*GREENS CREEK MINING COMPANY*

# STAGE 2 EXPANSION OF TAILINGS FACILITY
# POND 6 EXPANSION CONSTRUCTION
# CONTRACT NO. CWI CIVIL WORKS

## DRAWINGS

| DRAWING No. | REV. No. | TITLE |
|---|---|---|
| D-54001 | 0 | LOCATION PLAN |
| D-54002 | 0 | TAILINGS FACILITY GENERAL ARRANGEMENT |
| D-54003 | 0 | POND 6 FOUNDATION EXCAVATION PLAN |
| D-54004 | 0 | POND 6 UTILITIES PLAN SHEET 1 OF 2 |
| D-54004 | 0 | POND 6 UTILITIES PLAN SHEET 2 OF 2 |
| D-54005 | 0 | POND 6 FOUNDATION DRAINAGE DETAILS |
| D-54006 | 0 | POND 6 FINAL GRADING PLAN |
| D-54007 | 0 | POND 6 ROAD AND DITCH PROFILE AND DETAILS |
| D-54008 | 0 | POND 6 SOIL-BENTONITE WALLS PLAN, PROFILE AND DETAILS |
| D-54009 | 0 | POND 6 INSTRUMENTATION PLAN |
| | | |
| | | |

## TECHNICAL SPECIFICATIONS

| SECTION | TITLE |
|---|---|
| 4.1 | GENERAL |
| 4.2 | MEASUREMENT AND PAYMENT |
| 4.3 | MOBILIZATION AND DEMOBILIZATION |
| 4.4 | DEMOLITION |
| 4.5 | CLEARING AND EXCAVATION |
| 4.6 | FOUNDATION PREPARATION AND FILL |
| 4.7 | FOUNDATION LINER (NOT USED OR INCLUDED) |
| 4.8 | DRAINAGE SYSTEM |
| 4.9 | SOIL-BENTONITE WALL |

APRIL 11, 2008-APPROVED FOR TENDER

Len Murray, P.E. (AK)

**APRIL 11, 2008-APPROVED FOR TENDER**

Klohn Crippen Berger

Time: 8:47:3
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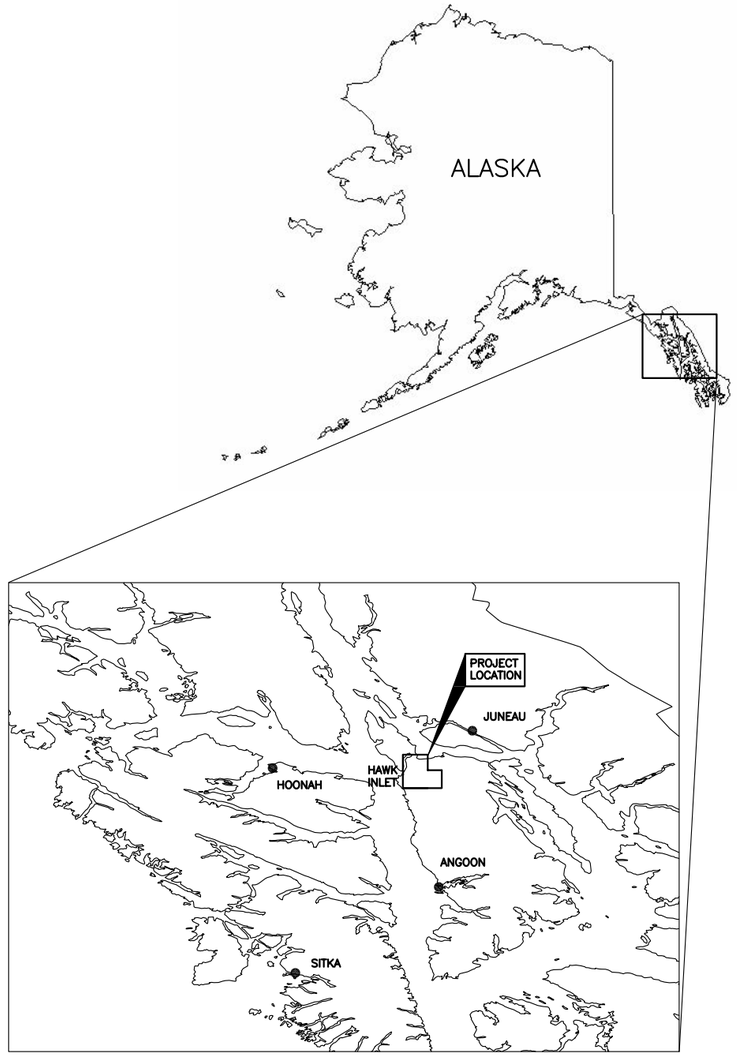
PLAN




KEY PLAN
SCALE: NTS

APPROVED FOR TENDER

SCALE: 0 5000 FT

## NOTES:

1. BASE PLAN PROVIDED BY GCMC, OCTOBER 2000.
2. CONTOUR INTERVAL IS 100 FT.
3. ELEVATIONS ARE IN FEET UNLESS NOTED OTHERWISE. COORDINATES AND ELEVATIONS ARE REFERENCED TO MINE DATUM.

| NO. | DATE | ISSUE / REVISION | DRAWN | CHK'D | DESIGN | APP'D |
|---|---|---|---|---|---|---|
| 0 | APR 11, 2008 | APPROVED FOR TENDER | AW | AD | LC | LM |

DRAWING NO. | REFERENCE DRAWING

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CLIENT
GREENS CREEK MINING COMPANY

Klohn Crippen Berger

PROJECT
STAGE 2 EXPANSION OF TAILINGS FACILITY
POND 6 EXPANSION CONSTRUCTION

TITLE
LOCATION PLAN

| SCALE | PROJECT No. | DWG. No. | REV. |
|---|---|---|---|
| AS SHOWN | M07802 A54 | D–54001 | 0 |

CANCEL PRINTS BEARING PREVIOUS REVISION

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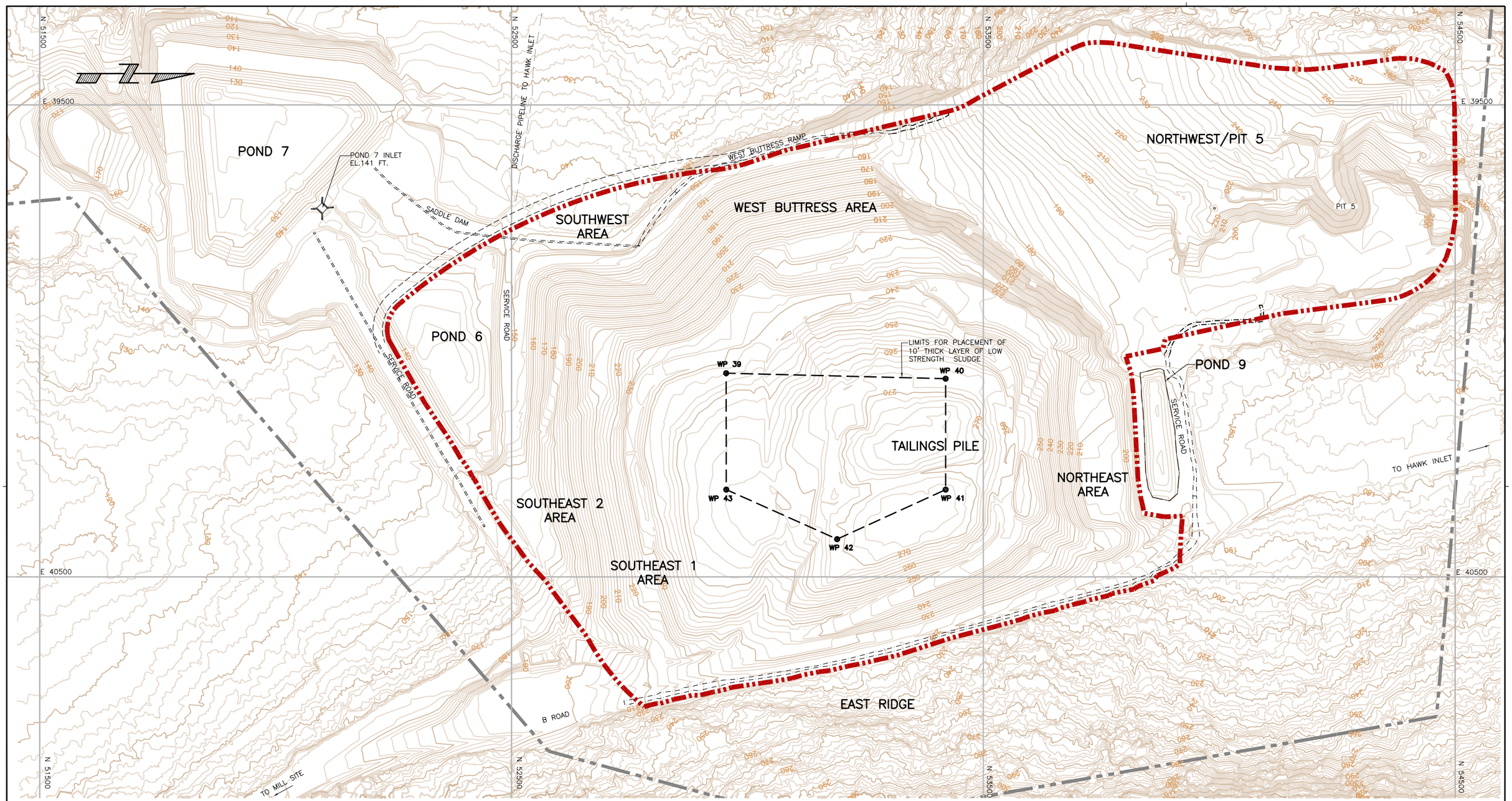


| POINT | NORTHING (FT.) | EASTING (FT.) |
|---|---|---|
| WP 39 | 52 955.0 | 40 068.0 |
| WP 40 | 53 420.0 | 40 080.0 |
| WP 41 | 53 420.0 | 40 315.0 |
| WP 42 | 53 190.0 | 40 420.0 |
| WP 43 | 52 955.0 | 40 315.0 |

## LEGEND

- PROPOSED TAILINGS EXPANSION
- EXISTING SOIL–BENTONITE WALL
- LEASE BOUNDARY
- PROPOSED ROAD

## GENERAL NOTES:

1. BASE TOPOGRAPHY PROVIDED BY GCMC (FEBRUARY, 2008).
2. LOCATIONS AND ELEVATIONS ARE IN FEET UNLESS OTHERWISE NOTED.

APPROVED FOR TENDER

SCALE: 0 200 FT.

| DRAWING NO. | REFERENCE DRAWING | NO. | DATE | ISSUE / REVISION | DRAWN | CHK'D | DESIGN | APP'D |
|---|---|---|---|---|---|---|---|---|
| | | 0 | APR 11, 2008 | APPROVED FOR TENDER | AW | AD | LC | LM |

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CLIENT

GREENS CREEK MINING COMPANY

Klohn Crippen Berger

PROJECT

STAGE 2 EXPANSION OF TAILINGS FACILITY
POND 6 EXPANSION CONSTRUCTION

TITLE

TAILINGS FACILITY
GENERAL ARRANGEMENT

| SCALE | PROJECT No. | DWG. No. | REV. |
|---|---|---|---|
| AS SHOWN | M07802 A54 | D–54002 | B |

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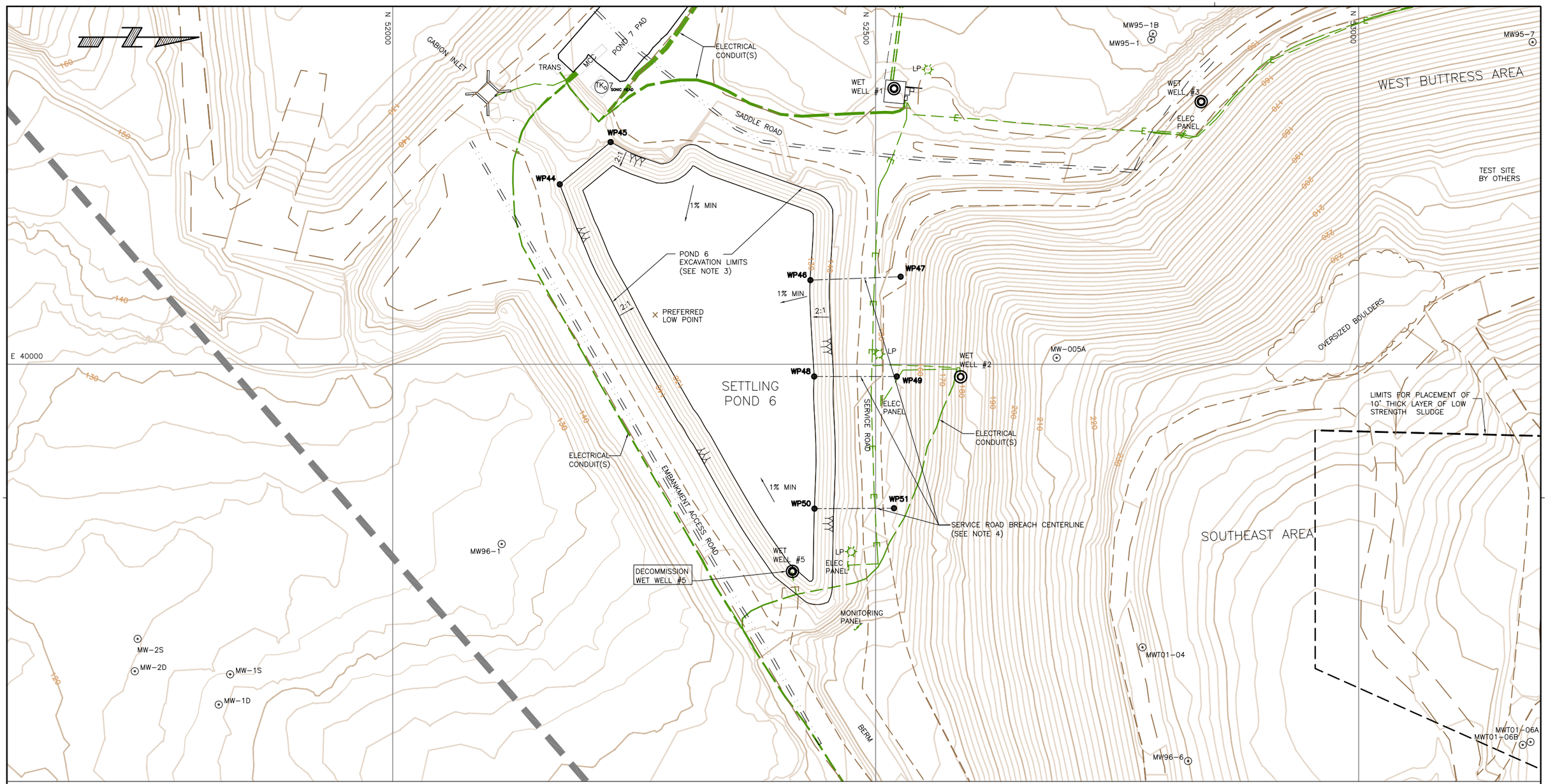
Xrefs: BM_Greens CK_FEB2008




## LEGEND

- EXISTING ROAD
- EXISTING SOIL–BENTONITE WALL
- LEASE BOUNDARY
- MW–005A — MONITORING WELLS
- –E– — ELECTRICAL LINES

## NOTES:

1. BASE TOPOGRAPHY PROVIDED BY GCMC (FEBRUARY, 2008).
2. LOCATIONS AND ELEVATIONS ARE IN FEET UNLESS OTHERWISE NOTED.
3. ALL PEAT, SAND, SLUDGE TO BE REMOVED FROM POND 6 FOOTPRINT. FOUNDATION TO BE GRADED TO A COMMON LOW POINT SUCH THAT TILL EXCAVATION IS MINIMIZED AND MINIMUM GRADE IS 1%. EXCAVATION LIMITS SHALL BE AS DIRECTED.
4. BREACH EXISTING SERVICE ROAD DOWN TO EXISTING FOUNDATION DRAIN BLANKET. DIG PERMIT REQUIRED DUE TO EXISTING ELECTRICAL CONDUITS IN AREA.
5. ANY BEDROCK EXPOSED DURING EXCAVATION SHALL BE REPORTED TO OWNER IMMEDIATELY.

| POINT | NORTHING (FT.) | EASTING (FT.) |
|---|---|---|
| WP 44 | 52 173.0 | 39 813.7 |
| WP 45 | 52 225.6 | 39 770.0 |
| WP 46 | 52 432.4 | 39 912.9 |
| WP 47 | 52 525.8 | 39 909.4 |
| WP 48 | 52 436.3 | 40 012.6 |
| WP 49 | 52 521.9 | 40 012.6 |
| WP 50 | 52 436.6 | 40 149.5 |
| WP 51 | 52 519.0 | 40 149.0 |

| DRAWING NO. | REFERENCE DRAWING | NO. | DATE | ISSUE / REVISION | DRAWN | CHK'D | DESIGN | APP'D |
|---|---|---|---|---|---|---|---|---|
| | | 0 | APR 11, 2008 | APPROVED FOR TENDER | AW | AD | LC | LM |

APPROVED FOR TENDER

SCALE: 0 100 FT.

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CLIENT: GREENS CREEK MINING COMPANY

Klohn Crippen Berger

PROJECT: STAGE 2 EXPANSION OF TAILINGS FACILITY
POND 6 EXPANSION CONSTRUCTION

TITLE: POND 6
FOUNDATION EXCAVATION PLAN

| SCALE | PROJECT No. | DWG. No. | REV. |
|---|---|---|---|
| AS SHOWN | M07802 A54 | D–54003 | 0 |

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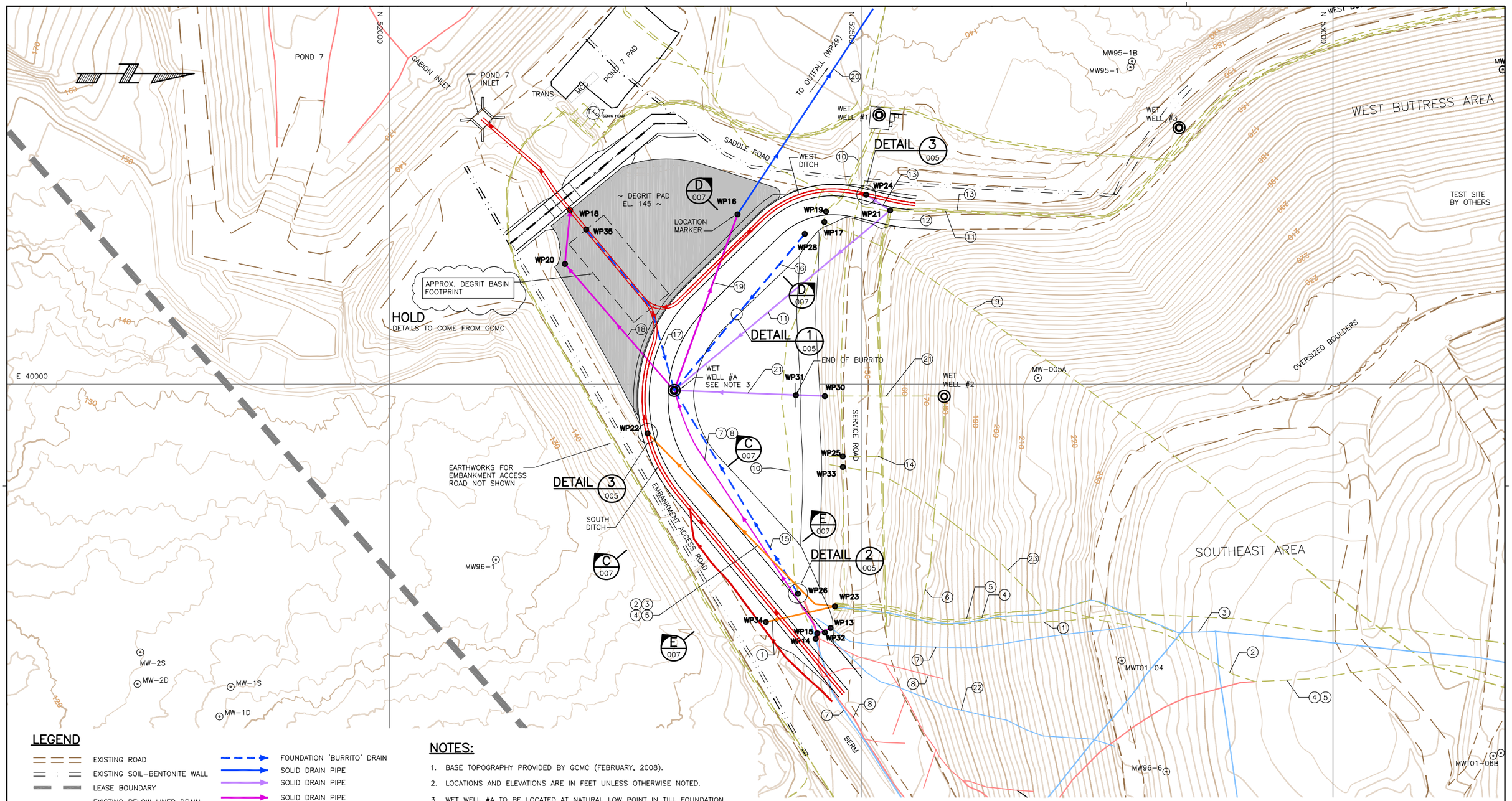


## LEGEND

- EXISTING ROAD
- EXISTING SOIL–BENTONITE WALL
- LEASE BOUNDARY
- EXISTING BELOW LINER DRAIN
- EXISTING ABOVE LINER DRAIN
- EXISTING WASTE WATER PIPE
- MW-005A — MONITORING WELLS
- WP15 — WORK POINTS
- NEW SOIL–BENTONITE WALL
- FOUNDATION 'BURRITO' DRAIN
- SOLID DRAIN PIPE
- SOLID DRAIN PIPE
- SOLID DRAIN PIPE
- SOLID DRAIN PIPE
- DIRTY ROAD
- SURFACE DITCH
- (23) PIPE NUMBER (REFER TO D–54004 SHEET 2 FOR DESCRIPTION)

## NOTES:

1. BASE TOPOGRAPHY PROVIDED BY GCMC (FEBRUARY, 2008).
2. LOCATIONS AND ELEVATIONS ARE IN FEET UNLESS OTHERWISE NOTED.
3. WET WELL #A TO BE LOCATED AT NATURAL LOW POINT IN TILL FOUNDATION, WET WELL DETAILS TO BE PROVIDED BY GCMC.
4. FOR WORK POINT COORDINATES SEE SHEET 2.
5. FOR PIPE INSTALLATION DETAILS SEE DWG. D–54005.

APPROVED FOR TENDER

SCALE: 0 100 FT.

| DRAWING NO. | REFERENCE DRAWING | NO. | DATE | ISSUE / REVISION | DRAWN | CHK'D | DESIGN | APP'D |
|---|---|---|---|---|---|---|---|---|
| | | 0 | APR 11, 2008 | APPROVED FOR TENDER | AW | AD | LC | LM |

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CLIENT: GREENS CREEK MINING COMPANY

Klohn Crippen Berger

PROJECT: STAGE 2 EXPANSION OF TAILINGS FACILITY
POND 6 EXPANSION CONSTRUCTION

TITLE: POND 6 UTILITIES PLAN SHEET 1 OF 2

| SCALE | PROJECT No. | DWG. No. | REV. |
|---|---|---|---|
| AS SHOWN | M07802 A54 | D–54004 | 0 |

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Xrefs: BM_Greens CK_FEB2008

| PIPE NUMBER | HDPE PIPE DESCRIPTION | WORK POINTS (SEE NOTE 1) | NORTHING (FT.) | EASTING (FT.) | INVERT ELEVATION (FT.) | NEW PIPE APPROX. LENGTH (FT.) | AVERAGE GRADE (%) | COMMENT |
|---|---|---|---|---|---|---|---|---|
| 1 | Non-active 10" ø Solid DB-04 Feed to Pond 6 | WP 23 | 52472.2 | 40235.5 | 150.0 | 75 | 1.2% | Extend to edge of dirty road and cap. |
| | | WP 34 | 52399.0 | 40252.2 | 149.1 | | | |
| 2 | 6" ø Solid French Drain from Northeast | WP 23 | 52472.2 | 40235.5 | 150.0 | 270 | 1.0% | Discharge to South Ditch. |
| | | WP 22 | 52273.6 | 40052.1 | 147.4 | | | |
| 3 | 6" ø Solid French Drain from 2002 Southeast Above Liner | WP 23 | 52472.2 | 40235.5 | 150.0 | 270 | 1.0% | Discharge to South Ditch. |
| | | WP 22 | 52273.6 | 40052.1 | 147.4 | | | |
| 4 | 16" ø Solid French Drain from Pond 9 | WP 23 | 52472.2 | 40235.5 | 150.0 | 270 | 1.0% | Discharge to South Ditch. |
| | | WP 22 | 52273.6 | 40052.1 | 147.4 | | | |
| 5 | 8" ø Solid French Drain from Pond 9 Underdrain | WP 23 | 52472.2 | 40235.5 | 150.0 | 270 | 1.0% | Discharge to South Ditch. |
| | | WP 22 | 52273.6 | 40052.1 | 147.4 | | | |
| 6 | 10" ø Solid Wet Well 2 Feed to Pond 6 | WP 23 | 52472.2 | 40235.5 | 150.0 | | | Decommission and cap. |
| 7 | 8" ø Solid Above Liner French Drain from Southeast 2 | WP 13 | 52467.6 | 40258.6 | 141.6 | 320 | 5.2% | Tie- in to 8" ø pipe at WP 13 and WP 14. |
| | | WP 14 | 52451.7 | 40269.9 | 141.6 | | | |
| | | WP 15 | 52453.5 | 40264.2 | 140.0 | | | Two-8" ø pipes to transition to a single 8" ø pipe at WP 15, reports to Wet Well A |
| | | WP 27 | 52301.9 | 40006.6 | 126.0 | | | |
| 8 | 8" ø Solid Below Liner French Drain from Southeast 2 | WP 15 | 52453.5 | 40264.2 | 138.0 | 299 | 4.0% | Two-8" ø pipes to transition to a single 8" ø pipe at WP 15, reports to Wet Well A. |
| | | WP 27 | 52301.9 | 40006.6 | 126.0 | | | |
| 9 | 12" ø Solid Backwash from Pit 5 to Pond 6 | WP 17 | 52461.0 | 39828.1 | 144.0 | | | Decommision and cap. |
| 10 | 8" ø Solid Stormwater Bypass to Wet Well 1 | WP 19 | 52462.7 | 39817.2 | 144.0 | | | Remove all pipes from Wet Well #1 unless pipe goes through existing slurry wall, then pipes to be cut 50-ft from wall or as directed and capped. |
| 11 | 12" ø Solid from Northwest Under Liner Drain | WP 21 | 52530.7 | 39815.9 | 143.0 | 298 | 5.7% | Pipe shall follow cut grade lines as directed. |
| | | WP 27 | 52301.9 | 40006.6 | 126.0 | | | |
| 12 | 12" ø Solid Water Treatment Feed | WP 21 | 52530.7 | 39815.9 | 147.0 | | | Decommision and cap. |
| 13 | 6" ø Solid Wet Well 3 to Tank 6 Feed | WP 21 | 52530.7 | 39815.9 | 145.0 | 31 | N/A | Pumped line. Tie in at SW corner of tailings pile and discharge to West Ditch. |
| | | WP 24 | 52505.3 | 39799.2 | 148.0 | | | |
| 14 | 6" ø Solid Wet Well 3 to Tank 6 Bypass to Pond 6 | WP 25 | 52480.4 | 40076.6 | 145.0 | | | Decommission and cap. |
| 15 | 8" ø Perforated Pond 6 Foundation 'Burrito' Drain | WP 26 | 52433.0 | 40222.0 | 133.0 | 252 | 3.6% | |
| | | WP 27 | 52301.9 | 40006.6 | 124.0 | | | |
| 16 | 8" ø Perforated Pond 6 Foundation 'Burrito' Drain | WP 28 | 52440.3 | 39840.7 | 132.6 | 216 | 4.0% | |
| | | WP 27 | 52301.9 | 40006.6 | 124.0 | | | |
| 17 | 8" ø Perforated Pond 6 Foundation 'Burrito' Drain | WP35 | 52208.6 | 39836.1 | 132.2 | 195 | 4.2% | |
| | | WP 27 | 52301.9 | 40006.6 | 124.0 | | | |
| 18 | 6" ø Solid Pipe from Wet Well A to Pond 7 | WP 27 | 52301.9 | 40006.6 | 123.0 HOLD | 235 | N/A | Pumped line to Pond 7 Inlet. |
| | | WP 20 | 52186.1 | 39872.5 | 137.0 | | | |
| | | WP 18 | 52191.6 | 39815.6 | 142.0 | | | |
| 19 | 12" ø Solid Pipe from Wet Well A to Location Marker | WP 27 | 52301.9 | 40006.6 | 122.0 | 198 | 1.0% | Install location marker at WP16 as directed by Owner. |
| | | WP 16 | 52369.0 | 39820.0 | 120.0 | | | |
| 20 | 12" ø Solid Pipe from Location Marker to Outfall (future) | WP 16 | 52369.0 | 39820.0 | 120.0 | 778 | 1.0% | This pipe to be installed by extending Pipe 19 at closure of facility (by others). |
| | | WP 29 | 53010.0 | 39380.0 | 112.0 | | | Location of manholes to be determined by qualified engineer prior to pipe installation |
| 21 | 6" ø Solid Pipe from Wet Well 2 to Wet Well A | WP 30 | 52461.5 | 40012.6 | 143.0 | 162 | 10.6% | Tie-in to pipe from Wet Well 2 in Burrito drain |
| | | WP 31 | 52430.8 | 40011.7 | 130.0 | | | Burrito from Wet Well 2 ends at WP 31. |
| | | WP 27 | 52301.9 | 40006.6 | 126.0 | | | Pipe shall follow cut grade lines as directed. |
| 22 | 8" ø Solid Pipe from Southeast 2 | WP 32 | 52461.5 | 40263.4 | 145.0 | | | Temporary construction dewatering drain pipe. Decommision and cap. |
| 23 | 8" ø Solid DB05 Feed to Pond 6 | WP 33 | 52480.6 | 40087.7 | | | | Uncertain- Greens Creek to confirm location, purpose and work required. |
| | | ? | | | | | | |

## NOTES:

1. SEE DRAWING D-54004 SHEET 1 OF 2 FOR PLAN LOCATIONS OF WORK POINTS.
2. PIPES MAY BE FIELD FIT TO MINIMIZE TILL EXCAVATION AND ROCK FILL REQUIREMENTS, PROVIDED A MINIMUM 1% PIPE GRADE IS MAINTAINED.
3. ALL PIPES SHALL BE SDR11 UNLESS OTHERWISE DIRECTED BY OWNER.

APPROVED FOR TENDER

| DRAWING NO. | REFERENCE DRAWING | NO. | DATE | ISSUE / REVISION | DRAWN | CHK'D | DESIGN | APP'D |
|---|---|---|---|---|---|---|---|---|
| | | 0 | APR 11, 2008 | APPROVED FOR TENDER | AW | AD | LC | LM |

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CLIENT: GREENS CREEK MINING COMPANY

Klohn Crippen Berger

PROJECT: STAGE 2 EXPANSION OF TAILINGS FACILITY
POND 6 EXPANSION CONSTRUCTION

TITLE: POND 6 UTILITIES PLAN SHEET 2 OF 2

| SCALE | PROJECT No. | DWG. No. | REV. |
|---|---|---|---|
| N/A | M07802 A54 | D-54004 | 0 |

CANCEL PRINTS BEARING PREVIOUS REVISION

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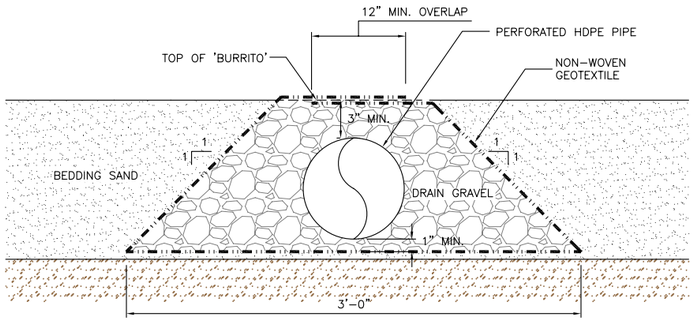
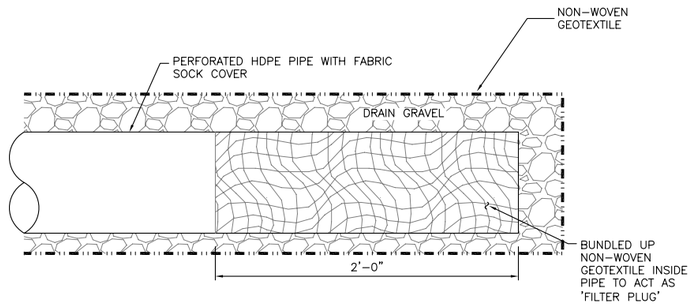



DETAIL 1 NTS 004

FOUNDATION 'BURRITO' DRAIN – TYPICAL



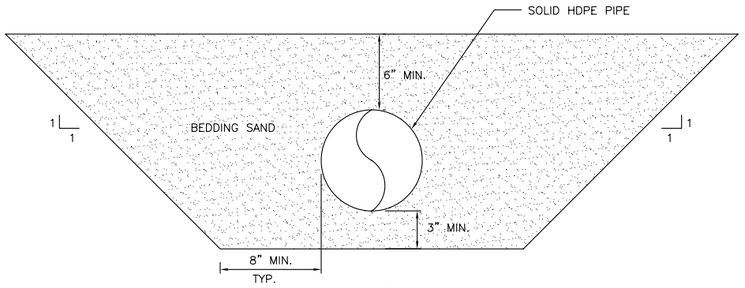

DETAIL 2 NTS 004

TYPICAL FOUNDATION 'BURRITO' DRAIN TERMINATION DETAIL

HOLD
DETAILS TO COME

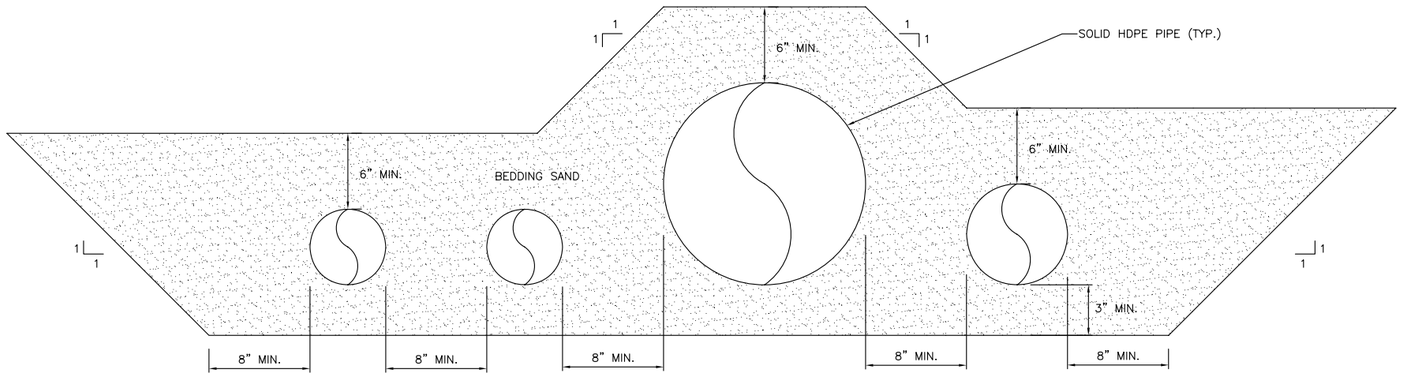
DETAIL 3 NTS 004

TYPICAL PIPE/DITCH LINER PENETRATION DETAIL




DETAIL 4 NTS –

TYPICAL SOLID PIPE EMBEDMENT – SINGLE PIPE INSTALLATION




DETAIL 5 NTS 007

TYPICAL SOLID PIPE EMBEDMENT – MULTIPLE PIPE INSTALLATION

HOLD
DETAILS TO COME

DETAIL 6 NTS 006

SERVICE ROAD BREACH DETAIL

## NOTE:

1. LOCATIONS, ELEVATIONS AND DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.

APPROVED FOR TENDER

| DRAWING NO. | REFERENCE DRAWING | NO. | DATE | ISSUE / REVISION | DRAWN | CHK'D | DESIGN | APP'D |
|---|---|---|---|---|---|---|---|---|
| | | 0 | APR 11, 2008 | APPROVED FOR TENDER | AW | AD | LC | LM |

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CLIENT: GREENS CREEK MINING COMPANY

Klohn Crippen Berger

PROJECT: STAGE 2 EXPANSION OF TAILINGS FACILITY
POND 6 EXPANSION CONSTRUCTION

TITLE: POND 6
FOUNDATION DRAINAGE DETAILS

| SCALE | PROJECT No. | DWG. No. | REV. |
|---|---|---|---|
| NTS | M07802 A54 | D-54005 | 0 |

CANCEL PRINTS BEARING PREVIOUS REVISION

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Date: 3/24/2008
Scale: 1=10(PS)
Drawing File: M:\M07802\A54 – 2008 Stage 2 Design\400 Design\410 Drawings\2008design\D-54005_r0.dwg (awong)

## WORK POINTS

| WP | NORTHING (FT.) | EASTING (FT.) | DITCH INVERT ELEVATION (FT.) |
|---|---|---|---|
| WP101 | 52 480.9 | 40 327.9 | 160.0 |
| WP102 | 52 449.0 | 40 289.4 | 157.0 |
| WP103 | 52 415.8 | 40 249.3 | 155.0 |
| WP104 | 52 305.8 | 40 116.6 | 150.0 |
| WP105 | 52 269.5 | 40 007.0 | 146.4 |
| WP106 | 52 316.8 | 39 901.8 | 145.0 |
| WP107 | 52 394.9 | 39 825.0 | 146.2 |
| WP108 | 52 439.2 | 39 798.8 | 146.7 |
| WP109 | 52 490.5 | 39 796.3 | 147.3 |
| WP110 | 52 556.7 | 39 809.2 | 148.0 |
| WP111 | 52 470.0 | 39 901.3 | |
| WP112 | 52 428.3 | 40 015.2 | |
| WP113 | 52 279.1 | 39 960.2 | 145.0 |
| WP114 | 52 269.9 | 39 909.9 | 144.4 |
| WP115 | 52 158.6 | 39 771.0 | 141.6 |

WORK POINTS FOR DITCHES ARE AT CENTERLINE OF DITCH

## LEGEND

- EXISTING ROAD
- EXISTING SOIL–BENTONITE WALL
- LEASE BOUNDARY
- SURFACE DITCH
- WP5 WORK POINTS (DITCH CENTERLINE)

## NOTES:

1. BASE TOPOGRAPHY PROVIDED BY GCMC (FEBRUARY, 2008).
2. LOCATIONS AND ELEVATIONS ARE IN FEET UNLESS OTHERWISE NOTED.
3. FILTER CLOTH WRAPPED ¾ INCH MINUS DRAINROCK SHALL BE PLACED AT EACH SERVICE ROAD BREACH TO TIE EXISTING FOUNDATION DRAIN BLANKET INTO POND 6 FOUNDATION DRAIN BLANKET. HOLD
4. ENTIRE SURFACE OF EXPOSED TILL FOUNDATION SHALL BE COVERED WITH 1' MIN. COMPACTED SAND LAYER.

APPROVED FOR TENDER

SCALE: 0 100 FT.

| NO. | DATE | ISSUE / REVISION | DRAWN | CHK'D | DESIGN | APP'D |
|---|---|---|---|---|---|---|
| 0 | APR 11, 2008 | APPROVED FOR TENDER | AW | AD | LC | LM |

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CLIENT: GREENS CREEK MINING COMPANY

Klohn Crippen Berger

PROJECT: STAGE 2 EXPANSION OF TAILINGS FACILITY
POND 6 EXPANSION CONSTRUCTION

TITLE: POND 6
FINAL GRADING PLAN

| SCALE | PROJECT No. | DWG. No. | REV. |
|---|---|---|---|
| AS SHOWN | M07802 A54 | D–54006 | 0 |

CANCEL PRINTS BEARING PREVIOUS REVISION

KGB–C–410

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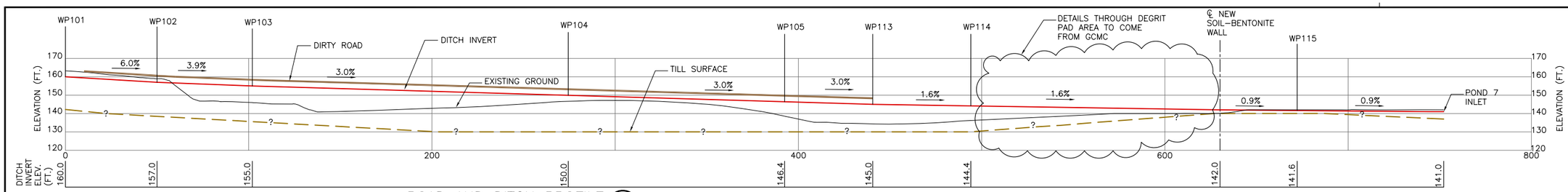
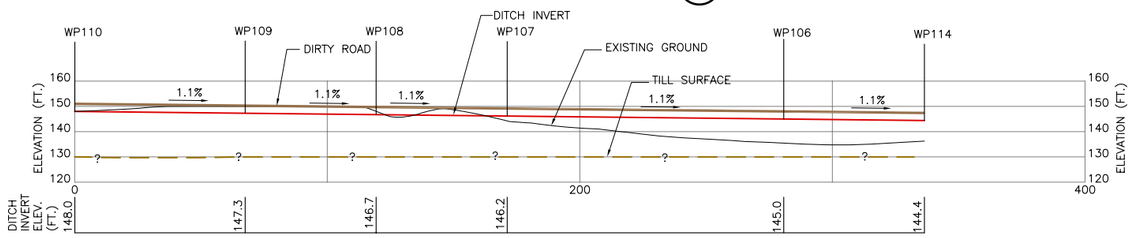
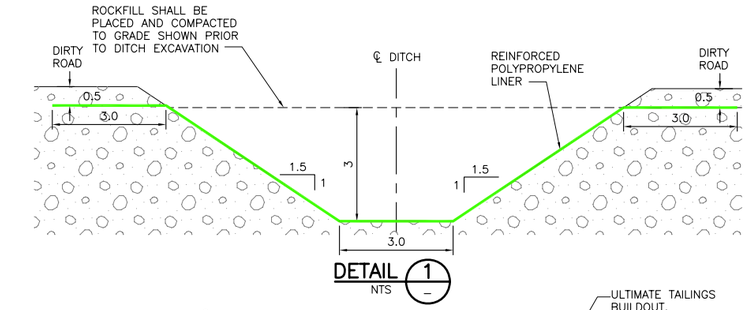
Xrefs: BM_Greens CK_FEB2008



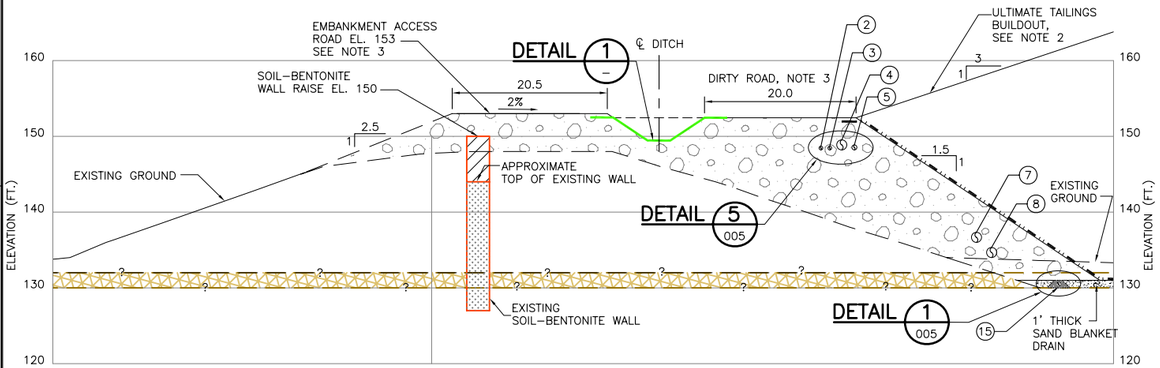

## ROAD AND DITCH PROFILE A
SCALE A (006)



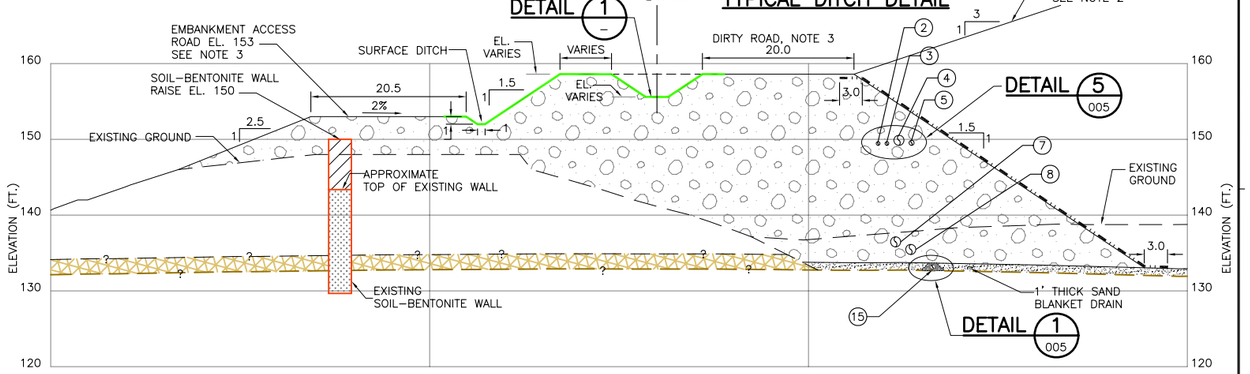

## ROAD AND DITCH PROFILE B
SCALE A (006)



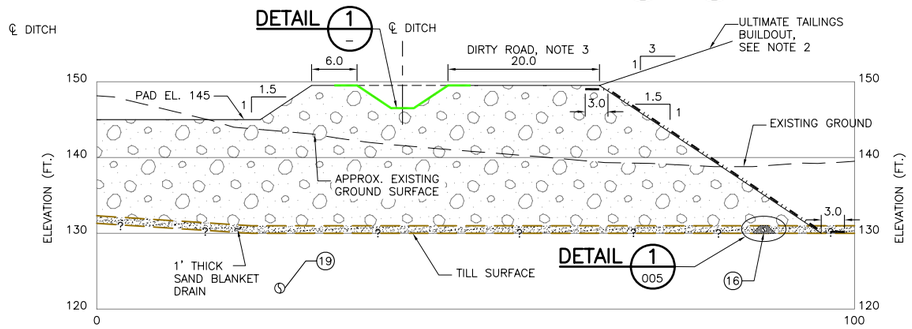

## DETAIL 1
NTS




## ROAD AND DITCH SECTION C AND C
SCALE B (004 AND 006)




## ROAD AND DITCH SECTION E AND E
SCALE B (004 AND 006)




## ROAD AND DITCH SECTION D AND D
SCALE B (004 AND 006)

### LEGEND

- 6" MINUS ROCKFILL
- PEAT
- BEDDING SAND
- SOIL–BENTONITE MIXTURE
- NON–WOVEN GEOTEXTILE
- (5) PIPE NUMBER (REFER TO D–54004 SHEET 2 FOR DESCRIPTION)

### NOTES:

1. LOCATIONS, ELEVATIONS AND DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
2. SLOPE OF ULTIMATE TAILING BUILD OUT NO STEEPER THAN 3H:1V.
3. GUARD RAIL OR SAFETY BERM SHALL BE INSTALLED AS DIRECTED. NOT SHOWN.
4. FOR SOIL–BENTONITE WALL DETAILS SEE DWG. D–54008.

SCALE A: 0 60 FT.
SCALE B: 0 20 FT.

APPROVED FOR TENDER

| NO. | DATE | ISSUE / REVISION | DRAWN | CHK'D | DESIGN | APP'D |
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CLIENT: GREENS CREEK MINING COMPANY

Klohn Crippen Berger

PROJECT: STAGE 2 EXPANSION OF TAILINGS FACILITY
POND 6 EXPANSION CONSTRUCTION

TITLE: POND 6
ROAD AND DITCH
PROFILE AND DETAILS

| SCALE | PROJECT No. | DWG. No. | REV. |
|---|---|---|---|
| AS SHOWN | M07802 A54 | D–54007 | 0 |

CANCEL PRINTS BEARING PREVIOUS REVISION

KOB–C–LD

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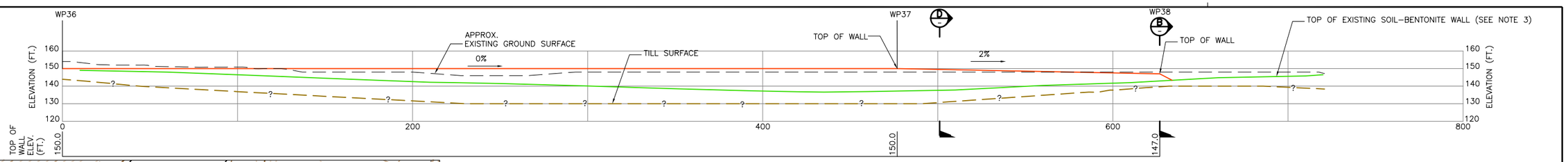
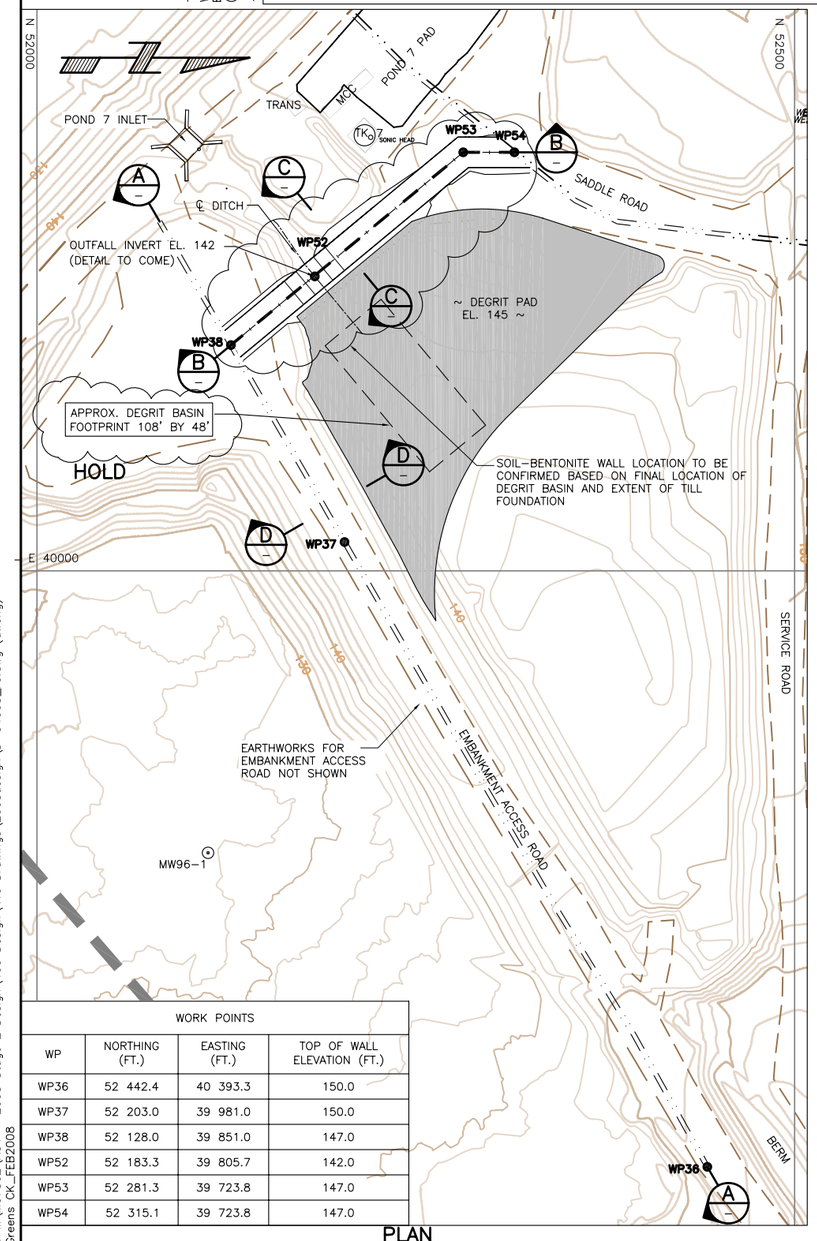
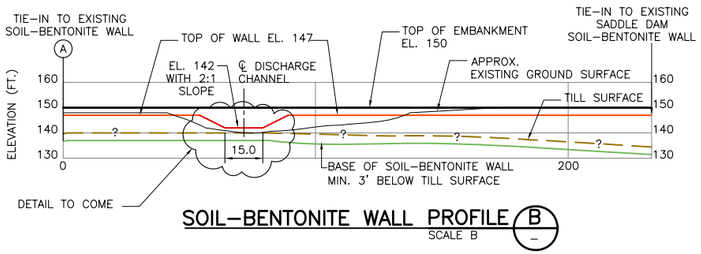



## SOIL–BENTONITE WALL PROFILE A
SCALE B

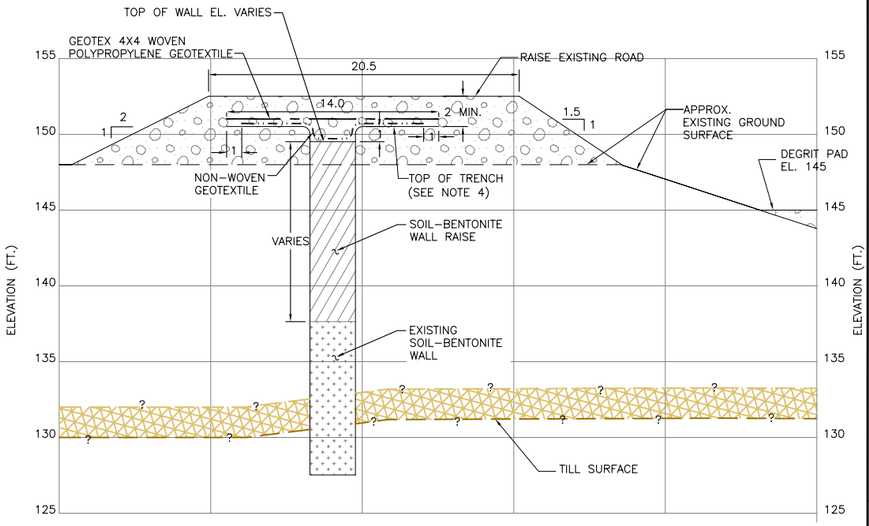



| WORK POINTS | | | |
|---|---|---|---|
| WP | NORTHING (FT.) | EASTING (FT.) | TOP OF WALL ELEVATION (FT.) |
| WP36 | 52 442.4 | 40 393.3 | 150.0 |
| WP37 | 52 203.0 | 39 981.0 | 150.0 |
| WP38 | 52 128.0 | 39 851.0 | 147.0 |
| WP52 | 52 183.3 | 39 805.7 | 142.0 |
| WP53 | 52 281.3 | 39 723.8 | 147.0 |
| WP54 | 52 315.1 | 39 723.8 | 147.0 |

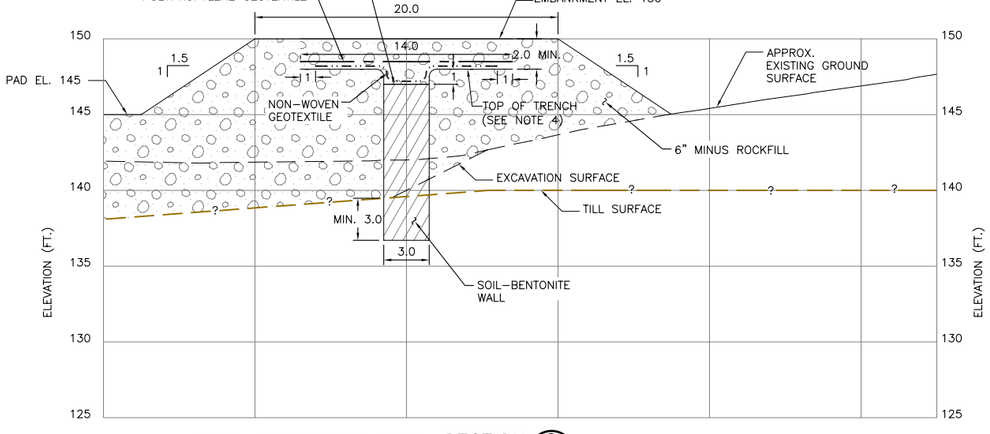
## PLAN
SCALE A




## SOIL–BENTONITE WALL PROFILE B
SCALE B




## SOIL–BENTONITE WALL SECTION D
SCALE C




## SOIL–BENTONITE WALL SECTION C
SCALE C

## LEGEND

- EXISTING ROAD
- EXISTING SOIL–BENTONITE WALL
- LEASE BOUNDARY
- NEW SOIL–BENTONITE WALL
- WP37 WORK POINTS
- 6" MINUS ROCKFILL
- PEAT
- SOIL–BENTONITE MIXTURE

## NOTES:

1. BASE TOPOGRAPHY PROVIDED BY GCMC (FEBRUARY, 2008).
2. LOCATIONS, ELEVATIONS AND DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
3. TOP OF EXISTING SOIL–BENTONITE WALL ESTIMATED FROM MAIN EMBANKMENT AS–BUILT PRODUCED BY SRK (JAN. 1989), AS PROVIDED BY GCMC. IT IS ASSUMED THE WALL HAS SETTLED OVER TIME, TO BE CONFIRMED IN THE FIELD.
4. 6" MINUS ROCK FILL TO BE PLACED AND COMPACTED TO TOP OF TRENCH LEVEL PRIOR TO SOIL–BENTONITE WALL TRENCH EXCAVATION.

SCALE A: 0 — 100 FT.
SCALE B: 0 — 60 FT.
SCALE C: 0 — 10 FT.

**APPROVED FOR TENDER**

| NO. | DATE | ISSUE / REVISION | DRAWN | CHK'D | DESIGN | APP'D |
|---|---|---|---|---|---|---|
| 0 | APR 11, 2008 | APPROVED FOR TENDER | AW | AD | LC | LM |

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CLIENT: GREENS CREEK MINING COMPANY

Klohn Crippen Berger

PROJECT: STAGE 2 EXPANSION OF TAILINGS FACILITY
POND 6 EXPANSION CONSTRUCTION

TITLE: POND 6
SOIL–BENTONITE WALLS
PLAN, PROFILE AND DETAILS

| SCALE | PROJECT No. | DWG. No. | REV. |
|---|---|---|---|
| AS SHOWN | M07802 A54 | D–54008 | 0 |

CANCEL PRINTS BEARING PREVIOUS REVISION

KCB–C–LD

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Date: 3/25/2008
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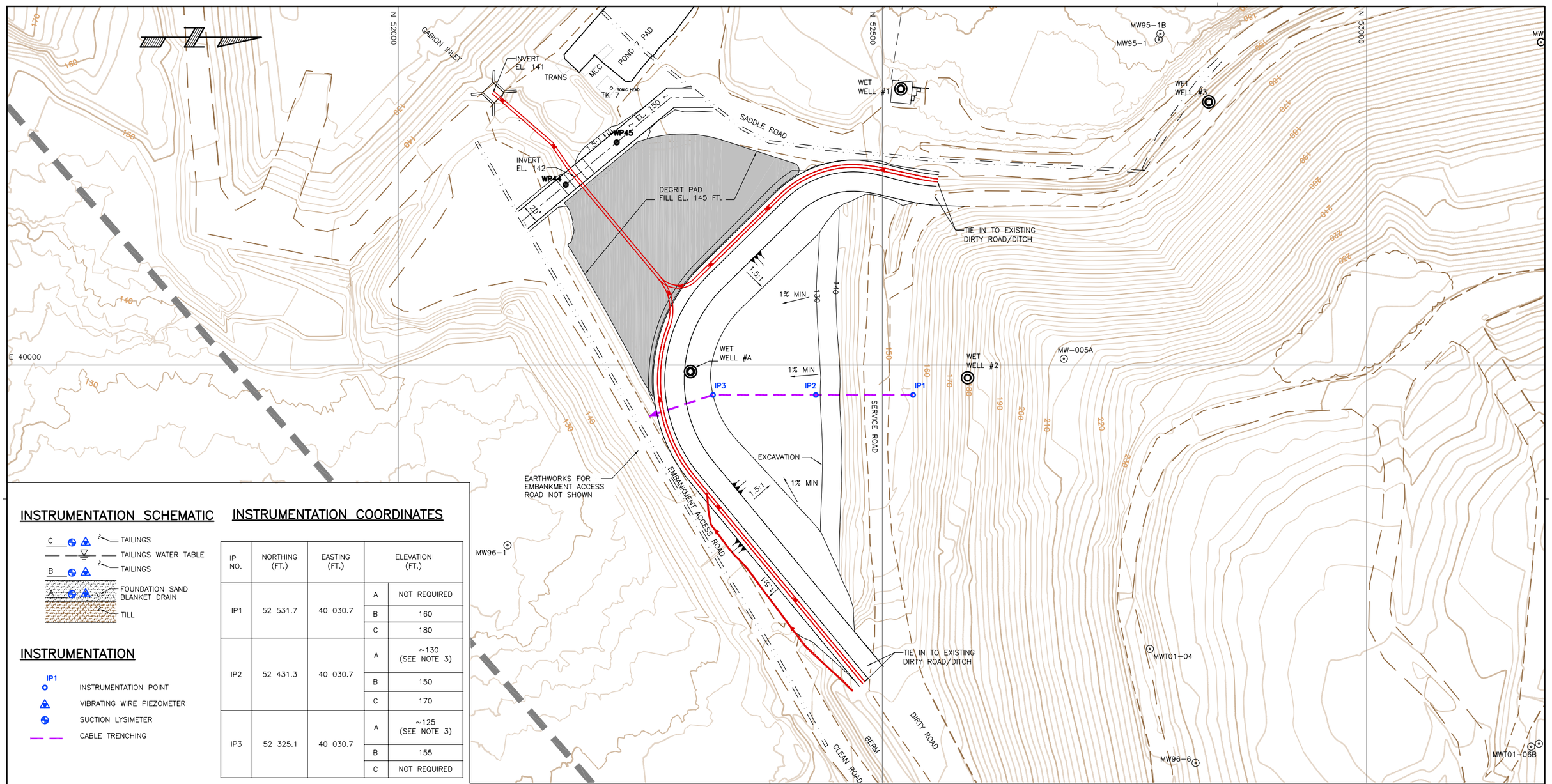
Xrefs: BM_Greens CK_FEB2008




## INSTRUMENTATION SCHEMATIC




## INSTRUMENTATION

IP1 — INSTRUMENTATION POINT

VIBRATING WIRE PIEZOMETER

SUCTION LYSIMETER

CABLE TRENCHING

## INSTRUMENTATION COORDINATES

| IP NO. | NORTHING (FT.) | EASTING (FT.) | ELEVATION (FT.) | |
|---|---|---|---|---|
| IP1 | 52 531.7 | 40 030.7 | A | NOT REQUIRED |
| | | | B | 160 |
| | | | C | 180 |
| IP2 | 52 431.3 | 40 030.7 | A | ~130 (SEE NOTE 3) |
| | | | B | 150 |
| | | | C | 170 |
| IP3 | 52 325.1 | 40 030.7 | A | ~125 (SEE NOTE 3) |
| | | | B | 155 |
| | | | C | NOT REQUIRED |

## LEGEND

EXISTING ROAD

EXISTING SOIL-BENTONITE WALL

LEASE BOUNDARY

PROPOSED SURFACE DITCH

## NOTES:

1. BASE TOPOGRAPHY PROVIDED BY GCMC (FEBRUARY, 2008).
2. LOCATIONS AND ELEVATIONS ARE IN FEET UNLESS OTHERWISE NOTED.
3. ELEVATION OF INSTRUMENTS IN FOUNDATION LAYER SHALL BE CONFIRMED ONCE NATURAL TILL SURFACE IS EXPOSED.

APPROVED FOR TENDER

SCALE: 0 100 FT.

| DRAWING NO. | REFERENCE DRAWING | NO. | DATE | ISSUE / REVISION | DRAWN | CHK'D | DESIGN | APP'D |
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CLIENT: GREENS CREEK MINING COMPANY

Klohn Crippen Berger

PROJECT: STAGE 2 EXPANSION OF TAILINGS FACILITY
POND 6 EXPANSION CONSTRUCTION

TITLE: POND 6
INSTRUMENTATION PLAN

| SCALE | PROJECT No. | DWG. No. | REV. |
|---|---|---|---|
| AS SHOWN | M07802 A54 | D-54009 | 0 |

CANCEL PRINTS BEARING PREVIOUS REVISION

KGB-C-4.0

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Xrefs: BM_Greens CK_FEB2008