

WATER AND POWER GENERAL PROPERTY USE GUIDELINES FOR LA RIVER REVITALIZATION PROJECTS AS OF OCTOBER, 2020

LADWP is a long-standing supporter of the LA River – it funded the City’s LA River Revitalization Master Plan (www.lariver.org) and continues to support implementation of river projects. LADWP understands there are many creative ideas regarding use of its properties for river-related projects, and, given that, has put together these guidelines to inform river project proponents about what is required to ensure their projects provide safe and enjoyable public access.

For questions regarding the guidelines, please contact Mr. Guy Lammers at (213) 202-0506 or guy.lammers@ladwp.com, or Sumita Thappa at (213) 202-0507 or sumita.thappa@ladwp.com.

Common Guidelines

1. Any entity proposing to implement a Los Angeles River revitalization project on or requiring use of LADWP property, referenced herein as “Agency”, shall pertain to the Agency’s employees, agents, consultants, contractors, officers, patrons or invitees of the Agency, or by any other of the Agency’s affiliated entities.
2. Proposed Use must serve LADWP purpose or reduce ratepayer obligations. Competitive process and rent may be required if LADWP property is used for commercial purposes, up to and including property outside of the City of Los Angeles.
3. Standard Terms and Conditions of the LADWP Real Estate Group’s license form may apply.
4. Upon submission of the detailed plans, LADWP representatives (including the local facilities manager impacted by the specific project) will review and comment on proposed projects. Project plans must be approved before any work is authorized within the LADWP Right-of-Way (ROW). Plans must a) illustrate LADWP property boundaries within the Agency’s proposed projects; b) include clearances from LADWP facilities, towers, wirelines, and property lines to proposed improvements; c) provide the grading and utility plans, including any other plans illustrating the impacts to the LADWP property; d) contain the Assessor’s Parcel Number (APN), plane coordinates, or use the Public Land Survey System to locate the improvements impacting LADWP’s property; e) may be required to be stamped and signed by a Professional Civil Engineer; and f) LADWP may require a survey and

related legal descriptions of the related property.

5. The Agency shall surrender the Licensed Area in a neat, clean and orderly condition upon expiration of this Agreement. In addition, the Agency shall complete restoration of the Licensed Area, including patrol roads and/or the ground surfaces to its original condition or better prior to the expiration of this License Agreement.
6. LADWP personnel must have access to LADWP property at all times for inspection, maintenance and repair of existing Water and Power facilities. This is especially important after normal working hours, on weekends and holidays.
7. The Agency assumes all responsibility and liability for all of its employees and/or subcontractors working within LADWP property.
8. LADWP shall not be responsible for any loss, damage, operation, removal, Management, or security of any material or equipment brought onto or used during, or following the construction of this project.
9. No improvements or construction activities of any kind whatsoever will be allowed within the LADWP property without the prior written approval of LADWP, including the local facilities manager impacted by the specific project. This includes, but not limited to footings, foundations, public or private substructures, fences, sheds, walls, and planters within LADWP's property, or Right of Way (ROW) boundaries.
10. Walkways or driveways may not be constructed on LADWP property without prior approval of LADWP, and the local facilities manager impacted by the specific project. Design calculations may be required for any pavement within the LADWP ROW.
11. No portion of any structure shall be located on or overhang LADWP property.
12. LADWP is not responsible for the maintenance or replacement of any walkway, pavement, planter, or landscaping within the LADWP property. In addition, any paving or walkways, landscaping, fences, planters, etc. within the LADWP boundaries that are removed for operation or maintenance on LADWP facilities will not be restored.
13. No items may be stored on LADWP property on a temporary or permanent basis without prior approval by LADWP, including the local facilities manager impacted by the specific project.
14. Design drawings and calculations shall be submitted to LADWP for approval. All construction/grading activities shall conform to LADWP approved drawings. Any changes to LADWP approved drawings shall require resubmittal and LADWP approval prior to construction/grading activities. An engineer licensed to practice in the State of California shall

prepare the design.

15. All concentrated surface water which is draining away from the permitted activity shall be directed to an approved storm drain system where accessible, or otherwise restored to sheet flow before being released within or from LADWP property. Positive drainage away from LADWP property shall be maintained to eliminate any possibility of damage from soil erosion, impounded water, or contamination.
16. All cut and fill slopes within LADWP property shall contain adequate berms, benches, and interceptor terraces. Revegetation measures shall also be provided for dust and erosion control protection of LADWP property.
17. The Agency shall obtain and pay for all permits and licenses required for performance of the work and shall comply with all the laws, ordinances, rules, orders, and regulations including, but not limited to, those of all agencies, departments, districts, or commissions of the State, County, or City having jurisdiction there over. Requirements imposed by specific permits may require prior approval of LADWP.
18. All above ground structures on LADWP property shall be painted with a graffiti resistant paint.
19. Vehicles, equipment and hazardous materials shall not be stored on the ROW or LADWP property at any time. All trash, debris, waste, and excess earth shall be removed from the property upon completion of the project.
20. Fueling of vehicles or equipment shall not be allowed on the ROW at any time.
21. The Department will not be responsible for any expenses associated with the removal or maintenance of the proposed improvements or use in order to permit access for maintenance or emergency repairs of LADWP facilities, or for any expenses associated with the relocation of any improvements due to any future repair, replacement, or improvements of LADWP facilities.
22. Failure of the Agency to satisfactorily comply with any LADWP requirements and conditions shall be sufficient grounds for revocation of the permission to utilize LADWP property. If LADWP determines at any time that the Agency's actions are hazardous or detrimental to LADWP facilities the Department shall have the right to immediately order termination of said activities.
23. The Agency must agree to release, hold harmless, defend, and indemnify the City of Los Angeles and the Department and all officers and employees of each from and against any and all claims, loss, demands, expense, damage, or liability whatsoever. The Agency will also agree to all LADWP's environmental indemnities.

24. The Agency must enter into a signed agreement to comply with all the Conditions set forth by LADWP, subject to the appropriate approvals by some or all of the following: System Managers, General Manager, Board of Commissioners, City Council and Mayor's office.
25. LADWP may require that a Department of Water and Power inspector be present during grading/construction operations on its property and a deposit for estimated costs of inspection services may be required prior to the start of construction.
26. LADWP may require a letter of credit or performance bond, with the Department as beneficiary, be provided to insure the timely and competent performance of any grading/construction on its property in accordance with the approved design and construction schedule. Failure of the developer/agency to complete work in conformance with the approved design and construction schedule may be cause for LADWP to complete the work or construct other facilities to restore safe conditions to its property.
27. Facilities construction, parking and materials storage must maintain a 'clear zone' of not less than 50-feet around LADWP facilities.
28. Vehicular crossings of pipelines, conduits or trunk lines shall be designed to withstand an American Association of State Highway and Transportation Officials (AASHTO) vehicular loading H-20-44 or HL-93 without placing additional stresses on the pipelines, conduits or trunk lines. This may require construction of bridges or pipeline encasement depending upon site specific conditions.
29. All paving, driveways, bridges, crossings, and substructures located within LADWP property shall be designed to withstand the AASHTO's vehicular loading H20-44 or HL-93. The design shall also comply with applicable design standards.
30. The location of underground pipelines and conduits shall be marked at all points where they cross the boundaries of LADWP property and at all locations where they change direction within the property. Underground utility crossings shall include surface mounted monument markers to indicate both the presence and alignment of the underground utilities. The markings shall be visible and identifiable metal post markers for underground pipelines. Utility markers flush with surface may be used on pavement.
31. The Agency shall provide a commercial driveway at locations where the replaced access roads terminate at, or cross public roads.
32. The Agency shall provide lockable gates on LADWP property at the requested locations of LADWP's choosing.

33. The Agency shall be responsible for the maintenance of the various project areas and shall keep the areas in a neat and clean condition within LADWP's property. The Agency will assume responsibility for the maintenance of the project improvements, and for all the risks and liabilities associated with the proposed Agency's projects. LADWP will not be liable for any damage to the proposed project during LADWP's operation and maintenance activities.
34. No new trees are allowed within LADWP's ROW, per Federal Energy Regulatory Commission (FERC) and North American Electric Reliability Corporation (NERC) requirements, or above water system pipelines as specified under the Water System guidelines of this document.
35. Fires and burning of materials are not allowed on LADWP property.
36. Agency shall comply with all Los Angeles County Municipal Storm Water Permit and Standard Urban Storm Water Mitigation Plan requirements.
37. Agency shall post a sign on the entrance gate to LADWP property, or in a visible location inside the entrance gate, identifying the contact person's name and telephone number for the prompt moving of (vehicles/trucks/trailers/containers or similar) at times of LADWP maintenance or emergency activities, or any other event that such (vehicles/trucks/trailers/containers or similar) must be moved. In emergency conditions, the LADWP reserves all rights at any time to move or tow (vehicles/trucks/trailers/containers or similar) out of specific areas for any Transmission operation or maintenance purposes.
38. Additional conditions may apply following review of detailed site plans, grading/drainage plans, etc.
39. LADWP reserves the right and sole discretion to modify any of these guidelines.

Water System Guidelines

40. The Agency must contact LADWP Personnel, at least seven (7) working days prior to the start of any work within the Water Services (WS) Right-of-Way (ROW). LADWP will have copies of the WS-approved plans, however, if the Developer's Contractor is using plans different from WS-approved plans, all work within WS ROW will halt until the discrepancies are resolved.
41. The Agency will provide the name and telephone number of the City Inspector to LADWP Personnel prior to the start of any construction activity within the WS-ROW and LADWP property.
42. The Agency will provide the name and telephone number of an on-site representative to LADWP Personnel prior to the start of any construction activity within the WS ROW.

43. The Agency shall immediately contact the DWP Trouble Board at (800) 342-5397 if any water facility is damaged during construction. This number is continuously available.
44. The centerline of LADWP Trunk Line within the existing WS right-of-way must be staked by a survey crew prior to the start of any work within the ROW. These location stakes must be maintained throughout construction.
45. Vibrating compaction equipment shall not be used within 5-foot clearance from the outer edge of trunk line. The Agency shall use non-vibratory equipment such as a roller to achieve the compaction requirements.
46. The Agency shall not store any material or equipment within 5-foot clearance from the outer edge of the LADWP Facility.
47. If any existing WS water facility is exposed during construction, the adjacent excavation must be backfilled with 100-E-100 slurry, in accordance with Section 201 of the Standard Specifications for Public Works Construction (SSPWC). The cement slurry backfill shall extend at least 30-inches above the top of the water facility, but the final 1-foot must be backfilled with compacted fill if the finish grade is in dirt. This is to ensure compaction around existing facilities and to minimize stresses due to compaction equipment loads.
48. The required backfill for the trunk line shall be $\frac{3}{4}$ sack slurry or CLSM.
49. The Agency shall submit copies of survey information locating structures and substructures that are within or cross WS ROWs and their depths. This information shall be transmitted to LADWP Personnel as soon as it is available but prior to the completion of the project.
50. Any new driveway access to WS ROW must have WS approved gates and locking devices. Ramps shall not exceed 10% without minimum paved surface. The ramps must transition to existing access roads, and provide adequate pockets for vehicles using these driveways, with respect to gate locations, to minimize traffic hazards.
51. Any aboveground water facilities must be protected in place and adjusted to the new finish grade of the street or surrounding grade. Costs for this work will be paid for by the Agency.
52. Any slopes for use by WS vehicles shall be a maximum of 10% grade and the finish surface shall be of a material that will not erode and is drivable during periods of precipitation.
53. No water services will be available from any portion of any water facility within the ROW boundaries.
54. Footings constructed adjacent to the ROW boundaries shall be designed so that no additional loads will be transmitted to the water facilities within the ROW.

55. Construction schedule and method shall be submitted to WS for approval not less than 60 calendar days prior to the planned beginning of construction.
56. Communications facilities shall be fenced off separately from WS's property and may be subject to collocation with existing communications facilities on the same site, at WS's discretion.
57. Construction within a watershed protection easement* must not adversely impact drainage or water quality within the affected watershed.
58. A responsible governmental agency must assume maintenance and liability responsibility for any WS property with operational facilities present, which will be open to the general public for recreational purposes. Otherwise, LADWP security must be on site during hours in which the property is open to the public. **The Agency is responsible for costs, including security incurred by LADWP.** Watershed properties in the Owens Valley that do not contain operational facilities are exempt from this requirement.

Power System Guidelines

59. When grading activity affects the Transmission Line access roads, the developer shall replace the affected access roads using the following access road design criteria. Typical Road Sections are illustrated in Attachment 1.
60. The access road drivable width shall be 20 feet minimum, and increased on curves by a distance equal to 400 divided by the radius of curve. Additional 2-feet on either side of the road shall be provided for berms and ditches, as detailed in the attached Typical Road Sections.
61. A permanent, unobstructed 20-foot wide roadway (patrol road), accessible at all times by LADWP maintenance personnel shall be provided and maintained. A wider roadway width may be required on curved segments. The roadway must remain open and unobstructed, excluded from any watering and kept as dry as possible at all times.
62. The access road right-of-way width shall be 20-feet minimum.
63. The minimum centerline radius of curves shall be 50-feet.
64. The vertical alignment grades shall be limited to 10 percent.
65. Roads entirely located on fills or with cross sections showing more than 30-percent fill along the drivable width of the road require paving.
66. Intersections or driveways shall have a minimum sight distance of 300 feet in either direction along the public street.

67. The Agency shall acknowledge the LADWP transmission line rights of way are integral components of the transmission line system, which provides electric power to the City of Los Angeles and other local communities. Their use is under the jurisdiction of the Federal North American Electric Reliability Corporation (NERC). Safety and protection of critical facilities are the primary factors used to evaluate secondary land use proposals. The rights of way serve as platforms for access, construction, maintenance, facility expansion and emergency operations. Therefore, the proposed use may, from time to time, be subject to disruption caused by such operations.
68. All transmission towers located within the confines of the proposed improvements shall be fenced or equipped with anti-climbing hardware to discourage kids/public from climbing. The Agency shall include this work in their scope of work and design. Please provide plans showing details of anti-climbing hardware installation on towers. Note: LADWP can install Anti-Climbing devices at a cost of up to \$3,200 per tower at the sole expense of the Agency as an alternative to fencing.
69. The installation and maintenance of any irrigation system shall be at no expense to LADWP. All waterlines shall be buried at a minimum depth of twenty-four (24) inches where they cross the patrol road.
70. Signs shall be posted prohibiting the use of balloons and kites in the LADWP Transmission Line Right of Way (ROW), as these pose a hazard to the public.
71. LADWP standards do not allow any permanent structures to be located within LADWP's transmission line right of way. Proposed steel shade pavilions and concrete bathrooms are not allowed. Non-climbable, nonpermanent shade structures, including playground and equipment made of non-combustible material with a height limit of 12-ft shall be considered.
72. Playground equipment, including but not limited to picnic tables, chess tables, fitness area, and benches, shall be constructed of nonflammable materials.
73. Remote-controlled gates, or lock boxes containing the device or key for opening the remote-controlled gates, shall be capable of being interlocked with an LADWP padlock to allow access to LADWP property and the ROW. Agency shall contact LADWP's Transmission Construction and Maintenance Business Group at (818) 771-5035, or (818) 771-5014, to coordinate the installation of an LADWP padlock.
74. Proposed fencing shall be constructed of nonconductive and nonflammable materials and must have gates with a minimum width of 20-feet to allow LADWP access for transmission line maintenance and repairs.
75. No excavations are allowed within 50-feet around the base of LADWP tower footings.

76. No objects, decorations, and/or equipment shall be placed on LADWP towers without prior written approval of the LADWP.
77. Conductor Clearances will be subject to the review and approval of the Transmission Engineering Group. The LADWP may need a copy of the conductor survey illustrating the cross sections showing our existing conductors and proposed improvements. See attached LADWP Conductor Survey Instructions (Attachment 2). The Transmission Engineering Group will use the data to calculate and confirm that conductor clearances meet the State of California, Public Utilities Commission, General Order No. 95.
78. California Code of Regulations, Title 8, Section 2700 defines “qualified electrical workers” as “a qualified person who by reason of a minimum of two years of training and experience with high-voltage circuits and equipment and who has demonstrated by performance familiarity with the work to be performed and the hazards involved.” At all times during installation, replacement, and/or maintenance of any improvement authorized under the License Agreement within the LADWP Transmission Line Right of Way, Agency shall have at least one qualified electrical worker on site to observe said work and ensure all CALOSHA required safety protocols are followed.
79. No equipment taller than 14-feet shall be used under the LADWP transmission line right of way. It is the Agency’s responsibility to comply with all applicable standards and safety regulations while working near or under high voltage overhead transmission lines.
80. All ground elevations are to remain unchanged from existing conditions after construction associated with the Agency’s proposed projects is completed. Cut & fill slopes inside the LADWP Transmission Line Right of Way steeper than 2 horizontal to 1 vertical require retaining structures or geotechnical report approval.

Note: Grading activity resulting in a vertical clearance between the ground and the transmission line conductor elevation less than thirty-five (35) feet or as noted in the State of California, PUC, General Order 95 within the LADWP Transmission Line Right of Way is unacceptable. Ground cover for all below ground utilities shall not be less than four (4) feet.
81. All aboveground metal structures including, but not limited to, pipes, drainage devices, fences, and bridge structures located within or adjoining the right of way shall be properly grounded, and shall be insulated from any fencing or other conductive materials located outside of the right of way. For safety of personnel and equipment, all equipment and structures shall be grounded in accordance with State of California Code of Regulations, Title 8, Section 2941; National Electric Code, Article 250; the American National Standards Institute of Electrical and Electronics Engineers Standard 487-latest edition; IEEE Guide for Safety in AC Substation Grounding.

82. The right of way contains high-voltage electrical conductors; therefore, the Agency shall utilize only such equipment, material, and construction techniques that are permitted under applicable safety ordinances and statutes, including the following: State of California Code of Regulations, Title 8, Industrial Relations, Chapter 4, Division of Industrial Safety, Subchapter 5, Electrical Safety Orders, California Public Utilities Commission, General Order No. 95, Rules for Overhead Electric Line Construction.
83. If any excavations are required, utility agencies within the proposed excavation sites shall be notified of impending work. The Agency shall be responsible for coordinating relocation of utilities, if any, within the project boundaries. Before commencing any excavations, Underground Service Alert (a.k.a. DigAlert) shall be notified.
84. Energized transmission lines can produce electrical effects including, but not limited to, induced voltages and currents in persons and objects. Agency hereby acknowledges a duty to conduct activities in such manner that will not expose persons to injury or property to damage from such effects.
85. Agency is hereby notified that grounding wires may be buried in the right of way; therefore, the Agency shall notify the LADWP's Transmission Construction and Maintenance Business Group at (818) 771-5014, at least 48- hours prior to the start of any construction activities in the right of way.
86. An area within 100 feet on all sides of each tower shall remain open and unobstructed for maintenance and emergencies, including periodic washing of insulators by high-pressure water spray.
87. Detailed plans for any grading, paving, and construction work within the ROW shall be submitted for approval to the Real Estate Business Group, Department of Water and Power, 221 North Figueroa Street., Suite 1600, Los Angeles, California 90012, no later than 45 days prior to the start of any grading, paving, or construction work. Notwithstanding any other notices given by Agency required herein, Agency shall notify the LADWP's Transmission Construction and Maintenance Business Group at (818) 771-5014, no earlier than 14 days and no later than two (2) days prior to the start of any grading, paving, or construction work.
88. "As Constructed or As-Built" drawings showing all plans and profiles of the Agency's project shall be furnished to the Real Estate Business Group, Los Angeles Department of Water and Power, 221 North Figueroa Street, Suite 1600, Los Angeles, California 90012, within five (5) days after completion of Agency's project.
89. In the event that construction within the ROW is determined upon inspection by the LADWP to be unsafe or hazardous to the LADWP facilities, the LADWP may assign a line patrol mechanic for the duration of the construction, at the Agency's expense.

90. Drainage from the paved portions of the right of way shall not enter the unpaved area under the towers. Drainage diversions such as curbs shall be used on three sides of each tower. The open side of each tower shall be the lowest elevation side to allow storm water which falls under the tower to drain. The area under the towers shall be manually graded to sheet flow out from under the towers.
91. Ponding or flooding conditions within the right of way shall not be allowed, especially around the transmission towers. All drainage shall flow off of the right of way.
92. Fills, including backfills, shall be in horizontal, uniform layers not to exceed six inches in thickness before compaction, then compacted to 90 percent relative compaction in accordance with the American Society for Testing and Materials D1557.
93. Agency shall provide the LADWP with one copy each of the compaction report and a Certificate of Compacted Fill, for clean fill compaction within the LADWP's ROW in accordance with the American Society for Testing and Materials D1557, approved by a geotechnical engineer licensed in the State of California.
94. The top two inches to six inches of the concrete footings of the towers shall remain exposed and not covered over by any fill from grading operations.
95. Signs shall not exceed four feet wide by eight feet long, shall not exceed a height of 12 feet, shall be constructed of noncombustible materials, and shall be installed manually at, and parallel with, the right of way boundary.
96. Agency's cathodic protection system, if any, shall have a design that does not cause corrosion to LADWP facilities. A detailed design of the Agency's cathodic protection system shall be submitted for approval to the Real Estate Business Group, Department of Water and Power, 221 North Figueroa Street, Suite 1600, Los Angeles, California 90012, no later than 45 days prior to the start of construction or installation of the cathodic protection system.
97. Agency shall install K-rails or removable pipe bollards at a distance of ten feet from each side of the tower base for protection of towers. A distance of five feet from the tower base may be acceptable in locations where the patrol roads would be obstructed.

**Watershed Easement is defined as any open area that feeds into an open reservoir or waterway leading into a potential drinking water source – i.e.: construction on the hills or surrounding areas should not have any impact on drainage (as it could cause erosion which leads to other issues) or water quality.*

LA River Revitalization Project Guidelines - Contact Personnel				
NAME	SYSTEM/SECTION	PHONE NO.	EMAIL ADDRESS	
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Colleen McKenna	Joint System, Real Estate Services Section	(213) 202-6372	Colleen.McKenna@ladwp.com	
Tony Chan	Power System, Power Transmission & Distribution	(213) 367-1535	Tony.Chan@ladwp.com	
David Nevarez	Power System, Right of Way Engineering Group	(213) 367-3621	David.nevarez@ladwp.com	
Edgar Perez	Power System, Right of Way Engineering Group	(213) 367-0084	Edgar.perez@ladwp.com	
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Graham Peace	Power System, Overhead Transmission Group	(818) 771-5014	Graham.peace@ladwp.com	
Property Manager	Water System, Water Operations Division	(213) 367-1057	TBD	
Property Management Supervisor	Water System, Water Operations Division	(213) 367-1507	TBD	
Watershed Management Supervisor	Water System, Water Resources Division	(213) 367-2966	TBD	