PROBLEM REQUIREMENTS

Determine the following:

1. Usable map sheet dimensions	1 Point
2. East-West, North-South limits (length and width) of area to be mapped	1 Point
3. Maximum flying height above average terrain	2 Points
4. Flying height above sea level	3 Points
5. Photo scale	3 Points
6. Compilation scale that will fit on one map sheet (see diagram) and be drawn in one of the following common engineering scales (10, 20, 30, 40, 50, 60, 100)	3 Points
7. Definition of the "Neat Model"	1 Point
8. Dimensions of the "Neat Model"	2 Points
9. Number of models required to map the given area	2 Points

PROBLEM B1

19 Points

PROBLEM STATEMENT

This problem has two parts. Part I examines the ability to match surveying terms with the listed definitions. Part II requires completion of a series of statements by supplying the missing word or words.

PROBLEM REQUIREMENTS

PART I: Example

Each of the definitions, numbered 1 through 7 below, defines a term listed below. Enter the letter designating the correct term in the blank to the left of its definition. 7 Points

Example:

A. MECHANIC B. SURVEYOR C. PLUMBER

__B__ One whose occupation is determining lengths, directions, boundary lines, and contours.

PART I: Definitions

A. Alluvion
B. Avulsion
C. Equitable Estoppel
D. Evidence Beyond Reasonable Doubt
E. Extrinsic Evidence
F. Grant
G. Intrinsic Evidence
H. Latent Defect
I. Ordinary High-Water Mark
J. Ordinary Mean Water
K. Ownership
L. Patent Defect
M. Preponderance of Evidence
N. Title
O. Title Report
P. Unwritten Rights
Q. Written Rights

1. _____ The union of all the elements that constitute ownership. 1 Point

2. _____ Summary of recorded documents that constitute Constructive Notice. 1 Point

3. _____ Information not contained in a deed, but allowed to apply or give affect to a description. 1 Point

4. _____ An error in a deed description that may be ascertained from the information contained therein. 1 Point

5. _____ The basis for deciding civil cases involving boundary litigation. 1 Point

6. _____ The boundary of an upland owner bordering on tide water. 1 Point

7. _____ The material gradually and imperceptibly accumulated by the recession of water. 1 Point

PART II: Fill in the Blanks — 12 Points

For the statements listed, fill in the blanks to make the statements correct.

1. Unwritten transfers of real property are prohibited by the _____. 1 Point

2. Recording a deed imparts _____. 1 Point

3. Conveyances are construed most strongly against the _____. 1 Point

4. The ownership of overlapping descriptions is generally decided by _____. 1 Point

5. Unwritten rights may be established by _____, _____, or _____. 1 Point

6. The trunk of a line tree is located more on the land of Owner A than that of Owner B. The tree is owned _____. 1 Point

7. Ownership bounded by a lake is a _____. 1 Point

8. In California, the elements of adverse possession require _____, _____, _____, _____, and _____ possession for the statute period of time of ___ years. 2 Points

9. The boundaries of California are the responsibility of the _____. 1 Point

10. The California Coordinate System is legally defined by _____. 1 Point

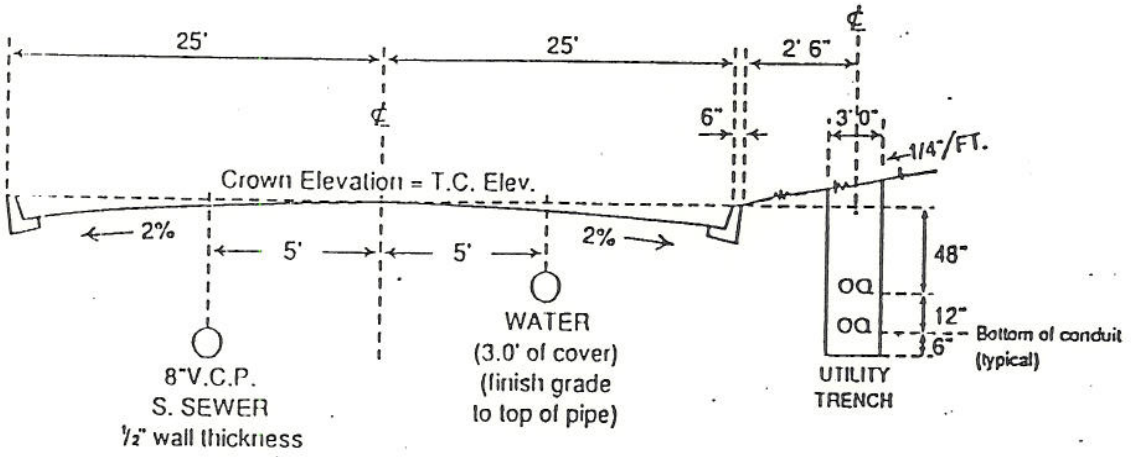
11. List three calls in a description in decreasing order of priority. _____, _____, _____. 1 Point

PROBLEM B2

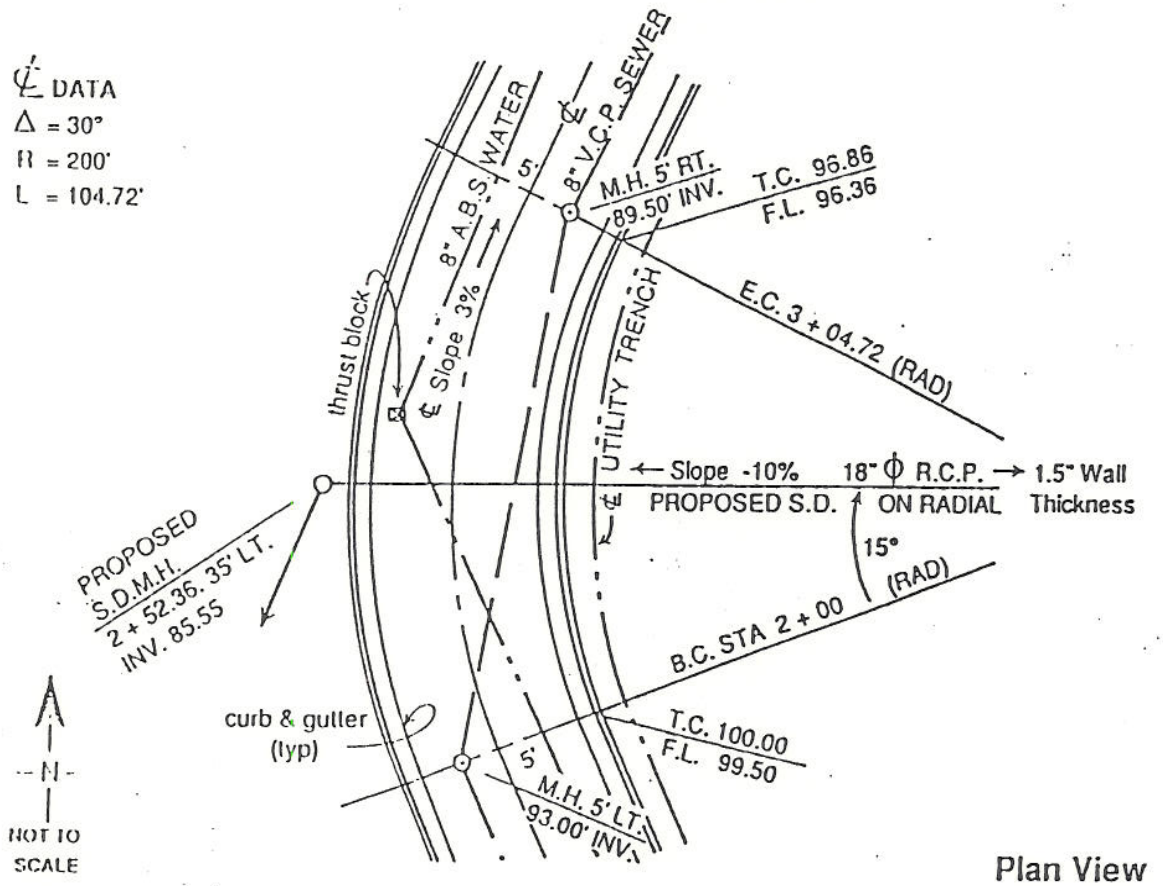
15 Points

PROBLEM STATEMENT

You have been asked to stake a new storm drain line that is to cross an existing road section containing the utilities as shown in the diagram below.



Typical Road Section 2 + 00



Plan View

PROBLEM REQUIREMENTS

1. Identify the problem(s) most likely to occur and describe how they might be resolved. Sketch and dimension the profile of the storm drain to show the position of the crossings. **12 Points**

2. Does your work require a review? Explain your answer. **3 Points**

PROBLEM B3

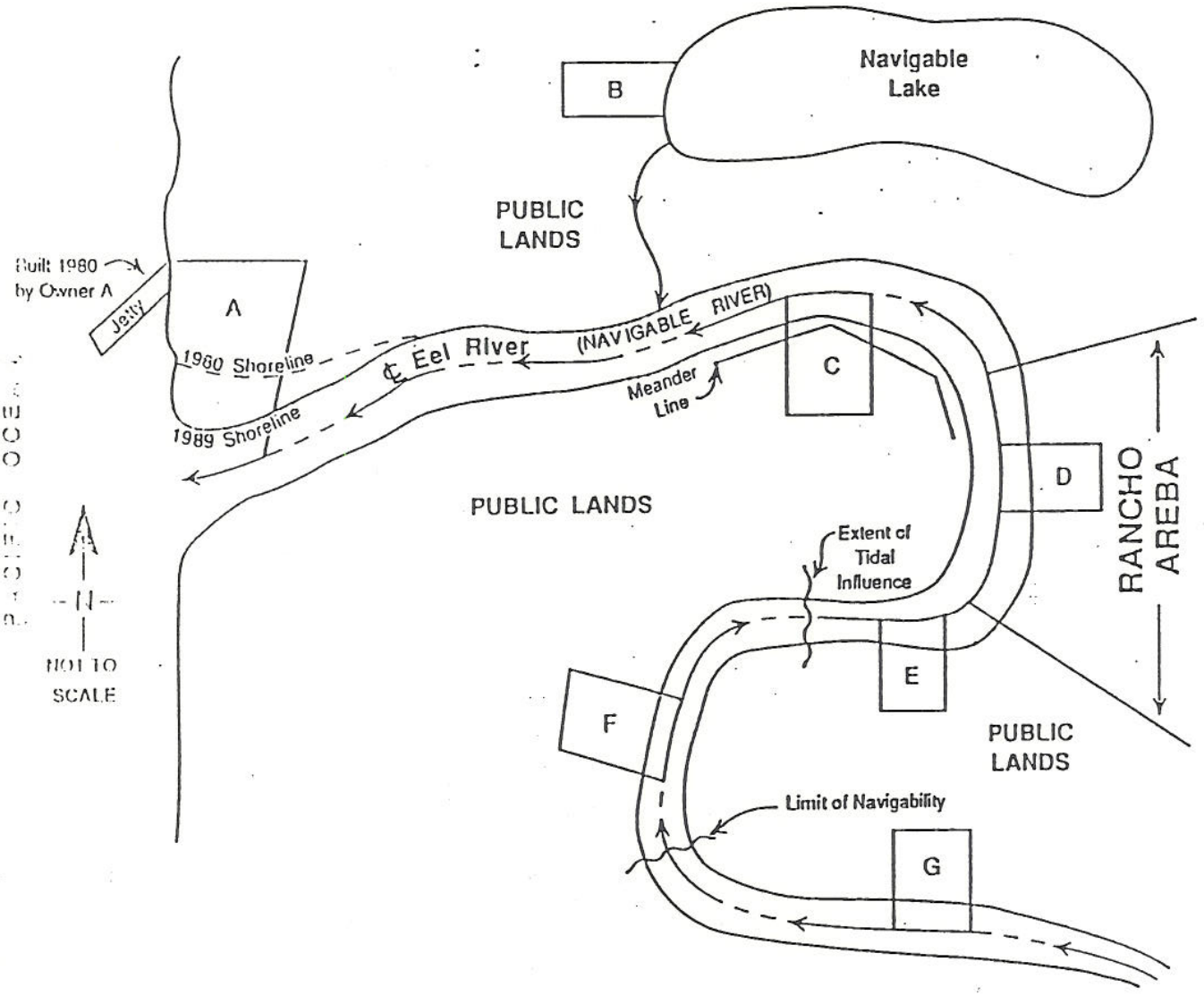
14 Points Sheet 1 of 1

PROBLEM STATEMENT

The diagram below illustrates seven parcels labeled A through G. All parcels have littoral or riparian rights.

PROBLEM REQUIREMENTS

For each parcel, A through G, describe the boundary line and, when applicable, describe any limitations to ownership. **2 Points Each**



PROBLEM B4

10 Points

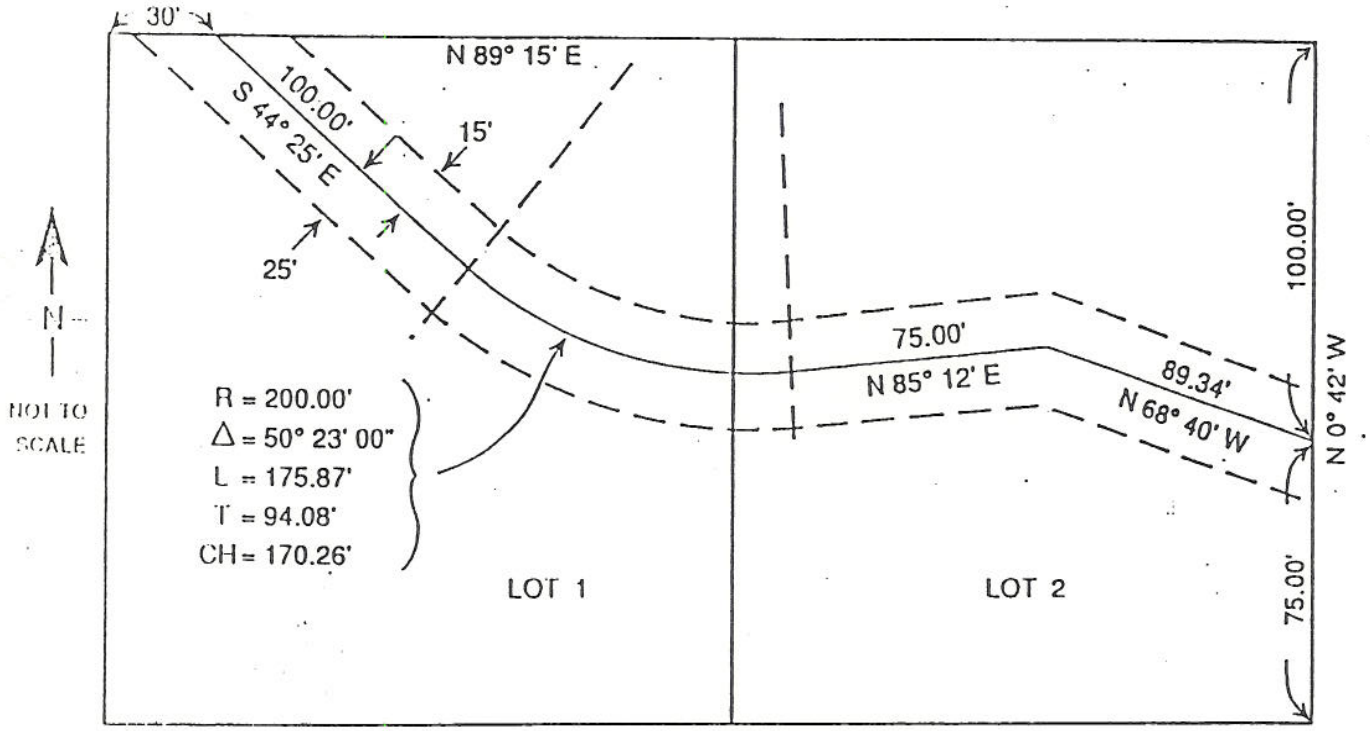
PROBLEM STATEMENT

The purpose of this problem is to test the candidate's understanding of terms, definitions, and descriptions related to easements.

PROBLEM REQUIREMENTS

1. Prepare a strip-type legal description for the easement shown in the diagram below. **5 Points**

Proposed Storm Drain Easement, Tract No. 54210
Book 105 of Maps, Page 44, Records of San Benito County, CA



2. Define the following terms:

   a. appurtenant easement **1 Point**

   b. dominant tenement **1 Point**

   c. servient tenement **1 Point**

   d. easement overburdening **1 Point**

   e. right-of-way **1 Point**

PROBLEM STATEMENT

Your client has requested that you provide a topographic map of the Jackson landfill by photogrammetric methods. In so doing, you are required to use the following criteria and equipment.

1. The map must fit on a single mylar sheet with borders as specified in the diagram below.
2. The common engineering map scale that allows the entire project to be compiled at the maximum size that will fit on the specified single sheet.
3. The camera focal length is 6"; the film format is 9" x 9".
4. The plotter has 9" x 9" diapositive plate carriers and a C-factor of 2000, as shown in the diagram below.
5. A forward photo overlap of 60% and a sidelap of 30% or an accepted common practice are required.
6. The terrain varies from 1500 feet to 2100 feet above sea level.
7. The contour interval is 1 foot.

Map Sheet Size With Borders