ANNUAL REPORT

FOR THE

DIGITAL MULTI-PURPOSE RANGE COMPLEX MITIGATION AND MONITORING PLAN

FORT BENNING, GEORGIA

APRIL 2008

Prepared for:
Environmental Management Division
Directorate of Public Works
Fort Benning, Georgia

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10 April 2008

1.0 INTRODUCTION

This document provides the status of the environmental mitigation and monitoring for the Digital Multi-Purpose Range Complex (DMPRC) as detailed in the Final Digital Multi-Purpose Range Complex Mitigation and Monitoring Plan (Fort Benning, 2005) (hereafter, the Plan). The Plan was prepared as part of the Army's compliance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality regulations (40 CFR 1500), and Army NEPA Regulations (32 CRF 651, also known as Army Regulation 200-2, abbreviated AR 200-2). The Plan was incorporated into the Record of Decision (ROD) for the DMPRC Environmental Impact Statement (EIS) (Fort Benning, 2004a and 2004b). Therefore, the Plan elaborates on environmental mitigation and monitoring required by the DMPRC EIS and ROD. In accordance with the Plan, this Annual Report summarizes the progress of the required mitigation and monitoring and notes any deficiencies and corrective action. Part of the mitigation was achieved by designing the DMPRC to minimize environmental impacts by careful placement of the range components, thereby minimizing significant impacts resulting from construction and future operation of the range. Modifications have been made to the DMPRC design since the previous Annual Report, which was dated 2 October 2007 and covered the timeframe from 1 January 2006 through 31 December 2006. This Annual Report will summarize those design modifications, as well as provide a brief analysis of changes in associated environmental impacts (Fort Benning, 2006).

Army NEPA Regulation (32 CFR 651.5(g)) requires that the design changes be evaluated to determine if they constitute "substantial changes in the proposed action that are relevant to environmental concerns; or significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impact." If so, then supplemental NEPA documentation is required. Mitigation monitoring can also lead to preparation of supplemental NEPA documentation and additional monitoring if changes in project activities occur (32 CFR 651 Appendix C (e)(5)). Therefore, this Annual Report also is being used to document the evaluation of the redesigns and the resulting determination that supplemental NEPA documentation is not required. While redesigns have been made, all range components still will be contained within the original DMPRC footprint, adverse environmental impacts are not expected to be significant (Fort Benning, 2006).

The timeframe covered by this Annual Report is from 1 January 2007 through 31 December 2007 and encompasses all changes made in the design of the DMPRC through the end of 2007. Currently, the DMPRC site is under construction. The DMPRC site was divided into four construction phases (Figure 1): Phase 1, which includes the administrative structures and staging area; Phase 2, which includes the area from Hourglass Road to Underwood Road; Phase 3, which includes the area from Underwood Road through Sally Branch; and Phase 4, which includes the area from Sally Branch northeastward to the end of the DMPRC footprint.

2.0 SUMMARY OF ACTIVITY

2.1 Design Changes

Design changes for the DMPRC were made to account for limitations in the topography, to meet training safety requirements, and to reduce environmental impacts. A summary of the design changes is provided below and is depicted in Figures 2A, 2B, 2C. Further details on design changes are available by contacting Mr. George Williams, DMPRC Environmental Monitor, Environmental Management Division (EMD), Directorate of Public Works (DPW), Fort Benning, Georgia.

A. Tank Trail Modifications

- An approximately 100-foot portion of Trail 3 in Phase 3 was extended in width by approximately 25 feet in order to construct the proper slope for the road, and to allow for proper drainage of Trail 3.
- At Trails 3 and 4 crossings of Sally Branch, the construction contractor installed matting and riprap streambank stabilization in order to correct streambank erosion and to stabilize the trail crossings.
- At Trails 3 and 4 crossings of Sally Branch, the construction contractor installed additional ditch turn outs and rip rap in order to control concentrated flows along the trails that were causing erosion at the crossings.
- At Resaca Road at the intersections of Trails 3 and 4, an existing culvert that was damaged and no longer functioning was removed and additional stabilization measures, including matting and riprap, were installed to allow for drainage and prevent erosion of the road along a newly installed ditch.

B. Target and Defilade Modifications

- The construction contractor was authorized to extend the clearing and grading limits and remove approximately four hardwood and pine trees along the edge of the clearing limits, on the northern end of Mover 9, due to the slope required to construct the mover.
- T25 was shifted to avoid a wetland impact on the eastern side of the target near Sally Branch.
- Grading limits were shifted north of Resaca Road near Mover 9 and Mover 5 to facilitate earthmoving operations and to allow room for the stockpiling of topsoil for target construction.
- Mover 8 was shifted to be relocated partially outside of the eastern DMPRC clearing limits in order to avoid exceeding the clearing limits on the northern portion of the site, and to allow for better target location with respect to topography.
- Range Marker 4 was shifted to be relocated inside established clearing limits to facilitate line-of-sight (LOS) of the Range Marker. This was needed because of

topography limitations and the need for the Range Marker to be placed in a visible location in close proximity to the Range.

- The removal of approximately three hardwood trees was authorized near SA38, on the edge of a leave-tree area, to allow the target to be constructed in the designed location.

C. Erosion, Sedimentation, and Pollution Control Plan Modifications

- The Erosion, Sedimentation, and Pollution Control Plan (ESPCP) was modified to include additional areas of land disturbance near berms around various targets, new haul routes within the DMPRC, and new topsoil berms in Phase 3. The construction contractor is required to submit the revised ESPCP to Georgia Environmental Protection Division (GA EPD), along with payments of fees for the additional acreage that will be cleared, and an updated Notice of Intent (NOI). Presently, the contractor is preparing a proposal to submit the revised ESPCP, fees, and NOI to the GA EPD.

D. Miscellaneous Item Modifications

- Changes were proposed to the Phase 4 grading area.
- Existing culverts were used to manage the flow of a spring that was identified within the right-of-way of Resaca Road.
- A new stockpile area was proposed in Phase 4 near Mover 3 and Mover 8.
- An existing access road in Phase 4 at Buena Vista Road was improved by the construction contractor for safety purposes. Improvements included rocking the access road and cutting back the slope at the intersection with Buena Vista Road to allow a clear view of the Buena Vista Road by construction vehicles.
- Camera Tower FL7 was originally designed to be located within the original clearing limits of the DMPRC, but was moved outside of the clearing limits on the northwestern side of Tank Trail 1. Additional tree clearing for this action was reviewed and approved under a Fort Benning Form 144R Record of Environmental Consideration (REC), thereby requiring no additional NEPA documentation.
- Camera Tower FL1 was originally proposed to be located within the original clearing limits of the DMPRC, but was proposed to be moved outside of the clearing limits to avoid impacts to wetlands. The first proposed location outside of the clearing limits was northeast of the northeastern corner of the DMPRC site adjacent to the impact area. This site was abandoned because of its proximity to the impact area and because of redundant camera views. The camera tower was subsequently located outside of the original clearing limits of the DMPRC southwest of the southwestern corner of the DMPRC site. While this area is located within the foraging habitat area for red-cockaded woodpecker (*Picoides borealis*) (RCW) cluster D13-02, it is located within an area that is unvegetated, therefore requiring no additional tree clearing. The action was reviewed and approved under a Fort Benning Form 144R REC, thereby requiring no additional NEPA documentation.
- A Range Marker was located adjacent to Tank Trail 1, across from Mover 7. While the location of the Marker is at the edge of the DMPRC clearing limits and near foraging habitat for RCW cluster D14-04, construction required the removal of only 3

trees within the foraging area. The action was reviewed and approved under a Fort Benning Form 144R REC, thereby requiring no additional NEPA documentation.

Presently, a Supplemental Environmental Assessment (SEA) is being prepared that addresses several changes to the design of the DMPRC. These design changes include the authorization of additional vegetation removal to achieve adequate LOS and radio frequency connectivity, and the addition of targetry and support features to meet the most current training range standards. The SEA will be completed in 2008 and will be addressed in the 2008 Annual Report.

2.2 Construction Activities

The National Pollutant Discharge Elimination System (NPDES) permit for the DMRPC requires the construction contractor to conduct routine and frequent inspections of the DMPRC construction site to evaluate the integrity of the soil erosion control Best Management Practices (BMPs). The Fort Benning Environmental Monitor (EM) also makes daily, weekly, and monthly compliance inspections of the site to insure compliance with NEPA, NPDES, and all applicable Environmental Laws and Regulations and submits monitoring reports to Fort Benning EMD. The monitoring reports are then forwarded to the U.S. Army Corps of Engineers (USACE) and the Office of Staff Judge Advocate (OSJA) as needed.

During 2007, numerous instances of failed BMPs and noncompliance with NPDES permit requirements were recorded by the Environmental Monitor. Incidences resulted from accumulated sediment in streams; and sediment barriers becoming undercut, failing, or becoming torn. Internal inspections show that delays in correcting BMP failures occurred many times and lasted for several weeks or more.

Several Letters of Self-notification were issued to the GA EPD for noncompliance with NPDES permit requirements. These letters served to notify GA EPD of issues of noncompliance that resulted from sediment outside of the project area, state waters being impacted, and BMP maintenance shortfalls.

In March 2007, the construction contractor excavated an approximately 50-foot section of a streambank on an unnamed stream at Trail 4 while working to remove accumulated sediment from the stream. A Letter of Self-notification was issued to the GA EPD. The contractor reshaped the streambank and stabilized the area with seed and mulch.

2.3 Clear Creek Mitigation Site

Outside of the DMPRC footprint is the Clear Creek Mitigation Site. This area is designated as a stream and wetland restoration area to compensate for the stream and wetland impacts that have and will occur during construction of the DMPRC. Part of the restoration includes the draining of a pond to restore the original stream and riparian habitat in the area. Included

in the process of draining the pond was an effort to remove beavers from the area and dismantle the beaver dams that impound water in the pond. At the beginning of 2007, beaver trapping was continuing from the previous year.

In March 2006, it was determined that approximately four acres of the pond would not drain following the dismantling of the beaver dams. The USACE Regulatory Office initially required that these four acres be removed from the mitigation acreage calculations. Subsequently, however, the Fort Benning EMD gained approval from the USACE Regulatory Office for the area to be included in the mitigation calculations by filling the area and planting with trees, grasses, and shrubs. In November 2007, this area was filled. Tree planting for the entire mitigation site was completed in December 2007.

3.0 AFFECTED AREAS

3.1 Soils, Vegetation, and Unique Ecological Areas

According to the DMPRC Mitigation Monitoring Plan, the construction contractor is responsible for removal of all non-saleable timber and vegetation, or slash that is left at the site after the initial timber harvest. In the beginning of 2007, the construction contractor was using some slash for brush barriers and leaving other slash onsite. In June 2007, a new construction subcontractor began harvesting the remaining unmerchantable timber that was left in the infield areas of the site, and began chipping slash that had previously been left on the site and hauling the debris off-post to be sold as fuel.

The only Unique Ecological Area on the DMPRC site is the area around Pine Knot Creek. During 2007, no work has occurred in this area. Therefore, the associated mitigation will not be addressed in this Annual Report.

3.2 Federally Protected Species

The RCW is the only federally protected species with habitat located within the boundaries of the DMPRC. It was discussed in the 2007 Annual Report that originally, there were seven RCW clusters identified that were located within 0.5 miles of the boundaries of the DMPRC, or to have foraging habitat within DMPRC boundaries, that would receive incidental take. These clusters include D03-02, D13-02, D14-04, D15-01, J06-01, K22-02, and K22-03. D13-01 was previously inactive and therefore not considered, but it became active during the 2005 season and was therefore added. J06-02 was previously not considered because it was inactive. It remains inactive, but was added because of the potential for it to be activated, as was D13-01. D13-01 and J06-02 are within 0.5 miles of the DMPRC footprint. As discussed in the 2006 Annual Report, during the 2006 breeding season, three additional clusters were identified as potentially being affected by the construction and were, therefore, included in the monitoring. These clusters include D04-01, D13-01, and K22-01.

During 2007, it was determined that all of the monitored clusters in or near the DMPRC site were active with the exception of J06-02 and D14-04. Both of these clusters continue to be monitored.

In May 2007, potential impacts to RCW clusters and potential RCW habitat from the construction of Camera Towers FL1 and FL7 were examined. There was a potential that the Camera Tower FL1 would impact RCW habitat for cluster D13-02 in the pine plantation near Tank Trail 5. In addition, Camera Tower FL7 would impact potential foraging habitat for cluster D14-04. Upon initial consideration, it was determined that a letter would be submitted to the U.S. Fish and Wildlife Service (USFWS) to initiate informal consultation. However, it was later determined that while the FL1 would be located within RCW habitat, it would be located in an area that had previously been cleared. Furthermore, FL7 would only be impacting potential habitat rather than primary habitat for cluster D14-04. Therefore, the

actions were reviewed and approved under a Fort Benning Form 144R REC, thereby requiring no additional NEPA documentation.

3.3 Water Quality and Hazardous Material

Numerous incidences of failed or improperly installed BMPs on the DMPRC site have resulted in sediment accumulating in streams. Accumulated sediment has affected Sally Branch, Bonham Creek, Pine Knot Creek, and several unnamed tributaries to these creeks. When BMP failures have been discovered, the construction contractor is required to take corrective actions to stabilize any impacted stream banks and drainage ways. While many of these corrective actions have been successfully completed, others remain an ongoing process in order to achieve stabilization and remediate for impacts.

3.4 Land Use and Utilities

As part of meeting the requirements of the SPiRiT Compliance Plan, the construction contractor is required to keep notebooks that document steps that are taken to incorporate sustainable design into the DMPRC. Most of the sustainable design measures focus on buildings and structures. Presently, the contractor has begun compiling the SPiRiT notebooks, but they have not been completed.

3.5 Cultural Resources

The design changes are not expected have adverse impacts on eligible or not yet designated cultural resources. The relocation of range components was planned to avoid known historic properties. In the 2006 Annual Report, it was discussed that the planned location for target T14 is near a culturally significant grist mill (cultural resources site 9Ce1735), and no protective berm was planned in 2006 to be located between the target and the site. At that time, discussions regarding redesign plans in 2007 indicated that a berm was planned for 2007 redesigns. The Fort Benning Cultural Resources Manager determined that the insertion of the protective berm would have no adverse effect on historic properties or on the DMPRC project. In January 2007, the construction contractor had begun initial clearing for T14 and the protective berm had not yet been added back into the design.

In June 2007, construction began in on the protective berm when the contractor began stockpiling fill near site 9Ce1735. However, in July 2007, the Georgia State Historic Preservation Office concurred that the berm was no longer needed. Construction of the berm was stopped.

The EM inspects all eligible cultural resources sites monthly during the construction phase. No previously unknown cultural resources or historic properties have been discovered on the DMPRC site.

3.6 Noise

Although the redesigns of the DMPRC involve relocation of many firing points and targets, the relocations would not generate a noticeable difference in the noise analysis presented in the EIS and ROD. Therefore, additional noise modeling is not required and the mitigation and monitoring requirements do not need to be revised.

Construction noise was not an issue and operational noise from training has not begun. Therefore, neither of these potential sources of noise will be addressed in this Annual Report.

3.7 Air Quality

As mitigation during construction, the construction contractor is required to follow existing applicable air quality requirements. The construction contractor has routinely taken measures to control air pollution, such as fugitive dust and particulate matter. These measures include covering trucks that transport rock, periodic watering unpaved roads, etc. The construction contractor has not made opacity readings to ensure that the required 20-percent fugitive dust restriction is not exceeded.

The construction contractor is using some of the slash vegetation for brush barriers and is using a mulching machine to dispose of some of the slash, as described in Section 3.1 of this document. This method of slash removal does not require any burning. Therefore, no associated air quality problems have arisen from slash removal.

4.0 CONCLUSIONS

This Annual Report identifies the status of DMPRC mitigation and monitoring from 1 January 2007 to 31 December 2007. In the design phase of the project, several design changes have occurred. Any potential environmental impacts or modifications to mitigation requirements have been identified in this Annual Report. In the construction phase, there have been several deviations from the required mitigation. These deviations either have been corrected or are in the process of being corrected.

Impacts to water quality on the construction site have occurred as a result of failed BMPs. Impacts have occurred in Sally Branch, Bonham Creek, Pine Knot Creek, and several tributaries to these creeks. When BMP failures have been discovered, the construction contractor is required to take corrective actions to stabilize any impacted stream banks and drainage ways. While many of these corrective actions have been successfully completed, others remain an ongoing process in order to achieve stabilization and remediate for impacts. As such, the Fort Benning EMD has determined that additional mitigation for water quality impacts is not warranted. Rather, these corrective measures are being taken in order to ensure that the existing mitigation plan is implemented.

The design changes are not expected to have adverse impacts on the environmental resources on Fort Benning. Fort Benning and the USACE are coordinating the redesigns with the appropriate regulatory agencies and will incorporate any additional environmental mitigation required via that process.

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28 Apr 08
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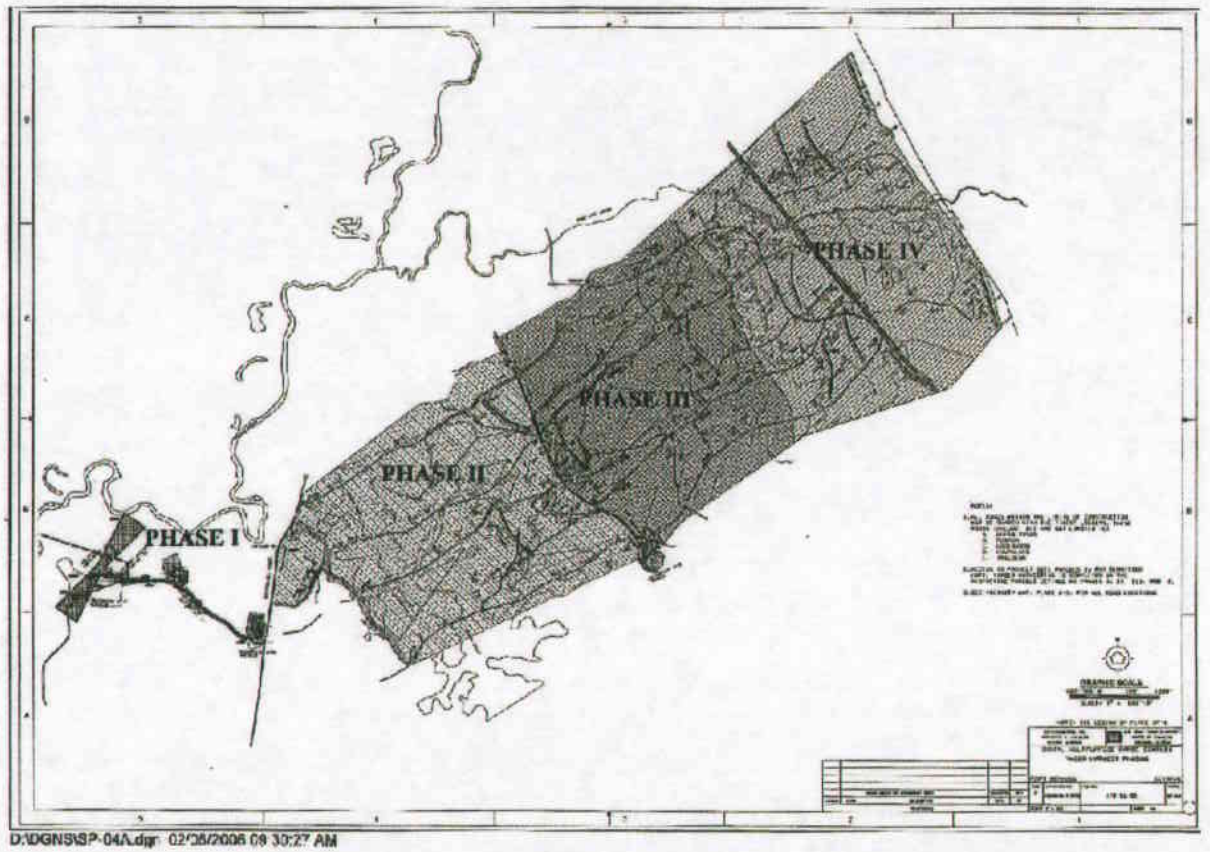
REFERENCES

Fort Benning. April 2004a. Record of Decision for the Final Environmental Impact Statement for the Digital Multi-Purpose Range Complex.

Fort Benning. April 2004b. Final Environmental Impact Statement for the Digital Multi-Purpose Range Complex.

Fort Bennning. November 2005. Final Digital Multi-Purpose Range Complex Mitigation and Monitoring Plan.

Fort Benning. February 2006. Annual Report for the Digital Multipurpose Range Complex Mitigation and Monitoring Plan.



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N

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Figure 1
DMPRC Construction Phases

Acer Project No.
2252-03

ACER Environmental, Inc.

DMPRC Design Changes
Fort Benning, Georgia

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0 1,150 2,300 4,600 Feet

Figure 2
DMPRC Design Changes
April 2008
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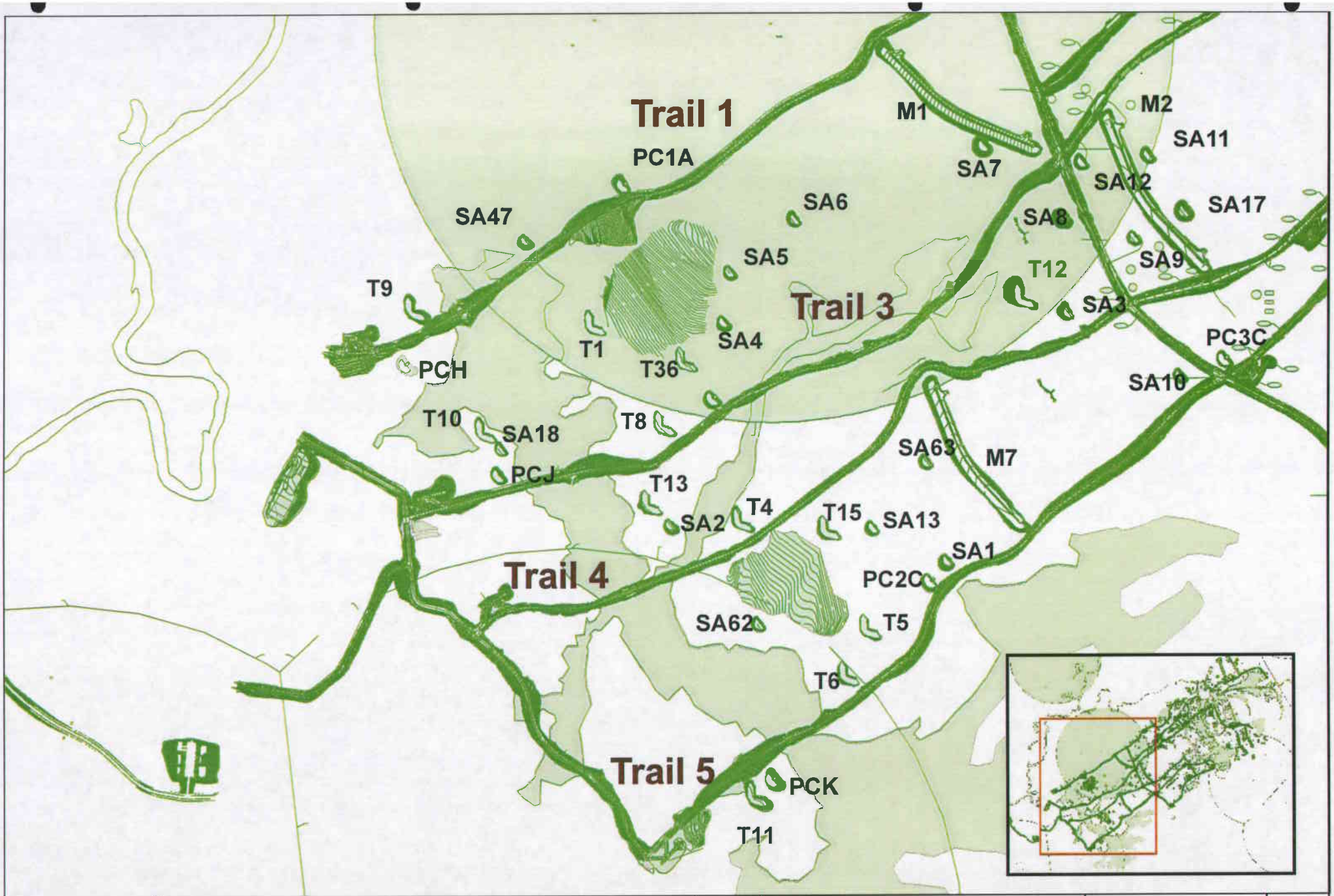
Acer Project No. 2252-03



ACER Environmental, Inc.

DMPRC Design Changes
Fort Benning, Georgia

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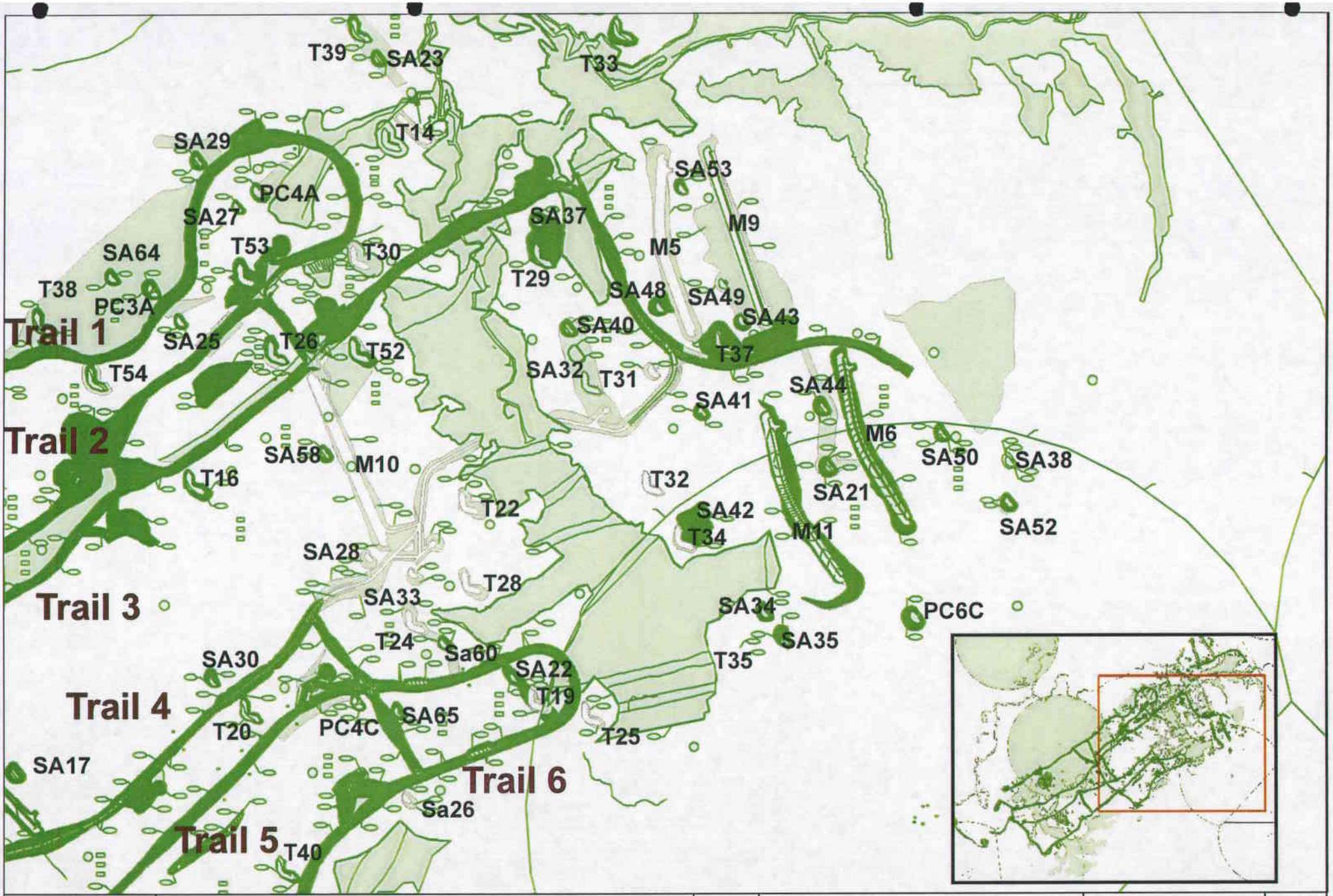
Figure 2a
DMPRC Design Changes
April 2008
Created By: JQ

Acer Project No. 2252-03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SA48
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PC3A
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Trail 1
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SA32
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SA44
SA41
Trail 2
M6
SA58
M10
SA50
SA38
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SA42
SA52
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Figure 2b
DMPRC Design Changes
April 2008
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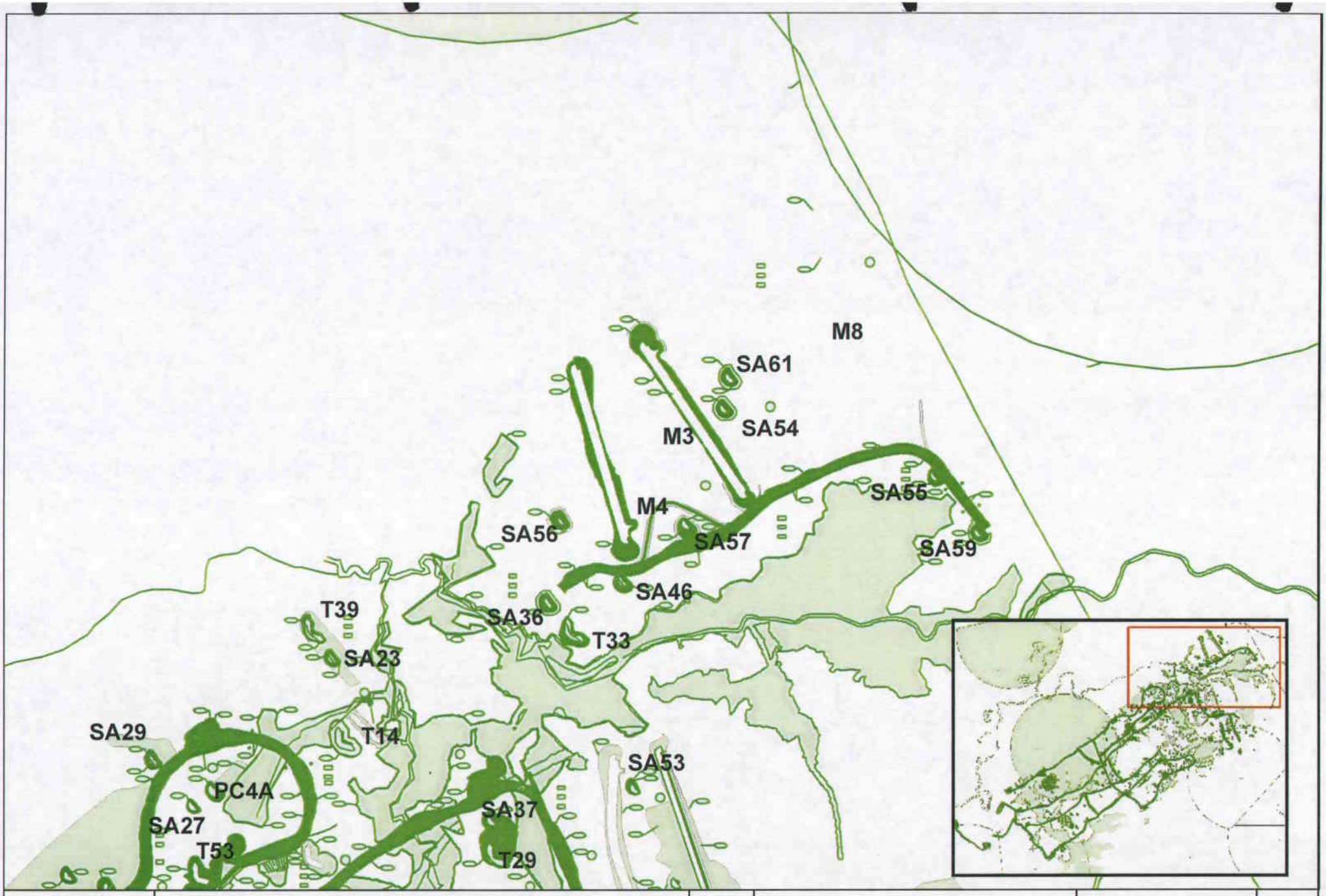
2252-03



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DMPRC Design Changes
Fort Benning, Georgia

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Figure 2c
DMPRC Design Changes
April 2008
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Acer Project No. 225-2-03