



Response to the Proposed Cold Spring Granite Charcoal 3 Quarry Project

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Charcoal 3 Site Overview:

Charcoal 3 is a 210-acre site located between Oak Grove Road (Co Rd 136) and West St. Germain Road (Co Rd 74) in southwest St. Cloud (see Fig 1). There are five ESA's on the site (Fig 2; numbers 8, 12, 22, 80 & 81) which received grades from D to B (Table 1). The sites range from willow swamp (8) to a wet meadow (12) to oak woodlands (80). The two wetland sites (8 & 12) received the highest grade and highest conservation priority and both were ranked in the top 30% of all sites (20.2% / 28.8%).

The natural areas on the Charcoal 3 site were rated similarly by the MN Department of Natural Resources (DNR) as a result of the Minnesota County Biological Survey (MCBS) and other work. The DNR recognizes four native plant communities on the site (Table 1) – sedge meadow, wet prairie, oak-red maple woodland, and crystalline bedrock community. The sedge meadow and wet prairie are roughly equivalent to ESA sites 8 & 12. In general, the sites are ranked slightly higher by the DNR and given a similar conservation status rating indicating that the communities are imperiled (wet prairie) or secure statewide but uncommon (sedge meadow, oak red maple woodland).

The MCBS included most of the Charcoal 3 property as a Site of High Biodiversity Significance which means it “contains very good quality occurrences of the rarest species, high quality examples of the rare native plant communities, and/or important functional landscapes” (M. Doperalski, MN DNR Regional Ecologist, Fig 4).

Two state threatened species (Blanding's turtle, Tubercled rein-orchid) occur in the wetland areas and the oak red maple woodland is likely used as nesting habitat for uncommon birds such as Red-shouldered hawks and Acadian flycatchers, species of Special Concern in Minnesota (Doperalski letter).

Table 1. Natural plant communities on the Charcoal 3 Quarry site. Data are from *St. Cloud Natural Areas Inventory and Planning Framework (SCNAIPF)* document or DNR (see Doperalski letter). SCNAIPF grade refers the quality of site where A = excellent and D = poor. Complex refers to whether the site is adjacent to other natural areas. Community Rank reports the statewide status according to the SCNAIPF document (U = uncommon statewide, T = Common statewide but widespread threats and poor quality examples). Priority refers to the importance of the community based on the three ecological characters (grade, complex, rank) where H = high, M = medium and L = low. Planning tools are found in the SCNAIPF document where PT1 = highest value sites (see pp 29 – 36). DNR Conservation Status refers to the level of threat or peril to these communities where S2 = imperiled and S4 = apparently secure, uncommon but not rare.

SCNAIPF							MN DNR		
ESA Number	Community Type	Grade	Complex	Rank	Priority	Planning Tool	Community Type	Ranking	Status
8	Willow swamp	B	Y	T	H	1	Sedge meadow	BC	S4
							Wet prairie	BC	S2
12	Wet Meadow	C	Y	U	H	1			
22	Quarry Pond	D	N		L	3			
80	Oak woodland	D	Y	T	L	3	Oak Red Maple	C to BC	S4
81	Aspen woodland	D	Y	T	M	2			
							Crystalline bedrock community	BC	S2

Project Impact:

Completion of the project as proposed (Fig. 3) will impact the natural communities present on the site. There will be a 48% reduction in the upland oak forest community (see EAW, Table 10.1 – 111.2 acres before vs. 58.5 acres after) and a 25% reduction of meadows and wetlands (EAW, Table 10.1 – 55.5 acres before vs. 41.6 acres after). The crystalline bedrock communities will certainly be removed during mining operations. The overall ecological impacts of these losses are not completely clear. However, it is likely that the reduction in size of the wetland and woodland communities will increase the potential for invasive species due to an “edge effect”. Other impacts, though hopefully minor, on the remaining communities should be expected.

Recommendations:

Ecologically-speaking, Charcoal 3 is a high quality site with relatively uncommon plant communities. Though the plant communities do not rank as “outstanding,” they are worthy of preservation.

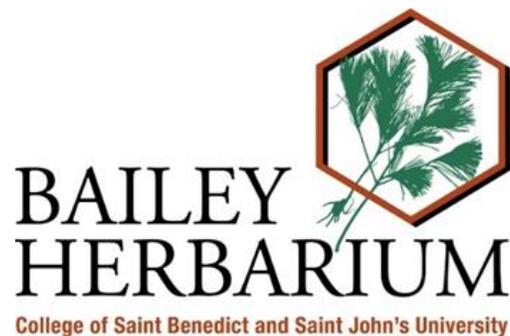
The St. Cloud ESAO suggests a variety of planning tools for making land use decisions concerning ESA's that provide incentives for preservation. These include a mixture of regulatory (*e.g.*, overlay zoning, performance zoning, planning unit development, subdivision regulations, dedication) and non-regulatory (*e.g.*, outright purchase, purchase of development rights, land banking, conservation easements, cooperative agreements, covenant, endowments, and condemnation) planning tools.

Considering the nature of the project, the regulatory planning tools do not appear to be applicable in this situation. Though some of the non-regulatory tools (*e.g.*, outright purchase, purchase of development rights, condemnation) could potentially be employed, they are not especially feasible, either. Cold Spring Granite plans to mine the granite reserve beneath ESA sites 80 and 81 for many years so it is unlikely they would be willing to sell either the property or development rights. And even if Cold Spring Granite were a willing seller, Mr. Scott Zlotnick, St. Cloud Parks, stated at the EDT meeting that the City of St. Cloud is not planning to purchase land for any additional parks. Thus, funds would need to be secured from the County, State or other entities.

Given the limited planning tool options to maximize both economic return and protection of the ESA's, I recommend that, if approved, the project:

1. Meets all applicable DNR, MPCA, county, and other (federal, state, local) rules and regulations.
2. Addresses issues raised in the MN DNR response letter to the EAW including:
 - a. Describe the measures that will be used to minimize impact on Blanding's turtle and Tubercled rein-orchid
 - b. Complete a Threatened and Endangered Species Avoidance Plan
 - c. Obtain a DNR Water Appropriation permit
 - d. Provide evidence that the application of chemicals for dust control won't adversely impact the wetlands
3. Addresses issues raised in the MPCA response letter to the EAW including:
 - a. Obtain an air emissions permit
 - b. Comply with wastewater disposal regulations
4. Addresses issues raised in the Stearns County Environmental Services response letter to the EAW including:

- a. Obtain appropriate approval for direct or indirect impacts to the jurisdictional wetlands
 - b. Maintain wetland hydrology
 - c. Include buffers around the wetland areas such as on the sides of the internal road where adjacent to or going through wetland, grout piles, and quarry areas adjacent to wetlands.
5. One way to especially limit potential damage to the wetland areas to the south side of the property is to retain the single entrance from the north. An added advantage is that heavy truck traffic wouldn't be diverted onto Co Rd 136. The proposal should include a justification for why an exit onto Co Rd 136 is essential to the project.
 6. Construction/earth-moving involving any forested area on the property should be permitted only during the 'safe' period (November – March) to prevent the spread of oak wilt disease (ESAO, p 31, e) to the remaining oaks.



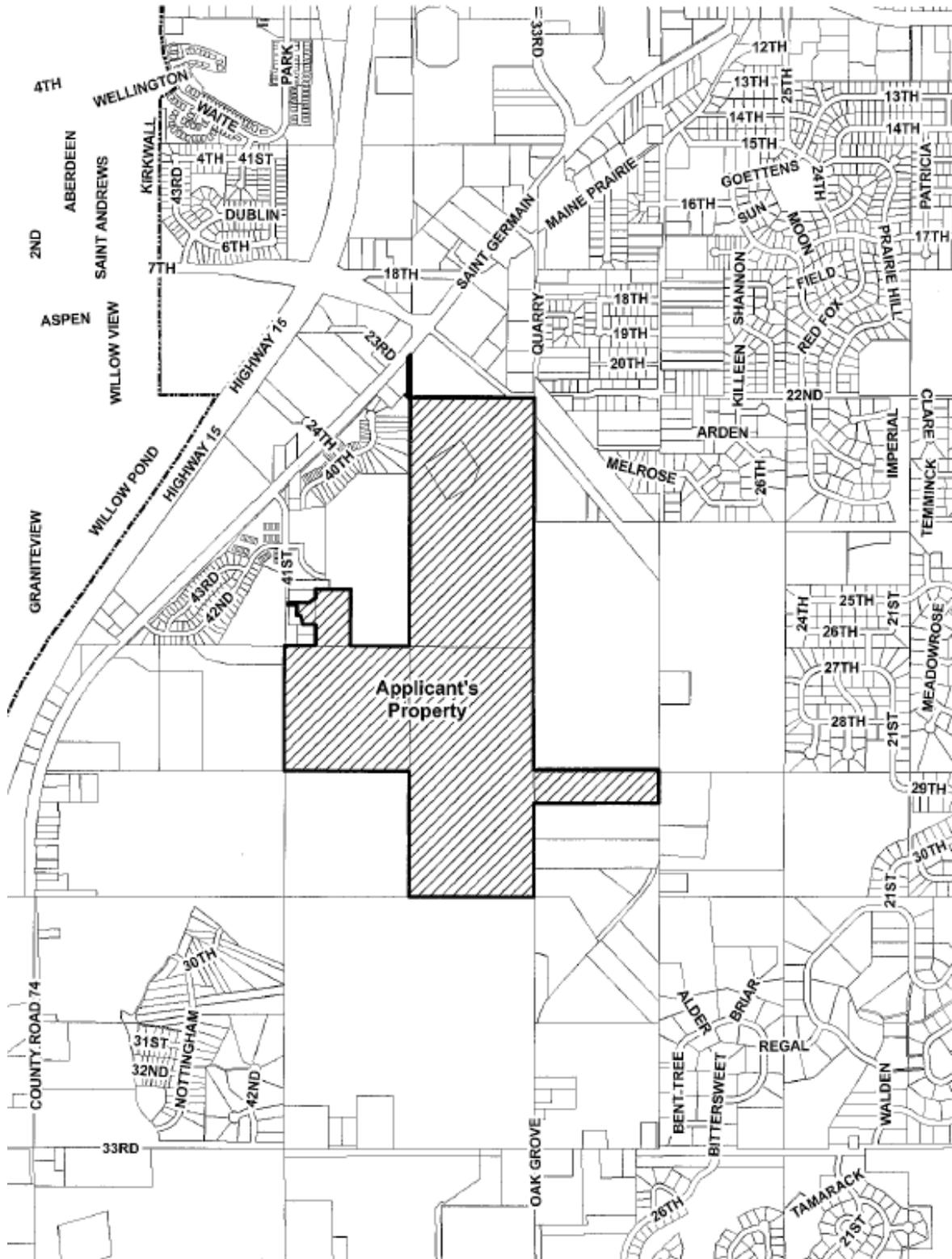


Figure 1. Location map of the proposed site (taken from the EAW application)

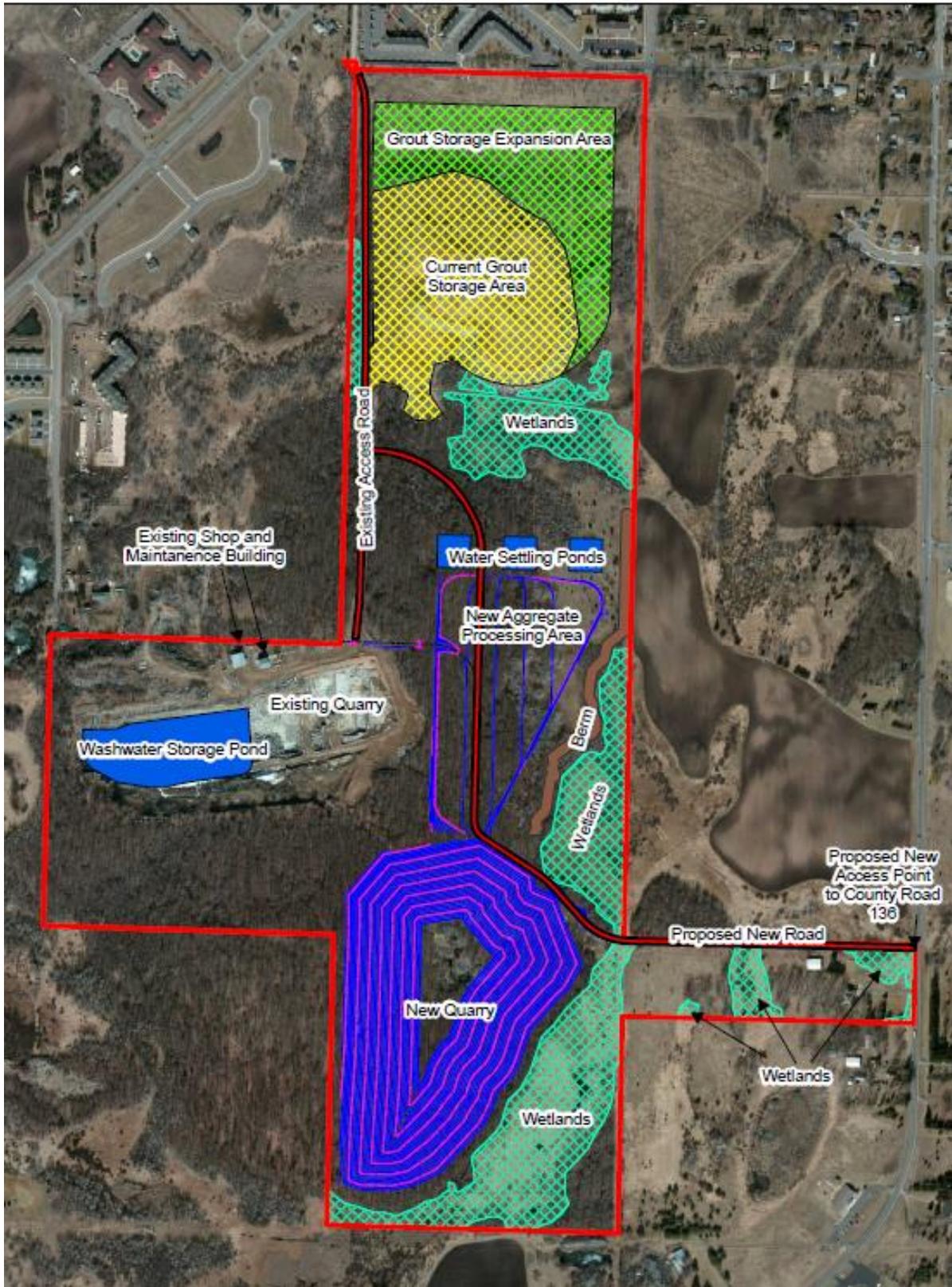


Figure 3. Proposed Charcoal 3 project by the Cold Spring Granite Company (taken from the EAW)

Charcoal 3 Granite Quarry

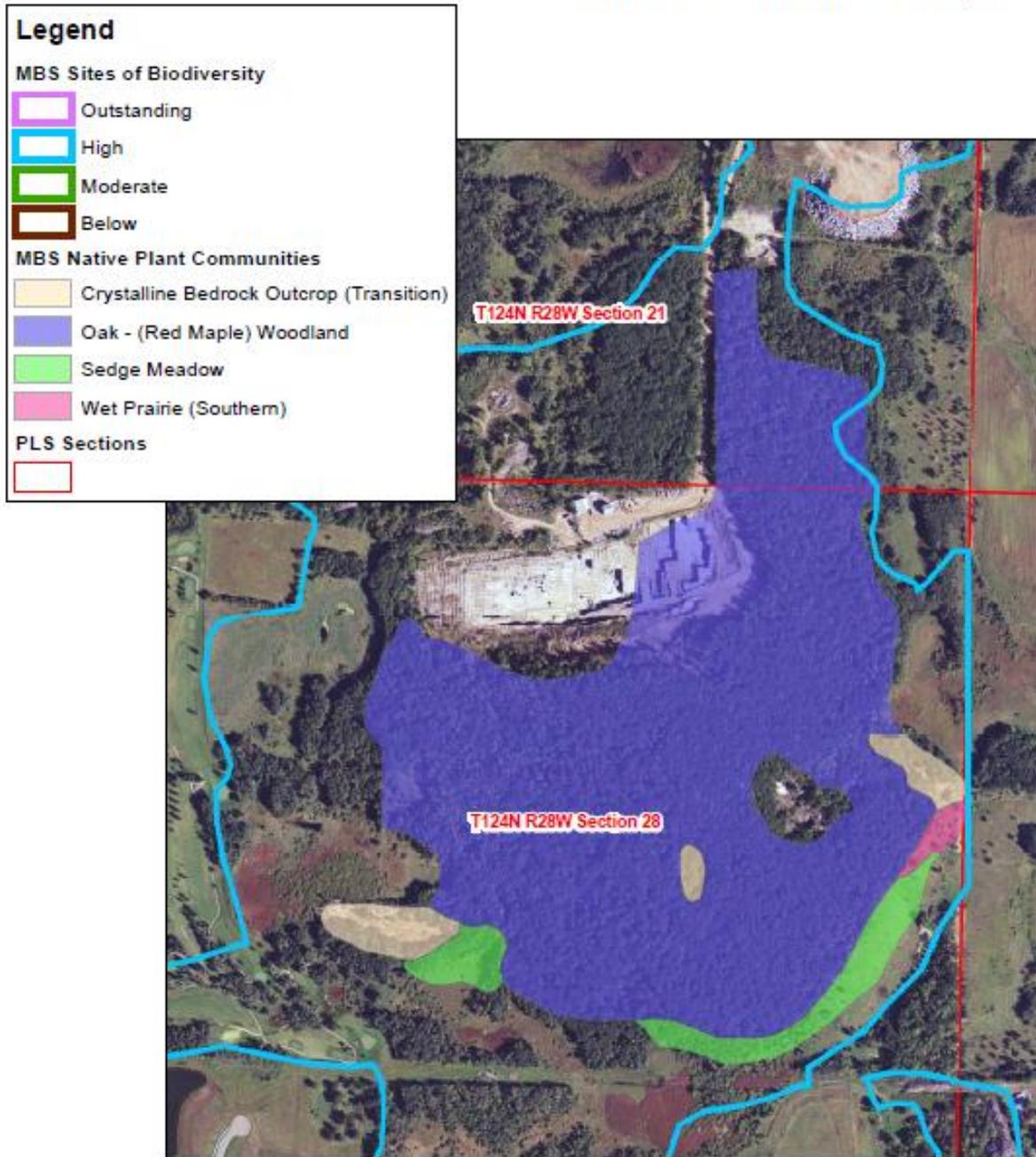


Figure 4. DNR map showing plant communities on the Charcoal 3 site (taken from Doperalski letter)