| REV | DATE | BY | DESCRIPTION |
|---|---|---|---|
| | | | |

STREET ACCESS TO VALLEY VIEW DRIVE

STORMWATER INFILTRATION POND

BUILDING SITES

UNDISTURBED AREA FOR SEPTIC DRAINFIELD

RESIDENTIAL LOT 1

RESIDENTIAL LOT 2

SUBDIVISION PROPERTY LINE

SAND CREEK

SAND CREEK

## LEGEND

- 735 — EXISTING INDEX CONTOUR (5-FT CI)
- EXISTING INTERMEDIATE CONTOUR
- 720 — COMPLETED MINING INDEX CONTOUR (5-FT CI)
- COMPLETED MINING INTERMEDIATE CONTOUR
- 730 — PROPOSED RECLAMATION INDEX CONTOUR (5-FT CI)
- PROPOSED RECLAMATION INTERMEDIATE CONTOUR
- FP — EXISTING 100-YEAR FLOOD LINE
- FP — POST-RECLAMATION 100-YEAR FLOOD LINE
- SHORELAND BOUNDARY
- PROPOSED MINING LIMITS
- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- FINAL WATERSHED BOUNDARY (INCLUDES AREAS OUTSIDE MINE BOUNDARY THAT WILL DRAIN TO ON-SITE PONDS)
- FINAL SURFACE WATER FLOW DIRECTION

POTENTIAL END USE:
SUBDIVIDE PROPERTY INTO TWO RESIDENTIAL LOTS.

**FLOODPLAIN STORAGE SUMMARY**

EXISTING FLOOD STORAGE WITHIN MINE BOUNDARY:
437,311 CY (88.3 MILLION GALLONS)

POST-RECLAMATION FLOOD STORAGE WITHIN MINE BOUNDARY:
1,066,169 CY (215.3 MILLION GALLONS)

NET INCREASE IN FLOOD STORAGE
628,858 CY(127.0 MILLION GALLONS): 144% INCREASE

FLOODPLAIN STORAGE VOLUME CALCULATIONS

Prismoidal Volume Results (pre-mine fill vol = flood storage)

| | |
|---|---|
| Original Surface Model: | existing ground |
| Final Surface Model: | Constant Elevation: 732.50 |
| Cut Compaction Factor: | 0.00 % |
| Fill Compaction Factor: | 0.00 % |
| Raw Cut Volume: | 205987.73 cu yd |
| Compacted Cut Volume: | 0.00 cu yd |
| Total Cut Volume: | 205987.73 cu yd |
| Raw Fill Volume: | 437310.74 cu yd |
| Compacted Fill Volume: | 0.00 cu yd |
| Total Fill Volume: | 437310.74 cu yd |

Prismoidal Volume Results (post-mine fill vol = flood storage)

| | |
|---|---|
| Original Surface Model: | restore site ignore pond |
| Final Surface Model: | Constant Elevation: 732.50 |
| Cut Compaction Factor: | 0.00 % |
| Fill Compaction Factor: | 0.00 % |
| Raw Cut Volume: | 320279.80 cu yd |
| Compacted Cut Volume: | 0.00 cu yd |
| Total Cut Volume: | 320279.80 cu yd |
| Raw Fill Volume: | 1066168.83 cu yd |
| Compacted Fill Volume: | 0.00 cu yd |
| Total Fill Volume: | 1066168.83 cu yd |

Prismoidal Volume Results (upland area only)

| | |
|---|---|
| Original Surface Model: | mine exc 600 |
| Final Surface Model: | restore site all |
| Cut Compaction Factor: | 0.00 % |
| Fill Compaction Factor: | 0.00 % |
| Raw Cut Volume: | 0.00 cu yd |
| Compacted Cut Volume: | 0.00 cu yd |
| Total Cut Volume: | 0.00 cu yd |
| Raw Fill Volume: | 894401.82 cu yd |
| Compacted Fill Volume: | 0.00 cu yd |
| Total Fill Volume: | 894401.82 cu yd |

Prismoidal Volume Results (wetland area only)

| | |
|---|---|
| Original Surface Model: | mine exc 600 |
| Final Surface Model: | restore site all |
| Cut Compaction Factor: | 0.00 % |
| Fill Compaction Factor: | 0.00 % |
| Raw Cut Volume: | 0.00 cu yd |
| Compacted Cut Volume: | 0.00 cu yd |
| Total Cut Volume: | 0.00 cu yd |
| Raw Fill Volume: | 27750.77 cu yd |
| Compacted Fill Volume: | 0.00 cu yd |
| Total Fill Volume: | 27750.77 cu yd |

0 50 100 200
SCALE IN FEET

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
JOHN R. MCCAIN
SIGNATURE
DATE REG. NO. 21835

McCain and Associates, Inc.
5300 Highway 12
Maple Plain, MN 55359
ph 952-346-3900
fx 952-346-3901

| | | | |
|---|---|---|---|
| DWN | NRB | DATE | 2/12/10 |
| DGN'R | NRB | CHK'D | NRB |
| PROJECT NO. | HEN0901 | | |
| DRAWING NO. | MINING_PLAN.DWG | | |

# RECLAMATION / END USE PLAN
## PROPOSED MINE SITE
SAND CREEK TOWNSHIP, SCOTT COUNTY, MINNESOTA

JORDAN AGGREGATES, LLC



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