

**EXHIBIT 2**  
**Environmental Assessment (EA) Form Instructions**  
**24 CFR Part 58 - HUD Environmental Review**

*The Environmental Assessment consists of the Categorically Excluded (CAT X) questions 1-16 and these instructions to complete items 17-45.*

Use the questions below to prepare your comments regarding criteria #17-45. Each question does NOT need to be answered separately. Review the questions in order to make a general conclusion and then prepare comments.

Supporting documentation should be attached but is **not** required.  
 Contact the HCD Environmental Review Specialist with any questions.

Criteria	Exhibit/Evidence Questions	Potential Resources
<b>Land Development Checklist</b>		
<p><u>17. Conformance with:</u>  <a href="#">Comprehensive Plans</a>  <a href="#">Land Use and Zoning</a></p> <p>A proposed project should be consistent with a community's long-range goals and policies as articulated in its comprehensive plans. Zoning regulates development patterns including the density, construction, alteration, and use of buildings, structures, or land. A community's zoning ordinance is the principal legal tool available for the implementation of its comprehensive plan and the definition of the community's land use policies.</p>	<p>Consider how the proposed project supports the community's comprehensive plan. Where appropriate, provide the plan's name and date of approval, and upload the relevant page(s).</p> <ol style="list-style-type: none"> <li>1. Is the project located within a specific planning area, community planning area, or other planning area that details existing and future planning initiatives for those areas?</li> <li>2. What is the current zoning classification of the project location?</li> <li>3. Does the proposed project comply with existing zoning regulations? If not, does the proposal require a zoning variance?</li> <li>4. What is the existing land use at the project location?</li> <li>5. How does the project relate to the existing land uses of the adjacent and surrounding properties?</li> </ol>	<p>State Planning Agency</p> <p>Local and Regional Planning Agency</p> <p>Zoning Review Officer or Administrator</p> <p>Planning Commission/Director</p>
<p><u>18. Scale, Compatibility and Urban Impacts</u></p> <p>Each project location will likely have positives and negatives. Therefore, site planning is key to balancing or mitigating the impacts of a proposed project. Certain types of federally assisted activities can have an adverse impact on the economic viability of a city's central business district. HUD-funded infrastructure improvements made at the edge of an urbanized area (e.g., sewer and water lines) may serve to induce development in undeveloped portions of a community, thus creating sprawl with resulting environmental and social costs.</p>	<p>Examine the visual impact of the project to determine if it is a good fit for the surrounding area. If your project involves a building, assess whether it will block or degrade views or become the focal point. Are the size, design, materials, and siting of the building or buildings compatible with surrounding buildings.</p> <ol style="list-style-type: none"> <li>1. How will the project alter the landform? Will the project demonstrably destroy or alter the natural or man-made environment? For example, will there be clearance of trees or buildings or alteration of the geomorphic form of the land?</li> <li>2. How does the project "fit" or conform within the surrounding and established built environment in terms of overall scale, density, size, and mass?</li> <li>3. Will there be an intrusion of elements out of character or scale with the existing physical environment?</li> <li>4. Does the proposed building represent a significant change in size, scale, placement, or height in relation to neighboring structures in an inappropriate manner?</li> <li>5. Does the project affect building density in the community?</li> <li>6. Are the changes resulting from any induced development regarded by the community as beneficial or negative?</li> <li>7. How does the project's design relate to the context of its surroundings?</li> </ol>	<p>City Architect, Urban Design Staff</p> <p>Local American Institute of Architects, American Society of Landscape Architects, or American Planning Association</p> <p>Local Conservation and Historic Commissions</p> <p>Consider:                      Site Planning                      Scale and Urban Design                      Visual Quality</p>

Criteria	Exhibit/Evidence Questions	Potential Resources
	<p>8. Are levels of activity reduced or detrimentally increased? Does the project enhance street-level activity and community interaction?</p>	
<p><b>19. Slope</b> Slope refers to changes in the physical features of the land: its elevation, orientation, and topography. Hillsides often requires alteration of the slope, especially where changes in the visual character of the site may occur and where slope instability, erosion, and/or drainage problems may result. In some localities, hillsides are likely to house native plant communities which could be lost as a result of topographic alteration.</p> <p>Improper grading often alters the surface water flow and may cause flooding for the site and the surrounding property owners. Excessive grading may also alter the groundwater level, which may cause the slow death of trees and ground cover, and in turn destroy wildlife habitats.</p>	<p>First, determine the slope. This information can be found in soil surveys or similar reports and studies, as well as contour or topographic maps. Next, complete a field investigation using an Abney Level, a clinometer, or a phone application. If in the field, measure the slope using the overland flow path profile that represents the topography of one-third to one-quarter of the most erodible part of the field (USDA-NRCS). Compare the slope at the project site to the slope suitability chart. If the slope at the site is in the marginal or unsatisfactory rating, consult project engineers and city development to determine if there are any restrictions, design changes, or mitigation measures needed.</p> <ol style="list-style-type: none"> <li>1. Is the site on a slope? If so is the slope <a href="#">slight, moderate, severe, or very severe</a>?</li> <li>2. Does the area have a history of slope failure?</li> <li>3. Do visual indications exist of previous slides or slumps in the project area, such as cracked walls or tilted trees or fences?</li> <li>4. Does the city or county have a soil survey that mentions that slopes are unstable for any of the soils on the site?</li> <li>5. Has a geotechnical report that includes soil boring information been previously developed for the site?</li> <li>6. Does the proposal call for development on a steep slope and, if so, does the design plan include measures to overcome potential erosion, slope stability, and runoff problems?</li> </ol>	<p><a href="#">NRCS Soil Survey</a></p> <p><a href="#">U.S. Geological Survey (USGS) Topographic Maps</a></p> <p>Civil Engineer</p> <p>Geologist</p> <p>Soils Scientist</p>
<p><b>20. Erosion</b> Erosion, transport, and sedimentation are the processes by which wind and water wear away the land surface or move it to another location. While commonly considered an agricultural problem, erosion in the urban context, resulting from land clearance and construction, can be equally serious. In urbanized areas, erosion can cause structural damage in buildings by undermining foundational support. It can pollute surface waters with sediment and increase the possibility of downgradient flooding by sediment-laden water entering the drainage system or watercourses. It can also increase the possibility of slope collapse.</p>	<p>Slope and soil suitability play a role in erosion potential. Compare the slope and soils in the project location with field observation. If the slope is severe or very severe and there is the presence of silty or sandy soil, a potential for erosion exists. The potential for erosion can be calculated with the <a href="#">Revised Universal Soil Loss Equations (RUSLE)</a>.</p> <ol style="list-style-type: none"> <li>1. Is there evidence of erosion or sedimentation?</li> <li>2. Does the project involve the development of an erosion-sensitive area (near water, on a steep slope, or on sandy or silty soil)?</li> <li>3. If the site requires clearance, what are the effects of the removal of vegetation? How will erosion be managed and controlled? How many acres will be cleared and for how long?</li> <li>4. Is an erosion control plan included as part of construction and the construction contract?</li> <li>5. Will the project site significantly affect or be affected by erosion or sedimentation conditions? If so, does the design plan include measures to overcome potential erosion problems?</li> <li>6. Could erosion from the project adversely impact a downslope development or natural environment?</li> <li>7. Does the proposed project involve the steepening of slopes?</li> </ol>	<p>In addition to resources above:</p> <p>Landscape Architect</p> <p>Soils Engineer</p> <p>State or local Highway Department</p> <p><a href="#">HUD's Community Resilience Toolkit</a>, "Erosion"</p>

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<p><b>21. <a href="#">Soil Suitability</a></b> Soil suitability is a measure of how well the qualities of the soil support the requirements of the proposed land use. The type of soil is not the only development issue. When the soil issues combine with other features of the site, including the height of the water table, the slope stability, and the potential of subsidence or settling of soils due to the extraction of mineral and geological deposits beneath the surface, additional problems can arise.</p> <p>Nonetheless, most soils are suited for development, and adverse soil conditions can be overcome by installing drainage, replacing soil with structural fill, or using special foundations. However, these measures can significantly add to project costs or conflict with resource management goals such as the preservation of floodplains or farmlands.</p>	<p>Perform an initial screening test to determine if the foundation soils are compressible or unstable. Also consider using Soil Survey Maps prepared by the National Resources Conservation Service (NRCS) or state natural resources department.</p> <p>If the potential exists for problems at the project site, a soil engineer, or geologist should examine the site: Underground Hazards, Bearing Capacity, Frost Susceptibility or Liquefaction, Shrink-Swell, Subsidence, Water Table</p> <ol style="list-style-type: none"> <li>1. Is there evidence of ground subsidence, seismic activity, a high-water table, erosion, or other unusual conditions on the site?</li> <li>2. Is there any visible evidence of soil problems such as foundation cracking, heaving, settling, or basement flooding in the neighborhood of the project site?</li> <li>3. Were structural borings or a dynamic soil analysis/geotechnical study needed and conducted? If so, please discuss the findings of the report.</li> <li>4. Are there visual indications of filled ground?</li> <li>5. Will the project site significantly affect or be affected by unsuitable soil conditions? Is climate change expected to exacerbate unsuitable soil conditions due to rainfall variability and warming temperatures?</li> <li>6. Will the project significantly affect soils that may be better suited for natural resource management activities such as farming, forestry, unique natural area preservation, etc.?</li> </ol>	<p>Along with the resources above, and in addition to the federal requirements under NEPA, legal requirements for soil suitability are found primarily in state and local building codes, zoning requirements, and subdivision regulations. EPA National Pollutant Discharge Elimination System (NPDES) and Stormwater Pollution Prevention Plan (SWPPP) requirements address issues related to subsidence. Additionally, many communities have local building codes or zoning ordinances that address soil suitability</p>
<p><b>22. <a href="#">Energy Consumption/Efficiency</a></b> (HUD's Climate and Energy topic) Lowering energy use (and related carbon emissions) has become increasingly important in both the design and the location and siting of new facilities.</p> <p>Maximizing opportunities for energy efficiency can be incorporated in nearly all phases of project planning, location selection, site development, and building design.</p> <p>State Qualified Allocation Plans (QAPs) typically require or incentivize energy-efficiency criteria for Low-Income Housing Tax Credit (LIHTC) developments. Section 109 of the Cranston-Gonzalez Affordable Housing Act of 1990 (42 USC 12709) requires new construction of public and assisted housing, as well as Federal Housing Administration (FHA)-insured housing, to meet the minimum International Energy Conservation Code (IECC) and the American Society of Refrigeration, Heating, and Air Conditioning Engineers (ASHRAE) standard.</p>	<p>Most states and localities have adopted building codes, subdivision requirements, and zoning ordinances to require <a href="#">minimum energy efficiency standards</a>.</p> <ol style="list-style-type: none"> <li>1. Is the project location near Transit, Shopping, Services, Schools Employment locations?</li> <li>2. Has the project taken advantage of shading from trees and other natural features to lower energy use?</li> <li>3. Have the plans and building orientation taken full advantage of potential energy-saving measures related to climate, sun, and wind?</li> <li>4. Is the incorporation of Energy Star appliances or systems being considered? Does the project meet current Energy Star Certified Homes performance standards?</li> <li>5. Is the project seeking a rating under a recognized green building standard?</li> <li>6. If a large development, is the project considering LEED-Neighborhood Development certification?</li> <li>7. Are utility rebates, tax incentives and renewable energy components being considered as part of project financing?</li> <li>8. For multifamily projects, is there individual metering for utilities or a tenant energy efficiency education program?</li> <li>9. Is there an opportunity to enter into an Energy Performance Contract (public housing)?</li> </ol>	<p>Consult with an Engineer, Architect, and/or Energy Auditor/Home Energy Rater to determine if the design fully exploits potential energy-saving measures, include those certified under the Home Energy Rating System (HERS) training and certification program.</p> <p>Utility companies and, in some cases, Public Works staff can assist in determining the adequacy of available power service to meet the needs of the proposal.</p> <p><a href="#">Greenhouse gas calculation tools</a></p>

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<p><u><a href="#">23. Climate Change Adaptation</a></u> (HUD’s Climate and Energy topic)</p> <p>Under <u><a href="#">Executive Order 14008 on Tackling the Climate Crisis at Home and Abroad</a></u>, it is federal policy to incorporate climate considerations into decision-making and build resilience against the impacts of climate change. HUD-assisted projects need to consider the potential future impacts of climate change on occupants. This applies to both new and existing structures; though climate impacts may not have been considered during a project’s initial environmental review, subsequent Environmental Assessment (EA)-level reviews (e.g., for major rehabilitations) should consider potential climate impacts on residents’ safety, wellbeing, and property.</p>	<p>A proposed project should consider the likely impacts of climate change on the project’s short- and long-term suitability and resilience. Many natural systems are expected to be affected by climate change, so these considerations will be wide-ranging.</p> <ol style="list-style-type: none"> <li>1. Is this project designed to withstand, within the useful life, the expected climate related changes projected for the area?</li> <li>2. How will increasingly frequent or severe natural disasters affect the proposed project?</li> <li>3. What specific climate change impacts have been identified, and what measures will help mitigate those impacts? Existing or ongoing infrastructure project may be considered; however, these do not eliminate the need to include mitigation measures specific to the proposed project.</li> <li>4. What future climate projections were considered when planning mitigation measures?</li> <li>5. Do the results of the considerations include future moderate and severe future climate scenarios? How will the likely future results affect the wellbeing of project residents and natural environment?</li> <li>6. How has the project plan reduced its direct contribution to climate change? Where feasible, consider using low-carbon building materials and incorporating existing buildings into the project to reduce greenhouse gas emissions from construction and material fabrication.</li> <li>7. Has the project considered indirect contributions toward climate change? For example, a project could provide electric vehicle charging infrastructure to reduce carbon emissions from residents’ transportation choices.</li> <li>8. What greenhouse gas emissions level targets were the proposed project’s sustainability tactics designed to meet?</li> </ol>	<p><u><a href="#">HUD Community Resilience Toolkit</a></u></p> <p><u><a href="#">U.S. Climate Resilience Toolkit</a></u></p> <p><u><a href="#">Georgetown Climate Center Adaptation Clearinghouse</a></u></p> <p><u><a href="#">EPA Climate Change Adaptation Resource Center</a></u></p> <p><u><a href="#">National Institute of Standard and Technology (NIST) Community Resilience planning guide</a></u></p> <p><u><a href="#">FEMA National Risk Index for Natural Hazards</a></u></p> <p><u><a href="#">Guidelines on Flood Adaptation for Rehabilitating Historic Buildings</a></u></p>

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<p><a href="#">24. Hazards, Nuisances and Site Safety</a></p> <p>Consider if project’s location and design reduce natural and man-made risks to people or property damage for both the public or project users. Refer to <a href="#">Important Considerations</a> for a list of common hazards.</p> <p>Many of these hazards may be subject to municipal regulation. Local zoning, building, and health codes usually address maintenance and cleanliness. Their enforcement is often independent of environmental assessment procedures.</p> <p>HUD’s <a href="#">Minimum Property Standards</a> also address site hazards, but they apply only to projects funded through Office of Housing programs. Communities should incorporate any expected change or increase in risk resulting from climate change over a project’s expected lifespan or a 30-year time horizon.</p>	<p><b>Earthquake or Volcanic Activity:</b> Use the <a href="#">Federal Emergency Management Agency’s (FEMA’s) Seismic Risk Maps</a> and <a href="#">HUD Minimum Property Standards</a> to determine seismic risks associated with the project area. <a href="#">USGS Earthquake Hazards</a> website is also a good resource. If the project is within 0.5 miles of an active fault, obtain the review and opinion of an engineer. A seismologist can provide additional information as to the extent of the risk.</p> <p><b>Floods, Tornadoes, Hurricanes, Tsunamis:</b> Flood risks are primarily addressed under Executive Order 11988—Floodplain Management, which is part of the Category X review, however, monthly “Storm Data” published by the <a href="#">National Oceanic and Atmospheric Administration’s National Centers for Environmental Information, U.S. Department of Commerce</a> includes occurrences of tornadoes, hurricanes, and floods. Some state-level agencies or universities might also collect information on storm data.</p> <p><b>Forest and Range Fires:</b> Contact local fire departments to determine whether the project area is currently, or may soon become, susceptible to forest or range fires. If so, consult with the fire department and local weather service authorities to determine which factors create a potential for fire hazards. Some state agencies may also publish fire hazards maps.</p> <p><b>Mudslides, Sands, and Hazardous Terrain Features:</b> Through field observation, area soils maps, and consultation with local flood insurance personnel, local weather bureaus, and the NRCS soils data, determine whether:</p> <ul style="list-style-type: none"> <li>• The site or adjacent area contains slopes with unconsolidated loose soils (i.e., a type of light windborne soil)</li> <li>• The area is subject to extensive rainfall that could cause mudslides.</li> <li>• The site contains soil materials prone to exhibit liquefaction (such as quicksand)</li> </ul> <p><b>Man-made Site Hazards:</b> Caused by human action or inaction, these types of hazards can have an adverse impact on humans, other organisms, biomes, and ecosystems. The frequency and severity of man-made hazards are key elements in some risk analysis methodologies.</p> <ul style="list-style-type: none"> <li>• For dangerous intersections or inadequate street lighting, include consultation with city planning offices to determine access and safety infrastructure improvements that are or could be planned to support the development and additional foot traffic generated.</li> <li>• For attractive nuisances on or near the project, review the site plan to ensure that access between resident areas and nuisances is separated, e.g., fences to prevent kids from climbing into detention areas.</li> <li>• For vacant lots, determine whether code enforcement can be engaged to abate vacant lot hazards, e.g., trash piles.</li> </ul>	<p>Federal or State Geological Survey</p> <p>Seismologist or Volcanologist</p> <p>District Officers of the Army Corps of Engineers or FEMA</p> <p>The <a href="#">Environmental Protection Agency (EPA)</a> which maintains FEMA’s Hazus program</p> <p><a href="#">HUD – Community Resilience Toolkit</a></p> <p>State and local Emergency Management Agencies</p> <p>State and local Floodplain Managers</p> <p>State and local Departments of Environment and Public Health</p> <p>Local Fire Departments</p>

Criteria	Exhibit/Evidence Questions	Potential Resources
<p><u>25. Noise – Contribution to Community Noise Levels</u></p>	<p>1. Will the proposed project create excessive noise for the ‘noise sensitive areas’ around it?</p> <p>For example, if the project is a manufacturing business, is it likely to create unwanted noise for the libraries, hospitals, or housing in the area, especially between the hours of 10 pm &amp; 8 am.</p> <p>Using site design techniques such as building location and orientation, window placement and the use of barriers, predictable undesirable site noise shall be moderated to meet the requirements of 24 CFR Part 51, Environmental Criteria and Standards</p>	

<b><i>Socioeconomic Checklist</i></b>
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<p><u>26. Demographic/Community Character Changes</u></p> <p>Communities can be highly diverse or highly homogeneous places. They can be strictly residential or characterized by mixed land uses. "Community" is often difficult to define because it carries physical, social, and psychological dimensions.</p> <p>Central to the definition of community is both the presence of a residential population and a sense of common bond and collective identity which defines the community as distinct from other neighborhoods.</p>	<p>Neighborhoods exist in which residents have strong ties to the area, each other, and the local stores, and institutions. Often, these are ethnic areas where residents share a common cultural and religious heritage. It is important that HUD-assisted activities not destroy the social networks and institutional ties in these areas and that they primarily benefit low- and moderate-income households.</p> <ol style="list-style-type: none"> <li>1. What is/are the identifiable community(ies) within the sphere of likely impact of the proposed project? What are the factors which contribute to the character of the community(ies)?</li> <li>2. Does the proposed project contribute to reducing or significantly altering the racial, ethnic, or income segregation of the area’s housing?</li> <li>3. Will the proposed project result in physical barriers or difficult access which will isolate a particular neighborhood or population group, making access to local services, facilities, and institutions or other parts of the city more difficult?</li> <li>4. Could/does the project help address historical barriers present segregating the community?</li> <li>5. Does the proposed project at this site create a concentration of low-income or disadvantaged people in violation of HUD site and neighborhood standards?</li> <li>6. Do the environmental impacts of the proposed project affect low- and moderate-income or minority persons or communities more significantly than the general public?</li> </ol>	<p>Neighborhood planner at the local planning department</p> <p>Director of local neighborhood organizations</p> <p>Housing code compliance office/local health or building department</p> <p>Local community action agencies</p> <p>Local advocacy groups and/or organizations</p>
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Criteria	Exhibit/Evidence Questions	Potential Resources
<p><b><u>27. Displacement</u></b></p> <p>Direct displacement involves involuntary displacement of a person who occupies property that is acquired, rehabilitated, or demolished for a HUD-funded activity; whose property is vacated to comply with HUD-assisted code enforcement; or whose property is specifically identified in a grant application as the site of a leveraged activity.</p> <p>Indirect displacement results from an activity or event that is not HUD-assisted but which is supported by concentrated HUD activities. This includes displacement caused by rapidly increasing rents made possible by the revitalization of an area in which HUD-funded rehabilitation or street improvements are taking place.</p>	<p>Federal law prohibits <a href="#">discrimination in housing and community development programs</a> because of race, color, religion, sex, national origin, familial status, and disability. Recipients of HUD funding must also take steps to <a href="#">affirmatively further fair housing</a>.</p> <ol style="list-style-type: none"> <li>1. Will the project directly displace individuals or families? How many people?</li> <li>2. Will the project destroy or relocate existing jobs, community facilities, or any business establishments?</li> <li>3. Will the project affect identifiable groups, such as older persons, females, single-parent households, racial/ethnic groups, income groups, or minority group members?</li> <li>4. Are replacement facilities or housing units available within the community or in nearby neighborhoods? What will be the effect of relocation on these neighborhoods?</li> <li>5. Will the project result in probable indirect displacement? If so, what measures have been planned to alleviate the hardship on those affected whose displacement is not covered under the <a href="#">Uniform Relocation Act</a>?</li> </ol>	<p>Those directly displaced by a public acquisition are entitled to the assistance stipulated in <a href="#">HUD Handbook 1378: Tenant Assistance, Relocation and Real Property Acquisition</a></p> <p>Relocation Specialist at local community development agency</p> <p>Relocation Specialist at HUD field office</p>
<p><b><u>28. Employment and Income</u></b></p> <p>A project can impact employment and income patterns in several ways. Most projects involve temporary construction jobs and permanent jobs required for the operation of the new facility. The purpose of the assessment is first to identify anticipated changes in employment and income patterns and then to evaluate how many of what types of jobs will be created. While increased job opportunities are generally considered beneficial, it is important to determine what the skills and income profile of new employment opportunities are likely to be. Some new development projects serve to displace existing employment.</p>	<p>Measure employment and income patterns either by identifying the occupations and income levels characteristic of an area's resident population or by identifying major employers within the area. Factors can include Per capita income, Median household income, Unemployment levels, Total employment and by industry sectors.</p> <ol style="list-style-type: none"> <li>1. Will the project either significantly increase or decrease employment opportunities? Will it create conditions favorable or unfavorable to commercial, industrial, or institutional operation or development?</li> <li>2. How many temporary and how many permanent jobs will the project create?</li> <li>3. What are the profiles of the newly created jobs? What is the distribution across the skill sets and income scale? How do these relate to the skills and income profiles of project area residents?</li> <li>4. From where are the new employees likely to come? To what degree will these new jobs go to local residents, and will local residents be competitively positioned for these jobs?</li> </ol>	<p>Local Industrial Development Authority</p> <p>Economist at state employment service center</p> <p>Planner or Administrator at local planning or employment agency</p> <p>Chamber of Commerce</p> <p><a href="#">analysis tools for Socioeconomic factors</a></p>

**Community Facilities and Services Checklist**

Criteria	Exhibit/Evidence Questions	Potential Resources
<p><a href="#">29. Educational and Cultural Facilities</a></p> <p>Schools include the traditional elementary and high school systems and may include centers of higher education and adult education. The need for educational facilities is related to the age structure of the population and it may also be influenced by the economic structure of the community.</p> <p>Cultural resources are also considered to be educational facilities, and include art galleries, libraries, dance facilities, museums, theaters, community centers, and other facilities for artistic and cultural purposes. Demand and supply for cultural facilities is a function of factors that include the size of the community, density of development, income, and demographics.</p>	<p>Schools are a different underwriting/environmental factor to assess. Schools are built in response to need and not in anticipation of need. Capacity is influenced by changing household characteristics, shifting service area boundaries, curriculum revisions changing educational concepts, and busing strategies. Capacity and accessibility are the fundamental issues to address.</p> <ol style="list-style-type: none"> <li>1. What is the projected increase in student population due to the proposed project?</li> <li>2. Will the additional school-aged children in the proposed project exceed the capacity of existing or planned school facilities?</li> <li>3. Does the potentially affected school(s) have adequate and safe access facilities (i.e., walking paths, bus routes, crosswalks, and guards) for the projected population increase? Are these adequate both in terms of safety and access?</li> <li>4. Are additional or alternative facilities needed to ensure safety and suitable access?</li> </ol>	<p><a href="#">Utah State Board of Education</a></p> <p><a href="#">Local School/District Superintendent's office</a></p> <p>Developer or sponsor of the proposed HUD project</p> <p>Traffic Department</p> <p>*When the project is existing infrastructure replacement, it will not have any impact on the educational facilities in the area.</p>
<p><a href="#">30. Commercial Facilities</a></p> <p>To assess commercial facilities, consider two key factors:  The adequacy of existing commercial facilities to service the project  The impact on surrounding commercial establishments.</p> <p>A determination of negative impact might result if it is found that existing commercial facilities are inadequate to meet the needs of the project users or residents. Poor access is the most common problem; however, in some locations, the existing commercial establishments can have too limited a variety of goods available or unusually high prices.</p> <p>A determination of negative impact might be displaced or resolved if a new commercial development is also proposed, such as a grant-sponsored commercial venture.</p>	<p>Generally, three types of retail areas might be affected by the proposed project:  <b>Neighborhood:</b> These consist of small businesses usually within 5-10 minutes of travel time including food, drug, cleaning, and convenience stores organized around a supermarket.  <b>Community:</b> A central business district contains multifunctional economic and service enterprises including banks and specialty stores with access provided either by auto or public transit. In larger metropolitan areas, this usually does not include a food store.  <b>Regional:</b> This may be either the central business district of a metropolitan area or a regional shopping center, usually with two or more department stores and various specialty stores.</p> <ol style="list-style-type: none"> <li>1. Is there adequate and convenient access to retail services? In the case of the elderly, this means that shopping for such essential items as food and medicine is within three blocks, and services such as banks and other convenience shopping are within walking distance.</li> <li>2. Do local retail services meet the needs of project occupants/users? Are they affordable and is the range of services adequate?</li> <li>3. In areas not readily serviced by retail services, can public transportation carry commuters to retail services within half an hour? If public transportation is not currently available, what are the plans to provide readily available transportation services? If access to vital services, such as a grocery store, is limited or requires multiple transfers via public transportation, consider options, such as establishing a paratransit service or alternative locations, before beginning the project.</li> <li>4. Will the proposed project adversely impact or displace existing retail and commercial services?</li> </ol>	<p>Local Chamber of Commerce</p> <p>Commercial Realtor and/or Commercial Appraiser</p> <p>Commercial Development Specialist</p> <p>Local Planning Agency</p>



Criteria	Exhibit/Evidence Questions	Potential Resources
<p><b>31. <a href="#">Health Care Services</a></b></p> <p>Health care services are those regular and emergency dental, medical care, mental health, and substance abuse services which private doctors, dentists, and other trained medical staff at a hospital; outpatient clinic; public, private or community health facility; home-care medical programs; or an emergency treatment facility (e.g., trauma unit, special cardiac pulmonary resuscitation (CPR) unit) provide.</p>	<p>Consider whether the proposed project provides adequate: Access to hospitals, emergency facilities, clinics, and physician services, Access to mental health and substance abuse service providers, Health services to accommodate the special needs of certain populations, Capacity for existing health care services to accommodate an increase in use.</p> <ol style="list-style-type: none"> <li>1. Will a potential population rise increase the need for area health care services beyond current capacities?</li> <li>2. Are non-emergency health care services, including mental health and substance abuse services, located within reasonable proximity to the proposed project (i.e., less than a half-hour's drive or commute away)? In dense urban areas, an even shorter time may be necessary.</li> <li>3. Are emergency health services (such as those that police, fire, and ambulances provide) available within approximately three to five minutes?</li> <li>4. Is the number of doctors, dentists, nurses, and other trained medical staff in realistic proportion to any increase in residents/users? If not, are provisions planned for additional skilled staff?</li> <li>5. Are the number of hospital beds and other medical facilities adequate in proportion to the increase in residents/users?</li> <li>6. Will project residents/users require special medical services or skills such as geriatric clinics?</li> </ol>	<p>Area Health Systems Agencies—Can provide the area-wide Health System Plan, which is an inventory of institutional health services and projected demand within the area.</p> <p>Local Public Health Departments—Can provide information on local demand for, and quality of, health care.</p> <p>National Council on Aging—Can provide information on the size and location of the local elderly population.</p> <p>Local Red Cross—Can provide information on the medical needs of the area.</p>
<p><b>32. <a href="#">Social Services</a></b></p> <p>Social services include, but are not limited to, programs for drug addiction, alcoholism, and mental health; halfway houses and drop-in centers; family counseling centers; daycare centers; services for senior citizens and persons with disabilities; nutrition centers; Meals on Wheels; income maintenance; manpower programs; and cooling centers in areas prone to severe heat risk. Governmental social service agencies or public or private groups typically provide these services.</p>	<p>Social services must cater and be easily accessible to those who need them. Therefore, access and adequacy are important considerations. If appropriate social services centers are not located within reasonable proximity to the proposed development, consider developing alternate spaces and services to accommodate new residents/users.</p> <ol style="list-style-type: none"> <li>1. Are the social services located onsite or within a convenient and reasonable distance to residents of the proposed project? Or is adequate public transportation available from the project to these services?</li> <li>2. Will the proposed project overtax or negatively impact social services?</li> <li>3. Will the provision of additional social services at this site create a concentration of the disadvantaged in violation of HUD site and neighborhood standards?</li> </ol>	<ul style="list-style-type: none"> <li>• Local Planning Department</li> <li>• Social Services Department</li> <li>• Public Welfare Office</li> <li>• Council on Aging</li> <li>• Social Security Office</li> <li>• Half-way house(s) in the area</li> <li>• Drop-in center(s) in the area</li> <li>• Local Council of Voluntary Human Service Agencies</li> <li>• Administrators of childcare or daycare centers</li> </ul>

Criteria	Exhibit/Evidence Questions	Potential Resources
<p><u><a href="#">33. Solid Waste Disposal and Recycling</a></u></p> <p>Solid waste disposal is an essential service. Its availability for supporting a newly proposed project is an essential determinant of whether a project should proceed. Generally, trucks transport solid waste materials to a common, usually remote, site for either recycling, compost, burial/disposal in a sanitary landfill, or incineration (where allowed).</p> <p>If applicable, determine if recycling and/or composting can be added to the project design and operation and maintenance of the project.</p>	<p>In assessing this service, consider: The proximity of the service to appropriate disposal sites; The disposal site capacity to accommodate the types and quantities of wastes that the project may generate both during construction and upon completion; The likely disposal site's climate resilience, including its susceptibility to erosion and flooding.</p> <ol style="list-style-type: none"> <li>1. What types and amounts of waste will the project generate as construction debris?</li> <li>2. What solid waste disposal system or company will handle the construction debris? Does it have the capacity to handle the amount of debris?</li> <li>3. What types of solid waste (including hazardous waste, if any) will the completed project generate?</li> <li>4. What is the name of the solid waste servicing company or landfill and what is the distance from the proposed project site?</li> <li>5. Is solid waste permitting required for the project?</li> <li>6. If it is hazardous waste, does the servicing company/landfill accept hazardous waste? If yes, attach documentation.</li> <li>7. What organization will handle garbage collection, composting, and recycling? Does this organization have the capacity to handle all services? Are these services affordable?</li> <li>8. Will the waste from the proposal exceed the capacity of the waste system or landfill?</li> </ol>	<p>Engineer — local Solid Waste Disposal Agency, or City/County</p> <p>Engineering Department Engineer/Planner — HUD Field Office or local Planning Department</p> <p>Engineer or Planner/Environmental Specialist — regional EPA Office</p>

Criteria	Exhibit/Evidence Questions	Potential Resources
<p><b>34. <a href="#">Waste Water and Sanitary Sewers</a></b></p> <p>Clean Water Act, as amended (33 U.S.C. 1251 et seq.)</p> <p>The Water Quality Standards Regulation (<a href="#">40 CFR 131</a>)</p> <p>The EPA maintains a clearinghouse of <a href="#">state-specific water quality standards</a> that they have approved. They may also include additional provisions outside the scope of the Clean Water Act. To find additional city water quality standards, it is important to contact the jurisdiction.</p> <p>In most areas, a system of sanitary sewers conveys wastewater to a “downstream” treatment facility. After treatment, the effluent is either recycled as biosolids (where permitted) or is discharged into surface water or a permeable recharge area for an underground aquifer. Less developed areas use on-site septic systems or package treatment plants.</p>	<p>When analyzing impacts to wastewater treatment/disposal facilities, consider two factors: proximity of the service to the site and capacity of the service to accommodate the project.</p> <p><b>Sewer System</b></p> <ol style="list-style-type: none"> <li>1. What kind of wastewater/sewer system will provide satisfactory service to the proposal?</li> <li>2. Does the existing or proposed sewer system have the capacity to adequately service the proposed development?</li> <li>3. Will climate change–induced floods increase the risk of combined sewage overflow events? What populations are most exposed to pollution associated with these events?</li> </ol> <p><b>On-Site Septic Systems</b></p> <ol style="list-style-type: none"> <li>4. If the sanitary sewers and wastewater disposal systems are non-municipal, have the appropriate authorities and agencies approved or permitted an acceptable system?</li> <li>5. Has a report of the soil conditions suitable for on-site septic systems been submitted? Does the report consider the likely impacts of climate change on soil conditions (e.g., increased temperature, increased saturation from heavier precipitation, etc.) that will affect soil treatment efficacy?</li> <li>6. Are soil conditions suitable for on-site septic systems? Is there a large variance in the water table elevation? (A high seasonal water table can prevent proper functioning of septic tank drain fields). Is the water table likely to rise significantly due to sea level rise in coastal areas?</li> <li>7. Does the septic disposal systems’ design, installation, and maintenance properly prevent effluent from contaminating soil or groundwater, including sole-source aquifers?</li> <li>8. How will climate change affect these suitability factors in the foreseeable future? As a rule of thumb, the useful life of the project may be used to set a minimum time horizon for such future considerations.</li> </ol>	<p>Engineers at local Sanitary District/Agency, City or County Engineering Department, or 208 Planning Agency</p> <p>Engineers or Planners at local Planning Departments</p> <p>Soils Scientist at U.S. Natural Resources Conservation Service (NRCS)</p> <p>Engineers at State Health or Environmental Quality Agencies</p> <p>Local 208 (Wastewater) Agency</p> <p>For areas requiring septic systems: the USDA Soil Survey available online, can help identify areas that are likely to be unsuited for septic systems</p>

Criteria	Exhibit/Evidence Questions	Potential Resources
<p><b>35. Storm Water Runoff</b> (HUD’s Land Development topic)</p> <p>Natural flow, storm sewers, or combined storm and sanitary sewers usually remove stormwater from an impermeable surface e.g., pavement and buildings.</p> <p>Floodable design features, such as floodable parks, green roofs and rain gardens to retain stormwater, or porous pavers, should be incorporated in communities with increasing flood risk. When stormwater runoff cannot be avoided, the water is usually sent to a surface water body, a permeable recharge area, or temporary storage areas.</p>	<p>consideration should be the potential to incorporate design features such as landscaping and the use of pervious rather than impervious surfaces to help limit stormwater runoff. In assessing impacts to stormwater service facilities, consider the following two factors: The proximity of the system to the site; The capacity of the system to accommodate the project.</p> <ol style="list-style-type: none"> <li>1. Is there an indication of cross-lot runoff, swales, or drainage flows on the property?</li> <li>2. Are there visual indications of filled ground, active rills, or gullies on-site?</li> <li>3. Will existing or planned stormwater disposal and treatment systems adequately service the proposed development? Will the proposed project be adversely affected by proximity to these facilities?</li> <li>4. Does nearby stormwater infrastructure (e.g., culverts, large drainage pipes) include safety measures like grates or fencing to prevent drownings during floods?</li> <li>5. If the public storm sewer is not available, how will stormwater drainage be handled?</li> <li>6. Is state/regional/local permitting required to control stormwater runoff e.g., a National Pollutant Discharge Elimination System (NPDES) permit? If so, what conditions will the permit require?</li> <li>7. Will the project itself cause or substantially contribute to off-site pollution by stormwater runoff, leaching of chemicals, or other pollutants?</li> <li>8. Will drainage and stormwater conditions significantly affect or be affected by the project site? If so, does its design plan include measures to overcome potential runoff problems?</li> <li>9. How will future changes in precipitation patterns affect the above considerations? How can such climate change impacts be mitigated?</li> </ol>	<p><a href="#">USDA Soil Survey</a></p> <p><a href="#">USGS Topographic Maps</a> (available through various map providers)</p> <p>FEMA <a href="#">National Flood Hazard Layer Map</a></p> <p>HUD – <a href="#">Community Resilience Toolkit, “Inland Flooding”</a></p> <p>Engineer—City/County Public Works, Engineering Department or Local/District Stormwater</p> <p>Regional or local Stormwater Management Authority</p> <p>Engineer/Planner—HUD Field Office or Local Planning Department</p> <p>State and regional Natural Resource Management Agencies</p>

Criteria	Exhibit/Evidence Questions	Potential Resources
<p><b><u>36. Water Supply</u></b></p> <p>Adequate water supply refers to the delivery of sufficient quantities of potable water under adequate pressure at affordable costs to the project site.</p>	<ol style="list-style-type: none"> <li>1. What private company, public organization, or system will provide a sufficient quantity of clean, potable water needed for each step of the proposal (planning, construction, and completion)?</li> <li>2. Is either the municipal water utility or on-site water supply system adequate to serve the proposed project? Does the project require an adequate water supply determination from the state water resource agency or other state department?</li> <li>3. Is the water supply quality safe and free from potentially harmful chemicals, metals, bacteria, and other pathogens?</li> <li>4. Will the project affect a sole source or other aquifer by overdrawing resources from the water source? (Please refer to the <a href="#">Sole Source Aquifers</a> webpage for further guidance.)</li> <li>5. If the water supply is non-municipal, have the appropriate authorities and agencies approved an acceptable water purification and transport system?</li> <li>6. Will the project water requirements of the proposal result in a significant consumption of the community's available water supply or significant deterioration of water quality?</li> <li>7. How is the project likely to be affected by future water conditions under likely global climate change scenarios? Consider both quantity (e.g., droughts, water shortages) and quality (e.g., increased potential for harmful algal blooms).</li> </ol>	<p>Municipal or private Utility Water Supply Planners and Engineers</p> <p>Local Public Health Agency Staff</p> <p><a href="#">Sole Source Aquifers</a></p>
<p><b><u>37. Public Safety – Police, Fire, and Emergency Medical</u></b></p> <p>Although many communities have sophisticated protective services, the consistency of adequate service differs from place to place. Within communities, one site may be better served than another.</p> <p>Factors in the variability of protective services include the availability of funds for additional coverage and the degree to which building and growth are coordinated with the provision of new municipal services. Key variables within each city are emergency equipment, emergency service personnel, response time, and access. These factors influence the availability and adequacy of required emergency services.</p>	<p>Consider the location of the project in relation to each type of protective service, the building size and number of residents/users to estimate demand for services, the type of building materials, access routes for emergency vehicles accessibility, nearest medical facility.</p> <p>Consult secondary data, including Fire Service maps, Local Fire or Police Department, Emergency Medical Service Plans and then Consult with public service departments for transparency of needs and impacts.</p> <ol style="list-style-type: none"> <li>1. What police services are located within reasonable proximity to the proposed project? What is the approximate response time?</li> <li>2. What firefighting protection is located within reasonable proximity to the proposed project? What is the approximate response time?</li> <li>3. Is the firefighting protection service adequate and equipped to service the project?</li> <li>4. Is the project in an area of likely wildfire intensification? If so, how much additional strain will the project put on the local firefighting protection service? What fire mitigation best practices will be adopted to minimize this impact?</li> <li>5. What emergency health care providers are located within reasonable proximity to the proposed project? What is the approximate response time?</li> <li>6. Will the project create a significant burden on police, fire, or health care providers in terms of manpower and/or equipment?</li> </ol>	<p>Chief of local Fire Department</p> <p>Chief of local Police Department</p> <p>Local chapter or national office of the National Fire Protection Association (NFPA)</p> <p>Local Emergency Management Agencies</p> <p>Administrator of a local Emergency Medical Agency such as The Ambulance Corps in the Department of Health or the Local Rescue Squad</p> <p>Local Medical Society</p>

Criteria	Exhibit/Evidence Questions	Potential Resources
<p><b><u>38. Parks, Open Space &amp; Recreation</u></b></p> <p>The development of community services such as open space, recreation, and cultural resources has become a necessary component of community development. Whether these facilities are government-owned, such as public parks and libraries, or private entities, such as YMCAs and private museums, they contribute to the quality of life and quality environment of a community and are essential to the continuity of a viable neighborhood.</p>	<p>Passive recreational activities emphasize the open space aspect of park facilities and include activities such as: Hiking, Walking, Birdwatching, Picnicking</p> <p>Active recreational activities are generally associated with group sports or play activities, and often require dedicated program areas such as: Playgrounds, Ballfields, Community centers, Swimming pools</p> <ol style="list-style-type: none"> <li>1. Are open space and recreational within reasonable walking distance to the project area, or is adequate public transportation available from the project to these facilities?</li> <li>2. Will the proposed project cause any overloading of existing open space or recreational facilities?</li> <li>3. How does the project satisfy any special recreational needs of certain population groups, such as small children, the elderly, or people with disabilities?</li> <li>4. If the development is housing, does the site include space for informal play for children of all ages?</li> </ol>	<p>Planner at local Parks and Recreation Department</p> <p>Local chapter of The American Society of Landscape Architects</p> <p>State Liaison Officer, such as State Division of Outdoor Recreation</p> <p>National Park Service</p>
<p><b><u>39. Cultural Resources</u></b></p> <p>Demand and supply for both specific recreation and cultural facilities is a function of factors that include the size of the community, density of development, income, and demography. Wealthier communities have these services and facilities more often than poorer communities.</p>	<p>Cultural resources include: Art galleries, Historic sites, Libraries, Dance facilities, Museums, Theatres, Community centers, Other facilities for artistic and cultural purposes, These usually receive both public and private support.</p> <ol style="list-style-type: none"> <li>1. Are cultural facilities within reasonable walking distance to the project area, or is adequate public transportation available from the project to these facilities?</li> <li>2. Will the proposed project cause any overloading of existing cultural facilities?</li> <li>3. How does the project satisfy any special cultural needs of certain population groups, such as small children, the elderly, or people with disabilities?</li> <li>4. If the development is housing, does the site provide passive recreation areas for adults and the elderly?</li> </ol>	<p>Administrator of Social Services Agency</p> <p>Administrator of Local Cultural Commission</p> <p>State Arts Office or Association</p> <p>Administrators of Agencies such as YMCAs, YWCAs, Museums, Libraries, etc.</p>

Criteria	Exhibit/Evidence Questions	Potential Resources
<p><b>40. <a href="#">Transportation and Accessibility</a></b></p> <p>Assessing transportation impacts involves analyzing four sub-elements of transportation: Access, Safety, Balance, Level of Service (LOS)</p>	<p>Review project plans to determine the location of the site with respect to transit services (bus, rail, and aviation), regional access (highways), and local access (local roadway network/bike path).</p> <ol style="list-style-type: none"> <li>1. Does the project require a traffic study? Has one already occurred? What needed actions did the study identify?</li> <li>2. Do safe and adequate public transportation services serve the project?</li> <li>3. Is the project safely accessible to vehicles? Is vehicle parking adequate, including parking for moving vans/trucks?</li> <li>4. Does the project facilitate pedestrian movement (e.g., sidewalks, pavement markings, landscaping, pedestrian-activated signal lights, or pedestrian overpasses)?</li> <li>5. Do bicycle lanes or trails serve the project area? Does the project provide covered, secure parking for bicycles, employees, and residents?</li> <li>6. Overall, will the existing and reasonably foreseeable transportation facilities and services be adequate to meet the needs of the project?</li> <li>7. Will the project itself cause a significant adverse impact on the local or regional transportation system (e.g., by reducing the level of service of roadways)?</li> <li>8. Are there any barriers to emergency vehicle access?</li> <li>9. Is the project accessible to the elderly and persons with disabilities (e.g., wheelchair ramps, traffic light timing, disabled parking, shuttle services)?</li> <li>10. Does the project design address any special transportation issues (e.g., bridge clearances for trucks)?</li> <li>11. Does the proximity to a highway or high traffic area disproportionately expose low- and moderate-income or minority persons or communities to harmful air pollutants?</li> </ol>	<p>Planner at the regional Transportation Planning Agency</p> <p>Planner at regional Transportation Authority</p> <p>Planner at the state Highway Department</p> <p>Local Transit Authority</p> <p>Local Traffic Department</p> <p>Local Parking Authority</p> <p>Federal Highway Administration Division Office</p> <p>Urban Mass Transportation Administration regional office</p>

### ***Natural Features Checklist***

<p><b>41. <a href="#">Unique Natural Features</a></b></p> <p>Unique natural features are primarily—though not universally—geological features that are rare or of special social/cultural, economic, educational, aesthetic, or scientific value.</p> <p>Development on or near natural features may render them inaccessible to investigators or visitors, degrade their value, or otherwise limit potential future use and appreciation of these resources. The key criterion in defining a unique natural feature is the rareness of the feature, a characteristic often recognized as a local landmark. Another characteristic is information content. Some unique natural features contain a great deal of information concerning natural history, such as geologic evolution or paleontological history</p>	<p>natural features sequester greenhouse gases, act as a buffer against extreme weather events for coastal communities, and provide a range of other positive ecosystem services, which should be considered before degrading or removing natural features.</p> <ol style="list-style-type: none"> <li>1. Will the proposed project location, construction, or activities of project users adversely impact unique natural features on or near the site?</li> <li>2. Will the project destroy, isolate from public or scientific access, or degrade the rare feeling of the unique natural feature?</li> <li>3. Will the unique feature pose safety hazards for a proposed development?</li> <li>4. Will the proposed project alter any views between public areas and the unique natural feature?</li> <li>5. Will runoff from the project erode or degrade the unique feature?</li> <li>6. Will the project create problems by introducing nuisance or non-indigenous species of vegetation that may be ecologically disruptive, be invasive, or threaten the survival of unique plant or animal habitats?</li> <li>7. Will the project limit the ability of a natural feature to provide important ecosystem services to the community?</li> </ol>	<ul style="list-style-type: none"> <li>• U.S. Geological Survey Topographic Quadrangle Maps and Surface and Bedrock Geology Maps.</li> <li>• Aerial photos can help identify existing land uses and unique features</li> <li>• Geological reports and maps</li> <li>• State and federal Park Service</li> <li>• State Natural Heritage Programs</li> <li>• State Wildlife Resource Management Agencies</li> </ul>
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Criteria	Exhibit/Evidence Questions	Potential Resources
<p><b>42. <a href="#">Water Resources</a></b></p> <p>Water Resources refers to both Groundwater (all the water found below the ground's surface) and Surface water (ranges from very large rivers and lakes to small ponds and streams).</p> <p>Most groundwater comes directly from rainwater, but some comes from seepage from the sides and bottoms of lakes and streams. The water table is the upper level at which this saturation occurs. The depth of the water table can vary tremendously annually and seasonally depending on the amount of rainfall. High water tables can result in basement flooding and surface puddles. Discharge from poorly designed, installed, or maintained septic systems to drinking water wells can cause health hazards.</p> <p>Surface water plays an important role in nearly every community as a source of drinking water, a means of transportation, a recreational resource, a source of water for irrigation, and a fishery. Development can, however, have a serious negative impact on water quality. Surface waters, chiefly rivers and large lakes, frequently suffer from the effects of pollution that factories, urban sewerage systems, power plants, and agricultural runoff generate. Degraded surface water quality can have short-term and long-term human health implications, can affect aquatic habitats and species, and can have aesthetic and olfactory consequences.</p>	<ol style="list-style-type: none"> <li>1. Is the site subject to rapid water withdrawal problems that change the depth or character of the water table or aquifer? Are there many wells that pump large quantities of water from the water table near the proposed project site? (Consider both current and future conditions that are likely due to increased water stress from climate change.)</li> <li>2. Will the project use a septic system? If so, is the system in proximity to sensitive natural receptors (e.g., wetlands) that could be adversely impacted by the design or location? Is there a large variance in the water table? (A high seasonal water table can prevent the proper functioning of septic tank drain fields.)</li> <li>3. Are there visual or other indications of water quality problems on or near the site (e.g., algal blooms or state listing as an impaired stream/waterway)? Will the proposed project(s) maintain, diminish, damage, or destroy the riparian buffer (e.g., a natural wooded buffer adjacent to a stream)?</li> <li>4. Will the project involve a substantial increase in impervious surface area? Does the design include runoff control measures or permeable surfaces?</li> <li>5. Will the project substantially reduce groundwater recharge due to an increase in impervious surface area? If so, could the project affect sensitive groundwater-dependent features (e.g., rare wetlands)? If yes, does the design include appropriate measures to promote groundwater recharge?</li> <li>6. Is the project located in a state or locally designated sensitive watershed area or the watershed of a particularly sensitive natural area (e.g., a unique wetland)? If so, what run-off control measures does the design include (e.g., the storm-year design is increased from 10 years to 25 years, buffers are placed along surface waters)?</li> <li>7. Will the project involve the discharge of non-sewage pollutants (i.e., agricultural fertilizer, insecticides, road salts, etc.) into surface water bodies? If so, will it meet state, federal, and other applicable standards?</li> <li>8. Does the project limit the access to or quality of water for downstream communities?</li> </ol>	<p>Planner or Engineer at 208 Plan area-wide Planning Agency</p> <p>Water Quality Specialist at Section 401 Water Quality Agency</p> <p>Hydrologist at USGS Geological Survey or state Geological Survey</p> <p>Soil Scientist at U.S. Natural Resources Conservation Service</p> <p>State Wildlife Resource Management Agency</p> <p>State Natural Heritage Program</p> <p>Wetland Biologist at city or county Stormwater Quality Department</p> <p>Engineer at city and/or county Engineering Department</p> <p><a href="#">U.S. EPA Water Quality Criteria</a></p>



Criteria	Exhibit/Evidence Questions	Potential Resources
<p><b>43. <a href="#">Vegetation</a></b></p> <p>Human impact on the environment through urbanization often results in water, air, and land pollution that endanger many natural plant and animal species. Development, which changes a sensitive ecosystem, may adversely affect the diversity of species present, the productivity of the system, or the rate of nutrient recycling.</p> <p>Additionally, development can have direct impacts on vegetation and natural communities, such as by driving through natural communities that support special-status vegetation species, or the accidental removal of not only special-status species, but also species that provide crucial ecosystem services to the larger natural community. When a natural community is disturbed and native species fail to thrive, noxious and invasive weed species often take over and can become dominant in developed areas.</p>	<p>The abundance and survival of both plant and animal species depend upon the existence of a favorable environment and their ability to adjust to man-made conditions. Urbanization has seriously altered natural ecosystems. The Audubon Society, USDA, and other organizations have resources for urban native planting efforts.</p> <ol style="list-style-type: none"> <li>1. Will the project create problems by introducing nuisance or non-indigenous species of vegetation that may be ecologically disruptive, be invasive, threaten the survival of indigenous plant habitats, or disrupt agricultural or silvicultural activities?</li> <li>2. Will the project introduce landscape maintenance actions (pesticide usage, fertilization) that may threaten the survival of indigenous plant habitats, or disrupt agricultural or silvicultural activities?</li> <li>3. Will the project damage or destroy existing remnant or endemic plant communities, especially those containing nationally, regionally, or locally rare species e.g., prairie grasslands, ice-age disjuncts, local soil-type endemics?</li> <li>4. Will the project damage or destroy plant species that are legally protected by state or local ordinances?</li> <li>5. Will the project damage or destroy trees without replacement and landscaping?</li> <li>6. How much risk does the proposed project face from the impacts of climate change? Will the proposed vegetation management or landscaping plan mitigate those risks e.g., excessive heat, flooding, degraded air quality, where possible?</li> </ol>	<p>Consult an expert such as a Biologist/Ecologist from a university, state Natural Resources Agency, or state Natural Heritage program.</p> <p>In more rural areas representatives of the State Forestry Department or the USDA Soil Conservation Services may also provide useful expert judgment.</p>

Criteria	Exhibit/Evidence Questions	Potential Resources
<p><b>44. Wildlife Habitat</b></p> <p>Wildlife habitats are where wildlife species normally live and meet their basic needs for food, water, cover, breeding space, and group territory.</p> <p>Wildlife habitats can range widely in size, from hyperlocal areas restricted to only a few square meters for many invertebrates, to hundreds of square miles for some large species, such as the mountain lion. Additionally, avian species regularly migrate thousands of miles to residential or breeding sites, on an annual basis, using resources across an expansive geographic range.</p> <p>Urbanization has generally been at odds with the maintenance of natural habitats. Urban habitats are often located in neglected and unused areas, such as along riverbanks and railroad alignments and in parks, easements, institutional grounds, and vacant tracts of land. While protecting wildlife habitats can appear at odds with urban development, developers can take certain actions to avoid undue disruption and to protect rare and endangered species and other non-threatened species that are protected through other legislative means, such as the Migratory Bird Treaty Act.</p>	<p>The questions on animal life address disruption, habitat alteration or removal, rare species (including those that are considered threatened or endangered), pest species, and game species.</p> <ol style="list-style-type: none"> <li>1. Will the project create special hazards for animal life? What types and numbers of animals will the project affect and how?</li> <li>2. Will the project impact migratory birds? Most birds protected by the federal <a href="#">Migratory Bird Treaty Act</a> are not included in the Endangered Species Act yet are protected by similar protections against a “taking” of birds' nests or eggs. Consult with the U.S. Fish and Wildlife Service (USFWS). Construction activities should occur outside the migratory bird nesting season. Alternatively, survey the site for migratory bird nests prior to construction.</li> <li>3. Does the project site host any species that local, state, tribal or the federal government list or monitor?</li> <li>4. Will the project damage or destroy existing wildlife habitats (e.g., removal or blockage of wildlife corridors, such as a riparian buffer)?</li> <li>5. Will excessive grading alter the groundwater level and thus cause the death of trees and ground cover which in turn diminish animal habitats?</li> <li>6. Will the project damage game fish habitat or spawning grounds? When answering this question, consider off-site damage resulting from erosion and stormwater run-off.</li> <li>7. Will the project create conditions favorable to the proliferation of pest species?</li> <li>8. Will the project create conditions (e.g., excessive noise, pesticide usage) that could harm or harass wildlife species that are nationally, regionally, or locally rare or protected by state or local ordinance?</li> <li>9. How will the project affect species or habitats that are particularly at risk due to climate change or other changing environmental conditions?</li> <li>10. How will the project impact the ecosystem as a whole? For example, will impacts on keystone species or ecosystem engineers lead to broader ecosystem consequences?</li> </ol>	<p><a href="#">USFWS Environmental Conservation Online System (ECOS)</a> critical habitat online ArcGIS mapviewer provides accurate life history information and spatial data for all plant and wildlife species</p> <p><a href="#">USFWS Information for Planning and Consultation (IPaC)</a> tool provides identification of USFWS managed resources and suggested conservation measures</p> <p>Cornell University’s Lab of Ornithology has developed a highly reputable online citizen science platform, called <a href="#">eBird</a>, which provides recent spatial and location data for nearly all avian species.</p> <p>Supplement technical studies with field observation of the site for signs of the likely presence of particular species. Consultation with Biologists and Ecologists with either state or federal agencies</p>
<p><b>45. Additional Resources</b></p>	<p>Visit the Environmental Assessment Resources page to learn more about <a href="#">analysis tools for Natural Features</a>.</p>	