intended to benefit residents by preventing the construction of unsightly buildings and the installation of landscaping that blocked the view. The restrictions were also to benefit motorists along the highway by preserving the scenic character of the drive. Commercial and industrial buildings were prohibited, along with oil derricks and overhead utility lines. Motion picture studios, theaters, billboards, signs, placards, and electric signs were prohibited, as well as hotels "with a possible exception of a high-class hotel under special circumstances." Trees were not to obstruct views from highways or from residences. Buildings were to be at least twenty feet apart. Land ownership was limited to Caucasians.¹²⁵

Fire Protection

Fire in the Santa Monica Mountains had long been recognized as a major obstacle to the settlement and development of the mountain districts.¹²⁶ In 1924, a fire-spotting system was established for the 100-square-mile mountain area surrounding Mulholland Highway, with a fire ranger station established at Mount San Vicente that was connected by telephone to other fire stations. A special brush

^{123. &}quot;Restriction to Benefit Route," LAT, August 17, 1924; "Restrict Highway Area," LAT, September 28, 1924.

^{124. &}quot;Highway to Be Done in Month," LAT, August 31, 1924.

^{125. &}quot;Restriction to Benefit Route," *LAT*, August 17, 1924; "Restrict Highway Area," *LAT*, September 28, 1924. The author has been unable to determine whether the Mulholland High Way Protective Association was ever formed, or whether these restrictions were ever implemented. It is notable that these restrictions were similar in intent (except for the racial exclusion), if not in detail, to the provisions of the Mulholland Scenic Parkway Specific Plan that was adopted by the council almost seven decades later. Mulholland Scenic Parkway Specific Plan, Ordinance 167943 (adopted May 13, 1992).

^{126. &}quot;To Begin Fire Break," *LAT*, January 30, 1921. This story reports on a gathering of property-owners in 1921 to promote the construction of a fifty-foot-wide fire break along the crest of the Santa Monica Mountains from Topanga Canyon to the Cahuenga Pass. The property-owners listed are many of the same individuals who participated in the Hollywood Foothills Improvement Association two years later.

firefighting force was created, with four fire rangers assigned to patrol Mulholland Highway. This mountain firefighting force was unique in American municipal fire departments.¹²⁷

In June 1924, a fire started by Mulholland Highway construction workers burning underbrush in advance of grading crews burned more than a thousand acres near the town of Girard before a force of firemen, highway workmen, and volunteers, aided by tractors and road-making equipment, brought the fire under control.¹²⁸ In July,



"San Vicente fire-lookout station." This lookout was located west of Sepulveda Pass.

Harry Merrick wrote to the city council on behalf of the association, pointing out that the construction of Mulholland Highway was resulting in an accumulation of brush piled along the roadway, creating a fire hazard as the Southern California fire season began. Merrick suggested to the council that prisoners from the city jail be

^{127. &}quot;Fire Protection in Foothills Planned," VNN, August 5, 1924; "Highway to Be Done in Month," LAT, August 31, 1924.

^{128. &}quot;Girard Hills Fire-Swept," LAT, June 13, 1924.

assigned to clear the brush, as well as to cut new fire breaks in the hills.¹²⁹

Despite these measures, fires swept through the mountains and near Mulholland Highway at least three times during the fire season of 1924. On August 3, 1924, a fire scorched 1,200 acres near the Encino Country Club, destroying four homes and sweeping south across Mulholland Highway before being brought under control by highway construction workers who worked alongside city and county fire fighters.¹³⁰ In September, fire broke out in Benedict Canyon and burned 2,000 acres, threatening the Beverly Hills Hotel. Two hundred and seventy-five highway construction workers fought the fire beside firemen from Los Angeles and Beverly Hills, workers from the estates of Douglas Fairbanks and Thomas Ince, and "150 Mexicans drafted by the fire department."131 Another fire flared up along Mulholland Highway and burned toward Franklin Canyon and Coldwater Canyon, threatening the Hollywood Country Club before it was stopped by a force of firemen, construction workers, and volunteers.¹³²

In October, the city council praised the work of the fire department in subduing the Benedict Canyon fire and appropriated \$51,000 for firefighting in the hills, creating the Mulholland Highway Fire Protection Fund.¹³³ In December 1924, Los Angeles Fire Chief Scott announced plans for a "small but extremely efficient fire fighting force" to be permanently stationed along Mulholland Highway, with one fire station at Franklin Canyon and a second at Sepulveda Pass. Special trucks were purchased that were equipped for mountain firefighting, including two 500-gallon water trailers that could be pulled to any fire location. Ten men were assigned to the mountain fire force on a regular basis, and reinforced during the dry season. In addition, toolboxes containing firefighting supplies such as shovels and bags were located along the highway, ready for emergency use.¹³⁴ Chief

^{129.} Council minutes, vol. 147, p. 463, July, 28, 1924; Council file 4908 (1924).

^{130. &}quot;Stubborn Brush Fire Conquered," LAT, August 4, 1924.

^{131. &}quot;Army of Men to Fight Fire," *LAT*, September 30, 1924. Food for the firefighters was provided by the kitchens of the Beverly Hills Hotel. Douglas Fairbanks joined the fire fighters, bringing drinking water to the fire line.

^{132. &}quot;New Forest Fire Rages on Front of Six Miles," LAT, September 29, 1924.

^{133. &}quot;Money Voted for Foothill Fire System," LAT, October 3, 1924.

^{134. &}quot;New Highway to Halt Fire," LAT, December 28, 1924.

Scott also proposed that road construction workers and workmen employed on hillside developments be organized into an emergency firefighting brigade to fight brush fires in the hills above Hollywood.¹³⁵

Side-tracks

The rapid and efficient progress being made by the Mulholland Highway Department in the construction of the highway did not go unnoticed, and was in contrast with the persistent backlog of street and highway projects accumulating in the City Engineering Department. While the Mulholland Highway project was still underway, the board and the city council began to look to Reaburn to tackle other major road-building projects in the city.

The two-lane road through Cahuenga Pass between Hollywood and the San Fernando Valley had become a choking point for traffic. The Ventura Boulevard Chamber of Commerce estimated that congestion in the pass was costing valley businesses thousands of dollars each day. The chamber proposed that a new, larger Cahuenga Pass Road be constructed by the city, and further suggested that the city's usual contracting process be bypassed and the roadway constructed under force account by the Mulholland Highway Department.¹³⁶

At the request of the city council's Public Works Committee,¹³⁷ Reaburn evaluated the chamber's proposal for a new roadway through Cahuenga Pass and reported that the grading of a new road from Highland Avenue over the summit of the pass would cost \$158,239.40. He also reported that Charles Toberman, the Hollywood developer who had contributed land for a right-of-way through the pass, agreed to the proposed route.¹³⁸ In September, the board directed the city engineer to transfer \$200,000 into a new Cahuenga Pass Road Fund. The board authorized Reaburn to draw on the fund for construction expenses, and authorized the "interchange" of employees and equipment between the Mulholland Highway project and the Cahuenga Pass project, with "the time and cost thereof to be properly apportioned."¹³⁹

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^{135. &}quot;Workmen Will Be Made Fire Fighters," LAT, April 5, 1924.

^{136.} BPW minutes, July 30, 1924; "New Plan for Speeding Cahuenga Pass Building," VNN, August 5, 1924.

^{137.} BPW minutes, August 8, 1924.

^{138.} BPW minutes, August 22, 1924.

^{139.} BPW minutes, September 18, 1924.

With the Cahuenga Pass project begun, the board directed Reaburn to evaluate the construction of a cross-mountain roadway intersecting Mulholland Highway at the Franklin Canyon saddle. Reaburn recommended that a road could be built between the Hollywood Country Club property southward to Mulholland Highway, and then along the west side of Franklin Canyon through the Public Service Commission (later the Department of Water and Power) property surrounding the Upper Franklin Canyon Reservoir.¹⁴⁰ The city council approved the project and appropriated \$10,000 for the Franklin Canyon Road, specifically finding that the construction of the Franklin Canyon Road was necessary to provide adequate fire protection to the mountain area.¹⁴¹ Construction on the Franklin Canyon Road—the first new roadway to cross the Santa Monica Mountains in forty years—was completed in November 1924.¹⁴²

In February 1924, when the work on Mulholland Highway was in its early phases, the HFIA had proposed another road project, the completion of Sunset Boulevard—then known as "Beverly Boulevard"—to the sea. Later in 1924, a new organization named the Hollywood Boulevards Improvement Association (HBIA) took up this project and a new bond issue was approved by voters, allocating \$1 million for the construction of Beverly Boulevard between Beverly Hills and the Pacific Ocean.¹⁴³ To speed the project, the HBIA urged that this work also be undertaken by the Mulholland Highway Department.¹⁴⁴ The board appointed Reaburn as the lead engineer for the improvement of Beverly Boulevard, and directed him to prepare an estimate of the number of workers required for the project.¹⁴⁵ Reaburn advised the board that in his estimate the work force required for the Beverly Boulevard project would be the same as for the Mulholland Highway project and recommended that the

^{140.} BPW minutes, September 22, 1924.

^{141.} BPW minutes, September 23, 1924; "Road Cost Reported," LAT, September 23, 1924.

^{142. &}quot;Mountain Road Is Due to Open," VNN, November 21, 1924; "Thousands of Cars Use Franklin Canyon Road," VNN, December 5, 1924.

^{143. &}quot;Boulevard Fund Voted in New Area," LAT, September 24, 1924; "Bond Vote Canvassed," LAT, September 24, 1924; "Reaburn Urged as Boulevard Engineer," LAT, November 28, 1924; "East-West Artery Voted," LAT, November 29, 1924.

^{144.} BPW minutes, October 27, 1924.

^{145.} BPW minutes, November 14, 1924; "East-West Artery Voted," LAT, November 29, 1924.

ordinance authorizing the employment of men for the Mulholland Highway project be duplicated for the Beverly Boulevard project.¹⁴⁶ The city council approved Reaburn's proposal.¹⁴⁷

Reaburn and the Mulholland Highway Department continued to make steady progress on Mulholland Highway, despite these additional responsibilities. According to news reports, the board and the proponents of the Cahuenga, Beverly, and Franklin Canyon projects applauded Reaburn's management of these projects and the progress made on all four roads.¹⁴⁸

On September 1, 1924, Reaburn reported that 19.63 miles of Mulholland Highway had been excavated.¹⁴⁹ Two weeks later, excavation was completed on 21.43 miles of roadway, leaving only 3.5 miles to completion.¹⁵⁰ By the end of September, 22.81 miles of roadway had been excavated, and the bond fund still held \$278,821.64.¹⁵¹ With excavation nearing completion, Reaburn's requests for equipment shifted from air compression drills, blasting powder, and steam shovels for rock removal, to dump trucks and graders to improve the surfacing of the roadway. The ten trucks that were being employed on the road project in September were doubled to twenty trucks in October to rush the roadway to completion by the end of 1924.¹⁵²

Hollywood Bowl Cut

The 1923 survey had shown Mulholland Highway descending into Cahuenga Pass along a track that crossed the Hollywood Bowl property within sight and, more importantly, within hearing of the Bowl's

- 149. BPW minutes, September 4, 1924.
- 150. BPW minutes, September 18, 1924.
- 151. BPW minutes, October 8, 1924.
- 152. Council file 6472 (1924); BPW minutes, October 8, 1924.

^{146.} BPW minutes, November 26, 1924.

^{147.} BPW minutes, December 1, 1924.

^{148.} As will be discussed more thoroughly in Part III of this article (to be published in the Fall 2017 issue of the *Southern California Quarterly*), when Reaburn's tenure as construction engineer for the Mulholland Highway Department was terminated in 1925 "in harmony with the Mayor's economy policy," the board made it clear that Reaburn had "constructed the Mulholland Highway and is now in the course of constructing the Cahuenga Pass Road and Beverly Boulevard in a highly satisfactory manner and ... has exhibited great ability and efficiency in performing the said work with the minimum expense and great rapidity." "Ax Falls on Reaburn," *LAT*, August 22, 1925. Property owners in the assessment districts and business groups also petitioned the board to retain Reaburn, citing his leadership of the Mulholland project. "Urge Reaburn's Reinstatement," *LAT*, August 25, 1925; "The Firing of Reaburn," *LAT*, September 1, 1925.



"'Bowl Cut': Looking East." Notice the "Hollywoodland" sign in the background.

patrons. The Theatre Arts Alliance, which owned and operated the Bowl, offered a more remote portion of the Bowl property as a revised right-of-way.¹⁵³ The new route cut through a ridge above the Bowl, buffering the Bowl from the noise and lights of traffic along the road.¹⁵⁴ The donation of the right-of-way was conditioned on the planting of trees to hide the excavation scar from the Bowl's patrons, and on the construction of a curbed median strip through the cut to separate the lanes of traffic and eliminate the need for drivers to honk their horns as they entered the cut.¹⁵⁵ The Hollywood Bowl Cut required the removal of 42,000 cubic yards of earth.¹⁵⁶

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^{153.} BPW minutes, October 8, 1924; BPW minutes, October 14, 1924.

^{154.} To secure the approval of C. E. Toberman and the management of the Hollywood Bowl, Reaburn had to construct a scale model of the Bowl, the mountain ridge, and the road cut to demonstrate that the highway would not be visible or audible from the amphitheater. "Construction of Mulholland Highway on Mountain Crest Is Big Dirt Moving Job," *Southwest Builder and Contractor*, January 2, 1925, 44.

^{155.} BPW minutes, October 8, 1924; BPW minutes, October 14, 1924.

^{156. &}quot;Construction of Mulholland Highway on Mountain Crest Is Big Dirt Moving Job" Southwest Builder and Contractor, January 2 1925, 44–45.

In October, two steam shovels excavating in opposite directions along Mulholland Highway met at Camp. No. 4 (Tarzana), marking the completion of grading between Laurel Canyon and Topanga Canyon. By late October, the entire roadway was passable between Laurel Canyon and Topanga Canyon and a few cars made the trip, even though the road was rough and parts of it remained unsurfaced.¹⁵⁷

Although weather had not been a significant factor in the construction of Mulholland Highway throughout 1924, in the last weeks of the year rain and inclement weather slowed work on the surfacing of the roadway. Anxious for the surfacing of the road to be completed by Christmas, Reaburn obtained authorization to employ double and triple shifts of workers, and to hire additional dump trucks to complete the work by year's end.¹⁵⁸

In November, Reaburn reported that 23.25 miles of roadway had been excavated and \$226,215.41 remained in the Mulholland Highway bond fund. One mile of roadbed remained to be excavated on the eastern end of the roadway, between Laurel Canyon and Cahuenga Pass.¹⁵⁹

With the excavation and grading of the roadway almost completed, decomposed granite was spread six-inches deep over the roadbed, oiled, and compacted with a roller.¹⁶⁰ Surfacing of the road had begun at Camp No. 4, south of Tarzana, and five miles of roadbed had been surfaced to a width of 30 feet and a depth of six to ten inches. Thirty-five trucks were used to haul rock and gravel from Calabasas to Camp No. 4, and surfacing was proceeding at 1000 feet per day. The start of road surfacing operations in the Franklin Saddle awaited completion of steam shovel work on the Franklin Canyon Road.¹⁶¹ After the roadway settled for a few weeks and the surface was oiled, Reaburn expected that it could carry traffic for several years until the highway could be paved.¹⁶²

^{157. &}quot;New Scenic Highway to Take First Rank," LAT, October 19, 1924.

^{158.} Council minutes, vol. 149, p. 521, October 9, 1924; Council minutes, vol. 151, p. 610, December 15, 1924; Council file 8276 (1924); BPW minutes, December 15, 1924.

^{159.} BPW minutes, November 6, 1924; BPW minutes, November 7, 1924.

 [&]quot;Scenic Highway Grading Job to Finish Tuesday," LAT, October 8, 1924; "Scenic Highway Grade Job Completed Tuesday," VNN, October 7, 1924.

^{161.} BPW minutes, November 6, 1924.

^{162. &}quot;Start Seen on Wilshire Work," LAT, December 1, 1924.

By December, \$171,112.75 remained of the bond funds,¹⁶³ all but 1,500 feet of Mulholland Highway had been graded, and half of the roadway was surfaced.¹⁶⁴

By Christmas, about five hundred feet of roadway remained unfinished at Cahuenga Pass on the eastern end of Mulholland Highway, awaiting the construction of a bridge that would enable traffic to enter Cahuenga Pass Road and link Mulholland Highway to Hollywoodland.¹⁶⁵ Of the \$1,000,000 raised by the sale of the Municipal Improvement District No. 22 bonds fourteen months previously, \$885,000 had been spent on the construction of the highway. Reaburn recommended that the \$115,000 that remained in the Mulholland Highway bond fund as of December 31, 1924, be retained to fund maintenance of the highway.¹⁶⁶

Completion and Celebration

On the morning of December 27, 1924, a caravan of cars and buses left downtown Los Angeles and drove through Cahuenga Pass and along Ventura Boulevard to Calabasas. There, the dignitaries and citizens in the caravan gathered beneath an archway made of flowers and tissue paper at the western portal of Mulholland Highway. Above them, a banner stretched across the road that read "Welcome Mulholland Highway—December 27, 1924—55 Miles [*sic*] of Scenic Splendor—The Gift of Los Angeles to Her 1,250,000 Inhabitants." It was the culmination of the efforts of the Hollywood Foothills Improvement Association, the Board of Public Works, and DeWitt Reaburn and his engineers and laborers, and the beginning of a daylong celebration of the completion of Mulholland Highway.¹⁶⁷

^{163.} Council minutes, vol. 151, p. 326, December 9, 1924; BPW minutes, December 8, 1924.

^{164. &}quot;Societies Will Aid Road Fete," LAT, December 3, 1924.

^{165.} This bridge had not been funded in the 1923 Municipal Improvement District No. 22 bond election, which had only authorized the expenditure of funds within District boundaries that went only to the center of Cahuenga Pass. As a temporary measure (that lasted over a decade), traffic at the eastern end of Mulholland Highway was diverted onto Darien Street and northward through Hollywood Park to Cahuenga Pass Road.

^{166.} Reaburn, Annual Report, 1925, 31–33; Council file 4003 (1925). It was also anticipated that additional funds could be returned to the bond fund through the sale of equipment that had been purchased for the project, although some of the construction equipment and work camp supplies were transferred to other projects. "Construction of Mulholland Highway on Mountain Crest Is Big Dirt Moving Job," Southwest Builder and Contractor, January 2, 1925, 44; BPW minutes, January 8, 1925.

^{167.} In the days prior to the celebration, rumors circulated that opponents of the Los Angeles Aqueduct might attempt to seize the aqueduct headgates in the Owens Valley or take other



Dignitaries and citizens gathered in Calabasas at the western end of the new highway for its dedication. William Mulholland performed the ceremonial ribboncutting. A banner read "Welcome Mulholland Highway. December 27, 1924. 55 Miles of Scenic Splendor. The Gift of Los Angeles to Her 1,250,000 Inhabitants." The highway extended from Topanga Canyon Road in Calabasas on the west to the Cahuenga Pass on the east, approximately 24 miles. The banner's reference to "55 miles" may refer to plans already being discussed to extend Mulholland Highway westward through the Santa Monica Mountains to the ocean near the

Los Angeles-Ventura county line. Courtesy of University of Southern California, on

A year after construction began, and two years after the initial meeting at the Hollywood Country Club, Reaburn and the Mulholland Highway Department had completed construction of the scenic mountain highway from Calabasas to Laurel Canyon. Crews of men had worked day after day on the isolated ridgetops of the Santa Monica Mountains, using axes, saws, and mules to chop and clear brush, creating a 24-mile long trail through the rugged hills. Blasting had been required over almost the entire length of the roadway to

actions during the festivities honoring William Mulholland. "Owens Coup Is Rumored," *LAT*, December 24, 1924. No such incidents were reported.

transform compacted deposits of rock, clay, and decomposed granite into rubble. Steam shovel operators had followed the powder men, tearing 1,500,000 cubic yards of earth from the rocky hillsides and pouring rock and soil into canyons.¹⁶⁸ Dump trucks spread tons of gravel and decomposed granite over the surface of the raw roadway, and road-graders and mule-drawn fresnos levelled the surface, creating a rolling, winding roadway where only months before there had been wilderness.

William Mulholland, City Council and Board of Public Works members, directors of the Hollywood and Los Angeles Chambers of Commerce, and members of the HFIA assembled on the new roadway beneath the banner. Floral chains attached to pine trees on either side of the roadway were joined in the center with a large gold padlock.¹⁶⁹ Mulholland and Chief of Police Lee Heath took positions on either side of the padlock. Heath poured a bottle of water drawn from the Los Angeles Aqueduct over a golden key and Mulholland smashed the bottle over the chain.¹⁷⁰ He inserted the key into the lock, the chain fell apart, and the thousands of people assembled at the portal broke into a deafening cheer.¹⁷¹

Most of the crowd in Calabasas moved from the dedication site to a nearby arena where they enjoyed a rodeo and Wild West show produced by cowboy film star Tom Mix.¹⁷² Meanwhile, Mulholland, Mayor Cryer, and the other dignitaries led the first procession of cars and buses over the highway to Laurel Canyon Road,¹⁷³ and then descended into Hollywood.¹⁷⁴ The million-dollar Mulholland Highway they travelled was not the broad parkway flanked by lawns, parks, bridle paths, and statuary that the HFIA had touted in the lead-up to the bond election.¹⁷⁵ Nor was it obvious that the roadway was "destined to be one of the most striking boulevards in the world,"

 [&]quot;Construction of Mulholland Highway on Mountain Crest is Big Dirt Moving Job," Southwest Builder and Contractor, January 2, 1925, 44–45.

^{169. &}quot;New Drive Is Opened," LAT, December 28, 1924.

^{170. &}quot;50,000 at Dedication of Picturesque Road," Los Angeles Herald Examiner, December 28, 1924.

^{171. &}quot;New Drive Is Opened," LAT, December 28, 1924.

^{172. &}quot;50,000 at Dedication of Picturesque Road," Los Angeles Herald Examiner, December 28, 1924; "New Drive Is Opened," LAT, December 28, 1924.

^{173.} At the time of the dedication, Mulholland Highway ended at Laurel Canyon. The segment of the Highway between Laurel Canyon and Cahuenga Pass was still being completed.

^{174. &}quot;50,000 at Dedication of Picturesque Road," Los Angeles Herald Examiner, December 28, 1924.

^{175. &}quot;Plans Are Filed for Mulholland High Way," LAT, August 26, 1923.



After the ceremonial opening of Mulholland Highway, the crowd was entertained by a rodeo and Wild West show. Then Mulholland, the mayor, and other dignitaries led a procession of cars and buses along the new road as far as Laurel Canyon Road, ending in a Hollywood parade and celebration that lasted into the night. *Courtesy of University of Southern California, on behalf of the USC Libraries Special Collections, C. C. Pierce Collection.*

nor that the mountain district would become "one of the most fashionable residential sections in the continent."¹⁷⁶ It was, instead, the much more modest roadway described in Reaburn's cost estimate for the HFIA¹⁷⁷—a two-lane road surfaced with six inches of decomposed granite and crushed rock, without curbs, drainage structures, a parkway, or other embellishments—but it was an engineering and construction feat completed on time and within budget, and it presaged the coming of development to the Santa Monica Mountains.

In Hollywood, there followed a full day of events marking the completion of Mulholland Highway, including an aquatic show and swimming exhibition at Lake Hollywood¹⁷⁸; a parade down Hollywood Boulevard with bands, floats, marchers from civic organizations

^{176.} Letter, HFIA to Property-owners, April 5, 1923 [Department of Water and Power historical files]. The DWP historical files are located at the John Ferraro Building, Department of Water and Power, 111 N. Hope Street, Los Angeles, CA.

^{177.} BPW minutes, July 8, 1924.

^{178. &}quot;Swim Stars Will Cavort Today," LAT, December 27, 1924; "Venice and H.A.C. Win, LAT, December 28, 1924.

and military units¹⁷⁹; a display of artillery fire at Hollywood and Vine¹⁸⁰; and a variety show in the Hollywood Bowl followed by speeches by Mulholland, Mayor Cryer, and others.¹⁸¹

The building of Mulholland Highway had been a collaborative effort. The businessmen and businesswomen of the HFIA had achieved the first step. Using the legal, political, and financial resources they possessed, they sold the idea of a scenic highway through the Santa Monica Mountains to the officials of the City of Los Angeles, to the people of Los Angeles, and to the land-owning voters of the mountain district. A handful of large property-owners and their colleagues convinced almost 400 small property-owners to approve a tax on their small holdings to finance a scenic highway that would not directly benefit them or their properties, largely by promising that water would follow the roadway. The Board of Public Works accomplished the second step of the project, adopting policies-force account, exemption from civil service requirements, creation of the Mulholland Highway Department-that were intended to place the project on a footing that would enable the work to be completed efficiently and economically.

The third step was taken by Reaburn and his colleagues in the Mulholland Highway Department. Reaburn's experience surveying and building roadways, aqueducts, and railroads up and down the western hemisphere enabled him to organize the men and mules, housing facilities, and equipment required for the job. Then he took the Mulholland Highway Department into the hills, where tons of earth and rock were blasted, scraped, and shoveled to carve a winding two-lane automobile highway through the rugged hills and canyons of the Santa Monica Mountains. Not only did Reaburn succeed in the engineering challenges of building a road through the wilderness, he also adeptly negotiated the logistical, labor, and bureaucratic

^{179.} Groups that were scheduled to participate included the Los Angeles police academy, the Los Angeles Fire Department followed by two fire trucks, the Santa Monica Municipal Band, the American Legion Band, the Golden State Band, the bagpipes and drums of the Crowe Juvenile Scottish band, the Simons Brick Company "band of Mexicans in green and scarlet and gold," the Hollywood DeMolay Band, the Pacific Fruit Express Band, the Los Angeles Gas and Electric Company Band, and the American Legion Band, as well as marching units from various military schools, fraternal organizations, and state societies. "High Way Fete to Be Free," *LAT*, December 26, 1924; "All Ready for Road Festival," *LAT*, December 23, 1924; "New Drive Is Opened," *LAT*, December 28, 1924.

^{180. &}quot;Guns of World War for Fiesta," LAT, December 21, 1924.

^{181. &}quot;New Drive Is Opened," LAT, December 28, 1924.





obstacles that arose during the project, as well as taking on additional responsibilities for the construction of Cahuenga Pass Road, Franklin Canyon Road, and Beverly Boulevard, managing to juggle those potential diversions and keep the Mulholland Highway on-schedule and under-budget.

In remarks given at the Hollywood Bowl on the evening of the dedicatory celebration, Mayor Cryer and others lauded William Mulholland for his contributions to Los Angeles and for his role in the building of Mulholland Highway. Mulholland, in response, stated that he appreciated the honor being given him, but that credit for the construction of Mulholland Highway belonged to Reaburn and the other engineers working for him. Their achievement, he said, was the "talk of engineering circles."¹⁸²

When the speeches were finished, the celebration culminated with a street dance on Hollywood Boulevard that went into the night. While the crowd—reported to be one of the largest in the history of Hollywood—attended the street dance, Mulholland and three hundred invited guests attended a banquet at the Writer's Club on Sunset Boulevard.¹⁸³

Mulholland Highway was open to the public. The *Van Nuys News* reported that "official observers stationed for the purpose" had counted 32,000 cars on Mulholland Highway on the day of the fiesta. On the following day, the traffic jam in Cahuenga Pass and on Mulholland Highway was reported to be even greater, "as if almost everybody in this section of the Southland made an attempt to go over the drive or get within looking distance of it."¹⁸⁴

A week later, E. W. Power of Oxnard made the trip from Cahuenga Pass to Calabasas on Mulholland Highway and reported that "the new drive is unusually scenic," but that "dust and heavy Sunday traffic rather detracted from the trip."¹⁸⁵

Part III of this article will continue the story of Mulholland Highway. Through the year 1925, the vision of a great scenic boulevard—

^{182. &}quot;New Drive Is Opened," *LAT*, December 28, 1924; "Mulholland Drive Formally Opened," *LAT*, December 30, 1924.

^{183. &}quot;New Drive Is Opened," LAT, December 28, 1924.

^{184. &}quot;Mulholland Drive Formally Opened," VNN, December 30, 1924.

^{185. &}quot;Trip by New Road," Oxnard Press-Courier, January 6, 1925.

the rival of the Riviera—faced persistent and almost immediate challenges. The two organizations that had created the highway—the Hollywood Foothills Improvement Association and the Mulholland Highway Department—were dismantled. DeWitt Reaburn was dismissed as the construction engineer for Mulholland Highway, and the disastrous failure of the St. Francis Dam damaged the reputation of William Mulholland. Changes in city politics led to the failure of the city to undertake basic improvements to the highway to shore up its failing slopes and pave its rocky surface—a failure that continued for decades. Property-owners who had donated the two-hundred-foot right-of-way for the highway petitioned to have the city vacate or surrender substantial portions of the right-of-way. These difficulties tarnished the dream of the scenic parkway, but the road through the mountains endured.

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