



WASHINGTON COUNTY, ARKANSAS  
County Courthouse

February 3, 2015

**SPECIAL MEETING OF THE  
WASHINGTON COUNTY QUORUM COURT**

Thursday, February 12, 2015  
6:00 p.m.  
Washington County Quorum Court Room

**AGENDA**

1. CALL TO ORDER. JUDGE EDWARDS
2. PRAYER AND PLEDGE.
3. ROLL CALL.
4. ADOPTION OF AGENDA.
5. **CONDITIONAL USE PERMIT APPEAL HEARING:**  
**Rich Red Dirt CUP Conditional Use Permit Request**  
Location: Section 05, Township 16 North, Range 31 West  
Applicant: Benny Holtzclaw  
Location Address: 15792 Harmon Road  
Proposed Land Use: 122.00 acres - Open Pit Red Dirt/Clay/Gravel Extraction  
Coordinates: Longitude: -94.28545281" W Latitude 36.08850625" N  
**Project #: 2014-124 Planner: Juliet Richey, [jrichey@co.washington.ar.us](mailto:jrichey@co.washington.ar.us)**
  - Introductory Remarks and Presentation by County Staff Summarizing the Project and Staff Recommendation **(5.1)**
  - Remarks from Applicable Public Agencies - Road Department & Contracted County Engineer **(5.2)**
  - Remarks by the Applicant/Appellant Support of the Project.
  - Remarks by Opponents of the Project.
  - Remarks by Supporters of the Project.

**6. AN ORDINANCE RATIFYING A CONDITIONAL USE PERMIT DENIED BY THE PLANNING AND ZONING BOARD.** This ordinance is on first reading. (6.1)

**EVA MADISON**

- Deliberation of the Quorum Court.
- Possible Motion/Vote on Ordinance. If no action is taken by the Quorum Court, the ordinance will be on second reading at the February 19 regular Quorum Court meeting. However, the Quorum Court can amend the ordinance; suspend the rules and move the ordinance up to second reading; or suspend the rules and move the ordinance up to second and third reading for adoption at this time.
- Public Comment. If the ordinance is moved up for adoption, additional public comment will be held at this time. *(20-minute limit: 10 minutes for & 10 minutes against; 3-minute limit per speaker)*

**7. ADJOURNMENT.**

/cs



# WASHINGTON COUNTY PLANNING OFFICE

2615 Brink Dr.  
Fayetteville, AR 72701  
(479) 444-1724  
(479) 973-8417

Agenda Item

A

Meeting- February 12, 2015  
Project- Rich Red Dirt CUP  
Project Number- 2014-124  
Planner- Juliet Richey,  
jrichey@co.washington.ar.us

---

## ZONING- CONDITIONAL USE PERMIT REQUEST

The determination as to whether a conditional use permit will be granted is subjective to a degree. The Quorum Court may act on issues discussed in the criteria checklist when making decisions in these matters.

---

**REQUEST:** Conditional Use Permit Approval for Rich Red Dirt CUP to transition existing agricultural/residential property to open pit red dirt/clay/gravel extraction operations.

**CURRENT ZONING:** Project does lie within the County Zoned area (Agriculture/Single-Family Residential 1 unit per acre).

**PLANNING AREA:** This project is located solely within the County.

**QUORUM COURT DISTRICT:** District 7, Rick Cochran.

**BACKGROUND/ PROJECT SYNOPSIS:**

The applicant is requesting Conditional Permit approval for Rich Red Dirt Pit to transition existing agricultural/residential property to open pit red dirt/clay/gravel extraction operations. This property is owned by Mark Rich.

This operation proposes the construction of a haul road and red dirt pit operations- extraction of clay and gravel (This application does not include a request for quarrying of rock). The proposed haul road from Harmon Road will connect to a proposed open cut mining area (the mining area is proposed to be approximately 9.3 acres in size).

The entrance is proposed to be located near the existing home (owned by Mark Rich) at 15792 Harmon Road, Fayetteville, AR, 72704. Please see the attached letter from the applicant and concept site plans for further information (**pgs A35-A41**).

**Past Planning Board Hearings:**

- This project was initially heard and tabled at a Planning Board/Zoning Board of Adjustments meeting on August 7, 2014.
- An informational Planning Board/ZBA meeting was held onsite (at the Rich property) on August 26, 2014.
- The project was tabled (at the request of the applicant) at the September and October 2014 Planning Board/ZBA meetings.
- The project was heard and denied by the Planning Board at November 6, 2014, Planning Board/ZBA meeting.

**An appeal was for this project was filed on December 5, 2014, by Benny Holtzclaw of Holtzclaw Excavating, Inc. (project applicant) (see attached pgs. A27-A30.)**

### County Contract Engineer Findings

After the November 6, 2014, Planning Board Meeting, County Staff decided it would be best to perform our own survey of the site to check our data against that submitted by the applicant. The Road Department performed a survey of the area and the County Contract Engineer used this new data to formulate his own plan/profile sheet of the subject section of Harmon Road. This resulted in the January 29, 2015, plan and profile sheet and letter of findings submitted by the County Contract Engineer. Please see attached copies of these documents on page (A42- A45).

At the November 6, 2014 Meeting, the applicant's Engineer, Mike Kelly, P.E., was unhappy with the fact that some of the calculations provided by Planning Staff and the Contract County Engineer were derived from an earlier version of the "AASHTO Green Book, A Policy on Geometric Design of Highways and Streets." In order to avoid any confusion, The County Contract Engineer figured the calculations resulting in the January 29, 2015, letter and plan/profile sheet based on the "2011, 6<sup>th</sup> Edition" of this manual.

In these documents Mr. Grote finds the following:

- 45 mph is the posted speed for this section of Harmon Road. The findings do not warrant a change in the posted speed of 45 mph for this section of Harmon Road.
- The proposed haul road does not have enough sight distance to safely make left turns onto Harmon Road. The sight distance needed to make a left turn (from the haul road) onto a 45 mph roadway is 628 feet. According to the information submitted by the developer, the proposed site has a current intersection sight distance (from the location of the haul road looking south) of 446 feet.

Planning Staff recommended denial of this CUP at the November 6, 2014, Planning Board and Zoning Board of Adjustments meeting, and at this time is making the recommendation that the Quorum Court uphold the denial of this proposed Conditional Use Permit.

The primary reasons for denial include:

- Safety concerns in regard to the proposed location of the haul road intersection with Harmon Road
- Issues of compatibility
- The high likelihood that this project will be injurious to the use and enjoyment of some of the other property in the surrounding area for the purposes already permitted, and substantially diminish and impair some property values within the surrounding area.

In regard to the Appeal Document filed on 12-5-14 (see copies of the appeal on pages A27 –A30):

#### **1. Safety**

In "Exhibit Two" of the Appeal Document filed by Mr. Holtzclaw, the appellant states the following:

"Safety- All designs are set for 45 mph per zoning staff unless applicant could prove Harmon Road does not meet 45 mph design. Our engineer surveyed the site and stamped drawing stating that existing horizontal and vertical alignments for Harmon Road only meets 20 mph design. Immediately preceding the hearing, staff changed sight distance requirement from 500 feet (Current ordinance) to 628 feet (not a current Ordinance) without properly notifying the applicant prior to the hearing,"

**Planning Staff Response:**

Planning Staff had the County Contract Engineer analyze the initial information submitted by the applicant's engineer. The County Contract Engineer came up with different design speed calculations and did not come to the same conclusion (That the design speed of Harmon Road should be dropped). This information was conveyed to the applicant and their engineer prior to the November 6, 2014, meeting.

In addition, upon further investigation into intersection sight distance requirements on November 5, 2014, Assistant County Road Superintendent, Shawn Shrum and Planning Director, Juliet Richey, found some additional information and calculations that we felt were relevant to the Rich Red Dirt CUP project.

We found that according to ASSHTO's "A Policy on Geometric Design of Highways and Streets," consideration should be given to scenarios where the predominant amount of traffic utilizing the sight visibility at an intersection situation like the one before us is truck traffic (where the truck traffic is turning from a minor road; the haul road, onto the larger road; Harmon Road), a different value should be utilized to accommodate the slower acceleration of trucks.

When using the value prescribed by the manual for truck traffic, the distances needed to provide for safety at an intersection increases. Using the time gap value appropriate for the proposed type of truck traffic at this site, Staff calculates that the sight distances needed (for left hand turning movements from the proposed Haul Road onto Harmon Road) should be as follows:

- 35 mph: 488.78' of sight distance needed
- 40 mph: 558.6' of sight distance needed
- 45 mph: 628.4' of sight distance needed
- 50 mph: 698.25' of sight distance needed

Mr. Shrum and Ms. Richey had the Contract County Engineer verify our new findings, and then emailed the information to the Planning Board on November 6, 2014 a few hours prior to the meeting.

While it is Staff's job to notify the Planning Board of findings of this nature, and while we strive to keep a clear line of communication between our department and the applicant, we are not under any obligation to share recent findings with the applicant prior to the meeting.

While reviewing a CUP, one of the criteria to be met is: *That the establishment, maintenance, or operation of the conditional use will not be detrimental to or endanger the public health, safety, morals, comfort or general welfare.* CUP review does not hold staff to road development standards only found in our current ordinance. In this case we used the AASHTO Green Book as it was the best tool available to evaluate safety for this particular combination of use and intersection situation. For staff to ignore the use of the larger time gap coefficient for single unit trucks in the sight distance equation (which is what equated the larger distance of sight distance needed than originally calculated) would be negligent on our part.

## **2. Compatibility**

In "Exhibit Two" of the Appeal Document filed by Mr. Holtzclaw, the appellant states the following:

"Compatibility- Site is situated between a U of A Hazardous Waste Site adjacent to Harmon Road to the west and existing rock quarry and dirt mining pits to the east as well as having previous pits under reclamation on the applicant's owner's 123 acre farm. Staff determination of non-compatibility issue is being challenged. We request the zoning staff basis for their determination of incompatibility."

## **3. Injurious to surrounding property already permitted**

In "Exhibit Two" of the Appeal Document filed by Mr. Holtzclaw, the appellant states the following:

"Injurious to surrounding property already permitted- Applicant has a current open mining permit in effect on his land for reclamation purposes. We request the zoning staff basis for their determination of significantly affecting surrounding property values. It is our contention that some will actually increase in value"

## **Planning Staff Response:**

**Both of these issues were covered in the November staff report for this project and iterated by staff at the November 6, 2014, Planning Board Meeting. They are also covered in depth in the report below, but for ease of reading, staff will place their findings on these topics in this section as well.**

- **Staff has concerns in regard to compatibility due to portions of the proposed site being close to neighboring property lines, and only relatively small buffer areas being proposed at this time. Additionally, there will be an industrial use added to an area that does not currently have industrial type noise and traffic within this close of a proximity to it. Although there is mining nearby (even until a few years ago on Mark Rich's land), the areas that have been mined in the past and are currently being mined are geographically removed (by distance and /or elevation and terrain changes) from the currently proposed location. Additionally, the other existing mining sites route traffic via Hamestring Road to HWY 16- not onto Harmon Road. This CUP proposes to add an industrial/mining type use in an area that has not experienced such a use in such a close proximity.**
- **There is much concern from neighboring property owners in regard to property values, quality of life, and other similar issues. Additionally, staff has concerns about the effect of this use on neighboring properties due to the limited buffering of haul roads and the mining area from surrounding residences.**

- **Buffering from surrounding properties in regard to noise, quality of life, property values, and incompatibility of uses: Planning Staff still has concerns regarding the lack or minimal width of proposed buffers onsite- especially in the area of the proposed Haul Road. The applicant has attempted to move the haul road away from the neighboring property line somewhat, but the haul road is still within the 35' or less from the neighboring property line for approximately 400'. While 28'-35' (the distances shown on the latest plan) may seem like a substantial width of land, staff feels that with the impact of 100 dump truck trips per day, further buffer may be needed for surrounding properties.**

**The applicant has also offered to place a 3' berm (with cedar trees on top of it) for the first 230' along the haul road. Staff feels that a berm could be effective, but feels it should likely be taller than 3' in height and extend to at least 400' in length. Additionally, the location of the berm should be considered carefully, as none of the existing fence line vegetation should be disturbed (so that the existing vegetative screen remains in place).**

**While the mining site itself appears to primarily be tucked away from the sight of the general public, there are two adjacent property lines to the south and west that are owned by other parties. Staff did note that both of these areas contain a high amount of existing vegetation, so the planting of additional vegetation is likely not needed if existing vegetation is left undisturbed. However, Staff recommends that a 150' buffer be proposed between these properties and all parts of the operation. The addition of berms could also be beneficial. At present the applicant is proposing only a 50' buffer from the southern property line (which borders the Casey property and the University of Arkansas' property). Additionally, more buffering or berming along the western property line (bordering the Elkins' property) should also be explored.**

**Due to the intensity of the traffic and operations of a dirt pit, staff is hesitant to recommend less than 100'-150' wide buffers along all adjoining property lines. 100'-150' is in line with what has been recommended in the past for other industrial/mining CUPs.**

If a CUP for this project is approved, this project will be subject to all applicable Washington County Large Scale Development Regulations.

At CUP we are evaluating whether or not this proposed use is appropriate for this site (in the manner it is proposed) - or if it could be made appropriate/compatible with the addition of any conditions. As per our zoning ordinance, we must evaluate the proposed use using the below criteria:

- (a) *The Board shall hear and decide requests for a conditional use and may authorize such if it finds:*
  - (1) *That a written application has been filed with the Planning Office and the appropriate fee has been paid.*

**Received 7-2-14**

- (2) *That the applicant has provided proof that each property owner as set out in section 11-204 has been notified by return receipt mail. **Completed 7-7-14 (all subsequent tablins and scheduling of hearings have been announced at public meetings and staff has followed up with a courtesy mailing).***
- (3) *That adequate utilities, roads, drainage and other public services are available and adequate or will be made available and adequate if the use is granted. **The location of the proposed haul road's intersection with Harmon Road appears to be inadequate in regard to safety. Discussed below.***
- (4) *That the proposed use is compatible with the surrounding area. **Staff has concerns in regard to compatibility due to portions of the proposed site being close to neighboring property lines and only relatively small buffer areas being proposed at this time. Additionally, there will be an industrial use added to an area that does not currently have industrial type noise and traffic within this close of a proximity to it. Although there is mining nearby (even until a few years ago on Mark Rich's land), the areas that have been mined in the past and are currently being mined are geographically removed (by distance and /or elevation and terrain changes) from the currently proposed location. Additionally, the other existing mining sites route traffic via Hamestring Road to HWY 16- not onto Harmon Road. This CUP proposes to add an industrial/mining type use in an area that has not experienced such a use in such a close proximity. Discussed in depth below.***
- (5) *That the establishment, maintenance, or operation of the conditional use will not be detrimental to or endanger the public health, safety, morals, comfort or general welfare. **The sight distance visibility in regard to left hand turns (onto Harmon Road from the site) appears to be a health/safety issue. A significant amount of information has been submitted, and staff has spent a significant amount of time analyzing the issue (analyzing data submitted by the applicant's engineer, performing our own surveys, and having the Contract County Engineer analyze the data). It appears that the currently proposed haul road configuration will not accommodate safe left turning movements onto Harmon Road. Discussed below.***



- (6) *That the conditional use will not be injurious to the use and enjoyment of other property in the surrounding area for the purposes already permitted, nor substantially diminish and impair property values within the surrounding area. **There is much concern from neighboring property owners in regard to property values, quality of life, and other similar issues. Additionally, staff has concerns about the affect of this use on neighboring properties due to the limited buffering of haul roads and the mining area from surrounding residences. Discussed below.***
- (7) *That the establishment of the conditional use will not impede the normal and orderly development and improvement of the surrounding area for uses permitted in the zone. **Staff feels that due to a lack of buffering from surrounding properties, the development and improvement of surrounding areas (especially neighboring properties) could be impeded in regard to agricultural and residential growth and development. Discussed below.***

*(b) If it is determined that there exist conditions that could be imposed by the Board that would significantly lessen the impact of the aforestated, then the Board has the power to impose said conditions which shall be specifically set forth.*

**Primary Concerns and Issues:**

**1. Sight visibility and safety in regard to truck traffic and Harmon Road**

The sight distance visibility and safety aspect regarding the proposed entrance point onto Harmon Road for this project have been issues of high concern since this project was initially submitted.

This portion of Harmon Road is posted at a 45 mph speed limit. There is a curve advisory sign (25 mph) preceding the curves south of the proposed entrance, however, the County uses the posted speed limit (45 mph) to determine the intersection sight distance needed unless actual design speeds are available.

The County generally uses a table from our code Chapter 11, Article IV- Appendix A (adopted from AASHTO Green Book Standards) to determine the minimum sight distance visibility needed for an intersection at certain speeds:

HORIZONTAL SIGHT DISTANCE AT INTERSECTIONS		
Design Speed (mph)	Intersection Sight Distance Left Turn Movements (ft.)	Intersection Sight Distance Straight Across/Right Turn (ft.)
25	280	240
30	335	290
35	390	335
40	445	385
45	500	430
50	555	480
55	610	530
60	665	575
65	720	625
70	750	670

As mentioned above, the posted speed limit is 45 mph. The posted speed limit is the number we use if no design speed is available. As per our code, minimum sight distance required for this speed is 500' for left turning movements; 430' for right turning (or straight) movements.

It became evident early in the process that the applicant did not have 500' of sight visibility to the South (in order to be able to safely make left turning movements onto Harmon Road). The below options were given to the applicant to address the sight visibility issue in regard to their proposed access point onto Harmon Road.

**Option A: Pursue an alternate drive location that meets required sight distance for the posted speed limit.**

**Option B: Determination of Design Speed for this Stretch of Harmon**

Harmon Road is posted at a speed of 45 mph. This speed limit will stand unless you can prove this is too high of a speed for this section of this County Road as per AASHTO's "A policy on Geometric Design of Highways and Streets, 6th Edition" (also known as the Green Book). You must consider the horizontal and vertical curve alignment and superelevation. Only after you submit all information, findings, etc., as per these standards will the County consider any differing speed limit designation.

### **Option C: Clearing/Offsite Easement option**

The applicant chose to pursue **Option B** and their Engineer, Mike Kelly, P.E., submitted documentation via a plan and profile sheet showing a series of “design speeds” for 1800’ feet of Harmon Road (**pg A31-A34, A41**).

Mr. Kelly also submitted intersection sight distances (for both left and right turning movements). The distances submitted were as follows (see attached **pg A31-A34**, for additional information):

- Sight distance to the south (to accommodate left turning movements): **446.36’**
- Sight distance to the north (to accommodate right turning movements): **+ 500’**

**As mentioned several places previously in this report, when using the value prescribed by the AASHTO manual for truck traffic, the distances needed to provide for safety at an intersection increases (from the standard used when the predominant traffic is cars). Using the time gap value appropriate for the proposed type of truck traffic at this site, Staff calculates that the sight distances needed (for left hand turning movements from the proposed Haul Road onto Harmon Road) should be as follows:**

- **35 mph: 488.78’ of sight distance needed**
- **40 mph: 558.6’ of sight distance needed**
- **45 mph: 628.4’ of sight distance needed**

As mentioned above in the project background/synopsis section, after the November 6, 2014, Planning Board Meeting, County Staff decided it would be best to perform our own survey of the site to check our data against that submitted by the applicant. The Road Department performed a survey of the area and the County Contract Engineer used this new data to formulate our own plan/profile sheet of the subject section of Harmon Road. This resulted in the January 29, 2015 plan and profile sheet and letter of findings submitted by the County Contract Engineer. Please see attached copies of these documents on page (A42 –A45).

In these documents Mr. Grote finds the following:

- **45 mph is the posted speed for this section of Harmon Road. The findings do not warrant a change in the posted speed of 45 mph for this section of Harmon Road.**
- **The proposed haul road does not have enough sight distance to safely make left turns onto Harmon Road. The minimum sight distance needed to make a left turn (from the haul road) onto a 45 mph roadway is 628 feet. According to the information submitted by the developer, the proposed site has a current intersection sight distance (from the location of the haul road looking south) of 446 feet.**

Due to all of the reasons listed above, Planning Staff still feels that there a true safety concern regarding the location of the proposed drive/haul road.

Staff also had some concern regarding trucks backing up onto Harmon while waiting to turn into the site. The applicant has stated that they propose to place the location of the gate to the site 100' back off of Harmon Road to mitigate this issue.

**2. Buffering from surrounding Properties in regard to noise, quality of life, property values, and incompatibility of uses.**

Planning Staff still has concerns regarding the lack or minimal width of proposed buffers onsite- especially in the area of the proposed Haul Road. The applicant has attempted to move the haul road away from the neighboring property line as much as they can, but the haul road is still within 35' or less from the neighboring property line for approximately 400'. While 28'-35' may seem like a substantial width of land, staff feels that with the impact of 100 dump truck trips per day further buffer may be needed for surrounding properties. The applicant has also offered to place a 3' berm (with cedar trees on top of it) for the first 230' along the haul road. Staff feels that a berm could be effective, but feels it should likely be taller than 3' in height and extend to at least 400' in length. Additionally, the location of the berm should be considered carefully, as none of the existing fence line vegetation should be disturbed (so that the existing vegetative screen remains in place).

While the mining site itself appears to primarily be tucked away from the sight of the general public, there are two adjacent property lines to the south and west that are owned by other parties. Staff did note that both of these areas contain a high amount of existing vegetation, so the planting of additional vegetation is likely not needed if existing vegetation is left undisturbed. However, Staff recommends that a 150' buffer be proposed between these properties and all parts of the operation. The addition of berms could also be beneficial. At present the applicant is proposing only a 50' buffer from the southern property line (which borders the Casey property and the University of Arkansas' property). Additionally, more buffering or berming along the western property line (bordering the Elkins' property) should also be explored.

Due to the intensity of the traffic and operations of a dirt pit, staff is hesitant to recommend less than 100'-150' wide buffers along all adjoining property lines. 100'-150' is in line with what has been recommended in the past for other industrial/mining CUPs.

**3. Concern regarding impact to Harmon Road and the possible need for Road Improvements to accommodate the proposed use.**

If a CUP is approved, staff recommends that a formal Traffic Study be required at the Large Scale Development Stage. The below information was given to the applicant at the County's technical review.

A formal traffic study will be required at Preliminary LSD if a CUP is approved. The applicant would be required to pay for any needed improvements specified in the study as well as acquire any needed ROW. The traffic study should cover (but not be limited to) the following elements:

- a. Directional division of proposed truck traffic (north and south)
- b. Level of service

- c. Impact to the intersection of HWY 16
- d. Impact on and interactions with the existing Wedington Woods intersection (WC 2161, Dogwood) to the North
- e. Change in percentage of trucks vs. car traffic on Harmon Road

A pavement analysis (for Harmon Road) will be required once formal traffic loading has been determined.

Harmon Road belongs to City of Fayetteville for the first ¼ mile (from the intersection of HWY 16). Discussion of any improvements needed must be coordinated with the City for their portion at Preliminary LSD.

#### **4. Concern regarding debris and tracking on Harmon Road- especially during inclement weather situations.**

County Staff is concerned about this issue- especially due to the amount of traffic that currently travels Harmon Road. The applicant has specified that they will build a tire wash onsite to help mitigate this issue, but this is not shown on the current plans (that staff can see).

The applicant has made several statements in their plan that they will not track and will shut down in inclement weather, however staff needs more details and a more fully defined policy/plan from the applicant to review in regard to safeguards against trucks tracking on Harmon.

#### **5. Environmental Concerns**

##### **Concern regarding proximity to U of A site on Harmon:**

Planning Staff contacted the U of A regarding any possible environmental issues that could arise in regard to this dirt mining proposal's proximity to the U of A's land on Harmon Road (adjacent to the south of this site). As per staff's conversation with U of A Staff we understand that all radioactive materials that were on this site in the past have now been removed and the site has been cleaned up. The only restriction remaining on this site is a Deed Restriction stating that a water well cannot be drilled on the University's property. This is not due to any radioactivity concerns, but due to a small amount of chemical contamination in the perched ground water on a location on this specific site. The University does not want someone drilling through the perched water and into the aquifer. This deed restriction and the concerns to the perched water are specific only to the U of A's parcel of land; not to any surrounding properties.

**The University's official response is as follows:**

***"The University is happy to make documentation regarding the Harmon Road property available for the inspection and review of county officials (including any deed restrictions). The University, however, does not believe that it should make any type of blanket warranties or representations regarding any of its property or any adjacent properties. As I understand it, ADEQ worked with the University as officials of the institution oversaw the clean-up of the Harmon Road site, and that process was completed some time ago.***

**As you may know, the University has taken a neutral position on the permit issue currently pending with Washington County.**

**- T. Scott Varady, Office of the General Counsel, University of Arkansas”**

Planning Staff also spoke with the ADEQ Hazardous Waste Division. ADEQ did not feel that there was a high chance of there being any contamination issues on surrounding properties).

**Other environmental concerns brought up by property owners in the area:**

- **Drainage**
- **Wildlife**
- **Storm water**

**Neighbor comments and proximity**

As you will see from the neighbor comments documents on the website there have been numerous comments on this project. Staff has posted the comments on the Planning Department website and has also created a map to show the proximity of the commenters to this CUP (see pgA-19) and a spreadsheet showing their general concerns and whether they were in opposition or in favor of this project (see pgs A20-A26)

**INFRASTRUCTURE: Water** –Washington Water Authority.

**Other Utilities** - The lot is in the service area of Ozark Electric, AT &T Telephone, Arkansas Western Gas, and Cox Communications.

**Planning Staff recommended denial of this CUP at the November 6, 2014, Planning Board and Zoning Board of Adjustments meeting, and at this time is making the recommendation that the Quorum Court uphold the denial of this proposed Conditional Use Permit.**

**ZONING BOARD OF ADJUSTMENTS ACTION:**

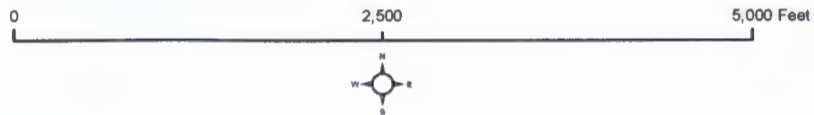
_____	CUP Approved
11/6/14	Denied
8/7/14, 8/26/14, 9/4/14, 10/8/14	Tabled

**Project Maps**  
**Created by Planning Staff**

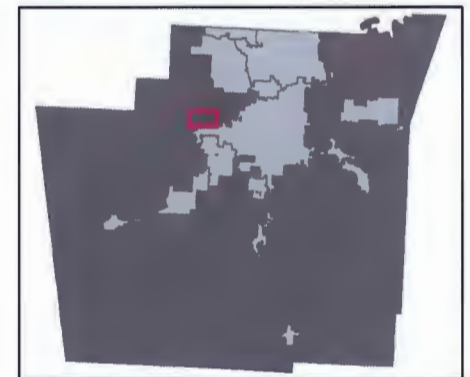


# Rich Red Dirt Project 2014-114 Vicinity Map

Site information is drawn over Assessor GIS aerial imagery (2014), parcel and street information. The information should not be misconstrued as survey information. Parcel information locations are based off the best material at hand.



- Highways/Other Roads
- Paved Roads
- Unpaved Roads
- Proposed Mining Area
- Rich Red Dirt
- Washington County Parcels
- City Limits
- Planning Areas
- Floodplain
- A
- AE
- Shaded Zone X

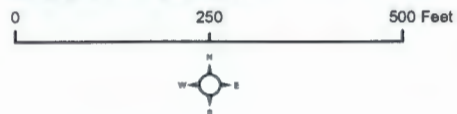






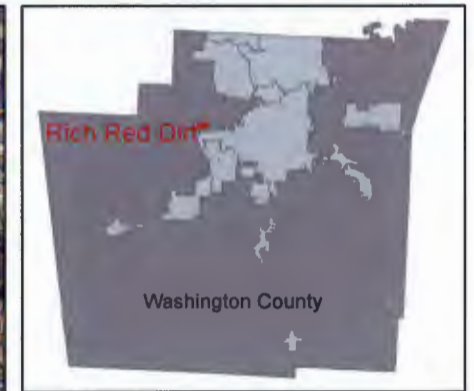


**Rich Red Dirt  
Project 2014-114  
Proposed Mining Area**

Site information is drawn over Assessor GIS aerial imagery (2014), parcel and street information. The information should not be misconstrued as survey information. Parcel information locations are based off the best material at hand.



-  Haul Road Approximate Location
-  Proposed Mining Area
-  Highways/Other Roads
-  Paved Roads
-  Unpaved Roads
-  Rich Red Dirt Parcels
-  Washington County Parcels





## Rich Red Dirt Project 2014-114 Surrounding Residences

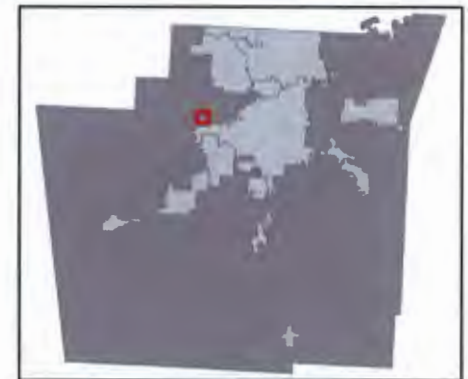
- Surrounding Residences
- Address Points
- Highways/Other Roads
- Paved Roads
- Unpaved Roads
- Proposed Mining Area
- Rich Red Dirt
- Washington County Parcels

0 500 1,000 Feet



Only residences immediately surrounding project boundaries (within two parcel lengths) shown.

Site information is drawn over Assessor GIS aerial imagery (2014), parcel and street information. The information should not be misconstrued as survey information. Parcel information locations are based off the best material at hand.





University of  
Arkansas  
Property  
ADEQ AFIN:  
72-00824

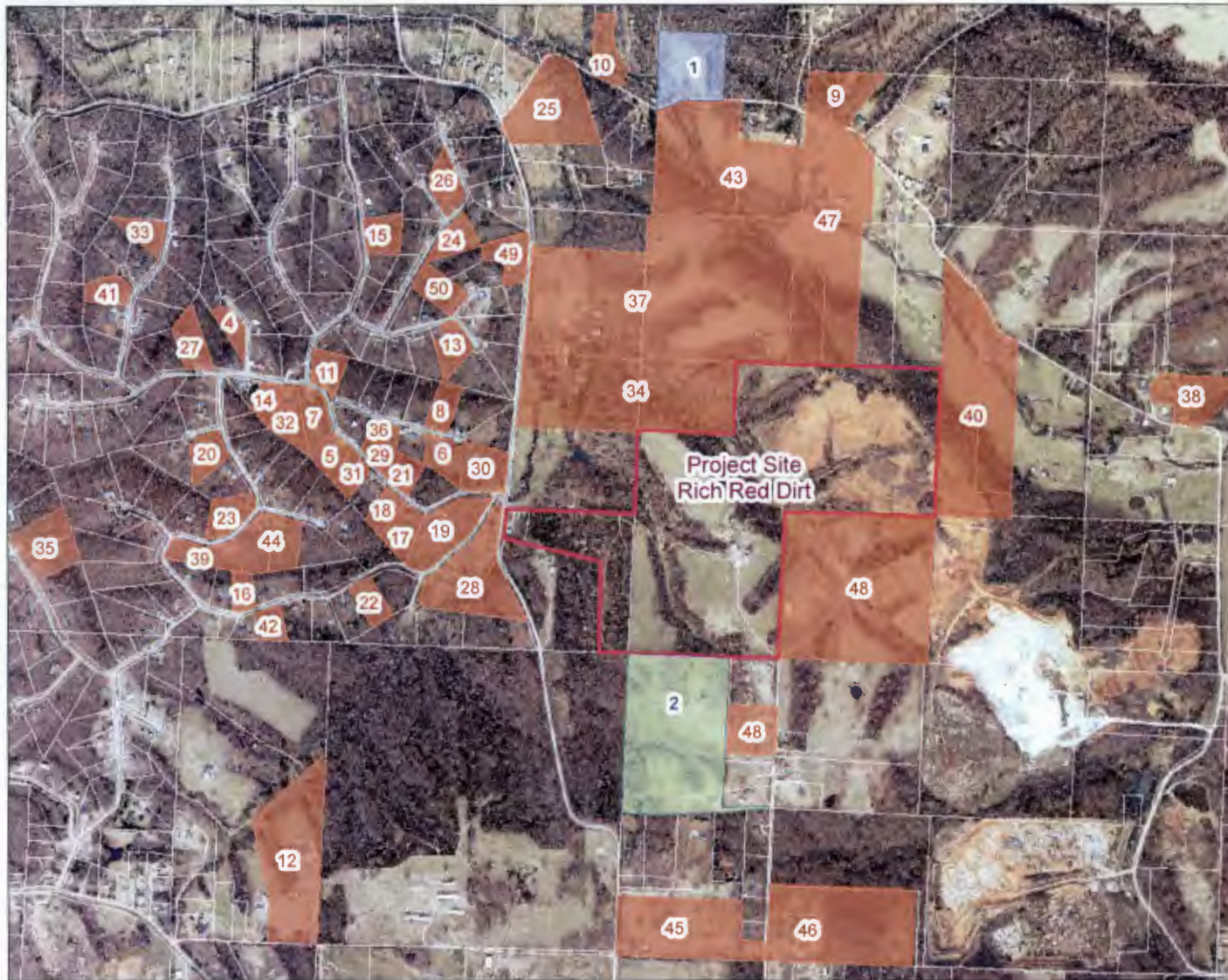


**Map of Neighbors Who Submitted Written  
Comments/Concerns**

**and**

**Neighbor Comments/Concerns Summary Spreadsheet**

**(Please see Planning website for full written copies of neighbor concerns)**



# Neighbor Comments

## Rich Red Dirt

Total Neighbor Comments: 49

- In-Favor Comment Received
- Neutral Comment or Question Received
- Opposing Comment Received

### Neutral Comments or Questions Received From:

1. 001-17519-000 - Hutchinson, Laura and Margaret

### In-Favor Comments Received From:

3. 001-11578-000  
001-11578-001 - Casey, Jerome

### Opposing Comments Received From:

- 536-03079-000 - Anderson, Cynthia (15)
- 532-03040-000 - Audiss, William and Terri (39)
- 001-11585-001 - Bale, Patricia (45)
- 532-03009-000 - Baudino, Gloria (8)
- 532-03025-000 - Brown, Arthur and Kristine (31)
- 536-03049-000 - Carr, Gary (13)
- 536-03054-000 - Cook, Ronnie (49)
- 001-11484-000 - Crumley, Edwin and Mary (40)
- 001-11484-004 - Crumley, Edwin and Mary (40)
- 001-17503-000 - Dalton, Gardie (10)
- 548-03175-000 - Davis-Beaupre, Terri (41)
- 532-03000-000 - Erstine, Kimberly (27)
- 532-03023-000 - Garrett, Deloris Revocable Trust (18)
- 001-11488-000 - Gooding, Charles and Ladema (37)
- 001-11508-000 - Gooding, Charles and Ladema (37)
- 001-11496-000 - Gray, Roma and Michael Luna (38)
- 536-03074-000 - Grimsley, Donna C. Trust (26)
- 532-03038-000 - Hawkings, James, Lydia Baumgartner (44)
- 532-03039-000 - Hawkings, James, Lydia Baumgartner (44)
- 532-02995-000 - Henderson, Joel and Deborah (20)
- 532-03027-000 - Herrin, Mary (7)
- 532-03013-000 - Hester, Lloyd and Virginia (6)
- 532-03028-000 - Johnson, Dick and Julie (32)
- 532-03017-000 - Jones, Phillips (29)
- 001-11494-000 - Jorgenson Trust (34)
- 001-11507-000 - Jorgenson Trust (34)
- 001-11509-001 - Jorgenson Trust (34)
- 001-17526-000 - King, Evelyn and Pamela Klein (9)
- 536-03059-000 - Kinion, Ronnie and Tammy (24)
- 001-11543-002 - Kwan, Timothy (12)
- 001-11579-000 - Main, Sherry and Alford (48)
- 001-11495-000 - Main, Sherry and Alford (48)
- 001-11580-000 - Main, Sherry and Alford (48)
- 536-03108-000 - Miller, Pauletta and Lloyd (4)
- 540-03120-000 - Morgan, Glenn and Linda (35)
- 540-03121-000 - Morgan, Glenn and Linda (35)
- 532-03018-000 - Nicholas, Patti (21)
- 536-03056-000 - Norvell, Mistie (50)
- 532-03020-000 - Osmon, Paul and Bonita (19)
- 532-03021-000 - Osmon, Paul and Bonita (19)
- 532-03015-000 - Presley, Rebecca (36)
- 532-03022-000 - Pulliam, Jenny and Benjamin (17)
- 001-11590-000 - Purcell, Floyd and Patricia (46)
- 001-11590-002 - Purcell, Floyd and Patricia (46)
- 532-02970-000 - Ritchie, Martha (28)
- 532-02971-000 - Ritchie, Martha (28)
- 532-02972-000 - Ritchie, Martha (28)
- 532-03012-000 - Roberson, Bill (30)
- 548-03171-000 - Smith, Christina (33)
- 532-02980-000 - Specie, Roy and Loretta Childs (42)
- 532-03004-000 - Stokes, Jerry and Nancy (11)
- 001-11491-000 - Sullivan, Kenneth (47)
- 001-11492-000 - Sullivan, Kenneth (47)
- 001-17528-000 - Sullivan, Kenneth (47)
- 001-17529-000 - Sullivan, Kenneth (47)
- 532-03043-000 - Tustin, William (16)
- 001-17521-000 - Ward, Walter and Janas (43)
- 001-17522-000 - Ward, Walter and Janas (43)
- 532-03030-000 - Warren, Robert G. Trust (14)
- 532-02976-000 - Wenger, Christopher and Mandy (22)
- 532-03026-000 - Williams, Sherr (5)
- 532-02993-000 - Yankelovich, Martha (23)
- 001-17501-000 - Yerton, Randall (25)

**Rich Red Dirt Mailed comments recieved**

property owner	address	parcel #	comments	opposed	neutral/no comment	in favor	date recvd	Planning Staff comments
Williams, Sherri A	13531 Dogwood Dr, Fayetteville, AR 72704	532-03026-000	property values, safety (children and animals), dirt on roads	x			7/9/2014	
Hester, Lloyd and Virginia	13431 Mimosa Ln, Fayetteville, AR 72704	532-03013-000	Harmon Road - narrow	x			7/10/2014	
Herrin, Mary	13647 Dogwood Dr, Fayetteville, AR 72704	532-03027-000	road saftey	x			7/10/2014	
Baudino, Gloria	13442 Mimosa Ln, Fayetteville, AR 72704	532-03009-000		x			7/15/2014	
King, Evelyn and Klein, Pamela	PO Box 2, Fayetteville, AR 72702-0002	001-17526-000	blasting, dust, noise, 2 other dirt pits in the area	x			7/15/2014	
Casey, Jerome	11091 Royal Oaks Rd, Prairie Grove, AR 72753	001-11578-000, 001 11578-001	No issues, belief that people should be allowed to use their property as they please as long as it doesn't infringe on others, income for nearby households, county tax revenue			x	7/15/2014, 8/26/2014	
Gardie Dalton	16380 Hamstring Rd, Fayetteville, AR 72704- 9471	001-17503-000	traffic, noise	x			7/16/2014	
Stokes, Jerry and Nancy	13626 Dogwood Dr, Fayetteville, AR 72704- 8243	532-03004-000	traffic, blasting, trucks, safety, against Rich Red Dirt company in general	x			7/16/2014	
Kwan, Timothy C	13792 W Hwy 16 Fayetteville, AR 72704	001-11543-002	debris, traffic, road conditions, wild life / environmental impact	x			7/17/2014	
Carr, Gary L	16019 Permission Trce. Fayetteville, Ar 72704	536-03049-000	aggressive driving from trucks	x			7/17/2014	
Warren, Robert, G SR & LE Ming Co-TTES of the Robert G. Warren	13687 Dogwood Dr Fayetteville, AR 72704	532-03030-000		x			7/17/2014	
Anderson, Cynthia R	16421 N River Ridge Rd. Fayetteville, Ar 72704-9465	536-03079-000	blasting, air pollution, traffic	x			7/17/2014	
Tust in Wiliam, E	13720 Redbud Dr. Fayetteville, AR 72704- 8318	532-03043-000		x			7/17/2014	

Pulliam, Jenny and Benjamin	13503 Dogwood Dr, Fayetteville, AR 72704	532-03022-000	noise, haul trucks on road	x			7/18/2014	
Garrett, Deloris J Revocable Trst	13511 Dogwood Dr, Fayetteville, AR 72704	532-03023-000	other red dirt companies in the area/trustworthiness	x			7/22/2014	
Osmon, Paul and Bonita	13469 Dogwood Dr, Fayetteville, AR 72704	532-03020-000, 532-03021-000	property values, traffic hazards, use of Harmon road instead of other adjoining roads, trucks stopping at bottom of hill, noise, traffic jams, road cleanliness in inclement weather, nearby home does not belong to Mark Rich	x			7/22/2014	
Henderson, Joel and Deborah	15741 Quail Rd, Fayetteville, AR 72704- 8412	532-02995-000	use of Harmon road - different road leads from dirt pit to hwy 16, road maintenance, road safety, traffic noise, removal of knoll, blasting	x			7/22/2014	
Nicholas (Evans), Patti	13512 Dogwood Dr, Fayetteville, AR 72704- 8027	532-03018-000	placement of access road at bottom of steep hill	x			7/22/2014	
Wenger, Christopher and Mandy	13565 Redbud Dr, Fayetteville, AR 72704- 8315	532-02976-000	access road, road safety, traffic, noise, soil erosion, dirty roads, property values	x			7/22/2014	
Yankelovich, Martha	15761 Quail Rd, Fayetteville, AR 72704- 8408	532-02993-000	confusion about the project, environmental degradation	x			7/22/2014	
Kinion, Ronnie G. and Tammy K.	16516 Sycamore Ln, Fayetteville, AR 72704- 8236	536-03059-000	road safety, narrow road, truck drivers pushing speed limits	x			7/24/2014	
Yerton, Randall	16395 Hamstring Rd, Fayetteville, AR 72704- 9471	001-17501-000	property values	x			7/25/2014	
Grimsley, Donna C Trust	8551 Carrie Smith Rd, Springdale, AR 72762	536-03074-000	Harmon Rd access, traffic, road maintenance	x			7/28/2014	
Gooding, Charles and Ladema, Cotrustees	16036 Harmon Rd, Fayetteville, AR 72704- 9376	001-11488-000, 001-11508-000	traffic on Harmon Rd, road visibility/safety, water overflow from the mine, installation of a fuel tank?, what happens after knoll is cleared?	x			7/29/2014	
Presley, Rebecca	13547 Mimosa Ln, Fayetteville, AR 72704- 8311	532-03015-000	traffic, road safety, use of Harmon Rd	x			7/29/2014	

Gray, Roma Lisa; Luna, Michael Leon	16529 Little Rd, Fayetteville, AR 72704	001-11496-000	traffic, road safety, two other mining operations in the area	x			8/4/2014	received after packets were mailed 7/31/2014
Audiss, William and Terri	15714 Quail Rd, Fayetteville, AR 72704	532-03040-000	noise	x			8/5/2014	received after packets were mailed 7/31/2014
Crumley, Edwin and Mary	16051 Hamstring Rd, Fayetteville, AR 72704-9429	001-11484-000, 001-11484-004	reclamation, environmental degradation	x			8/5/2014	received after packets were mailed 7/31/2014
Specie, Roy and Childs, Loretta	13687 Redbud Dr, Fayetteville, AR 72704	532-02980-000	noise, dirt on road will be slick when wet, road hazards, dangerous entrance to Harmon road	x			8/5/2014	received after packets were mailed 7/31/2014
Ward, Walter and Janas	16365 Hamstring Rd, Fayetteville, AR 72703	001-17521-000, 001-17522-000	traffic, narrow road, road visibility, school buses use the same road	x			8/6/2014	received after packets were mailed 7/31/2014
Ward, Walter and Janas	16365 Hamstring Rd, Fayetteville, AR 72703	001-17521-000, 001-17522-000	use of Harmon road, visibility at harmon road entrance/exit, trucks traveling up the hill, waste of energy for trucks to go downhill and then up same hill to get to highway, other access roads could be used	x			8/6/2014	received after packets were mailed 7/31/2014
Hawkins, James and Baumgartner, Lydia	15770 Quail Rd, Fayetteville, AR 72704	532-03038-000, 532-03039-000	noise, dumptrucks on highway, aggressive driving of dump trucks	x			8/7/2014	received after packets were mailed 7/31/2014
Bale, Patricia	15210 Harmon Rd, Fayetteville, AR 72704	001-11585-001	dump trucks on road, concerned well water may be disturbed	x			8/7/2014	received after packets were mailed 7/31/2014
Purcell, Floyd and Patricia	15218 Riches Rd #841, Fayetteville, AR 72704-7819	001-11590-000, 001-11590-002	blasting concerns, well water may be disturbed	x			8/7/2014	received after packets were mailed 7/31/2014
Sullivan, Kenneth	16313 Hamstring Rd, Fayetteville, AR 72704-9471	001-11491-000, 001-11492-000, 001-17528-000, 001-17529-000	reclamation, close proximity to UA wells that contain nuclear waste, dump trucks holding up traffic on Harmon Rd	x			8/7/2014	received after packets were mailed 7/31/2014
Main, Alford and Sherry	15574 Riches Rd, Fayetteville, AR 72704	001-11579-000, 001-11495-000, 001-11580-000	terminated ADEQ stormwater permit, no surface mining permit, other nearby mining sites	x			8/7/2014,	received at Planning Board meeting 8/7/2014
Nancy Stokes	13626 Dogwood Dr, Fayetteville, AR 72704-8243	532-03004-000	site visibility at Harmon Rd exit, many opposed neighbors, safety, use of Harmon rd, dump trucks on road, chipped windshields from rocks on road, narrow road, property values, blind curves on Harmon, speeding dump trucks, wildlife safety,	x			8/7/2014	received at Planning Board meeting 8/7/2014



Cook, Ronnie	16121 Harmon Rd, Fayetteville, AR 72704	536-03054-000	use of Harmon Rd instead of Riches Road	x			10/10/2014	
--------------	--------------------------------------------	---------------	--------------------------------------------	---	--	--	------------	--

**Rich Red Dirt emailed comments recieved**

property owner	address	parcel #	comments	opposed	neutral/no comment	in favor	date recvd	Planning Staff comments
Kimberly Erstine		532-03000-000	traffic, safety, entrance/exit of Harmon Rd	x			7/15/2014	
Martha Ritchie	PO Box 688, Frairie Grove, AR 72753	532-02970-000 532-02971-000 532-02972-000	traffic, safety, entrance/exit of Harmon Rd, property values, unenforceable promises, property values, safety, disruption in living standard, use of Harmon road instead of Riches Road, dirt adhering to dump truck tires as a safety issue	x			7/15/2014, 8/25/14, 8/28/14	
Phillips Jones	13516 Dogwood Dr. Fayetteville, AR 72704-9383	532-03017-000	noise, pollution, property value, traffic , quality of life	x			7/13/2014	
Bill Roberson	13436 Mimosa Ln, Fayetteville , AR 72704-8307	532-03012-000	traffic, safety, entrance/exit of Hwy 16, drainage, environmental,	x			7/10/2014	
Aruther and Kristine Brown	13523 Dogwood Dr, Fayetteville , AR 72704-8027	532-03025-000	traffic, safety, entrance/exit of Harmon Rd, blasting, water runoff, property value,	x			7/14/2014, 8/26/2014	
Kwan, Timothy C	13792 W Hwy 16 Fayetteville, AR 72704	001-11543-002	debris, traffic, road conditions, wild life / environmental impact	x			7/14/2014	This neighbor also sent a mailed letter on 7/17/2014
Dick and Julie Johnson	13650 Pin Oak Rd, Fayetteville, AR 72730	532-03028-000	entrance safety, bicycle route, Hwy 16 stop sign, noise and dust	x			7/14/2014	
Paul & Bonita Osmon	13649 Dogwood Dr, Fayetteville, AR 72704-8300	532-03020-000 532-03021-000	property value, traffic, safety, noise pollution, road, Harmon rd entrance, property values, zoning	x			7/16/2014, 8/28/2014	
Christina Smith	16149 Beechnut Lane Fayetteville, AR 72704	548-03171-000	entrance/exit of Harmon Rd, safety, environmental	x			7/17/2014	
Jorgenson Trust	15938 Harmon Road, Fayetteville, AR 72704	001-11494-000, 001-11507-000, 001-11509-001	Harmon Rd exit, road safety, traffic, property line dispute in 2003 (resolved)	x			7/24/2014	
Glen n and Linda Morgan Revocable Trust	14006 Cardinal Lane, Fayetteville, AR 72704	540-03120-000, 540-03121-000	road safety, entrance to Harmon Rd, road maintenance	x			7/29/2014	

Terri Davis-Beaupre	16035 Beechnut Lane, Fayetteville, AR 72704	548-03175-000	road safety, entrance to Harmon Rd	x			8/4/2014	received after packets were mailed
Mistie D. Norvell	13456 Persimmon Ln, Fayetteville, AR 72704	536-03056-000	road safety, dump trucks a hazard to school buses	x			1/20/2015	

### Rich Red Dirt Call List

caller	address	parcel #	comments	opposed	neutral/no comment	in favor	date	Planning Staff comments
Gloria Mitchell		532-02975-000	Called to state that they have a new address. Staff informed them that they should also change their address with the Assessor. They said they would. New address: 517 Bradford Park ct, Loganville, GA 30052		x		7/10/2014	JBR followed up with them 7-11-14 to verify that they didn't have any other comments at this time. They did not.
Laura Hutchison/ Margaret Hutchison	16372 Hamestring		Just calling to make sure there is no blasting and verify the location proposed. May send in a comment later.				7/11/2014	
Ronnie Cook			he wanted to verify that there will be no blasting. JBR verified that there will not be blasting. 7-11-14		x		7/9/2014	JBR followed up with him 7-11-14. He has no further comments at this time.
Lloyd Miller (Pauletta is property owner)			Harmon Road is already hazardous. Wedington Woods residents built Harmon- they were promised by County that Harmon Road would be upgraded to HWY 16 standards (similar road section?). It is currently a dangerous situation. The county is going back on its word to protect/maintain/build the road. the mid 1980s is when the agreement was made (as per another neighbor that Lloyd Miller talked to). Cars coming down the steep hill will hit the trucks. IT was promised that Harmon Road would be maintained to the same conditions as HWY 16 W. If Harmon Road was torn up then it would be inferior to HWY 16.	x			7/9/2014	spoke with CTM on 7/9/14. said he would call back later. JBR tried to call the phone # back and left a vm message on 7-11-14. JBR spoke with him again at a later date, 7-13-14.
Sue Gooding	Riches Road		Not in favor. Dirt pit should not be allowed if so many people are against it.	x			8/7/2014	
Davidson, Sharon and Belt, Charles	904 E Rogers Street, Fayetteville, AR 72701		driveway location most dangerous area on Wedington, their son lives in this area	x			8/22/2014	

## **Appeal Document filed by the Applicant**

CC 2011-8



WASHINGTON COUNTY PLANNING OFFICE  
2615 Brink Drive, Suite 102  
Fayetteville, AR 72701  
(479) 444-1724  
(479) 444-1786 - Fax  
PLANNING BOARD/ZBA DECISION APPEAL

2014 DEC -5 PM 1:37  
BRYLE WALTER  
COUNTY CLERK  
WASHINGTON COUNTY, AR

FILED

I, Benny Holtzclaw  
name  
139 San Jose, Springdale, AR 72764  
address  
(479) 756-0254  
phone/email

am hereby filing an appeal of a recent decision of the Washington County Planning Board/ Zoning Board of Adjustments (ZBA). My appeal is being filed within thirty (30) days of the decision as required by Ordinances 2009-33, 43, 67, and 2010-02 amending Section 11-206; "Appeals from Board" in "Chapter 11-Planning and Development, Article VI-Zoning" in Washington County, Arkansas.

During the November 6th, 2014 meeting of the Washington County Zoning Board of Adjustments, a Conditional Use Permit (CUP) was presented for approval. The CUP was for a (circle one) Commercial Use Industrial Use Residential Use / Other Use, located in Section 4 & 5, Township 16 North, Range 31 West, in Washington County.

My understanding of the decision of the Washington County ZBA is as follows:

SEE EXHIBIT ONE

I am appealing this decision to the Quorum Court for the following reasons:

SEE EXHIBIT TWO

I understand that the Quorum Court will follow the same procedures as the Washington County ZBA to reach a decision. The decision of the Quorum Court may be appealed to Circuit Court within thirty (30) days from said decision. I certify the above statements are correct to the best of my knowledge. (If extra room is needed please attach additional sheets.)

Benny Holtzclaw  
(signature)

12-4-14  
date

## EXHIBIT ONE

Request for a conditional use permit was denied for the following reasons:

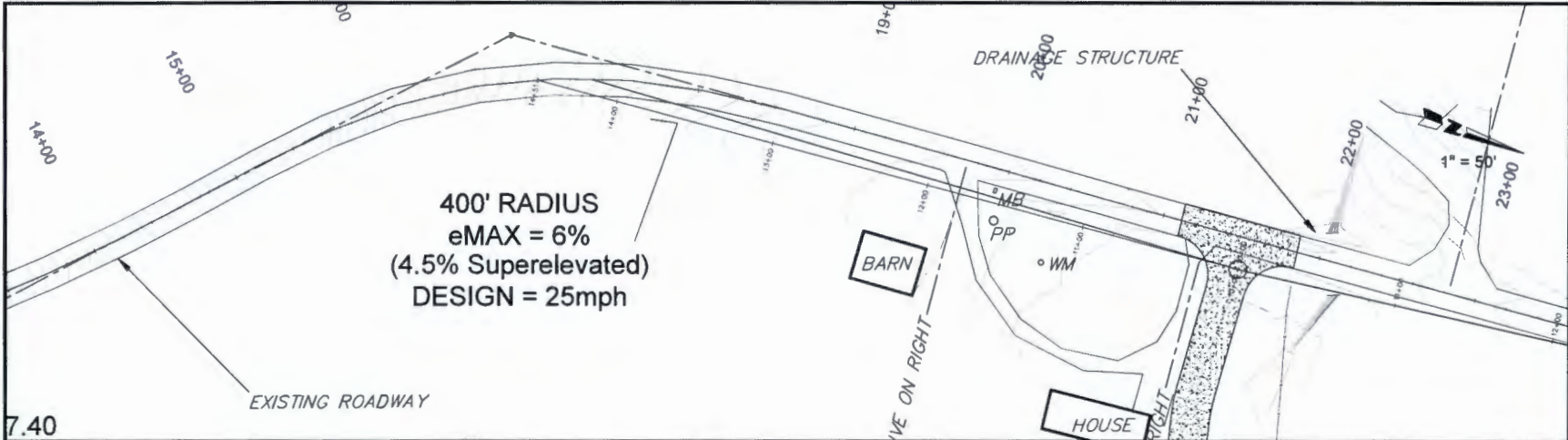
1. Safety - primarily intersection sight distance on an existing drive to be modified and buffers to adjacent property.
2. Compatibility issues.
3. There is a high likelihood that this project will be injurious (causing harm, hurt, damage, or distress) to the use and enjoyment of some of the other property in the surrounding area for the purposes already permitted.

## EXHIBIT TWO

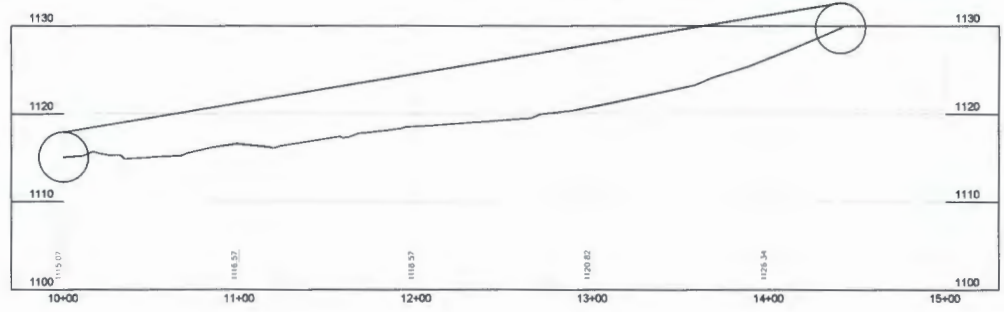
1. Safety-All designs are set for 45mph per zoning staff unless applicant could prove Harmon road does not meet 45mph design. Our engineer surveyed the site and stamped a drawing stating that existing horizontal and vertical alignments for Harmon road only meets 20 mph design. **Immediately preceding the hearing, Staff changed sight distance requirement from 500 feet (Current ordinance) to 628 feet (not a current ordinance) without properly notifying the applicant prior to the hearing.**
2. Compatibility - Site is situated between a U of A hazardous waste site adjacent to Harmon Road to the west and existing rock quarry and dirt mining pits to the east as well as having previous pits under reclamation on the applicant's owner's 123 acre farm. Staff determination of non-compatibility issue is being challenged. We request the zoning staff basis for their determination of incompatibility.
3. Injurious to surrounding property already permitted - Applicant has a current open mining permit in effect on his land for reclamation purposes. We request the zoning staff basis for their determination of significantly affecting surrounding property values. It is our contention that some will actually increase in value.



**Current Sight Distance information provided by the  
Appellant's Engineer, Mike, Kelly, P.E.**



7.40



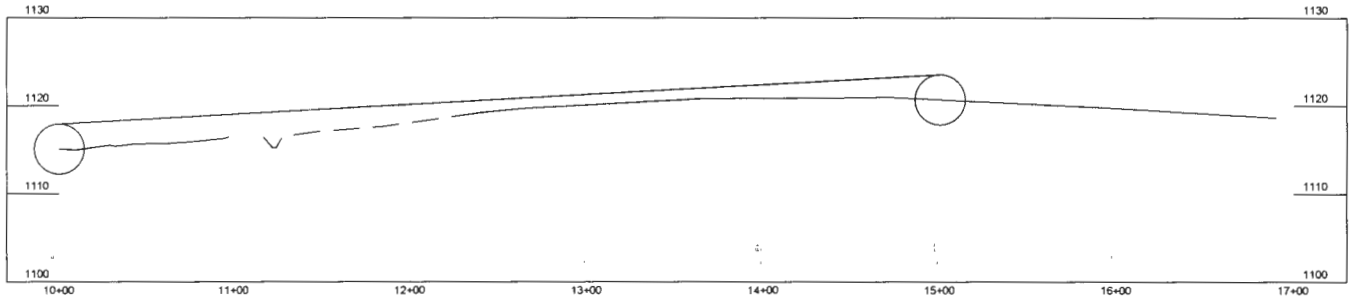
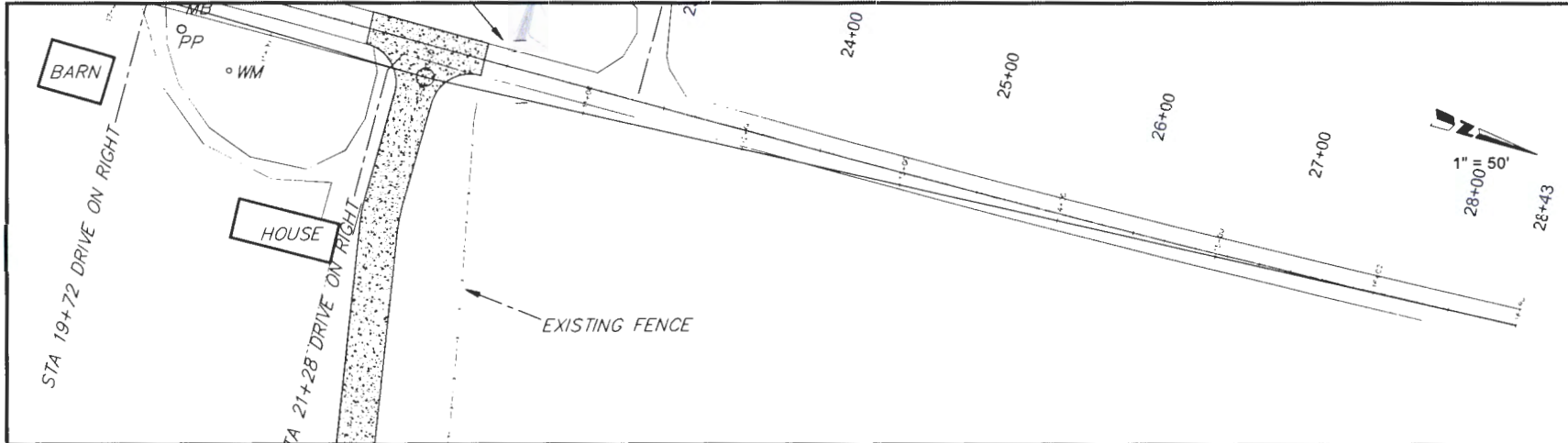
Vertical Profile to the South Profile  
10+00.00 to 15+00.00

$$H = 50$$

$$V = 10$$

**Sight Distance = 446.36'**

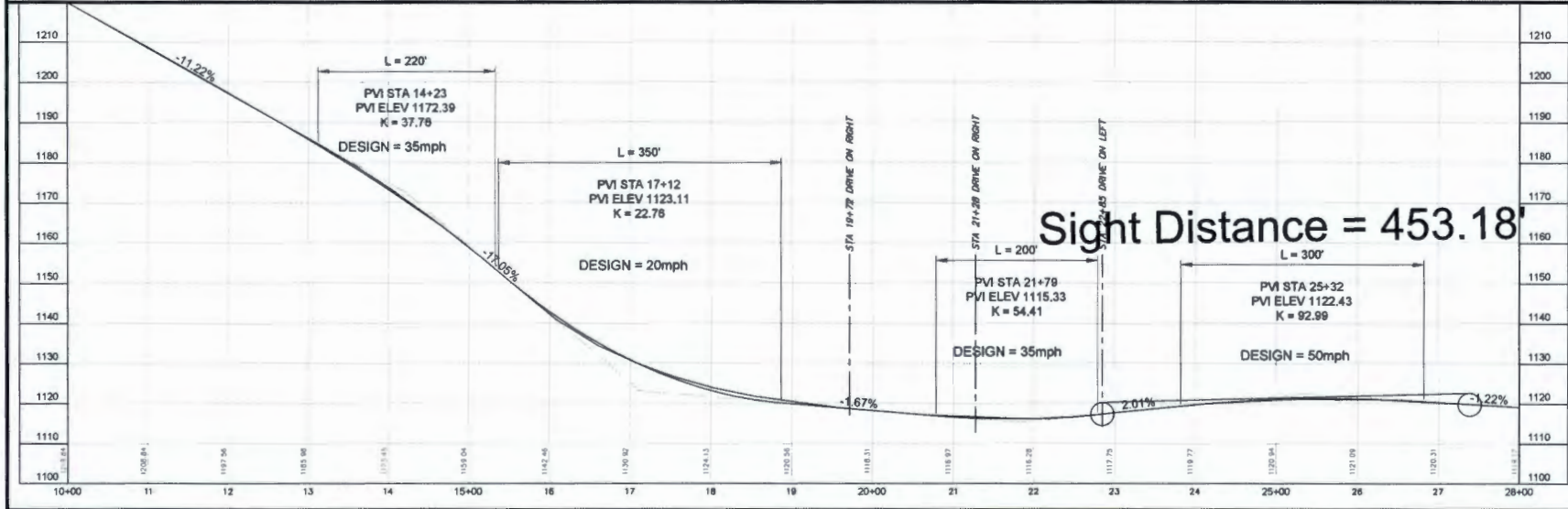
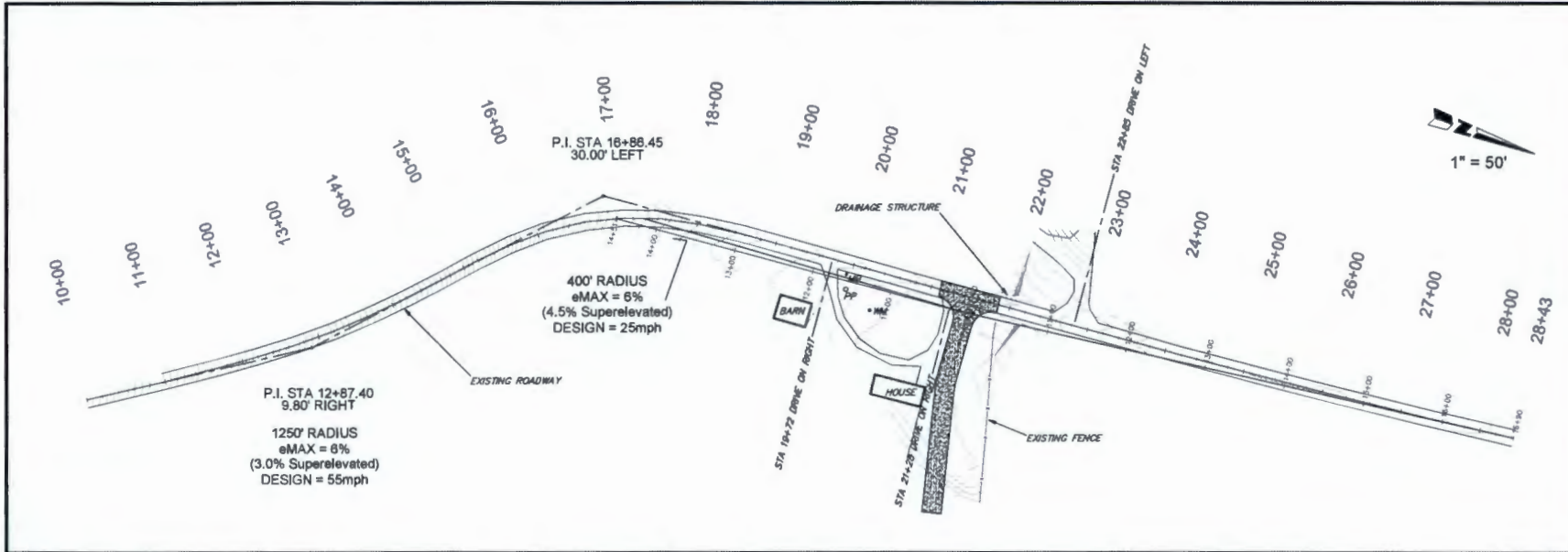
PLAN AND PROFILE  
STA 10+00 TO STA 28+00  
DATE: 10/20/14  
CHECK BY: [blank]  
DESIGN BY: DM  
KELLY  
ENGINEERING  
& ASSOCIATES, INC.



Vertical Profile to the North Profile  
 10+00.00 to 17+00.00  
 H = 50'  
 V = 10'

**Sight Distance = +500'**

PLAN AND PROFILE  
 STA 10+00 TO STA 28+00  
 CHECKED BY: [blank] DATE: 12-20-14 SHEET 1 OF 1  
 KELLY ENGINEERING & ASSOCIATES, INC.



PLAN AND PROFILE  
STA 10+00 TO STA 28+00

DATE: 10/20/14

CHECK BY: [ ]

DESIGN BY: [ ]

KELLY  
ENGINEERING  
& ASSOCIATES, INC.

**Site Plan, CUP narrative, and profile submitted by the  
applicant's Engineer, Mike Kelly, P.E.**

Rich Red Dirt  
Open Cut (Knoll Removal) Soil Mining Project  
CUP Requested Use Narrative (Revised 10/18/14)

The purpose of this project is to remove red dirt from an existing 9.3 acre knoll located on a 123 acre property as indicated on the location map. A haul road will need to be constructed in order to accomplish this task which will access Harmon Road. This property has previously experienced red dirt removal through mining permits established through the Arkansas Department of Environmental Quality.

The following statements shall apply to this facility:

- This will be a temporary project with a life cycle of approximately 5 years.
- There will be an insignificant impact to drainage. To assure this, a detailed drainage study shall be submitted for Large Scale Development (LSD) plan approval.
- Erosion Control measures will be designed and established to assure slope stability and minimal impact to storm water runoff.
- Entrance to the property will be protected by fencing and gates with proper signage and lighting.
- A formal traffic study will be provided for preliminary LSD approval. Trucks Entering Highway signs will be established along Harmon Road near the entrance for safety.
- Operation hours of the facility will be weekdays 7:30 am to 5:30 pm during summer months and 8:00 am to 4:30 pm during winter months.
- The facility will be closed for inclement weather.
- Traffic will be increased as demand increases. It is estimated an average of 50 trucks per day will be using this facility which will take approximately one year to generate traffic volume.
- Egress to Harmon Road will be monitored and kept clean and kempt at all times with a no tracking tolerance threshold.
- A geotechnical investigation for the pavement structure on Harmon road will be analyzed with the new loading to assure preservation of the existing pavement.
- Equipment necessary for the operation of this facility will be trucks, track hoe, track loader, bull dozer and water sprinkling equipment to assure dust control.
- No fuel, chemicals or hazardous material will be stored on this site.
- Topsoil will be salvaged in a berm surrounding the dirt removal site then reapplied for reclamation purposes. This increases the buffer for
- Reclamation (applying topsoil and vegetation) will be continuous as removal of the knoll progresses.
- No blasting will be performed under any circumstance.

- An increased buffer for the entrance to the site is proposed distance wise and a 3 foot high by 230 foot long berm will be constructed adjacent to the fence with cedar trees planted in a dense format on top of the berm for increased buffer.
- A fifty foot buffer will be obtained between the knoll removal site and the property line to the south and west of. Topsoil berms approximately 4 feet high will be constructed as well for additional protection.
- A permit will be required and obtained by the Arkansas Department of Environmental Quality.
- The conditional use permit will not impede the normal and orderly development and improvement of the surrounding area. Mr. Rich already has a DEQ permitted mine on his property that is in the process of being reclaimed.

The vision of the owner is to obtain a conditional use permit to remove and haul off the existing soil knoll and create a flatter plain conducive for agricultural crops, cattle ranching or residential development.

**WASHINGTON COUNTY, ARKANSAS  
PROPOSED  
MINING DEVELOPMENT  
FOR  
RICH RED DIRT**







BEFORE YOU DIG,  
CALL OKIE FOR  
LOCATION OF  
UNDERGROUND UTILITIES.  
1-800-522-6543

**CONSTRUCTION SITE**

**EROSION CONTROL IS REQUIRED**

An approved method of erosion control is required by EPA Stormwater Management and the Clean Water Act. Control methods shall be submitted to the governing authority for approval.

# WASHINGTON COUNTY, ARKANSAS

## PROPOSED MINING DEVELOPMENT FOR RICH RED DIRT

KELLY ENGINEERING & ASSOCIATES, INC.		
DESCRIPTION	DATE	BY

INDEX OF SHEETS	
1	TITLE SHEET
2	CONCEPT PLAN
3	SITE PLAN
4	DRAINAGE PLAN
5	SWPPP

SCALES

1" = 400'

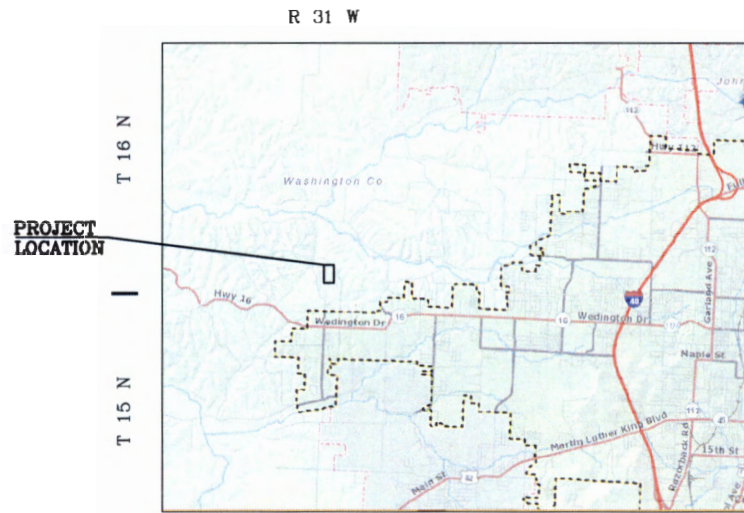
PLAN 1" = 400'

PROFILE HOR. 1" = NA

VER. 1" = NA

LOCATION MAP 1" = NA

- CONVENTIONAL SYMBOLS
- PROPOSED ROAD
  - BALDWIN
  - RANGE & TOWNSHIP
  - SECTION LINES
  - QUARTER SECTION LINES
  - FENCE
  - CROWN LINE
  - EXISTING ROADS
  - BRIDGE LINE
  - CROSS LINES
  - TELEPHONE & TELEGRAPH
  - POWER LINES
  - BUILDINGS
  - GRASS STRUCTURES - IN PLACE
  - GRASS STRUCTURES - NEW
  - RIGHT-OF-WAY LINES - EXISTING
  - RIGHT-OF-WAY LINES - NEW
  - RIGHT-OF-WAY MARKERS - IN PLACE
  - RIGHT-OF-WAY MARKERS - REMOVE & REPLACE
  - RIGHT-OF-WAY MARKERS - NEW
  - CONTROLLED ACCESS
  - RIGHT-OF-WAY FENCE
  - LIGHT POLE



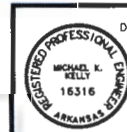
LOCATION MAP

OWNER: MARK RICH  
15721 RICH'S ROAD  
FAYETTEVILLE, AR 72704  
(479) 601-6701

DEVELOPER: BENNY HOLZCLAW  
139 SAN JOSE  
SPRINGDALE, AR 72704-2637  
(479) 756-0254

ENGINEER: MICHAEL K. KELLY, P.E.  
P.O. BOX 715  
TAHLEQUAH, OK 74465  
(918) 521-7936

PLANS PREPARED BY  
**KELLY**  
ENGINEERING  
& ASSOCIATES, INC.  
PHONE (918) 521-7936



DESIGN BY:

MICHAEL K. KELLY, P.E. NO. 17710



**LEGAL DESCRIPTION OF PROJECT**

A tract of land lying in and being a part of the SE4 of Section 5 and lying in the W2 of the SW4 of the SW4 of Section 4 Township 16 North Range 31 West, in Washington County, State of Arkansas being more particularly describe by metes and bounds as follows:

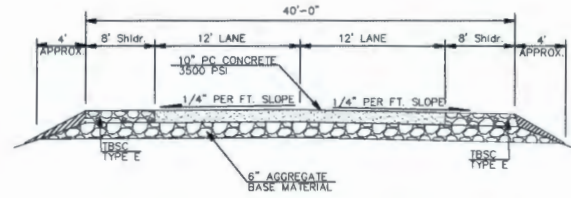
Beginning at the SE corner of the SE4 of Section 5 thence S 00°00'00" W along the South line of the SE4 of Section 5 a distance of 257.24 feet; thence N 00°00'00" W a distance of 842.05 feet; thence N 78° 09'15" W a distance of 288.10 feet; thence S 00°00'00" W a distance of 621.08 feet to the Center line of a County Road; thence N 03°47'08" E along the Center of said County Road a distance of 378.83 feet; thence N 90°00'00" E a distance of 1795.27 feet to the East line of the SE4 of the SE4 of Section 5 to the NW Corner of the SW4 of the SW4 of Section 4; thence N 90°00'00" E along the North line of the SW4 of the SW4 of Section 4 a distance of 860.00 feet to NE corner of the W2 of the SW4 of the SW4 of Section 4; thence S 00°00'00" W along the East line of the W2 of the SW4 of the SW4 of Section 4 a distance of 1320.00 feet to the SE corner of the SW4 of the SW4 of Section 4; thence S 00°00'00" W along the South line of the W2 of the SW4 of the SW4 of Section 4 a distance of 880.00 feet to the POINT OF BEGINNING;

PROPERTY IS NOT IN THE 100 YEAR FLOOD PLANE ACCORDING TO FIRM PANEL 654003A5F EFFECTIVE 5/16/2006

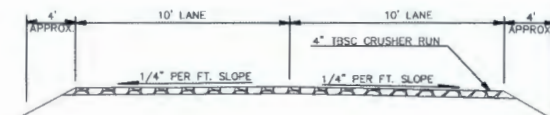
STORMWATER POLLUTION PREVENTION PLAN WILL BE PROVIDED BY THE ENGINEER.

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY PERMIT WILL BE OBTAINED BY THE DEVELOPER

MINING SOILS FROM NRCS = NAC  
NDA VERY GRAVELLY SILT LOAM 3-4% SLOPES



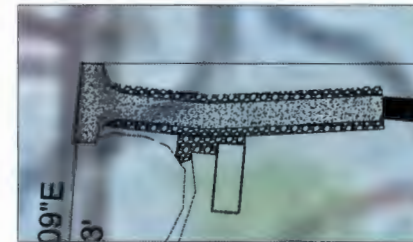
TYPICAL SECTION FIRST  
250' FROM HARMON ROAD



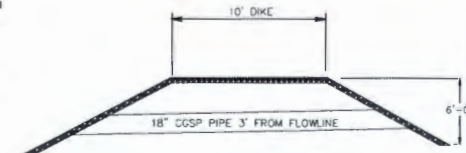
TYPICAL SECTION AFTER  
250' FROM HARMON ROAD

The following statements shall apply to this facility

- Drainage - Drainage intensity will be reduced not increased. Since we are reducing the average slope of the drainage basin, a longer time of concentration will be created for the storm water runoff which will actually reduce the intensity of runoff for this development. No detention facilities will be required for drainage. However, a detention facility will be proposed for two adjacent basins where the road and limit crosses wet weather streams. A detailed drainage study shall be submitted for preliminary plan approval for the Large Scale Development.
- Erosion Control measures will be designed and established to assure slope stability and minimal impact to storm water runoff. Six fences, six dikes and sediment basins will be designed to assure minimal storm water pollution leaves the site.
- Entrance to the property will be protected by fencing and gates with proper signage and lighting. Truck entrance signs will be placed along Harmon road for entrance safety.
- Operation hours of the facility will be weekdays 7:30 am to 3:30 pm during summer months and 8:00 am to 4:30 pm during winter months.
- The facility will be closed for inclement weather which includes 1/4" of rain and or snow.
- Right of way utility - Adequate right of way utility will be obtained. A detailed traffic study will be submitted for the preliminary L&D.
- A professional investigation will be conducted and recommendations follow for pavement preservation.
- Traffic - It is estimated an average of 30 trucks per day will be using this facility which will take approximately one year to generate traffic volume.
- Access to Harmon Road will be maintained and kept clean and kept at all times with a no tolerance threshold for the drivers.
- Equipment necessary for the operation of this facility will be trucks, tractor, hoe, back loader, ball down and water spreading equipment for dust control.
- No fuel, chemicals or hazardous material will be stored on this site.
- Topsoil will be salvaged as a berm around the perimeter of the site and stored locally for reclamation purposes.
- Reclamation (topsoil and vegetation) will be continuous as removal of the soil progresses.
- Absolutely no blasting will be performed under any circumstances.
- Buffers - A fifty foot buffer will be obtained between the front removal site and the property lines to the south and west. The entrance road buffer varies from 28'-35' from the north edge of the proposed entrance to the property line. Moving the drive further south to create more of a buffer would decrease safety sight distance.
- A permit will be required and obtained by the Arkansas Department of Environmental Quality.



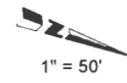
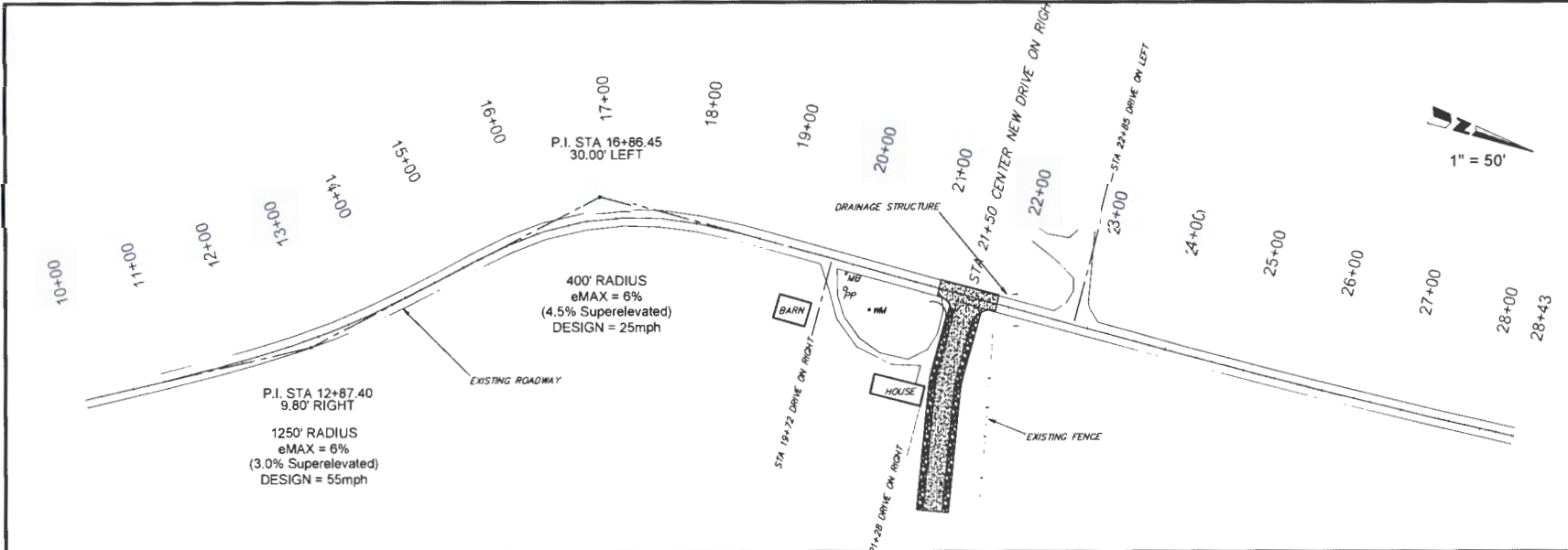
PROPOSED ENTRANCE  
PLAN VIEW NTS



SEDIMENT CONTROL



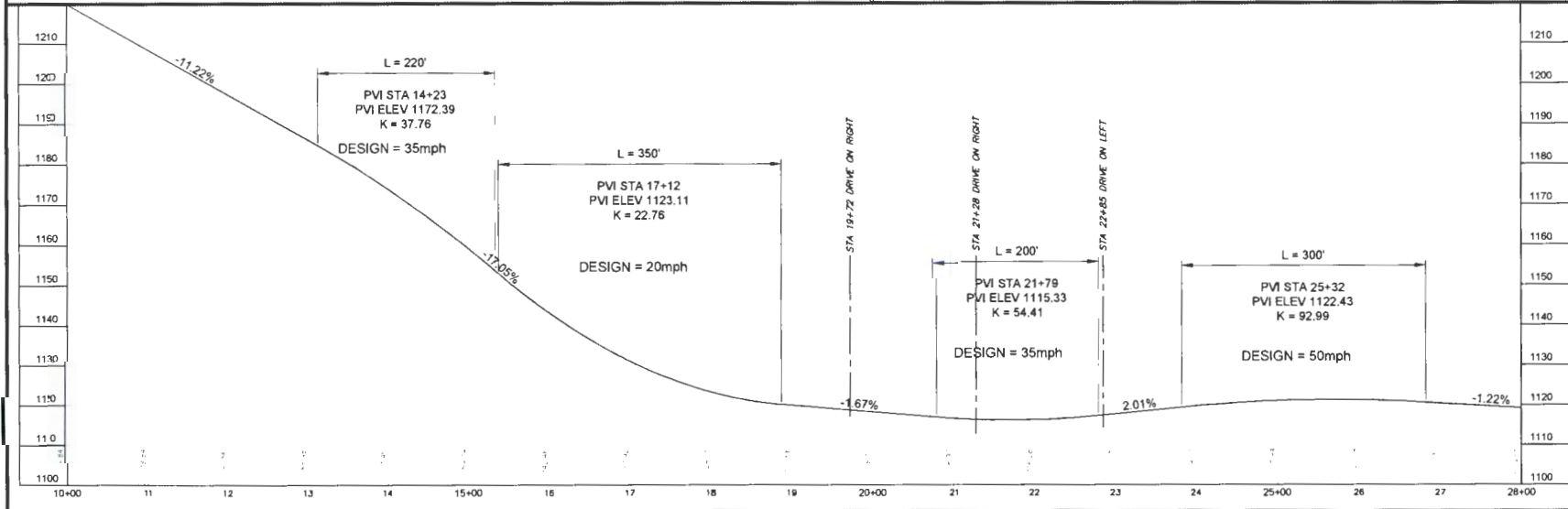
CONCEPTUAL PLAN  
 RICH RED DIRT  
 RICH RED DIRT  
 10 ACRE MINING DEVELOPMENT  
 WASHINGTON COUNTY  
 KELLY  
 ENGINEERING  
 & ASSOCIATES, INC.



1" = 50'

PLAN AND PROFILE  
 STA 10+00 TO STA 28+00

DESIGNER: BR. ON  
 CHECKED: J. MK  
 DATE: 12-20-14  
 SHEET: 1 OF 1



**KELLY**  
 ENGINEERING  
 & ASSOCIATES, INC.

**January 29, 2015**

**Letter and Plan/Profile information regarding the  
applicable section of Harmon Road from  
Washington County Contract Engineer, Clay Grote, P.E.**

# A. CLAY GROTE, P.E.

10585 Thunder Road, Fayetteville, AR 72701  
Ph (479) 409-6406  
Email: clay@aconcretesesi.com

---

---

January 29, 2015

Washington County Planning Dept.  
2615 Brink Dr.  
Fayetteville, AR 72701

RE: Rich Red Dirt Pit CUP – Design Speed of Harmon Rd. and Required Sight Distance for the Proposed Project.

Juliet,

This letter is a summarization of my calculations of the geometric alignment of Harmon Road in regards to the project known as Rich Red Dirt Pit CUP. Harmon Road currently has a posted speed of 45 mph.

As you know, the County Road Department surveyed the existing roadway known as Harmon Rd. I then took the points and generated the roadway's vertical and horizontal alignment (see attached plan and profile sheet). I then compared the existing conditions to some of the design considerations in the manual known as "The Green Book" (AASHTO's Policy on Geometric Design of Highways and Streets 2011 6<sup>th</sup> edition). It is important to note that the Green Book is a design manual for new roadways, and I am using the manual to model the characteristics of the existing roadway Harmon Rd.

I calculated the design speed of the sag vertical curves at and near the site using equation 3-51 on page 3-160 in the Green Book. The equation states that the length of the sag vertical curve is equal to the algebraic difference in grades multiplied by the square of the design speed divided by a factor of 46.5. The sag vertical curve within the project's proposed drive location has a length of 300 ft, and an algebraic difference in grades of 4.14. This yielded a speed of 58 mph. The sag vertical curve south of the proposed drive location has a length of 355 ft, and an algebraic difference in grades of 15.13. This yielded a speed of 33 mph.

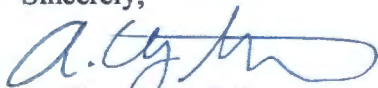
I analyzed the horizontal alignment of the curve near the site that corresponds with the sag vertical curve that yielded 33 mph. The horizontal curve has a radius of 400 feet. The northbound lane, which is the lane that is heading toward the proposed site, has a superelevation greater than 8%. Using Table 3.9 in the Green Book for roadways with a max superelevation of 8%, the design speed of the northbound lane along the curve has a design speed of 35 mph.

The proposed location of the drive of the Rich Red Dirt Pit is in the sag vertical curve that yielded a design speed of 58 mph which is greater than the posted speed of 45 mph. The curve to the south of the project yields a 35 mph design speed, which currently has an advisory speed of

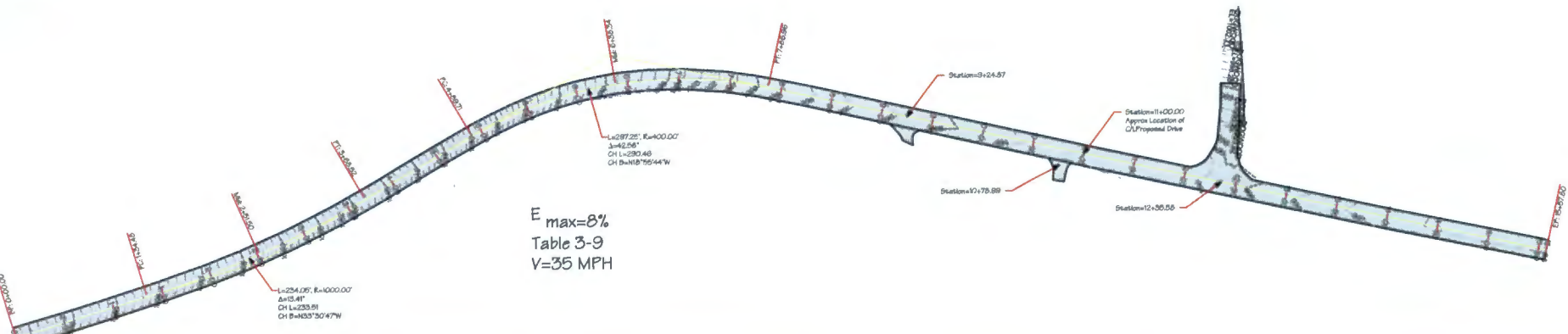
25 mph. The portion of Harmon Rd. to the north of the site yields a design speed equal to the posted speed of 45 mph. In conclusion, after analyzing the existing roadway with the location of the proposed drive, it is my professional opinion that the findings do not warrant a change in the posted speed at the section of Harmon Road.

The basis of all these calculations is to determine the appropriate sight distance for the intersection of Harmon Road and the proposed drive location of the site. Since this is a proposed red dirt pit, the traffic leaving the site will primarily be single-unit trucks. According to the Green Book the time gap for a stopped single-unit truck to turn left onto a two-lane highway with no median and with grades less than 3 percent is 9.5 seconds (Table 9-5). Using equation 9-1 for determining sight distance, the site distance needed to make a left turn onto a 45 mph roadway is 628 feet. According to the submittal provided by the developer, the proposed site has an intersection sight distance of 446 feet. In conclusion, the proposed drive of the proposed does not have enough sight distance to be able to safely make left turns onto Harmon Road.

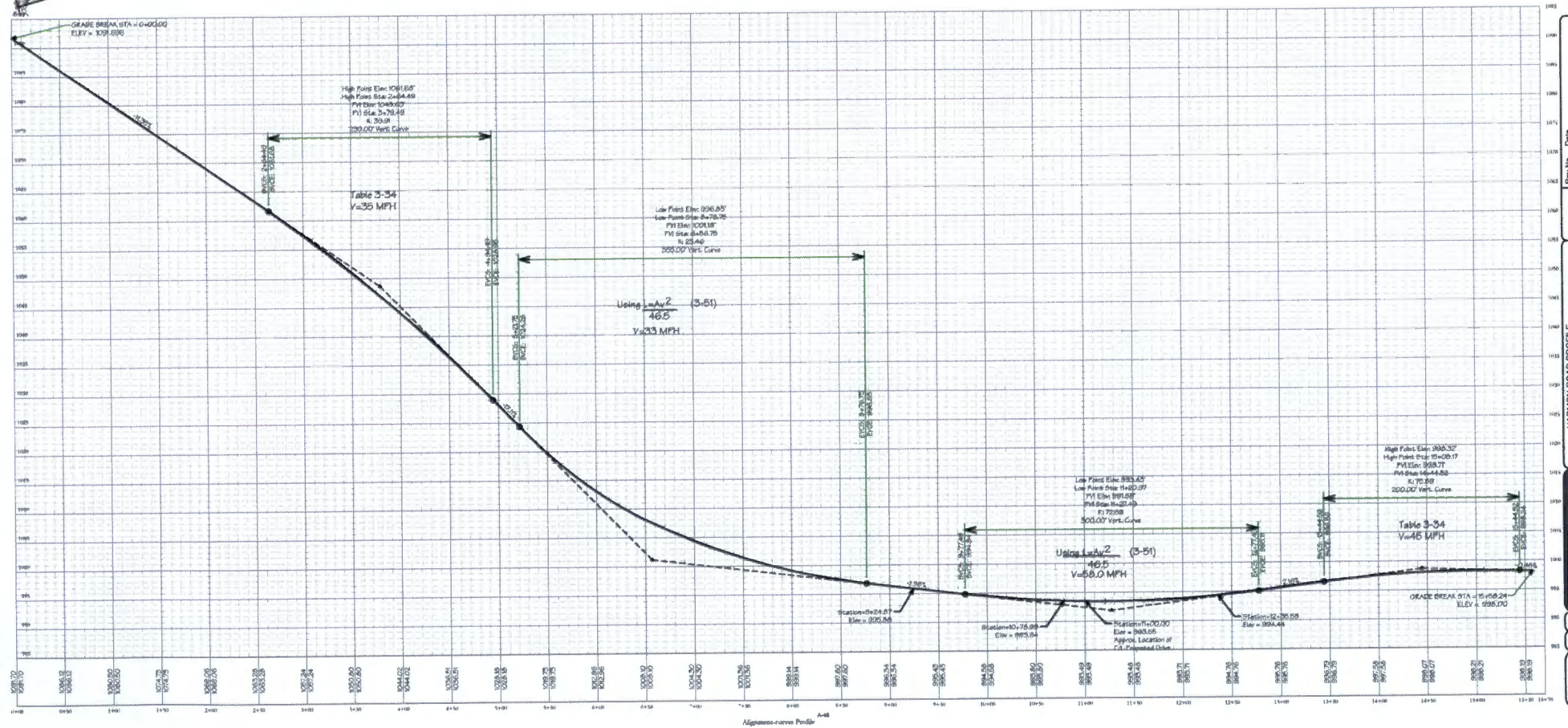
Sincerely,



A. Clay Grote, P.E.  
clay@aconcretesi.com  
479-406-6406



E<sub>max</sub>=8%  
Table 3-9  
V=35 MPH



Drawn BY:	ETH	Checked BY:	ACD
Rev. No.		Date	
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			
71			
72			
73			
74			
75			
76			
77			
78			
79			
80			
81			
82			
83			
84			
85			
86			
87			
88			
89			
90			
91			
92			
93			
94			
95			
96			
97			
98			
99			
100			
101			
102			
103			
104			
105			
106			
107			
108			
109			
110			
111			
112			
113			
114			
115			
116			
117			
118			
119			
120			
121			
122			
123			
124			
125			
126			
127			
128			
129			
130			
131			
132			
133			
134			
135			
136			
137			
138			
139			
140			
141			
142			
143			
144			
145			
146			
147			
148			
149			
150			
151			
152			
153			
154			
155			
156			
157			
158			
159			
160			
161			
162			
163			
164			
165			
166			
167			
168			
169			
170			
171			
172			
173			
174			
175			
176			
177			
178			
179			
180			
181			
182			
183			
184			
185			
186			
187			
188			
189			
190			
191			
192			
193			
194			
195			
196			
197			
198			
199			
200			

Scale: HARMON ROAD PROFILE  
Job #: 2015-01-28  
Owner: WASHINGTON COUNTY  
Address: HARMON ROAD  
City/State: WASHINGTON CO, AR

A. Clay Grote P.E.  
1056 TRANGLE RD  
FAYETTEVILLE, ARKANSAS 72701  
P.O. BOX 11111  
FAYETTEVILLE, ARKANSAS 72701

SCALE: 1"=50'  
PLOT DATE: 12/11/15  
Sheet 1

**Citations from the AASHTO Green Book,  
“A Policy on Geometric Design of Highways and Streets,  
2011, 6<sup>th</sup> Edition.”**



A Policy on  
**Geometric  
Design of  
Highways  
and Streets**

2011  
6th Edition



AMERICAN ASSOCIATION OF  
STATE HIGHWAY AND  
TRANSPORTATION OFFICIALS  
**AASHTO**  
THE VOICE OF TRANSPORTATION

at its junction with the major road. For simple unchannelized intersections involving low design speeds and stop or signal control, it may be desirable to warp the crowns of both roads into a plane at the intersection; the appropriate plane depends on the direction of drainage and other conditions. Changes from one cross slope to another should be gradual. Intersections at which a minor road crosses a multilane divided highway with a narrow median on a superelevated curve should be avoided whenever practical because of the difficulty in adjusting grades to provide a suitable crossing. Gradelines of separate turning roadways should be designed to fit the cross slopes and longitudinal grades of the intersection legs.

The alignment and grades are subject to greater constraints at or near intersections than on the open road. At or near intersections, the combination of horizontal and vertical alignment should provide traffic lanes that are clearly visible to drivers at all times, clearly understandable for any desired direction of travel, free from the potential for conflicts to appear suddenly, and consistent in design with the portions of the highway just traveled.

The combination of vertical and horizontal curvature should allow adequate sight distance at an intersection. As discussed in Section 3.5 on "Combinations of Horizontal and Vertical Alignment," a sharp horizontal curve following a crest vertical curve is undesirable, particularly on intersection approaches.

## 9.5 INTERSECTION SIGHT DISTANCE

### 9.5.1 General Considerations

Each intersection has the potential for several different types of vehicular conflicts. The possibility of these conflicts actually occurring can be greatly reduced through the provision of proper sight distances and appropriate traffic controls. The avoidance of conflicts and the efficiency of traffic operations still depend on the judgment, capabilities, and response of each individual driver.

Stopping sight distance is provided continuously along each highway or street so that drivers have a view of the roadway ahead that is sufficient to allow drivers to stop. The provision of stopping sight distance at all locations along each highway or street, including intersection approaches, is fundamental to intersection operation.

Vehicles are assigned the right-of-way at intersections by traffic-control devices or, where no traffic-control devices are present, by the rules of the road. A basic rule of the road, at an intersection where no traffic-control devices are present, requires the vehicle on the left to yield to the vehicle on the right if they arrive at approximately the same time. Sight distance is provided at intersections to allow drivers to perceive the presence of potentially conflicting vehicles. This should occur in sufficient time for a motorist to stop or adjust their speed, as appropriate, to avoid colliding in the intersection. The methods for determining the sight distances needed by drivers approaching intersections are based on the same principles as stopping sight distance, but incorporate modified assumptions based on observed driver behavior at intersections.

The driver of a vehicle approaching an intersection should have an unobstructed view of the entire intersection, including any traffic-control devices, and sufficient lengths along the intersecting highway to permit the driver to anticipate and avoid potential collisions. The sight distance needed under various

assumptions of physical conditions and driver behavior is directly related to vehicle speeds and to the resultant distances traversed during perception-reaction time and braking.

Sight distance is also provided at intersections to allow the drivers of stopped vehicles a sufficient view of the intersecting highway to decide when to enter the intersecting highway or to cross it. If the available sight distance for an entering or crossing vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions. However, in some cases, a major-road vehicle may need to stop or slow to accommodate the maneuver by a minor-road vehicle. To enhance traffic operations, intersection sight distances that exceed stopping sight distances are desirable along the major road.

### 9.5.2 Sight Triangles

Specified areas along intersection approach legs and across their included corners should be clear of obstructions that might block a driver's view of potentially conflicting vehicles. These specified areas are known as clear sight triangles. The dimensions of the legs of the sight triangles depend on the design speeds of the intersecting roadways and the type of traffic control used at the intersection. These dimensions are based on observed driver behavior and are documented by space-time profiles and speed choices of drivers on intersection approaches (12). Two types of clear sight triangles are considered in intersection design—approach sight triangles and departure sight triangles.

#### Approach Sight Triangles

Each quadrant of an intersection should contain a triangular area free of obstructions that might block an approaching driver's view of potentially conflicting vehicles. The length of the legs of this triangular area, along both intersecting roadways, should be such that the drivers can see any potentially conflicting vehicles in sufficient time to slow or stop before colliding within the intersection. Figure 9-15A shows typical clear sight triangles to the left and to the right for a vehicle approaching an uncontrolled or yield-controlled intersection.

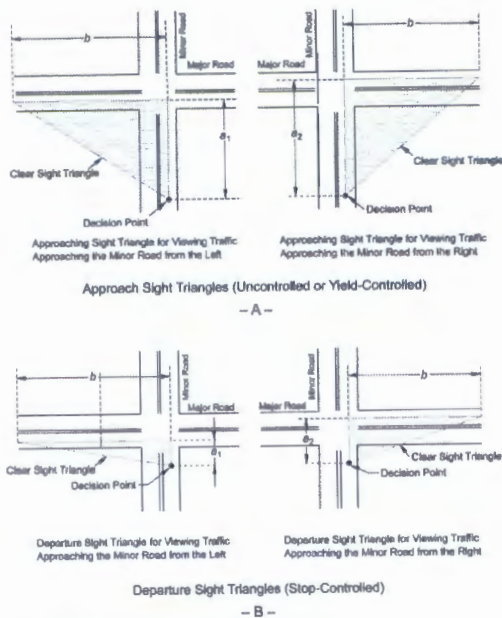


Figure 9-15. Intersection Sight Triangles

The vertex of the sight triangle on a minor-road approach (or an uncontrolled approach) represents the decision point for the minor-road driver (see Figure 9-15A). This decision point is the location at which the minor-road driver should begin to brake to a stop if another vehicle is present on an intersecting approach. The distance from the major road, along the minor road, is illustrated by the distance  $a_1$  to the left and  $a_2$  to the right as shown in Figure 9-15A. Distance  $a_2$  is equal to distance  $a_1$  plus the width of the lane(s) departing from the intersection on the major road to the right. Distance  $a_2$  should also include the width of any median present on the major road unless the median is wide enough to permit a vehicle to stop before entering or crossing the roadway beyond the median.

The geometry of a clear sight triangle is such that when the driver of a vehicle without the right-of-way sees a vehicle that has the right of way on an intersecting approach, the driver of that potentially conflicting vehicle can also see the first vehicle. Distance  $b$  illustrates the length of this leg of the sight triangle. Thus, the provision of a clear sight triangle for vehicles without the right-of-way also permits the drivers of vehicles with the right-of-way to slow, stop, or avoid other vehicles, if needed.

Although desirable at higher volume intersections, approach sight triangles like those shown in Figure 9-15A are not needed for intersection approaches controlled by stop signs or traffic signals. In that case, the need for approaching vehicles to stop at the intersection is determined by the traffic control devices and not by the presence or absence of vehicles on the intersecting approaches.

**Departure Sight Triangles**

A second type of clear sight triangle provides sight distance sufficient for a stopped driver on a minor-road approach to depart from the intersection and enter or cross the major road. Figure 9-15B shows typical departure sight triangles to the left and to the right of the location of a stopped vehicle on the minor road. Departure sight triangles should be provided in each quadrant of each intersection approach controlled by stop or yield signs. Departure sight triangles should also be provided for some signalized intersection approaches (see Case D in Section 9.5.3 on "Intersection Control"). Distance  $a_2$  in Figure 9-15B is equal to distance  $a_1$  plus the width of the lane(s) departing from the intersection on the major road to the right. Distance  $a_2$  should also include the width of any median present on the major road unless the median is wide enough to permit a vehicle to stop before entering or crossing the roadway beyond the median. The appropriate measurement of distances  $a_1$  and  $a_2$  for departure sight triangles depends on the placement of any marked stop line that may be present and, thus, may vary with site-specific conditions.

The recommended dimensions of the clear sight triangle for desirable traffic operations where stopped vehicles enter or cross a major road are based on assumptions derived from field observations of driver gap-acceptance behavior (12). The provision of clear sight triangles like those shown in Figure 9-15B also allows the drivers of vehicles on the major road to see any vehicles stopped on the minor-road approach and to be prepared to slow or stop, if needed.

**Identification of Sight Obstructions within Sight Triangles**

The profiles of the intersecting roadways should be designed to provide the recommended sight distances for drivers on the intersection approaches. Within a sight triangle, any object at a height above the elevation of the adjacent roadways that would obstruct the driver's view should be removed or lowered, if practical. Such objects may include buildings, parked vehicles, highway structures, roadside hardware, hedges, trees, bushes, unmowed grass, tall crops, walls, fences, and the terrain itself. Particular attention should be given to the evaluation of clear sight triangles at interchange ramp/crossroad intersections where features such as bridge railings, piers, and abutments are potential sight obstructions.

The determination of whether an object constitutes a sight obstruction should consider both the horizontal and vertical alignment of both intersecting roadways, as well as the height and position of the object. In making this determination, it should be assumed that the driver's eye is 1.08 m [3.50 ft] above the roadway surface and that the object to be seen is 1.08 m [3.50 ft] above the surface of the intersecting road.

This object height is based on a vehicle height of 1.33 m [4.35 ft], which represents the 15th percentile of vehicle heights in the current passenger car population less an allowance of 250 mm [10 in.]. This allowance represents a near-maximum value for the portion of a passenger car height that needs to be visible for another driver to recognize it as the object. The use of an object height equal to the driver eye height makes intersection sight distances reciprocal (i.e., if one driver can see another vehicle, then the driver of that vehicle can also see the first vehicle).

- TRAFFIC LIGHTS -  
 In Intersection Sight Triangles

Where the sight-distance value used in design is based on a single-unit or combination truck as the design vehicle, it is also appropriate to use the eye height of a truck driver in checking sight obstructions. The recommended value of a truck driver's eye height is 2.33 m [7.6 ft] above the roadway surface.

### 9.5.3 Intersection Control

The recommended dimensions of the sight triangles vary with the type of traffic control used at an intersection because different types of control impose different legal constraints on drivers and, therefore, result in different driver behavior. Procedures to determine sight distances at intersections are presented below according to different types of traffic control, as follows:

- Case A—Intersections with no control
- Case B—Intersections with stop control on the minor road
  - Case B1—Left turn from the minor road
  - Case B2—Right turn from the minor road
  - Case B3—Crossing maneuver from the minor road
- Case C—Intersections with yield control on the minor road
  - Case C1—Crossing maneuver from the minor road
  - Case C2—Left or right turn from the minor road
- Case D—Intersections with traffic signal control
- Case E—Intersections with all-way stop control
- Case F—Left turns from the major road

#### Case A—Intersections with No Control

For intersections not controlled by yield signs, stop signs, or traffic signals, the driver of a vehicle approaching an intersection should be able to see potentially conflicting vehicles in sufficient time to stop before reaching the intersection. The location of the decision point (driver's eye) of the sight triangles on each approach is determined from a model that is analogous to the stopping sight distance model, with slightly different assumptions.

While some perceptual tasks at intersections may need substantially less time, the detection and recognition of a vehicle that is a substantial distance away on an intersecting approach, and is near the limits of the driver's peripheral vision, may take up to 2.5 s. The distance to brake to a stop can be determined from the same braking coefficients used to determine stopping sight distance in Table 3-1.

Field observations indicate that vehicles approaching uncontrolled intersections typically slow to approximately 50 percent of their midblock running speed. This occurs even when no potentially conflicting vehicles are present (12). This initial slowing typically occurs at deceleration rates up to  $1.5 \text{ m/s}^2$  [ $5 \text{ ft/s}^2$ ]. Deceleration at this gradual rate has been observed to begin even before a potentially conflicting vehicle comes into view. Braking at greater deceleration rates, which can approach those assumed in stopping

sight distance, can begin up to 2.5 s after a vehicle on the intersecting approach comes into view. Thus, approaching vehicles may be traveling at less than their midblock running speed during all or part of the perception-reaction time and can, therefore, where needed, brake to a stop from a speed less than the midblock running speed.

Table 9-3 shows the distance traveled by an approaching vehicle during perception-reaction and braking time as a function of the design speed of the roadway on which the intersection approach is located. These distances should be used as the legs of the sight triangles shown in Figure 9-15A as dimensions  $a_1$  and  $b$ . Distance  $a_2$  is longer than distance  $a_1$ , as defined in discussion of "Approach Sight Triangles" in Section 9.5.2. Referring to Figure 9-15A, highway A with an assumed design speed of 80 km/h [50 mph] and highway B with an assumed design speed of 50 km/h [30 mph] need a clear sight triangle with legs extending at least 75 m and 45 m [245 and 140 ft] along highways A and B, respectively. Figure 9-16 shows the length of the legs of the sight triangle from Table 9-3.

Table 9-3. Length of Sight Triangle Leg—Case A, No Traffic Control

Metric		U.S. Customary	
Design Speed (km/h)	Length of Leg (m)	Design Speed (mph)	Length of Leg (ft)
20	20	15	70
30	25	20	90
40	35	25	115
50	45	30	140
60	55	35	165
70	65	40	195
80	75	45	220
90	90	50	245
100	105	55	285
110	120	60	325
120	135	65	365
130	150	70	405
—	—	75	445
—	—	80	485

Note: For approach grades greater than 3%, multiply the sight distance values in this table by the appropriate adjustment factor from Table 9-4.

This clear triangular area will permit the vehicles on either road to stop, if needed, before reaching the intersection. If the design speed of any approach is not known, it can be estimated by using the 85th percentile of the midblock running speeds for that approach.

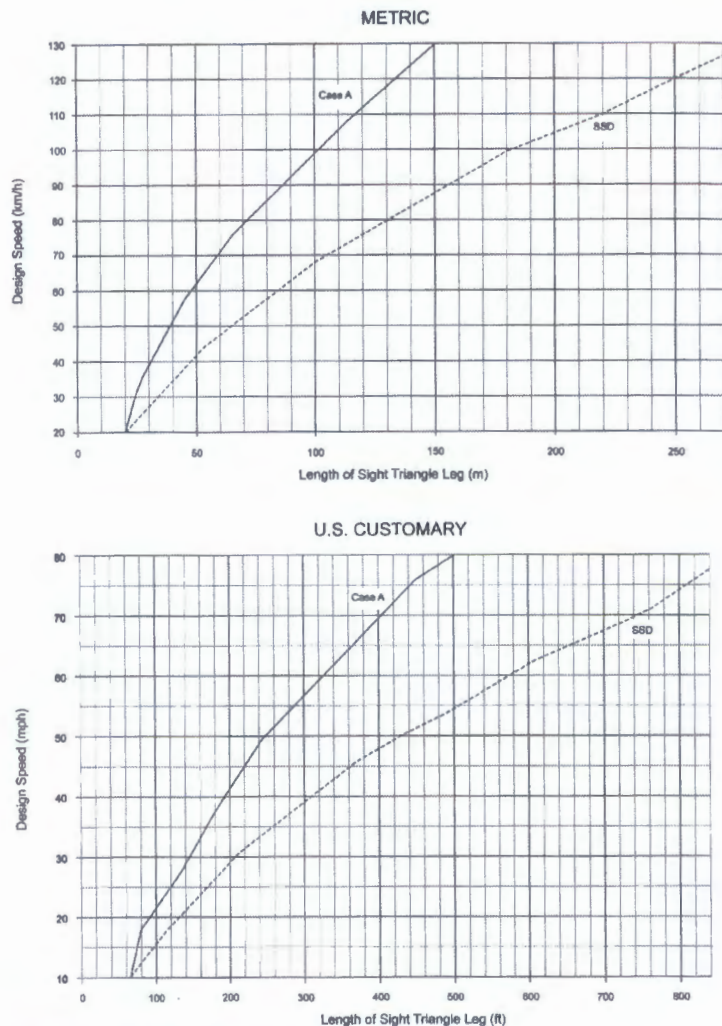


Figure 9-16. Length of Sight Triangle Leg—Case A, No Traffic Control

The distances shown in Table 9-3 are generally less than the corresponding values of stopping sight distance for the same design speed. This relationship is illustrated in Figure 9-16. Where a clear sight triangle has legs that correspond to the stopping sight distances on their respective approaches, an even greater margin of efficient operation is provided. However, since field observations show that motorists slow down to some extent on approaches to uncontrolled intersections, the provision of a clear sight triangle with legs equal to the full stopping sight distance is not essential.

Where the grade along an intersection approach exceeds 3 percent, the leg of the clear sight triangle along that approach should be adjusted by multiplying the appropriate sight distance from Table 9-3 by the appropriate adjustment factor from Table 9-4.

Table 9-4. Adjustment Factors for Sight Distance Based on Approach Grade

Approach Grade (%)	Metric													
	Design Speed (mph)													
	20	30	40	50	60	70	80	90	100	110	120	130	—	—
-6	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	—	—
-5	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	—	—
-4	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	—	—
-3 to +3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—	—
+4	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	—	—
+5	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	—	—
+6	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	—	—

Approach Grade (%)	U.S. Customary													
	Design Speed (mph)													
	15	20	25	30	35	40	45	50	55	60	65	70	75	80
-6	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2
-5	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2
-4	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
-3 to +3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
+4	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
+5	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
+6	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9

Note: Based on ratio of stopping sight distance on specified approach grade to stopping sight distance on level terrain.

If the sight distances given in Table 9-3, as adjusted for grades, cannot be provided, consideration should be given to installing regulatory speed signing to reduce speeds or installing stop signs on one or more approaches.

No departure sight triangle like that shown in Figure 9-15B is needed at an uncontrolled intersection because such intersections typically have very low traffic volumes. If a motorist needs to stop at an uncontrolled intersection because of the presence of a conflicting vehicle on an intersecting approach, it is

very unlikely another potentially conflicting vehicle will be encountered as the first vehicle departs the intersection.

**Case B—Intersections with Stop Control on the Minor Road**

Departure sight triangles for intersections with stop control on the minor road should be considered for three situations:

- Case B1—Left turns from the minor road;
- Case B2—Right turns from the minor road; and
- Case B3—Crossing the major road from a minor-road approach.

Intersection sight distance criteria for stop-controlled intersections are longer than stopping sight distance to allow the intersection to operate smoothly. Minor-road vehicle operators can wait until they can proceed safely without forcing a major-road vehicle to stop.

**Case B1—Left Turn from the Minor Road**

Departure sight triangles for traffic approaching from either the right or the left, like those shown in Figure 9-15B, should be provided for left turns from the minor road onto the major road for all stop-controlled approaches. The length of the leg of the departure sight triangle along the major road in both directions, shown as distance *b* in Figure 9-15B, is the recommended intersection sight distance for Case B1.

The vertex (decision point) of the departure sight triangle on the minor road should be 4.4 m [14.5 ft] from the edge of the major-road traveled way. This represents the typical position of the minor-road driver's eye when a vehicle is stopped relatively close to the major road. Field observations of vehicle stopping positions found that, where needed, drivers will stop with the front of their vehicle 2.0 m [6.5 ft] or less from the edge of the major-road traveled way. Measurements of passenger cars indicate that the distance from the front of the vehicle to the driver's eye for the current U.S. passenger car population is nearly always 2.4 m [8 ft] or less (12). Where practical, it is desirable to increase the distance from the edge of the major-road traveled way to the vertex of the clear sight triangle from 4.4 m to 5.4 m [14.5 to 18 ft]. This increase allows 3.0 m [10 ft] from the edge of the major-road traveled way to the front of the stopped vehicle, providing a larger sight triangle. The length of the sight triangle along the minor road (distance *a* in Figure 9-15B) is the sum of the distance from the major road plus 1/2 lane width for vehicles approaching from the left, or 1 1/2 lane widths for vehicles approaching from the right.

Field observations of the gaps in major-road traffic actually accepted by drivers turning onto the major road have shown that the values in Table 9-5 provide sufficient time for the minor-road vehicle to accelerate from a stop and complete a left turn without unduly interfering with major-road traffic operations. The time gap acceptance time does not vary with approach speed on the major road. Studies have indicated that a constant value of time gap, independent of approach speed, can be used as a basis for intersection sight distance determinations. Observations have also shown that major-road drivers will reduce their speed to some extent when minor-road vehicles turn onto the major road. Where the time gap acceptance values in Table 9-5 are used to determine the length of the leg of the departure sight triangle, most major-road drivers should not need to reduce speed to less than 70 percent of their initial speed (12).

The intersection sight distance in both directions should be equal to the distance traveled at the design speed of the major road during a period of time equal to the time gap. In applying Table 9-5, it can usually be assumed that the minor-road vehicle is a passenger car. However, where substantial volumes of heavy vehicles enter the major road, such as from a ramp terminal, the use of tabulated values for single-unit or combination trucks should be considered.

Table 9-5 includes appropriate adjustments to the gap times for the number of lanes on the major road and for the approach grade of the minor road. The adjustment for the grade of the minor-road approach is needed only if the rear wheels of the design vehicle would be on an upgrade that exceeds 3 percent when the vehicle is at the stop line of the minor-road approach.

**Table 9-5. Time Gap for Case B1, Left Turn from Stop**

Design Vehicle	Time Gap ( <i>t<sub>g</sub></i> ) at Design Speed of Major Road
Passenger car	7.5
Single-unit truck	9.5
Combination truck	11.5

Note: Time gaps are for a stopped vehicle to turn left onto a two-lane highway with no median and with grades of 3 percent or less. The table values should be adjusted as follows:

*For multilane highways*—For left turns onto two-way highways with more than two lanes, add 0.5 s for passenger cars or 0.7 s for trucks for each additional lane, from the left, in excess of one, to be crossed by the turning vehicle.

*For minor road approach grades*—If the approach grade is an upgrade that exceeds 3 percent, add 0.2 s for each percent grade for left turns.

The intersection sight distance along the major road (distance *b* in Figure 9-15B) is determined by:

Metric	U.S. Customary
$ISD = 0.278 V_{major} t_g$	$ISD = 1.47 V_{major} t_g$ (9-1)
where:	where:
$ISD$ = intersection sight distance (length of the leg of sight triangle along the major road) (m)	$ISD$ = intersection sight distance (length of the leg of sight triangle along the major road) (ft)
$V_{major}$ = design speed of major road (km/h)	$V_{major}$ = design speed of major road (mph)
$t_g$ = time gap for minor road vehicle to enter the major road (s)	$t_g$ = time gap for minor road vehicle to enter the major road (s)

For example, a passenger car turning left onto a two-lane major road should be provided sight distance equivalent to a time gap of 7.5 s in major-road traffic. If the design speed of the major road is 100 km/h [60 mph], this corresponds to a sight distance of  $0.278(100)(7.5) = 208.5$  or 210 m [ $1.47(60)(7.5) = 661.5$  or 665 ft], rounded for design.

A passenger car turning left onto a four-lane undivided roadway will need to cross two near lanes, rather than one. This increases the recommended gap in major-road traffic from 7.5 to 8.0 s. The corresponding value of sight distance for this example would be 223 m [706 ft]. If the minor-road approach to such an

INTERSECTION 1  
 STOP CONTROL - AS MINOR ROAD  
 THE RECOMMENDED SIGHT DIST.

intersection is located on a 4 percent upgrade, then the time gap selected for intersection sight distance design for left turns should be increased from 8.0 to 8.8 s, equivalent to an increase of 0.2 s for each percent grade.

The design values for intersection sight distance for passenger cars are shown in Table 9-6. Figure 9-17 includes design values, based on the time gaps for the design vehicles included in Table 9-5.

No adjustment of the recommended sight distance values for the major-road grade is generally needed because both the major- and minor-road vehicle will be on the same grade when departing from the intersection. However, if the minor-road design vehicle is a heavy truck and the intersection is located near a sag vertical curve with grades over 3 percent, then an adjustment to extend the recommended sight distance based on the major-road grade should be considered.

Table 9-6. Design Intersection Sight Distance—Case B1, Left Turn from Stop

Design Speed (km/h)	Metric		U.S. Customary				
	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars		Design Speed (mph)	Stopping Sight Distance (ft)	Intersection Sight Distance for Passenger Cars	
		Calculated (m)	Design (m)			Calculated (ft)	Design (ft)
20	20	41.7	45	15	80	165.4	170
30	35	62.6	65	20	115	220.5	225
40	50	83.4	85	25	155	275.6	280
50	65	104.3	105	30	200	330.8	335
60	85	125.1	130	35	250	385.9	390
70	105	146.0	150	40	305	441.0	445
80	130	166.8	170	45	360	496.1	500
90	160	187.7	190	50	425	551.3	555
100	185	208.5	210	55	495	606.4	610
110	220	229.4	230	60	570	661.5	665
120	250	250.2	255	65	645	716.6	720
130	285	271.1	275	70	730	771.8	775
—	—	—	—	75	820	826.9	830
—	—	—	—	80	910	882.0	885

Note: Intersection sight distance shown is for a stopped passenger car to turn left onto a two-lane highway with no median and grades 3 percent or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.

Sight distance design for left turns at divided-highway intersections should consider multiple design vehicles and median width. If the design vehicle used to determine sight distance for a divided-highway intersection is larger than a passenger car, then sight distance for left turns will need to be checked for that selected design vehicle and for smaller design vehicles as well. If the divided-highway median is wide enough to store the design vehicle with a clearance to the through lanes of approximately 1 m [3 ft] at both ends of the vehicle, no separate analysis for the departure sight triangle for left turns is needed on the minor-road approach for the near roadway to the left. In most cases, the departure sight triangle for right

turns (Case B2) will provide sufficient sight distance for a passenger car to cross the near roadway to reach the median. Possible exceptions are addressed in the discussion of Case B3.

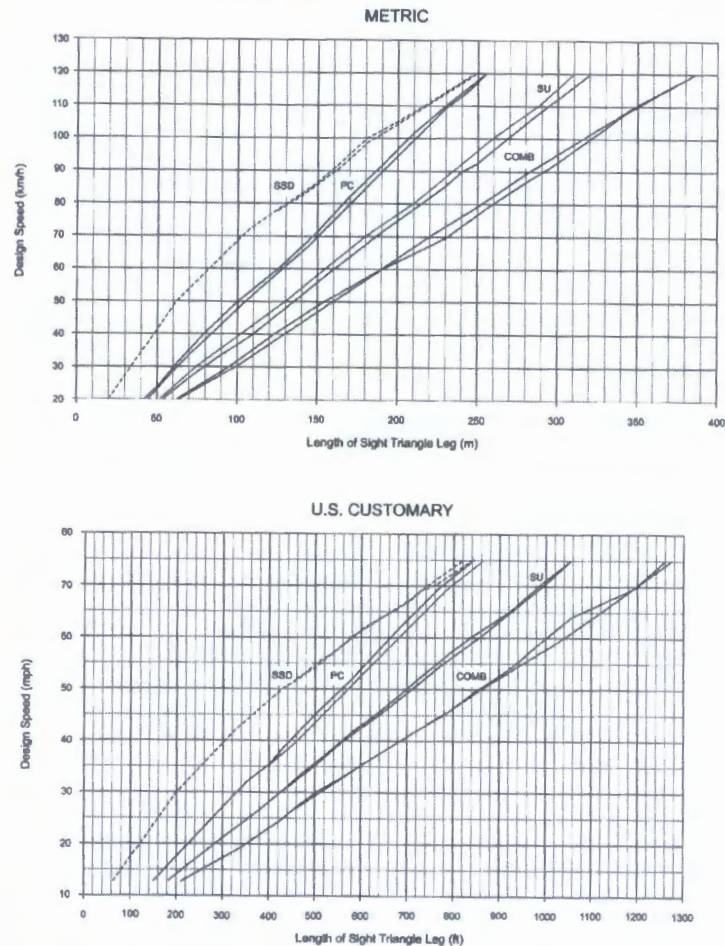


Figure 9-17. Intersection Sight Distance—Case B1, Left Turn from Stop

INTERSECTION SIGHT DISTANCE  
 STOPPING SIGHT DISTANCE  
 INTERSECTION SIGHT DISTANCE  
 STOPPING SIGHT DISTANCE  
 INTERSECTION SIGHT DISTANCE  
 STOPPING SIGHT DISTANCE

If the design vehicle can be stored in the median with adequate clearance to the through lanes, a departure sight triangle to the right for left turns should be provided for that design vehicle turning left from the median roadway. Where the median is not wide enough to store the design vehicle, a departure sight triangle should be provided for that design vehicle to turn left from the minor-road approach.

The median width should be considered in determining the number of lanes to be crossed. The median width should be converted to equivalent lanes. For example, a 7.2-m [24-ft] median should be considered as two additional lanes to be crossed in applying the multilane highway adjustment for time gaps in Table 9-5. Furthermore, a departure sight triangle for left turns from the median roadway should be provided for the largest design vehicle that can be stored on the median roadway with adequate clearance to the through lanes. If a divided highway intersection has a 12-m [40-ft] median width and the design vehicle for sight distance is a 22-m [74-ft] combination truck, departure sight triangles should be provided for the combination truck turning left from the minor-road approach and through the median. In addition, a departure sight triangle should also be provided to the right for a 9-m [30-ft] single unit truck turning left from a stopped position in the median.

If the sight distance along the major road shown in Figure 9-38, including any appropriate adjustments, cannot be provided, then consideration should be given to installing regulatory speed signing on the major-road approaches.

**Case B2—Right Turn from the Minor Road**

A departure sight triangle for traffic approaching from the left like that shown in Figure 9-15B should be provided for right turns from the minor road onto the major road. The intersection sight distance for right turns is determined in the same manner as for Case B1, except that the time gaps ( $t_g$ ) in Table 9-5 should be adjusted. Field observations indicate that, in making right turns, drivers generally accept gaps that are slightly shorter than those accepted in making left turns ( $t_L$ ). The time gaps in Table 9-5 can be decreased by 1.0 s for right-turn maneuvers without undue interference with major-road traffic. These adjusted time gaps for the right turn from the minor road are shown in Table 9-7. Design values based on these adjusted time gaps are shown in Table 9-8 for passenger cars. Figure 9-18 includes the design values for the design vehicles for each of the time gaps in Table 9-7. When the minimum recommended sight distance for a right-turn maneuver cannot be provided, even with the reduction of 1.0 s from the values in Table 9-5, consideration should be given to installing regulatory speed signing or other traffic control devices on the major-road approaches.

Table 9-7. Time Gap for Case B2—Right Turn from Stop and Case B3—Crossing Maneuver

Design Vehicle	Time Gap ( $t_g$ ) (s) at Design Speed of Major Road
Passenger car	6.5
Single-unit truck	8.5
Combination truck	10.5

Note: Time gaps are for a stopped vehicle to turn right onto or to cross a two-lane highway with no median and with grades of 3 percent or less. The table values should be adjusted as follows:

*For multilane highways*—For crossing a major road with more than two lanes, add 0.5 s for passenger cars and 0.7 s for trucks for each additional lane to be crossed and for narrow medians that cannot store the design vehicle.

*For minor road approach grades*—If the approach grade is an upgrade that exceeds 3 percent, add 0.1 s for each percent grade.

Table 9-8. Design Intersection Sight Distance—Case B2, Right Turn from Stop, and Case B3, Crossing Maneuver

Design Speed (km/h)	Stopping Sight Distance (m)	Metric		U.S. Customary			
		Intersection Sight Distance for Passenger Cars		Design Speed (mph)	Stopping Sight Distance (ft)	Intersection Sight Distance for Passenger Cars	
		Calculated (m)	Design (m)			Calculated (ft)	Design (ft)
20	20	36.1	40	15	80	143.3	145
30	35	54.2	55	20	115	191.1	195
40	50	72.3	75	25	155	238.9	240
50	65	90.4	95	30	200	286.7	290
60	85	108.4	110	35	250	334.4	335
70	105	126.5	130	40	305	382.2	385
80	130	144.6	145	45	360	430.0	430
90	160	162.6	165	50	425	477.8	480
100	185	180.7	185	55	495	525.5	530
110	220	198.8	200	60	570	573.3	575
120	250	216.8	220	65	645	621.1	625
130	285	234.9	235	70	730	668.9	670
—	—	—	—	75	820	716.6	720
—	—	—	—	80	910	764.4	765

Note: Intersection sight distance shown is for a stopped passenger car to turn right onto or to cross a two-lane highway with no median and with grades of 3 percent or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.



**Site photos**  
**Taken by Planning Staff**

**Rich Red Dirt CUP- photos of proposed mining area**



**c. Rich Red Dirt CUP- approximate sight distance for left turns onto Harmon**  
**(looking south)**



**c. Rich Red Dirt CUP- sight distance for right turns- looking north**



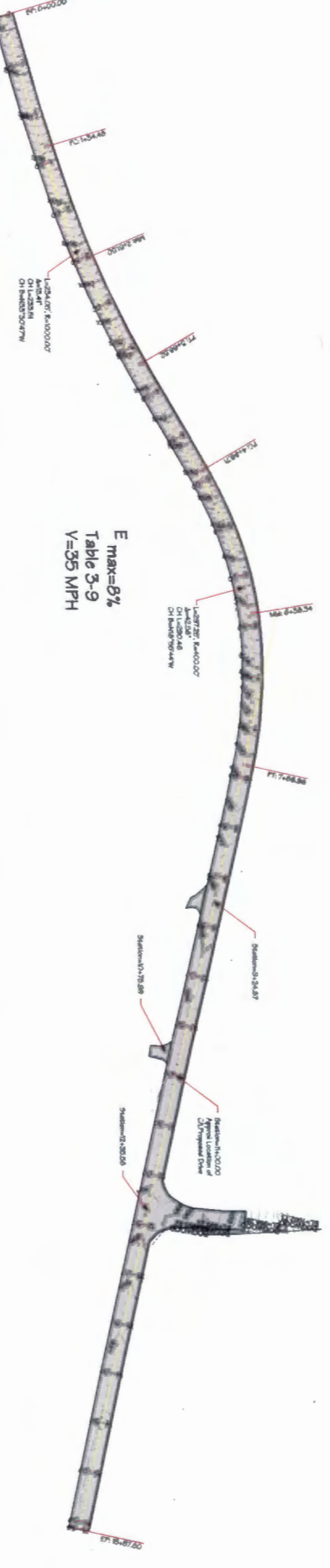
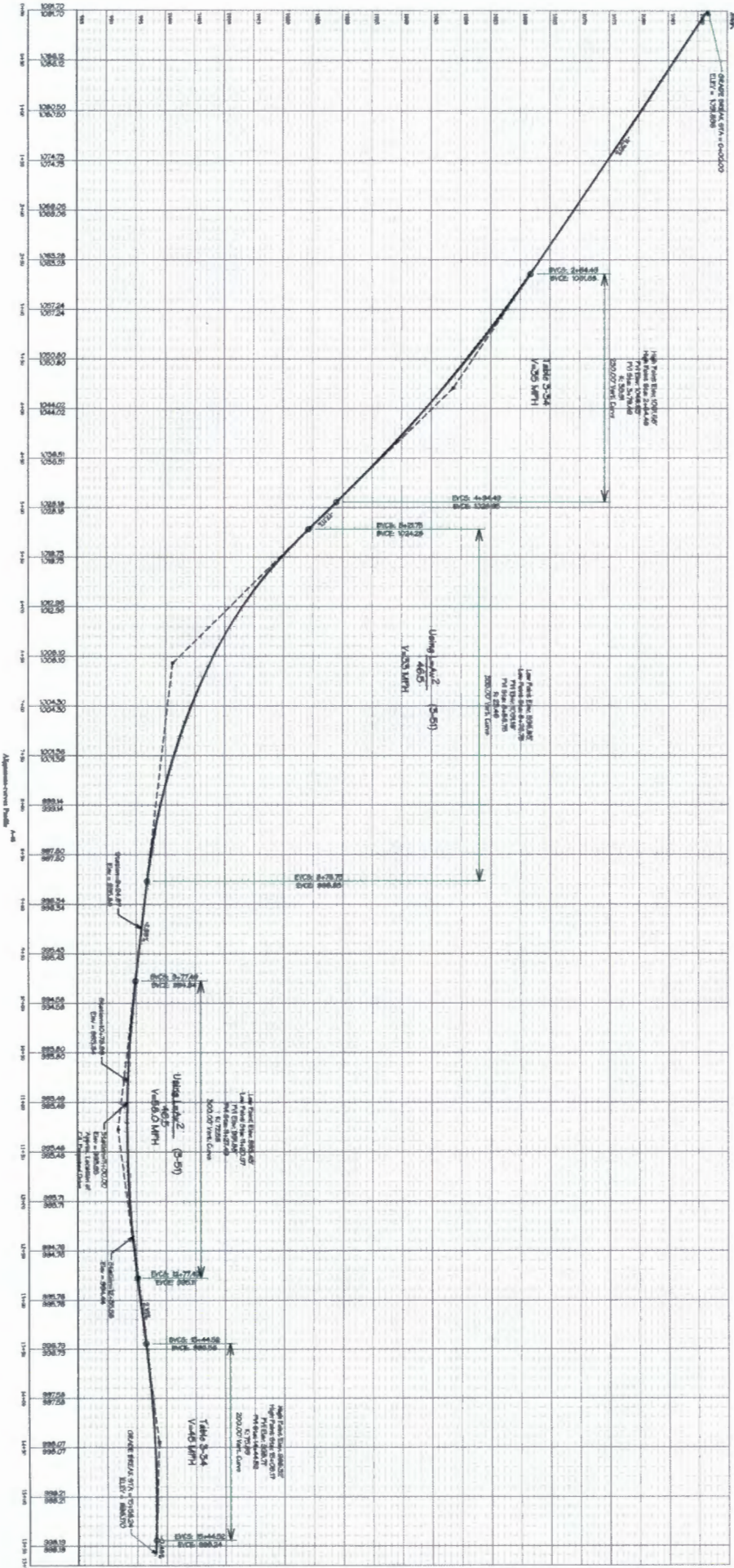
Chapter 11, Article VI, Sec. 11-200. - Criteria for allowance of conditional uses.

(a) The Board shall hear and decide requests for a conditional use and may authorize such if it finds:

- (1) That a written application has been filed with the Planning Office and the appropriate fee has been paid.
- (2) That the applicant has provided proof that each property owner as set out in section 11-204 has been notified by return receipt mail.
- (3) That adequate utilities, roads, drainage and other public services are available and adequate or will be made available and adequate if the use is granted.
- (4) That the proposed use is compatible with the surrounding area.
- (5) That the establishment, maintenance, or operation of the conditional use will not be detrimental to or endanger the public health, safety, morals, comfort or general welfare.
- (6) That the conditional use will not be injurious to the use and enjoyment of other property in the surrounding area for the purposes already permitted, nor substantially diminish and impair property values within the surrounding area.
- (7) That the establishment of the conditional use will not impede the normal and orderly development and improvement of the surrounding area for uses permitted in the zone.

(b) If it is determined that there exist conditions that could be imposed by the Board that would significantly lessen the impact of the aforesaid, then the Board has the power to impose said conditions which shall be specifically set forth.

(Ord. No. 2009-66, Art. I, § 11-2-06, Ord. No. 2010-02, Art. I, § 11-10)



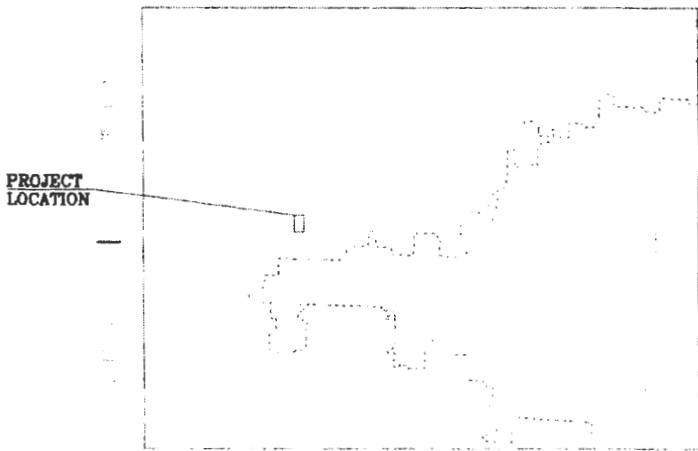
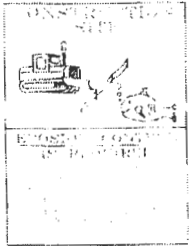
E max=6%  
Table 3-9  
V=35 MPH

<b>Sheet</b> 	<b>A. Clay Grote P.E.</b> 1605 THUNDER RD FAYETTEVILLE, ARKANSAS 72701 PR: 479-642-7117	<b>Sheet: HARMON ROAD PROFILE</b> Job #: 2015-01-28 Owner: WASHINGTON COUNTY Address: HARMON RD ROAD City/State: WASHINGTON CO, AR		DRAWN BY: BTH	Rev No. Date
		SCALE: HORIZONTAL: VERTICAL:	CHECKED BY: ACG	DATE:	



# WASHINGTON COUNTY, ARKANSAS

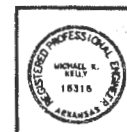
## PROPOSED MINING DEVELOPMENT FOR RICH RED DIRT



OWNER: MARK RICH  
1974 RICP'S ROAD  
FAYETTEVILLE, AR 72704  
(479) 801-6791

DEVELOPER: BENNY HOLZCLAW  
139 SAN JOSE  
SPRINGDALE, AR 72744-9517  
(479) 738-3254

ENGINEER: MICHAEL K. KELLY, P.E.  
P.O. BOX 716  
TABLEMOUNT, OK 74465  
505-524-7536





PROPERTY IS NOT IN THE 100 YEAR FLOOD PLANE ACCORDING TO FIRM PANEL 8540425F EFFECTIVE 8/26/00

STORMWATER POLLUTION PREVENTION PLAN WILL BE PROVIDED BY THE ENGINEER.

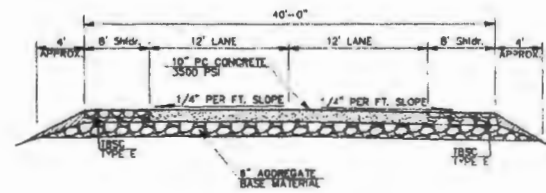
ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY PERMIT WILL BE OBTAINED BY THE DEVELOPER.

MINING WOULD PRODUCE MICS + BIC AREA VERY GENTLY SLOTTED S-PH SLOPES

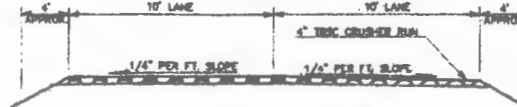
**LEGAL DESCRIPTION OF PROJECT**

A tract of land lying in and being a part of the SE4 of the SE4 of Section 5 and lying in the W2 of the SW4 of the SW4 of Township 16 North Range 31 West, in Washington County, State of Arkansas being more particularly describe by recites and bounds as follows:

Beginning at the SE corner of the SE4 of Section 5 thence S 89°00'00" W along the South line of the SE4 of Section 5 a distance of 287.24 feet; thence N 00°00'00" W a distance of 842.06 feet; thence N 78° 08'15" W a distance of 289.10 feet; thence S 80°00'00" W a distance of 621.09 feet to the center line of a County Road; thence N 02°47'00" E along the center of said County Road a distance of 378.83 feet; thence N 80°00'00" E a distance of 1788.27 feet to the East line of the SE4 of the SE4 of Section 5 to the NW corner of the SW4 of the SW4 of Section 4; thence N 90°00'00" E along the North line of the SW4 of the SW4 of Section 4 a distance of 880.00 feet to NE corner of the W2 of the SW4 of the SW4 of Section 4; thence S 00°00'00" W along the East line of the W2 of the SW4 of the SW4 of Section 4 a distance of 1320.00 feet to the SE corner of the SW4 of the SW4 of Section 4; thence S 90°00'00" W along the South line of the W2 of the SW4 of the SW4 of Section 4 a distance of 880.00 feet to the POINT OF BEGINNING.



TYPICAL SECTION FIRST  
250' FROM HARMON ROAD

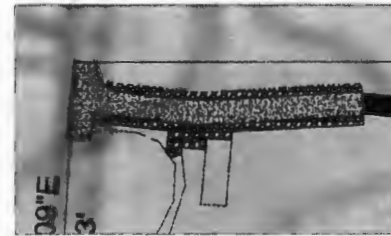


TYPICAL SECTION AFTER  
250' FROM HARMON ROAD

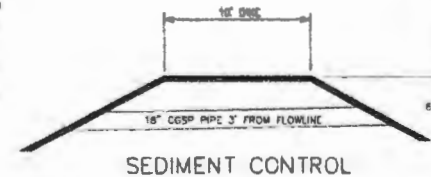
SCALE  
1" = 200'

The following statements shall apply to the facility

- **Drainage** - Drainage ditches will be reduced and increased. Where we are reducing the average slope of the drainage basin, a change factor of concentration will be created for the storm water runoff which will initially reduce the volume of runoff for this development. An detention facility will be required for drainage. However, a detention facility will be proposed for two additional basins where the road and trail curves are weather dependent. A detailed drainage study shall be submitted for preliminary plan approval for the Large Scale Development.
- **Erosion Control** - Erosion control will be designed and established to ensure slope stability and minimal impact to storm water runoff. Soil Pans, rock ditches and sediment basins will be designed to ensure minimal storm water pollution leaves the site.
- **Access** to the property will be protected by fencing and gates with proper signage and lighting. Traffic distance signs will be placed along Harmon road for customer safety.
- **Operation hours** - The facility will be open days 7:30 am to 5:30 pm during storm months and 8:00 am to 4:30 pm during wet or runoff.
- **The facility** will be closed for customer weather which includes 1/4" of rain and or more.
- **Sight Visibility** - Adequate sight visibility will be obtained. A detailed traffic study will be submitted for the preliminary L&D.
- **A geotechnical investigation** will be conducted and recommendations follow of for potential preservation.
- **Traffic** - It is estimated an average of 10 trucks per day will be using this facility which will take approximately one year to generate traffic volume.
- **Explosive Storage** - Explosives will be prohibited and kept down and kept at all times with a no tolerance threshold for the driver.
- **Equipment** necessary for the operation of this facility will be stored, such as back loader back loader and water controlling equipment for dust control.
- **No fuel, lubricants or hazardous material** will be stored on site.
- **Trucks** will be staged at a site around the perimeter of the site reserved for the preliminary program.
- **Reclamation** during layout and implementation will be continuous a minimal of 10% final program.
- **Abandonment** as a mining will be performed under any circumstances.
- **Griffins** - A 10' high buffer will be obtained between the small reserved site and the property line to the south and east. The reserved road buffer varies from 25' to 35' from the north edge of the proposed entrance to the property line following the drive further north to create a zone of a better road decrease safety sight distance.
- **A permit** will be required and obtained by the Arkansas Department of Environmental Quality.



PROPOSED ENTRANCE  
PLAN VIEW NTS



SEDIMENT CONTROL

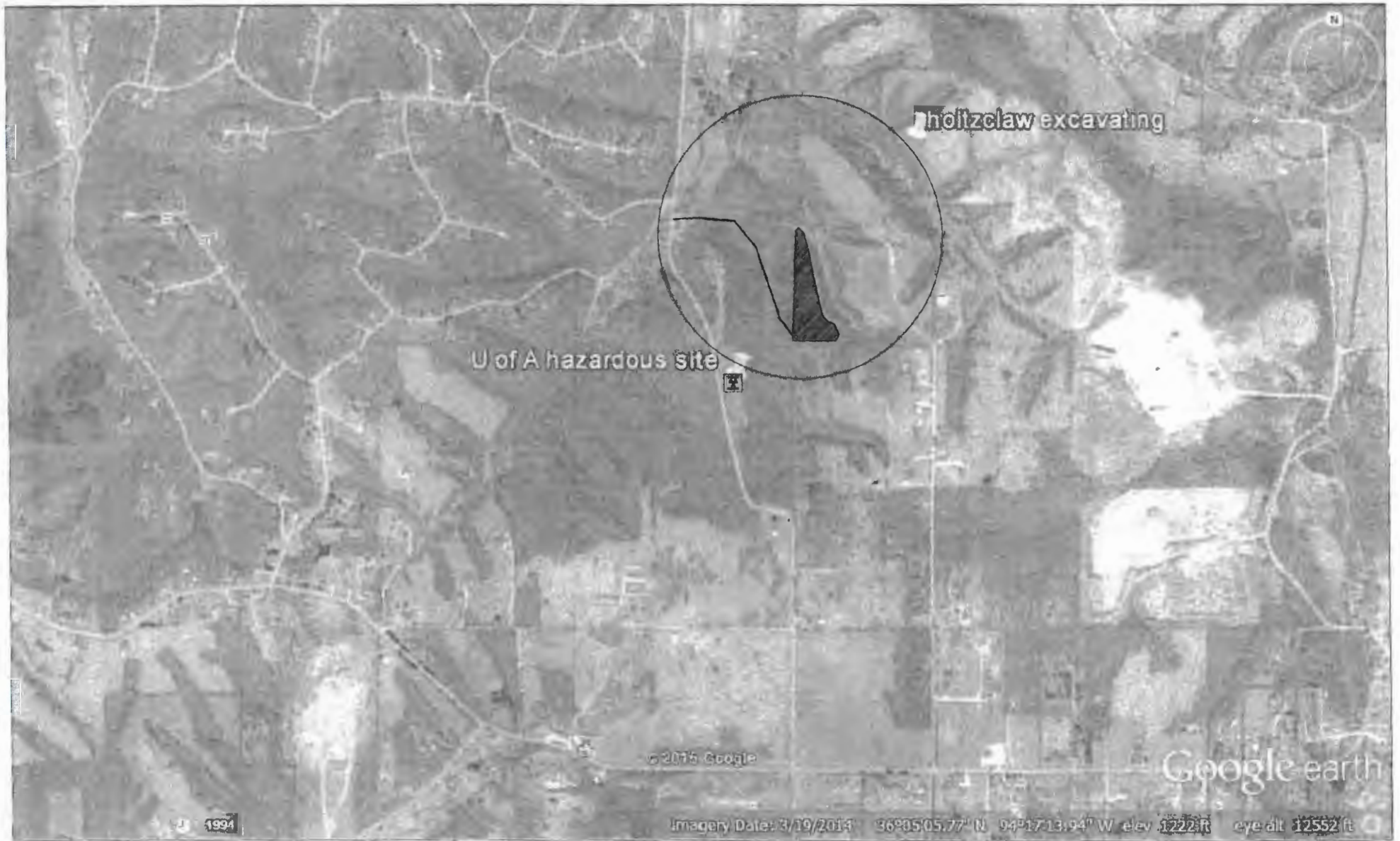
CONCEPTUAL PLAN  
RICH RED DIRT

RICH RED DIRT  
10 ACRE MINING DEVELOPMENT  
WASHINGTON COUNTY

KELLY  
ENGINEERING  
& ASSOCIATES, INC.

DATE: 08/14/04  
DRAWN BY: JG  
CHECKED BY: JG  
SCALE: 1" = 200'





holizclaw excavating

U of A hazardous site

© 2015 Google

Google earth

1994

Imagery Date: 3/19/2014 36°05'05.77" N 94°17'13.94" W elev 1222 ft eye alt 12552 ft

**From:** Geoff Canty [Geoff@ccenviro.net]  
**Sent:** Thursday, January 22, 2015 8:44 AM  
**To:** 'mike kelly'  
**Subject:** Washington Mine

**Attachments:** 4185184\_2.pdf;  
www.adeq.state.ar.us\_ftproot\_pub\_WebDatabases\_Legal\_CAO\_LIS\_Files\_00-058.pdf; ADEQ - Facility Info - Permit Data System (PDS) \_ ADEQ.pdf; ADEQ - Inspection Details \_ ADEQb.pdf; ADEQ - PDS - Hazardous Waste Details.pdf; ADEQ - PDS - Hazardous Waste Detailsb.pdf  
Mike:

We got the information back from the database search—see attached.

Also found some documentation from ADEQ—see attached. The site is a closed mixed waste low-level radioactive and hazardous waste disposal site. Closure circa 1999. There is contamination in the groundwater-solvent 1,4-dioxane. Post closure monitoring appears to be ongoing. Some inspections as of 2008.

We could look into it more if needed.

*Geoff Canty*  
**CC Environmental**  
3533 National Drive  
PO Box 1292  
Norman, OK 73069

(405) 761-1225 (cell)  
(405) 307-9290 (fax)

NOTICE OF CONFIDENTIALITY: The information contained in this transmission including any attached documentation is privileged and confidential. It is intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copy of this communication is strictly prohibited. If you have received this communication in error, please notify CC Environmental immediately by replying to this email, and delete all copies of this message and any attachments immediately.

No virus found in this message.

Checked by AVG - [www.avg.com](http://www.avg.com)

Version: 2015.0.5645 / Virus Database: 4260/8967 - Release Date: 01/20/15

**From:** Juliet Richey [JRichey@co.washington.ar.us]  
**Sent:** Friday, September 05, 2014 2:22 PM  
**To:** mike kelly  
**Cc:** markmarco001@aol.com; kwikshot100@aol.com; Donnie Coleman; Shawn Shrum; Clay Grote; Dan Short; George Butler  
**Subject:** RE: Sight Distance Photo  
 Mr. Kelly:

I do apologize that it has taken a few days to answer your email. I felt it imperative to meet with the County Engineer and Road Superintendants prior to drafting a response.

In my previous emails I have stated that health/safety issues (including sight distance visibility) are indeed Conditional Use Permit issues. Staff still holds that sight distance is a CUP issue. I have previously copied code from the Zoning Ordinance in regard to Conditional Use Permits stating such. Below is the explanation I gave you in a previous email:

(excerpt from August 21 email to you) I am not trying to ask you to perform all of the LSD requirements at this time- thus having stated in the staff report that Traffic Studies, etc will need to be performed at LSD. However, I am asking you to do some things at CUP (like assure a safe intersection sight distance is achievable or the addition of larger buffer areas) in order to meet the Conditional Use criteria that are stated within our Zoning Ordinance- please see below.

**Sec. 11-200. Criteria for allowance of conditional uses.**

- (a) The Board shall hear and decide requests for a conditional use and may authorize such if it finds:
- (1) That a written application has been filed with the Planning Office and the appropriate fee has been paid.
  - (2) That the applicant has provided proof that each property owner as set out in section 11-204 has been notified by return receipt mail.
  - (3) That adequate utilities, roads, drainage and other public services are available and adequate or will be made available and adequate if the use is granted.
  - (4) That the proposed use is compatible with the surrounding area.
  - (5) That the establishment, maintenance, or operation of the conditional use will not be detrimental to or endanger the public health, safety, morals, comfort or general welfare.
  - (6) That the conditional use will not be injurious to the use and enjoyment of other property in the surrounding area for the purposes already permitted, nor substantially diminish and impair property values within the surrounding area.
  - (7) That the establishment of the conditional use will not impede the normal and orderly development and improvement of the surrounding area for uses permitted in the zone.
- (b) If it is determined that there exist conditions that could be imposed by the Board that would significantly lessen the impact of the aforesaid, then the Board has the power to impose said conditions which shall be specifically set forth.

*(Ord No 2006-66 Art 10 11-9-06 Ord No 2010-02 Art 1 1-14-10)*

There was never any intention to offend your sense of professionalism in regard to your statements on sight distance. It is common practice for us to require clear documentation from engineers regarding how the sight distance was determined. I need to see how you arrived at your conclusions and measurements. Some of my

concerns were in regard to the location that a photo that you had attached was taken. The photo appeared to be taken from the center of Harmon Road- not where sight distance would be measured from. As per our Engineer, there is a certain procedure for determining sight distance as per the AASHTO green book. We need you to provide proof that sight distance was determined (for both left and right turns onto Harmon) as per these standard engineering methods.

I spoke with the County Engineer and the Road Superintendants this week. Below is the result of our meeting:

Harmon Road is posted at a speed of 45 mph. This speed limit will stand unless you can prove this is too high of a speed for this section of this County Road as per AASHTO's "A policy on Geometric Design of Highways and Streets, 6th Edition" (also known as the Green Book). You must consider the horizontal and vertical curve alignment and superelevation. Only after you submit all information, findings, etc., as per these standards will the County consider any differing speed limit designation.

I should have some additional follow-up comments for you regarding the draft easement submittal early next week.

**Juliet Richey**  
**Washington County Planning Director**  
 2615 Brink Drive  
 Fayetteville, AR 72701  
 (479) 444-1724 x 3535

**From:** mike kelly [mailto:kellyeng@ipa.net]  
**Sent:** Friday, August 29, 2014 7:37 PM  
**To:** Juliet Richey  
**Subject:** RE: Sight Distance Photo

Ms. Richie,

First off I want to point out that we are letting an LSD issue control the CUP. Sight distance is an LSD issue and will be addressed at the LSD stage.

Since your office has drawn a line in the sand on the sight distance issue and Mr. Rich wants to retain his property and proceed with the mining permit, we have all put Mr. Elkins in a very difficult predicament. He is going to have to choose to honor his word to Mark or lose some of his friends that are campaigning against this project. Can't we work together on this?

Would you please look at the sight distance issue with some additional reasoning? Intersection sight distance you have stated we need to comply with is 500 feet. That is a distance set so that a stopped vehicle at the Rich Red Dirt intersection will have enough time to pull out safely from vehicles that are approaching at 45 mph. A vehicle 500 feet south of the Rich Red Dirt entrance will not be traveling 45 mph because it is in a sharp curve where the recommended speed is 25 mph. Therefore an allowance should be made for that distance. There are 3 other drives in that immediate area that do not comply with 500 feet of sight distance. That would be the 2 drives that lead to Mark Rich's Rental and Weddington Woods drive. Weddington Woods drive does not have the sight distance to the north because of a vertical curve.

Another argument for the non 45mph sight distance is that Harmon Road is not engineered for 45 mph velocities. There are three main elements to road design. Those are horizontal alignment, vertical alignment and clear zone. Lets just address clear zone. Clear zone is a distance (measured from the outside of the driving lane) for safety that is required for a vehicle that inadvertently drifts off the road to correct steering and return back to the road. Having 36" diameter trees within 10 feet of the outside driving lane does not constitute proper clear zone. Therefore Harmon Road should not be posted at 45 mph but should be posted for a velocity that integrates the horizontal alignment, vertical alignment and clear zones all together.

file:///C:/Users/mike/Desktop/november%20meeting/appeal/juliet%20richey%206th%20edi... 2/1/2015

I also want to point out that I am offended that you have questioned my decision as an engineer by asking for validation of my decision that we can obtain sufficient sight distance with clearing. I have a professional engineer's license and 35 years of experience backing me. My license and my integrity is on the line if I were to approve anything I could not substantiate. That request is and was unnecessary especially for CUP approval.

I propose to hire an independent consultant to do the traffic study for the LSD submittal. If you will agree, I will request them to quote what they feel the recommended sight distance should be for existing conditions in both directions along Harmon Road and we can let that be the determining intersection sight distance. If you will not demand the 500 feet sight distance then this should be a very reasonable request to possibly get Mr. Elkins out of hot water.

Besides that, I will reiterate, the sight distance is an LSD issue and has absolutely nothing to do with the CUP.

I await your reply.

Michael Kelly, P.E.

---

**From:** Juliet Richey [mailto:JRichey@co.washington.ar.us]  
**Sent:** Sunday, August 24, 2014 3:54 PM  
**To:** Juliet Richey; mike kelly  
**Cc:** markmarco001@aol.com; kwikshot100@aol.com; Donnie Coleman; Shawn Shrum  
**Subject:** RE: Sight Distance Photo

Juliet Richey  
Washington County Planning Director  
2615 Brink Drive  
Fayetteville, AR 72701  
(479) 444-1724 x 3535

**From:** Juliet Richey  
**Sent:** Friday, August 01, 2014 8:03 AM  
**To:** 'mike kelly'  
**Cc:** mkh775@aol.com; markmarco001@aol.com; kwikshot100@aol.com; Donnie Coleman; Shawn Shrum; 'Clay Grote'; George Butler; Marilyn Edwards; Dan Short  
**Subject:** RE: Sight Distance Photo

Mr. Kelly:

Please see my below comments. Please call me if anything seems unclear so that we can discuss it further.

Sincerely,

Juliet Richey  
Washington County Planning Director  
2615 Brink Drive  
Fayetteville, AR 72701  
(479) 444-1724 x 3535

**From:** mike kelly [mailto:kellyeng@ipa.net]  
**Sent:** Wednesday, July 30, 2014 10:32 PM  
**To:** Juliet Richey  
**Cc:** mkh775@aol.com; markmarco001@aol.com; kwikshot100@aol.com; Donnie Coleman; Shawn Shrum; 'Clay Grote'; George Butler; Marilyn Edwards  
**Subject:** RE: Sight Distance Photo

Ms. Richey,

The current measured sight distance is 430 feet. The 500 feet sight distance can be obtained by clearing only the county right-of-way. We are wanting to be good stewards and create as much sight distance as possible. Not only for this project but for the rent house drive depicted in the photo as well. If the county will allow us to clear the county right-of-way (30 feet from the centerline of the existing county road) then we can obtain the required 500 feet sight distance without the easement.

The Road Department went out to the area in question yesterday (the hill/curve area of Harmon Road adjacent to Mr. Elkins property) and measured the area that they currently maintain and presume to be their ROW. In this area it appears to be less than 30'. They measured from the center of Harmon Road to the existing fence in the curve. The actual width of the presumed ROW in this location appears to be approximately 21.5 feet. Therefore, you will need to determine if you are able to obtain your sight distance in this 21.5 feet, or if further clearing will be required. If further clearing is required for you to achieve minimum sight distance then an easement would need to be obtained from Mr. Elkins.

You will also need to provide a plan to maintain portions of the vegetation within the presumed area of the ROW as needed for the maintenance of sight visibility as there may be times when the sight distance visibility may require it in times of fast growing vegetation. Please contact the Road Department regarding permitting for this activity within the presumed ROW area.

In addition, the photo you submitted regarding sight distance appeared to be taken by someone standing near the center of Harmon Road, not at the location of the actual intersection where sight distance would be obtained. I would like assurances that any measurements you are taking are taken from the exact locations that they should be and that you are calculating the distances from the heights required for such calculations. Please provide written documentation of these measurements and the exact locations and heights which the measurements were taken. Please state these measurements from both directions and include commentary on the vegetation on/near your northern property line as well.

However, we would like to clear the entire outlined area for additional safety.

There was no attachment to this email. When you reference the outlined area- are you referring to that area defined on the Preliminary LSD plan document that you submitted?

Please reconsider your request to have a signed easement for the CUP hearing.

If you read my July 30 email closely you will see that we are not requiring the actual easement be signed before the CUP hearing, only that it be drawn up and Mr. Elkins submit a signed letter/statement stating that he understands the terms of the easement for both initial and ongoing clearing and maintenance and would be willing to sign such an easement if the CUP was granted.

We understand no clearing will be allowed until the project is approved. We also understand you are requesting us to provide a formal traffic study, pedological survey, formal drainage study, detailed sight plan and pavement design for the county road prior to project approval. At this point, we just want to get through the hearing. Thank you for your consideration.

Michael K. Kelly, P.E.  
President

**From:** Juliet Richey [<mailto:JRichey@co.washington.ar.us>]  
**Sent:** Wednesday, July 30, 2014 2:47 PM  
**To:** mike kelly  
**Cc:** [mkh775@aol.com](mailto:mkh775@aol.com); [markmarco001@aol.com](mailto:markmarco001@aol.com); [kwikshot100@aol.com](mailto:kwikshot100@aol.com); Donnie Coleman; Shawn Shrum; Clay Grote ([clay@aconcretesi.com](mailto:clay@aconcretesi.com)); George Butler; Marilyn Edwards  
**Subject:** RE: Sight Distance Photo

Mr. Kelly:

Thank you for your reply.

As I discussed with Mr. Rich on Monday: As per Washington County Code of Ordinances, no clearing, grading, offsite improvements, or other land preparation may take place prior to the approval of the Land Development. Therefore, you will not be allowed to clear the land within the County Road ROW of Harmon Road or on Mr. Elkins Property in conjunction with this potential Development until Land Development Approval is received.

In addition to the sight visibility information that you provided via the below email, we will need the following information from you at the CUP stage:

The project engineer will need to determine the perimeter of the area needed to be cleared to obtain the sight visibility needed. This area will need to be described and a formal easement drawn up that will need to be obtained from Mr. Elkins in the future. While the formal easement does not need to be signed unless CUP is approved, we will need it to all be drawn up and submitted to this office along with a signed letter from Mr. Elkins referencing this proposed easement document, stating that he will agree to sign the easement if the CUP is approved.

This easement will need to be a permanent easement (or for as long as the Red Dirt Operation is in business or has been totally reclaimed) and a specific maintenance plan and timetable for keeping vegetation under control must be specified. This document should include the scope of the initial clearing and the methods and frequency of maintenance for the ongoing maintenance.

It is critical that the County receive this detailed information to be able to assure that a safe sight distance can be maintained (once established) in the future.

Please let me know if you have any questions regarding the above.

In addition, you did mention some interest in clearing (perhaps a lesser amount than is anticipated for the dirt pit) in regard to visibility for the renter at Mr. Rich's rent house on Harmon Road). If you want to pursue a conversation about clearing specifically for that purpose, please let me know, and we can discuss that issue in more depth).

Sincerely,

Juliet Richey  
Washington County Planning Director  
2615 Brink Drive  
Fayetteville, AR 72701  
(479) 444-1724 x 3535

**From:** mike kelly [<mailto:kellyeng@ipa.net>]

**Sent:** Tuesday, July 29, 2014 11:03 AM  
**To:** Juliet Richey  
**Cc:** [mkh775@aol.com](mailto:mkh775@aol.com); [markmarco001@aol.com](mailto:markmarco001@aol.com)  
**Subject:** Sight Distance Photo

Ms. Richey,

Attached please find a photo we took the day of the technical review meeting. Benny, Mark and I went to the sight and physically measured and painted on the pavement distances where we began and our measurements from and measured 400 and 500 paint lines along the pavement.

Since that meeting, Mark has reached an agreement with the property owner that owns the land adjacent to the power lines traversing up the hill east of the county road. In my picture you can see a vehicle on the road in the clearing of the power lines. Upon approval of this project, the land between the power line and the county road will be cleared and sight distance will be significantly improved. We anticipate obtaining at least 700 feet of sight distance with this endeavor.

We would also like to point out that the entrance to the rent house Mark owns has very poor sight distance as depicted on that photo. This endeavor will significantly improve the safety of that point of ingress/egress as well.

Please make this photo part of your file if possible. There is a statement on the preliminary sight plan that states we will be able to obtain the proper sight distance required upon clearing.

Thank you for your cooperation.

Michael Kelly, P.E.

No virus found in this message.  
Checked by AVG - [www.avg.com](http://www.avg.com)  
Version: 2014.0.4716 / Virus Database: 3986/7951 - Release Date: 07/30/14

No virus found in this message.  
Checked by AVG - [www.avg.com](http://www.avg.com)  
Version: 2014.0.4745 / Virus Database: 4007/8071 - Release Date: 08/20/14

No virus found in this message.  
Checked by AVG - [www.avg.com](http://www.avg.com)  
Version: 2014.0.4765 / Virus Database: 4015/8171 - Release Date: 09/07/14



# WASHINGTON COUNTY, ARKANSAS

## HARMON ROAD AS BUILT PLANS

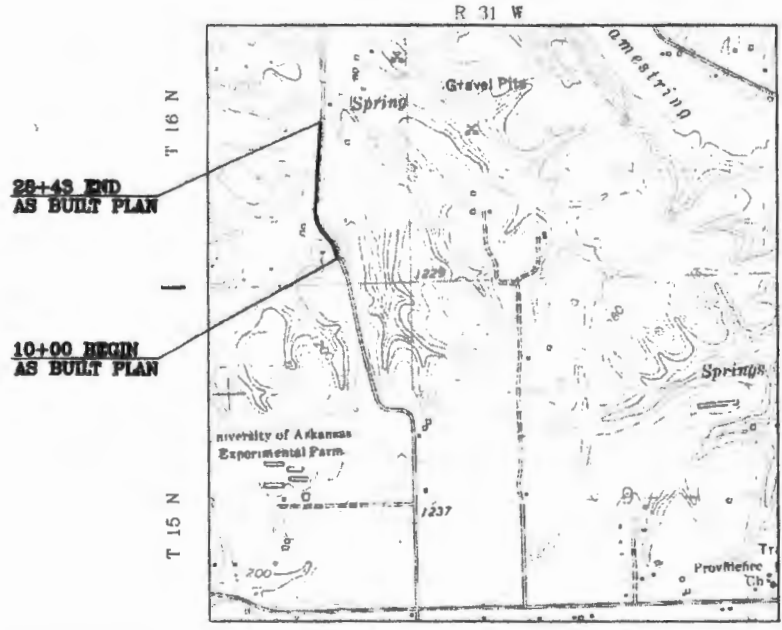
Scale	1" = 50'
Projection	UTM

INDEX OF SHEETS	
1	TITLE SHEET
2	PLAN & PROFILE
3	CROSS SECTIONS

**SCALES**  
 PLAN 1" = 50'  
 PROFILE HOR. 1" = 50'  
 VER. 1" = 10'  
 LOCATION MAP 1" = NA

**CONVENTIONAL SYMBOLS**

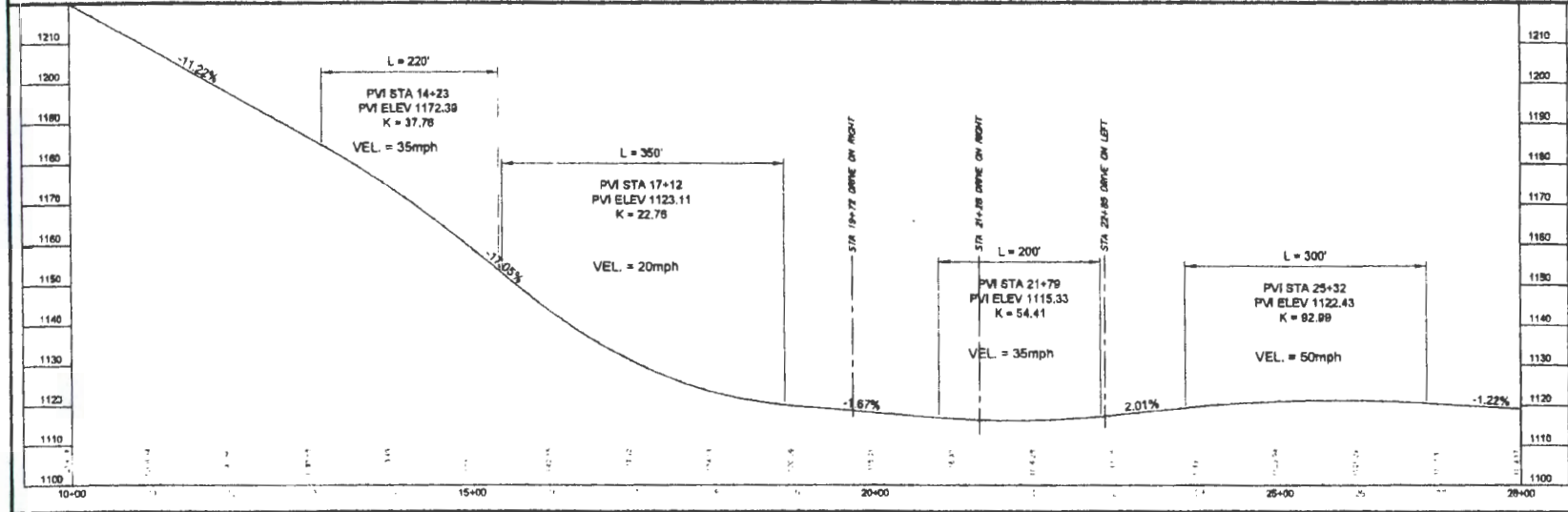
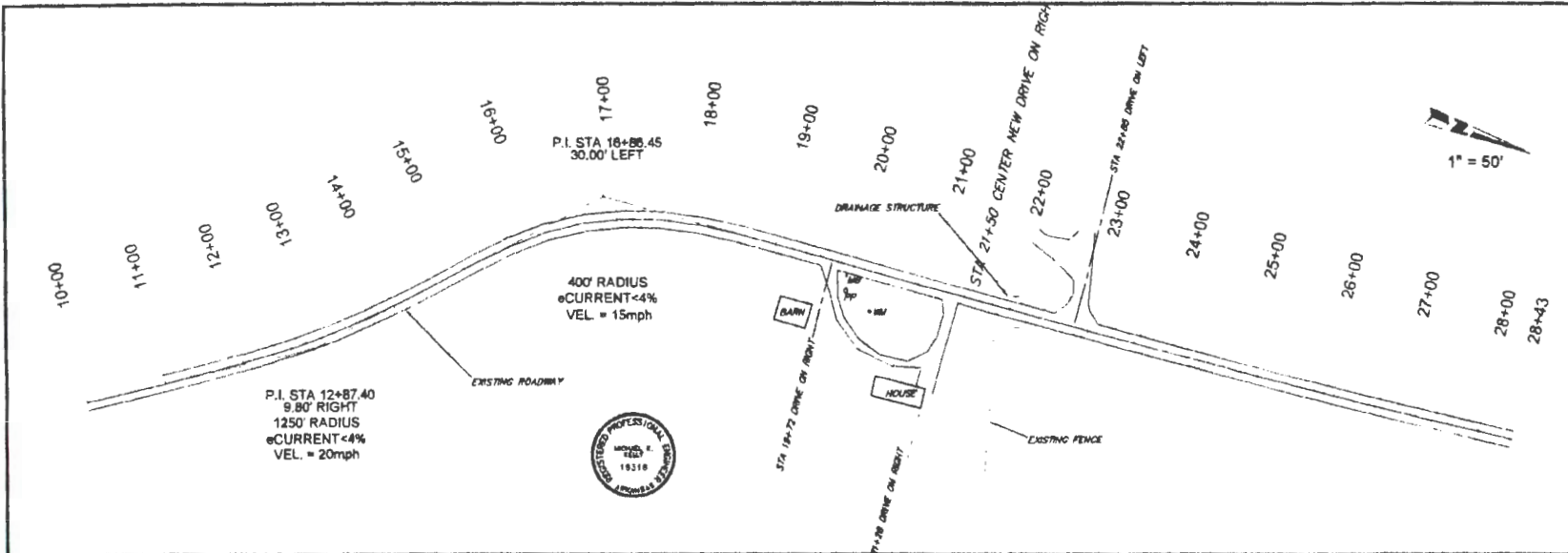
	PROPOSED ROAD
	EXISTING ROAD
	UTILITY LINE
	FENCE
	DITCH
	STREAM
	CONTOUR LINE
	SPOT ELEVATION
	STRUCTURE
	BUILDING
	WELL
	MONUMENT
	BENCHMARK
	CENTERLINE
	RIGHT-OF-WAY
	EASEMENT
	SURVEY POINT
	NORTH ARROW



LOCATION MAP



Velocities were determined using AASHTO publication "A policy on Geometric Design of Highways and Streets, 6th Edition"



AS-BUILT PLAN AND PROFILE  
 STA 10+00 TO STA 28+00

DATE: 07/2011

SCALE: 1" = 50'

**KELLY**  
 ENGINEERING  
 & ASSOCIATES, INC.

1150  
1140  
1130  
1120  
1160  
1150  
1140  
1130  
1160  
1150  
1140  
1130  
1170  
1160  
1150  
1140  
1170  
1160  
1150  
1140

--2.00% --10.07%  
  
16+00  
  
  
15+75  
  
  
15+50  
  
  
15+25  
  
  
15-00

1150  
1140  
1130  
1120  
1160  
1150  
1140  
1130  
1170  
1160  
1150  
1140  
1170  
1160  
1150  
1140

1140  
1130  
1120  
1110  
1140  
1130  
1120  
1110  
1150  
1140  
1130  
1120  
1150  
1140  
1130  
1120

--1.41% 4.49%  
  
17+25  
  
  
17+00  
  
  
16+75  
  
  
16+50  
  
  
16+25

1140  
1130  
1120  
1110  
1140  
1130  
1120  
1110  
1150  
1140  
1130  
1120  
1150  
1140  
1130  
1120

1140  
1130  
1120  
1110  
1140  
1130  
1120  
1110  
1130  
1120  
1110  
1120  
1140  
1130  
1120  
1110

0.75% -5.17%  
  
18+00  
  
  
17+75  
  
  
17+50

1140  
1130  
1120  
1110  
1140  
1130  
1120  
1110  
1140  
1130  
1120  
1110  
1140  
1130  
1120  
1110



CROSS SECTIONS  
 STA 15+00 TO STA 18+00  
 DATE: 11/2013  
 SHEET 1 OF 1  
**KELLY**  
 ENGINEERING  
 & ARCHITECTS, INC.

# 9 Intersections

## 9.1 INTRODUCTION

An intersection is defined as the general area where two or more highways join or cross, including the roadway and roadside facilities for traffic movements within the area. Each highway radiating from an intersection and forming part of it is an intersection leg. The most common intersection at which two highways cross one another has four legs. It is recommended that an intersection have no more than four legs.

The three general types of highway crossings are at-grade intersections, grade separations without ramps, and interchanges. This chapter deals primarily with the design of intersections at grade; the latter two intersection types are discussed in Chapter 10. Certain intersection design elements, primarily those concerning the accommodation of turning movements, are common and applicable to intersections and to some parts of certain interchanges.

At-grade intersections are among the most complicated elements of a street or highway. Intersections are the focus of business and community activity and conflicting traffic movements. Traffic control that requires some or all users to slow or stop is uniquely present at intersections. Intersections usually have less capacity than other parts of the roadway and are where most traffic conflicts occur. The design of intersections is important to users of the intersections and owners of land adjacent to the intersection. Therefore, design criteria should be selected that will result in balanced and cost-effective design that provides efficient operations and low crash frequencies, and considers the needs of all user groups. Design criteria should also meet mobility, environmental, scenic, aesthetic, cultural, natural resource, and community needs.

This chapter provides information to design an intersection and its appurtenant features that provides for the effective movement of each intersection user. Use of the design elements presented herein is based on design criteria including functional classification, volume of each intersection user group including directions and turning movements, design speed, design vehicle (passenger car, transit bus, WB-62 truck, recreational vehicle, etc.), alignment and profile at the desired intersection location, and desired traffic control (no assigned control, two-way stop, all-way stop, traffic signal, or roundabout). When needed, level of service analysis is used to determine the number of lanes for each traffic movement and accommodation for each user group. Given the design criteria and results of level of service analysis, this chapter provides guidance for physical

Where the sight-distance value used in design is based on a single-unit or combination truck as the design vehicle, it is also appropriate to use the eye height of a truck driver in checking sight obstructions. The recommended value of a truck driver's eye height is 2.33 m [7.6 ft] above the roadway surface.

### 9.5.3 Intersection Control

The recommended dimensions of the sight triangles vary with the type of traffic control used at an intersection because different types of control impose different legal constraints on drivers and, therefore, result in different driver behavior. Procedures to determine sight distances at intersections are presented below according to different types of traffic control, as follows:

- Case A—Intersections with no control
- Case B—Intersections with stop control on the minor road
  - Case B1—Left turn from the minor road
  - Case B2—Right turn from the minor road
  - Case B3—Crossing maneuver from the minor road
- Case C—Intersections with yield control on the minor road
  - Case C1—Crossing maneuver from the minor road
  - Case C2—Left or right turn from the minor road
- Case D—Intersections with traffic signal control
- Case E—Intersections with all-way stop control
- Case F—Left turns from the major road

#### Case A—Intersections with No Control

For intersections not controlled by yield signs, stop signs, or traffic signals, the driver of a vehicle approaching an intersection should be able to see potentially conflicting vehicles in sufficient time to stop before reaching the intersection. The location of the decision point (driver's eye) of the sight triangles on each approach is determined from a model that is analogous to the stopping sight distance model, with slightly different assumptions.

While some perceptual tasks at intersections may need substantially less time, the detection and recognition of a vehicle that is a substantial distance away on an intersecting approach, and is near the limits of the driver's peripheral vision, may take up to 2.5 s. The distance to brake to a stop can be determined from the same braking coefficients used to determine stopping sight distance in Table 3-1.

Field observations indicate that vehicles approaching uncontrolled intersections typically slow to approximately 50 percent of their midblock running speed. This occurs even when no potentially conflicting vehicles are present (12). This initial slowing typically occurs at deceleration rates up to 1.5 m/s<sup>2</sup> [5 ft/s<sup>2</sup>]. Deceleration at this gradual rate has been observed to begin even before a potentially conflicting vehicle comes into view. Braking at greater deceleration rates, which can approach those assumed in stopping

**ORDINANCE NO. 2015-\_\_\_\_\_**

**BE IT ORDAINED BY THE QUORUM COURT  
OF THE COUNTY OF WASHINGTON,  
STATE OF ARKANSAS, AN ORDINANCE  
TO BE ENTITLED:**

**AN ORDINANCE RATIFYING A CONDITIONAL  
USE PERMIT DENIED BY THE PLANNING  
AND ZONING BOARD.**

**WHEREAS**, the Planning and Zoning Board denied a Conditional Use Permit on November 5, 2014, for Rich Red Dirt; and,

**WHEREAS**, an appeal has been filed concerning such; and,

**WHEREAS**, based upon the actions of the Planning and Zoning Board and the facts before the Court.

**NOW, THEREFORE, BE IT ORDAINED BY THE QUORUM  
COURT OF WASHINGTON COUNTY, ARKANSAS:**

**ARTICLE 1.** That the Conditional Use Permit for Rich Red Dirt denied by the Planning and Zoning Board is hereby ratified.

\_\_\_\_\_  
MARILYN EDWARDS, County Judge

\_\_\_\_\_  
DATE

\_\_\_\_\_  
BECKY LEWALLEN, County Clerk

Sponsor: \_\_\_\_\_ Eva Madison

Date of Passage: \_\_\_\_\_

Votes For: \_\_\_\_\_ Votes Against: \_\_\_\_\_

Abstention: \_\_\_\_\_ Absent: \_\_\_\_\_

**ORDINANCE NO. 2015-\_\_\_\_\_**

**BE IT ORDAINED BY THE QUORUM COURT  
OF THE COUNTY OF WASHINGTON,  
STATE OF ARKANSAS, AN ORDINANCE  
TO BE ENTITLED:**

**AN ORDINANCE GRANTING A CONDITIONAL  
USE PERMIT DENIED BY THE PLANNING  
AND ZONING BOARD.**

**WHEREAS**, the Planning and Zoning Board denied a  
Conditional Use Permit on November 5, 2014, for Rich Red Dirt; and,

**WHEREAS**, an appeal has been filed concerning such; and,

**WHEREAS**, based upon the actions of the Planning and  
Zoning Board and the facts before the Court.

**NOW, THEREFORE, BE IT ORDAINED BY THE QUORUM  
COURT OF WASHINGTON COUNTY, ARKANSAS:**

**ARTICLE 1.** That the Conditional Use Permit for Rich Red  
Dirt denied by the Planning and Zoning Board is granted and the Planning Board's  
denial is reversed.

\_\_\_\_\_  
MARILYN EDWARDS, County Judge

\_\_\_\_\_  
DATE

\_\_\_\_\_  
BECKY LEWALLEN, County Clerk

Sponsor: \_\_\_\_\_ Rick Cochran \_\_\_\_\_

Date of Passage: \_\_\_\_\_

Votes For: \_\_\_\_\_ Votes Against: \_\_\_\_\_

Abstention: \_\_\_\_\_ Absent: \_\_\_\_\_