Washington University in St. Louis
SCHOOL OF LAW

Interdisciplinary Environmental Clinic

September 15, 2017

Carol S. Comer, Director
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

Re: St. Louis Ice Center in Creve Coeur Lake Memorial Park

Dear Ms. Comer:

We are writing on behalf of the Missouri Coalition for the Environment ("MCE") regarding the National Park Service's ("NPS") August 25, 2017 letter[1] asking you to instruct St. Louis County ("the County"), sponsor of the above-referenced project, to cease all on-site stormwater grading work in preparation for building the ice center, and DNR's August 30, 2017 letter[2] to the County indicating that the grading work may continue based on the County's verbal assurance that the work being performed at the site is not specific to its public facility proposal for the ice center. As discussed further below, the grading work performed at the site to date has unquestionably been for the purpose of developing stormwater management facilities designed specifically for the ice center, which are described in detail in the Stormwater Management Facilities Report ("SMFR") included in the draft Environmental Assessment ("EA") for the ice center that the County submitted to DNR last month.[3] The County's claim in its June 6, 2017 letter[4] seeking DNR's concurrence that the grading project does not require NPS approval in part because it "does not contain any features … that are specific or unique to the public facility proposal" is simply untenable, and we urge you to rescind your August 30 letter granting permission to continue grading the site and instruct the County to cease all work as requested by NPS until all legal requirements of the Land and Water Conservation Fund ("LWCF") program have been met.

As you know, the County has sought permission from NPS to build an enclosed ice center on land in Creve Coeur Lake Memorial Park that was purchased with LWCF Act monies,

[1] Letter from Roger Knowlton, Acting Chief, Recreation Grants, National Park Service, to Carol S. Comer, Director, Missouri Department of Natural Resources (Aug. 25, 2017).
[2] Letter from Ben Ellis, Division Director and LWCF State Liaison Officer, Missouri State Parks, to Gary Bess, Director, St. Louis County Parks and Recreation Department, and Sheila Sweeney, Chief Executive Officer, St. Louis Economic Development Partnership, RE: Stormwater grading activities at Creve Coeur Lake Memorial Park (Aug. 30, 2017).
[3] Stormwater Management Facilities Report: Detention Volume – Howard Bend Levee District, St. Louis Ice Center, Maryland Heights, Missouri (Revised Mar. 27, 2017), included as Appendix F to St. Louis Ice Center Project Draft Environmental Assessment, Maryland Heights, St. louis County, Missouri (June 2017) ("SMFR").
[4] Letter from Sheila Sweeney, Chief Executive Officer, St. Louis Economic Development Partnership, to Carol S. Comer, Director, Missouri Department of Natural Resources, RE: Grading project, Creve Coeur Lake Memorial Park, Maryland Heights, Missouri (June 6, 2017).

seeking to have it approved as a public facility. At the end of August, while the proposal and accompanying draft EA were under review by DNR, both NPS and DNR received reports of significant grading activity occurring at the ice center's proposed location in order to prepare the site for construction of the ice center. Upon learning of this activity, NPS, in its August 25 letter, asked you to instruct the County to cease and desist from these activities lest they put the state out of compliance with the legal requirements of the LWCF program (for moving forward with construction before completion of the conversion process NPS believes is required for the ice center).

Instead DNR, in its August 30 letter, indicated that although federal LWCF regulations prohibit a project sponsor from "performing work on a proposed Public Facility until the Public Facility request and required environmental documentation has been reviewed and approved by both the Department and NPS," the County could continue the grading work based on verbal assurance from the County Parks and Recreation Department and the St. Louis Economic Development Partnership that the work being performed at the site was not specific to the County's public facility proposal for the ice center. DNR then informed NPS that the County was in the process of providing documentation to support its assurance that no work was underway that would solely benefit the ice center or otherwise would constitute a conversion. However, despite the County's assurance, the significant grading work performed at the site to date is clearly site preparation for the proposed ice center, not "unassociated grading and stormwater management improvements, the benefits of which are not specific to the County's Public Facility proposal for a proposed ice center."

We know this because the SMFR in the draft EA describes, in detail, stormwater facilities designed specifically for the ice center – facilities which, as discussed further below, match those already constructed at the site. The SMFR describes a series of interconnected wet detention lakes designed by the County's engineers to provide flood protection detention and compensatory storage to offset the loss of storage caused by filling that portion of the site that lies below the base flood elevation, with smaller bio-retention basins providing water quality treatment and volume reduction for runoff from impervious surfaces:

> For the proposed development, a wet retention lake will be utilized to provide Flood Protection Detention (Fp) and Channel Protection Storage (Cpv). The main retention lake will be interconnected to a secondary "finger lake" immediately west of Marine Avenue. From the second retention lake, an enclosed storm sewer discharge pipe will convey runoff to Creve Coeur Creek. Upstream of the on-site retention lake bio-retention basins will be utilized to provide Water Quality Treatment (WQv) and Volume Reduction (Volr) for the proposed impervious surfaces.[5]

Lake and bio-retention basin volumes were calculated based on the computed runoff differential of the ice center's 20 acres of impervious surfaces (building, parking lots, and an outdoor synthetic turf field) and the quantity of fill required to be offset with an equivalent compensatory storage volume, which is responsible for the bulk of the necessary storage:

[5] SMFR at 3-4.

> Per the FIRM map, the project site has a published base flood elevation of 450.00. A portion of the existing site lies below elevation 450 and will be "filled" as part of the proposed development. This quantity of "fill" is required to be offset by providing an equivalent Compensatory Storage volume in order to maintain the current level of storage provided within the entire watershed. The Compensatory Storage volume will be provided within the retention lakes between elevations 449.00 and 442.75 … The required & provided compensatory storage volume is 1,400,000 CF.[6]

The SMFR includes spreadsheets showing the calculated lake and bio-retention volumes for the ice center, nearly 2 million cubic feet in total.[7] This massive amount of storage is only necessary for the ice center; use of the site for bona fide outdoor recreation purposes would not require huge amounts of fill (as stated in the SMFR, the site is only being filled "as part of the proposed development") or acre upon acre of impervious surfaces and thus would not require millions of cubic feet of detention and storage. Absent these "improvements," limited grading to promote runoff and better conveyance off site would likely be the only on-site stormwater improvements necessary, if any improvements are necessary at all.

The SMFR also includes a grading plan for the site depicting the ice-center specific lakes and bio-retention basins described in the report (Figure 1).[8] A walk down of the site is sufficient to see that the stormwater facilities that have been constructed to date match those shown on the grading plan and described in the SFMR (and also in the Project Description and Environmental Screening Form in the draft EA). Lakes A and B, Area C, and bio-retention basin F have all been partially to fully excavated and are unmistakable given their geometry and location. Further confirmation that it is these specific stormwater facilities that have been built and not generic stormwater improvements as the County claims is provided by GPS data collected around their respective perimeters.

We collected GPS data at the site on September 4 and September 10 using a handheld Garmin GPS receiver and GPS-enabled smartphones. We traversed the breakline at the top of each lake's perimeter berm, collecting GPS coordinates (latitude and longitude) at regularly spaced intervals around the entire perimeter. For the main body of the largest lake (Lake A), we also traversed the breakline at the toe of the perimeter berm, although it was not well-defined in some areas and was inaccessible in others due to the presence of water. We then imported the coordinates we collected into Google Earth for comparison to the stormwater facilities shown on the ice center grading plan, which we also imported into Google Earth as an image overlay and georectified using clearly identifiable landmarks (Figure 2). As shown in Figures 3, 5, 7, 9, and 11, the points we collected around the constructed lakes align almost perfectly with the lakes and bio-retention areas shown on the ice center grading plan. Figures 4, 6, 8, 10, and 12 show photos of the constructed lakes to give you a better sense of their size, which is well beyond that of normal stormwater improvements. Clearly the grading activities that have been performed at the site are anything but "unassociated grading and stormwater management improvements." A list of the GPS coordinates we collected at the site is attached to this letter.

---

[6] *Id.* at 4.
[7] *Id.*, Appendix B.
[8] *Id.*, Appendix A.

Just yesterday it was announced that the site would be "re-greened" by planting grass in the disturbed area, with the County Executive stating, "I think greening the area while we wait for the improvement to occur or not occur is a good idea."[9] While this is a welcome development, it begs the question why the County would cease work on a grading project it claims is both necessary and unrelated to the ice center until the fate of that facility is decided. It is also unclear whether yesterday's announcement signifies a cessation of all work until NPS acts on the County's public facility request (and, more than likely, a subsequent conversion request), or just a temporary pause in construction (the grading specifications included in the County's grading permit application to the City of Maryland Heights state that disturbed areas shall be seeded after clearing and grubbing when no activity will occur within 30 days). To ensure that the County does not resume work on the ice center until all legal requirements of the LWCF program have been met, we urge you to rescind your August 30 letter granting the County permission to continue grading the site and instruct it unequivocally to cease all work until it has all the necessary approvals from the NPS.

Thank you for your attention to this matter. Please contact me at the number below or Clinic Scientist Ken Miller at 314-935-6368 if you have any questions.

Sincerely,

Elizabeth J. Hubertz
Assistant Director
Interdisciplinary Environmental Clinic
Washington University School of Law
One Brookings Drive - Campus Box 1120
St. Louis, MO 63130
Phone: 314.935.8760

Attorneys for the Missouri Coalition for the Environment

Cc: Alicia Lloyd, Missouri Coalition for the Environment
Ben Ellis, Missouri State Parks
Dawn Frederickson, Missouri State Parks
Roger Knowlton, National Park Service
Carol Edmonson, National Park Service

[9] See http://www.kmov.com/story/36360546/ice-complex-land-slated-for-re-greening.

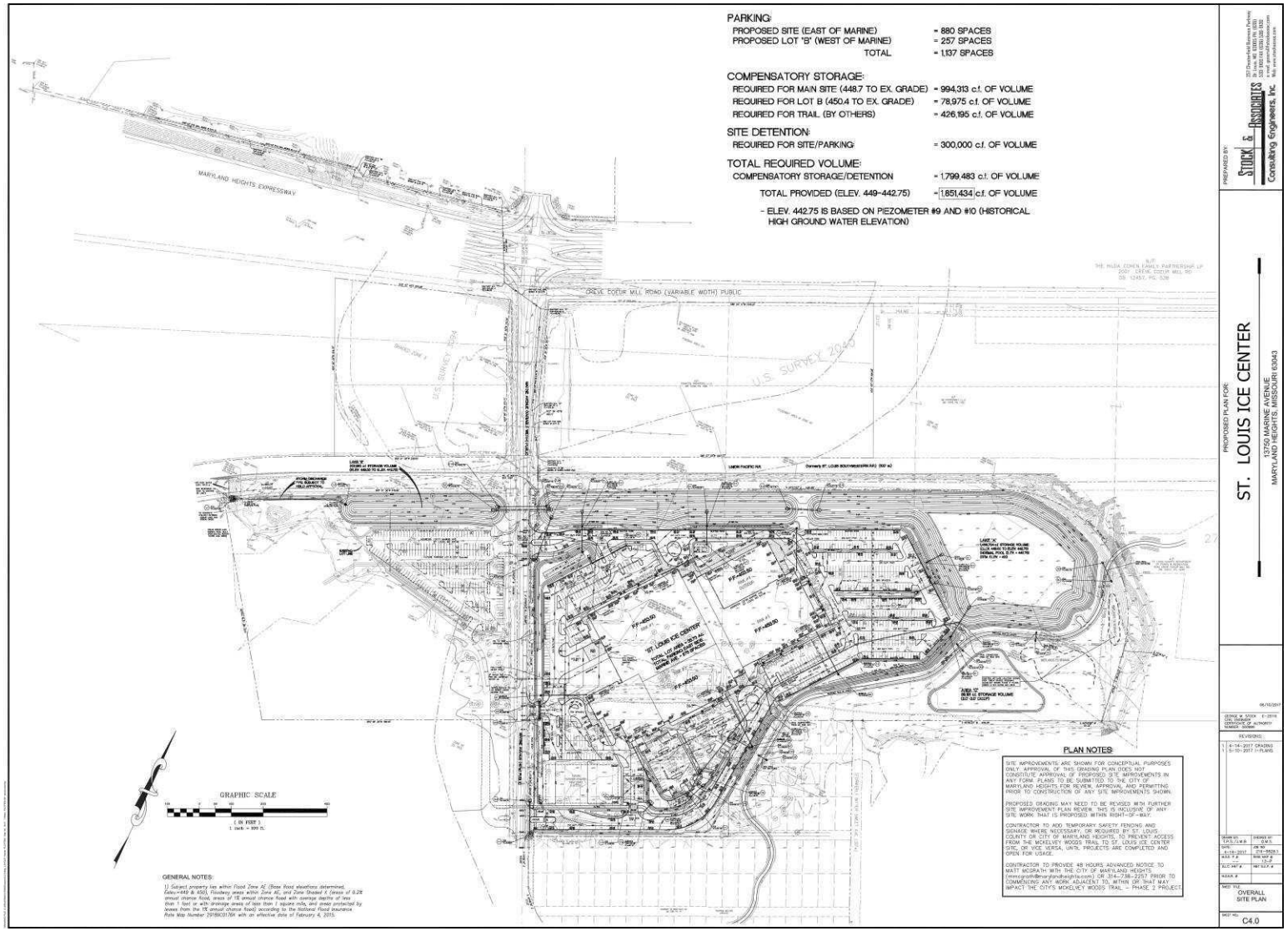

Figure 1. Ice center grading plan.

Figure 2. Ice center grading plan as a georectified image overlay in Google Earth (line color changed for enhanced visibility).

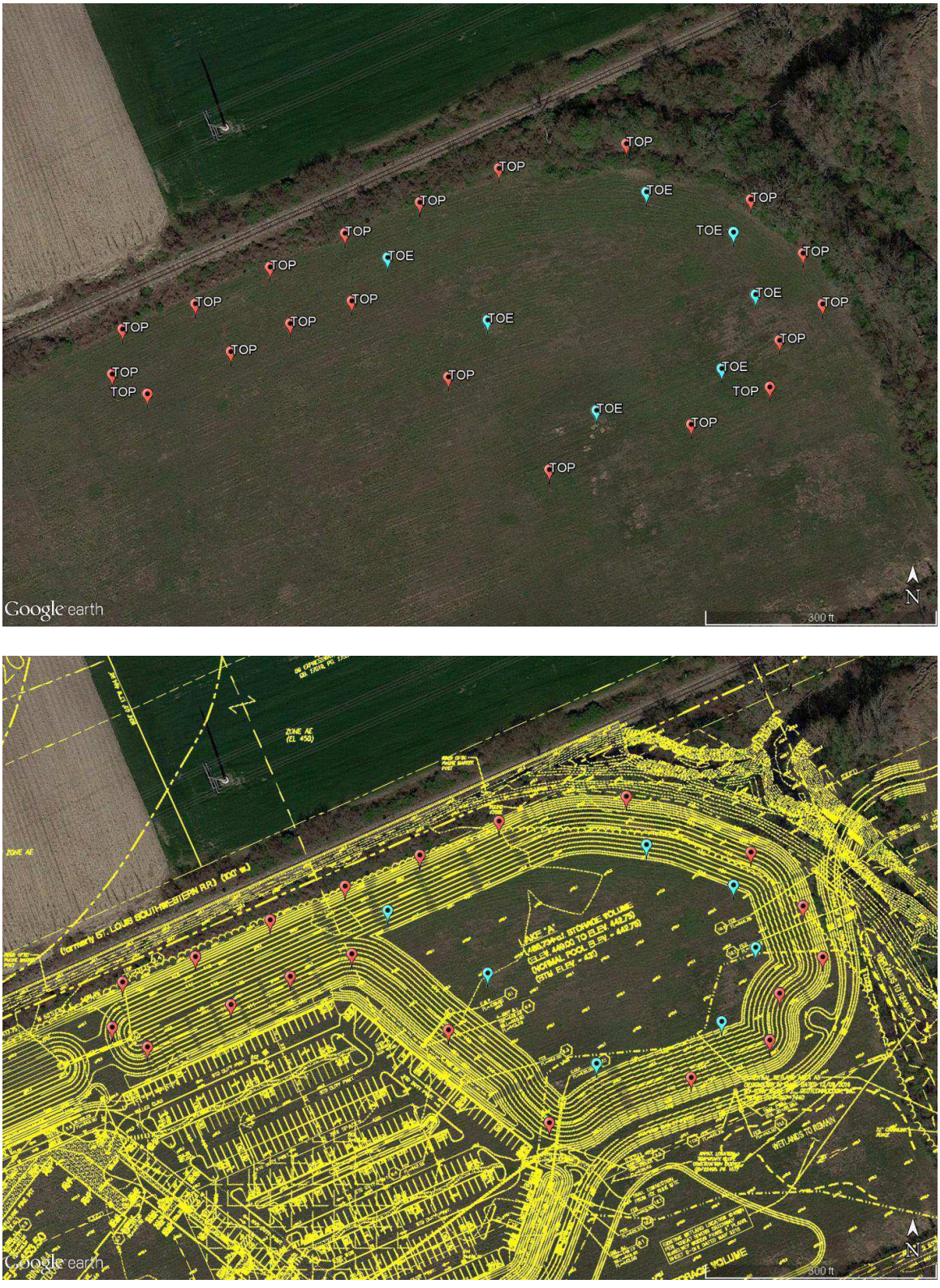

Figure 3. GPS coordinates collected around the perimeter berm of the main body of Lake A in Google Earth (top; imagery dated 4/2/2016, prior to the start of grading activities on the site) and superimposed on the grading plan for the ice center (bottom).

Figure 4. Photos of the main body of Lake A taken from the northwest side facing east (top) and from the west end facing east-northeast (bottom).

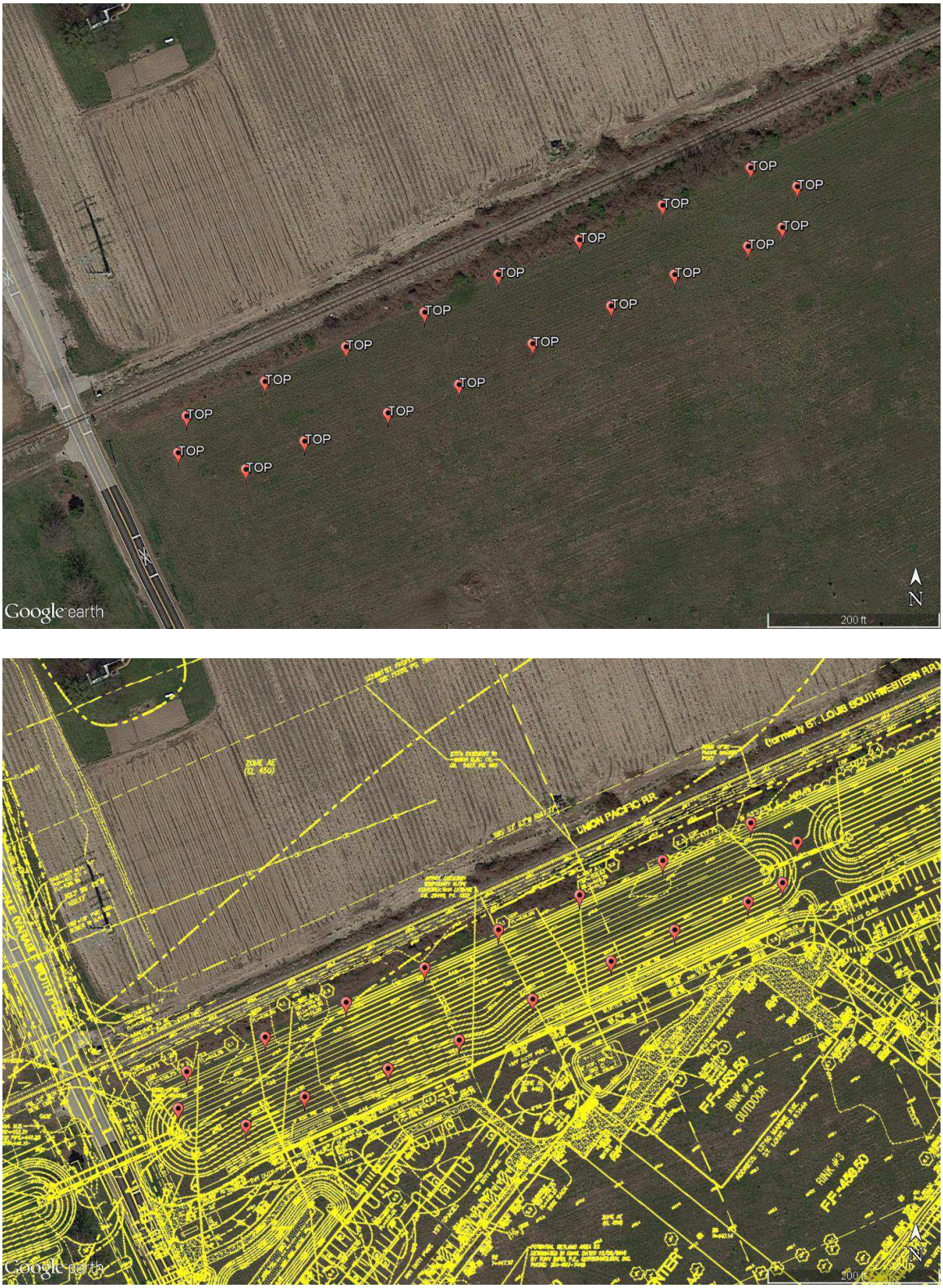

Figure 5. GPS coordinates collected around the perimeter berm of the western finger of Lake A in Google Earth (top; imagery dated 4/2/2016, prior to the start of grading activities on the site) and superimposed on the grading plan for the ice center (bottom).

Figure 6. Photos of the western finger of Lake A taken from the west end facing east-northeast (top) and from the east end facing west-southwest (bottom).

Figure 7. GPS coordinates collected around the perimeter berm of Lake B in Google Earth (top; imagery dated 4/2/2016, prior to the start of grading activities on the site) and superimposed on the grading plan for the ice center (bottom).

Figure 8. Photos of Lake B taken from the west end facing east-northeast (top) and from the east end facing west-southwest (bottom).

Figure 9. GPS coordinates collected around the perimeter berm of Area C in Google Earth (top; imagery dated 4/2/2016, prior to the start of grading activities on the site) and superimposed on the grading plan for the ice center (bottom).

Figure 10. Photos of Area C taken from the north side facing south (top) and from the northwest side facing east-southeast (bottom).

Figure 11. GPS coordinates collected around the perimeter berm of the main body of bio-retention basin F in Google Earth (top; imagery dated 4/2/2016, prior to the start of grading activities on the site) and superimposed on the grading plan for the ice center (bottom).

Figure 12. Photos of bio-retention basin F taken from the southwest end facing northeast (top) and the northeast end facing southwest (bottom).

List of GPS Coordinates
St. Louis Ice Center Site, Creve Coeur Lake Memorial Park

Longitude	Latitude	Description
-90.48116	38.72858	Lake A_Main Body_TOP
-90.48162	38.72891	Lake A_Main Body_TOP
-90.48206	38.72918	Lake A_Main Body_TOP
-90.48234	38.7291	Lake A_Main Body_TOP
-90.48261	38.729	Lake A_Main Body_TOP
-90.48051	38.72874	Lake A_Main Body_TOP
-90.48016	38.72887	Lake A_Main Body_TOP
-90.48011	38.72904	Lake A_Main Body_TOP
-90.47991	38.72917	Lake A_Main Body_TOP
-90.48001	38.72935	Lake A_Main Body_TOP
-90.48025	38.72954	Lake A_Main Body_TOP
-90.48081	38.72974	Lake A_Main Body_TOP
-90.4819	38.72933	Lake A_Main Body_TOE
-90.48144	38.72911	Lake A_Main Body_TOE
-90.48095	38.72879	Lake A_Main Body_TOE
-90.48038	38.72894	Lake A_Main Body_TOE
-90.48022	38.7292	Lake A_Main Body_TOE
-90.48032	38.72942	Lake A_Main Body_TOE
-90.48072	38.72957	Lake A_Main Body_TOE
-90.48315	38.72892	Lake A_Main Body_TOP
-90.48299	38.72885	Lake A_Main Body_TOP
-90.4831	38.72908	Lake A_Main Body_TOP
-90.48277	38.72917	Lake A_Main Body_TOP
-90.48243	38.7293	Lake A_Main Body_TOP
-90.48209	38.72942	Lake A_Main Body_TOP
-90.48175	38.72953	Lake A_Main Body_TOP
-90.48139	38.72965	Lake A_Main Body_TOP
-90.48345	38.72869	Lake A_West Finger_TOP
-90.48375	38.7286	Lake A_West Finger_TOP
-90.48401	38.7285	Lake A_West Finger_TOP
-90.48433	38.72838	Lake A_West Finger_TOP
-90.48463	38.72825	Lake A_West Finger_TOP
-90.48492	38.72816	Lake A_West Finger_TOP
-90.48526	38.72807	Lake A_West Finger_TOP
-90.4855	38.72798	Lake A_West Finger_TOP
-90.48578	38.72803	Lake A_West Finger_TOP
-90.48574	38.72815	Lake A_West Finger_TOP
-90.48542	38.72826	Lake A_West Finger_TOP
-90.48509	38.72837	Lake A_West Finger_TOP
-90.48477	38.72848	Lake A_West Finger_TOP
-90.48447	38.7286	Lake A_West Finger_TOP
-90.48414	38.72871	Lake A_West Finger_TOP
-90.4838	38.72882	Lake A_West Finger_TOP
-90.48344	38.72894	Lake A_West Finger_TOP

List of GPS Coordinates
St. Louis Ice Center Site, Creve Coeur Lake Memorial Park

Longitude	Latitude	Description
-90.48325	38.72888	Lake A_West Finger_TOP
-90.48331	38.72875	Lake A_West Finger_TOP
-90.4862	38.7277	Lake B_TOP
-90.48649	38.72757	Lake B_TOP
-90.4868	38.72747	Lake B_TOP
-90.48713	38.72735	Lake B_TOP
-90.48746	38.72724	Lake B_TOP
-90.48772	38.72717	Lake B_TOP
-90.48788	38.72725	Lake B_TOP
-90.48784	38.7274	Lake B_TOP
-90.4875	38.72752	Lake B_TOP
-90.4872	38.72763	Lake B_TOP
-90.48688	38.72776	Lake B_TOP
-90.48658	38.72785	Lake B_TOP
-90.48638	38.72791	Lake B_TOP
-90.48616	38.72785	Lake B_TOP
-90.4811	38.72806	Area C_TOP
-90.48119	38.72779	Area C_TOP
-90.48085	38.72777	Area C_TOP
-90.48051	38.72793	Area C_TOP
-90.48019	38.72802	Area C_TOP
-90.4799	38.72814	Area C_TOP
-90.47995	38.72827	Area C_TOP
-90.4802	38.72837	Area C_TOP
-90.48046	38.72843	Area C_TOP
-90.48088	38.72834	Area C_TOP
-90.48512	38.72782	Bio F_TOP
-90.48515	38.72771	Bio F_TOP
-90.48529	38.72756	Bio F_TOP
-90.48544	38.72741	Bio F_TOP
-90.48524	38.72784	Bio F_TOP
-90.4854	38.72768	Bio F_TOP
-90.48558	38.72757	Bio F_TOP
-90.48562	38.72747	Bio F_TOP
-90.48553	38.72733	Bio F_TOP