Tree Planting Proposal Rubric for Geospatial Skills

Criteria	Exemplary	Proficient	Adequate	Needs Improvement
Use GIS to manage, display, query, and analyze geospatial data. Use geospatial analysis to process geospatial data for the purpose of making calculations, and inferences about space, geospatial patterns, and geospatial relationships. Use geospatial data analysis	The policy describes the specific and precise geographic locations using geographic language of the proposed tree plantings (for example: on the northeast corner of the main parking lot or including geographic coordinates). No images are needed to identify the location. Verbal explanation alone is sufficient.	The policy describes the geographic locations of all of the proposed tree plantings (for example: in the main parking lot, 30 meters away from the front of the school). Geographic language may not be completely precise.	The policy describes the geographic locations of some of the proposed tree plantings (for example: in the main parking lot).	None of the proposed tree plantings are placed into locations with specificity ("I will put the trees in the parking lot") or the geographic location description is not accurate or precise (for example: left of the school).
in which geospatial relationships such as distance, direction, and topologic relationships (e.g. adjacency, connectivity, and overlap) are particularly relevant. Row 1: Precision about using geographic language. Row 2: Precision about using the geographic tool (Web GIS).	At least three screen shots including two different planting areas and a screenshot that includes the boundary of the entire Building 21 property and all planting locations from the Web GIS are included. Added detail will be present through detailed imagery, labels, legends, and so forth (for example, pictures of tree leaves, specific planting locations).	Two screen shots from the Web GIS are included from two different planting areas. Added detail will be present through detailed imagery, labels, legends, and so forth in both screenshots. (for example, pictures of tree leaves, specific planting locations).	Two screen shots from the Web GIS are included from two different planting areas. At least one screenshot from the Web GIS is included that includes some detail such as a polygon that indicates the tree planting location.	Screenshots do not include any additional detail through detailed imagery added, labels, legends, and so forth or included detail is not accurate or misleading.
Row 3: Articulating spatial relationship.	The discussed tree locations (both planting and non- selected alternative) take into account three or more geospatial relationships (for example, existing trees, proximity to road, existing	The discussed tree locations (both planting and non- selected alternative) take into account two geospatial relationships (for example, existing trees, proximity to road, existing structures,	The discussed tree locations (both planting and non- selected alternative) take into account only one geospatial relationship (for example, existing trees, proximity to road, existing	Existing trees or other features on the Building 21 property were not considered.

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	structures, topography, drainage, urban planning or interactions among any two factors)	topography, drainage)	structures, topography, drainage)	
Use inductive and deductive reasoning to analyze, synthesize, compare, and interpret information. Use logic and reasoning to identify strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.	At least two site selections are practical and realistic for the selected tree species.	At least two site selections are practical.	One site selections is practical.	No site selections are practical.
	A valid justification is provided that clearly explains with much detail why the two recommended locations are ideal locations and the selected species are appropriate.	A valid justification is provided that explains why the two recommended locations are ideal locations.	A valid justification is provided that explains why one recommended location is an ideal location.	A valid justification is not provided that explains why either of the recommended locations are ideal locations.
	Alternative locations and species that were not selected are addressed with much detail .	Alternative specific locations and species that were not selected are addressed.	Alternative specific locations or species that were not selected are addressed.	Does not address alternative locations or species.
	The major benefits of planting a particular species are included and address three or more factors (cost, size, shade, rate of growth, hardiness, animal habitat, drainage, effects on crime/aesthetics, or other interactions with the environment). Two explanations include much detail.	The major benefits of planting a particular species are included and address two factors (cost, size, shade, rate of growth, hardiness, animal habitat, drainage, effects on crime/aesthetics, or other interactions with the environment). One explanation includes much detail.	One major benefit of planting trees in each location is included (cost, size, shade, rate of growth, hardiness, animal habitat, drainage, effects on crime/aesthetics, or other interactions with the environment). No detailed explanation provided.	The major benefits of planting trees in the locations are not included.
	The proposal clearly states how the tree plantings will impact or change the environment. Proposal articulates who or what benefits and who or what is impacted. (This species provides habitat for birds, insects, and squirrels; This tree's color will be appealing to the eye and it will be a	The proposal states how the tree plantings will impact or change the environment. Proposal articulates who or what benefits and who or what is impacted. (This species provides habitat for animals; This tree's color will be appealing to the eye) Explanations are detailed.	The proposal somewhat states how the tree plantings will impact or change the environment. Proposal does not include who or what benefits and who or what is impacted. (This species provide habitat; People will like this tree)	The proposal does not state how the tree plantings will impact or change the environment.

nice to place to chill). Explanations are very detailed.		