

**CITY OF RAMSEY LAND USE APPLICATION  
TECHNICAL REVIEW FILE**

<b>DATE</b>	JULY 27, 2017	<b>PROJECT ADDRESS</b>	SOUTH OF BUNKER LAKE BLVD, EAST OF PUMA STREET
<b>PROJECT. TITLE</b>	BUNKER LAKE BOULEVARD INDUSTRIAL PARK		
<b>ESCROW #</b>			
<b>DEPARTMENT:</b>	Engineering		
<b>TECHNICAL REVIEWER:</b>	Name: Leonard Linton Phone: 763 433-9834 Email: llinton@ci.ramsey.mn.us		

We offer the following comments regarding the Civil Construction Plans submittal for Bunker Lake Boulevard Industrial Park. The submittal consists of 20 sheets prepared by Bolton & Menk. The plans are not dated. The plans were received on July 5, 2017.

This report also covers the Phase 1 grading plans for this project received July 7, 2017. This submittal consists of 12 sheets. The comments are listed separately at the end of this report.

We offer the following comments on the sheets:

**Civil Construction Plans**

**General comments:**

1. A legend is must be shown on all sheets. All symbols used on that sheet must be added to the legend for the sheet. Symbols not used must not be in the legend. The patterns in the legend must match size and scale of patterns on the plans.
2. Ramsey City Details are included in the set. Some details can be removed from the set as noted below.
3. All sidewalks in public right-of-way must be shown as 6 feet wide and 6 inches thick.
4. Class 5 shall meet the Ramsey modified gradation. This gradation must be included in the details.
5. Plan readability – Proposed sanitary sewer lines and symbols, and watermain lines and symbols must be the most prominent items on the sewer and water sheets. Proposed storm sewer lines and symbols must be the most prominent on the storm sewer sheets. Proposed curb lines, sidewalks and pedestrian ramps must be the most prominent lines on the street sheets. All other lines on the sheet must be screened so the lines and symbols for proposed features standout. This includes the symbols in the legends which must match the plan view in size, pattern, weight, and color.

6. Graphic scale **must** match viewport scale.
7. Underlying lines **must** be broken where they are under text boxes to enhance readability. This project will require a stormwater permit from the Lower Rum River Watershed Management Organization (LRRWMO).

**G0.01:**

1. A date must be shown on **each** page of the set.

**C0.01 – C0.02:**

8. A sheet specific legend must be added to **each** sheet.
9. Make all text legible.
10. Add note: “All erosion control must be installed and inspected by the City prior to any work commencing on site.”

**C2.03:**

1. Change “14 days” to “7 days”. This site is within 1 mile of the Mississippi River.

**C2.04- C2.08:**

1. The intent of the Erosion Control Plan sheets is not clear. The same areas of the site are shown on multiple pages. Notes must be added to clarify intent of pages.
2. Add note ”Silt fence must be placed around base of stockpile and stabilization installed within 7 days on slopes.”
3. The cul-de-sac does not match the sketch.
4. Utility lines should be screened on the erosion control plan. Match lines are required on all sheets.
5. Show screened grading with drainage patterns on Erosion Control Sheets.
6. Remove Mulch , Seed mix entry from legend if it is not used on sheet.
7. Add “See Page XX” label where features continue off the page.
8. Add text mask to hide lines under labels.
9. All items curb, striping, storm sewer, etc., must be in lighter shades on the erosion control plan. See general comment 5.
10. Legend must show all items pertinent to each sheet. Fiber blanket in legend does not match plan view.
11. Stabilized construction exit is in legend, not on plans.
12. Silt fence must be placed downslope of all disturbed areas.

**C2.09:**

1. A legend is required on each sheet.
2. Why is a concrete intersection proposed?
3. Are curb cuts proposed for the north side of the east-west street?

**C3.01:**

1. A legend is required on each sheet.
2. Label the side slopes on the ditch.
3. Additional contour elevations and spot elevations are required around the pond.
4. Identify the solid line extending west from the pond and the dashed line that intersects the edge of pavement? in the cul-de-sac.
5. The normal water level of the pond seems higher than existing groundwater levels in this area. Will an impermeable liner be installed in the pond?
6. Label the street with and curb radii.
7. The existing tree line symbol must be lighter to match the existing contours.
8. The proposed contours west of the main access road do not match the access road in all places.
9. The proposed contours on the swale north of the pond must tie into existing contours.
10. All text on the sheet must be legible (Bunker Lake Blvd features in particular)

**C4.01:**

1. A legend is required on each sheet.
2. Drainage and utility easements are required over all sanitary sewer or storm sewer that serve more than one site.
3. Drainage and utility easements are required over all watermain.

A Lower Rum River Watershed Management Organization permit will be required.

**Phase 1 Grading**

**C0.01- C0.02:**

1. Make all text legible.
2. A legend is required on each sheet.
3. Add and label match lines.

**C2.03:**

1. Change "14 days" to "7 days". This site is within 1 mile of the Mississippi River.

**C2.04- C2.08:**

1. The intent of the Erosion Control Plan sheets is not clear. The same areas of the site are shown on multiple pages. Notes must be added to clarify intent of pages.
2. Add note "Silt fence must be placed around base of stockpile and stabilization installed within 7 days on slopes."
3. The cul-de-sac does not match the sketch.
4. Utility lines should be screened on the erosion control plan. Match lines are required on all sheets.
5. Show screened grading with drainage patterns on Erosion Control Sheets.
6. Remove "Mulch, Seed Mix 25-121..." entry from legend if it is not used on sheet.

7. Add "See Page XX" label where features continue off the page.
8. Add text mask to hide lines under labels.
9. All items curb, striping, storm sewer, etc., must be in lighter shades on the erosion control plan. See general comment 5.
10. Legend must show all items pertinent to each sheet. Fiber blanket in legend does not match plan view.
11. Stabilized construction exit is in legend, not on plans.
12. Silt fence must be placed downslope of all disturbed areas.
13. Proposed rip-rap must be shown.
14. Add and label match lines on all sheets.

**C3.01:**

1. A legend is required on each sheet.
2. Label the side slopes on the ditch.
3. Additional contour elevations and spot elevations are required around the pond.
4. Identify the solid line extending west from the pond and the dashed line that intersects the edge of pavement? in the cul-de-sac.
5. The normal water level of the pond seems higher than existing groundwater levels in this area. Will an impermeable liner be installed in the pond?
6. Label the street with and curb radii.
7. The existing tree line symbol must be lighter to match the existing contours.
8. The proposed contours west of the main access road do not match the access road in all places.
9. The proposed contours on the swale north of the pond must tie into existing contours.
10. All text on the sheet must be legible (Bunker Lake Blvd features in particular)
11. Remove extra labels.
12. Soil borings are shown on the plans. The geotechnical report must be submitted.

**Stormwater Summary**

The project is providing volume control (infiltration) and rate control for all storms. Please copy the existing conditions table to the end of the report adjacent to the Final Proposed condition summary so that an easy comparison can be made of existing and proposed conditions.