Bureau of Engineering
SURVEY DIVISION

REQUEST FOR TOPOGRAPHIC SURVEY

Date Requested_____, 200_

Work Order No._____ Funding source _____

Name of project _____

Project limits:_____

_____

Purpose of the project_____

❒ Caltrans involvement (must check Metric box below)

❒ Contours (show on sketch or in special instructions the limits of contouring) Interval_____

FORMAT

❒ Plat paper 8.5” x 11” (hand drawn sketch, no scale, no CAD drawing)

Metric ❒ Yes ❒ No

CAD Drawings

Proposed scale of map_____

❒ AutoCAD Drawing file on diskette

❒ AutoCAD DXF file on diskette`

❒ Land Development Project

Special instructions: eg. Special alignment, adjoining survey, special datum; NAD 83, NAVD 88 etc.)

_____

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_____

Requested by:_____ Div._____ Ph # _____

Dist./Div. Head _____

Request discussed with Survey: Name_____Date:_____

Survey Division use only

*Survey #*_____ *Task*_____ *Sub task*_____*Cadastral district* _____

*Estimated completion*_____*Actual completion*_____

*Estimated hours*_____*Actual hours*_____

*Field book and page*_____*Party chief*_____

*Comments*_____

REQUEST FOR TOPOGRAPHIC SURVEY ADDENDUM

The Survey Division of the City of Los Angeles, Bureau of Engineering has a long history of producing quality topographic survey maps that have greatly assisted our co-workers in the Bureau and other City Departments in their design endeavors. As a result of the new Bond Programs, Bureau Engineers and Architects find it necessary to contract out design functions to private firms. This document will serve to specify which items are required for the topographic map. The Project Manager and his team must work with, not only this Division, but also other Engineering Divisions, (e.g. Real Estate for Title information) and other City Departments, (e.g. Planning for Zoning information) to fulfill the designer's request.

All requests for surveys should be discussed with a Survey Supervisor. All requests must clearly define the limits of the survey/project.

Topographic/Site survey maps will, in general include the following:

- Location of natural and manmade features including the surface expression of utilities
- Contour lines indicating the shape and elevation of the land at the interval outlined in **Appendix A**
- Survey control including elevation bench marks established specifically for the project
- Final delivery of the mapping will be on the Bureau of Engineering standard sheet/s. The media will be heavy bond paper with a wet signature. A mylar print of the map will be archived in the Bureau of Engineering Vault. An AutoCAD drawing file is available upon request. Additionally, copies of the City Engineer Field Book pages showing horizontal and vertical control employed on the project will be provided.

A more detailed description of what is typically depicted on the map is found in **Appendix B**.

Optional items for the topographic survey are contained in **Appendix C**

Appendix A

Existing contour lines indicating the shape and elevation of the land in accordance with the following table. Contour intervals may occasionally depend on the terrain. For example very steep slopes may not be depicted at a 1-foot interval regardless of scale.

Map Scale	Contour Interval
1”=20’	1 foot
1”=30’	1 foot
1”=40’	1 foot
1”=50’	1 foot
1”=100’	1 or 2 feet
1”=200’	2 or 4 feet
1”=400’	4, 5 or 10 feet

Appendix B

Items typical to a City of Los Angeles, Survey Division Topographic/Site Survey Map

- North Arrow
- Scale, both graphic and descriptive.
- Legend depicting symbols and abbreviations used in the drawing
- Title limits (legal description) of survey
- Surveyor, Professional Land Surveyor's Seal
- Date surveyed
- Street names
- Street width
- Ties to street control lines, intersections, monumentation
- Reference to the Los Angeles City Engineer Field Book for horizontal and vertical control.
- Street control line information, (bearings and distances, curve data)
- A Basis of Bearings
- Delineation and labeling of surface materials, i.e., concrete, dirt, asphalt, brick, etc.
- Delineation and labeling and location of surface features, e.g., driveways, access ramps, curbs, gutters, drains, valves, meters, vaults, maintenance holes, power/telephone poles, traffic signals, etc.
- The location of all permanent and fixed structures including retaining walls, bridges, culverts, buildings, transmission towers, maintenance holes etc.
- Plotting of record substructure information obtained from City Substructure, Storm Drain, and Sewer maps. Note that this information is rarely shown extending outside of the public Right of Way.
- Delineation and elevations of changes in surface grades, e.g., curbs, flow lines, swales, etc.
- Contour lines indicating the shape and elevation of the land over the entire parcel being surveyed at an interval in accordance with the table in Appendix A. Additionally, the spot elevations used to create the contours will be shown.
- Locations and elevations of lakes, rivers, streams or drainage courses on or near the survey limits
- Entry way elevation (finished floor) if applicable
- Walls- heights, widths, and material
- Fences- height and material
- Trees over 4" in diameter. Trees will be identified by the following broad categories: Oak, palm, coniferous and all others.
- Work Order number
- If the optional boundary survey is performed, bearings and distances of property lines will be shown also encroachments will be shown.
- Public easements as shown on City of Los Angeles Cadastral Maps

Appendix C

Optional items to be included with the topographic survey

- ❑ Boundary survey. A Grant deed and if possible a Title Report must be provided. Permanent monuments will be established at the property corners.
- ❑ Easements. If a Title Report is provided, easements will be plotted based on the information contained in the Report. This is in addition to Public easements, which are shown, as per Appendix B.
- ❑ Location and description of any building or major structure on adjoining land that is within 10 feet of the parcel being surveyed. The Project Manager may need to obtain a Right of Entry to access the adjacent property.
- ❑ Sewer maintenance hole inverts.
- ❑ Storm drain maintenance hole inverts.
- ❑ Catch basin inverts
- ❑ Height of buildings
- ❑ Building overhangs
- ❑ Parking area striping and the type (eg. Handicapped, motorcycle, regular, etc.)
- ❑ Parking meters.
- ❑ Trees smaller than 4".
- ❑ Tree drip lines.
- ❑ Shrubs/bushes. The outline area of the shrubbery shown.
- ❑ Sprinklers. Sprinklers are frequently not visible. The Project Manager should make arrangements to mark them out prior to the survey.
- ❑ Location and plotting of utilities by plans and markings that are provided to the Survey Division. As indicated in Appendix B, the observed evidence of utilities will be shown on the map.
- ❑ Additional information, if provided to the Survey Division, will be shown on the map. This information may include such items as zoning, required building setbacks, proposed street widening, etc. Documents provided: _____

  _____
- ❑ Additional information. Describe in detail: _____

  _____

Items that are considered incidental to demolition or new construction will not be included. Unless specifically requested, minor street culture will not be located. This includes items such as stop signs, parking signs, directional signs and other minor signage. Also not located are items such as mailboxes, newspaper racks and bus benches. Larger, more permanent features such as billboards and bus shelters would be included on the map.