MODULE 3: Communication and Terminology for the Workplace

TOPIC 2: Workplace Correspondence – Proposals

LEARNING OUTCOMES:

By the end of this lesson, participants will be able to:

- find extensive specific information in an engineering proposal
- negotiate engineering services in a project
- write a proposal proposing consultant engineering services

TOPIC	SKILLS	CLB COMPETENCIES AREA	COMPETENCIES	PRE-TASKS	TASKS	POST-TASKS
♦ Workplace Correspon-dence – Proposals	♦ Listening/ Speaking ♦ Reading/ Writing	♦ exchanging information ♦ suasion ♦ formatted text	♦ extract general ideas and specific details from a text ♦ understand the purpose and content of an engineering proposal in letter format ♦ apply knowledge of terminology associated with proposals and contracts ♦ convey a formal message in appropriate format by understanding format, function, and formality requirements in the workplace	♦ locate specific information in a proposal ♦ isolate and group terms and common expressions associated with proposals ♦ discuss engineering services within disciplines as relevant to a proposed project	♦ write a short proposal using appropriate language and terminology in a given context	♦ review and analysis of a group participant proposal

Facilitator's Guide for Module 3
Topic 2: Workplace Correspondence – Proposals

PREPARATION

Content

In order to teach this lesson effectively, the facilitator should be familiar with the following:

- the layout and information in a proposal
- the role of the proposal for an engineer as a consultant

Delivery

As many copies as necessary of the following handouts should be made:

- Handout 1 Proposal (three pages)
- Handout 2 Comprehension Questions
- Handout 3 Contribution Matrix (two pages)

Materials needed: OHT 1, 2 and 3, overhead projector, chart paper and markers

METHODOLOGY

Introduction

(20 minutes) 1. Elicit from the class what the parts of a letter are and what kind of information is included by showing OHT 1. Have participants identify and label the parts. These should include:

- letterhead
- date
- inside address
- attention line (optional)
- subject line
- salutation

- body
- complimentary closing
- signature
- carbon copies
- enclosures

Explain that the purpose of the class is to examine an engineering proposal that has been presented in letter form. Ask the class: What are proposals? What are the parts of a proposal? What is their purpose? What kind of information is included? (e.g., fee, schedule, dates, scope of services) How are proposals used by engineers? Ensure that the terms consultant and sub-consultant are understood within an engineering context. Also, see if participants understand terms like tender, bid, and associated terms (bidder, tender closing, pre-bid meeting, tender period).

Pre-Tasks

(15 minutes) 1. Distribute Handout 1 (three pages). Have the participants first read the proposal and then answer the following questions: Who is it from? Who is it to? What is it about?

(20 minutes) 2. Distribute Handout 2. Have the participants do the Comprehension Questions and compare their answers with a partner. Initiate a whole-class discussion about the contents. What is the role of the engineer? (Resident Engineer works on-site). See facilitator's notes.

(15 minutes) 3. Explain to the class that proposals are written using formal language that, with a few exceptions, generally would not be used in speaking. Have students locate and underline the phrases that are examples of this formal/legal kind of language found in documents and contracts. Participants should list/locate the following:

- in the order of
- with respect to
- we are pleased to
- to retain

- we propose
- assuming
- upon receipt of your verbal authority
- at your convenience

(25 minutes) 4. Explain to the participants that the terminology in this proposal can be divided into two categories: “money” and “services provided”. Divide the class into pairs and have each pair locate the words that fall into the "services provided" category. What services are being offered? Have each pair share their list with another pair. Have each group write their words on chart paper and display them on the wall. On an OHP, elicit words from the whole class to list the services; this time, subdivide them into "action" services and documents/products as they are being volunteered by the participants.

Documents / Products

- design
- contract drawings
- technical specifications
- contract documents
- interim design drawing
- as-built drawings
- draft plans
- contract submittals (shop drawings)
- minutes
- contemplated change notices
- change orders
- vellum originals
- digital files on disk

“Action” Services

- contract administration
- proposed structural repair
- electrical upgrading work
- support services
- periodic site review
- periodic site visit
- pre-construction meeting
- general technical consultation service
- evaluate contractor responses

(15 minutes) 5. Have the participants go back to the proposal and find all the words and phrases associated with money. Then elicit terms from class and make a list on OHT. Give examples or definitions as necessary.

Money

- to quote
- lump sum
- inclusive of
- exclusive of
- applicable disbursements
- detailed breakdown of fees
- to invoice
- costs incurred
- to carry an allowance of
- additional fee
- estimate
- budget cost of
- Progress Payment
- Final Payment Certificates
- total construction phase fee
- fee quotation

(30 minutes) 6. Distribute Handout 3 and tell them Schedule 1A is a *contribution matrix* of the tasks, employees, and costs involved in the proposal they have read about. In groups or pairs, have them answer the questions and discuss how they would distribute the costs and the tasks for the project. After 20 minutes, have a whole-class discussion and compare ideas. Present OHT 2 with the actual costs and hours. Discuss.

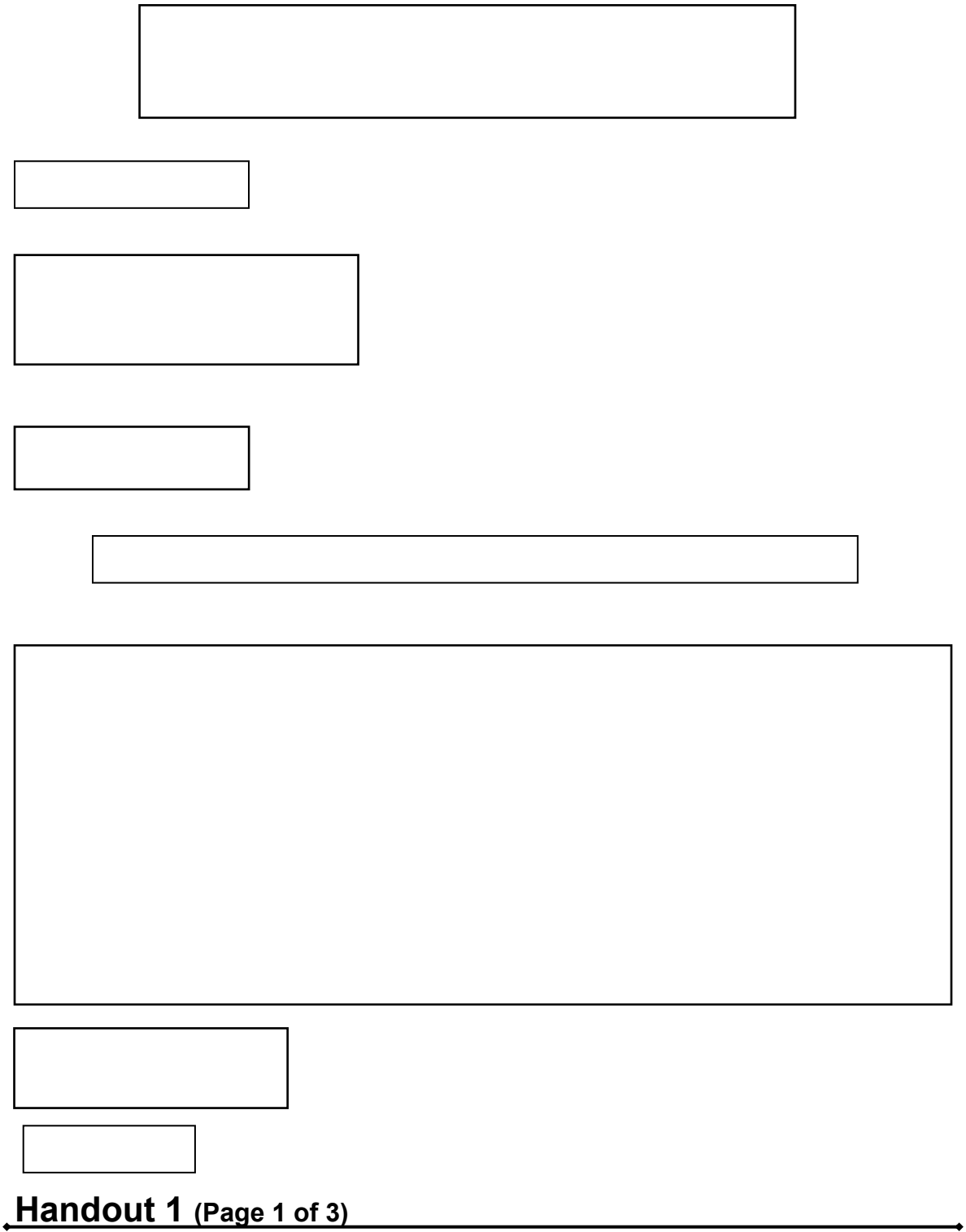
Task

(30 minutes) 1. Group participants in pairs according to discipline, show OHT 3, and read together. Ensure understanding of the task. Explain that participants are to write a short proposal for engineering services in the context provided and according to their discipline, if possible. Have the participants use the first proposal as a model. Services offered by industrial, mechanical, and electrical engineers should be included in the proposal.

Post-Task

(15 minutes) 1. Choose one proposal and, with permission from the participants, copy it onto OHT or make copies for everyone. Analyze the proposal together as whole class for format, sentence structure, terminology, and general clarity.

OHT 1



Handout 1 (Page 1 of 3)

March 23, 200X

Mr. Joe Verone, P.Eng.
Project Engineer
PCS Engineering Ltd.,
6293 Register St.
Toronto, Ontario
M4W 2LC

Dear Mr. Verone:

Re: File No. 98/41Proposal for Consulting Service – Gerald Building, River Street

We are pleased to provide our additional fee to prepare contract documents for the Repair Program and to undertake periodic site review and contract administration during construction. We understand that the budget cost of construction is in the order of $_____ for this project.

Scope of Service

Orvil Consulting Services Ltd. will provide design, contract drawings, and technical specification for the proposed structural repair and electrical upgrading work.

We will also provide support services during the tender period, review the tenders received, and make recommendations with respect to the successful bidder.

The following construction-phase services are also included in our fee quotation:

- attend pre-construction meeting
- review contract submittals (shop drawings, etc.)
- general technical consultation services
- periodic site visits to review progress/issues with Resident Engineer (average three per week)
- conduct weekly site meeting and prepare minutes for distribution
- assist PCS Engineering Ltd. in preparing Contemplated Change Notices and Change Orders and evaluating contractor responses
- issue Progress Payment and Final Payment Certificates for work done under the contract

Continued on Page Two

Handout 1 *(page 2 of 3)*

Fees

We would propose to invoice for our service as outlined below. Note that all fees quoted are exclusive of G.S.T.

1. Design, Contract Documents, and Tender Phase

We propose a lump sum of $_____ for this phase of the project, inclusive of all applicable disbursements. Four copies of all interim design drawings and specifications will be provided. The final tender documents will be submitted in the form of vellum originals plus digital files on disk (Autocad Release 12). A detailed breakdown of fees and disbursements is provided in the attached schedules 1A and 1B.

2. Construction Phase

For this phase, we propose a lump sum fee of $_____ per week. Assuming a 17 week construction period, the total construction phase fee would be $_____, inclusive of all applicable disbursements.

3. Testing Services

We propose to retain _____ as our sub-consultant for all inspection and testing for services required during the construction of the project. Since the actual costs incurred for this work are to some extent dependent on the construction methods and schedule, we can only give an estimate at this time. We recommend carrying an allowance of at least $_____ to cover testing costs.

4. As-built Drawings

We propose a lump sum fee of $_____ for the production of as-built drawings, inclusive of all applicable disbursements.

5. Schedule

Our proposed schedule to undertake this fast-track repair project is attached. Upon receipt of your verbal authority, we are prepared to proceed with design and contract document preparation. Please note that in order to complete the required work within the 200X construction season without resorting to temporary heating, the design phase must be under way by May 1, 200X.

Continued on Page Three

Handout 1 (Page 3 of 3)

Milestone dates are as follows:

	Completed by:
Award Consultant Contract	
Draft Plans and Specifications	
Review Meeting	
Finalize Contract Documents	
Pre-bid Meeting (Tentative)	
Tender Closing	
Award	
Construction	

Should this work be delayed, temporary heating may be required for the final phase of construction. This will entail additional costs.

If you should have any questions or comments on this proposal, we will be pleased to meet with you at your convenience to finalize these arrangements.

Yours very truly,

Orvil Consulting Services Ltd.

Source: Bergs, V. (1994) Engineering Workplace Communications in the Consulting, Contracting, Government Sectors. Toronto: Skills for Change.

Handout 2

Read the letter (Handout 1) and answer the questions below to help you understand the format.

1. What kind of project is this?

2. What three services will be provided?

3. What do the above services consist of?

4. What services will be provided before construction begins?

5. How will the services be grouped for the purpose of billing?

6. What are some time constraints of the project?

FACILITATOR'S NOTES

Answer Key to Handout 2

Participant Instructions

Read the letter (Handout 1) and answer the questions below to help you understand the format.

1. ***What kind of project is this?***
   - *It is a Repair Program for a project. A proposal for sub-contracting services to an engineer is being submitted.*

2. ***What three services will be provided?***
   - *structural repair*
   - *electrical upgrading work*
   - *support services during the tender period*

3. ***What do the above services consist of?***
   - *structural repair - design, contract drawings, technical specifications*
   - *electrical upgrading work*
   - *support services - review tenders received, recommend bids*

4. ***What services will be provided before construction begins?***
   - *pre-construction meetings*
   - *review contract submittals*
   - *general technical consultation services*
   - *periodic site visits to review progress with Resident Engineer*

5. ***How will the services be grouped for the purpose of billing?***
   - *conduct weekly site meetings & prepare minutes for distribution*
   - *assist client in preparing contemplated Change Notices and Change Orders and evaluating contractor responses*
   - *issue Progress Payment & Final Payment Certificates for contract work in phases/ services/drawings: 1. Design, contract documents, tender; 2. Construction phase; 3. Testing services; 4. As-built drawings*

6. ***What are some time constraints of the project?***
   - *fast track*
   - *must be done within this year's construction season to avoid cost of temporary heating*

Handout 3 *(1 of 2 pages)*

On the next page is a chart that outlines the services, staff, hours, and costs involved in the project you have read about. The hours and costs are not included here. Examine the information and answer the following questions.

1. How many tasks are described here?
2. How many employees will be involved?
3. How long do they anticipate construction will take?
4. Which service do you believe will involve the most hours?
5. Which employee do you believe will charge the most hours?

Handout 3 *(Page 2 of 2)*

SCHEDULE 1a – CONTRIBUTION MATRIX

TASK	DESCRIPTION	PROJECT MANAGER ($_____ /HR)	STRUCTURAL ENGINEER ($_____ /HR)	MECHANICAL ENGINEER ($_____ /HR)	ELECTRICAL ENGINEER ($_____ /HR)	CAD OPERATOR ($_____ /HR)	WORD OPERATOR ($_____ HR)	TASK COST
1.	Design Phase							
1.1	Review Site Conditions							
1.2	Prepare Drawings./Specs./Cost Breakdown							
1.3	60% Submission & Review Meeting							
1.4	Revise Drawings and Specs.							
1.5	Prepare Cost Estimate							
1.6	100% Submission (Draft & Final)							
2.	Tendering Assistance							
3.	Construction Phase Services							
	Based on 17 weeks construction							
4.	Materials Testing (Estimate)							
5.	As-built Drawings							
	TOTAL HOURS							
6.	Disbursements (Design Phase)							
7.	Misc. Disbursements (Const. Phase)							
	TOTAL FEE							

Notes: (1) Materials inspection and testing services during construction will be provided through a sub-consultant.
(2) All costs quoted above are exclusive of G.S.T.

OHT 2

SCHEDULE 1a – CONTRIBUTION MATRIX

TASK	DESCRIPTION	PROJECT MANAGER ($_____ /HR)	STRUCTURAL ENGINEER ($_____ /HR)	MECHANICAL ENGINEER ($_____ /HR)	ELECTRICAL ENGINEER ($_____ /HR)	CAD OPERATOR ($_____ /HR)	WORD OPERATOR ($_____ /HR)	TASK COST
1.	Design Phase							
1.1	Review Site Conditions		6	3	8			
1.2	Prepare Drawings./Specs./Cost Breakdown		24	6	24	40	6	
1.3	60% Submission & Review Meeting	3	4					
1.4	Revise Drawings and Specs.		12		12	20	2	
1.5	Prepare Cost Estimate		6		8			
1.6	100% Submission (Draft & Final)	3	6					
2.	Tendering Assistance		8					
3.	Construction Phase Services							
	Based on 17 weeks construction	24	282		48			
4.	Materials Testing (Estimate)							
5.	As-built Drawings							
	TOTAL HOURS	30	348	9	100	60	8	
6.	Disbursements (Design Phase)							
7.	Misc. Disbursements (Const. Phase)							
	TOTAL FEE							

Notes: (1) Materials inspection and testing services during construction will be provided through a sub-consultant.
(2) All costs quoted above are exclusive of G.S.T.

OHT 3

Your group provides engineering consulting services. You will be providing these services to Ruby Engineering, who has been contracted to undertake the expansion of facilities at St. Rupert's Hospital. They would like to expand to include a second 10,000 square foot wing. The project engineer is Ms. Martha Gomez. Give your consulting group a name.

Your task is to consider what services you will provide, at what cost, and to write a one-page proposal in letter form.

Remember to use the format and language you have just examined.

Terminology List

Proposal Language

- in the order of
- with respect to
- we are pleased to
- to retain
- we propose
- assuming
- upon receipt of your verbal authority
- at your convenience

Money

- to quote
- lump sum
- inclusive of
- exclusive of
- applicable disbursements
- detailed breakdown of fees
- to invoice
- costs incurred
- to carry an allowance of
- additional fee
- estimate
- budget cost of
- Progress Payment
- Final Payment Certificates
- total construction phase fee
- fee quotation

Kinds of Documents

- design
- contract drawings
- technical specifications
- contract documents
- interim design drawing
- as-built drawings
- draft plans
- contract submittals (shop drawings)
- minutes
- contemplated change notices
- change orders
- vellum originals
- digital files on disk
- contribution matrix
- we propose
- assuming
- upon receipt of your verbal authority
- at your convenience

Kinds of Services

- contract administration
- proposed structural repair
- electrical upgrading work
- support services
- periodic site review
- periodic site visit
- pre-construction meeting
- general technical consultation service
- evaluate contractor responses
- contract administration