

# EROSION & SEDIMENT CONTROL PLAN NARRATIVE

**SITE NAME**  
RAPID CITY REGIONAL AIRPORT  
ELECTRICAL VAULT BUILDING

**OWNER/DEVELOPER**  
RAPID CITY REGIONAL AIRPORT  
4560 TERMINAL ROAD, SUITE 102  
RAPID CITY, SD 57703-8706  
605.394.4195  
**AUTHORIZED REPRESENTATIVE:**  
CAMERON HUMPHRES

**ENGINEER**  
KAORIMAS, LEE & JACKSON, INC.  
330 KNOLLWOOD DRIVE  
RAPID CITY, SD 57701  
605.721.5653  
**REGISTERED ENGINEER: ROD SENN - 6136**

**GENERAL CONTRACTOR**  
TO BE DETERMINED  
**STREET ADDRESS**  
CITY, STATE ZIP CODE  
**TELEPHONE NUMBER**  
**AUTHORIZED REPRESENTATIVE**

**LEGEND**

---	PROPOSED SEDIMENT CONTROL, HATCH
---	EDGE OF AIRWAY
---	EDGE OF GRAVEL
---	WATER LINE
---	FRESH WATER LINE
---	GAS LINE
---	SEWER/STORM SEWER LINE
---	GAS LINE
---	SAFETY FENCE
---	GAS LINE
---	EXISTING 1" CONTROLLER
---	EXISTING 2" CONTROLLER

**QUANTITIES THIS SHEET**  
SEDIMENT CONTROL, HATCH 278 LF.

**GENERAL NOTES:**  
THE EROSION AND SEDIMENT CONTROL PLAN AS SHOWN ON THIS SHEET IS BASED ON THE INFORMATION PROVIDED BY THE OWNER AND THE ENGINEER. THE ENGINEER HAS CONDUCTED VISUAL INSPECTIONS OF THE SITE AND HAS REVIEWED THE RECORD DRAWINGS AND SURVEY DATA. THE ENGINEER HAS ASSUMED THAT THE SITE IS AS SHOWN ON THE RECORD DRAWINGS AND SURVEY DATA. THE ENGINEER HAS NOT CONDUCTED ANY TESTS OR INVESTIGATIONS TO DETERMINE THE SOIL CONDITIONS OR THE EROSION POTENTIAL OF THE SITE. THE ENGINEER HAS ASSUMED THAT THE SOIL CONDITIONS ARE AS SHOWN ON THE RECORD DRAWINGS AND SURVEY DATA. THE ENGINEER HAS ASSUMED THAT THE EROSION POTENTIAL OF THE SITE IS AS SHOWN ON THE RECORD DRAWINGS AND SURVEY DATA. THE ENGINEER HAS ASSUMED THAT THE EROSION POTENTIAL OF THE SITE IS AS SHOWN ON THE RECORD DRAWINGS AND SURVEY DATA.

**CONSTRUCTION AND MAINTENANCE:**  
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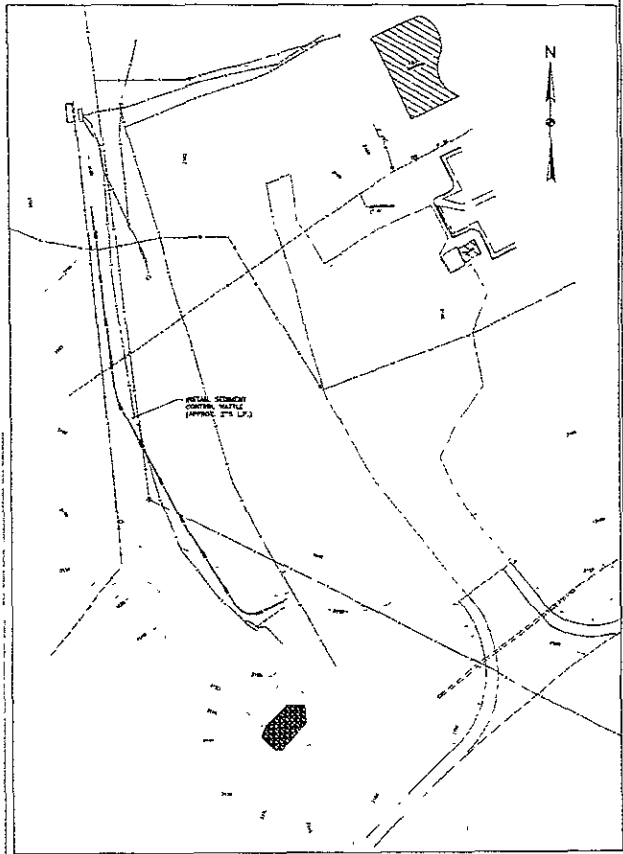
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**TABLE 1: EROSION CONTROL MEASURES**

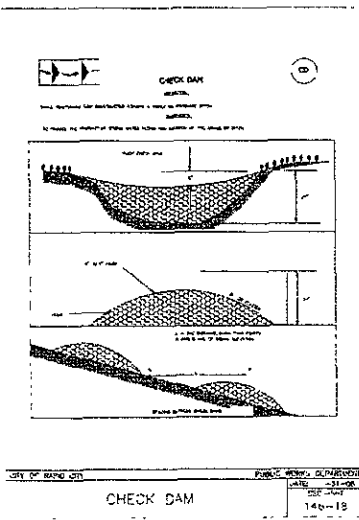
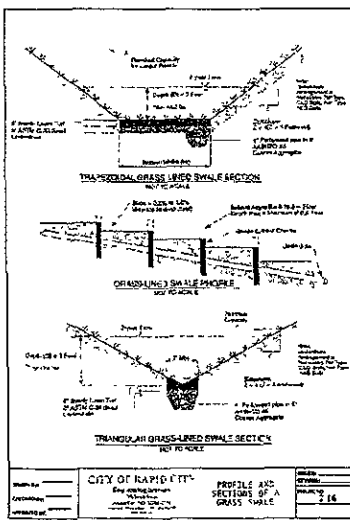
MEASURE	ALLOWABLE PERCENT OF EXPOSURE (SPRINT)
GRAVEL MULCHING	100
HYDROSEEDING	100
HYDROSEEDING WITH MULCH	100
SOIL STABILIZATION	100
SOIL APPLICATION OF MULCH	100

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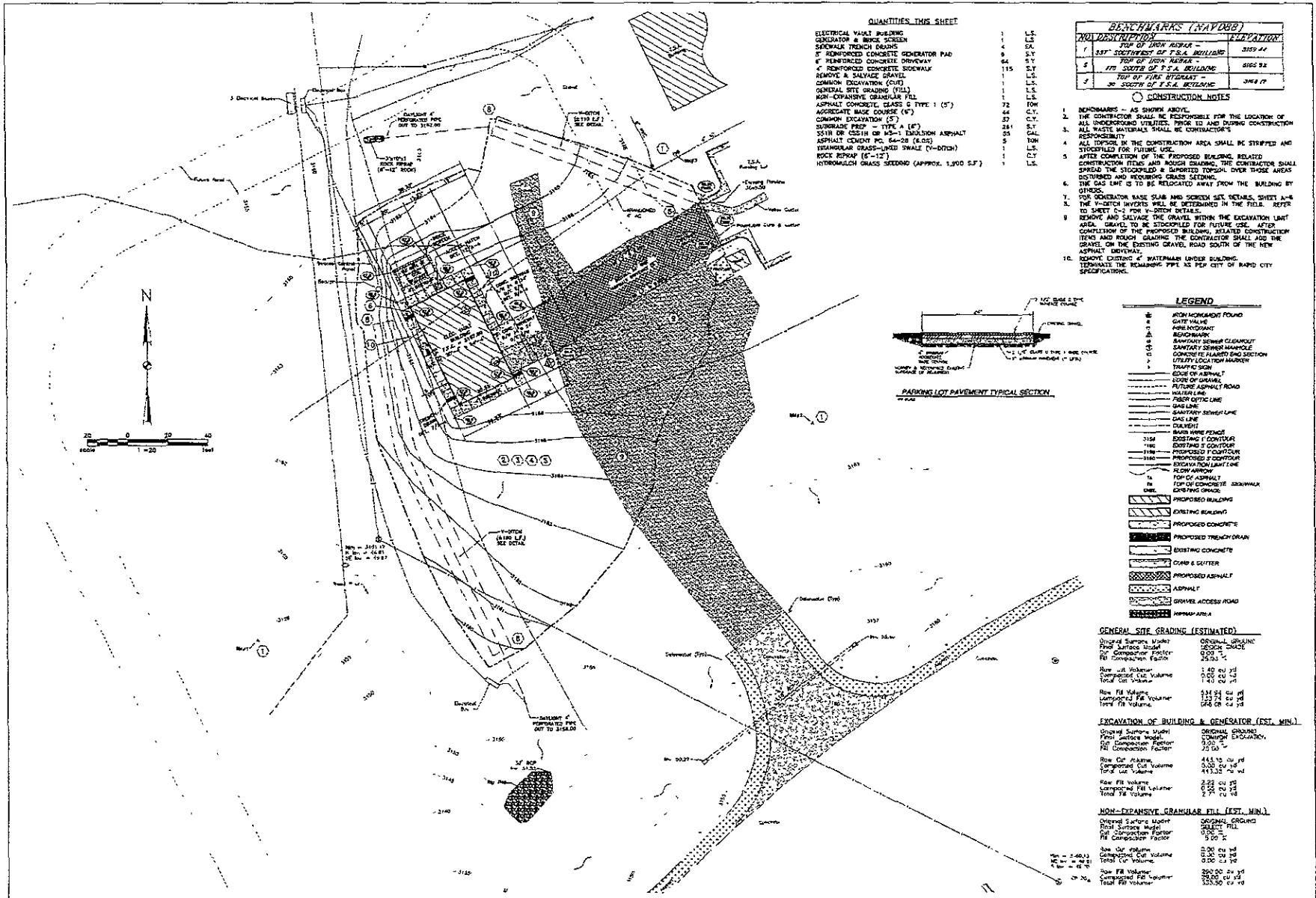
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**EROSION AND SEDIMENT CONTROL PLAN**



KAORIMAS, LEE & JACKSON, INC.  
 ENGINEERS SURVEYORS & PLANNERS  
 1001 SOUTH DAKOTA  
 RAPID CITY, SOUTH DAKOTA 57701  
 PRAIRIE ENGINEERING, P.C.  
 1600 WEST 10TH AVENUE  
 DENVER, COLORADO 80202  
 RAPID CITY REGIONAL AIRPORT  
 ELECTRICAL VAULT BUILDING  
 RAPID CITY, SOUTHDAKOTA COUNTY, SOUTH DAKOTA



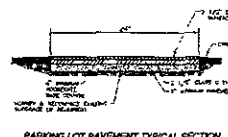
**QUANTITIES THIS SHEET**

ELECTRICAL VAULT BUILDING	1	L.S.
GENERATOR & BARGE SCREEN	1	L.S.
SEWALK TRENCH DRAINS	4	EA.
8" REINFORCED CONCRETE GENERATOR PAD	9	S.Y.
4" REINFORCED CONCRETE DRIVEWAY	64	S.Y.
4" REINFORCED CONCRETE SIDEWALK	115	S.Y.
REMOVE & SALVAGE GRAVEL	1	L.S.
COMMON EXCAVATION (5')	1	L.S.
GENERAL SITE GRADING (FILL)	1	L.S.
NON-EXPANSIVE GRANULAR FILL	1	L.S.
ASPHALT CONCRETE, CLASS C TYPE 1 (5')	72	TON
AGGREGATE BASE COURSE (6')	44	C.Y.
COMMON EXCAVATION (5')	27	C.Y.
SUBGRADE PREP - TYPE A (1')	24	S.Y.
551B OR 5511H OR 50-11 EMBLEMEN ASPHALT	25	SAL
ASPHALT CEMENT FC. 64-28 (8.0%)	5	TON
IRREGULAR GRASS-1000 SWALE (V-DITCH)	1	L.S.
ROCK RETRAP (5'-12')	1	C.Y.
HYDROMULCH GRASS SEEDING (APPROX. 1,300 S.F.)	1	L.S.

BENCHMARKS (NAD83)		
NO.	DESCRIPTION	ELEVATION
1	TOP OF IRON ANCHOR - 387' SOUTHWEST OF P.S.A. BUILDING	3559.44
2	TOP OF IRON ANCHOR - 470' SOUTH OF P.S.A. BUILDING	3565.92
3	TOP OF IRON ANCHOR - 30' SOUTH OF P.S.A. BUILDING	3568.17

**CONSTRUCTION NOTES**

1. BENCHMARKS - AS SHOWN ABOVE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO AND DURING CONSTRUCTION.
3. ALL WASTE MATERIALS SHALL BE CONTRACTOR'S RESPONSIBILITY.
4. ALL DEBRIS IN THE CONSTRUCTION AREA SHALL BE STOCKPILED AND STOCKPILED FOR FUTURE USE.
5. AFTER COMPLETION OF THE PROPOSED BUILDING, RELATED CONSTRUCTION ITEMS AND ROUGH GRADING, THE CONTRACTOR SHALL SPREAD THE STOCKPILED & DAMAGED TOPSOIL OVER THOSE AREAS DISTURBED AND REPAIRING GRASS SEEDING.
6. THE GAS LINE IS TO BE RELOCATED AWAY FROM THE BUILDING BY OTHERS.
7. FOR GENERATOR BASE SLAB AND SCREEN SET DETAILS, SHEET A-6 TO SHEET C-2 FOR V-DITCH DETAILS.
8. REMOVE AND SALVAGE THE GRAVEL WITHIN THE EXCAVATION LIMIT AREA. GRAVEL TO BE STOCKPILED FOR FUTURE USE. AFTER COMPLETION OF THE PROPOSED BUILDING, RELATED CONSTRUCTION ITEMS AND ROUGH GRADING, THE CONTRACTOR SHALL ADD THE GRAVEL ON THE EXISTING GRAVEL ROAD SOUTH OF THE NEW ASPHALT DRIVEWAY.
9. REMOVE EXISTING 4" WATERMAIN UNDER BUILDING. TERMINATE THE REMAINING PIPE AS PER CITY OF RAPID CITY SPECIFICATIONS.



**LEGEND**

- IRON ANCHOR FOUND
- GATE VALVE
- ▲ FIRE HYDRANT
- RECONSTRUCTION
- SANITARY SEWER CLEAROUT
- SANITARY SEWER MANHOLE
- CONCRETE FLARED END SECTION
- UTILITY UNDER TOP OF MANHOLE
- TRAFFIC SIGN
- EDGE OF ASPHALT
- EDGE OF GRAVEL
- FUTURE ASPHALT ROAD
- HOUSING LINE
- FIBER OPTIC LINE
- SANITARY SEWER LINE
- GAS LINE
- DRAINAGE
- BARS WERE FOUND
- EXISTING FOOTING
- PROPOSED FOOTING
- PROPOSED FOOTING
- PROPOSED FOOTING
- PROPOSED FOOTING
- FLOW ARROW
- TOP OF ASPHALT
- TOP OF CONCRETE SIDEWALK
- DIME
- PROPOSED BUILDING
- EXISTING BUILDING
- PROPOSED CONCRETE
- PROPOSED TRENCH DRAIN
- EXISTING CONCRETE
- GRAVEL & GUTTER
- PROPOSED ASPHALT
- ASPHALT
- GRAVEL ACCESS ROAD
- ASPHALT AREA

**GENERAL SITE GRADING (ESTIMATED)**

Original Surface Model	ORIGINAL GRAVING
Final Surface Model	SECTION CHASE
Compaction Factor	2.000 X
Raw Fill Volume	25,013 cu yd
Compacted Fill Volume	12,506 cu yd
Total Fill Volume	12,506 cu yd

**EXCAVATION OF BUILDING & GENERATOR (EST. MIN.)**

Original Surface Model	ORIGINAL GRAVING
Final Surface Model	SECTION CHASE
Compaction Factor	2.000 X
Raw Fill Volume	444.15 cu yd
Compacted Fill Volume	222.07 cu yd
Total Fill Volume	222.07 cu yd

**NON-EXPANSIVE GRANULAR FILL (EST. MIN.)**

Original Surface Model	ORIGINAL GRAVING
Final Surface Model	SECTION CHASE
Compaction Factor	2.000 X
Raw Fill Volume	52.00 cu yd
Compacted Fill Volume	26.00 cu yd
Total Fill Volume	26.00 cu yd

PROJECT NO. 09SR010  
 DRAWN BY: J.A. JENSEN  
 CHECKED BY: J.A. JENSEN  
 DATE: 08/11/2009  
 SCALE: AS SHOWN

**KADRMAS, LEE & JACKSON, INC.**  
 ENGINEERS, ARCHITECTS & PLANNERS  
 1000 W. WASHINGTON AVE.  
 RAPID CITY, SOUTH DAKOTA 57701

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 RAPID CITY, SOUTH DAKOTA 57701

**RAPID CITY REGIONAL AIRPORT  
ELECTRICAL VAULT BUILDING**  
 RAPID CITY, SOUTHERN DISTRICT, SOUTH DAKOTA