July 17, 1987

CITY OF SAN BUENAVENTURA
REQUEST FOR PROPOSAL NO. P-763
AUTOMATED MAPPING / GEOGRAPHIC INFORMATION SYSTEM

Prospective Proposer:

The City of San Buenaventura requests proposals to supply system software, hardware, and training related to the acquisition of a system to provide automated mapping and geographic information system functions. The system is intended to complement and significantly enhance existing applications which utilize address standardization and other geobase methods to organize and relate all locational information as well as provide a capability to present the information in mapped form. It will be utilized by all departments to varying degrees primarily for analysis purposes rather than to create official record quality maps. The plan is to utilize the County of Ventura base map which is being prepared on a Computervision system and to overlay the items listed on the Data Element List included below including the entire water, sewer, and storm drain system. It is mandatory that the system allow tabular data to be readily associated with graphic elements for purposes of analysis and/or display.

A Proposers' Conference is scheduled on July 31, 1987 at 2:00 P.M. in the Community Meeting Room of City Hall, 501 Poli Street, Ventura which will offer an opportunity to respond to all interested vendors' questions concerning this request. Attendance at this conference should be confirmed with the Project Coordinator.

Significant dates related to this Request for Proposal are as follows:

RFP Released to vendors
Proposers' Conference
Proposals Due
Selection of "short list" of finalists for Demonstration
Demonstrations (Performance Test)
Notification of selected vendor
Contract signing

July 17, 1987
July 31, 1987
August 28, 1987
September 11, 1987
September 28 to October 9, 1987
October 23, 1987
November 5, 1987
Questions concerning the content of this proposal should be addressed to:

Mr. William L. Danforth  
Mapping/Information System Project Coordinator  
City of San Buenaventura  
501 Poli Street, room 225  
Ventura, CA 93001  
(805) 654-7800 Ext 617

Signed proposals must be submitted in a sealed envelope to:

City of San Buenaventura Purchasing Office  
501 Poli St, Room 101  
PO Box 99  
Ventura CA 93002

The submitter envelope should be clearly marked "Request for Proposal No. P-763" and submitted prior to 5:00 P.M. on Friday, August 28, 1987.

The City of San Buenaventura appreciates your participation in this process and looks forward to your response.

Sincerely,

[Signature]

Mr. Everett Millais  
Director of Community Development
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>I. BACKGROUND</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. City Vital Statistics</td>
<td>2</td>
</tr>
<tr>
<td>B. Data Element List</td>
<td>3</td>
</tr>
<tr>
<td>C. Funding</td>
<td>8</td>
</tr>
<tr>
<td>D. Desired Site Locations</td>
<td>9</td>
</tr>
</tbody>
</table>

| II. WRITTEN PROPOSAL GUIDELINES | 10 |

<table>
<thead>
<tr>
<th>III. HARDWARE AND SOFTWARE REQUIREMENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Hardware</td>
<td>12</td>
</tr>
<tr>
<td>B. General Software</td>
<td>13</td>
</tr>
<tr>
<td>C. Graphic Software</td>
<td>15</td>
</tr>
<tr>
<td>D. Analytical Software</td>
<td>16</td>
</tr>
<tr>
<td>E. Training, Implementation and Ongoing Assistance</td>
<td>18</td>
</tr>
</tbody>
</table>

| IV. COST | 19 |

<table>
<thead>
<tr>
<th>V. Appendices</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Present Computer Application List</td>
<td></td>
</tr>
<tr>
<td>2. Performance Test</td>
<td></td>
</tr>
<tr>
<td>3. Terms and Conditions and Affidavit of Non-collusion</td>
<td></td>
</tr>
</tbody>
</table>
I. BACKGROUND

The City has been developing a geobase system for the past five years and has made progress in standardizing addresses, developing a parcel-based set of files to track planning and building permit information and to access tabular information from the County Assessor. Address files from diverse sources have been successfully linked together so that it is possible to branch between building data, assessor’s data, water customer and meter locations, business license and sales tax locations and some others. The original plan was to organize a data base similar to the DIME format with which to encode various district information (police and fire districts, planning community boundaries, building inspector areas, etc.). This approach has proven to be impractical for several reasons: (1) The amount of time to code different areas to each street segment, and (2) the inappropriateness of using street addresses to locate certain items. Another approach was to code district information to each assessor parcel. This was also time consuming and did not allow a means to allow for boundaries which cross property lines. We still find it very difficult to aggregate many items within ad hoc boundaries.

With the improving feasibility of developing a mapped data base and improving software to associate tabular information with lines on the map, it appears that many of the weaknesses of the former approaches can be overcome with a Geographic Information System. The same tools should also allow an accurate depiction of utility systems (water, sewer, and storm drains). Whether the new system is referred to as a Geographic Information System, an AM-FM system or some other label, what we are seeking is the capability to record as much information as possible about the land within the City: What are the physical characteristics of the land? What kind of facilities and structures exist on the land? How is land being used and how might it be used in the future? How can we most efficiently maintain the infrastructure? How much of what is where?

With a view toward developing a GIS capability, a Project Coordinator has been assigned and a study team has been formed to investigate what information might be included in such a system and what types of systems are available. The team has seen demonstrations of several systems and has reviewed data we have received in response to our Request for Information.

What follows is specific background data on the City, a proposed data element list, a funding summary, and an outline of the locations for work stations. While much of this information has been previously provided in our Request for Information, it is also included here to ease the preparation of proposals.
### A. CITY VITAL STATISTICS (AS OF JUNE 30, 1986)

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>87,000</td>
</tr>
<tr>
<td>Area</td>
<td>34.3 square miles (14.5 ocean)</td>
</tr>
<tr>
<td>Number of Parcels</td>
<td>29,600</td>
</tr>
<tr>
<td>Number of Building Permits</td>
<td>1780 (Average past 3 years)</td>
</tr>
<tr>
<td>Value of Building Permits</td>
<td>$ 98,657,667 (Average past 3 years)</td>
</tr>
<tr>
<td>Miles of Streets</td>
<td>255.6</td>
</tr>
<tr>
<td>Enterprise Funds</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td></td>
</tr>
<tr>
<td>length of pipe</td>
<td>264.65 miles</td>
</tr>
<tr>
<td>Sewer</td>
<td></td>
</tr>
<tr>
<td>length of gravity pipe</td>
<td>281.02 miles</td>
</tr>
<tr>
<td>length of force mains</td>
<td>3.08 miles</td>
</tr>
<tr>
<td>Length of Storm Drains</td>
<td>19.69 miles</td>
</tr>
<tr>
<td>Number of Fire Hydrants</td>
<td>2554</td>
</tr>
<tr>
<td>Water Wells</td>
<td>11</td>
</tr>
<tr>
<td>Reservoirs</td>
<td>7</td>
</tr>
<tr>
<td>Water Tanks</td>
<td>31</td>
</tr>
<tr>
<td>Street Lights</td>
<td>7538</td>
</tr>
<tr>
<td>Number of parks</td>
<td>24</td>
</tr>
<tr>
<td>Park acreage</td>
<td>414</td>
</tr>
<tr>
<td>Golf course acreage</td>
<td>351</td>
</tr>
<tr>
<td>Number of street trees</td>
<td>40,000</td>
</tr>
<tr>
<td>Present Data Processing Capability</td>
<td></td>
</tr>
<tr>
<td>Processors</td>
<td>VAX 11-785</td>
</tr>
<tr>
<td></td>
<td>VAX 8530</td>
</tr>
<tr>
<td>Operating system</td>
<td>VMS</td>
</tr>
<tr>
<td>Application Software</td>
<td>ADMINS</td>
</tr>
<tr>
<td>Applications</td>
<td>See Appendix 1</td>
</tr>
<tr>
<td>Personnel assigned</td>
<td>5</td>
</tr>
</tbody>
</table>
B. DATA ELEMENT LIST

Following is a listing of data elements planned for eventual inclusion on the system and the kinds of capabilities the City is seeking in software to manipulate the data.

MULTI-DEPARTMENT USE

Base map to include:

- Major geographic and topographic features such as land/water areas, city boundaries, barrancas, canyons, lakes and rivers
- Street and freeway network
- Railroads
- Assessor’s parcels

It is our intention to utilize a base map presently being constructed by the County of Ventura utilizing a ComputerVision system. The City portion of the overall map at the 500 scale has been completed.

COMMUNITY DEVELOPMENT

Planning:

- Zoning
- Future land use
- Parking districts
- Local coastal plan boundaries
- Planning community boundaries
- Phasing area boundaries
- Sensitive habitat areas
- Flood plain overlay and areas
- Hillside management boundaries
- Hillside drainage areas
- Urban/rural boundaries
- Hillside scenic resource area
- Phasing program boundaries
- Special study areas
- Hillside/centers boundary
- Designated scenic highways, drives
- Open space including future major parks
- Pending project areas
- Project and planning case areas
- Mobile home parks
- Ventura fault special study zone
Preliminary 100 & 50 year flood plain
Historic areas
Building envelopes for selected areas
Tsunami areas
Prime agricultural property
Annexations
Area boundaries for hearing notification of owners
and/or occupants
Sign program areas

Building and Safety:

Master map of street address locations
Building inspector areas
Hillside brush areas
Business locations
Code enforcement complaints
Noise contours

Revitalization/Economic Development:

Census Data
Building footprints
Redevelopment area boundaries
Residential land status of development
Vacant land analysis

Department Summary of Existing Tabular Information on Computer:
Assessor's parcel data
All Case locations by parcel since July, 1984
Parcel cross reference for discretionary planning permits
Building permit data by address
Business license data by address
Complaint data by address
Vacant Land Status by parcel (in progress)

PARKS AND RECREATION

Street trees
Park boundaries
Census data
Park & golf course irrigation systems
Park trees
Sidewalk - tree maintenance areas
Recreation facilities/park locations - existing and future
Wind rows
Facilities maps
Flood Control Districts
Linear parks
Medians
School play areas/Athletic facilities
State and County Park areas
Department Summary of Existing Tabular Information on Computer:
  Recreation Facilities Inventory by address
  Sidewalk Data

POLICE

Police reporting districts
Beats
Crime locations
Known offender locations
Traffic collision locations
Traffic citation locations
Floor plans of high risk businesses
Hazardous material storage areas
Crime cluster areas
Arrest locations
Call for service locations
Parking citation locations
Neighborhood watch locations
Liquor dispensing locations
Schools
Placement homes

Department Summary of Existing Tabular Information on Computer:
  Most data available on police/fire computer system

FIRE

Water lines and valves
Natural gas and oil lines and valves
hydrant locations
Hazardous material storage sites
Alternate traffic routes
Emergency medical treatment facilities
Flood danger/inundation areas
Fire response maps

Department Summary of Existing Tabular Information on Computer:
  Fire hydrant data

PUBLIC WORKS

Engineering
Water Atlas including present grid lines,
Transmission and distribution pipe lines
System street valves
Fire hydrants
Pump stations and wells
Storage tanks and reservoirs
Conditioning plants
Sewer atlas
Storm drain atlas
Topographical data
CAD (Computer Assisted Design) Civil Engineering Package.
Other utility lines (telephone, gas, electric, cable, etc.)

Water
Meters and services
Water sample stations
Pressure zones

Sanitation
Sewers
Mains (including elevations in selected areas)
Manholes
Lampholes
Lift stations
Services
Flow test results
Areas of city on septic service

Traffic Engineer
Street network
Circulation plan
Traffic zones
Underpasses and vertical clearances
Signals
Signs
Stripings and markings
Traffic counts
Current and future land use data
Traffic accident locations

Land Development
Reimbursement areas

Maintenance
Storm drain preventative maintenance
Traffic control devices, signing and striping
Sidewalk survey areas
Street sweeping areas
Traffic signal locations
Street light inventory
Crack sealing areas
Utility pavement cuts
Pavement management
Annual resurfacing program
Annual slurry seal program
Department Summary of Existing Tabular Information on Computer
  Pavement survey data by street segment
  Water customer information by address
  Water meter location information by address
  Traffic Control Device Inventory (DBASE III)
  Traffic signal data
  Sidewalk data
  Traffic count history (PC)

FINANCE

Special Assessments
  Special assessment district boundaries

Revenue
  Location of sales and property tax payers

Accounting
  Areas from location table in chart of accounts

Department Summary of Existing Tabular Information on Computer
  Sales Tax locations by address
  Special assessment data by parcel
  Accounting information related to locations in table

CITY CLERK

  Easements