0001

TECHNICAL MEMORANDUM
Utah Coal Regulatory Program

January 13, 2009

TO: Internal File

THRU: David Darby, Environmental Scientist III / Team Lead / Hydrologist
James D. Smith, Permit Supervisor / Co-Hydrologist JDS 01/26/09

FROM: Peter Hess, En SCI III / Engineer / Bond PH by SQS

RE: Detailed Design Changes, UtahAmerican Energy, Inc., Horse Canyon Mine / Permit Area "B", C/007/013, Task ID # 3017

SUMMARY:

The Permittee submitted an amendment to the approved MRP (Task ID # 2969) on May 2, 2008 to allow for design changes in the proposed surface facilities area for the permit area "B" / Lila Canyon Extension of the Horse Canyon Mine. The permit area "B" Mine is called the Lila Canyon Mine.

The Division returned the Task ID # 2969 application on July 7, 2008, because the contour maps for the pre-mining, operational and reclamation do not match any of the cross sections.

The Permittee resubmitted the entire application on July 22, 2008. The Division has designated this new application as Task ID # 3017. This technical memo will address the adequacy of Task ID # 3017 relative to R645-301-500, Engineering.

The permit area "B" Lila Canyon Extension Mine is an underground coal mine proposal, which is under construction. This review will address concerns relative to facility construction and engineering design.

TECHNICAL ANALYSIS:

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

Regulatory Reference: 30 CFR 784.2, 784.11; R645-301-231, -301-526, -301-528.

Analysis:

Plate # 5-2 Official Disturbed Boundary Map depicts the general layout of the surface facilities, which are to be constructed for the Lila Canyon Mine. There are six main areas which will be constructed to develop the facilities;

a) the truck loading loop and coal reclaim facilities
b) the office / administration / main parking area
c) the sediment pond area
d) run-of-mine coal stockpile area / ROM conveyor corridor
e) shop / warehouse equipment storage area
f) the portal access road and portal pad area.

Shop / Warehouse Equipment Storage Area

The pad upon which the Shop and Warehouse is to be constructed (as depicted on Plate 5-2) encompasses approximately 1.8 acres. The 28,000 cubic yards of sandstone material which is created from the development of the Mine rock tunnels will be used to construct this area of the pad.

The rock slope material will be placed in an incisement created by the removal of subsoil material. The plan does not describe what acreage of subsoil will be removed prior to placement and compaction of the mine development waste in the void.

R645-301-231.100 requires that the Permittee describe the methods to be used for subsoil removal and storage.

Appendix 5-7, page 2, Placement of Rock Slope Material (Refuse) gives a description of how the Permittee intends to dispose of the rock slope development waste while building the shop pad. "Rock slope material (refuse) will be dumped into the hole created from the removal of the subsoil. The refuse will be placed in the hole in 12-inch lifts and compacted using a front-end loader. Once the hole is filled to the planned level the subsoil will be placed over the top of

the refuse in 12 inch lifts and compacted with a front-end loader, and then another hole will be constructed by removing subsoil adjacent to the previous hole. The topsoil removal and storage, subsoil removal, hole being filled with refuse, and subsoil replacement, procedure will be repeated as additional refuse disposal is needed."

This information is felt to be unclear. The R645 State of Utah Coal Mining Rules define "coal mine waste" as coal processing waste or underground development waste. The material which will be produced as a result of the rock portals development is easily classified as "underground development waste" as it will provide access to the mineable reserves in the lower Sunnyside seam.

Mine development waste may also be produced as ventilation overcasts or underground sumps are needed. Most of this will more than likely be stored underground in gob rooms or for use as backfilled ramps adjacent to overcast walls. The expense of shipping this material to the outside and then placing it for permanent disposal (either on or off –site) can be prohibitive.

Appendix 5-7, page 1, General , paragraph one states that " although washing of coal is not proposed, it is likely that some coal processing waste will be generated by the operation of the screening plant and from the Mine itself."

The Division understands that the sandstone rock material (28,000 cubic yards) will be disposed of by placing and compacting the material on the north end of the shop / warehouse pad. Four feet of subsoil material will then be placed to provide the pad area.

The Permittee's proposal to remove topsoil, subsoil, place and compact refuse and then re-sub soil the area is not acceptable because subsoil will be contaminated with mine development waste. In accordance with the requirements of

R645-301-231.100, a description of the method for removing …subsoil,…will be provided in the permit application, and

R645-301-232.600, Timing, All material to be removed (i.e., subsoil) will be removed …before drilling, blasting, mining, or other surface disturbance takes place. This includes placement or disposal of mine development waste.

The Task ID #3017 application makes frequent use of the term "refuse" to describe both the material from the rock slopes (See heading Rock Slope Material (Refuse) Appendix 5-7), and the last statement under Placement of Rock Slope Material (Refuse), page 2. "The topsoil removal and storage, subsoil removal, hole being filled with refuse, and subsoil replacement, procedure **will be repeated as additional refuse disposal area is needed."**

This statement conflicts with the second statement on Page 1, Appendix 5-7. "Permanent disposal of refuse, other than rock slope material, will be at UtahAmerican Energy's Wild Cat Loadout". The Division needs clarification as to which method will be used for permanent disposal of coal processing waste. The Permittee must use words defined in the R645 Coal Mining Rules when discussing disposal procedures for waste (whether mine development or coal processing).

R645-301-528.320; If the Permittee intends to place coal processing waste in any of the fill areas at the Lila Canyon Mine, those areas must meet the R645 and 30 CFR 77 requirements for refuse piles.

Plate 5-2 depicts a shop / warehouse pad comprising 2.6 acres with a outslope toe to crest height of 52 feet. An outslope configuration of 2.1 H : 1V can be determined from the Plate. **The submitted plan must clearly state where the additional material necessary to construct the shop / warehouse pad will come from. The plan accounts for 28,000 cubic yards of subsoil which will be recovered to create the incisement to store the Mine development waste from the rock tunnels.**

The Division assumes that 20% of the subsoil removed to create the incisement for the rock tunnel mine development waste will be used to cover that material. There appears to be a volume deficiency to create the size of the pad depicted on Plate 5-2 for the Shop / Warehouse.

The Task ID # 3017 plan **must clearly state where the fill volume for the Shop / Warehouse pad and the ROM coal stockpile pad will come from. Estimated cut and fill volumes must be provided for the entire Mine site**. The Division does not have the time to calculate cuts and fills from the cross-sections which have been provided.

ROM Conveyor Corridor

Plate 5-2, Official Disturbed Boundary Map, depicts a sixty inch belt conveyor exiting the rock tunnel in the escarpment, where it traverses 280 feet of ground between the portal access road and the crest of the cut bank east side of the shop / warehouse pad. A note on Plate 5-2 states: **"20' (feet) each side of conveyor disturbed, but no topsoil stripped"**. This does not meet the requirement of the coal rules. The Division has learned from experience that conveyors generally contaminate the area below with coal fines from either bottom belt carry-back or material spills. Therefore the Permittee must salvage topsoil from the 40' by 280' corridor in this area (0.25 acres). In accordance with the requirements of...

R645-301-232.100; Topsoil Removal. All topsoil will be removed as a separate layer from the area to be disturbed and segregated. The term "disturbed" includes construction processes for conveyor support structures.

The Division would like to recommend that the Permittee consider constructing an ancillary road within the conveyor corridor for ease of maintenance.

Peninsula of Disturbed Acreage East of Shop / Warehouse Pad and Water Treatment Plant

Plate 5-2, Surface Area / Official Disturbed Boundary Map depicts this area with the map note **"AREA BETWEEN ROADS DISTURBED, BUT NO TOPSOIL STRIPPED"**. In accordance with the requirements of

R645-301-232.100; Topsoil Removal. All topsoil will be removed as a separate layer from the area to be disturbed and segregated.

The Division does not understand why the Permittee has chosen to designate this area as "disturbed". If it is to be designated disturbed, it must have the topsoil removed. This will also reduce the potential for impacts from coal fines from various areas.

The Division recommends that the Permittee modify Plate 5-2 to include this area as "undisturbed" and delineate the area (along the west crest of the cut slope behind the shop / warehouse pad, and down the toe of the portal road outslope where soils may have been side cast) with the permitted disturbed area markers.

Findings:

The application is deficient. In accordance with the requirements of

1) **R645-301-231.100,** a description of the method for removing …subsoil,…will be provided in the permit application, and

2) **R645-301-232.100; Topsoil Removal.** All topsoil will be removed as a separate layer from the area to be disturbed and segregated. The term "disturbed" includes construction processes for conveyor support structures.

3) **R645-301-232.600, Timing,** All material to be removed (i.e., subsoil) will be removed …before drilling, blasting, mining, or other surface disturbance takes place. This includes placement or disposal of mine development waste.

4) R645-301-521; General. The Task ID # 3017 plan **must clearly state where the fill volume for the ROM coal stockpile pad will come from. Estimated cut and fill volumes must be provided for the entire Mine site.**

5) R645-301-526.220, 526.222, 526.300. The Permittee **must commit to submit final approval letters from the Utah Division of Environmental Quality approving the design** of the water treatment plant, potable water tank, sewer tank and drain field to the Division for insertion into the mining and reclamation plan prior to initiation of construction for those facilities.

6) R645-301-513.400, R645-301-528.320. Refuse Piles. The Division believes the Task ID # 3017 application lacks clarity as far as disposal of mine wastes within the Mine's permit area. If the Permittee intends to place coal processing waste **in any of the fill areas** at the Lila Canyon Mine, those areas must meet the R645 and 30 CFR 77 requirements for refuse piles. The Permittee must realize that areas designated for permanent disposal of coal processing waste cannot be used for other mining related activities / facility construction.

The Division needs clarification as to which method will be used for permanent disposal of "waste" or "refuse". The Division understands that once the Mine is built and operating, a temporary coal processing waste pile location has been permitted on the ROM stockpile pad. This material will be hauled to the Wildcat Loadout for permanent disposal.

The Permittee must use words defined in the R645 Coal Mining Rules when discussing disposal procedures for waste (whether mine development or coal processing).

EXISTING STRUCTURES:

Regulatory Reference: 30 CFR 784.12; R645-301-526.

Analysis:

There are no existing structures at the Lila Canyon Mine permit area "B" surface facility area.

Findings:

This section is not applicable to the Task ID # 3017 application.

RELOCATION OR USE OF PUBLIC ROADS

Regulatory Reference: 30 CFR 784.18; R645-301-521, -301-526.

Analysis:

The main access to the Lila Canyon mine site will be via Emery County road #126, which connects to U.S. Highway 191 / 6 to the Mine site.

A section of Emery County road # 126 also runs parallel to the base of the Bookcliffs, and connects with County road #124 at the Horse Canyon Mine permit area "A" reclaimed borrow area. Emery County claims the entire road under a RS-2477 federal road designation. This section of EC 126 was in poor condition when last traveled by Division personnel, as several road channel crossings had been severely eroded over the years. Generally speaking, no maintenance is performed on this section of EC # 126.

The Little Park road (also an Emery County road) runs from the Horse Canyon road / Turtle Canyon junction to the escarpments above the proposed Lila Canyon surface facilities. This is an unimproved road, generally requiring four-wheel drive to access Little Park.

The main access to the Mine has been designated as Lila Canyon Road 126.

The Mine access will be upgraded to a two lane, 30 foot wide gravel surface Class B road. Portions will be re-aligned as necessary to improve haul road safety (See Appendix 5-4). Drainage crossings meeting the requirements of AASHTO will be constructed by the Emery County Road Department where needed.

The Permittee has committed to not construct any surface facilities, including the six foot chain link fence which will serve as a disturbed area perimeter boundary (west side of disturbed area) within the County Road right-of-way.

Findings:

This section meets the minimum requirements of the R645 Coal Mining Rules.

COAL RECOVERY

Regulatory Reference: 30 CFR 817.59; R645-301-522.

Analysis:

The mining methods which will be implanted at the proposed Lila Canyon Mine will include standard methods of mine development using continuous miner sections. Where coal resource and geologic conditions allow, continuous miners will be used to develop longwall gate roads outlining the coal blocks for secondary extraction. This is described in the Task ID # 3017 application, Chapter 5, pages 25 through 28.

Secondary extraction of coal will include long wall mining methods and coal pillar extraction using continuous miner and shuttle car methods. All coal will be hauled on the installed underground conveyors. All methods will be required to have approved ground control plans by the U.S. Department of Labor / Mine Safety and Health Administration.

Coal recovery is described in the approved resource recovery and protection plan approved by the US Department of the Interior, Bureau of Land Management.

Findings:

The Task ID # 3017 application meets the minimum regulatory requirements of the R645 Coal Mining Rules.

SUBSIDENCE CONTROL PLAN

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

Analysis:

Renewable Resources Survey

The renewable resources survey conducted by the Permittee identified the following within and adjacent to the Lila Canyon mine permit area;

1) ground water
2) grazing
3) timber
4) (aquifer) recharge areas.

"Subsidence from underground coal mining has been believed to affect overlying forest and grazing resource lands…". Since these resources have been identified, a subsidence control plan is required.

Subsidence Control Plan

The Permittee's proposed subsidence control plan is presented in Section 525.400 of the Task ID # 3017 application. The Permittee intends to utilize longwall extraction methods as well as pillar extraction methods utilizing continuous mining methods. A mining height of 10.5 feet is being proposed in the Sunnyside seam which has an average height of 12.5 feet. The depth of cover to be undermined at Lila ranges from 0 feet to 2,300 feet. Only minimum subsidence is anticipated.

The standard surface subsidence model utilized by the Office of Surface Mining predicts the following based upon extracted thickness;

a. A caved zone will sag and drop immediately above the coal seam to a height of three to five times the mining height (or 32 to 53 feet).
b. A fracture zone of sagged / broken overlying rock will develop 25 to 50 times the mining height (263 – 525 feet).
c. The continuous deformation zone will start approximately six hundred feet above the coal seam and proceed toward the surface becoming smaller until surface deformation can be approximated in inches.
d. Most of the deformation will be concealed by vegetation and the soil zone.

This is a model predicted by the Division for approximation purposes only. The Permittee can develop a more specific model based upon analysis of several years of data when collected.

Section 525.440, Chapter 5, page 43, describes the methods which will be used by the Permittee to meet the requirements of R645-301-525.440:

> A 200 foot monitoring grid will be established over the area to be undermined prior to initiation of second mining (either longwall or CM pillar extraction). **The plan does not state if this is to be a one time installation to determine a subsidence model, or if the Permittee intends to do this over every secondary extraction area.** 12 to 16 control points will be established, with six of these being outside of the projected subsidence zone.
>
> PLATE 5-3, (last revision January 2007) depicts the six subsidence monitoring locations which will be established outside of the approved permit boundary. The remaining control points are not depicted, nor are individual panel subsidence monitoring points.

PLATE 5-3 was originally drawn in November of 1999, and appears to be a "Life of Mine" projection, showing all main and submain development, as well as each individual long wall panel. Subsidence contours are depicted after all reserves between the South Lila Canyon Fault and the Central Graben Fault have been extracted.

There are no subsidence monitoring point locations depicted which will provide indication of when maximum surface deformation has been achieved. The Permittee must provide this information by depicting the monitoring point locations on a current 5 year Mine projection. In accordance with the requirements of ...

R645-301-511.100, Proposed Coal Mining Operations. The Permittee must provide a current 5 year Mine projection, as part of the Subsidence Monitoring plan.

The Permittee must show the relationship between the intermittent and perennial stream channels mentioned on page 43 of the subsidence monitoring plan and the five year mine plan.

R645-301-731, General Requirements,

I. Aerial subsidence monitoring will be conducted annually while the significant subsidence is taking place.

II. A ground survey of the general mine permit area will be performed in conjunction with the quarterly water monitoring program. During the ground surveys any cracks observed will be noted and reported to DOGM. The ground survey will consist of walking the surface where subsidence might occur, (where secondary extraction has most recently been completed). If evidence of subsidence is identified, the area of subsidence will be surveyed and the extent of the disruption identified. If damage is identified (material damage, as discussed under 525.510) mitigation measures will be reviewed and implemented.

Subsidence Monitoring Plan

The monitoring plan, as submitted is deficient. In accordance with the requirements of :

R645-301-525.440, the Permittee must :

a. provide more information about the proposed 200 foot monitoring grid including the Permittee's justification for wanting to do this. Generally, the Division requires one subsidence monitoring point in the center of an extraction area (long wall panel). This is to determine when maximum deformation has been achieved. Grid monitoring would be expensive, and the Division does not know if a grid system is justified. Grids are generally implemented when subsidence contours about the extraction areas are needed.

b. The Division recommends that subsidence monitoring points be implemented along escarpments where hazards may develop. This is a particular need in the adjacent Mine facilities area.

c. The plan must commit to a specific time of year when the aerial survey is to be conducted (i.e., post foliage, pre-snow).

d. documentation of the quarterly ground survey of the general mine permit area must be performed. The report must document the length and maximum width of any cracks when observed. The report should note whether the crack could be considered a hazard to wildlife or humans. The location of significant cracks must be documented on a surface map of the Mine's permit area. The Mine's assigned reclamation specialist / inspector must be notified of the find. This information must also be submitted in the Annual Subsidence Report for the Mine.

Performance Standards For Subsidence Control

The methods to be used for coal extraction at the Lila Canyon Mine (i.e., longwall secondary extraction and continuous miner pillar retreat) are consistent with known mining technology which provides for planned subsidence in a predictable and controlled manner. Room and pillar mining using continuous mining methods will be implemented where recoverable reserves remain, but whose area is too small to install longwall methods. The Permittee thus intends to maximize resource recovery wherever possible.

The Permittee will comply with all of the provisions of the approved subsidence control plan.

Section 525.510, (Chapter 5, Page 45) of the Task ID #3017 application makes a commitment to restore lands affected by subsidence where material damage has been determined to the extent economically and technologically feasible. The land will be

restored to a condition capable of maintaining the value and reasonable foreseeable uses which it was capable of supporting before the subsidence occurred.

There are no pre-existing structures to be undermined within the permit area. The Little Park road (County road) exists in the anticipated subsidence zone, (See **Section 525.530,** Page 45 of the Task ID # 3017 application). The Permittee has committed to repair any subsidence related damage to the Little Park road as per Section 525.120.

There are no public buildings, facilities, churches, schools, hospitals, impoundments or bodies of water within the permit area, therefore undermining of same is not possible. The subsidence control plan does not need to be modified to address any such areas.

There are no urbanized areas, cities, towns, communities, industrial or commercial buildings, major impoundments or perennial streams in the area which could create an imminent danger to those inhabitants if undermined by the prospective mining operation.

Notification

The Permittee initiated construction activities at an increased level prior to the date of this document. Development of the mine site sediment pond is occurring, and the Mine portal access road has been roughed in. The Division anticipates an 18 month to two year construction project to develop the Mine surface facilities. Development of the coal reserve access will be fast tracked to reach the Sunnyside reserves and develop the main entries.

A review of Plate 5-4 COAL OWNERSHIP, indicates that all reserves associated with the permit area "B" Mine are Federally held.

Surface land owners are listed in Volume 1 of 7, Permit Area "B", Lila Canyon Mine / 007/013, Chapter 1, pages 4 and 5, **Section 112.500**.

The Permittee will need to notify all surface landowners at least six months (June 2010) in advance of mining in order to meet the requirements of **R645-301- 525.600, Compliance**. This section of the R645 Coal Mining Rules has not been addressed within the Task ID # 3017 application.

Findings:

The application is deficient. In accordance with the requirements of the following:

R645-301-511.100, Proposed Coal Mining Operations. The Permittee must provide a current 5 year Mine projection, as part of the Subsidence Monitoring plan.

"Within a schedule approved by the Division, the operator shall submit a detailed plan of the underground workings. The detailed plan shall include maps and descriptions, as appropriate, of significant features of the underground mine, including the size, configuration, and approximate location of pillars and entries, extraction ratios, measures taken to prevent or minimize subsidence and related damage, areas of full extraction, and other information required by the Division. Upon request of the operator, information submitted with the detailed plan may be held as confidential."

The Permittee shall submit the required 5 year projection map by June 2010.

R645-301-525.440, the Permittee must :

d. provide more information about the proposed 200 foot monitoring grid including the Permittee's justification for wanting to do this. Generally, the Division requires one subsidence monitoring point in the center of an extraction area (long wall panel). This is to determine when maximum deformation has been achieved. Grid monitoring would be expensive, and the Division does not know if a grid system is justified. Grids are generally implemented when subsidence contours about the extraction areas are needed.

e. The Division recommends that subsidence monitoring points be implemented along escarpments where hazards may develop. This is a particular need in the adjacent Mine facilities area.

f. The plan must commit to a specific time of year when the aerial survey is to be conducted (i.e., post foliage, pre-snow).

d. documentation of the quarterly ground survey of the general mine permit area must be performed. The report must document the length and maximum width of any cracks when observed. The report should note whether the crack could be considered a hazard to wildlife or humans. The location of significant cracks must be documented on a surface map of the Mine's permit area. The Mine's assigned reclamation specialist / inspector must be notified of the find. This information must also be submitted in the Annual Subsidence Report for the Mine.

R645-301- 525.600, Compliance. The Permittee must address the requirements of this regulation in the application. The Permittee must commit to notifying all surface landowners at least six months (June 2010) in advance of mining in order to meet the requirements of R645-301-525.600. This includes all government agencies regardless of the agencies interaction with the Mine's permitting process.

SLIDES AND OTHER DAMAGE

Regulatory Reference: 30 CFR Sec. 817.99; R645-301-515.

Analysis:

The Application meets the requirements of R645-301-515.100 and R645-301-515.200 by committing to immediately contact the Division if a slide occurs (Section 515.100) and provide a mitigation plan. The Division will then determine the adequacy of the remediation plan. The Permittee has also committed to report any potential hazards found during impoundment inspections (Section 515.200).

Findings:

Information provided in the Application meets the Slides and Other Damage requirements of the regulations.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

Analysis:

Topsoil Removal and Storage

The Task ID # 3017 application (Plate 5-2, Official Disturbed Boundary Map) shows the area beneath the run-of-mine conveyor and the area east of the shop / warehouse pad as disturbed, but no topsoil is to be removed. All topsoil must be removed prior to disturbance.

The Task ID # 3017 application discusses subsoil recovery in the shop / warehouse area via trench excavation, burying rock slope development waste in that void, and then moving over to recover adjacent subsoil. According to the rules, all material (i.e., subsoil) will be removed before other surface disturbance occurs.

In accordance with the following,

R645-301-231.100, a description of the method for removing …subsoil,…will be provided in the permit application, and

R645-301-232.100; Topsoil Removal. All topsoil will be removed as a separate layer from the area to be disturbed and segregated. The term "disturbed" includes construction processes for conveyor support structures.

R645-301-232.600, Timing, All material to be removed (i.e., subsoil) will be removed …before drilling, blasting, mining, or other surface disturbance takes place. This includes placement or disposal of mine development waste.

Findings:

The application is deficient and must meet the requirements of the R645 Coal Mining Rules prior to approval.

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Regulatory Reference: 30 CFR Sec. 784.24, 817.150, 817.151; R645-301-521, -301-527, -301-534, -301-732.

Analysis:

Road Classification System

Chapter 5, Page 49, **Section 527.100** of the Task ID # 3017 application states that "all new roads within the disturbed area have been classified as primary".

Section 527.120 states that the slope access road / portal access road and the mine facilities road / truck loadout road are classified as primary roads. None of these roads will be retained as part of the approved post-mining land use.

Plans and Drawings

Appendix 5-4, ROADS contains brief descriptions for the following roads which are associated with the Emery County Lila Canyon Coal mine. These are:

1) Emery County Road #126
2) new mine facility road
3) slope access road
4) the Little Park / Emery County road
5) existing vehicle ways (two tracks) off of Little Park used to conduct water and subsidence monitoring activities.

All roads within the Mine site disturbance are classified as primary roads.

Emery County Road #126

As noted, the Mine access is a County road which will be designed, located and constructed according to AASHTO standards. Segments of the existing road will be re-aligned to provide a safer route. Drainage controls will be implemented as necessary to carry road surface runoff to the proper channels.

New Mine Facility Road

The mine facility road is depicted on Plate 5-2. A short segment of this road will intersect the slope access road, from which the office and bathouse facilties can be reached. Coal trucks will access the truck loading facility loop and scales.

Coal will be hauled on this short segment; initially the road will be graveled, with paving to follow at a later date. The haul road surface width has been designed at 24 feet. The requirement to pave the coal haul road is stated within the State of Utah Department of Environmental Quality / Air Quality approval order.

The road has been located based upon grade, stability and alignment.