Geotechnical Manual Program Delivery Plan (GMPDP)

1) Background:

- GS management has recognized the need to develop standards, guidance and policies for Geotechnical Services to assist in staff direction, staff development, promote uniformity/consistency, and succession planning.
- Geotechnical Services (GS) has created a Geotechnical Manual (GM) to document the Department’s standards of practice for geotechnical investigations, design, reporting, quality management, and other business practices.
- The GM has been a work in progress for the last several years.
- Management recently took steps to assign a Program Manager (PM) to bring more focus, planning and issue resolution to accelerate the completion of the GM.
- Management has instructed the PM to develop a Geotechnical Manual Program Delivery Plan (GMPDP) to ensure all GMPDP team members understand the direction and mandates assigned to this effort, including:
  a. Management expectations;
  b. Teamwork and consensus obligations;
  c. Detailed outline, boundaries and changes;
  d. Team agreement directives;
  e. Roles and responsibilities;
  f. Performance measurement, risk management and corrective action requirements;
  g. Quality assurance and control conditions, and;
  h. Schedule, budget and document control duties.
- The GM will be completed in a two step approach:
  a. Step I will occur over the next 12 months and will address and complete all modules on the Geotechnical Standards, Procedures and Guidance Development Management Status Report – Based on Work Plan for Fiscal Year 13/14 and 14/15 (GSPGD), dated 9/19/13, Page I and associated Page 2 items to be identified during meetings with the Module Development Teams.
  b. Step I has been given a schedule completion date of September 2014.
  c. Step II will follow with a focus on all remaining GSPGD, Page 2 items and any newly identified topics. The Step II scope and schedule is yet to be determined.
- The GMPDP will also be used to develop and manage training, future manual work development (roadmap), and the service contract (scope to be defined later).
- The draft GMPDP was reviewed by several MDT Chairs and GS Office Chiefs members to obtain input and guidance prior to submittal to management.
- The final GMPDP has been approved by management and is now ready for implementation.

2) GMPDP Purpose:

- The purpose of the GMPDP is to manage the timely completion of the Geotechnical Manual with a focus on quality, performance and teamwork.

3) GMPDP Development, Implementation & Management Plan Schedule

- See Attachment A
4) **GMPDP Team Members:**
- Project Sponsor – Phil Stolarski
- Program Manager – Roy Bibbens
- Project Manager I – Craig Hannenian
- Technical Advisor - John Bowman
- Module Development Team (MDT)
  - MDT Chair
  - MDT Members
  - Stakeholder(s)
  - Ad-hoc Representative(s)
- Program Administrators:
  - Schedule Management: Susanna Aaltonen
  - Document Control Management: Susanna Aaltonen
  - Resource Management: Rudy Lopez
  - Web Support: Kim Goodman

**MDT Formation**
- The existing technical and/or ad-hoc teams will continue to work on their respective modules and are now called MDTs.
- The PM may identify stakeholder(s) and/or additional members to join the MDTs.
- For future work, the PM will identify the appropriate GS personnel and stakeholders.

5) **GMPDP Team Agreement**
- The Sponsor, Program Manager and Project Manager I agree to support the other GMPDP team members to ensure quality of work and completion of all assigned tasks.
- All GMPDP members agree to ensure their specific tasks and work products are developed and completed with a focus on quality, compliance with the detailed outline, schedule and budget, the GMPDP and other applicable requirements as directed by the Program Manager.
- All GMPDP members agree to utilize and comply with the program management tools and systems noted herein (Schedule Management Plan, CapCorp Management Plan, Document Control System, and Master Resolution Lists).
- All GMPDP members agree to perform their tasks pursuant to the project schedule. If an event occurs that may impact the approved detailed outline, project schedule or budget, the Project Manager I and the entire MDT will be notified within one business day of the awareness of the potential delay. The MDT member who becomes aware of the issue will do the initial notification.
- All GMPDP members agree to timely report CapCorp expenditures to the PM (or designated representative) pursuant to the CapCorp Management Plan.
6) **GMPDP Instructions: Detailed Outline, Schedule, Budget, Boundaries and Changes**

A. **Detailed Outline and Schedule Development Process:**

A detailed outline is a subject outline that also includes a brief explanation of the intended content, and estimated length in pages. The explanation could be a bullet list or a few sentences to facilitate a common understanding of what will be written. Each MDT is responsible to perform the work within the general module boundaries, provided herein, and the approved detailed outline. Items 1-19 below provide an overview of the detailed outline steps and process. For an example of a detailed outline See Example Detailed Outline, Attachment B.

1. The manual has numerous modules with varied degrees of completion.
2. The task summary for the GM is currently defined on the *Geotechnical Standards, Procedures Development* (GSPGD) dated 9/19/13, Page I and Page 2.
3. The focus of the work in Step I (next 12 months) will address all modules on GSPGD, Page I. The balance of page 2 items and newly identified topics will be addressed in Step II.
4. The GSPGD will be replaced with a new schedule for each module.
5. To ensure compliance with the direction provided in the GMPDP, the Program Manager will revisit and evaluate existing outlines, partially completed modules, and completed modules.
6. Several existing outlines and nearly-completed modules appear to be within the intent of the GMPDP and will require limited or no modifications (changes may be small or not needed!).
7. In some cases, as determined by the PM, new detailed outlines will need to be developed by the MDT and approved by the PM.
8. Each MDT will be given specific direction by the Program Manager relating to the detailed outline and boundaries, to be utilized by the MDT during the development of the detailed outline.
9. The MDT will submit a draft detailed outline for review and comment by the PM.
10. Meetings will be held between the PM and the MDT to finalize the draft detailed outline.
11. The MDT will develop a draft schedule and budget using the draft detailed outline.
12. The PM will provide schedule milestones to be incorporated into the approved schedule (Attachment C). Each MDT can add milestones to the schedule as needed. The level of detail and milestones to be included in each schedule will be determined in the Program Manager meeting with each MDT.
13. All schedules and budgets must be developed to ensure a completion date no later than September 30, 2014.
14. The Program Manager may work with the MDT Chair to reduce the draft detailed outline to stay within the limits imposed by the schedule and/or budget.
15. Work not programmed for September 30, 2014 completion will serve as a basis for future module work.
16. Upon receipt of Notice to Proceed (including the approved: detailed outline, schedule, budget and boundaries) by the PM, the MDT will develop the draft module for final approval by the Program Manager.
17. The MDT will recognize the critical need to ensure the work is developed and completed with a key focus on the limits imposed by the CapCorp allocation and schedule. Remaining within your MDT’s allocation is critical!
18. The PMI will perform QC/QA evaluations (focus on GMPDP, detailed outline, schedule, budget, and applicable technical/editorial issues) during the MDT process.
19. Should a change in the detailed outline, schedule or budget be required, a written request must be made to the Project Manager I.

B. Module Boundaries:

Given the September 2014, Step I deadline and the current allocation limitations, it is necessary to implement certain controls to ensure each MDT has specific targets for their respective module. The Program Manager and Project Manager I will provide each MDT with the boundaries and limits that will pertain to the development of the detailed outline and module language. It is imperative that each MDT remain within the boundaries noted below.

All modules must:
   a. Provide expectations for the geoprofessional
   b. Provide a measurable standard or procedure so that the QMP can be applied to it
   c. Provide specifics, not just generalities
   d. Promote uniformity
   e. Comply (not conflict) with existing departmental standards, procedures, expectations etc, or have agreement with stakeholder(s) to make appropriate modifications to other documents
   f. Have stakeholder concurrence, if needed
   g. Document existing practices, not the individual writer’s vision of how things should be (some change is OK but needs to be vetted early and impacts identified)

Modules that result in professional recommendations (Design Modules) must also:
   h. Provide a roadmap for investigations, testing, design, communication, process, and reporting
   i. Capture institutional knowledge for assisting existing and future staff on the topic
   j. Use existing standards/procedures as much as possible. The module is original only were necessary due to lack of existing standards/procedures, or to present California Amendments.
   k. Follow the “Design Module” outline where practical (will be presented during GMPDP Phase II meetings.)

C. GMPDP Change Process:

Changes to the GMPDP must be approved in advance by the Program Manager and comply with the GMPDP Change Processes (Attachment D).

7) Role - Program Sponsor –Deputy Division Chief METS/GS

   • Supports the Program Manager (PM) in the resolution of critical issues that cannot be resolved at the MDT level.
• Supports the Dispute Resolution process.
• Ensures the GMPDP members comply with the Geotechnical Manual Program Delivery Plan (GMPDP).
• Provides the GMPDP team with the necessary resources to complete the work.

8) Role – Program Manager

• Ensures compliance with the GMPDP.
• Makes all decisions and final determinations required in the GMPDP.
• Editor of the Geotechnical Manual.
• Directs the Project Manager I and MDT Chairs as necessary to ensure GMPDP, detailed outline, schedule, budget, and quality compliance. Provides direction and/or responses to issues identified in the monthly status reports.
• Approves detailed outline and ensures compliance.
  o Coordinates resolution of detailed outline discrepancies.
  o Coordinates resolution of detailed outline issues with project Sponsor.
  o Approves detailed outline change requests.
• Approves schedule and ensures compliance.
  o Approves schedule recovery plans and plans to avoid future delays (e.g. increased meeting frequency to avoid future delays).
  o Approves schedule change requests.
• Approves budget and ensures compliance.
  o Resolves differences between scoping plan budget and CapCorp allocation.
  o Approves CapCorp change requests.
• Review the GMPDP for effectiveness and continuous improvement.
• Implements dispute resolution process.
• Provides monthly status updates to the Sponsor.
• Directs the use of the Master Resolution List (MRL) when needed.
• Approves Geotechnical Manual and associated documents.

9) Role - GS Office Chiefs

• Support the Program Manager by reviewing draft detailed outlines, draft and proposed final modules, dispute resolution documents, and change requests.
• Make necessary staff assignment modifications to assure the MDT members can dedicate appropriate time to complete their module assignments.
• Ensure subordinate MDT members attend meetings and comply with the GMPDP with a focus on detailed outline, schedule and budget compliance.
• Support the Program Manager (once the Program Manager makes a determination or gives the MDT direction).
• Technical participation as desired/interested.

10) Role – Project Manager I (PMI)

• The primary role of this position is to act as the single focal point for communication for the MDTs.
• Participates in MDT meetings and module development with focus on detailed outline, schedule, budget and quality compliance.
• Develops and distributes meeting minutes relating to detailed outline, schedule, budget and quality compliance. Note: this will not include technical issues.
• Actively works with the MDT Chair and members on team building and consensus development.
• Reviews Monthly Status Reports provided by the MDT chairs and Program Administrators to ensure compliance with the GMPDP.
• Provides Monthly Status Reports to the Program Manager with a focus on failure analysis and recommendations for resolution pursuant to the following:
  o Identify deviations from the approved: detailed outline, schedule and budget.
  o If a deviation significantly impacts the detailed outline, schedule, budget and quality, the PMI provides the Program Manager with a written report (issues, options and recommendation for resolution).
• The PMI will communicate on a regular basis with the Program Manager and the MDT Chairs to ensure the key issues are discussed and shared.
• Consistently communicates with and directs the GMPDP Administrators.
• Supports and prepares documents for possible dispute resolution.
• Maintains a document control system.
• Performs editorial reviews of draft modules.

11) Role – Technical Advisor (TA)
• The primary purpose of this position is to support the MDT(s) in completing the work within the boundaries of the detailed outline.
• Provides technical support and input as required.
• May attend meetings for the PMI to focus on detailed outline, schedule, budget and quality compliance. Issues meeting minutes to the PMI.
• Actively works with the MDT Chair and members on team building and consensus development.
• Reviews Monthly Status Reports provided by the PMI and provides comments back to the PMI.
• May author whole or portions of modules.
• Supports and prepares documents for possible dispute resolution.
• Maintains a document control system.
• Performs editorial reviews of draft modules.

12) Role – Module Development Team (MDT) Chair
• Meets with the Program Manager and Project Manager I to develop the module detailed outline, schedule and budget.
• Promotes a team-based atmosphere working with the PMI and Technical Advisor (TA), while ensuring compliance with the GMPDP.
• Schedules module development meetings as necessary to comply with the approved schedule and ensures the PMI is invited.
• Ensures a working majority of MDT members attend all scheduled meetings. If a meeting is delayed, the Chair will reschedule to ensure the schedule is not impacted.
• Meets as necessary with the Program Manager to address key issues, problems or challenges relating to detailed outline, schedule, budget and quality compliance.
• Manages and provides oversight of the team’s work to ensure compliance with the GMPDP, detailed outline, schedule, budget while ensuring quality work.
• Carefully reviews MDT work products to identify any GMPDP, detailed outline, schedule, budget, quality non-compliance issues.
• Takes corrective measures as necessary to recover identified non-compliance issues.
• Communicates and interacts, when required, with the Resource and/or Schedule Administrator.
• Submits, when required by the GMPDP, Change Requests to modify the detailed outline, schedule and/or budget to the PMI. No change to these three elements can be made without written approval from the Program Manager.
• Documents all reviews of MDT work products and corrections taken.
• Develops and submits, per the reporting schedule, Monthly Status Reports (MSR) to the Project Manager I with respect to detailed outline, schedule and budget compliance and the results generated from the quality of work review by the Chair. See Attachment E and J.
• The MDT Chair may include technical issues in the status report if they impact the detailed outline, schedule, budget and quality.
• Implements and takes action on the direction provided by the Program Manager relating to the applicable status report or as otherwise required.
• The MDT Chair will prepare meeting minutes (relating to detailed outline, schedule and budget compliance) when the PMI is absent and send the minutes to the PMI.
• Maintains a document control system.

13) Role – Module Development Team Members
• Responsible for ensuring compliance with the GMPDP.
• Author modules.
• Attend MDT meetings scheduled by the MDT Chair.
• Responsible for delivering their portion(s) of the approved module work plan/outline.
• Responsible for timely communication of critical issues to the MDT Chair.
• Review modules that have been through the editing process for technical integrity (i.e. ensure that the editing process did not change the original technical intent).

14) Role – Program Administrators
• Schedule Management
  o Works with the PM, PMI, and MDT Chair to develop approved schedule.
  o Processes changes to the schedule as directed by the PM.
  o Communicates and interacts with the MDT Chairs.
• CapCorp Management
  o Obtains monthly CapCorp Charging data for 6TTGS.
  o Generates reports in accordance with the CapCorp Management Plan.
  o Processes changes to budget items as directed by the PM.
  o Communicates and receives direction from the PM and PMI.
  o Communicates and interacts with the MDT Chairs per the CapCorp Management Plan.
  o Develop the monthly reporting schedule.
  o Provides required quarterly reports to SP&I.
• Document Control Management
15) **CapCorp Management Plan:**
- See CapCorp Management Plan (Attachment F)

16) **Schedule Management Plan**
- See Schedule Management Plan (Attachment G)

17) **Dispute Resolution Process**
It is expected that every effort be made to resolve disputed issues at the MDT/Stakeholder/PMI level. If an unresolved issue is threatening the detailed outline, schedule, and/or budget the Dispute Resolution Process (Attachment H) should be used to resolve the issue.

18) **Document Control System:**
- Document Control is the act of maintaining records of decisions made, reports generated, module versions, etc. that are readily retrievable.
- All GMPDP participants will document key issues relating to the detailed outline, schedule, budget and quality to ensure a record is maintained.
  o The MDT Chair is responsible for maintaining records, if generated, that document technical decisions made during module development.
  o The Document Control Administrator will maintain the following:
    a. GMPDP and attachments
    b. Approved detailed outline, schedule and budget
    c. Change requests and approvals
    d. Monthly reports
    e. Corrective action plans
    f. MRLs
    g. Dispute resolution documents
    h. Quarterly SP&I reports
    i. Correspondence relating to any of the above
- All documents will be maintained in a logical manner to ensure easy access.
GMPDP Attachments

Attachment A - GMPDP Development, Implementation & Management Plan Schedule
Attachment B - Detailed Outline Example
Attachment C - Schedule Tasks/Milestones with Explanations
Attachment D - GMPDP Change Process and Form
Attachment E - Monthly Status Report Template
Attachment F - CapCorp Management Plan and Forms (CCMP)
Attachment G - Schedule Management Plan (SMP)
Attachment H - Dispute Resolution Process
Attachment I - MRL Template
Attachment J - 2013/2014 Calendar

NOTE: When this GMPDP is approved the existing development process will be removed from the GM web page.