Bellecci & Associates

February 22, 2018

Mr. Aaron Kerrigan
San Leandro Unified School District
835 E. 14th Street
San Leandro, CA 94577

Subject: **Proposal to Provide Topographic Surveying Services for the Woodrow Wilson and Garfield Elementary Schools**

Dear Mr. Kerrigan:

We are pleased to submit this letter proposal to provide topographic surveying services to the San Leandro Unified School District for the above referenced project.

The email from HKIT Architects on February 16, 2018 and follow-up emails, we propose to provide design level topographic survey for the Woodrow Wilson and Garfield Elementary Schools located in the San Leandro Unified School District.

Attached is our proposed scope of services (Exhibit A) for your review. Our proposal breaks the project into separate tasks of work to help identify the steps we feel are necessary to develop a comprehensive topographic survey for each school site. Also attached is a copy of our proposed budget to do the work (Exhibit B).

Bellecci & Associates, Inc proposes to conduct the work for the project as outlined in this proposal for an estimated lump sum fee of $18,708.00 (fee includes reasonable reimbursable expenses).

If you have any questions regarding this proposal, please call me at (925) 685-4569. We look forward to working with you on this project.

Sincerely,
BELLECCI & ASSOCIATES, INC

Robert Broestl

Robert Broestl, PE
Principal

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Locations of Work:



Description of Work:

Bellecci & Associates, Inc. (CONSULTANT) will provide topographic surveying services to the San Leandro Unified School District (SLUSD) (CLIENT) for the SLUSD School Classroom Projects at Woodrow Wilson and Garfield Elementary Schools in San Leandro, California (PROJECT). The CONSULTANT will provide design level topographic survey supplemented with ground shot survey and as-built location of utilities. CONSULTANT scope of work is described in more detail below:

Scope of Work:

1 Project Management:

CONSULTANT shall perform the following services:

a) Coordinate with CLIENT for as-built plans.
b) Coordinate with HKIT Architects and RGM and Associates.
c) Project administration and project status report to CLIENT.

Deliverables:

CONSULTANT will provide a copy of the project status report with the monthly invoice

2 Set Survey Control:

CONSULTANT shall perform the following services:

a) Establish survey control at both school sites using GPS coordinates (NAD 83, NAVD 88, Epoch 2010, Zone 3).
b) Set flight crosses (XYZ control points) at each school.
c) Send survey control point coordinates to 360 Degree Aerial for use in the topographic mapping.

Deliverables:
None

3 Aerial Flight and Topographic Survey:

CONSULTANT's SUBCONSULTANT 360 Degree Aerial shall perform the following services:

a) Fly and obtain orthophotos for each school site.
b) Map physical features and contours for each school site.

Deliverables:
CONSULTANT will provide a bond copy 20 scale map with 1' contours for each school site.

4 Ground Shot Supplemental Survey (Utilities, Inverts, Tree Trunks, etc.):

CONSULTANT shall perform the following services:

a) Provide supplemental ground shot topographic survey for the areas at the school sites scheduled to receive new improvements.
b) Supplemental survey to include the following:
    1) Curbs, gutters, sidewalks, driveways,
    2) Tree sizes and dripline.
    3) Sewer manhole rim, clean-outs and invert elevations.
    4) Storm drain manhole rim elevations, catch basin grate elevations and pipe inverts.
    5) Water valve boxes, meter boxes and fire hydrants.
    6) Gas valves and boxes.
    7) Electrical boxes, street light boxes, utility vaults.
    8) Communication boxes.
    9) Utility poles and guy wires.

Deliverables:
CONSULTANT will provide a bond copy of the aerial topographic map with supplemental survey points for each school site and an electronic copy of the ACAD base map for each school site to be provided to the design team.

5 Utility Mapping (From Provided As-Built Plans):

CONSULTANT shall perform the following services:

a) Obtain available as-built plans from CLIENT for each school site.
b) Cross check utility as-built information against physical features located in the field by our survey crew.
c) Map the approximate location of the existing utilities in ACAD for the areas at the school sites scheduled to receive new improvements.

Deliverables:
CONSULTANT will provide a bond copy 20 scale map with 1' contours and an electronic copy of the ACAD base map for each school site to be provided to the design team.

Optional Services

OS1 Utility Locating Service (GeoTech Utility Locating (GUL)) (Budget TBD):

CONSULTANT's subconsultant, GUL will perform utility locating services using industry acceptable methods. The following is a partial list of equipment typically used to locate detectable utilities:

- Radio Detection 7000 transmitter w/ matched receiver
- Fisher TW-6 M-scope - shallow focus metal detector
- RD 1000 ground penetrating radar (GPR) unit
- 512 Hz Sonde.

a) GUL will visually inspect the surrounding area for evidence of subsurface utilities or other buried features as well as review available as-built utility drawings.
b) Each identified utility will be investigated using active electromagnetic utility-locating instruments and its surface trace demarcated on the ground using color-coded spray paint.
   - Electric ---------- Red
   - Telephone/Comm ------- Orange
   - Storm/Sanitary ---------- Green
   - Water/Air ---------- Blue
   - Gas/Steam/Oil ----------Yellow
   - Unknown pipes ---------- Pink
c) Utility marks will be collected with total station and plotted onto a drawing, by layers, in the ACAD format.

Deliverables:
CONSULTANT will include the located utility lines on the topographic survey map. An electronic copy of the ACAD file will be provided to the design team.

EXHIBIT B

BUDGET/COST PROPOSAL

SAN LEANDRO UNIFIED SCHOOL DISTRICT
TOPOGRAPHIC SURVEY FOR WOODROW WILSON
AND GARFIELD ELEMENTARY SCHOOLS

	PROJECT BUDGET ESTIMATE		
TASK #	TASKS DESCRIPTION	DIRECT COST	TOTAL COST
1.0	Project Management		$1,260
2.0	Set Survey Control for Aerial Topographic Survey	$100	$2,528
3.0	Aerial Flight and Topographic Survey		$4,840
4.0	Ground Shot Supplemental Survey (Utilities, Inverts, Tree Trunks, etc.)	$150	$6,590
5.0	Utility Mapping (From Provided As-Built Plans)	$150	$3,490
	Topographic Survey Total:	**$400**	**$18,708**

* Printing/Copying/Deliveries cost shows as a direct cost under the task

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