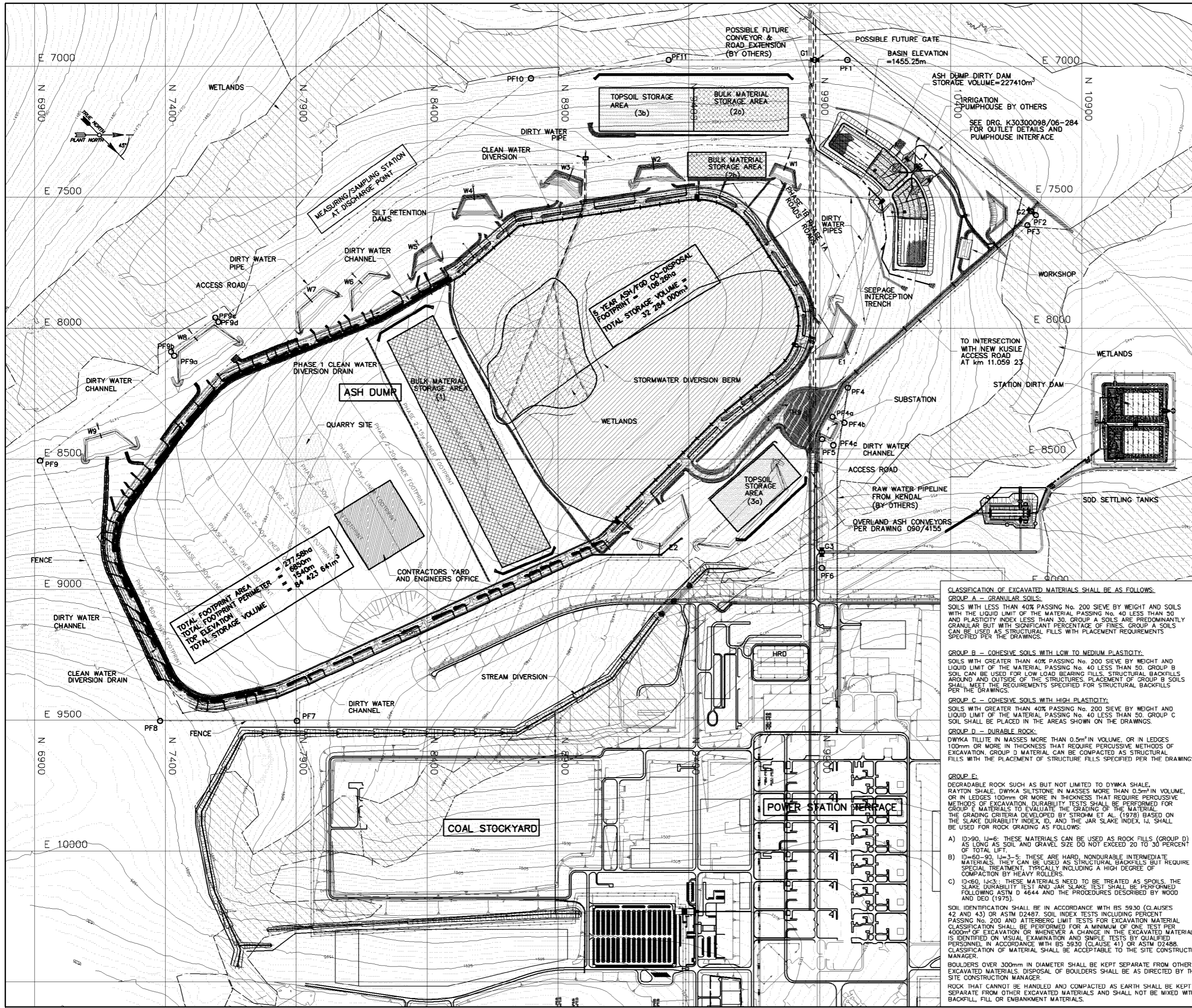


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REFERENCE DRAWINGS

DRAWING No.	TITLE
30300099/06-202	ASH DUMP NO. 1 - GEOTECHNICAL PLAN
30300099/06-208	WETLAND / PAN DRAINAGE PLAN AND DETAILS
30300099/06-209	WETLAND / PAN DRAINAGE - DN110 KABELFLUX LONGITUDINAL SECTION
30300099/06-210	FOOTPRINT SITE PREPARATION - PHASE 1
30300099/06-211	FOOTPRINT SITE PREPARATION - PHASE 1 DETAILS
30300099/06-213	TERRACING OF RADIAL STACKER - GENERAL ARRANGEMENT PLAN
30300099/06-215	ASH DUMP DIRTY DAM - CONSTRUCTION PHASE STORM WATER MANAGEMENT GA AND DETAILS
30300099/06-216	ASH DUMP NO. 1 - CONSTRUCTION PHASE STORM WATER MANAGEMENT GA AND DETAILS
30300099/06-217	WORKSHOP TERRACE - GENERAL ARRANGEMENT & TYPICAL SECTIONS
30300099/06-218	PUMP STATION TERRACE - GENERAL ARRANGEMENT & TYPICAL SECTIONS
30300099/06-220	HOPE LINER GENERAL ARRANGEMENT, PHASE 1
30300099/06-221	HOPE LINER SECTIONS AND DETAILS, PHASE 1
30300099/06-224	DRAINAGE ABOVE HOPE LINER - GENERAL ARRANGEMENT & DETAILS, PHASE 1
30300099/06-230	DIRTY WATER MANAGEMENT - GENERAL ARRANGEMENT AND SETTING OUT COORDINATES
30300099/06-232	DIRTY WATER DRAINS - CONCRETE DETAILS
30300099/06-280	ADD - GENERAL ARRANGEMENT AND SETTING OUT COORDINATES
30300099/06-281	ADD - SECTIONS AND DETAILS - SHEET 1 OF 2
30300099/06-282	ADD - SECTIONS AND DETAILS - SHEET 2 OF 2
30300099/06-300	CLEAN WATER MANAGEMENT - GENERAL ARRANGEMENT AND SETTING OUT COORDINATES
30300099/06-301	CLEAN WATER MANAGEMENT - PHASE 1 GENERAL ARRANGEMENT
30300099/06-340	PERIMETER ACCESS ROAD - GENERAL ARRANGEMENT
30300099/06-370	ACCESS ROAD 3 - GENERAL ARRANGEMENT AND SETTING OUT COORDINATES

ABBREVIATIONS

- IL - INVERT LEVEL
- c/c - CENTER TO CENTER
- cm - CENTIMETERS
- mm - MILLIMETERS
- m - METERS
- m² - SQUARE METERS
- m³ - CUBIC METERS
- ha - HECTARES
- N.G.L. - NATURAL GRADE LEVEL
- T.O.C. - TOP OF CONCRETE
- DRG. - DRAWING
- B&W - BLOCK & WEATH
- N.T.S. - NOT TO SCALE
- OMC - OPTIMUM MOISTURE CONTENT
- F.T.L. - FINAL TERRACE LEVEL

SETTING OUT CO-ORDINATES: GATES

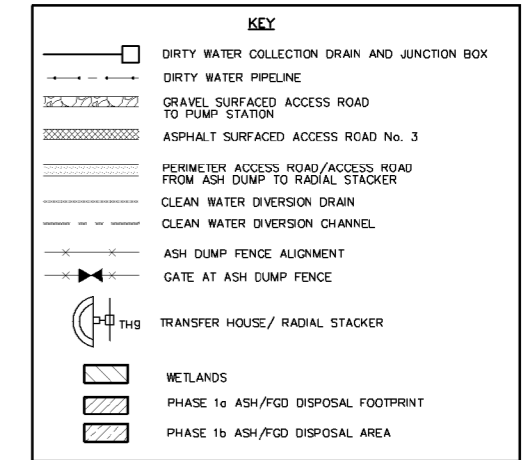
POINT NAME	N-COORDINATE	E-COORDINATE
G1	9880.493	6974.949
G2	10707.136	7553.448
G3	9908.480	8856.685

SETTING OUT CO-ORDINATES: PERIMETER FENCE

POINT NAME	N-COORDINATE	E-COORDINATE
PF1	10005.839	6974.949
PF2	10725.650	7568.720
PF3	10693.505	7607.290
PF4	10007.842	8228.570
PF4a	9948.727	8340.194
PF4b	9994.728	8362.892
PF4c	9951.513	8447.586
PF5	9909.319	8425.132
PF6	9908.480	8917.788
PF7	7903.147	9502.500
PF8	7380.007	9502.500
PF9	6921.105	8505.818
PF9a	7434.542	8106.047
PF9b	7422.255	8090.286
PF9c	7590.476	7959.287
PF9d	7602.723	7975.067
PF10	6796.921	7045.275
PF11	5323.271	6974.949

GENERAL NOTES:

- ALL DIMENSIONS GIVEN IN MILLIMETERS, UNLESS OTHERWISE NOTED.
- FOR FENCE AND GATE DETAILS, REFER TO B&W DRAWINGS OJYX-S3916, -S3916A THROUGH -S3916F. PERIMETER FENCE AND GATE SHOWN HERE ARE OF "OUTER BARRIER" CONFIGURATION.



CLASSIFICATION OF EXCAVATED MATERIALS SHALL BE AS FOLLOWS:

GROUP A - GRANULAR SOILS:
SOILS WITH LESS THAN 40% PASSING No. 200 SIEVE BY WEIGHT AND SOILS WITH THE LIQUID LIMIT OF THE MATERIAL PASSING No. 40 LESS THAN 50 AND PLASTICITY INDEX LESS THAN 30. GROUP A SOILS ARE PREDOMINANTLY GRANULAR BUT WITH SIGNIFICANT PERCENTAGE OF FINES. GROUP A SOILS MAY BE USED AS STRUCTURAL FILLS WITH PLACEMENT REQUIREMENTS SPECIFIED PER THE DRAWINGS.

GROUP B - COHESIVE SOILS WITH LOW TO MEDIUM PLASTICITY:
SOILS WITH GREATER THAN 40% PASSING No. 200 SIEVE BY WEIGHT AND LIQUID LIMIT OF THE MATERIAL PASSING No. 40 LESS THAN 50. GROUP B SOIL CAN BE USED FOR LOW LOAD BEARING FILLS, STRUCTURAL BACKFILLS AROUND AND OUTSIDE OF THE STRUCTURES. PLACEMENT OF GROUP B SOILS SHALL MEET THE REQUIREMENTS SPECIFIED FOR STRUCTURAL BACKFILLS PER THE DRAWINGS.

GROUP C - COHESIVE SOILS WITH HIGH PLASTICITY:
SOILS WITH GREATER THAN 40% PASSING No. 200 SIEVE BY WEIGHT AND LIQUID LIMIT OF THE MATERIAL PASSING No. 40 LESS THAN 50. GROUP C SOIL SHALL BE PLACED IN THE AREAS SHOWN ON THE DRAWINGS.

GROUP D - DURABLE ROCK:
DWMKA TILLITE IN MASSES MORE THAN 0.5m³ IN VOLUME, OR IN LEDGES 100mm OR MORE IN THICKNESS THAT REQUIRE PERCUSSIVE METHODS OF EXCAVATION. GROUP D MATERIAL CAN BE COMPACTED AS STRUCTURAL FILLS WITH THE PLACEMENT OF STRUCTURE FILLS SPECIFIED PER THE DRAWINGS.

GROUP E:
DEGRADABLE ROCK SUCH AS BUT NOT LIMITED TO DYMKA SHALE, RAYTON SHALE, DYMKA SILTSTONE IN MASSES MORE THAN 0.5m³ IN VOLUME, OR IN LEDGES 100mm OR MORE IN THICKNESS THAT REQUIRE PERCUSSIVE METHODS OF EXCAVATION. DURABILITY TESTS SHALL BE PERFORMED FOR GROUP E MATERIAL TO EVALUATE THE GRADING OF THE MATERIAL. THE GRADING CRITERIA DEVELOPED BY STROHM ET AL. (1978) BASED ON THE SLAKE DURABILITY INDEX, ID, AND THE JAR SLAKE INDEX, IJ, SHALL BE USED FOR ROCK GRADING AS FOLLOWS:

- ID>90, IJ=6: THESE MATERIALS CAN BE USED AS ROCK FILLS (GROUP D) AS LONG AS SOIL AND GRAVEL SIZE DO NOT EXCEED 20 TO 30 PERCENT OF TOTAL LIFT.
- ID=60-90, IJ=3-5: THESE ARE HARD, NONDURABLE INTERMEDIATE MATERIALS. THEY CAN BE USED AS STRUCTURAL BACKFILLS BUT REQUIRE SPECIAL TREATMENT, TYPICALLY INCLUDING A HIGH DEGREE OF COMPACTION BY HEAVY ROLLERS.
- ID<60, IJ<3: THESE MATERIALS NEED TO BE TREATED AS SPOILS. THE SLAKE DURABILITY TEST AND JAR SLAKE TEST SHALL BE PERFORMED FOLLOWING ASTM D 4644 AND THE PROCEDURES DESCRIBED BY WOOD AND DEO (1975).

SOIL IDENTIFICATION SHALL BE IN ACCORDANCE WITH BS 5930 (CLAUSES 42 AND 43) OR ASTM D2487. SOIL INDEX TESTS INCLUDING PERCENT PASSING No. 200 AND ATTERBERG LIMIT TESTS FOR EXCAVATION MATERIAL CLASSIFICATION SHALL BE PERFORMED FOR A MINIMUM OF ONE TEST PER 4000m² OF EXCAVATION OR WHENEVER A CHANGE IN THE EXCAVATED MATERIALS IS IDENTIFIED ON VISUAL EXAMINATION AND SIMPLE TESTS BY QUALIFIED PERSONNEL IN ACCORDANCE WITH BS 5930 (CLAUSE 41) OR ASTM D2488. CLASSIFICATION OF MATERIAL SHALL BE ACCEPTABLE TO THE SITE CONSTRUCTION MANAGER.

BOULDERS OVER 300mm IN DIAMETER SHALL BE KEPT SEPARATE FROM OTHER EXCAVATED MATERIALS. DISPOSAL OF BOULDERS SHALL BE AS DIRECTED BY THE SITE CONSTRUCTION MANAGER.

ROCK THAT CANNOT BE HANDLED AND COMPACTED AS EARTH SHALL BE KEPT SEPARATE FROM OTHER EXCAVATED MATERIALS AND SHALL NOT BE MIXED WITH BACKFILL, FILL OR EMBANKMENT MATERIALS.

PLAN
SCALE 1:5000

KUSILE POWER STATION
ASH DUMP NO. 1
GENERAL ARRANGEMENT PLAN

DRG. No. K30300098/06-201

0.90/23330

REV	DATE	BY	CHKD	APPD	REVISION
1	20/07/10	AK	AK	AK	ISSUED FOR BIDDING
2	20/07/10	AK	AK	AK	ISSUED FOR COMMENTS & APPROVAL
3	15/07/10	AK	AK	AK	ISSUED FOR COMMENTS & APPROVAL
4	15/07/10	AK	AK	AK	ISSUED FOR COMMENTS & APPROVAL