



Member in Training (MIT)/Supervisor/Mentor
PROGRESS REPORT FORM
Instructions to MIT, Supervisor and Mentor (If Applicable)

Note: All MITs are required to have a professional member take responsibility for their work. If the MIT is a GIT, he/she must have either a P.Geo or a P.Eng. with geological expertise take responsibility for his/her work. If the MIT is an EIT, he/she must have a professional engineer take responsibility for his/her work. If the direct supervisor is not a professional member then the MIT is required to find a professional member either from inside or outside the company to act as a mentor and to take professional responsibility for their work.

Note: This form is to be submitted by the MIT, their direct supervisor and their mentor (if applicable) for every six month employment period, or/and whenever there is a change in supervision/employment. The following procedure should be followed:

- 1. MIT completes his/her portion of this report including the Professional development and Volunteer service reports downloaded from the APEGM website.**
- 2. MIT submits the report to APEGM, keeps a copy and submits one copy each to supervisor and mentor (if applicable)**
- 3. Supervisor completes the Supervisor/Mentor declaration shown on the next page, completes his/her portion of the report and submits the entire report to APEGM.**
- 4. Mentor (if applicable) completes the Supervisor/Mentor declaration shown on the next page, completes his/her portion of the report and submits the entire report to APEGM.**

If supervisor and/ or mentor portions of the report can be completed at the same time as the MIT's report it would be acceptable for the report to be submitted as one (or two) document(s). If, however, the report cannot be submitted on time (within 8 months of the start of the reporting period), it is advisable that the MIT submit a copy to APEGM before sending it to his/her supervisor and his/her mentor (if applicable). Otherwise, the MIT will be penalized for late reporting.

APEGM encourages collaborative reporting between the MIT, supervisor and the mentor, however, should the supervisor or mentor prefer to have his or her reports remain confidential from the MIT we ask that it be so indicated in the supervisor or mentor declaration on the following page. In the event that there are two or more consecutive supervisors (or two or more consecutive mentors) for one six month reporting period – e.g. one supervisor for 4 months and another supervisor for the next 2 months, more than one progress report will be required to cover the 6 month period in question.

Note to Master's and Phd students: Experience credit can be claimed for project and thesis work only. Generally, the candidate should submit his/her progress report for every six month period, and have the supervisor indicate the number of months of equivalent to full time thesis work that was done during those six months.

After January 1,2004, APEGM is subject to PIPEDA. For details on APEGM's Privacy Policy in general and how it relates to this report in particular please see www.apegm.mb.ca after January 1,2004.

Declarations of Supervisor or Mentor **PLEASE READ & SIGN**

Section A: to be completed by a professional member registered in the location of the MIT's place of employment

A1. I _____ have been registered as a professional engineer geoscientist (check one) since
(Name)
_____ in _____ with expertise in _____.
(year) (province) (discipline)

A2. I have taken professional responsibility for the quality of the MIT's work as described in this report for the period from _____ to _____. See Note 1. **Signed:** _____ **Date:** _____
(d/m/y) (d/m/y)

Section B: to be completed by a supervisor if the supervisor is **not** a professional member registered in the location of the MIT's place of employment

B1. I _____ am qualified to take responsibility for the quality of the MIT's work by reason of the following:

B2. I have taken responsibility for the quality of the MIT's work as described in this report for the period from _____ to _____
(d/m/y)
_____. See Note 1. **Signed:** _____ **Date:** _____
(d/m/y)

Section C: THIS SECTION MUST BE COMPLETED BY THE SUPERVISOR & THE PROFESSIONAL MEMBER

C1. In an effort to ensure the timely assessment of this report, I will endeavor to complete my portion of this report no later than a month after receiving the report from the MIT.

Yes No If the answer is No, please provide a reason: _____

C2. In my opinion, the MIT has completed _____ months equivalent to full time experience. See Note 2.

It is important that you answer this question.

C3. I do or do not authorize APEGM to provide information contained in this report or a copy of this report to the MIT. See Note 3. **Signed:** _____ **Date:** _____

Note 1: The reporting period should cover the same period as the MIT reporting period shown on item 1. If the reporting period for which you have taken professional responsibility does not correspond to the MIT reporting period shown on item 1 of the progress report please explain why: _____.

*Note 2: normal vacation, bank time, family leave, for which the employee is entitled, is not discounted. Overtime is not counted extra. If, however, the MIT has been absent for a significant amount of time due to special circumstances - disability leave for example, this time should be discounted from the full time number of months of experience. If the MIT has made sub-standard progress in this time frame, the number of months given may also be discounted, if you feel it is warranted. If the number of months is discounted for any reason, please provide an explanation in section 10. If the time is discounted for any reason, APEGM reserves the right to indicate the fact that the time was discounted to the MIT and to indicate that the time was discounted at the request of the supervisor/mentor. **Note to supervisors of Master's and Phd students:** Experience credit can be claimed for project and thesis work only. Generally, the candidate should submit his/her progress report for every six month period, and have the supervisor indicate the number of months of equivalent to full time thesis work that was done during these six months.*

Note 3: If authorization is not granted, for our information purposes only and recognizing that you are not obligated to do so, please provide a reason for withholding this authorization: _____.

Note 4: Each supervisor and mentor should complete a separate declaration page.

1. MIT to complete all portions of this report except for areas specifically marked “to be completed by supervisor/mentor”.

Note: Before completing this form, please familiarize yourself with APEGM’s document entitled “Nature of Acceptable Work Experience”. An important aspect of this program is progression in responsibility and complexity of work therefore the answers to question #4 and #5 are of particular interest. You are encouraged to use this report as a guide for both yourself and your supervisor in order to indicate the kind of progress you are making as a member-in-training.

I, _____
Surname Given Name Middle Name(s)
(FULL LEGAL NAME)

Currently Employed Enrolled in a program of study Or Unemployed:

By _____
Company Name Address Postal Code Phone Number

Company Email Home Address (See Note 1) Home Postal Code Home Phone Number

hereby submit the following report on my Pre-Registration Program participation from

_____ to _____
(d/m/y) (d/m/y)

During this period, I was employed by:

Company Name Address Postal Code Phone Number

Company Email

as _____ under the immediate supervision
Description of position held

of _____
Supervisor’s Name (see Note 2) Present Address Postal Code

Supervisor’s Phone No. Supervisor’s Email

If your supervisor was not a P.Eng. or P.Geo. registered in Manitoba please provide the name of the professional member who is taking responsibility for your work during this period (mentor):

Mentor’s Name (See Note 2) Present Address Postal Code

Mentor’s Phone No. Mentor’s Email

*Note 1: Provision of home information is voluntary. See Privacy Policy at www.apegm.mb.ca for further details.
Note 2: Under PIPEDA, you may not give any information other than the name, title, and business address and business phone number of an individual without the consent of that individual. Please see Privacy Policy at www.apegm.mb.ca for further details.*

2. Work Experience:

2.1 Please give a description of your Engineering/Geoscientific Work Experience for the period noted in question #1, **including** information in support of your responses to questions **2.2, 2.3, 2.4** and **2.6**. Append additional sheets as necessary.:

As Project Engineer-in-Training, I had responsibility for the design and delivery of the draft tender for Contract 5511 (PTH 20 Bituminous Pavement) including the following activities:

- Designed the overall pavement structure for the project. Starting with the established theoretical pavement designs (as provided by the Pavement Design Engineer in the Materials Engineering Branch), used the appropriate base course equivalencies to adjust designs in areas of new construction. This provided a more easily constructed series of lift thicknesses throughout the length of the project, without sacrificing structural strength. Financial considerations included comparing the cost of an additional quantity of Class “C” bituminous pavement with the potential savings in bid unit prices for the material due to ease of construction.
- Set up a system of pavement coring, to verify that the assumed existing pavement structure at key areas matched what was reported in the Department’s inventory. Coordinating with the Materials Engineering Branch and the coring crew was required in delivering this activity.
- Designed sub cuts at three bridge structures. This was to ensure adequate pavement structure at these key areas and to correct the riding profile into each structure, while matching the existing elevation of each bridge deck and maintaining the Department’s standards for vertical geometry.
- Measured the existing pavement cross-fall and depth of rutting throughout the project. This was to verify that the nominal leveling lift as specified by The Materials Engineering Branch would be sufficient to restore the desired design cross-section.
- In conjunction with the Regional Design Engineer, assessed the two curves within the project limits that had substandard radii. While the curves did not meet current Department standards for new construction, they were deemed acceptable under rehabilitation standards for this project. Similar curves immediately south of this project required realignment. However, maintaining the existing radii for the curves on this project was deemed acceptable (and noted as a design exception in the Geometric Design Criteria) due to the presence of better site lines, lower deflection angles and lower traffic volumes.
- Identified during the functional design process the need for utility revisions. Met on site with the Engineering Technologist from Manitoba Hydro to discuss utility revisions at the north junction of PR 269 and PTH 20, as required to accommodate the realignment of PR 269 to correct a skewed intersection. Exchanged survey information and drawings via email to determine a preliminary proposal for relocation of hydro poles. Compared locations suggested by Manitoba Hydro to design cross-sections to determine if there would be any conflict with the new alignment, including allowances for acceptable setback, while considering Manitoba Hydro’s requirements for anchoring, maximum permissible span between poles, and line clearance to the traveled surface.

- Calculated and proposed material quantities for the surfacing portion of the project, including bituminous and granular aggregates and asphalt cement. Calculated and proposed material quantities associated with removal of substandard timber structures and installation of pre-cast concrete through-grade culverts. Calculation was based on a frost-taper design to minimize differential settlement during freeze-thaw cycles. Used these quantities in the preparation of detailed engineering estimates for the project, including contract items, non-contract purchase items, and internal and administrative overheads. Revised these estimates as necessary to reflect design changes and changes to project scope.
- Oversaw and directed the work of a survey crew during the preliminary survey and design phase of the project, including the capture of cross-sectional information for computerized earthwork calculation and verification of proposed road alignment
- Accompanied the Property Appraisal & Acquisition Officer from Land Management Services to initial negotiations with a potentially affected landowner. I was acting as a source of technical information and first-hand knowledge of construction details and scope of the project.
- Prepared draft tender documents for Contract No. 5511, with an estimated contract value of \$3,400,000.00 and a proposed advertising date of late April, 2005. Documents included contract special provisions and detailed design drawings.

As the surfacing Inspector for Contract No. 5412 (as reported in the previous progress report). I also had responsibility for the following:

- Following completion of the contract, developed a proposal in response to the Contractor's request for a reduction in liquidated damages due to the assessment of working days above and beyond the maximum allowed in the contract. Several issues were raised by the Contractor in a detailed letter to the Department. These issues required analysis of the Contractor's construction and production methods during the dates in question, and comparison to the Department's specifications and reasonable expectation of established rates of delivery. This included preparing an operational timeline of the actual sequence of construction activities on the project over the period in question. I proposed that the Contractor was entitled to two additional working days due to an increase in material quantities above the tendered quantities, based on the appropriate formula in the Department's specifications. Additional claims for a reduction in liquidated damages were dismissed, as it was deemed that working days were charged correctly according to the Department's standards and those delays were ultimately due to the Contractor's own scheduling and construction methods. Based on these findings, a detailed report was prepared on behalf of my Project Manager, and accepted by the Construction Engineer.
- The above assignment had an added degree of difficulty, as the Contractor identified my inspection duties during construction activities at the Valley River bridge approaches as one of the sources of delays in production. Despite my personal feelings in the matter, professional and ethical obligations required me to be objective during analysis of the period in question, and base my proposal solely on Department specifications, reasonable expectations, past precedence and the overall spirit of fairness outlined in the Project Partnering Agreement between the Department and the Contractor.

I also gained practical experience during the following site visitations:

- Observed late season construction during grading and shoulder widening operations on PTH 68. In spite of an unfavourable weather forecast, particularly given the time of year, the Contractor insisted on continuing to strip topsoil further along the project rather than focus on completing grading operation on areas already opened up. This represented a differing philosophy on risk management. The Department stressed a proactive approach, advising that trimming and leveling for drainage should be undertaken to minimize delays due to unfavourable weather, and that general preparation to “winterize” the project site should be underway. The Contractor instead chose a reactive approach that would continue to deal with bad weather if and when it arrived. It is worth noting that due to issues such as this, this particular project has been carried over to a second construction season, whereas the design of the project (and past history of similar work) indicated a single season of work, even allowing for weather delays. This places a significant strain on the budget for the project, as in-house engineering charges have now exceeded originally estimated costs. Additionally, visiting this project site demonstrated the limitations of engineering designs. Contractor performance on the project did not meet department expectations, even after numerous design changes to grade lines were made to accommodate the Contractor’s inability to construct drainage within accepted tolerances.
- Observed in-stream work during the removal of the ford crossing over the Swan River, including the assembly and removal of a temporary coffer dam. This project was initiated by the Department of Fisheries and Oceans, who identified the site as being in contravention of the Fisheries Act by inhibiting fish passage. This was one of the more extreme examples of the role of other regulatory agencies outside of the Department.

Note: Supervisor and Mentor assessments are to be shown by indicating either **Yes** or **No** in the space following the question:

Do you agree with the answer provided by the MIT?

If you are a professional member supervisor or a mentor, complete the Professional Member field. If you are a non-member supervisor, complete the non-member field. Comments should be made as applicable especially if the answer is No.

Supervisor/Mentor Assessment: Do you agree with the answer provided by the MIT?

Professional Member (Yes/No) ____ Yes _____ Non-Professional Member (Yes/No) _____

Comments: Much of the EIT’s work was done independently. Standard Reviews were conducted during the design and draft tender development of PTH 20.

2.2 While undertaking the work experience indicated in 2.1, I have applied theory in:

- i) Analysis/Interpretation ii) Project Design & Synthesis iii) Testing/Verification
- iv) Implementation v) Other(s) _____
(please identify)

Supervisor/Mentor Assessment: Do you agree with the answer provided by the MIT?

Professional Member (Yes/No) ___ Yes _____ Non-Professional Member (Yes/No) _____

Comments: ___ Comments: ___ The EIT worked with a pavement design provided by Materials Engineering. The structure thickness of that design was redesigned to accommodate construction variables.

2.3 While undertaking the work experience indicated in 2.1, I obtained practical experience by:

- i) Studying or being exposed to existing engineering/geoscience works
- ii) **For EITs:** Applying designs as parts of larger systems
- iii) **For GITs:** Integrating geoscience data analysis with larger projects/systems _____
- iv) Experiencing the limitations of engineering designs/geoscience projects
- v) Experiencing time as a factor in the engineering/geoscience process
- vi) Other(s) _____
(please identify)

Supervisor/Mentor Assessment: Do you agree with the answer provided by the MIT?

Professional Member (Yes/No) ___ Yes _____ Non-Professional Member (Yes/No) _____

Comments: ___ The curvature radius was an issue on the PTH 20. The EIT was involved in an analysis on how to handle substandard curvature on his project of PTH 20. Curves on PTH 20 on a previous job were built to a new standard. Because of the Geometry, curves in the EIT's section were left

2.4 While undertaking the work experience indicated in 2.1, I was exposed to the following areas of engineering/geoscientific management:

- i) Planning ii) Scheduling iii) Budgeting iv) Supervision
- v) Project Management vi) Risk Assessment
- Other(s) _____
(please identify)

Supervisor/Mentor Assessment: Do you agree with the answer provided by the MIT?

Professional Member (Yes/No) ___ Yes _____ Non-Professional Member (Yes/No) _____

Comments: __The EIT's challenge was to produce a design and draft tender within a set time frame and budget.

2.5 During this period, my communications skills improved, as follows:

(i) Oral presentations

Presented a proposed route detour of PTH 20 at a council meeting of the Rural Municipality of Dauphin, required to accommodate removal of four timber structures. Explained the conceptual timing of the proposed work and how maintenance and signing of the detour would be handled, and answered questions on the impact of the detour to the R. M. This presentation secured the council resolution required to proceed further with the project as envisioned.

Presented a potential land purchase to an affected landowner, explaining the engineering need behind the proposed acquisition, the geometry of the proposed alignment and how it might impact the landowner. Provided an introduction into the land acquisition process, prior to negotiations with the Property Appraisal and Acquisition Officer from Land Management Services. This presentation enabled further negotiations with LMS and the landowner, although they ultimately proved unsuccessful.

(ii) Written documents

Prepared the detailed written proposal for reduction of working day penalties associated with Contract No. 5412.

Wrote the draft tender of Contract No. 5511.

Wrote a letter requesting resolutions from the RM of Dauphin Council for the paving of municipal intersections with PTH 20 and for future maintenance of these intersections.

Engaged in technical discussions via email with various Department representatives in other branches, as well as with officials from other agencies and with various equipment suppliers.

(iii) Interaction with others

Participated in meetings with the Councils for the Rural Municipalities of Dauphin and Mossey River.

Participated in on-site meetings with representatives from Manitoba Hydro, Land Management Services, and the Department of Fisheries and Oceans.

Directed the activities of the survey crew during the design phase of Contract No. 5511

Interacted with representatives of the department, both regionally and in head office, during the design process for Contract No. 5511. Branches included Materials Engineering, Technical Services, Planning & Design, and Environment.

Participated in associated design meeting, draft tender review, and drawing review with senior management.

Participated in the post-construction internal audit of Contract No. 5412 by the Department's Engineering Audit and Quality Assurance section.

(iv) Other(s)

Supervisor Assessment: Do you agree with the answer provided by the MIT?

Professional Member (Yes/No) ___ Yes _____ Non-Professional Member (Yes/No) _____

Comments: ___The EIT's Actions were very independent in preparing this contract. Results were very successful.

2.6 During this period, I was required to make decisions based on an engineer's/geoscientist's professional and ethical responsibilities as follows, to:

- i) The public __x__ ii) The profession __x__ iii) The client and/or employer ___x___
iv) Co-workers __x__ v) The environment __x__

Supervisor/Mentor Assessment: Do you agree with the answer provided by the MIT?

Professional Member (Yes/No) ___ Yes _____ Non-Professional Member (Yes/No) _____

Comments: _The EIT Dealt with many outside agencies and government officials affected by the potential construction of PTH 20.

2.7 During this period, I had to consider the social implications of my work in the following areas:

During the design phase of Contract No. 5511, a number of substandard accesses onto PTH 20 were identified and proposed to be closed, mostly due to the skew angle at which they intersected the highway. One particular access, which the Rural Municipality of Mossey River did not wish to have severed outright, was proposed to be realigned to intersect PTH 20 at a standard right angle. This alignment would require securing right-of-way from the adjacent landowner. In this case the value of the new alignment to the Department had to be balanced against the impacts to the affected landowner. In the end, it was felt that the benefit of the improved geometry was outweighed by the negative impact on the landowner's agricultural activities, as well as the cost associated with the relocation, given the lack of accident history at that particular access.

The design of the proposed route detours to PTH 20 had balance the inconvenience to local residents and the Rural Municipality of Dauphin with improved ease of construction and enhanced safety to the motoring public during the proposed removal of timber structures. Local access would still have to be maintained, and dust control provided, as well as maintenance on the municipal roads serving as the detours.

Supervisor/Mentor Assessment: Do you agree with the answer provided by the MIT?

Professional Member (Yes/No) ___ Yes _____ Non-Professional Member (Yes/No) _____

Comments: _Much of the work within Highways has an impact on local landowners and residences

3. Personal Development

3.1 Examples of my ability to work effectively as part of a team, during this period, include:

The daily performance of my duties within the Department requires working in a team environment. A structured reporting system exists for financial, design and construction issues, and interaction outside of the Regional office with other branches of the Department is both frequent and necessary to meet my mandate of the successful delivery of roadway construction activities. My primary duties are project management related, and cannot be performed without the input and assistance of many other individuals.

Supervisor/Mentor Assessment: Do you agree with the answer provided by the MIT?

Professional Member (Yes/No) ___ Yes _____ Non-Professional Member (Yes/No) _____

Comments: _While reporting to myself and a senior project manager. The project engineer in training is required to work with regional technical services resource staff and head office engineers and technical staff.

3.2 Examples of my ability to assume responsibility during this period include:

Had ultimate responsibility for the delivery of the design and draft tender of Contract No. 5511. Beyond my own design and management activities for the project, I was responsible for ensuring that the required work undertaken by other individuals, whether within the Region or in other branches, was completed and forwarded through appropriate channels.

Supervisor/Mentor Assessment: **Do you agree with the answer provided by the MIT?**

Professional Member (Yes/No) ___ Yes _____ Non-Professional Member (Yes/No) _____

Comments: __The EIT's work was very independent.

4. I have shown progress since the last report (where applicable) as follows:

Since the last report was filed I have been required to take on additional responsibility in terms of the scope of the work I perform, and the scale of the projects I am assigned to. I have also been assigned increased design work associated with these projects, of a greater complexity.

Supervisor/Mentor Assessment: **Do you agree with the answer provided by the MIT?**

Professional Member (Yes/No) ___ Yes _____ Non-Professional Member (Yes/No) _____

Comments:

5. I consider myself to be lacking in exposure to, or requiring improvement in, the following areas:

The demands on my time and the scope of the project associated with Contract No. 5511, coupled with Department initiatives to reduce overheads, has demonstrated that I require improvement in the area of time management.

Supervisor/Mentor Assessment: **Do you agree with the answer provided by the MIT?**

Professional Member (Yes/No) ___ Yes _____ Non-Professional Member (Yes/No) _____

Comments: _Time management is the key to the delivery of a high level project as was PTH 20.

6. During this period, I undertook the (additional) continuing education and professional development activities that are shown on the attached form.
7. During this period, I undertook the (additional) volunteer activities shown on the attached form.
8. I would like to provide the following additional, relevant information:

9. I understand that this progress report will be reviewed by my immediate supervisor and, where applicable, by the mentor who took responsibility for my work.

The MIT is responsible for submitting a copy of his or her report to the supervisor and mentor (as applicable) who will then forward their copies directly to APEGM. APEGM will no longer forward progress reports to supervisors or mentors.

Note: Your report will not be considered unless it is signed and dated.

Date

Signature

To be completed by Supervisor/Mentor:

10. Supervisor/Mentor Comments:

I would like to provide the following additional relevant information about the MIT's progress and/or character (**Note: you must complete this portion**)

The EIT's work ethic is very professional and is progressing well from senior inspection work to design and contract preparation. The EIT's next period will be involved in contract administration and construction of a 3.5 million dollar surfacing project.

Supervisor/Mentor Signature:

Date

Signature

Note: This report will not be considered unless it is signed and dated.

Note: Each supervisor or mentor should complete a separate page.

For Professional member only:

Please affix and sign seal: