

PMT REVIEW DOCUMENT

Responses to Comments of the Draft AUAR for the UMore Study Area
August 1, 2013

Summarized Comment	Response
Dakota County Comments	
1a. Transportation. The County travel demand model does not include information for the UMore site. If a 6-lane road is needed on CSAH 42, sufficient right-of-way will be needed.	The City and Township will work with the County through the Dakota County Plat Commission during platting of each development proposal to insure that adequate right of way is secured adjacent to CSAH 42 and all other County roads. No change has been made to the AUAR.
1b Transportation. Consider revising the mitigation measure to “provide right-of-way required for future roadway expansion adjacent <u>and within</u> the UMore property.	This text modification will be changed in Final AUAR in sections II.vii. F and Item 21 E.
1c Transportation. Future access locations to CSAH 42 are limited to ½ mile interval spacing and/or in accordance with the <i>CSAH 42 Study</i> .	Access locations shown in the AUAR meets these requirements. Reference to the CSAH 42 Final Study and updated recommendation for Segment 15 that were adopted by the County Board will be included in the Final AUAR mitigation measures sections II.vii E and Item 21 E.
1d Transportation. AUAR should incorporate text confirming that roundabouts are a potential intersection control measure.	Text will be added in the Final AUAR to the Item 21 D “Access and Intersection Control” discussion and to Item 21 E “Transportation Mitigation Plan” to reflect the use of roundabouts as an intersection control and that an Intersection Control Evaluation (ICE) will need to be completed with each proposed improvement.

<p>1e Transportation. The development will have large scale impacts on the county. It can be expected that the county road system beyond the limits covered in the AUAR will need analysis of impacts as development is further refined or occurs.</p>	<p>Additional analysis from MN Hwy 3 to US Hwy 52 will be included with the required traffic analysis as development is identified / proposed in the area. Traffic analysis for areas of the City and Township beyond MN Hwy 3 and US Hwy 52 will be analyzed within the decennial Comprehensive Plan update. This is included in the transportation mitigation plan shown in sections II.vii A and Item 21 E.</p>
<p>1f Transportation. The future alignments of various roads in the AUAR appear to be consistent with the recommendations of the <i>Rosemount/Empire/UMore Area Transportation Study</i>.</p>	<p>Comment noted</p>
<p>2 Greenways. Request to show the Vermillion Highlands Greenway map</p>	<p>Follow up with Dakota County indicated that Figure 25-3 addressed request in this comment. No change has been made to the AUAR.</p>
<p>3a. Environmental Resources. Recommendation for comprehensive approach to site clean up</p>	<p>The City and Township appreciates the County's recommendation to comprehensively address environmental impacts prior to redevelopment. The MPCA is actively involved in helping to ensure that the identified releases of hazardous substances are addressed by the persons responsible for causing or contributing to the release. The MPCA will continue to be involved before and during development through response actions plans and/or contingency plans. The scope of this AUAR Report is limited to assessing environmental impacts in the context of their potential affect on the redevelopment scenarios outlined in the AUAR, and does not extend to analysis of potentially responsible parties to address those releases. No change has been made to the AUAR.</p>
<p>3b. Environmental Resources. MPCA has indicated in past correspondence with the U of M and US Corps of Engineers that remedial investigation/feasibility study and an evaluation of potential threats from physical hazards and asbestos are needed at the GOW site.</p>	<p>The reference to MERLA, CERCLA and Army Corps' regulation in the context of future investigation and response actions within the project area is helpful in confirming the appropriate regulatory requirements. Because the investigation work plans completed to date within the project area has been reviewed by MPCA Superfund staff, this comment is not directed at the adequacy of the AUAR and/or supporting investigations.</p> <p>All investigations and response action activities conducted to date by the University in the project area have been compliant with the Minnesota Environmental Response and Liability Act ("MERLA"), Minn. Stat. § 115B.01 <i>et seq.</i>, and, where applicable, the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. 9601 <i>et seq.</i>,</p>

	<p>and ER 200-3-1, the regulation promulgated by the United States Army Corps of Engineers (“Army Corps”) for the Formerly Used Defense Sites (“FUDS”) Program. MPCA Superfund Program staff reviewed and approved the work plan for the Phase II Investigation for Sites of Concern (SOCs) 1-3 and 6-8 and the work plan and Quality Assurance Project Plan/Sampling Analysis Plan (“QAPP/SAP”) for the Supplemental Site Inspection/Remedial Investigation (“SSI/RI”). MPCA’s review and approval of investigation work plans and the QAPP/SAP was completed consistent with MERLA and CERCLA. Completion of additional investigation and other response actions will be necessary in certain portions of the project area before or contemporaneously with redevelopment activities.</p> <p>The University has committed to continue to seek approval from MPCA of all future investigation and response action work plans and related project plans developed to address releases or threatened releases of hazardous substances present within the UMA under MERLA, and as appropriate with respect to GOW, under CERCLA and/or FUDS regulations. No change has been made to the AUAR.</p>
<p>3bi. Environmental Resources. Prior to property transfers, due diligence should be exercised, especially regarding past land use.</p>	<p>The City of Rosemount and Empire Township will work with the University of Minnesota and the Minnesota Pollution Control Agency to complete appropriate additional environmental due diligence prior to the City or the Township acquiring portions of the project area for public infrastructure and services. No change has been made to the AUAR.</p>
<p>3c Environmental Resources. Dakota County has the responsibility to regulate abandoned wells. Wells must be sealed in conformance with County Ordinance 114.</p>	<p>This will be added to the FAUAR in summary of mitigation measures and in the water use section.</p>
<p>3d Environmental Resources. Measures should be taken to protect Lake 2162 from potential contamination</p>	<p>Storm water will be pretreated prior to discharge into water bodies within the study area, including Lake 2162. Pretreatment will include wet ponds and infiltration areas. Infiltration areas will be implemented in areas where the use of infiltration is a suitable BMP and does not increase risk of contaminating groundwater. The mitigation measures in Item 17 (Water Quality section) of the AUAR indicate that where contamination is possible or where soils are not suitable, infiltration will not be used. No change has been made to the AUAR.</p>

<p>3e Environmental Resources. Current tenants may generate hazardous waste</p>	<p>While not expressly referenced in the Section cited in this comment, activities of past and current tenants are noted in Section F. Potential Environmental Hazards, and in the environmental report summaries provided in that Section. Portions of the project area that were formerly leased by the University to third party tenants were included within the scope of the Phase I Environmental Site Assessment, UMore East, Dakota County, MN (Barr Engineering Co., April 2011) and the Phase I Environmental Site Assessment, UMore Park, Rosemount, MN (Peer Engineering, Inc., July 2006). Recognized environmental conditions identified during the Phase I Assessments are discussed in these studies, which are available for public review on the University's UMore Park website: http://www.umorepark.umn.edu/planning/SelectPublications/2006phasei/index.htm. In accordance with University Real Estate Office procedures, currently leased properties within the project area will be subject to further assessment as the leases expire or are terminated. Identified releases present on land leased by past or current University tenants will be appropriately addressed consistent with the proposed future use of those parcels. No change has been made to the AUAR.</p>
<p>3f. Environmental Resources. Concern that the Superfund Five Year Review should also be re-evaluated based change in land use such as those proposed in the AUAR.</p>	<p>The Five Year Review of the University of Minnesota Rosemount Research Center Superfund Site (U.S. Environmental Protection Agency, June 2012) addresses a closed federal and Minnesota Superfund site located within the project area, consisting of four former waste disposal locations totalling approximately ten acres of the 4,900 acre project area. As recommended in the Five Year Review, additional investigation and other response actions will be completed prior to any change in land use of the closed Superfund site areas. The University has posted signs on segments of the UMore Park property that are not open to the public due to the presence of potential physical hazardous and identified substances in some areas. The public should contact the University for access to the property. The City and Township will require that any remaining physical hazards will be addressed prior to or as part of any approved redevelopment plan.</p>
<p>3g Environmental Resources. There may be unrecorded wells within the study area</p>	<p>Abandoned wells discovered during future redevelopment activities in the project area will be sealed in accordance with Dakota County Ordinance No. 114 and Minnesota Department of Health guidelines. This has been added to the AUAR.</p>

<p>3gi and 3gi1 Environmental Resources. Discussion about adequacy of future groundwater.</p>	<p>It is recognized that as Rosemount grows the water demands necessary to serve the expanding population will also, and that there are concerns related to the impact of increased water demands on groundwater supplies. The City currently monitors groundwater trends, climate, and population trends and will continue to do so in the future. Additionally, the City will continue to work with Metropolitan Council staff as groundwater modeling is refined and alternate water supply sources are evaluated. No change has been made to the AUAR.</p>
<p>3h Environmental Resources. Any alterations in shoreland in Empire Township need to meet Dakota County Ordinance 50</p>	<p>This will be noted in the FAUAR in Item 14. There are currently no shoreland areas in Empire Township. However, any development in the Township will follow Dakota County ordinances.</p>
<p>3i Noted concern for potential groundwater contamination. Commercial and industrial uses may be subject to County regulation</p>	<p>Comment noted. No change has been made to the AUAR.</p>
<p>3j Prior to excavation, due diligence should be used to investigate and remediate areas.</p>	<p>The Phase I Environmental Site Assessment, UMore East, Dakota County, MN (Barr Engineering Co., April 2011) and the Phase I Environmental Site Assessment, UMore Park, Rosemount, MN (Peer Engineering, Inc., July 2006) identified “recognized environmental conditions” present within the project area. Information contained in these studies, as well as other environmental studies completed within the project area, was considered and are summarized in the AUAR Report, and are available for public review on the University’s UMore Park website: http://www.umorepark.umn.edu/planning/SelectPublications/2006phasei/index.htm.</p> <p>These studies will be a resource for parties required to prepare Stormwater Pollution Prevention Plans (SWPPPs) associated with future redevelopment projects. In addition to SWPPPs, the City recommended in the AUAR that Phase I Environmental Site Assessments and Construction Contingency Plans be developed and submitted to the Minnesota Pollution Control Agency for technical review and comment prior to excavation activities associated with future development within the project area (See Response to MPCA Comment 3). The City notes that a Construction Contingency Plan, UMore Mining Area (Barr Engineering Co., September 2012) was developed by Dakota Aggregates LLC and reviewed by the Minnesota Pollution Control Agency as a permit condition for the northern portion of the UMore Mining Area. No change has been made to the AUAR.</p>

Minnesota Department of Agriculture Comments	
No comments	Noted
Minnesota Department of Transportation Comments	
Design 1. State Highway system changes will require a MnDOT Layout	Comment noted
Traffic 1: Please indicate whether the proposed improvements are planned improvements.	The improvements identified in the 2030 No-build condition were those identified with previous planning efforts / studies. These improvements are not programmed or funded at this time but were assumed to be completed as development and traffic increases in the area. No change has been made to the AUAR.
Traffic 2: Funding has not been identified for the proposed improvements on the State Highway system. How will proposed improvements be funded?	Funding has not been identified for specific improvements at this time. As needs arise with development proposals, improvement funding will be secured either through assessments, State Aid or other sources. No change has been made to the AUAR.
Traffic 3: Figure 21-6A shows an increase of 590 vehicles over the no-build scenario. Please correct if this is an error.	Figure 21-6A has been updated to reflect the error.
Modeling 1 and 2: Concerns about the modeling methodology.	The methodology used to forecast the future 2030 build traffic was selected more specifically to determine the potential “local” impacts. It was understood that this methodology would potentially create higher forecasts on the regional system than using the regional models. This is a more conservative approach. Additionally, as specific developments are proposed this methodology provides a way to compare the development with that assumed in the AUAR. One of the controlling mitigation measures is to evaluate the traffic analysis with new development proposals. It is also anticipated that with the City of Rosemount’s, Empire Township and/or Dakota County’s Comprehensive Plan updates the Regional and Dakota County model will then be updated with more accurate population, households and employment information. Sections II.vii A and Item 21 F have been updated in the Final AUAR to more clearly indicated the additional traffic analysis and modeling that will be completed.

Modeling 3: Clarification of pass-by and internal trips is requested.	It was assumed that 15% to 20% of the trips used by retail/commercial/service uses would be pass-by from traffic already on existing roadways (CSAH 42, CSAH 46, etc.) and 10% of the development travel would be internal dual purpose trips within each TAZ. In this case it was assumed that the factors used are conservative and that in reality, more traffic would be passing-by and/or internal to the site. This was just an observation and no additional factors were used. No change has been made to the AUAR.
Modeling 4: Clarify trip generation distribution.	The distribution referenced is for the percent of traffic entering and exiting for a specific land use (i.e. 45% entering/55% exiting). The overall vehicle distribution by direction was based on the County's modeling data and existing traffic patterns. No change has been made to the AUAR.
Modeling 5: The scenarios seem to minimize non-motorized trips. It would be helpful to see an estimate of non-motorized trips.	Non-motorized traffic generation will be included with each specific development as they are proposed. No change has been made to the AUAR.
Noise: Concern about future traffic noise.	The City and Township are aware of the noise standards and guidelines. As development occurs in the area, the developer will need to assess the noise impacts. No change has been made to the AUAR.
Permits. Work in MnDOT right-of-way requires a permit.	This has been added to Item 8 of the AUAR
Review submittal contact information provided.	Comment noted. No change has been made to the AUAR.

Minnesota Department of Health Comments

<p>Asbestos/Hazardous Waste. Asbestos inspection must occur before demolition of structures. Removal of debris needs to be in conformance with state rules.</p>	<p>Parties seeking to redevelop portions of the project area will be expected to comply with all applicable federal and state statutes, regulations and rules relating to hazardous building materials, including but not limited to asbestos-containing building materials. No change has been made to the AUAR.</p>
<p>Affordable Housing. The supply of affordable housing is shrinking. The project does provide a mix of housing densities but should also consider affordable housing options</p>	<p>The City of Rosemount has a housing plan, which includes affordable housing targets, and will continue to update this plan as needed to continue to meet the Metropolitan Council's housing policies. Empire Township will address affordable housing through an updated Comprehensive Plan process. No change has been made to the AUAR.</p>
<p>Drinking Water Protection. Request to address the wellhead protection concerns outlined in two past letters related to the proposed mining in the area (April 2013 and June 2012) to the City.</p>	<p>Through the mining review and permitting process, a well monitoring plan was developed and implemented.</p> <p>It is recognized that Minnesota Department of Health (MDH) has submitted letters to the City related to well head protection and groundwater quality monitoring in connection with direct recharge from surface water into the aquifer and within the highly vulnerable portion of the Drinking Water Supply Management Area (DWSMA). The City reviewed the MDH letters and guidance documentation during the mining interim use permit and annual operating permit review process. Requirements for groundwater quality monitoring and a well monitoring plan were incorporated into these permits. The wells will be monitored through the life of the mining activity. After the mining area is reclaimed, the City will evaluate if continued monitoring is needed. Additionally, actions have been included in the City's Wellhead Protection Plan Part 2 to monitor the surface water to ground water connection during mining activities and after the mine-pit lake has been constructed, and an annual review of the groundwater monitoring plan and results associated with mining permits.</p> <p>If the any of the monitoring wells are determined that they are no longer useful, the well(s) will be sealed in accordance with Dakota County Ordinance No. 114 and Minnesota Department of Health guidelines. No change has been made to the AUAR</p>

<p>Energy Consumption. The project should consider ways, such as those described in the Concept Master Plan, to conserve energy, reduce energy use, promote use of renewable energy</p>	<p>As plans for the development of UMore continue, further consideration will be given to energy conservation, energy reduction and the use of renewable energy. No change has been made to the AUAR.</p>
<p>Health Impact Assessment. A Health Impact Assessment could provide recommendations to policy makers to support positive health outcomes, inform zoning, and permitting activities.</p>	<p>Comment noted. No change has been made to the AUAR.</p>
<p>Physical Activity. The project should consider bicycle and pedestrian connections, such as those described in the Concept Master Plan.</p>	<p>Through the Concept Master Plan, consideration and implementation of greenways, trails, and connections for non-motorized transportation will be a part of development within the study area. The proposed development scenarios incorporate a large amount of green space which will also allow for bicycle and pedestrian trails. Additionally, the City of Rosemount has a bicycle and pedestrian plan that provides guidance for the City to encourage resident participation in non-motorized transportation. No change has been made to the AUAR.</p>
<p>Stormwater/Impervious Surfaces. Increases in impervious surfaces have the potential to increase volume and pollutants. Future climate conditions are anticipated to result in increased frequency and intensity of storm events.</p>	<p>Storm water management within the study area will conform to the City and Township requirements. Overall, these requirements will result in additional infiltration and a reduction in volume and pollutants leaving the site than occurs in its current condition and land uses. The City and Township will continue to review policies in light of larger or flashier storm events that may occur in the future. No change has been made to the AUAR.</p>
<p>Well Construction. New wells or abandoned wells are required to meet state requirements.</p>	<p>It is recognized that new wells will need to be constructed in accordance with Minnesota Statutes, Chapter 103I and Minnesota Rules, Chapter 4725, and Dakota County has been delegated some responsibilities for well management within the county. A new mitigation measure has been added to read "Any new wells (supply, dewatering, monitoring, or other) shall be constructed in accordance with Dakota County Ordinance 114, Minnesota Statutes Chapter 103I and Minnesota Rules Chapter 4725.</p> <p>It is recognized that abandoned wells will need to be sealed in accordance with Dakota County Ordinances and MDH guidance. The Water Use Mitigation Plan included in the Summary of Mitigation Measures (II.ii.D, page 5) and UMore Study Area AUAR (III, 13.B., page 51) shall be amended to read "Any abandoned wells found within the study area will be sealed in accordance with Dakota County Ordinance No. 114, Well and Water Supply</p>

	Management, and in accordance with Minnesota Department of Health (MDH) guidelines.
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Metropolitan Council Comments	
Item 8 - Permits and Approvals. As new segments of sanitary sewer are proposed, plans will need to be sent to the MPCA and Met Council	Review by Metropolitan Council for any new sanitary sewer extension will be added to Item 8 in the AUAR.
Item 9 – Land Use. Comments related to the long-term planning aspect of the UMore study area. These long-range plans should be incorporated into the City and Township’s Comprehensive Plans	Both the City and the Township will complete Comprehensive Plan updates to reflect proposed land uses within the study area. No change has been made to the AUAR.
Item 9 – Regional Parks. Met Council encourages the U of M, City, and Township to work with Dakota County to facility regional trail development.	Comment noted. No change has been made to the AUAR.
Item 13 – Water Supply. Met Council has concerns about expansion of groundwater use in the study area. The City and Township should continue to work with Met Council as groundwater modeling is refined and alternate water supplies are explored. Development should also include the latest infiltration across all land uses.	<p>It is recognized that water supply is critical to future growth planning. The City and Township will continue to work with Metropolitan Council staff as groundwater modeling is refined and alternate water supply sources are evaluated.</p> <p>Additionally, the City and Township are part of the Coalition of Northern Dakota Cities that is in the early stages of developing a formal agreement and discussing future groundwater issues.</p> <p>No change has been made to the AUAR.</p>
Item 17 – Surface Water. The City and Township should consider using Atlas 14 for stormwater analysis and management.	The City and Township will be reviewing the Atlas 14 information and determining if new policies should be developed. Similarly, if there are any changes to Federal, State, regional, or County regulation(s) that would impact the City or Township regulations, then the future development of UMore will need to meet those revised regulations. No change has been made to the AUAR.

<p>Item 18 – Wastewater. The plan in the AUAR for development in the study area shows the potential for increased sewer flows in the upstream portion of the regional system that could exceed the system’s capacity. The interceptor downstream of Biscayne Ave has sufficient capacity to serve the study area. Updates to Comp Plans and Sewer Plans will be needed and plans will need to reflect the long term wastewater projections from each sewer district.</p>	<p>It is recognized that the AUAR redefined the individual sanitary sewer districts within the project area from those previously identified in the City’s 2008 Comprehensive Plan Update. The AUAR included preliminary roadway layouts and land use locations which allowed the sewer districts within the project area to be reevaluated.</p> <p>In the Comprehensive Sanitary Sewer System Plan (CSP,) included in the 2008 Comprehensive Plan Update, the project area consisted of the entire Southwest, Southwest Central, and South Central districts, and approximately 177 acres in the Central District. The AUAR redefined the project area into the Central, East, Northwest, and Southwest districts for evaluation as part of the AUAR.</p> <p>It is recognized the proposed sanitary system layout represents a potential system impact MCES’s Rosemount Interceptor. The proposed sanitary sewer system layout and estimated wastewater flows would be a change from the City’s 2008 CSP.</p> <p>To clarify the impact of the proposed sanitary sewer system and estimated wastewater flows on the MCES system, the attached Tables A, B, and C indicate future estimated wastewater flows by connection point to the Rosemount Interceptor. The tables were developed from Table 6-4 in the 2008 CSP and modified to incorporate estimated wastewater flows from Scenario 1 and Scenario 2. Also, changes in the sewer districts and flows from Table 6-4 in the 2008 CSP were highlighted for clarity. Development Scenario 1 would result in the greatest wastewater flow generated by the proposed development and Scenario 2 the least. Table 6-4 from the 2008 CSP is attached.</p> <p>Tables A, B, and C indicate that wastewater flow generated by the project area would increase ultimate (post-2030) wastewater flows relative to those planned for in the 2008 CSP. It is possible that some development may occur prior to 2030, but development timing is currently unknown. Development projections will be defined as part of future Comprehensive Plan Amendments.</p> <p>Ultimate wastewater flows would increase under Scenario 1 (Table A) in comparison to the City’s 2008 CSP, but wastewater flows would remain relatively consistent with or less than the 2008 CSP under Scenario 2 (Table B). Additionally, MCES has retained the former Rosemount Wastewater Treatment Plant site for development of a future wastewater</p>
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	<p>treatment plant if necessary.</p> <p>It is recognized that MCES’s Rosemount Interceptor has a fixed hydraulic capacity and the City commits to directing future wastewater flows not to exceed interceptor capacity. Due to the potential variation in future development, alternative sanitary sewer system layouts, service agreements between Rosemount and Empire Township, and MCES additional ultimate system treatment capacity, the City will revise the sanitary sewer system layout in the future as development plans progress. The sanitary sewer system layout will be coordinated with MCES as development progresses.</p> <p>No change has been made to the AUAR.</p>
<p>Item 21 – Traffic. The use of ITE trip generation rates is not appropriate for this size of development. Also, CSAH 42 and 52 are principal arterials. Reconstruction of these roads would require approval from Met Council</p>	<p>See response to MnDOT Modeling Comment 1. The expansion of CSAH 42 from 4 lanes to 6 lanes and the proposed interchanges on CSAH 42 at TH 3 and US 52 have been previously identified in City of Rosemount’s and Dakota County’s 2030 Comprehensive Plans and other planning studies as needed in the future. As future development is proposed in the UMore area, a better understanding on the timing of these needs will be determined.</p> <p>The City and Township will work with Dakota County, MnDOT and the Metropolitan Council on regional transportation expansion needs as development proposals are submitted to review.</p> <p>Sections II.vii A and Item 21 F have been updated in the Final AUAR to more clearly indicate the additional traffic analysis and modeling to be completed.</p>
<p>Item 27 – Compatibility with Plans/Land Use Regulations. The Met Council is drafting a new 2040 Framework. Scenarios 1, 2, and 3 are not recognized by the Met Council’s 2030 Framework. It is expected that the City and Township will update their comprehensive plans.</p>	<p>The City and Township do intend to update their Comprehensive Plans, as noted in the AUAR. The entirety of the scenarios may not be fully incorporated in Comprehensive Plan updates as future phasing of development will be considered. Comprehensive Plan updates will reflect likely anticipated development within a reasonable timeframe and consider the appropriate timeframe’s population estimate. No change has been made to the AUAR.</p>

Minnesota Pollution Control Agency Comments

Surface Water Runoff 1. NURP is not a recognized treatment method per the NPDES permit.	Development will need to meet the City/Township and the NPDES permit requirements. This is noted in the AUAR.
Surface Water Runoff 2. MPCA encourages the use of infiltration of stormwater, where possible.	Stormwater management will be required to meet the City's standards in Rosemount and Empire/Vermillion River JPA standards in Empire. The City's standards require infiltration. Infiltration will be used in areas where appropriate that will not increase risk of groundwater contamination. No change has been made to the AUAR.
Surface Water Runoff 3. MPCA encourages Minimal Impact Design practices to retain surface water.	See response to "Surface Water Runoff 2". Also, the Concept Master Plan for the site does incorporate greenways, and low impact development concepts into the plan. No change has been made to the AUAR.
Surface Water Runoff 4. In relation to landlocked basins, NPDES prohibits adverse impacts to wetlands unless impacts have been addressed through permitting.	Comment noted. No change has been made to the AUAR.
Surface Water Runoff 5. The AUAR does not indicate if the Study Area will discharge into Special Waters.	There are no Special Waters within one mile of the site. This has been added to the AUAR in Item 17.
As was noted in the draft AUAR, releases of hazardous substances have been identified in various areas throughout UMore Park. These releases have occurred from various activities during operation of the Gopher Ordnance Works (GOW), after GOW operations ceased, and since the property has been owned by the University of Minnesota. Under Minnesota State Superfund Law (the Minnesota Environmental Response and Liability Act, Minn. Stat. ch. 115B), both the U.S. Department of Defense and University of Minnesota are considered to be responsible	As is discussed in the draft AUAR Report, releases of hazardous substances have been identified within certain portions of the project area. Technical reports identifying and describing those releases are available for public review on the University's website: http://www.umorepark.umn.edu/planning/SelectPublications/2006phasei/index.htm . The identified releases will need to be addressed prior to or contemporaneously with redevelopment of affected portions of the project area. The AUAR states that the MPCA is to be consulted by developers regarding any necessary additional investigation or cleanup required to properly address any such identified releases prior to approval of the proposed redevelopment. No change has been made to the AUAR.

<p>parties for these releases. The MPCA recognizes there may be other parties that may also be responsible for releases, such as operators and/or lessees, at the site.</p>	
<p>As more specific development plans are finalized, updated environmental assessments will need to be completed and response actions plans and/or contingency plans prepared which address implementation of appropriate actions relative to site remediation activities. The work, and subsequent documents, should undergo appropriate review/approval by the MPCA's Superfund or Brownfield programs.</p>	<p>The AUAR indicates that project proposers prepare and submit Construction Contingency Plans ("CCPs") to the MPCA to help identify and respond to any presently unknown potential releases of hazardous substances that may be encountered during construction activities. The AUAR also states that Phase I Environmental Site Assessments be completed for the proposed project area and submitted to MPCA for review along with the CCPs. The City or Township will consider the known or potential presence of hazardous substances when reviewing proposed redevelopment plans and associated permit applications for the project area, and will recommend that response action plans be developed to address identified releases of hazardous substances and be submitted to the MPCA for review and approval. No changes have been made to the FAUAR.</p>
<p>The MPCA has recommended that both the University of Minnesota and Army Corps of Engineers enter into a formal agreement with the MPCA for oversight of such assessments and response action development. The MPCA has also encouraged the U of M and Corps to begin discussions as to the allocation of workload with respect to further assessments and response actions, including discussions related to actions to address physical hazards from GOW operations that remain at the site.</p>	<p>Please see the response to MPCA Comment above.</p>

Department of Natural Resources Comments

Recommendation that the Natural Heritage Database be re-evaluated before major construction events.	The AUAR will be evaluated every five years, and the Natural Heritage Database will be consulted during those evaluations. No change has been made to the AUAR.
The DNR appreciates consideration of the Vermillion Highlands area and encourages the City to continue discussion with DNR as more definitive site plans are developed.	The City, Township, and U of M will continue to coordinate with the DNR. No change has been made to the AUAR.
DNR encourages the use of wildlife-friendly erosion control mesh.	Comment noted. No change has been made to the AUAR.
New well construction requires approval from the DNR.	This has been added to Item 8 in the AUAR.

Comments from Ronald Spong	
Permits and Approvals. Dakota County requires approvals and compliance with its ordinances	This has been added to Item 8 in the AUAR
Existing Land Uses. All past and present land uses should be included in the AUAR.	Over at least the past 25 years, the project area has been the subject of numerous environmental investigations by the University, the United States Army Corps of Engineers and others. Most recently, the University completed a Remedial Investigation of UMore East (eastern two-thirds of the project area) and a Remedial Investigation and Phase II Environmental Assessment of the UMore Mining Area (western one-third of the project area). Those investigations, which are available for public review on the University's website: http://www.umorepark.umn.edu/planning/SelectPublications/2006phasei/index.htm , were compliant with the Minnesota Environmental Response and Liability Act ("MERLA"), Minn. Stat. § 115B.01 et seq., and, where applicable, the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. 9601 et seq., and ER 200-3-1, which was developed by the United States Army Corps of Engineers ("Army Corps") for the Formerly Used Defense Sites ("FUDS") Program. Those studies were identified and discussed in the AUAR and include an extensive review of past and current land use. No change has been made to the AUAR
Superfund Site Status and Potential Environmental Hazards. Recommends revising these sections of the AUAR to properly and fully inform the public and decision makers related to past and current land use.	The AUAR contains an extensive discussion of pre- and post-GOW land use and associated identified environmental releases. Key environmental studies are cited and their findings presented in the AUAR. With respect to the "more than a hundred" disposal and release sites documented by Dakota County as referenced in this comment, the Phase I Environmental Site Assessment, UMore East, Dakota County, MN (Barr Engineering Co., April 2011) and the Phase I Environmental Site Assessment, UMore Park, Rosemount, MN (Peer Engineering, Inc., July 2006) identified and addressed the sites. Representatives of Barr Engineering met with County staff and reviewed records provided by the County, including the site summaries contained in the County's Environmental Database. Sites in the County's database were physically inspected by Barr Engineering staff. After completion of the document review, site inspection and interviews of County staff, Barr Engineering identified several sites of concern for further assessment as part of the Phase I

	<p>Environmental Site Assessment and where appropriate, Phase II testing. The results of these activities are presented in Barr’s Phase I, Phase II, and Remedial Investigation Reports, which are summarized and were considered in this AUAR.</p> <p>The University’s Department of Environmental Health and Safety and Barr Engineering have recommended that the list of sites from Dakota County’s database that were not fully investigated as part of the UMore East Remedial Investigation be considered in Phase I Environmental Site Assessments and Construction Contingency Plans prepared for future redevelopment activities. For example, all of the Dakota County sites that were not included in the Phase II investigation for the UMA are listed and identified on maps in the UMA’s Construction Contingency Plan. These sites primarily consist of abandoned farmsteads. An environmental professional will direct excavation of the farmsteads and will attempt to locate wells and potential hazardous substances. The same or a similar process will be followed with respect to proposed other future redevelopment activities within the project area.</p> <p>The scope of this AUAR is limited to assessing environmental impacts in the context of their potential affect on the redevelopment scenarios outlined in the AUAR, and does not extend to analysis of potentially responsible parties to address those releases. No change has been made to the AUAR.</p>
<p>Water Use. Concern there may be unidentified wells on site. Concern about nitrogen in the aquifer.</p>	<p>With respect to the comment regarding abandoned wells, please see response to Dakota County comment 3C</p> <p>At this time, siting of new public water supply wells are not being considered in or downgradient of the project area. If in the future this changes and a public water supply well is contemplated for the project area, the City of Rosemount is committed to conducting water quality testing as part of the siting process. While no new public wells are planned downgradient of the project area, the groundwater monitoring wells for the mining operation were designed and installed to monitor ground water on the two existing City wells at the former City Hall property north of DCTC (wells RR-1 and RR-2) and the possibility of a future well, west of the City ballfields, south of DCTC.</p> <p>As to nitrogen impacts to the groundwater, nitrogen in the form of agricultural chemicals is</p>

	<p>used extensively at and in the region surrounding the project area. Nitrogen-based substances such as nitric acid and dinitrotoluene were also used in the manufacturing of smokeless gunpowder during GOW operations. During the UMore East Remedial Investigation, Barr Engineering detected trace concentrations of dinitrotoluene in soil in some areas used for Gopher Ordnance Works-era smokeless gunpowder production. However, dinitrotoluene was not detected in groundwater. As noted in the comment, groundwater data show that significant nitrogen concentrations exist in groundwater, both upgradient and downgradient of the project area. This data is consistent with regional groundwater issues and have been associated with row-crop farming in the region (Dakota County, 2005). No change has been made to the AUAR.</p>
<p>Water Use. The City should revise its DWSMA using the MDH Source Protection guidance for wellhead protection for fractured and solution-weathered bedrock.</p>	<p>The City's Wellhead Protection Plan, Part II Update was completed concurrently with the development of the AUAR and was approved by the Minnesota Department of Health on June 7, 2013. The WHPP, Part II Update was completed in accordance with the MDH Source Protection guidance and direction from the MDH. This guidance was also used in the development of the Drinking Water Supply Management Area (DWSMA). No change has been made to the AUAR.</p>
<p>Water Use. Concern about using the Jordan aquifer.</p>	<p>See response to Item 13- Metropolitan Council</p>
<p>Water Quality. Concern about directing storm water to Lake 2162.</p>	<p>See response to Dakota County 3d. Also, as required by the mining permit issued by the City of Rosemount, a groundwater monitoring network has been established to monitor groundwater quality downgradient of the referenced lake. Furthermore, controls referenced in the Spill Prevention, Control and Countermeasures Plan (SPCC Plan) will be in place to minimize the potential for spills and accidental releases that could affect water quality of the lake. No change has been made to the AUAR.</p>
<p>Geologic Hazards. Anecdotal evidence of fractured and solution-weathered conduits in the underlying formations</p>	<p>As shown on Figure 19-6 of the AUAR Report, no karst surface features have been identified at or within five miles of UMore Park, and few karst features have been identified on the surrounding upland outwash plain. This is not surprising considering that the depth to bedrock is greater than 50 feet below the ground surface. Although surface karst features like sinkholes are not considered a structural risk factor for UMore Park development, groundwater flow in the Prairie du Chien aquifer has preferential flow patterns on a local scale that result from solution cavities in the dolomite bedrock.</p>

	<p>Additionally, the City’s Engineer has coordinated the drilling of many wells in Rosemount. Based on this experience, the weathered portion of the Prairie du Chien strata has only been present when covered by St. Peter Sandstone. This suggests that the erosion event that removed the St. Peter also removed the weathered top portion of the Prairie du Chien strata, making the risk of sinkhole formation lower in the parts of UMore where the Prairie du Chien is the first bedrock. City engineering staff has not observed paleokarst in the lower half of the Prairie du Chien strata. This is generally supported by research and in regional outcrops. This does not mean that the area is immune to sinkhole formation, but the lack of physical and chemical evidence for sinkholes in the UMore area suggests that the risk is considered relatively low. Factors that might indicate increased risk of karst conditions affecting both structures and water quality in the project area are being monitored.</p> <p>No change has been made to the AUAR.</p>
<p>Compatibility with Plans and Land Use Regulations. Recommends implementation of Scenario 4</p>	<p>The comment that the reviewer would prefer Scenario 4 is noted. Further, the scope of this AUAR is limited to assessing environmental impacts in the context their potential effect on the redevelopment scenarios outlined in the AUAR, and does not extend to analysis of potentially responsible parties to address those releases. No change has been made to the AUAR.</p>
<p>Comments from Martha Henderson</p>	
<p>Recommends no development in the area and restoring the area as prairie. Public should have access to open spaces.</p>	<p>The concept plans for the study area contain more green space than most developments. As these green spaces are designated, restoration is anticipated to occur in some areas as appropriate and these spaces will be available for public use. The greenway corridor will connect regional open spaces to the south through to the north boundary of the AUAR. The site is adjacent to Vermillion Highlands and Dakota County’s Whitetail Woods park, which are dedicated open space that is open to the public.</p>

Comments from School District	
The School District had no comments.	No response is necessary.

UMore AUAR Response to Comments - Sanitary Sewer

Table A

Development Scenario 1 Future Regional Wastewater Flow by MCES Connection Point and 10-Year Increment
Based on 2008 Rosemount Comprehensive Sanitary Sewer System Plan (CSP) Table 6-4

MCES Facility	MCES Facility Avg. Flow Capacity (MGD)	2008 CSP Existing Avg. Flow (MGD)	Cumulative 2020 Avg. Flow (MGD)	Cumulative 2030 Avg. Flow (MGD)	Cumulative Ultimate Avg. Flow (MGD)	Sewer Shed	2008 CSP Existing Avg. Flow (MGD)	2020 Avg. Flow (MGD)	2030 Avg. Flow (MGD)	Ultimate Avg. Flow (MGD)
M641	0.56	0.361	0.405	0.405	0.405	LS 3	0.265	0.309	0.309	0.309
L74 to Blaine Ave. (CR 73)	4.00	0.188	1.854	4.839	5.026	Danville Central	0.096	0.096	0.096	0.096
						Northeast	0.000	0.884	1.075	1.075
						Southeast	0.000	0.318	0.494	0.681
						Southeast Central	0.000	0.538	3.081	3.081
							0.000	0.114	0.190	0.190
Blaine Ave. (CR 73) to Akron Ave. (CR 71)	6.72	0.188	1.939	4.924	6.061	UMore-East	0.000	0.000	0.000	0.950
						West Central	0.000	0.085	0.085	0.085
						¹ Northwest	0.000	0.000	0.000	0.300
						¹ Lan-O-Ken	0.054	0.175	0.175	0.277
						LS 9	0.034	0.063	0.063	0.063
						Connermara	0.219	0.279	0.279	0.279
						UMore-Central	0.000	0.000	0.000	1.010
Akron Ave. (CR 71) to Biscayne Ave.	9.52	0.577	3.527	6.843	10.411	UMore-Northwest	0.000	0.000	0.000	0.820
						¹ North Central	0.000	0.915	1.246	1.316
						¹ South Bacardi	0.000	0.074	0.074	0.203
						Auburn	0.011	0.011	0.011	0.011
						LS 8	0.053	0.053	0.053	0.053
						LS 7	0.018	0.018	0.018	0.018
						150th	0.171	0.171	0.171	0.171
						Canada	0.113	0.113	0.113	0.113
						LS 1	0.136	0.136	0.136	0.136
						¹ LS 4	0.115	0.121	0.121	0.121
						LS 5	0.107	0.107	0.107	0.107
						LS 6	0.005	0.005	0.005	0.005
Biscayne Ave. to City Boundary (M645)	11.92	1.425	4.666	7.982	11.550	Business Pkwy Biscayne	0.077	0.354	0.354	0.354
							0.124	0.132	0.132	0.132
City Boundary (M645) to 170th Street	11.92	1.425	4.666	7.982	11.990	UMore-Southwest	0.000	0.000	0.000	0.440

¹ Sewer districts contain existing development that is proposed to be connected to Municipal system under ultimate scenario, therefore ultimate flow not solely dependent upon developable acres

² Future development average flow is based on a wastewater generation rate of 800 gallons per acre per day, UMore flows based on AUAR projections

UMore AUAR Response to Comments - Sanitary Sewer

Table B

Development Scenario 2 Future Regional Wastewater Flow by MCES Connection Point and 10-Year Increment
Based on 2008 Rosemount Comprehensive Sanitary Sewer System Plan (CSP) Table 6-4

MCES Facility	MCES Facility Avg. Flow Capacity (MGD)	2008 CSP Existing Avg. Flow (MGD)	Cumulative 2020 Avg. Flow (MGD)	Cumulative 2030 Avg. Flow (MGD)	Cumulative Ultimate Avg. Flow (MGD)	Sewer Shed	2008 CSP Existing Avg. Flow (MGD)	2020 Avg. Flow (MGD)	2030 Avg. Flow (MGD)	Ultimate Avg. Flow (MGD)
M641	0.56	0.361	0.405	0.405	0.405	LS 3 Danville	0.265 0.096	0.309 0.096	0.309 0.096	0.309 0.096
L74 to Blaine Ave. (CR 73)	4.00	0.188	1.854	4.839	5.026	Central Northeast Southeast Southeast Central	0.000 0.188 0.000 0.000	0.884 0.318 0.538 0.114	1.075 0.494 3.081 0.190	1.075 0.681 3.081 0.190
Blaine Ave. (CR 73) to Akron Ave. (CR 71)	6.72	0.188	1.939	4.924	5.891	UMore-East West Central Northwest Lan-O-Ken LS 9 Connemara UMore-Central UMore-Northwest	0.000 0.000 0.000 0.054 0.034 0.219 0.000 0.000	0.000 0.085 0.000 0.175 0.063 0.279 0.000 0.000	0.000 0.085 0.000 0.175 0.063 0.279 0.000 0.000	0.780 0.085 0.300 0.277 0.063 0.279 0.740 0.620
Akron Ave. (CR 71) to Biscayne Ave.	9.52	0.577	3.527	6.843	9.771	North Central South Bacardi Auburn LS 8 LS 7 150th Canada LS 1 LS 4 LS 5 LS 6	0.000 0.000 0.011 0.053 0.018 0.171 0.113 0.136 0.115 0.107 0.005	0.915 0.074 0.011 0.053 0.018 0.171 0.113 0.136 0.121 0.107 0.005	1.246 0.074 0.011 0.053 0.018 0.171 0.113 0.136 0.121 0.107 0.005	1.316 0.203 0.011 0.053 0.018 0.171 0.113 0.136 0.121 0.107 0.005
Biscayne Ave. to City Boundary (M645)	11.92	1.425	4.666	7.982	10.910	Business Pkwy Biscayne UMore-Southwest	0.077 0.124 0.000	0.354 0.132 0.000	0.354 0.132 0.000	0.354 0.132 0.320
City Boundary (M645) to 170th Street	11.92	1.425	4.666	7.982	11.230					

¹ Sewer districts contain existing development that is proposed to be connected to Municipal system under ultimate scenario, therefore ultimate flow not solely dependent upon developable acres

² Future development average flow is based on a wastewater generation rate of 800 gallons per acre per day, UMore flows based on AUAR projections

UMore AUAR Response to Comments - Sanitary Sewer
Table C

Development Scenario 1 Future Regional Wastewater Flow by MCES Connection Point and 10-Year Increment
Based on 2008 Rosemount Comprehensive Sanitary Sewer System Plan (CSP) Table 6-4

MCES Facility	MCES Facility Avg. Flow Capacity (MGD)	2008 CSP Existing Avg. Flow (MGD)	Cumulative 2020 Avg. Flow (MGD)	Cumulative 2030 Avg. Flow (MGD)	Cumulative Ultimate Avg. Flow (MGD)	Sewer Shed	2008 CSP Existing Avg. Flow (MGD)	2020 Avg. Flow (MGD)	2030 Avg. Flow (MGD)	Ultimate Avg. Flow (MGD)
M641	0.56	0.361	0.405	0.405	0.405	LS 3	0.265	0.309	0.309	0.309
L74 to Blaine Ave. (CR 73)	4.00	0.188	1.854	4.839	5.026	Danville Central	0.096	0.096	0.096	0.096
						Northeast	0.000	0.884	1.075	1.075
						Southeast	0.188	0.318	0.494	0.681
						Southeast Central	0.000	0.538	3.081	3.081
							0.000	0.114	0.190	0.190
Blaine Ave. (CR 73) to Akron Ave. (CR 71)	6.72	0.188	1.939	4.924	5.931	UMore-East	0.000	0.000	0.000	0.820
						West Central	0.000	0.085	0.085	0.085
						¹ Northwest	0.000	0.000	0.000	0.300
						¹ Lan-O-Ken	0.054	0.175	0.175	0.277
						LS 9	0.034	0.063	0.063	0.063
						Connemara	0.219	0.279	0.279	0.279
						UMore-Central	0.000	0.000	0.000	1.010
Akron Ave. (CR 71) to Biscayne Ave.	9.52	0.577	3.527	6.843	10.281	UMore-Northwest	0.000	0.000	0.000	0.820
						¹ North Central	0.000	0.915	1.246	1.316
						¹ South Bacardi	0.000	0.074	0.074	0.203
						Auburn	0.011	0.011	0.011	0.011
						LS 8	0.053	0.053	0.053	0.053
						LS 7	0.018	0.018	0.018	0.018
						150th	0.171	0.171	0.171	0.171
						Canada	0.113	0.113	0.113	0.113
						LS 1	0.136	0.136	0.136	0.136
						¹ LS 4	0.115	0.121	0.121	0.121
						LS 5	0.107	0.107	0.107	0.107
						LS 6	0.005	0.005	0.005	0.005
Biscayne Ave. to City Boundary (M645)	11.92	1.425	4.666	7.982	11.420					
						Business Pkwy	0.077	0.354	0.354	0.354
						Biscayne	0.124	0.132	0.132	0.132
City Boundary (M645) to 170th Street	11.92	1.425	4.666	7.982	11.860	UMore-Southwest	0.000	0.000	0.000	0.440

¹Sewer districts contain existing development that is proposed to be connected to Municipal system under ultimate scenario, therefore ultimate flow not solely dependent upon developable acres

²Future development average flow is based on a wastewater generation rate of 800 gallons per acre per day, UMore flows based on AUAR projections

**Table 6-4
Future Regional Wastewater Flow by MCEs Connection Point and 10-Year Increment**

MCEs Facility	Cumulative Existing Avg. Flow (MGD)	Cumulative 2010 Avg. Flow (MGD)	Cumulative 2020 Avg. Flow (MGD)	Cumulative 2030 Avg. Flow (MGD)	Cumulative Ultimate Avg. Flow (MGD)	Sewer Shed	Existing Avg. Flow (MGD)	2010 Avg. Flow (MGD)	2020 Avg. Flow (MGD)	2030 Avg. Flow (MGD)	Ultimate Avg. Flow (MGD)
M641	0.361	0.361	0.405	0.405	0.405	LS 3	0.265	0.265	0.309	0.309	0.309
L74 to Blaine Ave. (CR 73)	0.188	0.188	1.854	4.839	5.168	Danville Central Northeast Southeast Southeast Central	0.096 0.000 0.188 0.000 0.000	0.096 0.000 0.188 0.000 0.000	0.096 0.884 0.318 0.538 0.114	0.096 1.075 0.494 3.081 0.190	0.096 1.217 0.681 3.081 0.190
Blaine Ave. (CR 73) to Akron Ave. (CR 71)	0.188	0.188	1.939	4.924	5.982	South Central West Central	0.000 0.000	0.000 0.000	0.000 0.085	0.000 0.085	0.730 0.085
Akron Ave. (CR 71) to Biscayne Ave.	0.577	1.014	3.527	6.843	9.657	¹ Northwest ¹ Lan-O-Ken LS 9 Connemara Southwest Central ¹ North Central ¹ South Bacardi Auburn LS 8 LS 7	0.000 0.054 0.034 0.219 0.000 0.000 0.000 0.011 0.053 0.018	0.094 0.063 0.279 0.000 0.308 0.000 0.011 0.053 0.018	0.175 0.063 0.279 0.000 0.915 0.074 0.011 0.053 0.018	0.175 0.063 0.279 0.000 1.246 0.074 0.011 0.053 0.018	0.277 0.063 0.279 1.155 1.316 0.203 0.011 0.053 0.018
Biscayne Ave. to City Boundary (M645)	1.425	2.059	4.666	7.982	11.247	150th Canada LS 1 ¹ LS 4 LS 5 LS 6 Southwest Business Pkwy Biscayne	0.171 0.113 0.136 0.115 0.107 0.005 0.000 0.077 0.124	0.171 0.113 0.136 0.115 0.107 0.005 0.000 0.266 0.132	0.171 0.113 0.136 0.121 0.107 0.005 0.000 0.354 0.132	0.171 0.113 0.136 0.121 0.107 0.005 0.000 0.354 0.132	0.171 0.113 0.136 0.121 0.107 0.005 0.450 0.354 0.132

¹Sewer districts contain existing development that is proposed to be connected to Municipal system under ultimate scenario, therefore ultimate flow not solely dependent upon developable acres

²Future development average flow is based on a wastewater generation rate of 800 gallons per acre per day