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<b>16. Abstract</b> <p>The objective of this research was to determine if roughness data on railroad crossings could be extracted from INDOT's road network database in order to determine the need and priority of repair projects. This "railroad roughness" was to be correlated to the general public's perception of riding comfort by using the panel rating method. From this information a Railroad Crossing Index (RCI) would be developed so that the INDOT could search the database to generate a list of crossings that require repair and prioritize them. To calculate RCI four methods were proposed: 1. The first proposed method for generating RCI equates IRI and RCI. By this method the user would specify the distance over which the RCI (IRI) is calculated, from ten feet to 1/10 mile, centered around the crossing. 2. The second proposed method for generating RCI, was to calculate a difference in IRIs. This was to be done by generating an IRI for a section of road, including the railroad crossing data, then use the same raw data to generate a second IRI after "masking out" the railroad crossing data, and take the difference of the two. 3. The third method proposed for calculating RCI is similar to method one, but does not result in a standard IRI number. In addition to enabling the user to specify the distance over which the RCI is calculated (method 1), the user may also specify the 'long wave' parameter used in the IRI calculation. 4. The final method proposed for generating RCI uses a calculated elevation profile. The RCI is the summation of the absolute values of the change in height from a reference index and a moving average of data points surrounding the point under consideration. The repeated failure of the profiler's computer system resulted in a series of delays and eventually to a complete revision of the computer system and software. During the revision of the software, several changes were made to put the system back in service after a lengthy period of downtime. Unfortunately, some of the changes that were made to the software had an adverse effect on the study. Due to the size of the sampling interval, locating the railroad-highway grade crossings in the data generated by the Department's profiler was extremely difficult. This problem was compounded by the fact that the Department's profiler uses a receiver-averaging board to generate a sensor footprint in the height measuring system. Therefore the resolution of the distinguishing features was so poor as to be almost unrecognizable. After locating the railroad-highway crossings in the data, and generating the RCI values for each crossing using the two remaining methods, the results were correlated to public perception of acceptable, or unacceptable, levels of roughness. A logistical regression analysis was performed on the data to see if enough probability of predicting the acceptability/unacceptability of roughness associated with railroad-highway grade crossings existed to validate either of the proposed methodologies for calculating RCI. Both of the remaining methods for calculating RCI failed to meet the minimum amount of probability necessary to validate either method. Also, due to the geometry of the construction of railroad-highway grade crossings, the roughness of the crossing itself is nearly impossible to distinguish from the roughness of the approaches. For this reason, it is unlikely that data collected from any current profiler would be able to provide results sufficient to generate a rating scale based on this technology.</p>					
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Final Report

**FHWA/IN/JTRP- 2003/4**

Classification of Railroad Crossings in Indiana by Roughness

By

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The contents of this report reflect the views of the author who is responsible for the facts and the accuracy of the data represented herein. The contents do not necessarily reflect the official views or policies of the Federal Highway Administration and the Indiana Department of Transportation. The report does not constitute a standard, specification or regulation.

Indiana Department of Transportation,  
Division of Research  
West Lafayette, Indiana 47906  
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- Mr. Gordon Hooker; for performing a physical survey of test sites to confirm the operation of the Department's profiler after its' redesign.

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# 1. Introduction

One of the primary goals of the Indiana Department of Transportation (INDOT) has always been to provide its users with a quality product, namely smooth, safe, durable roads. One of the characteristics measured to determine the quality of the Department's product is 'roughness'. Roughness is, in its simplest definition, the measure of the traveling public's comfort for a defined section of road. It is measured in units of inches/mile (mm/km) and is evaluated using the International Roughness Index (IRI). By using the IRI to measure the roughness characteristics of a road surface, one is able to quantitatively compare and contrast various roads to assist in determining; repair strategies and priorities, and pavement performance over time.

To accurately determine a repair strategy, or pavement performance, the section of interest must first be defined. The way a section of road is currently defined is by the contract number most recently associated with its configuration of materials and construction. The boundaries of the defined section are then stated using INDOT's 'Reference Post System'. This method of defining a section of road works well for referencing various data by giving the user of the data the ability to physically locate, and identify the specific area where the data was collected.

Unfortunately, since roughness data is usually evaluated at the 'contract level' (i.e. a section of road built or repaired as part of a contract.), any features not included in that specific contract are excluded. The data necessary for calculating the roughness of these features is collected at the same time as the rest of the section, but it is omitted from the rest of the data when analyzed. Bridge decks, intersections, under-passes, and railroad crossings are all examples of features that are omitted when analyzing roughness data because they are not a part of the contract being evaluated.

# 2. Problem Statement

Because a feature is not included in a specific contract, does not mean that it is any less of a contributor to the general public's perception of roughness for that section of road. The general public view road characteristics, geography, and road features as a whole when evaluating a section of pavement, and to omit any part of the road surface from analysis decreases the Department's ability to accurately gauge the overall quality of their product.

The research performed in this project is intended to extract additional information from profile data collected by the Indiana Department of Transportation. The information to be extracted from this data is the roughness associated with, or contributed by, railroad crossings that intersect with the highway network.

This data, when extracted, could be extremely valuable in determining repair strategies and priorities for all railroad crossings statewide.

### **3. Objective or Purpose**

To determine the feasibility of developing an automated methodology of generating roughness data for classifying railroad crossings, several technical challenges had to be addressed. The technical challenges addressed in this study are:

- Utilizing existing equipment, testing methods, and data recording formats, to determine a means of locating railroad-highway grade crossings in profile data currently being collected by the Indiana Department of Transportation.
- Utilizing profile data currently being collected by the Indiana Department of Transportation, develop a method for isolating and quantifying the roughness associated with railroad-highway grade crossings.
- Correlate the roughness associated with railroad crossings to the traveling public perception of acceptable, and unacceptable, levels of roughness.

Once these technical challenges were met, the final goal of the study was to assemble the methods required to locate and extract roughness data associated with railroad crossings into an informational package to be adopted by the vendor currently under contract to collect roughness data. The vendor would implement these methods and report the roughness associated with railroad crossings as an additional term of the contract. After receiving this data, the Department of Transportation could utilize it in prioritizing railroad crossing repairs and determining the level of repair necessary.

## 4. Work Plan

### 4.1 Locating Railroad-Highway Grade Crossings in Data

The first objective addressed in this study is the locating of railroad-highway grade crossings in profile data currently collected by the Indiana Department of Transportation. To accomplish this objective a review of railroad-highway grade crossing construction was required. The purpose of this review was to determine which characteristics are common to all railroad-highway grade crossings, and which of those characteristics can be detected in the profile data. The following is a summary of the information obtained from the review:

- Several factors affect the design of railroad-highway grade crossings. These factors are: location (urban, rural), type of road (arterial, collector, local), traffic volume, geometric features (number of lanes, horizontal and vertical alignment, crossing angle, etc.), crossing surface and elevation.
- Since these factors all have an affect on the design of railroad-highway grade crossings, each crossing exhibits its own unique physical characteristics.
- One characteristic that is common to all railroad-highway grade crossings is called ‘gauge spacing’.
- ‘Gauge spacing’ is the distance measured between the two parallel sections of rail that form the railroad tracks. This distance is a standard used by all railroads and measures four feet, eight and one-half inches (4 feet 8.5 inches, or 56.5 inches).

The next step in locating railroad-highway grade crossings in profile data was to examine the actual profile data generated by the Department’s profiler. This was done to determine if the gauge spacing characteristic could be detected in the data collected. To accomplish this, a railroad-highway grade crossing located on US 52 in Lafayette, Indiana was selected for testing with the Department’s profiler. This site was selected for the following reasons:

- The site is located in an area that has more than 1/10 mi. of distance, on both sides of the crossing, with no traffic controls.
- The site provides multiple railroad tracks (2) and multiple lanes (4).
- The site has periods of time with low traffic volume.
- The posted speed limit at the site is 55 mph.
- The site is in close proximity to the Division of Research.

The site was laid out so that the crossing was located in the center of a 1/10 mile section of pavement. Several sets of profile data were then collected from the site while testing at the posted speed limit. The site was tested at the posted speed limit for two (2) reasons: (1) To

provide the ability to apply the results of this study to historical data, and (2) To allow the contractor collecting profile data to apply the results of this study without having to alter their testing methods or retest locations containing railroad-highway grade crossings.

To ensure that the crossing location could be found in the data, the ‘event marker’ feature of the Department’s profiler was used while collecting some of the sets of profile data. The ‘event marker’ feature of the Department’s profiler is a way for the testing system operator to enter a ‘marker’ into the raw profile data. In this way the operator can mark the location of an event (milepost, bridge-deck, railroad crossing, etc.) as it is tested. After the data was collected, it was taken back to the Division of Research for processing and analysis, which will be discussed in the analysis section of this report.

## **4.2 Isolating and Quantifying Roughness**

The second objective to be addressed in this study was the isolation and quantifying of ‘roughness’ associated with railroad-highway grade crossings. Since the area of interest in this study is much smaller than those typically evaluated using IRI, a separate rating scale called the ‘Railroad Crossing Index’ (RCI) was developed to evaluate the data in this study. The ‘RCI’ was developed by manipulating IRI data associated with railroad-highway grade crossings and correlating the resulting values to the traveling public’s perception of the crossing’s condition. To accomplish this objective, four different methods of manipulating the IRI data were proposed. However, due to a complete failure of the computer system in the Department’s profiler and the subsequent repair and redesign of the system, two of the proposed methods had to be dropped from consideration. This was done with the approval of the study advisory committee (SAC) for the following reasons:

- To return the Department’s profiler to active status as quickly as possible.
- To make the Department’s profiler less dependent on proprietary knowledge exclusive to its designers.
- To allow this, and other, research projects to continue making progress.

The remaining two methods proposed for isolating and quantifying roughness associated with railroad-highway crossings are as follows:

- Method A: This method equates a resulting ‘Railroad Crossing Index’ (RCI) with IRI. The RCI (or IRI) is calculated from the section of data that contains only the railroad-highway grade crossing. Using this method, an IRI is generated for a ten (10) foot section of data, centered about the crossing, which becomes the RCI value for this method.
- Method B: This method of generating an RCI number calculates two (2) IRI numbers and uses the difference between the two. The first IRI number calculated is for a 1/10 mile (528’) section of pavement that includes the railroad -highway grade crossing. The second IRI number calculated uses the same

data as the first IRI number, excluding a 10 foot section of data that contains the railroad-highway grade crossing itself. The difference between these two IRI values becomes the RCI value for this method.

The two methods listed here will be discussed in greater detail in the analysis section of this report.

In order to verify the proposed methods, a statistical experiment was designed by Sedat Gulen from the Indiana Department of Transportation, Division of Research. The experiment called for locating enough representative sites of differing roughness levels to support a statistical analysis of the RCI data. To satisfy the requirements of the statistical experiment, three levels of roughness were selected. The three levels of roughness were defined as:

- ‘Smooth’: a level of roughness that is almost undetectable to a traveler’s perception while traversing the crossing at the posted speed limit.
- ‘Medium’: a level of roughness that is detectable to a traveler’s perception, but not significant enough to cause undo concern while traversing the crossing at the posted speed limit.
- ‘Rough’ : a level of roughness that is both detectable to a traveler’s perception and significant enough to cause concern while traversing the crossing at the posted speed limit.

In addition to the three levels of roughness, three ranges of speed were also specified for each level of roughness. These ranges were defined as:

- ‘Low’ : 30-35 mph.
- ‘Medium’ : 40-45 mph.
- ‘High’ : 50-55 mph.

Then, for each of the nine classifications listed above, three representative sites were selected. These sites were selected by the criteria established above, plus the additional criteria that it be located in an area that facilitated the formation of a route. This route was used to collect the profile data as well as the physical rating panel evaluations.

### **4.3 Correlation of RCI with Public Perception.**

The final objective to be addressed in this study was the correlation of the RCI numbers generated by the two proposed methods with the traveling public’s perception of roughness associated with railroad-highway grade crossings. This was done to determine the levels of

roughness that were acceptable and unacceptable to the traveling public according to the values obtained by calculating an RCI.

The ability to locate sites that permit the formation of a route is due to the use of a physical rating panel. The physical rating panel was made up of several individuals selected to drive a standard INDOT fleet vehicle over the selected sites. Since other personnel were used as a rating panel, a time efficient means of traveling and evaluating all the sites was necessary. Therefore a route was developed from the selected sites to permit evaluation of all the selected sites in the least amount of time.

After traversing a site, each person in the panel was asked to make an individual judgment of whether they thought the crossing was acceptable or unacceptable. This information was then used in the statistical analysis of the RCI data. Since the response of the raters in the rating panel was binomial (acceptable/unacceptable), a Logistical Regression using an Exponential Distribution was used to determine the correlation between RCI values and levels of acceptable, and unacceptable, roughness.

## **5. Analysis of Data**

The original premise of this study was to develop a rating system by which railroad-highway grade crossings could be evaluated and ranked based on their roughness. This information would then be given to the railroad companies as a means of determining repair priorities based on the traveling public's perception of crossing roughness. However, after further investigation into the responsibility of crossing maintenance, it was discovered that the state, not the railroad companies, is responsible for the maintenance of the approaches to all publicly accessible railroad-highway grade crossings. Furthermore, this responsibility is divided amongst several other governmental agencies within the state. These divisions vary from state to state, but in Indiana this responsibility is governed by various state, county, and city governmental agencies depending on the location of the crossing. This fact, along with the sheer number of railroad-highway grade crossings in Indiana, makes the reporting of this data to the appropriate governing entity more complex than originally anticipated, and beyond the scope of this study. However, it was decided by the study advisory committee that even though the reporting of this data went beyond the scope of this study, that there was still a merit in determining if this kind of data could be generated.

### **Section 5.1 Locating Railroad-Highway Crossings in Profiler Data**

To locate a railroad-highway grade crossing in the profile data generated by the Department's profiler requires several steps. Initially, the raw profile data is in a format that is not conducive to visual examination. Therefore it must be processed into a useable format before a crossing can be located. The raw data generally consist of 12 lines of text (header information), followed by 5 columns of 4-digit numbers. (See figure 5.1 below.)

```

New Test at 09:18:50 AM on 8/11/1999
Left Optocator Offset: 0
Right Optocator Offset: 10
Left Accelerometer Offset: 1084
Right Accelerometer Offset: 1033
FrequencyToVoltage Reading at 400Hz: 4095
Operator: t. williams
Road: us 52
Direction: north
Lane: driving
Starting RP: mp 52
Comment:
3265 1101 1017 2107 2090
3273 1182 1020 2113 2088
3275 1142 1017 2117 2089
3281 1172 1011 2114 2095
3283 1120 1009 2120 2090
3270 1029 1057 2122 2092
3260 1024 1134 2125 2099
3245 1011 1180 2131 2106
3231 1000 1141 2137 2113
3311 1035 1143 2139 2120

```

**Figure 5.1 ‘Sample of Raw Profile Data’**

Each column of 4-digit numbers represents the output of one of the system’s sensors, or transducers, in bit form. These sensors, in order of the output, include; a frequency-to-voltage converter (speed), two accelerometers (displacement), and two optocators (height). Two sets of accelerometers and optocators are used to provide profile data for both the left and right wheel-paths. (More detailed information about the system’s sensors and transducers are included in Appendix A.) The minimum value of these readings is 0000, and the maximum value is 4095. This comes from the fact that the system’s computer I/O board has 12-bit resolution (i.e.  $2^{12} = 4096$ ) for converting analog input voltages into digital form. Therefore the output voltage of each sensor is divided into 4096 pieces (including 0), and establishes the overall resolution for each sensor as seen by the computer. These are given in the table below:

Sensor	Measurement Range (MR)	Resolution/bit
Optocator	256 mm	0.0625 mm (0.0025 inches)
Accelerometer	+/- 2 Gs	0.00977 Gs
Freq.-to-Volt.	71.35* mph	0.0174 mph

\*71.35 mph is the vehicle speed that corresponds to a pulser output frequency of 400Hz.

**Table 5.1 ‘Sensor Resolution-I/O Board’**

The first step in converting the raw profile data into a useable format is to use the raw data to generate an elevation profile. This was done by using a software program developed by Karen

Zhu at the Indiana Department of Transportation, Division of Research. This program, simply called ‘process.exe’, performs several important functions. First, it extracts all the ‘text’ information from the raw data and stores it in a file named ‘\*.sum’, for summary file. (See figure 5.2 below.)

```
Marker at 1147.65ft (line 4389)
Marker at 6514.59ft (line 24914)
Marker at 32486.38ft (line 124239)
Marker at 37726.50ft (line 144279)
Marker at 74268.74ft (line 284029)
Marker at 79470.94ft (line 303924)
Comment: 1st marker=RP-221 2nd=RP-222 3rd=RP-227 4th=RP-228 5th=RP-235
6th=RP-236 at 79897.16ft (line 305554)
```

### Figure 5.2 ‘Sample Summary (\*.sum) File’

As indicated by the extension, a summary file is all the text information included in the body of a raw data file. Contained in these file(s) are: a) Comment’s related to the collection of the data entered by the system’s operator., and b) Any ‘event marker’ entered by the system operator during the collection of data. This data is stored in a summary file along with the location, line number and longitudinal distance (in feet), of where it occurred.

Next, the program converts all the 4-digit, bit numbers into actual values by multiplying them by their corresponding conversion factors listed in Table 5.1. Each line of raw data corresponds to one longitudinal data point for both the left and right wheel-paths. The ‘process.exe’ program uses these calculated ‘actual values’ to generate the individual data points that make-up the elevation profile(s). This is done by use of the following equation:

$$Z(x) = H(x) + \iint_x A_t(s)/V^2 ds ds$$

Where:        x = Longitudinal distance

              Z(x) = Computed Profile Point

              H(x) = Height sensor measurement

              A<sub>t</sub>(s) = (Temporal) Vertical acceleration

              V = Vehicle speed

This methodology of calculating elevation profiles was invented by Elson Spangler and William Kelly (Spangler E.B. et. al., 1966). Once the ‘process.exe’ program has calculated the data points for the elevation profile(s), the new data points are saved in a file called an ‘\*.erd’ file.(See figure 5.3 below.) This data, when plotted, can be examined visually.

```

ERDFILEV2.00
      2,      -1,      -1,      1,      5, 0.26160      ,      -1,
TITLE      us 52      north      driving      starting from mp 52
SHORTNAMElev.      RElev.
LONGNAMELeft Elevation      Right Elevation
UNITSNAMin      in
GENNAME Profile Elevation      Profile Elevation
XLABEL Distance
XUNITS ft
FORMAT
TestID F:\10ths\us52nbd110th
History Operated by t. williams
END
-0.03 -0.04
-0.08 -0.07
-0.11 -0.12
-0.15 -0.16
-0.18 -0.18
-0.21 -0.20
-0.23 -0.23
-0.27 -0.25
-0.30 -0.30
-0.33 -0.32

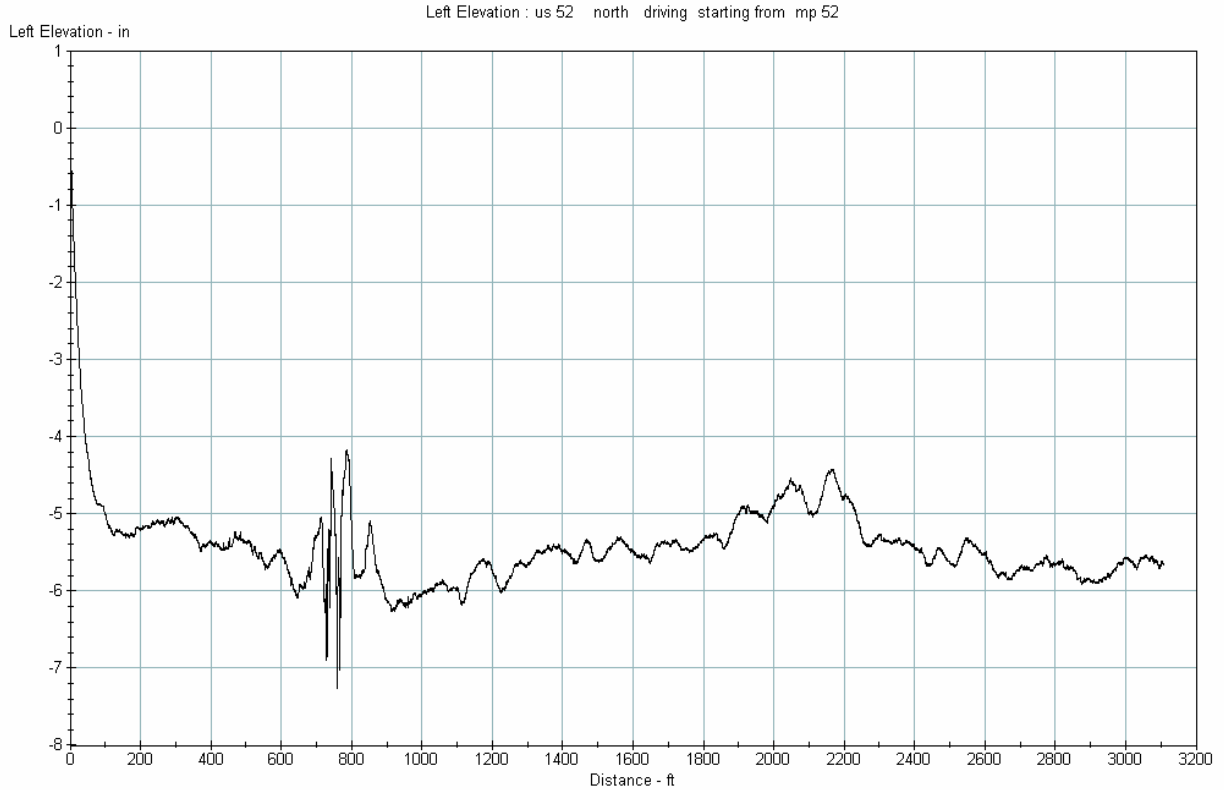
```

**Figure 5.3 ‘Sample Elevation Profile (\*.erd) File Data’**

Each line of data corresponds to 3.138” of longitudinal movement, otherwise known as the ‘sample interval’. This is a result of the pulser that is used on this system for measuring speed and mileage. This pulser is mounted directly in-line with the vehicle’s speedometer cable, and attaches to the transmission at the speedometer cable drive. The output signal of the pulser is a square-wave pulse-train with a uniform duty-cycle and a frequency that changes linearly with the speed of the host vehicle. This pulse-train is also used as an external trigger source for the system’s computer data I/O card to ensure uniform distance between each data point. This information is important when viewing the plotted elevation profile(s).

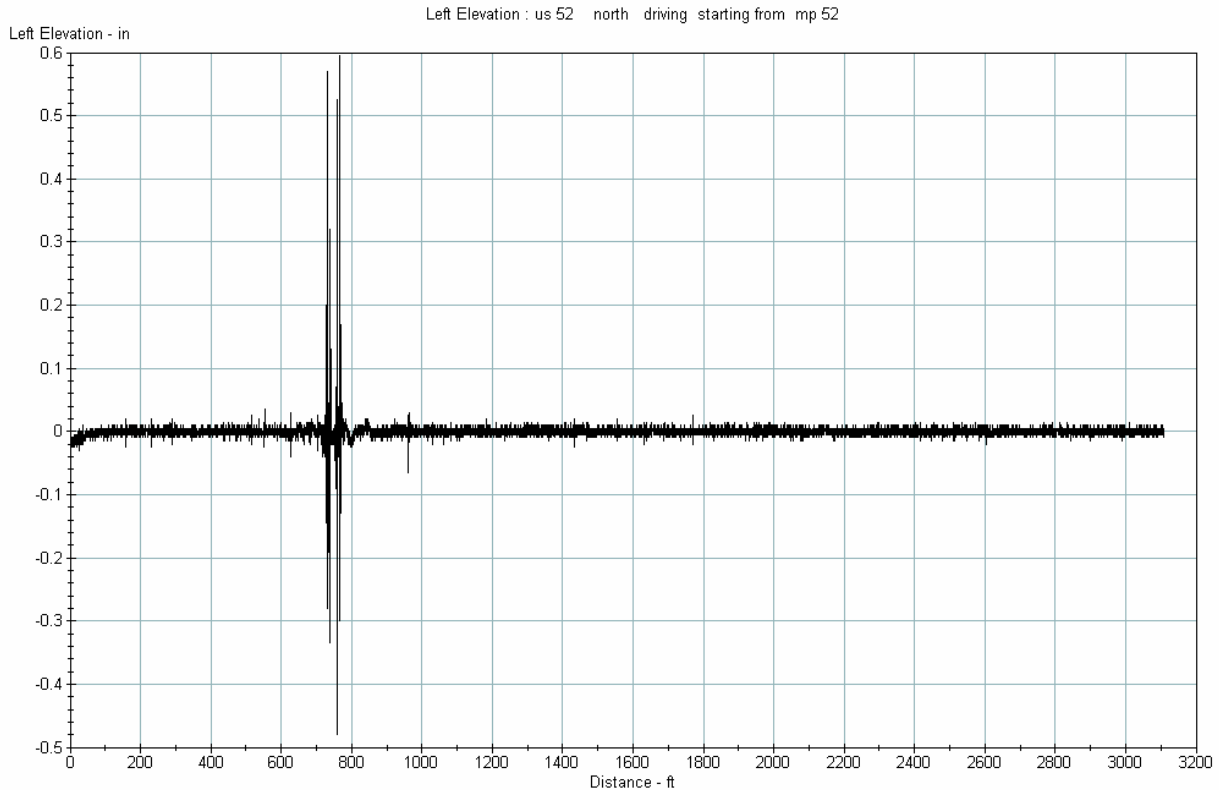
A software program called WinEP.zip is used to plot, and view, the elevation profile for the left wheel-path. WinEP.zip is an engineering plotter that was developed by Jin Hu and Kevin O’Malley of the Mechanical Simulation Corporation for the University of Michigan (copyright© 1996-1997). This program was developed for the University of Michigan to support several programs, but the one of interest to this study is the RoadRuf software which will be discussed later in this section.

Figure 5.4 below shows an example of a plotted elevation profile using WinEP. This example shows how the profiles appear when they are plotted without filtering.



**Figure 5.4 ‘Plotted Elevation Profile File Without Filtering’**

As can be seen in figure 5.4, to accurately examine the profile data visually, it must first be filtered. This is accomplished in the WinEP software by selecting the ‘Data’ menu, and then selecting the ‘Filter...’ option. Due to the configuration of the Department’s profiler, and its sample interval, the ‘Hi-Pass’ option was selected for use in this study. The ‘base-length’ of the Hi-Pass filter is set to 0.523 feet, which is equal to twice the sample interval of the Department’s profiler (see figure 5.5 below). This is done to prevent ‘aliasing the data’ when it is plotted, as shown in figure 5.4 on the previous page.



**Figure 5.5 ‘Plotted Elevation Profile After Filtering’**

‘Aliasing’ occurs when the collected data is not filtered, or filtered improperly. When profile data is collected using a finite sampling interval, the short-wavelength component of the actual profile negatively affects the longer-wavelength component unless it is properly filtered. To properly filter the profile data, the Nyquist Sampling Theory is utilized. The Nyquist Sampling Theory simply states that in order to accurately reproduce a waveform from sampled data, that a minimum of two (2) data points are needed from the shortest wavelength of interest. By applying this theory to the data collected by the Department’s profiler, we find that the shortest reproducible wavelength is equal to twice the sample interval, or:

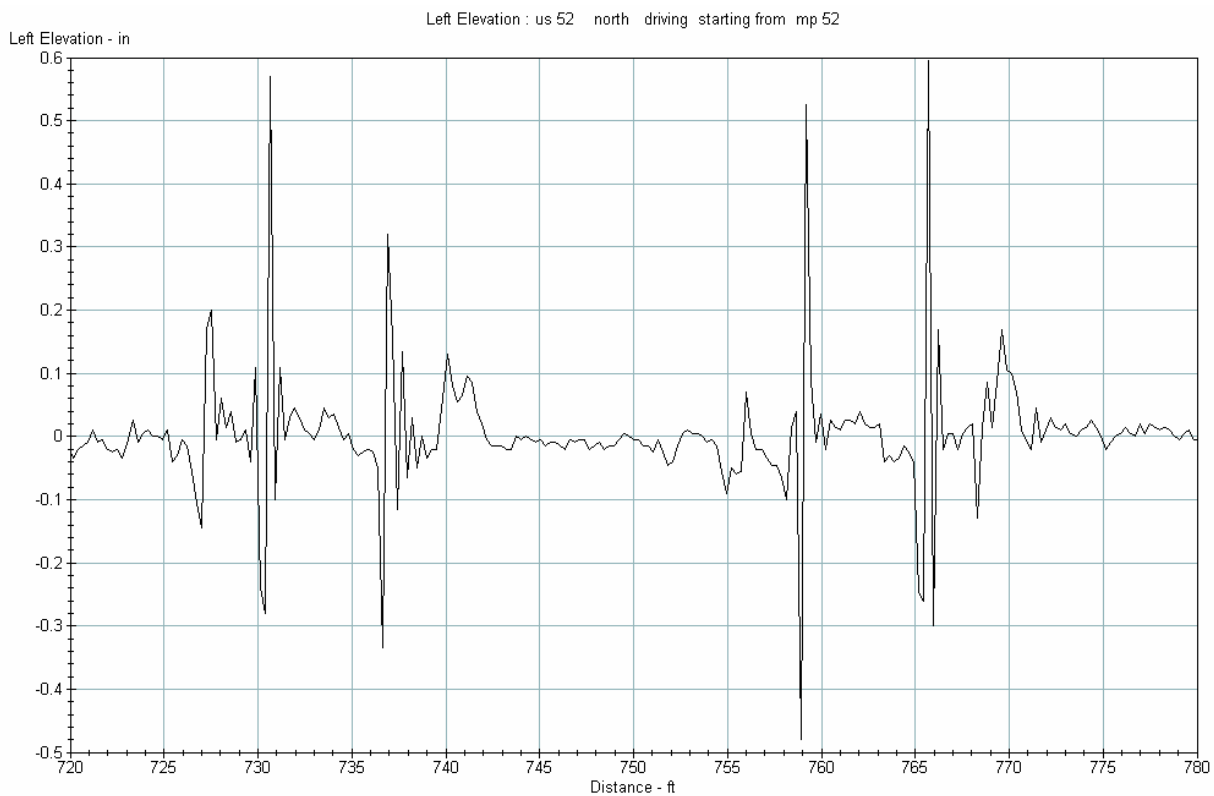
$$\mathbf{3.138\ inches\ x\ 2\ =\ 6.276\ inches\ (0.523\ feet)}$$

This wavelength, 6.276 inches, is the shortest wavelength that can be accurately reproduced by the Department’s profiler, and therefore the overall resolution of the collected profile data.

Now that the data has been properly filtered, a detailed visual examination of the profile can be performed. As mentioned earlier, the one feature universal to all railroad-highway grade crossings is the gauge-spacing, which equals 56.5 inches. Therefore this is the feature that needs to be identified in the profile data to determine the location of the crossing. Locating railroad-highway grade crossings randomly distributed through-out the collected data by a visual inspection alone poses a very large task. Therefore, the information contained in the \*.sum file is very useful at this time. By knowing the location of the ‘event marker’ entered by the system operator while traversing the crossing, the approximate location of the crossing is known. The reason the location is approximate is due to the following factors: operator’s response time,

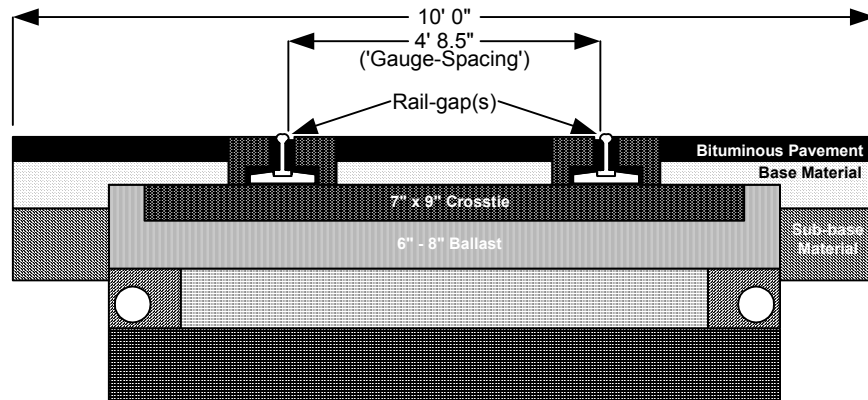
speed of the testing system, and the time delay caused by entering a keyboard input to the computer while collecting data. These factors cause a ‘lag’ in the location of the marker that ranges from 10-60 feet. Never-the-less, the marker gives a starting point for the visual inspection that greatly reduces the time needed to locate the crossing(s).

Using the location of the marker from the \*.sum file, and allowing space for both the lag and the crossing itself, the area containing the crossing can be viewed by changing the parameters of the output plot using the WinEP software. This is done by using the ‘Format’ menu and selecting the ‘Customize Plot Format...’ option. Then by entering the beginning and end points (in feet) determined by the location of the marker, the profile is plotted showing the data between these points only (figure 5.6).



**Figure 5.6 ‘Elevation Profile of Crossing Location’**

The example used in figure 5.6 shows the elevation profile of a railroad-highway grade crossing that has two (2) sets of railroad tracks. The distance between the rails for each set of tracks can be measured using the WinEP software by activating the ‘show data points’ option on the tool bar at the top of the screen. When this option is activated, a set of ‘cross-hairs’ are used to locate a point of interest, in this case a 2.5 inch gap (rail-gap) inside of each rail at the beginning and end of the gauge-spacing (figure 5.7).



**Figure 5.7 ‘Cross-section of Railroad-Highway Grade Crossing’**

Once the rail-gap is located, its ‘x’ and ‘y’ coordinates are shown at the bottom of the screen. By recording the x-values for the position of the rail-gaps, and subtracting the two, the distance between the two (gauge-spacing) can be determined. When this method of measuring the gauge-spacing was applied to the example in figure 5.6, the following results were obtained:

Crossing #1:  $x_1 = 730.39'$ ,  $x_2 = 736.67'$ : Gauge-Spacing<sub>1</sub> =  $736.67' - 730.39' = 6.28'$

Crossing #2:  $x_1 = 758.90'$ ,  $x_2 = 765.44'$ : Gauge-Spacing<sub>2</sub> =  $765.44' - 758.90' = 6.58'$

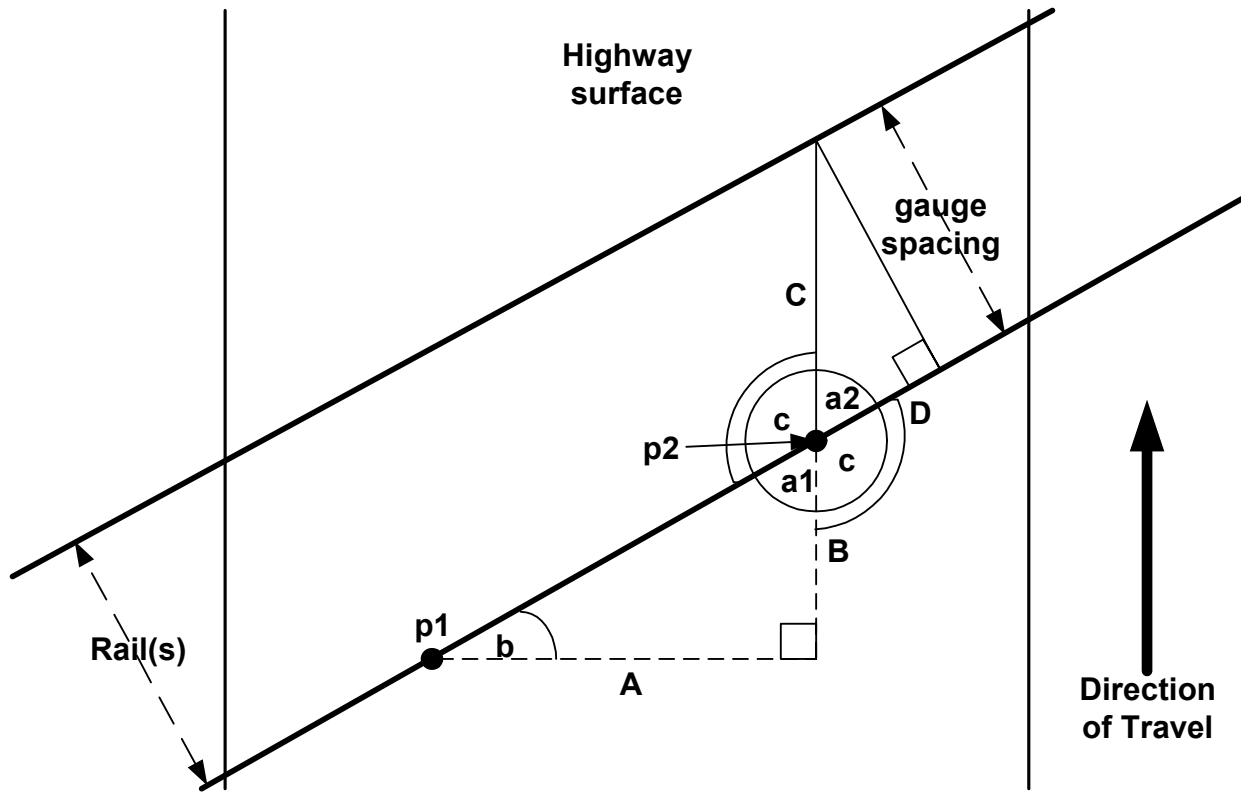
The discrepancy between the two values obtained above is attributable to the difference of one pulse from the speed and mileage pulser (3.138”), which also controls when the computer inputs new data points by acting as an external trigger source.

Since the exact location of the occurrence of the speed and mileage pulse with respect to the physical characteristics of the crossing are not known, it is impossible to determine which of the two gauge-spacings is more accurate. Therefore it is necessary to use a range of values instead of an exact distance, as shown below.

Gauge-Spacing<sub>1</sub> (range): 6.28 feet +/- 3.138 inches = (6.02’ to 6.54’)

Gauge-Spacing<sub>2</sub> (range): 6.58 feet +/- 3.138 inches = (6.32’ to 6.84’)

Another factor that becomes important at this time is the angle at which the railroad and the highway intersect each other. The gauge-spacing characteristic, from the profiler’s perspective, equals 56.5 inches only when the two intersect at a 90° angle. When the railroad and highway intersect at any other angle, the gauge-spacing characteristic becomes a function of the angle of intersection, as described in figure 5.8 below:



**Figure 5.8 ‘Gauge-spacing as a Function of Angle of Intersection.’**

Where:

P1 = point of detection by left height-sensor (optocator).

P2 = point of detection by right height-sensor (optocator).

A = distance between left and right height-sensors. (59 inches)

B = difference between points P1 and P2.

C = Gauge-spacing (as measured by profiler).

Gauge-spacing = 56.5 inches.

Since the Department’s profiler has height sensors in both the left and right wheel-paths, this method of determining the gauge-spacing, as seen by the profiler, is possible. Using the information in figure 5.8, the gauge-spacing (as measured by the profiler) is calculated by using the following relationships:

$$B = P2 - P1$$

$$\tan(\text{angle } a1) = A/B \text{ (or } 59''/B)$$

$$\tan (\text{angle } a_2) = \text{Gauge-Spacing}/D \text{ (or } 56.5''/D)$$

And since by trigonometric definition:

$$\text{angle } a_1 = \text{angle } a_2$$

and,

$$\tan (\text{angle } a_1) = \tan (\text{angle } a_2)$$

therefore, by using substitution:

$$A/B = \text{Gauge-Spacing}/D, \text{ or } 59 \text{ inches}/B = 56.5 \text{ inches}/D$$

and solving this equation for the unknown factor D results in:

$$D = (\text{Gauge-Spacing} * B) / A \text{ or } (56.5'' * B) / 59''$$

and finally, by using the Pythagorean theorem, we can solve for the gauge-spacing as measured by the profiler (C):

$$C = \sqrt{(D^2 + 56.5^2)}$$

By substitution, the final equation for finding the gauge-spacing as measured by the profiler becomes:

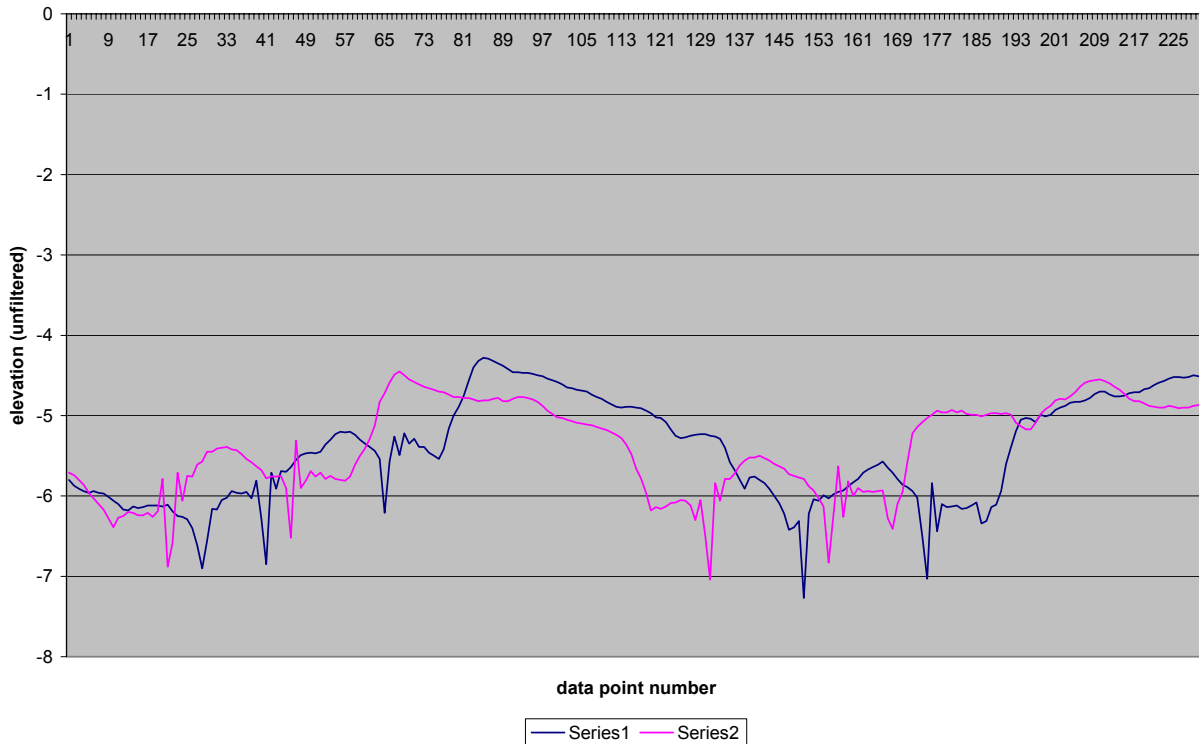
$$C = \sqrt{(((56.5'' * B) / 59'')^2 + 56.5^2)}$$

Since the WinEP software will only plot the left elevation profile, to get the information needed to determine the gauge-spacing characteristic as seen by the profiler (figure 5.8) required a different strategy. After noting the location of the crossing(s) in the left elevation profile (in feet), and using the same beginning and end points used to change the format of the elevation profile as shown in figure 5.6, the 'data point number' can be calculated using the pulser resolution as follows:

$$\text{Data Point \#} = (\text{Location (in feet)} * 12 \text{ inches/foot}) / 3.138 \text{ inches/pulse}$$

This results in the location(s) of the data points in the \*.erd file, as well as, the raw data file. The \*.erd file is then plotted using the MicroSoft 'Excel' software package. This has the advantage of being able to plot both the left and right elevation profiles simultaneously (figure 5.9).

us52nbdl.erd



**Figure 5.9 ‘Left and Right Elevation Profiles (Excel)’**

By being able to view both the left and right elevation profiles simultaneously, the information necessary to determine the angle of intercept (figure 5.8), and thus the gauge-spacing characteristic as measured by the profiler, can be obtained. However, since Excel is being used to generate these profiles, the data can no longer be filtered to prevent aliasing. By using the data point numbers calculated earlier for the location of the entire crossing, and the location of the crossing in the left-hand profile, the physical location of the crossing in the right-hand profile can be found by visually comparing the two profiles and matching the common features of each profile. In this way, the difference in distance between the start of the crossing in the left-hand profile and the right-hand profile can be measured. After the crossings have been located in both profiles, the data point numbers are recorded, and the difference in starting points (‘B’ in figure 5.8) is calculated by multiplying the number of data points by the pulser resolution.

From the plot in figure 5.9 the following information was obtained:

- Crossing #1:  $x_{\text{right}} = 23$ ,  $x_{\text{left}} = 40$ : ‘B<sub>1</sub>’=  $40 - 23 = 17$  data points.
- Crossing #2:  $x_{\text{right}} = 133$ ,  $x_{\text{left}} = 151$ : ‘B<sub>2</sub>’=  $151 - 133 = 18$  data points.

Then converting the data point numbers to distances yields:

$$‘B_1’ = 17 \text{ data points} * (3.138''/\text{data point}) = 53.35''$$

$$‘B_2’ = 18 \text{ data points} * (3.138''/\text{data point}) = 56.48''$$

Again the discrepancy between the two values is directly attributable to the difference in one pulse from the speed and mileage pulser.

By using the values obtained above in the equation generated in figure 5.8, the gauge-spacing measured by the profiler can be calculated and compared to the values obtained from the elevation profile plotted by the WinEP software:

$$C_1 = \sqrt{(((56.5'' * 53.35'') / 59'')^2 + 56.5^2)}$$

$$C_1 = \sqrt{((51.09'')^2 + (56.5'')^2)}$$

$$C_1 = \sqrt{(2610.19 + 3192.25)} = \sqrt{5802.44}$$

$$\underline{\text{Gauge-Spacing}_1 = C_1 = 76.17'' (6.35')}$$

$$C_2 = \sqrt{(((56.5'' * 56.48'') / 59'')^2 + 56.5^2)}$$

$$C_2 = \sqrt{((54.09'')^2 + (56.5'')^2)}$$

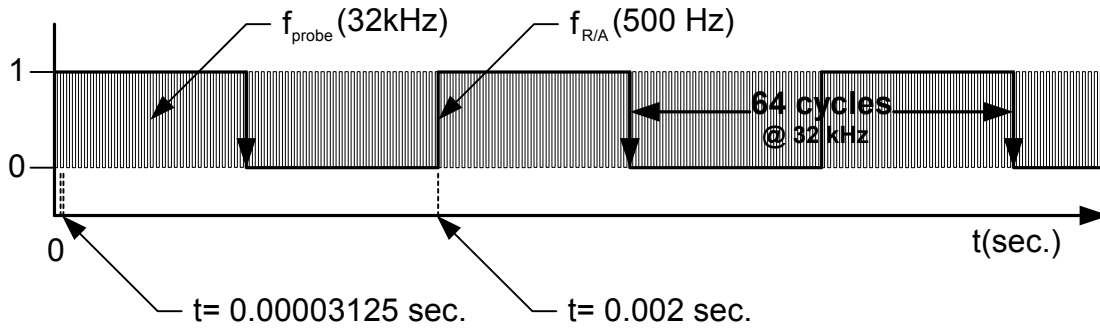
$$C_2 = \sqrt{(2925.73 + 3192.25)} = \sqrt{6117.98}$$

$$\underline{\text{Gauge-Spacing}_2 = C_2 = 78.22'' (6.52')}$$

By using this method, most of the railroad-highway grade crossings included in this study were located. However, other characteristics of the Department's profiler affected the ability to locate some of the railroad-highway grade crossings by visual inspection of the elevation profiles alone.

The characteristics of the Department's profiler that impeded the locating of railroad-highway grade crossings are the 'sample interval', and 'sensor footprint'.

The 'sensor footprint' is the area measured by a sensor before generating an 'averaged' output. This is the function of the receiver/averaging card used by the optocator's laser control unit. Using an averaged reading of the sensors output (footprint), ensures that the system will not lose any data points due to size of the area sampled by the optocator (1.7x 8 mm) while traversing an irregular surface such as asphalt. Therefore, several readings are averaged together to generate a single data point. The receiver/averaging card is factory configured to have an updating frequency of 500Hz. Since the optocators have an operating frequency of 32 kHz, this means that the output of the receiver/averaging card is the average of 64 data points collected by the optocator. This is illustrated in the timing diagram (figure 5.10) below.

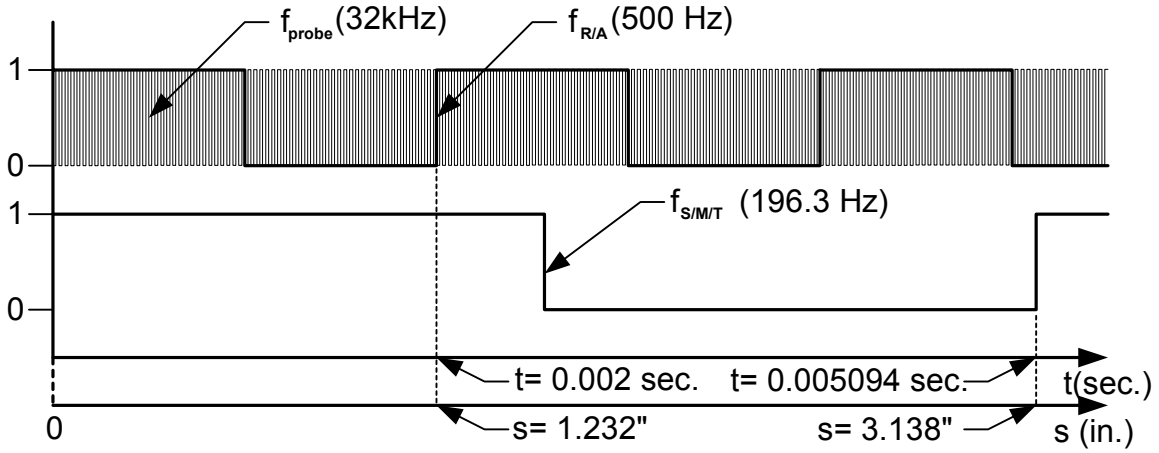


$$\# \text{ of data points averaged} = (32,000 \text{ Hz}) / (500 \text{ Hz}) = 64$$

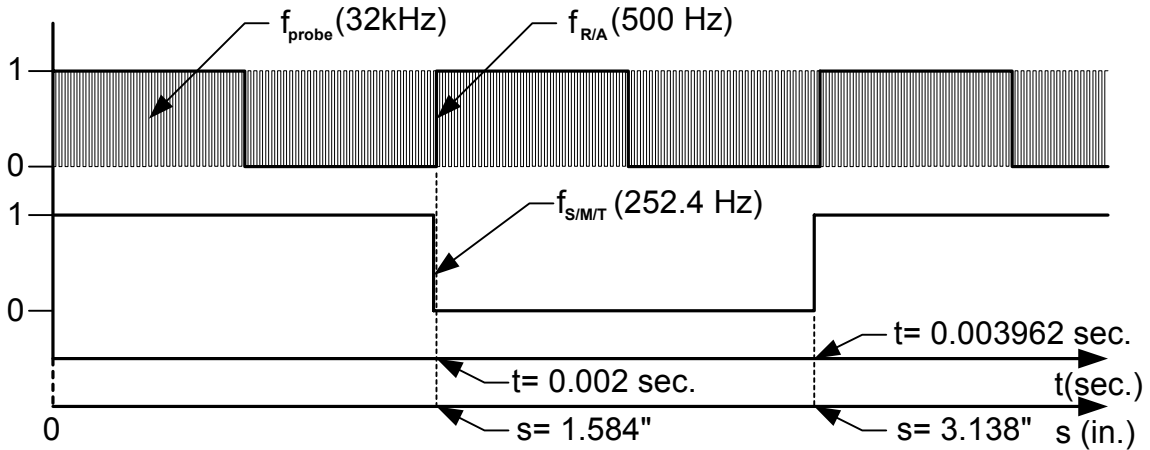
**Figure 5.10 ‘Optocator-Receiver/Averaging Timing Relationship’**

Even though using an averaged output prevents the loss of data points, it does have a negative effect on the resolution of the output. By averaging a number of sensor readings to generate a single data point, the actual value of that data point is attenuated to some degree by the averaging process. This is especially noticeable in the elevation profile when sudden changes in elevation occur. A good example of this is when data is collected over areas such as the ‘rail-gap’, which is essential when identifying a railroad-highway grade crossing by the gauge-spacing characteristic. Since the optocator(s), laser control unit, and receiver/averaging card(s) are stand-alone units and not controlled by the system’s computer, the data generated by them updates continually regardless of the speed of the testing system. Even though this data is updated continually, not all of the data generated is collected and stored by the system’s computer. The only time the data is collected and stored by the computer is when the system’s I/O board receives a pulse from the speed and mileage pulser at its external trigger input. This causes the I/O board to read, collect, and store all the data that is currently present at its inputs. The longitudinal distance between the speed and mileage pulses is known as the ‘sample interval’ which, for the Department’s profiler, equals 3.138 inches.

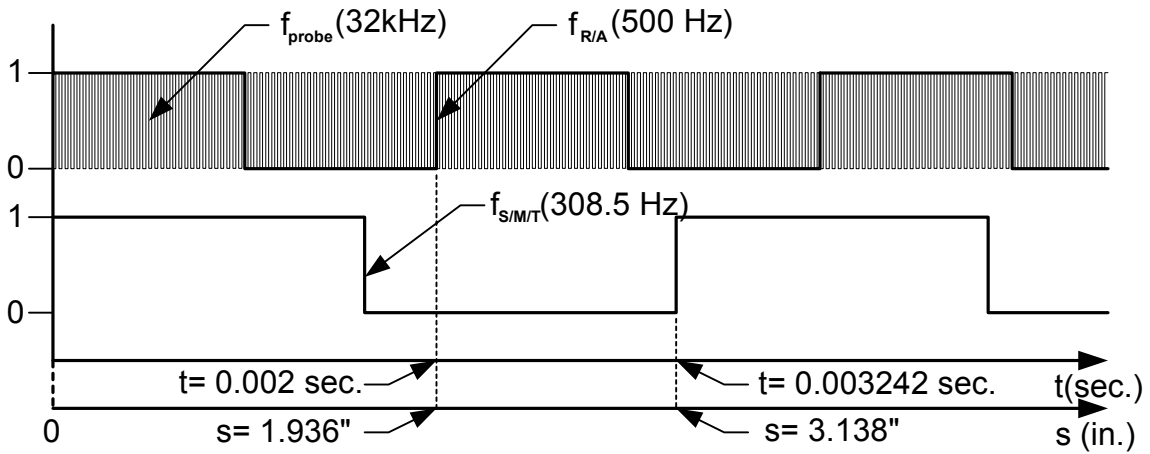
The operating frequencies of the optocator(s) and receiver/averaging cards are fixed values, and do not vary at any time during data collection. However, when the system is collecting data, the speed of the host vehicle has an impact on the size of the sensor’s footprint as shown in figure 5.11 on the next page.



**Speed = 35 mph**



**Speed = 45 mph**



**Speed = 55 mph**

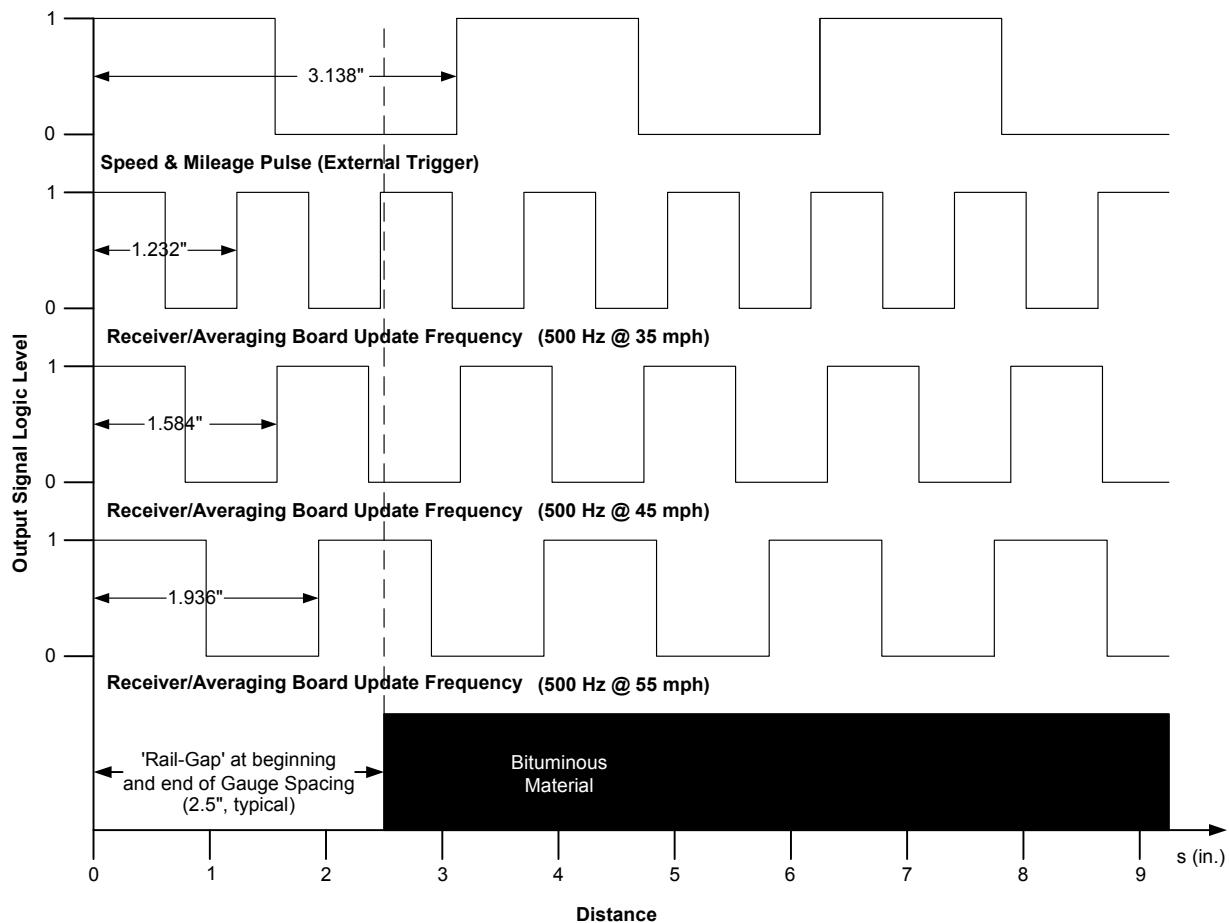
**Figure 5.11 'Sensor Footprint Size Variance With Speed'**

As shown in figure 5.11, there is a spatial relationship between the testing vehicle's speed and the size of the sensor's footprint. This is due to the fact that the operating frequencies of the optocator(s) and receiver/averaging card(s) remain constant regardless of the speed of the host vehicle. Therefore, as the speed of the host vehicle changes, the distance traveled between successive readings from the optocator(s) changes. The distance between optocator readings, and the size of the sensor's footprint, can be calculated by using the following formula:

$$\Delta s \text{ (inches)} = (v / f_{\text{opt}}) * ((64 \text{ optocator pulses}) / (1 \text{ receiver/averaging pulse}))$$

- Where:
- $v$  = speed of the testing system in inches/second.
  - $f_{\text{opt}}$  = the operating frequency of the optocators (32 kHz).
  - $\Delta s$  = the distance traveled by the system during one receiver/averaging card pulse.

Also shown in figure 5.11 is the relationship between the size of the sensor's footprint and the interval of the speed and mileage (external trigger) pulse. This relationship shows that as the speed of the testing vehicle increases, the size of the sensor's footprint approaches the distance of the sampling interval. Therefore, even though at least some of the optocator's readings will be in the 'rail-gap', the number of optocator readings from the rail-gap area that are included in the averaged output of the receiver/averaging card is uncertain. This is especially true since the signals are not synchronized, or have a common time-base (figure 5.12).



**Figure 5.12 'Spatial Relationships'**

As a result, it is not always possible to identify the rail-gaps due to the attenuation caused by the receiver/averaging card and the decreased resolution caused by an insufficient number of rail-gap readings. This problem is very noticeable at higher testing speeds and railroad-highway grade crossings with rough approaches.

Even though it was not possible to identify all the railroad-highway grade crossings initially selected for this study, enough crossings were located and identified to satisfy the requirements of the statistical analysis and continue with the project.

### **Section summary:**

To locate the railroad-highway crossings in the data generated by the Department's profiler, several steps were necessary. First, the information generated by the Process.exe program was used to examine the data visually and approximate the position of the crossing. Next, using markers entered by the system operator, the area containing the crossing was isolated for further examination by zooming in on the location using the WinEp software. Due to attenuation caused by the receiver-averaging boards, sample interval, and angle of intersection, positively identifying features indicating the location of railroad-highway grade crossings (i.e. rail-gap, and gauge-spacing) was extremely difficult and in some cases impossible.

## **5.2 Isolating and Quantifying Roughness**

To calculate the Railroad Crossing Index (RCI) values by the two proposed methods, several intermediate steps were required. The first step was to normalize all the raw profile data files to a total length of 1/10 mile that is centered about the crossing. In some cases it was not possible to center the crossing within the 1/10 mile due to the location of the railroad-highway grade crossings' proximity to intersections and traffic control devices. In these cases, the railroad-highway grade crossings were offset from center an appropriate distance so that only valid profile data was included in the edited raw data file. To normalize the raw data file to 1/10 mile total length, the following procedure was used: (to prevent a repeat of this entire procedure, a 10 foot section centered about the crossing was also identified.)

1. Using the location of the center of the railroad-highway grade crossings obtained in section 5.1, the location (in feet) was converted into a 'data point number' using the same methodology used earlier (see example below):

$$C = (A * (12''/1')) / (3.138''/\text{data point})$$

Where: A = The location of the crossing center in feet. (section 5.1)

C = The data point number of the crossing center.

\*The data point number obtained from the above relationship was then rounded to the nearest whole number.

2. Then, the number of data points needed to obtain both a 1/10 mile and 10' section was calculated using the following relationship:

$$Z_1 = (528' * (12''/1')) / (3.138''/\text{data point}) = 2019 \text{ data points}$$

$$Z_2 = (10' * (12''/1')) / (3.138''/\text{data point}) = 38 \text{ data points}$$

Where:  $Z_1$  = the number of data points needed to obtain a 1/10 mile section.  
 $Z_2$  = the number of data points needed to obtain a 10' section.

\*Again, the data point numbers obtained here are rounded to the nearest whole number.

- Using the number of data points needed to obtain 1/10 mile, 10', and the data point number for the center of the crossing, the end points of the 1/10 mile, and the 10' section of the crossing area, were determined by:

$$\text{End point}_1 = C - (Z_1 / 2)$$

$$\text{End point}_2 = C + (Z_1 / 2)$$

$$\text{End point}_3 = C - (Z_2 / 2)$$

$$\text{End point}_4 = C + (Z_2 / 2)$$

Where:  $\text{End point}_1$  = the beginning of the 1/10 mile section.

$\text{End point}_2$  = the end of the 1/10 mile section.

$\text{End point}_3$  = the beginning of the 10' section containing the crossing.

$\text{End point}_4$  = the end of the 10' section containing the crossing.

$C$  = the data point number of the crossing center.

$Z_1$  = the number of data points needed to obtain a 1/10 mile section.

$Z_2$  = the number of data points needed to obtain a 10' section.

\*Again, the data point numbers obtained here are rounded to the nearest whole numbers.

- Then, by opening the raw data file into a spreadsheet (Microsoft Excel), line/data point numbers could be associated with the raw data points. After opening the raw data file into a spreadsheet, the data point numbers for the end points of the 1/10 mile and 10' sections were located and the 'data strings' at those points recorded (see example in table 5.2 on the next page)

Data Pt. #	Speed	Lt. Accel.	Rt. Accel.	Lt. Height	Rt. Height	
1842	3242	1084	1062	2108	2089	
1843	3265	1101	1017	2107	2090	End Pt. 1
1844	3273	1182	1020	2113	2088	
3861	3291	1063	961	2136	2145	
3862	3246	1056	958	2130	2147	End Pt. 2
3863	3203	1075	988	2126	2150	
2836	3267	243	497	2928	2850	
2837	3270	192	643	3003	2846	End Pt. 3
2838	3271	109	957	3043	2846	
2874	3273	1390	764	2425	2152	
2875	3304	1334	767	2399	2127	End Pt. 4
2876	3317	1303	798	2357	2357	

**Table 5.2 ‘Determining Data Point Numbers and Data Strings’**

5. After obtaining the ‘data string’ of the endpoints, the raw data file was opened in a text editing program (Microsoft WordPad) where a search was performed using the ‘find’ feature of the program until the correct data strings were located.

3222	1067	1072	2111	2087
3242	1084	1062	2108	2089
<b>3265</b>	<b>1101</b>	<b>1017</b>	<b>2107</b>	<b>2090</b>
3273	1182	1020	2113	2088
3275	1142	1017	2117	2089
3272	1071	979	2135	2148
3291	1063	961	2136	2145
<b>3246</b>	<b>1056</b>	<b>958</b>	<b>2130</b>	<b>2147</b>
3203	1075	988	2126	2150
3270	1076	988	2121	2145
3269	773	362	2844	2843
3267	243	497	2928	2850
<b>3270</b>	<b>192</b>	<b>643</b>	<b>3003</b>	<b>2846</b>
3271	109	957	3043	2846
3266	63	951	3065	2854
3249	974	836	2467	2157
3273	1390	764	2425	2152
<b>3304</b>	<b>1334</b>	<b>767</b>	<b>2399</b>	<b>2127</b>
3317	1303	798	2357	2117
3335	1445	661	2300	2114

**Figure 5.13 ‘Data Strings in Raw Data File’**

6. Once the end point data strings for the 1/10 mile section were located, the data points surrounding them were deleted, leaving only the raw data necessary for the 1/10 mile section centered on the crossing. After the raw data files were normalized, they were saved as the data to be used in the rest of the study.

Even though all the railroad-highway grade crossings could not be centered in the raw data, the same methodology listed above, except step #3, was utilized for all the sites located in section 5.1.

Once all the sites had been normalized to a total length of 1/10 mile, the next step was to edit the normalized raw data files to remove the railroad-highway grade crossings themselves. This was done to accommodate method B (difference of IRIs) of calculating an RCI. Using the end point data strings associated with the actual crossing area (end point<sub>3</sub> & end point<sub>4</sub>), the normalized raw data files were edited using the same process that was used to normalize the raw data files:

1. The normalized raw data files were opened into a text editing software program (Microsoft WordPad) and searched using the 'find' feature until the correct data strings were located. (see figure 5.13).
2. After the correct data strings corresponding to the actual crossings were located, the raw data between them was deleted which removed the crossings from the raw data files.
3. Once the crossings were removed from the normalized raw data files, the edited raw data files were saved under a different file name to preserve the original, normalized raw data files for further use in the study.

To calculate the Railroad Crossing Index (RCI) values by the two (2) proposed methods, the RoadRuf Software program developed by the University of Michigan Transportation Institute (UMTRI) was used. The RoadRuf software was developed by UMTRI for the Federal Highway Administration (FHWA) as a means of analyzing road profiles. This software uses the same algorithms that were developed by researchers from UMTRI (Sayers, Gillespie, and Karamihas) for the purpose of measuring roughness, and has been accepted by ASTM as the standard for analyzing longitudinal profiles for that purpose. The RoadRuf software is available, for free, at the following website: [www.umtri.umich.edu/erd/roughness/rr\\_home.html](http://www.umtri.umich.edu/erd/roughness/rr_home.html).

The first proposed method (Method A) for calculating an RCI equates a resulting RCI with IRI. The RCI is calculated from a section of profile data that contains the railroad-highway grade crossing only. Using this method, an IRI is generated for a 10 foot section, per crossing, of profile data centered about the crossing. To accomplish generating these values using the RoadRuf software, the unedited, normalized data files were used. The analysis settings of the software were changed to calculate IRI values in ten foot increments, and the files processed. Since the normalized data files were centered about the crossing, the 10 foot increment that represents the crossing is 260-270 feet. The IRI values that corresponded to this interval were recorded, in a spreadsheet (Microsoft Excel), as the RCI values when using this method. In cases where the crossing was not able to be centered in the 1/10 mile of data, the location of the crossing relative to the 1/10 mile was known and the corresponding ten foot increment's IRI value recorded as the RCI value for those sites (see table 5.3, pg. 31-32). Another value that was recorded in the spreadsheet at this time was the IRI value for the entire 1/10 mile section. This was recorded as the initial IRI value to used in calculating an RCI by the second proposed

(Method B). All the data produced by the RoadRuf software for this method of generating an RCI, is located in Appendix B of this report.

The second proposed method (Method B) for generating an RCI value, calculates two (2) IRI values and uses the difference between the two as the RCI value. The first IRI value is calculated for a 1/10 mile section of pavement that includes a railroad-highway grade crossing. (This was done by using the normalized data files and RoadRuf software as described above.) This establishes the initial roughness level of the section. A second IRI value is then calculated for the same section of pavement, excluding the railroad-highway grade crossing data. This was done by using the edited, normalized data files, and the RoadRuf software. For this method of generating an RCI, only the IRI value for the whole section is important. Therefore, only the first IRI value generated (value for the entire section) was recorded in the spreadsheet, and used for the study. (The IRI values generated by the RoadRuf software using the edited data files are included in Appendix C of the report.) The second IRI values were then subtracted from the first set of IRI values to generate the RCI values for these sites. The resulting RCI value would then be representative of the amount of roughness contributed to a section of pavement by a railroad-highway grade crossing. These values were then recorded in the spreadsheet containing the rest of the IRI and RCI data for all the sites included in the study (see table 5.3, pg. 31-32).

**Table 5.3 ‘IRI / RCI Data for All Sites’**

<u>Site #</u>	<u>Location</u>	<u>Road Designation</u>	<u>Direction</u>	<u>IRI 1 (1/10 mi.)</u>	<u>IRI 2 (- Xing)</u>	<u>Method 1 (10' IRI)</u>	<u>Method 2 (iri1-iri2)</u>
1	W. Lafayette	sr 26	west	228.48	220.08	1147.17	8.4
			east	257.76	243.6	1185.44	14.16
3	Lafayette	us 52	south	212.1	147.7	1133.98	64.4
			north	249.03	181.59	1200.6	67.44
4	Corwin	sr 28	west	283.42	246.93	3001.23	36.49
			east	261.41	257.85	2999.17	3.56
5	Lafayette	sr 231	north	282.5	239.32	1045.14	43.18
			south	288.87	214.05	1192.3	74.82
14	Frankfort	us 421	north				
	retest			249	234.77	723.84	14.23
	w/mm			245.74	239.86	730.48	5.88
			south				
	retest			277.73	253.55	679.68	24.18
	w/mm			277.78	253.74	804.11	24.04
15	Frankfort	sr 39 & us 421	north				
	retest			361.63	335.19	1416.76	26.44
	w/mm			358.21	329.57	1571.4	28.64
			south				
	retest			404.76	378.46	1324.54	26.3
	w/mm			396.85	366.71	1387.68	30.14
16	Frankfort	sr 28	west				
	retest			311.92	326.24	728.5	-14.23
	w/mm			326.61	344.32	653.24	-17.71
			east				
	retest			313.27	300.55	921.57	12.72
	w/mm			320.23	301.95	1101.91	18.28

17	Oxford	sr 55	south	166.84	144.57	1378.55	22.27
	retest			166.59	143.58	1434.99	23.01
	w/mm		north	201.34	164.25	1543.97	37.09
	retest			213.15	177.06	1543.8	36.09
20	Templeton	sr 352	west	302.42	310.71	665.98	-8.29
	retest			302.13	306.18	695.32	-4.05
	w/mm		east	300.77	272.55	2108.66	28.22
	retest			325.01	289.98	2197.14	35.03
21	Reynolds	us 421	south	198.23	183.29	1015.82	14.94
	retest			194.83	185.09	777.13	9.74
	w/mm		north	170.56	157.28	937.4	13.28
	retest			170.61	158.98	926.91	11.63
22	Reynolds	sr 24	east	260.4	166.58	1638.94	93.82
			west	231.14	167.94	1551.81	63.2
23	Clymers	sr 25	south	138.33	133.42	606.14	4.91
			north	192.03	159.32	1960.46	32.71
24	Clymers	sr 25	south	185.72	179.35	1384.04	6.37
			north	204.88	189.32	1942.77	15.56
26	Michigantown	sr 29	north	156.58	149.64	1016.73	6.94
			south	154.53	144.26	1209.24	10.27
27	Boyleston	sr 29	north	127.34	113.82	779.56	13.52
	retest			130.78	117	819.7	13.78
	w/mm		south	140.04	114.53	587.28	25.51
	retest			137.22	114.02	639.19	23.2
28	Pleasant Ridge	sr 114	east	159.79	146	858.24	13.79
			west	171.36	152.24	1098.99	19.12
29	Rensslear	sr 231	north	432.83	271.15	1882.17	161.68
			south	369.04	206.49	1566.61	162.55
32	Camden	sr 218	east	174.98	173.05	726.28	1.93
	retest			172.46	173.22	637.97	-0.76
	w/mm		west	178.92	160.5	765.05	18.42
	retest			173.52	160.18	859.61	13.34
33	Delphi	sr 218	east	177.68	174.12	968.89	3.56
	retest			169.17	157.54	1230	11.63
	w/mm		west	204.41	205.33	1528.32	-0.92
	retest			206.79	207.47	1539.9	-0.68
34	Pike	sr 47	north	161.72	134.76	1613.34	26.96
			south	154.11	125.66	1397.82	28.45
35	Fayette	sr 267	north	198.39	192.94	789.51	5.45

36	New Ross	us 136	south	187.22	171.93	1244.71	15.29
			west	264.13	265.8	1227.45	-1.67
			east	219.35	231.38	1052.32	-12.03
37	Crawfordsville	us 136	east				
			retest	249.13	241.48	692.22	7.65
			w/mm	232.18	218.87	762.84	13.31
			west				
			retest	205.37	211.18	958.53	-5.81
			w/mm	203.25	209.25	968.3	-6
38	Crawfordsville	sr 32 & sr 47	east	155.75	150.12	1030.19	5.63
			west	153.51	188.48	1442.14	-34.97
39	Greencastle	sr 231	south	244.3	216.29	765.18	28.01
			north	238.02	230	568.74	8.02
40	Roachdale	sr 236	east	314.45	265.69	1594.26	48.76
			west	346.74	348.53	1645.32	-1.79
41	Ladoga	sr 234	east	301.35	255.91	1048.28	45.44
			west	323.81	294.08	880.2	29.73
42	Bainbridge	sr 36	east	182.56	176.38	1588.15	6.18
			west	230.29	174.06	2336.34	56.23

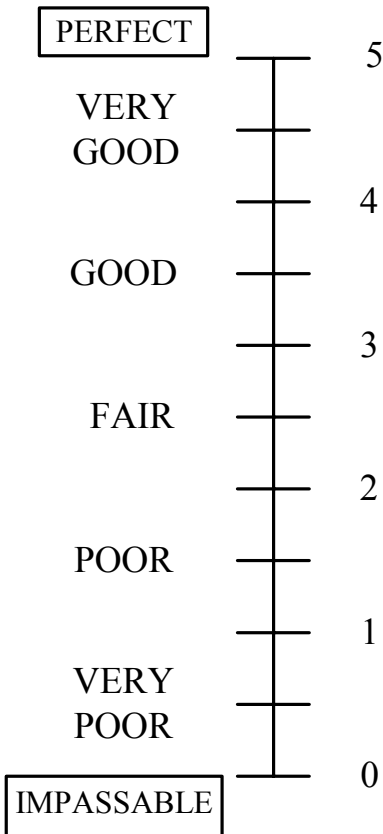
### Section Summary:

By locating the center of a railroad-highway grade crossing in the profile data by feet, the data point can be located in the raw data file by utilizing the characteristics of the speed and mileage pulser. Once the location of the center of a crossing was found in the raw data file, the files were normalized to a standard length of 1/10 mile and a 10' section centered around the crossing was identified. After this had been accomplished for all the sites included in this study, the two remaining methods of generating an RCI (10' increment and difference of IRIs) were applied to the data and the results recorded in a spreadsheet.

### 5.3 Correlation with Public Perception

In order to correlate the resulting RCI values with the traveling public's perception of roughness, a comparative statistical experiment was designed by Sedat Gulen of the Indiana Department of Transportation's, Division of Research. This statistical experiment was designed so that RCI data objectively measured by the Department's profiler, could be related to the subjective ratings of the traveling public. In this manner, 'breakpoints' in the RCI rating scale(s) could be determined for acceptable, and unacceptable, levels of roughness. This information could then be used to determine repair priorities and strategies for railroad-highway grade crossings that were determined to be at unacceptable levels of roughness.

To obtain subjective data that accurately reflects the traveling public's perception of roughness associated with railroad-highway grade crossings, a panel of four (4) volunteers from the Division of Research was used to rate all 28 sites included in this study. Each member of the rating panel was given specific instructions on how to perform the desired ratings, and was then driven over all the sites included in this study. Each site in the study was individually evaluated by each member of the rating panel using the Weaver/AASHO scale shown in figure 5.14 on the next page.



**Figure 5.14 ‘Weaver/AASHO Scale Used by Rating Panel’**

As the rating panel was driven across each site, each member of the rating panel recorded their individual observations on a separate piece of paper with the Weaver/AASHO scale on it and labeled the paper with the appropriate site number. After all the sites in the study had been evaluated by the rating panel, the individual observations for each site was collected, the results tabulated, and recorded in the spreadsheet that contains the IRI/RCI data. To support the use of a Logistical Regression of the data generated by this study, the rating panel observations had to be in a binary format. This was accomplished by dividing the Weaver/AASHO scale in half. Any rating that was < 2.49, was given a rating of ‘unacceptable’ and assigned a binary value of “0”. Conversely, any rating that was > 2.51, was given a rating of ‘acceptable’ and assigned a binary value of “1”. These converted rating panel observations were then recorded into the spreadsheet for further use in the statistical analysis of the data.

**Section Summary:**

A rating panel was formed using volunteers from the division of research. This panel then used a standard INDOT fleet vehicle to traverse and evaluate each site included in this study. Each panel member recorded their own independent observation, for each site, on a separate piece of paper containing a copy of the Weaver/AASHO scale on it. After all the sites had been evaluated by the rating panel, the data was converted into a binary form (0= unacceptable, 1= acceptable) for use in the statistical analysis of the data. This was done by dividing the Weaver/AASHO scale directly in half. Any value that was less than 2.49 was considered

unacceptable, and any value that was greater than, or equal to, 2.50 was considered acceptable. This data was also recorded in the spreadsheet containing the calculated RCI values.

## 5.4 Statistical Analysis of Data

To analyze the data from this study a logistical regression was used. The reason a logistical regression was used to analyze the data from this study is because the quantity being examined (i.e. the acceptability, or unacceptability, of a level of roughness) may have more than one variable that effects the outcome. Therefore, by using a multivariate form of statistical analysis (logistical regression), it would allow for the simultaneous analysis of the relationship between three or more variables across multiple subjects, and still be capable of discovering relationships, which ordinarily would not be discovered by a series of bivariate statistical analysis.

To use a logistical regression analysis on this data, the following variables, and variable types were identified for each of the railroad-highway grade crossings included in this study:

**Rater’s Observation = Binary nonmetric dependent variable**

**Vehicle’s Speed = Nonmetric independent variable**

**Railroad Crossing Index Value(s) (RCIs) = Nonmetric independent variable**

Once these values were determined and recorded in a spreadsheet (table 5.3), they were given to Sedat Gulen, the statistical engineer for the Indiana Department of Transportation, Division of Research, to perform the statistical analysis. Using a statistical analysis software (SAS) program, the rater’s observations were entered as a 1 for acceptable levels of roughness and as a 0 for unacceptable levels of roughness. This was done for all of the rater’s observations. Also entered at this time was: the testing speed (speed limit), and the calculated RCI values. This was done for both methods of calculating RCIs (see Appendix D).

The results of the statistical analysis software are listed in table 5.4 (on the next page):

**Table 5.4 ‘Results of SAS Program’**

RCI Method 1

<b>Speed</b>	$\alpha_0$	$\alpha_1$
30	2.1098	-0.000877
35	3.2769	-0.00252
40	50.5833*	-0.363
55	1.7007	-0.00149

RCI Method 2

<b>Speed</b>	$\alpha_0$	$\alpha_1$
30	0.8314	0.0227
35	1.1688	-0.0155
45	1.2684	-0.0455
55	0.3287	-0.045

Once these values had been obtained, they were used to calculate the probability of being able to determine if a railroad-highway grade crossing was an acceptable, or unacceptable, level of roughness using data collected by the Department's profiler and either of the proposed methods of calculating RCIs. This was done by using the data from table 5.4, in the following equations, to perform the logistical regression:

$$L = \alpha_0 + (\alpha_1 * RC\text{Ivalue})$$

$$P = (e^L / (1 + e^L))$$

Where:

L = the extent a dependent variable can be predicted by (2) or more variables.

$\alpha_0$  = the regression constant.

$\alpha_1$  = the regression coefficient.

RCIvalue = Roughness value calculated using the (2) proposed methods.

And

P = the probability of predicting the acceptability of roughness value.

e = 2.71838

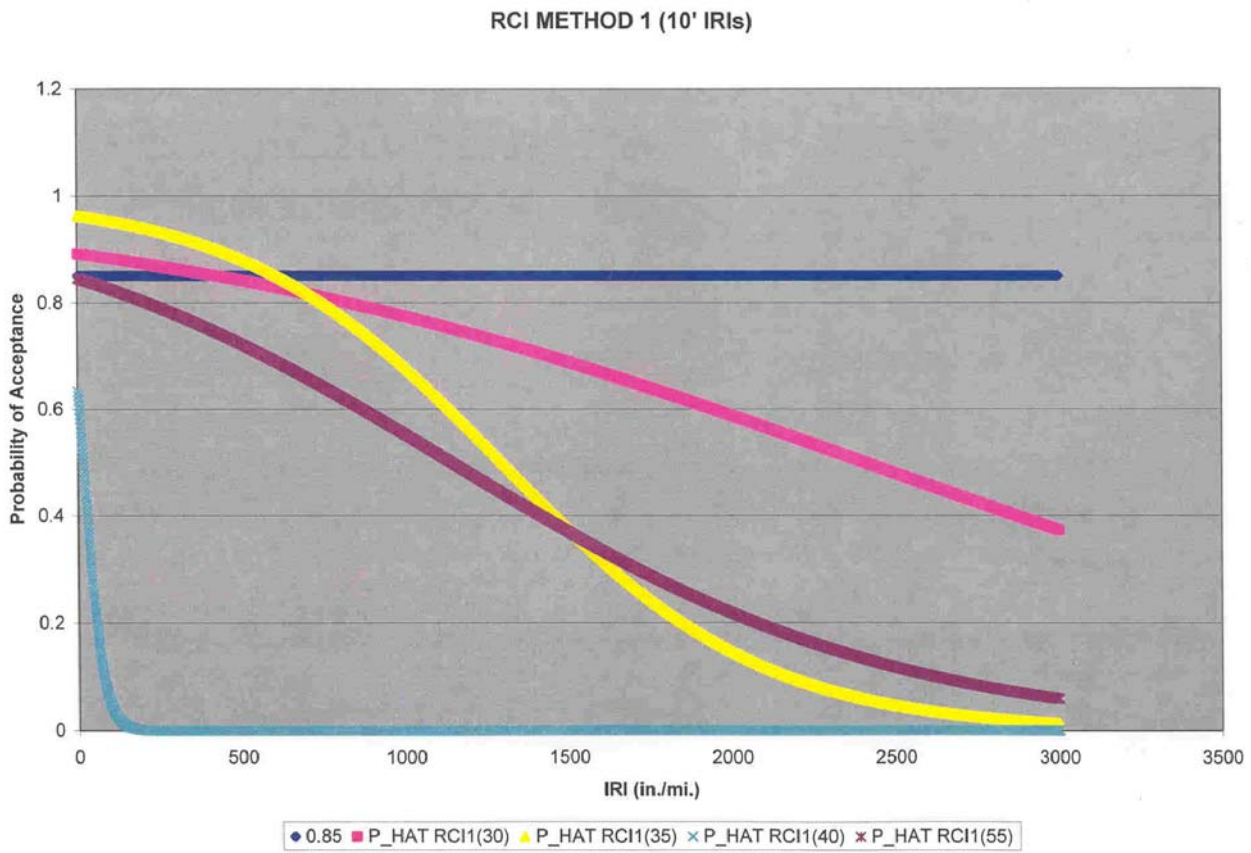
After calculating the probability for all the values of RCI generated by both methods, the following plots were made (figures 5.15 and 5.16 on the following pages), one for each method of calculating RCI. These plots show the probability curves for predicting the acceptability of railroad-highway grade crossing roughness using the two proposed methods and all possible RCI values included between the lowest and highest calculated values. Also included in these plots is a solid line showing where the .85 (85%) probability, value is located. This is the minimum acceptable value of probability that is allowed to verify the validity of the test results.

As can be seen in the plots in figures 5.15 and 5.16, the probability of predicting the acceptability of railroad-highway grade crossings using data generated by the Department's profiler and the two proposed methods of calculating RCI failed to meet the minimum acceptable level of probability for validation. Therefore, based on the results of the statistical analysis, it is not possible to generate a reliable prediction of acceptable/unacceptable levels of roughness associated with railroad-highway grade crossings using data generated by the Department's profiler and the two methods proposed in this study.

### **Section Summary:**

A logistical regression analysis of the data was utilized in this study because more than one variable may have an effect on the outcome. After the logistical analysis was performed on the data obtained in this study, the probability of identifying and rating a railroad-highway grade crossing was calculated for both proposed methodologies of calculating an RCI using data obtained from the logistical analysis. Neither method achieved the minimum 85% probability to validate it.

Figure 5.15 'Probability of Predicting Acceptability Using Method 1'



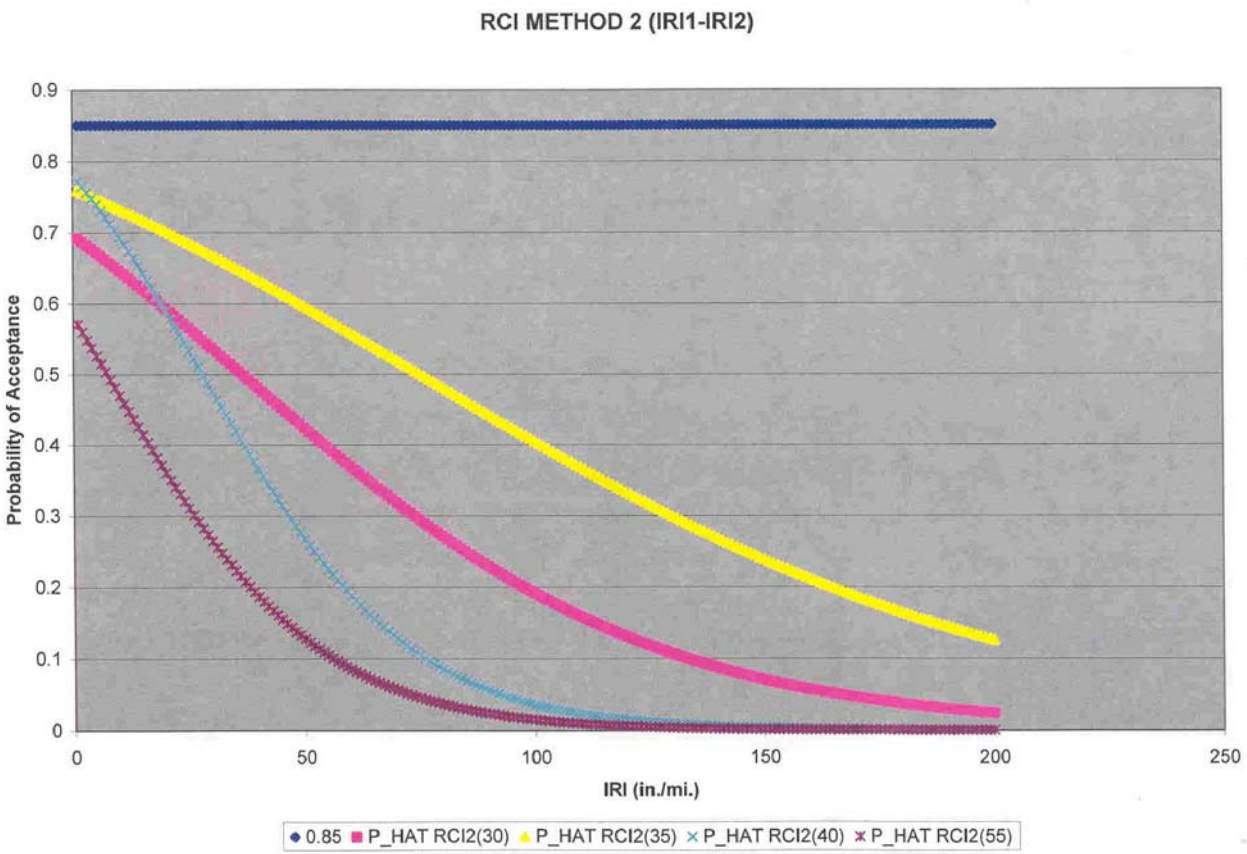


Figure 5.16 'Probability of Predicting Acceptability Using Method 2'

## 6. Conclusions

This report has shown the work that was performed in trying to develop a rating scale (RCI) for determining acceptable, and unacceptable, levels of roughness associated with railroad-highway grade crossings. This report has also shown the reasons why this study failed to produce the desired results. The following is a summary of the reasons why the study failed:

- The “Sensor Footprint”, generated by the receiver-averaging board in the opticator’s laser control box, averages a number of height readings together to generate one output value. By doing this, the receiver-averaging card attenuates fine details and sudden changes in height that are important in trying to locate railroad-highway grade crossings. This makes the rail-gap and gauge-spacing characteristics very difficult to locate with an acceptable degree of confidence. This problem is compounded by the fact that since the opticators operate at a fixed frequency, the size of the sensor footprint varies with the speed of the profiler.
- The “Sample Interval” of the department’s profiler is too large to achieve the resolution necessary for identifying characteristics like the rail-gap and gauge-spacing. By not being able to collect data points at a closer interval, details necessary to identify a crossing could not be positively located in the data. This problem is compounded when the timing relationship between the output of the receiver-averaging card and the external-trigger pulse from the speed and mileage pulser is examined. Since these two signals are not synchronized, there is no guarantee that data from the receiver-averaging card will contain data from the areas of interest (i.e. rail-gap, and gauge-spacing) or not, nor how many of the 64 averaged readings will be from the area of interest.
- Due to the geometry associated with the construction of railroad-highway grade crossings, the roughness of the crossing itself is nearly impossible to distinguish from the roughness of the approaches. For this reason, it is unlikely that data collected from any current profiler would be able to provide results sufficient enough to generate a rating scale based on this technology.

It is for these reasons that the department’s profiler was inadequate for use in this study, and also why the railroad-highway grade crossings were either located incorrectly or not at all.

## 7. Recommendations

Even though this study did not achieve its ultimate goal of developing a rating scale for determining acceptable and unacceptable levels of roughness for railroad-highway grade crossings, it did expose several weaknesses of the department’s profiler. These weaknesses are: (1) the size of the ‘sensor footprint’ and its variance with speed, and (2) the size of the ‘sample interval’ and its timing relationship with the external trigger pulse. To address these weaknesses a couple of system components must be replaced by components that have better capabilities than the ones currently being used. The system components that need to be replaced as a result of this study are: the speed and mileage pulser, and the receiver-averaging board(s). By replacing

these components, it would increase the resolution, and detail, of the resulting profiles and increase the accuracy of the height, speed, and mileage readings.

## **8. Implementation Suggestions**

As a result of this project failing to achieve its original goals, it should be noted that via a copy of this report to the Program Development Division of INDOT, who requested the study, and Mike Scime, manager of the Railroad section of the Multi-Modal Transportation Division, that it is unlikely that railroad-highway grade crossings can be accurately found and rated using the Department's profiler and the methodologies utilized in this study. Similarly, the techniques used in evaluating the profile data generated by the Department's profiler cannot be applied to data collected by a vendor's system due to differences in data storage formats.

### **End Note**

The author also wishes at this time to take the opportunity to explain why this project took so long to complete. Shortly after receiving approval to conduct this study, the co-principal investigator left the employment of INDOT to take another job. This was a severe setback to the project as this person was responsible for writing the custom controls and data regression software utilized by the Department's profiler and designing the system's custom computer controller boards. Further delays were encountered when the system's computer started failing intermittently causing long periods of down-time to repair equipment that was outdated and obsolete. Finally the systems computer failed completely causing the study to be suspended until suitable replacement equipment could be found and the controls/data regression software rewritten to accommodate the new equipment.

During this time period, several of the sites originally included in this study had been repaired, changed, or removed which forced the study to start back at the beginning. Once the system had been restored to operation and the data was being collected, the author experienced the first of two hard drive failures that resulted in the loss of much of the data. After retrieving as much of the lost data as possible, several of the sites still had to be retested causing even more delays.

After all the data for the study had been collected, and much of the analysis completed, the author experienced a second hard drive failure. This time approximately 60% of the work completed was able to be recovered, leaving the remainder of the work to be redone using notes, graphs, and other surviving documentation.

Completing this study has been an experience filled with delays, frustration, and disappointments, and through hard-work and determination it has finally been brought to a satisfactory conclusion. The author would like to thank the members of the Study Advisory Committee, the staff at the Division of Research, and the members of the Joint Highway Research Program board, for all of the support and understanding that was received in completing this project.

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**Appendix A**  
**Overview of INDOT's Profiler**  
**(R.I.P.)**

Host Vehicle : 1986 GMC Panel Van

Height Measurement Sub-System:

- Selcom Model 2005-535 Opticator(s), with options: 21101, 32 kHz sampling rate  
21002, Sunlight Conversion
  - Measurement Range: 256 mm (~10")
  - Standoff: 305 mm (~12")
  - Resolution: 64  $\mu$ m (~0.0025")
- Selcom Model 1004 CPU Sub-Rack, with Model 10045 Power Supply
- Selcom Model 10058 Receiver/Averaging Board(s)
  - Update frequency: 125 Hz

Displacement Sub-System:

- Setra Model 141B Accelerometer(s)
  - Measurement Range: +/- 2 g(s)
  - Natural Frequency (Nominal): 275 Hz
  - Flat Response (+/-3 db) 0 Hz to: 200 Hz
  - Resolution : Infinite (limited only by output noise level)

Speed and Mileage Sub-System:

- Arthur-Allen Model AA-1422-20 Hall-Effect Transducer
  - 20 pulses/revolution
- Arthur-Allen Model AA-1600-04 Pulse Frequency Conditioner
- Red Lion Model IFMA Frequency-to-Voltage Converter

Signal Conditioning Sub-System:

- Frequency Devices Model FD9016 Programmable Filter Rack
- Frequency Devices Model LU-BU8, 8-Pole Lowpass Butterworth Filter Card(s)

Analog and Digital I/O Sub-System:

- Data Translation Model 301 Analog and Digital I/O Card
  - 16 single-ended (or 8 differential) Analog Inputs
  - 23 Digital I/O Lines
  - 4 Counter/Timer Channels
  - Resolution: 12-bits
  - Throughput: 150 kS/s
- Data Translation Model STP-300 Screw Terminal Panel

**Appendix B**  
**IRI Data (1/10 mile)**  
**10' Intervals**

\* IRI and Ride Number Calculation  
 \* Last modified at UMTRI September 14, 1996  
 \* Copyright (c) 1996 The Regents of the University of Michigan. All Rights Reserved.

Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\SR26W_~1.ERD							
	.00	529.74	228.48	217.40	.41	.39	.40
	.00	10.00	56.18	60.44	3.58	3.30	3.43
	10.00	20.00	37.48	93.17	3.67	3.62	3.64
	20.00	30.00	39.37	130.50	3.48	3.45	3.46
	30.00	40.00	102.86	103.07	3.94	3.69	3.81
	40.00	50.00	66.83	68.62	3.88	3.71	3.79
	50.00	60.00	92.50	53.31	3.37	3.66	3.50
	60.00	70.00	86.94	38.65	2.46	3.68	2.89
	70.00	80.00	113.28	75.06	3.87	3.85	3.86
	80.00	90.00	145.99	122.00	3.82	3.86	3.84
	90.00	100.00	85.06	94.25	3.85	3.96	3.90
	100.00	110.00	64.17	73.92	3.72	3.77	3.74
	110.00	120.00	90.40	98.74	3.32	3.33	3.32
	120.00	130.00	86.78	61.94	2.99	4.05	3.38
	130.00	140.00	46.53	53.17	3.77	3.80	3.79
	140.00	150.00	49.32	28.35	3.73	4.00	3.86
	150.00	160.00	78.32	63.86	3.23	4.09	3.55
	160.00	170.00	86.84	35.38	3.33	3.82	3.54
	170.00	180.00	106.70	116.97	3.46	3.26	3.36
	180.00	190.00	100.97	90.10	3.34	3.82	3.55
	190.00	200.00	67.17	72.06	3.48	3.29	3.38
	200.00	210.00	95.72	185.58	2.94	1.81	2.22
	210.00	220.00	538.64	842.73	1.09	.62	.80
	220.00	230.00	92.91	283.53	2.23	1.57	1.84
	230.00	240.00	193.66	136.40	2.07	2.63	2.31
	240.00	250.00	251.00	235.75	1.77	2.09	1.92
	250.00	260.00	327.90	295.12	.03	2.47	.13
	260.00	270.00	1147.17	584.81	.00	.00	.00
	270.00	280.00	1122.72	1094.48	.00	.00	.00
	280.00	290.00	775.60	905.99	.81	.00	.02
	290.00	300.00	380.14	655.76	.96	1.50	1.18
	300.00	310.00	506.29	444.57	1.87	.86	1.21
	310.00	320.00	317.41	397.88	1.78	1.42	1.58
	320.00	330.00	281.36	85.28	1.90	2.54	2.17
	330.00	340.00	221.50	221.38	2.60	1.99	2.25
	340.00	350.00	224.15	227.55	2.43	2.13	2.27
	350.00	360.00	270.22	155.45	3.09	3.05	3.07
	360.00	370.00	150.22	196.70	2.90	3.50	3.16
	370.00	380.00	441.70	282.79	2.78	3.34	3.02
	380.00	390.00	266.18	155.64	2.90	2.90	2.90
	390.00	400.00	161.76	199.25	2.49	1.92	2.16
	400.00	410.00	329.36	234.23	2.45	2.25	2.35
	410.00	420.00	146.27	141.41	3.15	2.48	2.76
	420.00	430.00	172.28	274.88	2.90	2.38	2.60
	430.00	440.00	125.57	139.14	3.05	2.69	2.85
	440.00	450.00	187.30	103.41	2.78	3.13	2.94

450.00	460.00	265.54	156.22	1.28	2.72	1.74
460.00	470.00	171.85	130.18	2.80	3.43	3.07
470.00	480.00	168.09	137.42	2.19	1.84	2.00
480.00	490.00	148.69	228.58	1.92	2.00	1.96
490.00	500.00	228.64	147.02	1.77	2.08	1.91
500.00	510.00	254.15	315.80	3.33	2.22	2.63
510.00	520.00	162.54	173.77	3.02	3.29	3.15
520.00	529.74	317.34	245.23	3.01	3.09	3.04

---

\* IRI and Ride Number Calculation  
 \* Last modified at UMTRI September 14, 1996  
 \* Copyright (c) 1996 The Regents of the University of Michigan. All Rights Reserved.

Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\SR26E_~1.ERD							
	.00	529.74	257.76	255.98	.58	.50	.54
	.00	10.00	216.99	252.29	2.53	2.42	2.47
	10.00	20.00	355.23	184.47	1.61	1.97	1.77
	20.00	30.00	224.81	444.89	3.15	2.14	2.52
	30.00	40.00	202.03	263.42	2.82	2.51	2.65
	40.00	50.00	160.49	248.98	2.82	1.52	1.96
	50.00	60.00	255.78	396.35	3.06	2.18	2.53
	60.00	70.00	94.82	107.01	2.90	2.27	2.54
	70.00	80.00	59.85	78.44	3.02	2.90	2.96
	80.00	90.00	230.28	217.79	2.72	3.04	2.87
	90.00	100.00	228.32	106.13	2.56	3.32	2.87
	100.00	110.00	203.50	158.16	2.68	2.68	2.68
	110.00	120.00	185.24	134.64	2.94	2.52	2.71
	120.00	130.00	104.25	206.60	2.53	1.20	1.63
	130.00	140.00	145.20	59.95	2.96	3.41	3.16
	140.00	150.00	152.34	186.16	3.01	2.75	2.87
	150.00	160.00	371.61	314.16	2.31	2.92	2.57
	160.00	170.00	258.61	192.68	2.31	2.00	2.14
	170.00	180.00	284.78	373.59	2.41	2.75	2.56
	180.00	190.00	430.75	431.41	2.41	1.86	2.09
	190.00	200.00	363.89	537.11	2.63	1.37	1.80
	200.00	210.00	465.51	454.96	2.03	2.33	2.17
	210.00	220.00	503.16	491.20	1.97	2.61	2.24
	220.00	230.00	106.10	71.51	2.43	2.55	2.49
	230.00	240.00	416.47	154.55	1.48	2.74	1.91
	240.00	250.00	765.99	487.32	.83	1.99	1.20
	250.00	260.00	433.71	349.42	.08	2.21	.26
	260.00	270.00	1185.44	778.76	.00	.00	.00
	270.00	280.00	960.34	916.60	.00	.00	.00
	280.00	290.00	376.46	913.03	1.92	.04	.15
	290.00	300.00	215.19	366.44	2.44	1.44	1.81
	300.00	310.00	850.85	788.19	.37	.57	.45
	310.00	320.00	351.62	251.28	1.48	2.08	1.73
	320.00	330.00	216.03	222.59	2.84	2.55	2.69
	330.00	340.00	273.79	452.07	3.26	2.92	3.08
	340.00	350.00	140.73	204.79	3.54	3.44	3.49
	350.00	360.00	119.77	89.84	3.42	3.37	3.40
	360.00	370.00	117.07	187.66	3.76	3.59	3.67
	370.00	380.00	205.36	240.85	3.75	3.61	3.68
	380.00	390.00	152.88	122.61	3.33	3.40	3.36
	390.00	400.00	140.63	178.38	3.10	3.29	3.19
	400.00	410.00	107.43	100.62	3.49	3.36	3.42
	410.00	420.00	112.75	35.40	3.24	3.91	3.51
	420.00	430.00	73.99	65.78	3.95	3.69	3.81
	430.00	440.00	84.77	145.83	4.06	3.92	3.99
	440.00	450.00	98.29	70.18	3.16	3.91	3.46

450.00	460.00	105.74	51.68	3.65	3.93	3.78
460.00	470.00	93.29	122.54	3.45	3.77	3.60
470.00	480.00	125.33	70.02	3.55	3.73	3.64
480.00	490.00	46.99	44.01	3.73	3.63	3.68
490.00	500.00	71.31	73.42	3.56	3.96	3.73
500.00	510.00	70.27	88.85	3.70	3.58	3.64
510.00	520.00	100.10	34.97	3.93	3.91	3.92
520.00	529.74	74.06	55.35	3.52	3.45	3.49

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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\US52SB~1.ERD							
	.00	529.74	212.10	247.88	.76	.59	.67
	.00	10.00	99.12	108.38	3.16	2.97	3.06
	10.00	20.00	81.82	108.04	3.57	3.29	3.42
	20.00	30.00	98.25	91.88	3.83	3.70	3.76
	30.00	40.00	61.11	58.87	3.94	3.63	3.77
	40.00	50.00	48.56	89.71	4.11	3.89	3.99
	50.00	60.00	86.11	67.46	3.65	4.08	3.84
	60.00	70.00	36.01	38.07	3.79	3.60	3.69
	70.00	80.00	33.96	45.88	3.96	3.81	3.88
	80.00	90.00	26.30	42.58	3.91	3.61	3.75
	90.00	100.00	66.29	66.00	3.71	3.73	3.72
	100.00	110.00	48.47	21.94	3.93	3.60	3.75
	110.00	120.00	45.14	62.61	3.96	3.81	3.88
	120.00	130.00	16.72	30.01	3.79	3.70	3.75
	130.00	140.00	46.10	42.88	3.96	3.86	3.91
	140.00	150.00	25.79	54.73	3.84	3.27	3.51
	150.00	160.00	48.84	60.68	3.64	3.59	3.61
	160.00	170.00	55.63	27.00	3.64	3.87	3.75
	170.00	180.00	53.12	47.35	3.78	3.81	3.79
	180.00	190.00	26.10	92.90	3.94	3.46	3.66
	190.00	200.00	113.43	103.30	3.68	3.32	3.48
	200.00	210.00	117.87	101.53	3.48	2.95	3.18
	210.00	220.00	252.54	103.77	2.48	2.50	2.49
	220.00	230.00	87.81	215.16	3.14	2.53	2.79
	230.00	240.00	434.61	847.41	1.86	.36	.68
	240.00	250.00	829.93	1353.37	.01	.00	.00
	250.00	260.00	1301.77	1863.31	.01	.01	.01
	260.00	270.00	1042.51	1280.85	.61	.30	.42
	270.00	280.00	1113.63	1324.42	.00	.00	.00
	280.00	290.00	1382.05	1263.99	.01	.04	.02
	290.00	300.00	612.91	426.70	1.08	3.20	1.62
	300.00	310.00	548.03	309.90	2.41	2.71	2.55
	310.00	320.00	333.50	239.02	3.03	3.57	3.26
	320.00	330.00	254.78	207.75	3.43	3.24	3.33
	330.00	340.00	249.71	101.41	3.36	2.80	3.04
	340.00	350.00	101.46	152.51	2.70	3.39	2.99
	350.00	360.00	111.87	139.53	3.37	3.20	3.28
	360.00	370.00	268.40	250.09	2.69	3.32	2.96
	370.00	380.00	86.38	143.50	3.15	3.15	3.15
	380.00	390.00	155.56	255.56	2.75	3.82	3.14
	390.00	400.00	115.61	98.98	3.39	3.72	3.54
	400.00	410.00	67.83	123.76	3.76	3.37	3.54
	410.00	420.00	53.20	59.24	3.45	3.80	3.61
	420.00	430.00	38.64	43.25	3.73	3.27	3.47
	430.00	440.00	37.29	98.34	3.66	3.42	3.53
	440.00	450.00	33.13	81.14	3.91	3.83	3.87

450.00	460.00	46.46	61.45	3.71	3.67	3.69
460.00	470.00	49.35	81.94	3.65	3.73	3.69
470.00	480.00	40.54	121.83	3.67	2.96	3.25
480.00	490.00	97.90	126.35	3.66	3.16	3.38
490.00	500.00	60.00	66.19	3.33	3.47	3.40
500.00	510.00	123.47	140.83	3.09	3.26	3.17
510.00	520.00	57.89	56.93	3.71	3.57	3.64
520.00	529.74	33.89	74.27	3.63	3.64	3.63

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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\US52NB~1.ERD							
	.00	529.74	249.03	269.13	.72	.69	.70
	.00	10.00	171.81	151.44	2.64	2.47	2.55
	10.00	20.00	127.75	183.83	3.76	3.24	3.46
	20.00	30.00	146.87	96.03	3.66	3.44	3.54
	30.00	40.00	85.51	53.62	3.12	3.61	3.33
	40.00	50.00	146.33	115.02	3.48	3.19	3.33
	50.00	60.00	99.10	70.03	3.48	3.83	3.63
	60.00	70.00	82.42	68.76	3.49	3.78	3.63
	70.00	80.00	43.08	53.70	3.03	3.87	3.36
	80.00	90.00	70.20	57.75	3.77	3.42	3.57
	90.00	100.00	34.27	24.51	3.82	3.84	3.83
	100.00	110.00	42.72	54.13	3.72	3.49	3.60
	110.00	120.00	61.34	144.37	3.27	1.45	1.98
	120.00	130.00	70.45	44.53	3.60	3.81	3.70
	130.00	140.00	61.40	41.55	3.66	3.84	3.75
	140.00	150.00	114.57	80.78	2.22	2.11	2.17
	150.00	160.00	67.90	75.76	3.82	3.77	3.79
	160.00	170.00	90.29	58.47	3.62	3.59	3.61
	170.00	180.00	114.15	130.81	3.21	3.73	3.43
	180.00	190.00	87.63	124.03	2.89	3.27	3.06
	190.00	200.00	82.14	195.39	2.49	2.11	2.29
	200.00	210.00	240.45	274.31	2.51	2.62	2.57
	210.00	220.00	111.94	132.66	2.88	3.20	3.03
	220.00	230.00	84.12	124.74	3.21	2.95	3.07
	230.00	240.00	455.36	640.20	1.25	1.84	1.49
	240.00	250.00	706.86	1330.42	.00	.00	.00
	250.00	260.00	1027.90	1532.72	.01	.05	.02
	260.00	270.00	1259.91	981.76	.64	.42	.51
	270.00	280.00	1179.81	1322.71	.01	.00	.00
	280.00	290.00	1828.52	1360.18	.00	.02	.01
	290.00	300.00	523.52	874.54	.78	.92	.84
	300.00	310.00	500.14	332.07	2.44	2.21	2.32
	310.00	320.00	570.68	453.48	2.79	2.92	2.85
	320.00	330.00	438.32	468.32	2.84	1.93	2.28
	330.00	340.00	519.95	397.23	3.05	2.42	2.69
	340.00	350.00	123.22	175.74	3.15	2.63	2.86
	350.00	360.00	160.80	268.12	2.71	2.06	2.33
	360.00	370.00	210.85	213.08	3.22	3.03	3.12
	370.00	380.00	299.40	311.36	3.31	3.18	3.24
	380.00	390.00	101.97	123.47	3.61	3.08	3.31
	390.00	400.00	278.37	272.49	3.52	3.56	3.54
	400.00	410.00	114.16	116.36	3.61	3.66	3.63
	410.00	420.00	68.01	63.46	3.71	3.70	3.70
	420.00	430.00	52.95	102.76	3.78	2.94	3.27
	430.00	440.00	103.57	139.71	3.27	3.09	3.18
	440.00	450.00	66.03	71.04	3.55	3.56	3.56

450.00	460.00	88.28	80.29	3.63	3.61	3.62
460.00	470.00	56.28	26.14	3.54	3.78	3.65
470.00	480.00	50.55	42.03	3.42	3.55	3.48
480.00	490.00	41.67	41.21	2.60	3.74	3.02
490.00	500.00	68.61	53.81	3.63	3.61	3.62
500.00	510.00	80.93	45.72	3.51	3.29	3.39
510.00	520.00	37.96	30.66	4.03	3.41	3.66
520.00	529.74	30.62	49.37	4.02	3.81	3.91

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Input files from directory "F:\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
F:\10THS\ERD\SR28WB1.ERD	.00	529.48	283.42	309.48	.84	1.05	.94
	.00	10.00	98.25	89.19	3.16	3.19	3.18
	10.00	20.00	88.37	99.23	3.65	3.80	3.72
	20.00	30.00	141.87	106.13	4.10	3.87	3.98
	30.00	40.00	70.84	43.55	3.71	3.85	3.77
	40.00	50.00	50.59	47.60	3.89	3.87	3.88
	50.00	60.00	95.04	65.68	4.17	4.00	4.08
	60.00	70.00	101.97	84.39	3.62	3.65	3.64
	70.00	80.00	64.85	86.62	3.87	3.71	3.79
	80.00	90.00	54.63	64.22	3.88	3.57	3.71
	90.00	100.00	67.28	82.49	3.83	3.87	3.85
	100.00	110.00	50.54	65.97	3.26	3.68	3.45
	110.00	120.00	52.32	64.10	3.70	3.95	3.82
	120.00	130.00	35.48	41.38	3.82	3.65	3.73
	130.00	140.00	47.45	62.57	3.74	3.99	3.86
	140.00	150.00	59.62	51.61	3.67	3.90	3.78
	150.00	160.00	127.48	162.90	3.15	3.11	3.13
	160.00	170.00	104.46	256.54	2.84	1.69	2.10
	170.00	180.00	209.27	357.89	3.02	2.54	2.75
	180.00	190.00	66.05	70.02	3.48	3.63	3.55
	190.00	200.00	83.33	141.69	3.47	3.24	3.35
	200.00	210.00	46.36	96.14	3.39	3.36	3.38
	210.00	220.00	56.31	179.36	3.53	2.85	3.13
	220.00	230.00	55.04	79.79	3.73	3.36	3.53
	230.00	240.00	69.01	233.27	3.95	3.42	3.64
	240.00	250.00	187.13	298.46	3.31	2.04	2.49
	250.00	260.00	114.62	102.13	3.52	3.47	3.50
	260.00	270.00	191.96	238.36	3.65	3.73	3.68
	270.00	280.00	212.82	278.58	3.38	3.46	3.42
	280.00	290.00	99.80	189.33	3.02	2.76	2.88
	290.00	300.00	278.07	909.23	1.59	.51	.82
	300.00	310.00	220.84	396.13	1.98	2.71	2.28
	310.00	320.00	367.29	323.39	1.52	2.05	1.75
	320.00	330.00	416.29	516.52	2.23	2.28	2.25
	330.00	340.00	848.26	1079.16	1.09	1.38	1.22
	340.00	350.00	3001.23	2221.47	.00	.00	.00
	350.00	360.00	1897.98	1583.87	.03	.06	.04
	360.00	370.00	735.03	253.26	.63	1.51	.92
	370.00	380.00	631.22	887.81	1.21	1.14	1.17
	380.00	390.00	578.44	588.04	1.42	1.05	1.22
	390.00	400.00	202.59	522.41	1.37	.86	1.07
	400.00	410.00	699.63	826.13	1.99	1.42	1.66
	410.00	420.00	830.23	805.48	3.12	2.45	2.73
	420.00	430.00	311.14	208.14	2.09	3.23	2.50
	430.00	440.00	410.80	131.54	1.71	2.25	1.94
	440.00	450.00	117.62	177.65	2.93	3.23	3.07

450.00	460.00	70.30	106.96	3.47	3.11	3.27
460.00	470.00	138.78	326.57	2.94	1.71	2.15
470.00	480.00	56.76	62.45	3.59	3.65	3.62
480.00	490.00	49.23	94.37	3.60	3.72	3.66
490.00	500.00	72.82	56.05	3.54	3.32	3.42
500.00	510.00	48.59	121.47	3.85	3.57	3.70
510.00	520.00	104.03	230.02	3.51	3.75	3.62
520.00	529.48	163.15	218.80	3.15	2.84	2.98

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Input files from directory "F:\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
F:\10THS\ERD\SR28EB1.ERD	.00	529.48	261.41	253.96	.87	1.16	1.00
	.00	10.00	109.66	124.80	3.15	3.05	3.10
	10.00	20.00	122.35	131.39	3.55	3.78	3.66
	20.00	30.00	91.57	92.27	3.82	3.82	3.82
	30.00	40.00	29.41	48.25	3.76	4.00	3.87
	40.00	50.00	44.97	34.49	4.01	4.03	4.02
	50.00	60.00	38.02	43.96	3.83	3.81	3.82
	60.00	70.00	52.59	30.89	3.89	4.19	4.03
	70.00	80.00	23.65	27.31	3.74	3.87	3.80
	80.00	90.00	81.90	80.88	3.61	3.38	3.49
	90.00	100.00	57.92	71.73	3.71	3.48	3.59
	100.00	110.00	89.96	106.38	3.13	2.84	2.97
	110.00	120.00	30.57	39.11	3.47	3.43	3.45
	120.00	130.00	21.96	48.35	3.91	3.86	3.88
	130.00	140.00	35.32	67.65	3.43	3.49	3.46
	140.00	150.00	35.00	37.48	3.83	3.65	3.74
	150.00	160.00	69.65	47.80	3.66	3.73	3.70
	160.00	170.00	36.45	32.53	3.56	3.92	3.72
	170.00	180.00	111.85	60.96	3.05	3.62	3.29
	180.00	190.00	122.02	83.53	3.35	3.50	3.42
	190.00	200.00	254.02	88.91	2.59	2.88	2.73
	200.00	210.00	128.13	117.63	3.27	2.97	3.11
	210.00	220.00	72.46	119.90	3.61	2.88	3.18
	220.00	230.00	122.44	137.57	2.76	3.02	2.88
	230.00	240.00	176.12	256.02	2.11	1.27	1.59
	240.00	250.00	346.94	246.55	.80	2.17	1.21
	250.00	260.00	365.56	694.70	1.66	1.47	1.56
	260.00	270.00	613.70	667.04	1.68	2.01	1.83
	270.00	280.00	783.45	1018.81	.36	.86	.53
	280.00	290.00	2999.17	2155.38	.00	.00	.00
	290.00	300.00	1799.20	1515.09	.07	.19	.11
	300.00	310.00	676.68	481.39	.53	.58	.55
	310.00	320.00	449.66	773.13	1.79	.72	1.06
	320.00	330.00	535.08	207.37	1.87	1.56	1.70
	330.00	340.00	271.58	262.09	1.21	1.13	1.17
	340.00	350.00	314.09	555.34	2.33	2.30	2.32
	350.00	360.00	616.31	509.54	3.50	2.90	3.15
	360.00	370.00	409.82	266.48	3.57	3.28	3.41
	370.00	380.00	165.41	241.36	3.23	3.31	3.27
	380.00	390.00	200.12	257.38	2.64	3.57	3.00
	390.00	400.00	145.76	107.19	3.77	3.51	3.63
	400.00	410.00	156.39	277.56	3.52	3.54	3.53
	410.00	420.00	211.09	241.14	3.69	3.49	3.58
	420.00	430.00	85.54	129.20	3.83	3.64	3.73
	430.00	440.00	92.04	179.36	3.49	3.92	3.68
	440.00	450.00	149.24	84.28	3.55	3.65	3.60

450.00	460.00	93.00	85.44	3.78	3.69	3.74
460.00	470.00	207.62	243.07	2.13	2.22	2.18
470.00	480.00	117.12	98.60	3.59	3.52	3.56
480.00	490.00	55.49	70.67	3.93	3.77	3.84
490.00	500.00	58.89	96.32	3.93	3.53	3.71
500.00	510.00	41.85	74.36	3.76	3.64	3.70
510.00	520.00	33.08	18.03	3.98	3.90	3.94
520.00	529.48	29.99	52.59	3.82	3.99	3.90

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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\SR231N~1.ERD							
	.00	529.74	282.50	313.70	.28	.35	.31
	.00	10.00	111.80	154.07	3.00	2.93	2.97
	10.00	20.00	118.01	148.94	3.61	3.80	3.70
	20.00	30.00	76.11	36.19	3.64	3.59	3.61
	30.00	40.00	90.10	96.20	3.71	3.51	3.61
	40.00	50.00	83.39	79.50	3.44	3.44	3.44
	50.00	60.00	91.85	111.07	3.15	3.50	3.31
	60.00	70.00	68.05	69.45	3.48	3.65	3.56
	70.00	80.00	74.43	43.04	4.04	3.87	3.95
	80.00	90.00	41.59	94.04	3.70	3.73	3.72
	90.00	100.00	100.42	104.11	3.99	3.77	3.87
	100.00	110.00	94.01	92.69	2.94	3.36	3.13
	110.00	120.00	51.68	62.79	3.67	3.57	3.62
	120.00	130.00	105.64	91.81	3.56	3.82	3.68
	130.00	140.00	93.06	142.85	3.78	3.66	3.71
	140.00	150.00	47.63	69.87	3.53	3.63	3.58
	150.00	160.00	83.25	112.55	3.47	3.35	3.41
	160.00	170.00	87.47	235.37	3.56	2.58	2.95
	170.00	180.00	114.47	173.85	3.54	2.84	3.13
	180.00	190.00	85.96	129.13	3.56	3.48	3.51
	190.00	200.00	50.69	83.53	3.41	3.90	3.62
	200.00	210.00	261.89	114.71	2.88	3.38	3.10
	210.00	220.00	236.95	299.81	2.67	2.14	2.37
	220.00	230.00	471.53	435.00	1.90	2.04	1.97
	230.00	240.00	199.87	257.69	2.77	3.13	2.94
	240.00	250.00	256.01	415.52	2.13	2.09	2.11
	250.00	260.00	807.80	406.84	.00	.00	.00
	260.00	270.00	1098.27	773.54	.01	.00	.00
	270.00	280.00	1076.40	1946.04	.00	.00	.00
	280.00	290.00	1198.09	1106.62	.49	.00	.03
	290.00	300.00	285.84	358.41	1.72	.70	1.03
	300.00	310.00	904.65	279.14	1.72	1.58	1.65
	310.00	320.00	624.04	1683.91	1.56	1.30	1.42
	320.00	330.00	385.85	787.13	2.62	1.48	1.89
	330.00	340.00	551.17	845.69	2.74	3.49	3.05
	340.00	350.00	781.95	1099.64	3.90	3.85	3.87
	350.00	360.00	335.75	533.49	3.69	2.87	3.20
	360.00	370.00	188.15	201.87	3.18	3.81	3.44
	370.00	380.00	403.85	574.25	3.63	3.58	3.61
	380.00	390.00	241.22	464.26	3.63	4.01	3.80
	390.00	400.00	117.59	126.51	3.44	4.03	3.68
	400.00	410.00	70.44	200.83	3.45	3.74	3.59
	410.00	420.00	375.22	156.98	1.18	3.65	1.76
	420.00	430.00	294.75	45.60	3.06	4.08	3.44
	430.00	440.00	244.68	78.68	2.34	3.92	2.85
	440.00	450.00	148.80	99.27	3.30	3.93	3.56

450.00	460.00	110.38	95.69	3.48	3.54	3.51
460.00	470.00	291.78	161.98	2.75	4.11	3.21
470.00	480.00	116.08	126.78	2.45	3.98	2.94
480.00	490.00	401.16	97.93	1.87	3.78	2.43
490.00	500.00	157.09	119.71	2.65	3.88	3.08
500.00	510.00	367.03	299.29	3.44	3.71	3.57
510.00	520.00	226.06	252.62	3.54	3.99	3.74
520.00	529.74	75.18	69.35	3.59	4.07	3.80

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Input files from directory "F:\10THS"

Filename	Start:	End:	IRI:	(in/mi)	RN: 0-5		Both
	ft	ft	LElev.	RElev.	LElev.	RElev.	
-----							
F:\10THS\SR231S~1.ERD							
	.00	529.48	288.87	305.60	.24	.23	.24
	.00	10.00	180.63	147.09	1.73	2.72	2.11
	10.00	20.00	287.87	188.07	2.37	3.63	2.82
	20.00	30.00	252.64	164.63	1.81	2.25	2.00
	30.00	40.00	173.65	109.64	3.33	3.73	3.51
	40.00	50.00	125.73	74.01	3.59	3.80	3.69
	50.00	60.00	316.57	91.90	3.68	3.65	3.67
	60.00	70.00	223.36	236.15	3.87	3.80	3.83
	70.00	80.00	107.15	114.73	3.72	3.55	3.63
	80.00	90.00	219.63	110.79	3.32	3.87	3.55
	90.00	100.00	197.71	234.74	2.40	3.92	2.89
	100.00	110.00	248.79	164.01	2.04	3.78	2.57
	110.00	120.00	111.30	54.59	3.12	3.97	3.45
	120.00	130.00	84.48	110.77	3.25	3.42	3.33
	130.00	140.00	153.76	137.74	3.49	3.79	3.63
	140.00	150.00	59.00	147.05	3.60	4.02	3.78
	150.00	160.00	109.92	114.44	3.24	3.41	3.32
	160.00	170.00	128.91	53.74	3.49	3.97	3.70
	170.00	180.00	259.15	93.73	3.16	3.80	3.42
	180.00	190.00	181.27	83.73	2.77	3.68	3.13
	190.00	200.00	134.04	81.31	3.36	2.22	2.64
	200.00	210.00	262.94	426.62	3.11	1.61	2.10
	210.00	220.00	202.50	458.31	3.24	2.66	2.91
	220.00	230.00	383.17	472.83	1.56	1.42	1.49
	230.00	240.00	392.53	762.08	2.62	2.45	2.53
	240.00	250.00	254.97	430.35	1.23	3.07	1.75
	250.00	260.00	1308.24	596.47	.00	.00	.00
	260.00	270.00	1410.88	1369.23	.03	.00	.00
	270.00	280.00	1049.14	1069.71	.00	.00	.00
	280.00	290.00	1000.94	1079.94	.28	.00	.01
	290.00	300.00	540.10	457.31	1.83	.99	1.30
	300.00	310.00	1260.60	892.52	1.87	1.89	1.88
	310.00	320.00	570.76	915.49	3.07	2.81	2.93
	320.00	330.00	226.81	574.66	3.01	3.04	3.02
	330.00	340.00	597.84	368.27	3.40	3.17	3.28
	340.00	350.00	468.69	742.34	3.89	3.87	3.88
	350.00	360.00	131.00	364.35	3.51	3.51	3.51
	360.00	370.00	243.01	198.84	3.64	3.57	3.60
	370.00	380.00	133.06	184.10	3.60	3.75	3.67
	380.00	390.00	28.69	84.78	3.70	3.88	3.79
	390.00	400.00	90.55	58.00	3.82	3.92	3.87
	400.00	410.00	98.90	85.40	3.16	3.57	3.34
	410.00	420.00	83.04	143.38	3.71	3.97	3.83
	420.00	430.00	107.89	105.28	3.42	3.57	3.49
	430.00	440.00	61.15	117.23	3.77	3.66	3.72
	440.00	450.00	59.40	125.81	3.84	3.53	3.67

450.00	460.00	85.63	85.95	3.93	2.99	3.35
460.00	470.00	106.86	168.57	3.87	3.27	3.52
470.00	480.00	52.21	228.86	3.84	2.64	3.07
480.00	490.00	86.46	222.99	3.72	3.01	3.30
490.00	500.00	64.50	197.34	3.69	2.26	2.74
500.00	510.00	87.15	198.64	3.66	3.21	3.41
510.00	520.00	79.56	214.07	3.44	3.13	3.27
520.00	529.48	75.28	259.88	3.55	3.13	3.32

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\US421NB2.ERD							
	.00	529.48	249.00	335.08	1.75	1.45	1.59
	.00	10.00	509.59	405.21	.97	1.50	1.19
	10.00	20.00	370.51	166.61	1.29	1.97	1.56
	20.00	30.00	568.45	388.06	2.97	1.27	1.77
	30.00	40.00	257.04	173.10	3.03	2.43	2.69
	40.00	50.00	361.28	273.50	2.34	2.67	2.49
	50.00	60.00	152.67	100.35	3.36	3.06	3.20
	60.00	70.00	145.44	226.80	3.49	1.42	1.98
	70.00	80.00	138.67	140.15	3.30	3.51	3.40
	80.00	90.00	77.79	107.38	3.29	1.52	2.04
	90.00	100.00	101.65	422.53	3.42	1.31	1.86
	100.00	110.00	121.08	282.36	2.88	1.93	2.30
	110.00	120.00	111.27	212.84	3.18	2.94	3.05
	120.00	130.00	103.71	187.31	2.92	2.62	2.76
	130.00	140.00	155.10	134.01	3.06	3.26	3.15
	140.00	150.00	148.07	250.84	3.16	2.79	2.96
	150.00	160.00	124.15	226.12	2.96	2.84	2.90
	160.00	170.00	129.96	511.20	3.21	1.63	2.13
	170.00	180.00	69.51	179.91	3.10	1.66	2.13
	180.00	190.00	200.74	463.13	2.75	1.53	1.96
	190.00	200.00	76.80	154.31	3.11	2.58	2.81
	200.00	210.00	120.09	256.43	3.32	1.88	2.36
	210.00	220.00	361.10	587.95	1.06	.95	1.00
	220.00	230.00	372.33	263.10	1.85	2.83	2.22
	230.00	240.00	213.71	89.48	2.36	2.95	2.61
	240.00	250.00	163.74	83.30	2.31	3.35	2.70
	250.00	260.00	383.02	369.34	1.34	1.07	1.20
	260.00	270.00	723.84	1193.75	.11	.03	.05
	270.00	280.00	544.94	1132.50	.86	.23	.40
	280.00	290.00	1019.98	1355.46	1.72	1.89	1.80
	290.00	300.00	777.64	1019.16	.27	1.93	.57
	300.00	310.00	219.53	554.75	.89	.96	.92
	310.00	320.00	178.81	868.81	1.53	.24	.50
	320.00	330.00	663.27	578.84	.86	1.04	.94
	330.00	340.00	489.67	780.73	3.14	3.11	3.12
	340.00	350.00	249.01	274.65	2.81	3.02	2.91
	350.00	360.00	291.24	421.84	2.47	3.38	2.83
	360.00	370.00	320.42	378.80	1.77	2.61	2.10
	370.00	380.00	84.61	87.74	3.07	3.38	3.21
	380.00	390.00	84.61	143.01	2.67	3.12	2.87
	390.00	400.00	77.57	131.14	3.43	3.62	3.52
	400.00	410.00	100.52	106.80	2.34	3.01	2.62
	410.00	420.00	94.89	120.60	3.34	2.91	3.10
	420.00	430.00	81.09	50.32	2.94	3.20	3.06
	430.00	440.00	99.91	112.37	3.39	3.40	3.40

440.00	450.00	161.96	237.52	2.38	2.12	2.24
450.00	460.00	287.98	156.16	2.59	2.95	2.75
460.00	470.00	184.18	144.44	1.82	2.88	2.22
470.00	480.00	209.60	75.31	3.22	2.16	2.56
480.00	490.00	134.85	680.19	3.14	.95	1.48
490.00	500.00	103.40	103.61	3.07	3.00	3.04
500.00	510.00	166.64	125.78	2.77	2.95	2.86
510.00	520.00	134.48	95.55	2.94	3.35	3.12
520.00	529.48	174.48	109.41	2.77	3.17	2.95

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Input files from directory "F:\MM\RAW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\10THS\ERD\US421NB2.ERD							
	.00	529.48	245.74	339.48	1.49	1.45	1.47
	.00	10.00	516.82	359.80	.07	1.64	.23
	10.00	20.00	418.14	186.18	1.14	2.41	1.56
	20.00	30.00	632.06	422.17	2.71	2.12	2.37
	30.00	40.00	197.44	176.11	2.99	2.14	2.48
	40.00	50.00	400.68	283.18	2.20	2.77	2.45
	50.00	60.00	169.96	102.49	3.32	3.21	3.26
	60.00	70.00	122.19	209.43	3.80	1.53	2.12
	70.00	80.00	154.38	136.64	3.35	3.48	3.41
	80.00	90.00	71.17	128.38	3.39	2.76	3.03
	90.00	100.00	108.53	391.53	3.30	1.14	1.69
	100.00	110.00	108.70	275.74	2.71	1.81	2.16
	110.00	120.00	156.16	241.04	3.21	2.54	2.82
	120.00	130.00	111.35	212.79	2.80	2.52	2.65
	130.00	140.00	129.20	106.76	3.32	3.73	3.50
	140.00	150.00	163.72	209.29	2.88	3.09	2.98
	150.00	160.00	98.80	260.51	2.68	2.80	2.74
	160.00	170.00	136.89	475.21	3.30	1.82	2.31
	170.00	180.00	82.10	174.46	2.74	1.62	2.03
	180.00	190.00	158.05	551.53	2.83	1.51	1.96
	190.00	200.00	84.09	223.96	3.30	2.23	2.63
	200.00	210.00	119.27	229.79	2.79	1.65	2.06
	210.00	220.00	286.53	589.02	1.10	.97	1.03
	220.00	230.00	293.28	269.09	2.13	2.89	2.44
	230.00	240.00	168.92	79.28	2.46	2.95	2.67
	240.00	250.00	139.09	87.58	2.50	3.32	2.83
	250.00	260.00	318.52	258.21	1.97	1.60	1.77
	260.00	270.00	730.48	1254.35	.09	.09	.09
	270.00	280.00	502.09	1118.40	.54	.07	.17
	280.00	290.00	1011.04	1330.85	1.73	1.87	1.80
	290.00	300.00	769.92	1115.48	.24	1.85	.53
	300.00	310.00	257.39	544.72	.80	.92	.86
	310.00	320.00	186.72	884.71	1.41	.25	.50
	320.00	330.00	604.48	578.97	.72	1.06	.86
	330.00	340.00	547.10	794.82	3.24	2.73	2.95
	340.00	350.00	246.82	303.94	2.23	3.07	2.56
	350.00	360.00	282.91	405.10	1.95	2.85	2.30
	360.00	370.00	302.67	378.67	2.06	2.73	2.34
	370.00	380.00	115.04	95.25	3.67	4.05	3.83
	380.00	390.00	63.58	133.32	2.79	2.75	2.77
	390.00	400.00	66.57	132.62	3.42	3.30	3.36
	400.00	410.00	107.19	95.10	2.37	3.04	2.66
	410.00	420.00	111.71	125.62	3.13	2.89	3.00
	420.00	430.00	79.92	31.47	2.94	3.22	3.07
	430.00	440.00	85.99	98.57	3.50	3.71	3.60

440.00	450.00	177.38	217.94	2.72	2.23	2.45
450.00	460.00	266.37	152.21	2.51	3.01	2.73
460.00	470.00	213.75	143.91	2.12	2.82	2.41
470.00	480.00	213.87	89.01	3.11	2.55	2.79
480.00	490.00	140.15	794.18	3.53	.72	1.24
490.00	500.00	101.85	118.18	3.72	3.40	3.54
500.00	510.00	150.46	121.70	2.92	2.91	2.92
510.00	520.00	141.97	93.36	3.23	3.25	3.24
520.00	529.48	162.89	148.93	3.00	3.06	3.03

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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\US421SB2.ERD							
	.00	529.74	277.73	352.90	1.43	1.25	1.34
	.00	10.00	298.22	265.16	1.68	1.93	1.80
	10.00	20.00	342.85	325.25	1.53	2.27	1.82
	20.00	30.00	182.14	173.43	2.56	.78	1.24
	30.00	40.00	80.97	343.10	2.50	2.08	2.27
	40.00	50.00	230.51	212.67	2.75	3.33	3.00
	50.00	60.00	66.19	179.59	3.29	3.71	3.48
	60.00	70.00	84.15	56.66	2.63	2.31	2.46
	70.00	80.00	194.36	154.15	3.04	3.40	3.20
	80.00	90.00	149.47	109.78	2.72	1.71	2.09
	90.00	100.00	194.99	184.62	3.21	3.28	3.25
	100.00	110.00	156.05	159.49	2.10	.85	1.24
	110.00	120.00	155.75	202.20	3.05	1.55	2.03
	120.00	130.00	132.03	141.04	2.88	3.37	3.09
	130.00	140.00	103.51	56.47	2.27	3.41	2.69
	140.00	150.00	128.91	141.31	2.11	1.99	2.05
	150.00	160.00	58.55	99.33	3.16	2.70	2.90
	160.00	170.00	204.54	164.79	1.47	1.59	1.53
	170.00	180.00	202.92	264.19	3.19	1.33	1.86
	180.00	190.00	231.56	684.30	1.63	.72	1.03
	190.00	200.00	422.79	509.54	1.10	.78	.92
	200.00	210.00	121.78	413.48	.96	1.49	1.17
	210.00	220.00	363.44	699.51	.20	.23	.21
	220.00	230.00	455.43	593.86	.98	1.09	1.03
	230.00	240.00	530.09	833.96	.88	.75	.81
	240.00	250.00	546.73	862.56	1.15	1.85	1.43
	250.00	260.00	488.98	586.09	1.28	.70	.93
	260.00	270.00	679.68	878.76	.07	.09	.08
	270.00	280.00	553.73	539.91	1.05	1.20	1.12
	280.00	290.00	1135.45	1356.07	1.15	1.00	1.07
	290.00	300.00	1030.74	1119.26	1.49	1.54	1.51
	300.00	310.00	255.79	501.26	1.74	1.69	1.72
	310.00	320.00	1220.95	1274.68	.42	.19	.28
	320.00	330.00	441.05	304.90	1.67	1.22	1.41
	330.00	340.00	69.18	323.93	2.35	2.95	2.61
	340.00	350.00	139.37	429.86	1.69	1.66	1.67
	350.00	360.00	115.93	249.95	2.74	1.10	1.58
	360.00	370.00	406.23	408.09	.51	1.93	.87
	370.00	380.00	560.77	397.80	2.43	2.04	2.22
	380.00	390.00	106.25	170.30	3.12	2.39	2.69
	390.00	400.00	169.92	182.22	2.64	2.55	2.59
	400.00	410.00	60.00	111.55	2.77	3.09	2.92
	410.00	420.00	145.03	87.90	2.55	3.64	2.96
	420.00	430.00	188.38	181.06	2.92	2.06	2.40

430.00	440.00	136.21	121.27	2.28	2.28	2.28
440.00	450.00	260.00	460.64	2.00	.35	.69
450.00	460.00	104.95	285.36	3.60	1.38	1.95
460.00	470.00	60.65	94.68	2.90	3.49	3.15
470.00	480.00	150.32	127.72	2.73	3.06	2.88
480.00	490.00	98.10	186.34	3.06	3.43	3.22
490.00	500.00	169.04	113.59	2.71	3.21	2.93
500.00	510.00	123.71	116.41	3.22	3.25	3.24
510.00	520.00	51.14	137.13	2.66	2.08	2.33
520.00	529.74	191.55	235.63	2.71	2.24	2.45

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\MM\RAW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\10THS\ERD\US421SB2.ERD							
	.00	529.22	277.78	342.22	1.40	1.23	1.31
	.00	10.00	262.67	269.48	2.01	2.02	2.01
	10.00	20.00	319.22	342.50	1.67	2.12	1.87
	20.00	30.00	133.25	146.03	2.26	2.28	2.27
	30.00	40.00	71.57	240.25	3.15	2.18	2.55
	40.00	50.00	213.08	210.10	2.80	3.17	2.97
	50.00	60.00	66.51	166.74	3.65	3.56	3.60
	60.00	70.00	81.01	56.32	3.00	2.50	2.72
	70.00	80.00	224.15	133.66	2.82	3.17	2.98
	80.00	90.00	145.86	95.03	2.42	1.85	2.10
	90.00	100.00	200.75	192.87	3.19	3.24	3.21
	100.00	110.00	125.03	96.32	2.64	1.21	1.66
	110.00	120.00	168.77	140.15	3.16	1.15	1.69
	120.00	130.00	124.03	160.32	3.18	3.29	3.23
	130.00	140.00	126.80	42.53	3.01	3.99	3.37
	140.00	150.00	117.91	152.58	2.56	2.50	2.53
	150.00	160.00	71.14	66.05	3.42	3.22	3.32
	160.00	170.00	146.92	135.67	1.95	2.05	2.00
	170.00	180.00	186.58	275.35	3.19	1.52	2.03
	180.00	190.00	219.23	654.32	1.40	.72	.97
	190.00	200.00	324.64	496.08	1.30	.88	1.06
	200.00	210.00	94.30	391.39	1.37	1.09	1.22
	210.00	220.00	498.22	760.89	.05	.08	.06
	220.00	230.00	418.71	574.12	1.29	.75	.96
	230.00	240.00	539.39	932.11	.93	.83	.88
	240.00	250.00	528.94	723.74	.80	1.87	1.15
	250.00	260.00	553.00	691.58	1.13	.72	.89
	260.00	270.00	804.11	815.46	.08	.05	.06
	270.00	280.00	694.37	444.36	.54	.67	.60
	280.00	290.00	1136.61	1252.77	1.10	1.10	1.10
	290.00	300.00	1087.49	1278.29	1.16	1.35	1.25
	300.00	310.00	258.56	519.45	1.59	1.85	1.71
	310.00	320.00	1045.88	1136.83	.67	.44	.54
	320.00	330.00	572.78	500.32	2.16	.56	.96
	330.00	340.00	95.14	321.52	2.90	2.13	2.45
	340.00	350.00	158.57	296.77	2.53	2.25	2.38
	350.00	360.00	92.26	222.01	3.21	1.43	1.96
	360.00	370.00	272.44	351.43	.90	2.32	1.33
	370.00	380.00	457.77	398.59	1.77	2.38	2.03
	380.00	390.00	105.49	192.58	3.47	2.46	2.84
	390.00	400.00	203.59	152.92	2.70	2.46	2.57
	400.00	410.00	91.81	155.71	2.88	3.08	2.98
	410.00	420.00	161.21	87.16	3.02	3.59	3.26
	420.00	430.00	206.94	183.75	3.23	2.57	2.85

430.00	440.00	105.48	115.90	3.05	2.50	2.74
440.00	450.00	225.08	431.33	2.71	.55	.99
450.00	460.00	133.28	207.71	3.53	3.01	3.24
460.00	470.00	66.94	77.74	3.29	3.68	3.47
470.00	480.00	145.10	102.49	3.03	3.42	3.20
480.00	490.00	94.28	169.18	3.58	3.27	3.41
490.00	500.00	187.24	128.03	2.53	3.24	2.82
500.00	510.00	119.18	129.01	3.34	3.00	3.16
510.00	520.00	49.44	127.43	2.53	2.26	2.39
520.00	529.22	175.40	215.28	2.66	2.58	2.62

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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\SR3942~1.ERD							
	.00	529.48	361.63	377.87	.90	.85	.87
	.00	10.00	1090.03	430.20	.34	1.53	.63
	10.00	20.00	397.13	142.59	1.24	2.35	1.63
	20.00	30.00	130.10	97.90	2.54	2.92	2.71
	30.00	40.00	217.65	102.41	1.95	2.39	2.15
	40.00	50.00	195.71	167.07	3.08	3.07	3.07
	50.00	60.00	114.81	144.04	2.75	3.05	2.89
	60.00	70.00	199.98	235.67	2.99	2.89	2.94
	70.00	80.00	65.40	112.90	3.03	2.23	2.55
	80.00	90.00	173.59	187.53	2.62	2.51	2.56
	90.00	100.00	100.34	86.27	1.75	2.87	2.16
	100.00	110.00	83.57	243.11	2.16	1.35	1.66
	110.00	120.00	143.19	120.81	1.99	2.52	2.22
	120.00	130.00	584.69	409.71	.56	.80	.66
	130.00	140.00	455.84	366.44	1.46	1.72	1.58
	140.00	150.00	791.07	870.43	2.69	2.38	2.52
	150.00	160.00	851.05	1066.66	2.29	1.25	1.63
	160.00	170.00	1416.76	1456.28	.00	.00	.00
	170.00	180.00	1015.41	1435.16	.33	.96	.53
	180.00	190.00	1009.87	1149.74	.50	.67	.58
	190.00	200.00	683.37	762.99	1.35	1.58	1.46
	200.00	210.00	619.64	667.99	1.30	1.62	1.44
	210.00	220.00	856.67	900.17	.99	1.61	1.24
	220.00	230.00	632.47	744.90	1.51	1.63	1.57
	230.00	240.00	288.17	497.74	1.97	2.67	2.26
	240.00	250.00	768.26	838.17	1.48	1.93	1.67
	250.00	260.00	266.05	169.53	1.93	2.09	2.01
	260.00	270.00	85.89	114.77	3.32	2.81	3.04
	270.00	280.00	69.91	147.72	3.90	2.31	2.82
	280.00	290.00	96.50	168.25	3.31	3.70	3.49
	290.00	300.00	162.44	192.74	3.44	3.54	3.49
	300.00	310.00	155.78	80.27	4.08	3.98	4.03
	310.00	320.00	133.03	97.47	2.77	3.07	2.91
	320.00	330.00	131.46	208.25	3.38	3.17	3.27
	330.00	340.00	88.12	92.92	2.13	3.18	2.53
	340.00	350.00	224.01	195.92	1.76	2.60	2.09
	350.00	360.00	99.56	180.40	3.98	3.11	3.45
	360.00	370.00	111.97	55.12	3.23	3.30	3.27
	370.00	380.00	105.50	84.99	3.05	3.45	3.23
	380.00	390.00	54.80	191.36	3.54	2.42	2.83
	390.00	400.00	93.31	139.03	3.87	2.89	3.26
	400.00	410.00	57.70	63.71	3.54	2.70	3.03
	410.00	420.00	45.18	138.09	3.55	3.07	3.28

420.00	430.00	205.54	269.90	2.77	2.32	2.52
430.00	440.00	143.77	201.79	3.13	2.36	2.67
440.00	450.00	66.02	134.94	3.68	3.04	3.31
450.00	460.00	149.14	213.23	3.15	3.09	3.12
460.00	470.00	195.45	233.35	2.15	2.76	2.41
470.00	480.00	287.71	236.58	2.11	2.11	2.11
480.00	490.00	724.81	755.97	1.11	1.24	1.17
490.00	500.00	548.05	625.15	.97	1.11	1.04
500.00	510.00	1084.37	823.70	1.94	2.62	2.22
510.00	520.00	530.87	519.55	1.01	2.12	1.39
520.00	529.48	417.70	452.54	1.94	3.09	2.36

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\MM\RAW\SYNC\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\SYNC\ERD\SR3942~1.ERD							
	.00	529.22	358.21	393.36	.68	.62	.65
	.00	10.00	848.09	1275.36	.01	.00	.00
	10.00	20.00	268.97	152.95	2.04	2.07	2.05
	20.00	30.00	84.94	142.87	2.92	2.79	2.85
	30.00	40.00	174.87	121.29	2.38	2.21	2.29
	40.00	50.00	164.71	131.45	2.76	3.12	2.93
	50.00	60.00	181.22	184.55	2.70	1.86	2.19
	60.00	70.00	207.44	194.48	2.04	3.09	2.44
	70.00	80.00	79.82	85.46	2.41	2.38	2.40
	80.00	90.00	238.12	142.54	2.16	2.72	2.40
	90.00	100.00	141.61	66.04	1.75	3.56	2.29
	100.00	110.00	96.09	250.46	2.01	1.29	1.58
	110.00	120.00	140.07	196.79	2.28	2.53	2.40
	120.00	130.00	622.74	574.90	.53	.36	.43
	130.00	140.00	459.20	393.57	1.50	1.80	1.63
	140.00	150.00	808.41	851.81	2.55	2.92	2.72
	150.00	160.00	830.84	1077.96	2.23	1.92	2.07
	160.00	170.00	1571.40	1381.84	.00	.00	.00
	170.00	180.00	1148.85	1386.29	.28	.95	.47
	180.00	190.00	1029.24	1202.13	.52	.53	.52
	190.00	200.00	713.70	793.90	1.08	1.57	1.29
	200.00	210.00	600.51	694.44	1.28	1.31	1.30
	210.00	220.00	845.00	884.65	1.08	1.41	1.23
	220.00	230.00	630.27	800.74	1.50	1.70	1.59
	230.00	240.00	298.82	545.51	2.06	2.33	2.19
	240.00	250.00	729.63	871.18	1.63	1.48	1.55
	250.00	260.00	231.74	214.38	2.19	2.27	2.23
	260.00	270.00	112.90	128.25	3.56	2.69	3.03
	270.00	280.00	62.57	143.63	3.26	2.63	2.90
	280.00	290.00	154.09	183.81	3.43	3.36	3.40
	290.00	300.00	140.66	218.72	3.46	2.90	3.14
	300.00	310.00	118.38	52.74	3.72	3.89	3.80
	310.00	320.00	78.76	83.55	3.24	3.53	3.37
	320.00	330.00	129.16	174.63	3.21	3.04	3.12
	330.00	340.00	76.14	132.79	2.89	2.31	2.56
	340.00	350.00	175.61	195.68	2.40	2.78	2.58
	350.00	360.00	130.14	178.81	3.79	3.09	3.38
	360.00	370.00	87.39	59.72	3.01	3.47	3.21
	370.00	380.00	105.79	87.98	3.19	3.30	3.25
	380.00	390.00	65.29	159.88	3.57	2.90	3.18
	390.00	400.00	85.14	98.87	3.50	3.40	3.45
	400.00	410.00	80.01	101.21	3.20	2.70	2.92
	410.00	420.00	42.33	118.83	3.29	2.77	3.00

420.00	430.00	212.68	258.32	2.95	2.44	2.67
430.00	440.00	119.02	159.88	2.85	2.49	2.66
440.00	450.00	94.51	102.76	3.06	3.06	3.06
450.00	460.00	165.33	223.17	3.07	2.50	2.75
460.00	470.00	122.36	255.14	2.32	2.58	2.44
470.00	480.00	221.25	148.00	2.22	2.53	2.36
480.00	490.00	663.71	652.85	1.27	1.93	1.54
490.00	500.00	579.33	591.65	1.12	1.33	1.21
500.00	510.00	1049.53	800.66	1.99	2.25	2.11
510.00	520.00	608.66	439.16	.80	1.98	1.18
520.00	529.22	383.41	480.05	1.97	2.54	2.22

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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\SR3942~2.ERD							
	.00	529.74	404.76	532.27	.77	.77	.77
	.00	10.00	234.13	368.49	2.16	1.55	1.80
	10.00	20.00	184.01	715.31	2.99	.46	.89
	20.00	30.00	468.42	780.62	1.60	.88	1.15
	30.00	40.00	359.47	569.85	2.28	1.48	1.80
	40.00	50.00	136.35	316.85	2.12	1.64	1.85
	50.00	60.00	782.60	495.59	.86	1.61	1.13
	60.00	70.00	738.02	941.75	.53	.47	.50
	70.00	80.00	828.58	976.89	1.85	2.08	1.96
	80.00	90.00	346.92	515.25	3.33	2.58	2.89
	90.00	100.00	415.02	441.73	2.88	3.25	3.05
	100.00	110.00	442.23	538.88	3.66	3.59	3.63
	110.00	120.00	185.25	290.67	2.68	2.14	2.37
	120.00	130.00	119.40	149.07	3.88	3.18	3.47
	130.00	140.00	245.08	380.21	3.80	2.62	3.05
	140.00	150.00	116.07	213.14	3.28	2.19	2.60
	150.00	160.00	53.01	64.81	3.92	2.96	3.32
	160.00	170.00	118.75	132.44	3.78	2.77	3.15
	170.00	180.00	113.31	248.36	3.50	2.68	3.01
	180.00	190.00	80.75	89.16	3.39	2.95	3.15
	190.00	200.00	80.04	74.27	3.23	2.95	3.08
	200.00	210.00	119.88	197.13	3.58	2.70	3.04
	210.00	220.00	123.64	507.10	3.58	.15	.41
	220.00	230.00	114.38	615.09	3.62	.94	1.50
	230.00	240.00	98.19	156.20	3.57	1.90	2.42
	240.00	250.00	36.18	216.99	3.93	2.28	2.80
	250.00	260.00	66.82	109.27	3.57	2.62	2.99
	260.00	270.00	107.24	196.13	3.52	2.06	2.55
	270.00	280.00	66.82	216.47	3.07	1.58	2.06
	280.00	290.00	531.02	793.18	1.27	.72	.94
	290.00	300.00	606.54	842.72	1.75	.82	1.14
	300.00	310.00	180.87	318.82	2.46	1.07	1.50
	310.00	320.00	441.52	347.61	.85	1.40	1.07
	320.00	330.00	493.35	347.20	1.25	1.71	1.45
	330.00	340.00	465.67	699.03	1.56	1.27	1.40
	340.00	350.00	560.70	489.31	1.22	1.43	1.32
	350.00	360.00	1137.78	1221.63	.90	1.01	.96
	360.00	370.00	1324.54	1859.58	.00	.00	.00
	370.00	380.00	1062.39	1420.49	.37	.17	.24
	380.00	390.00	669.99	623.02	1.32	.64	.89
	390.00	400.00	1176.74	1408.69	.40	.45	.42
	400.00	410.00	914.30	968.68	.33	.53	.41

410.00	420.00	615.07	837.30	1.34	1.39	1.37
420.00	430.00	1178.15	1552.77	1.91	1.66	1.77
430.00	440.00	851.01	936.19	2.82	1.40	1.87
440.00	450.00	284.18	524.43	1.61	1.48	1.54
450.00	460.00	603.85	509.62	3.01	1.94	2.34
460.00	470.00	380.61	366.97	3.43	2.81	3.07
470.00	480.00	181.68	407.79	3.25	2.26	2.64
480.00	490.00	202.21	358.93	2.89	1.62	2.06
490.00	500.00	99.48	176.17	3.36	2.86	3.08
500.00	510.00	86.73	191.28	3.21	2.99	3.09
510.00	520.00	183.76	267.39	2.93	2.43	2.65
520.00	529.74	464.72	242.47	.44	1.86	.78

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Input files from directory "F:\MM\RAW\SYNC\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\SYNC\ERD\SR3942~2.ERD							
	.00	529.22	396.85	522.46	.80	.67	.73
	.00	10.00	269.37	320.86	1.86	1.15	1.43
	10.00	20.00	178.99	331.26	3.09	1.92	2.34
	20.00	30.00	304.59	653.61	1.68	1.16	1.38
	30.00	40.00	434.01	548.49	2.02	1.51	1.73
	40.00	50.00	273.15	443.16	1.54	1.65	1.59
	50.00	60.00	553.53	545.25	.86	1.24	1.02
	60.00	70.00	824.67	1054.69	.60	.50	.55
	70.00	80.00	845.20	984.16	1.99	2.07	2.03
	80.00	90.00	368.77	610.37	3.41	2.71	3.00
	90.00	100.00	359.41	407.56	3.68	3.61	3.64
	100.00	110.00	452.27	568.83	3.32	3.38	3.35
	110.00	120.00	215.30	327.02	2.71	2.38	2.53
	120.00	130.00	93.19	155.16	3.96	3.15	3.47
	130.00	140.00	230.35	347.72	3.67	2.40	2.85
	140.00	150.00	148.22	329.68	3.44	2.07	2.54
	150.00	160.00	49.27	59.43	3.69	3.07	3.33
	160.00	170.00	92.10	106.76	3.82	3.23	3.48
	170.00	180.00	124.79	244.47	3.98	2.87	3.27
	180.00	190.00	62.26	105.60	3.37	3.12	3.24
	190.00	200.00	85.78	138.09	2.84	2.68	2.76
	200.00	210.00	132.07	201.55	3.57	2.44	2.86
	210.00	220.00	107.13	400.71	3.58	.25	.60
	220.00	230.00	109.02	708.54	3.43	.48	.93
	230.00	240.00	80.61	132.76	3.43	1.93	2.42
	240.00	250.00	49.57	245.49	3.91	2.36	2.86
	250.00	260.00	72.93	94.85	3.61	2.86	3.17
	260.00	270.00	84.60	191.17	3.33	2.09	2.53
	270.00	280.00	89.23	207.68	3.48	1.97	2.47
	280.00	290.00	433.62	773.33	1.42	.78	1.03
	290.00	300.00	648.33	752.65	1.58	.76	1.05
	300.00	310.00	188.79	431.61	2.38	1.01	1.44
	310.00	320.00	428.10	285.03	.92	1.39	1.11
	320.00	330.00	507.77	380.94	1.12	1.77	1.38
	330.00	340.00	536.43	707.87	1.59	1.32	1.44
	340.00	350.00	535.36	515.73	1.05	1.32	1.18
	350.00	360.00	1016.75	1047.63	1.03	1.19	1.11
	360.00	370.00	1387.68	1700.14	.00	.00	.00
	370.00	380.00	877.36	969.67	.41	.04	.10
	380.00	390.00	756.58	937.38	1.58	.51	.82
	390.00	400.00	957.61	1315.10	.41	.54	.47
	400.00	410.00	1029.37	1124.11	.20	.67	.34

410.00	420.00	661.72	731.88	1.29	.98	1.12
420.00	430.00	1081.75	1429.68	2.25	1.73	1.96
430.00	440.00	956.84	1159.59	2.68	1.27	1.72
440.00	450.00	301.51	401.21	1.59	1.47	1.53
450.00	460.00	528.05	573.34	3.11	1.76	2.22
460.00	470.00	418.11	376.52	3.66	3.04	3.30
470.00	480.00	200.10	397.38	3.26	2.16	2.57
480.00	490.00	179.43	311.62	2.95	1.60	2.06
490.00	500.00	96.67	234.77	3.14	2.84	2.98
500.00	510.00	89.87	158.35	2.81	3.33	3.04
510.00	520.00	183.28	307.36	2.98	2.29	2.58
520.00	529.22	380.57	196.28	1.26	2.34	1.65

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start:	End:	IRI:	(in/mi)		RN: 0-5		Both
	ft	ft	LElev.	RElev.	LElev.	RElev.		
-----								
F:\NEW\10THS\ERD\SR28WB2.ERD								
	.00	529.48	311.92	341.20	.92	.45	.62	
	.00	10.00	827.83	664.02	.14	.22	.17	
	10.00	20.00	203.85	215.91	1.76	1.84	1.80	
	20.00	30.00	255.75	324.32	2.71	1.68	2.06	
	30.00	40.00	346.57	533.68	1.49	1.29	1.39	
	40.00	50.00	319.06	177.17	2.21	.99	1.39	
	50.00	60.00	400.33	344.91	1.74	2.33	1.99	
	60.00	70.00	295.81	101.81	2.53	3.26	2.83	
	70.00	80.00	188.75	485.41	2.11	1.29	1.61	
	80.00	90.00	238.81	220.60	2.96	2.81	2.89	
	90.00	100.00	190.82	157.90	3.11	2.86	2.98	
	100.00	110.00	156.44	113.13	3.11	3.07	3.09	
	110.00	120.00	171.54	333.23	1.86	1.28	1.52	
	120.00	130.00	240.70	149.04	2.69	2.96	2.81	
	130.00	140.00	332.71	177.63	1.89	2.28	2.07	
	140.00	150.00	120.71	60.44	3.12	2.79	2.95	
	150.00	160.00	246.25	209.20	2.20	2.06	2.13	
	160.00	170.00	256.29	330.62	1.44	1.69	1.55	
	170.00	180.00	560.64	661.84	1.61	1.06	1.28	
	180.00	190.00	267.38	377.77	1.19	1.16	1.17	
	190.00	200.00	205.46	315.19	1.62	1.81	1.71	
	200.00	210.00	335.84	251.92	1.72	2.76	2.11	
	210.00	220.00	223.17	239.83	1.34	2.03	1.62	
	220.00	230.00	154.07	248.38	2.58	1.39	1.80	
	230.00	240.00	168.87	305.67	2.46	.88	1.33	
	240.00	250.00	511.47	508.40	.52	.71	.61	
	250.00	260.00	293.60	509.87	2.13	.28	.60	
	260.00	270.00	728.50	1050.41	.00	.00	.00	
	270.00	280.00	607.34	715.29	.13	.39	.21	
	280.00	290.00	772.68	617.57	.11	.20	.15	
	290.00	300.00	512.06	632.84	.92	.18	.36	
	300.00	310.00	460.96	609.91	.54	1.48	.83	
	310.00	320.00	673.81	706.04	2.81	2.64	2.72	
	320.00	330.00	256.18	263.42	1.95	2.51	2.19	
	330.00	340.00	412.08	568.89	2.25	2.73	2.46	
	340.00	350.00	284.89	174.83	.89	1.57	1.15	
	350.00	360.00	398.63	323.61	1.86	1.97	1.92	
	360.00	370.00	139.59	168.37	2.31	1.56	1.86	
	370.00	380.00	324.09	351.82	2.61	1.87	2.18	
	380.00	390.00	190.69	294.54	2.47	2.34	2.40	
	390.00	400.00	128.12	173.10	2.67	2.56	2.61	
	400.00	410.00	152.05	331.48	2.31	2.83	2.54	

410.00	420.00	170.53	162.19	1.87	3.23	2.34
420.00	430.00	502.89	258.70	.75	1.39	.99
430.00	440.00	206.08	175.76	2.00	2.32	2.15
440.00	450.00	218.94	226.02	2.22	2.64	2.41
450.00	460.00	207.04	121.68	1.83	2.16	1.98
460.00	470.00	114.18	224.76	2.17	2.49	2.32
470.00	480.00	191.31	179.53	1.81	2.46	2.08
480.00	490.00	145.21	195.23	3.12	2.36	2.67
490.00	500.00	432.16	450.76	1.21	.69	.89
500.00	510.00	220.63	250.22	2.19	2.45	2.31
510.00	520.00	257.14	595.11	2.00	.84	1.21
520.00	529.48	337.36	304.75	1.52	1.39	1.45

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\MM\RAW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\10THS\ERD\SR28WB2.ERD							
	.00	529.22	326.61	346.98	.92	.48	.65
	.00	10.00	844.10	769.39	.13	.18	.15
	10.00	20.00	208.08	243.76	1.74	1.96	1.84
	20.00	30.00	230.69	332.99	2.61	2.24	2.41
	30.00	40.00	310.45	568.16	1.52	1.33	1.42
	40.00	50.00	349.39	165.87	1.77	1.56	1.66
	50.00	60.00	388.75	360.98	1.60	2.36	1.91
	60.00	70.00	297.95	107.74	2.50	3.24	2.80
	70.00	80.00	210.71	462.12	1.85	1.25	1.50
	80.00	90.00	228.07	241.26	3.40	2.98	3.17
	90.00	100.00	189.45	148.75	3.11	3.28	3.19
	100.00	110.00	166.92	135.95	3.23	3.29	3.26
	110.00	120.00	151.46	316.07	1.80	1.26	1.49
	120.00	130.00	249.31	167.82	2.53	3.12	2.78
	130.00	140.00	320.07	141.40	1.94	1.61	1.76
	140.00	150.00	122.07	82.69	2.60	2.45	2.52
	150.00	160.00	263.38	223.40	2.06	1.99	2.03
	160.00	170.00	286.26	309.68	1.44	1.63	1.53
	170.00	180.00	585.86	600.48	1.74	1.06	1.33
	180.00	190.00	324.68	443.81	1.24	.97	1.10
	190.00	200.00	226.86	325.21	1.88	1.69	1.78
	200.00	210.00	409.71	247.54	2.21	2.99	2.53
	210.00	220.00	232.51	271.82	1.27	1.96	1.55
	220.00	230.00	164.68	231.03	2.60	2.10	2.32
	230.00	240.00	143.30	308.97	2.48	1.21	1.64
	240.00	250.00	512.04	576.40	.41	.78	.55
	250.00	260.00	357.87	506.80	1.77	.21	.47
	260.00	270.00	653.24	1174.60	.01	.00	.00
	270.00	280.00	546.89	491.41	.30	.64	.42
	280.00	290.00	629.63	361.20	.71	.38	.51
	290.00	300.00	616.36	788.20	.22	.19	.20
	300.00	310.00	899.88	733.68	.05	1.40	.18
	310.00	320.00	559.36	756.10	2.67	2.68	2.68
	320.00	330.00	312.75	261.03	1.76	2.57	2.08
	330.00	340.00	397.98	579.51	2.85	2.80	2.83
	340.00	350.00	221.61	235.55	.97	1.54	1.20
	350.00	360.00	464.32	345.48	1.33	1.77	1.52
	360.00	370.00	169.60	161.39	2.00	1.47	1.69
	370.00	380.00	290.23	316.49	2.52	2.01	2.23
	380.00	390.00	208.55	318.24	2.46	2.43	2.45
	390.00	400.00	82.29	212.30	3.17	1.70	2.19
	400.00	410.00	183.18	297.94	2.71	2.69	2.70

410.00	420.00	177.23	196.62	.84	3.18	1.36
420.00	430.00	747.00	228.30	.15	1.19	.34
430.00	440.00	215.73	143.38	1.68	2.75	2.08
440.00	450.00	239.15	221.44	2.22	2.43	2.32
450.00	460.00	185.58	131.42	1.99	2.16	2.07
460.00	470.00	108.16	200.98	1.86	2.28	2.05
470.00	480.00	206.57	139.07	1.78	2.00	1.88
480.00	490.00	170.83	218.02	3.12	2.56	2.80
490.00	500.00	459.14	458.57	1.04	.77	.89
500.00	510.00	232.34	254.94	1.83	2.34	2.05
510.00	520.00	217.84	623.90	2.15	.88	1.28
520.00	529.22	297.14	297.43	.94	1.33	1.11

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\SR28EB2.ERD	.00	529.48	313.27	350.92	.75	.67	.71
	.00	10.00	72.34	103.31	3.40	3.31	3.35
	10.00	20.00	691.29	493.60	.45	.78	.58
	20.00	30.00	123.77	107.35	3.29	3.12	3.20
	30.00	40.00	139.59	459.83	1.92	1.22	1.50
	40.00	50.00	112.01	182.29	3.25	3.06	3.15
	50.00	60.00	189.04	111.52	1.88	2.22	2.03
	60.00	70.00	71.79	196.30	2.72	3.22	2.94
	70.00	80.00	112.78	170.26	1.54	1.07	1.27
	80.00	90.00	136.77	146.83	2.72	3.61	3.07
	90.00	100.00	218.90	178.11	2.57	3.46	2.92
	100.00	110.00	298.76	298.09	3.01	3.39	3.18
	110.00	120.00	138.18	124.15	3.29	3.59	3.43
	120.00	130.00	535.94	433.08	1.50	1.69	1.59
	130.00	140.00	236.66	224.50	2.78	2.88	2.83
	140.00	150.00	392.68	357.88	3.17	3.25	3.21
	150.00	160.00	127.49	226.85	3.09	3.22	3.16
	160.00	170.00	415.24	424.57	.61	.95	.75
	170.00	180.00	251.34	353.65	2.26	2.30	2.28
	180.00	190.00	333.42	421.55	1.22	1.49	1.35
	190.00	200.00	450.41	278.33	.74	.75	.75
	200.00	210.00	345.65	658.85	2.52	2.31	2.41
	210.00	220.00	466.34	749.72	2.62	.40	.80
	220.00	230.00	663.20	824.92	.17	.69	.31
	230.00	240.00	1079.05	801.21	.27	.30	.28
	240.00	250.00	229.09	264.44	1.00	2.10	1.37
	250.00	260.00	464.83	850.06	1.02	.04	.13
	260.00	270.00	921.57	1432.25	.00	.00	.00
	270.00	280.00	1002.31	984.28	.13	.62	.26
	280.00	290.00	617.93	751.74	.80	.52	.64
	290.00	300.00	506.28	362.64	.73	1.69	1.05
	300.00	310.00	320.96	243.95	.53	.41	.46
	310.00	320.00	497.31	625.18	1.06	.92	.98
	320.00	330.00	335.42	424.95	2.17	1.55	1.81
	330.00	340.00	380.14	352.35	1.43	1.97	1.66
	340.00	350.00	104.45	114.27	2.44	1.80	2.07
	350.00	360.00	471.39	582.55	1.45	.88	1.11
	360.00	370.00	270.50	284.48	2.00	1.74	1.86
	370.00	380.00	229.10	268.91	2.49	2.19	2.33
	380.00	390.00	176.90	180.55	2.51	2.18	2.33
	390.00	400.00	215.40	252.15	2.09	1.91	2.00
	400.00	410.00	69.59	328.51	3.61	3.87	3.73
	410.00	420.00	111.33	98.09	3.90	3.00	3.34

420.00	430.00	190.52	243.58	3.44	1.75	2.28
430.00	440.00	230.61	356.91	1.49	1.22	1.34
440.00	450.00	109.95	79.23	3.25	2.72	2.95
450.00	460.00	71.86	44.35	3.75	3.36	3.53
460.00	470.00	93.37	90.48	1.96	2.32	2.12
470.00	480.00	221.84	351.26	1.92	1.82	1.87
480.00	490.00	172.80	183.61	2.41	2.40	2.40
490.00	500.00	210.06	123.00	2.64	3.58	3.01
500.00	510.00	72.71	79.16	1.67	2.37	1.96
510.00	520.00	307.88	191.05	1.23	1.80	1.46
520.00	529.48	299.16	94.78	1.65	2.54	2.00

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\MM\RAW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\10THS\ERD\SR28EB2.ERD							
	.00	529.48	320.23	359.02	.77	.65	.70
	.00	10.00	145.02	166.59	.76	1.10	.90
	10.00	20.00	660.98	517.27	.82	1.57	1.09
	20.00	30.00	115.72	128.22	3.57	3.27	3.41
	30.00	40.00	124.57	438.19	2.69	1.16	1.63
	40.00	50.00	89.21	155.23	3.56	3.38	3.47
	50.00	60.00	240.29	130.95	1.52	2.41	1.86
	60.00	70.00	87.56	187.40	3.20	3.10	3.15
	70.00	80.00	131.33	136.31	1.62	1.92	1.76
	80.00	90.00	112.86	147.06	3.38	3.38	3.38
	90.00	100.00	247.32	188.95	3.03	3.46	3.22
	100.00	110.00	284.87	265.10	3.29	3.02	3.15
	110.00	120.00	184.28	161.67	2.82	3.19	2.99
	120.00	130.00	511.36	408.40	1.56	1.86	1.70
	130.00	140.00	250.55	256.73	2.89	3.24	3.05
	140.00	150.00	343.03	311.49	3.13	2.95	3.04
	150.00	160.00	208.04	279.21	1.07	1.55	1.27
	160.00	170.00	369.97	416.48	.95	1.48	1.17
	170.00	180.00	226.28	318.91	1.66	2.68	2.04
	180.00	190.00	385.73	426.15	.88	1.28	1.05
	190.00	200.00	516.57	272.07	.47	.85	.62
	200.00	210.00	363.71	758.26	2.70	1.81	2.16
	210.00	220.00	486.72	687.29	2.56	.44	.84
	220.00	230.00	662.76	795.84	.40	.61	.49
	230.00	240.00	1099.18	821.66	.29	.24	.27
	240.00	250.00	284.63	272.83	1.04	2.03	1.39
	250.00	260.00	524.55	926.28	.20	.01	.03
	260.00	270.00	1101.91	1663.29	.00	.00	.00
	270.00	280.00	953.66	746.16	.16	.68	.30
	280.00	290.00	751.20	892.08	.60	.34	.45
	290.00	300.00	476.39	418.25	.94	2.51	1.39
	300.00	310.00	255.31	305.40	.54	.38	.45
	310.00	320.00	507.56	598.92	1.29	.88	1.06
	320.00	330.00	262.90	423.94	2.78	1.58	2.01
	330.00	340.00	374.36	309.79	1.43	1.55	1.48
	340.00	350.00	120.76	167.02	1.90	1.49	1.67
	350.00	360.00	462.81	610.72	1.46	1.09	1.25
	360.00	370.00	261.59	224.47	1.76	1.66	1.71
	370.00	380.00	284.44	290.20	2.33	2.15	2.24
	380.00	390.00	149.41	237.63	2.66	2.37	2.51
	390.00	400.00	185.12	238.01	2.67	2.12	2.36
	400.00	410.00	83.21	333.59	3.76	3.85	3.80
	410.00	420.00	122.69	85.10	3.78	3.03	3.33

420.00	430.00	195.05	264.05	2.35	1.94	2.12
430.00	440.00	233.84	314.10	1.74	1.36	1.53
440.00	450.00	111.42	55.35	3.30	3.03	3.15
450.00	460.00	81.66	59.39	3.61	3.50	3.55
460.00	470.00	98.88	89.38	2.52	2.42	2.47
470.00	480.00	226.73	323.45	1.78	1.92	1.85
480.00	490.00	153.38	207.33	2.94	2.26	2.55
490.00	500.00	152.31	125.13	3.05	3.22	3.13
500.00	510.00	110.22	103.88	1.63	1.75	1.69
510.00	520.00	288.69	224.54	1.88	2.43	2.12
520.00	529.48	335.91	105.59	1.72	2.43	2.01

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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\SR55SB.ERD	.00	529.48	166.84	199.43	.78	.79	.79
	.00	10.00	376.04	509.25	.31	.07	.14
	10.00	20.00	197.94	134.62	3.14	2.84	2.98
	20.00	30.00	154.27	149.40	2.73	2.11	2.37
	30.00	40.00	87.70	226.51	3.06	1.23	1.75
	40.00	50.00	95.47	331.93	2.28	2.55	2.41
	50.00	60.00	69.57	312.06	3.01	2.27	2.57
	60.00	70.00	50.78	103.26	2.92	2.61	2.76
	70.00	80.00	73.30	192.50	3.44	2.45	2.83
	80.00	90.00	57.17	243.85	3.49	2.62	2.97
	90.00	100.00	34.25	231.74	3.61	.03	.13
	100.00	110.00	65.56	310.69	3.65	2.84	3.17
	110.00	120.00	117.42	93.19	2.13	2.53	2.31
	120.00	130.00	114.99	102.85	2.58	3.01	2.77
	130.00	140.00	186.98	454.68	2.13	1.33	1.64
	140.00	150.00	1378.55	1374.10	.00	.00	.00
	150.00	160.00	1119.54	1068.19	.37	.82	.53
	160.00	170.00	313.98	350.21	2.25	2.41	2.33
	170.00	180.00	73.79	239.03	3.23	2.06	2.48
	180.00	190.00	131.75	67.56	3.06	2.98	3.02
	190.00	200.00	101.21	144.44	2.63	3.33	2.92
	200.00	210.00	115.34	184.75	3.31	2.96	3.12
	210.00	220.00	120.43	245.58	2.30	2.72	2.49
	220.00	230.00	148.01	154.91	2.31	2.95	2.58
	230.00	240.00	147.82	142.24	3.01	3.41	3.19
	240.00	250.00	163.16	135.96	2.61	3.48	2.96
	250.00	260.00	128.76	159.41	2.79	3.18	2.97
	260.00	270.00	78.06	163.11	2.81	2.78	2.79
	270.00	280.00	85.03	142.05	3.59	2.92	3.20
	280.00	290.00	111.81	163.80	2.50	2.63	2.56
	290.00	300.00	95.60	74.88	2.65	2.64	2.64
	300.00	310.00	150.32	167.65	2.01	3.82	2.55
	310.00	320.00	123.14	229.20	2.16	2.81	2.43
	320.00	330.00	99.23	43.71	2.39	2.65	2.51
	330.00	340.00	83.16	141.78	2.49	2.48	2.48
	340.00	350.00	73.41	81.35	3.17	3.61	3.36
	350.00	360.00	41.71	92.27	3.03	2.45	2.70
	360.00	370.00	104.74	59.46	2.39	3.08	2.68
	370.00	380.00	130.62	57.31	2.04	2.98	2.40
	380.00	390.00	104.40	90.63	3.39	2.76	3.03
	390.00	400.00	88.05	98.22	2.49	1.84	2.11
	400.00	410.00	124.83	103.13	2.92	3.24	3.07
	410.00	420.00	171.19	80.92	2.26	1.53	1.82

420.00	430.00	76.25	83.92	1.96	2.28	2.10
430.00	440.00	122.26	56.46	2.12	3.51	2.59
440.00	450.00	87.51	47.01	2.90	1.69	2.12
450.00	460.00	130.39	64.56	1.31	1.67	1.47
460.00	470.00	108.98	53.05	2.57	2.92	2.73
470.00	480.00	219.85	211.47	1.43	1.49	1.46
480.00	490.00	130.02	160.34	2.05	1.86	1.95
490.00	500.00	109.78	83.89	2.79	2.73	2.76
500.00	510.00	121.15	106.92	2.49	1.71	2.02
510.00	520.00	296.35	59.58	2.20	3.15	2.57
520.00	529.48	123.62	189.08	3.29	2.72	2.97

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\MM\RAW\SYNC\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\SYNC\ERD\SR55SB.ERD	.00	529.48	166.59	185.98	.85	.94	.90
	.00	10.00	179.26	107.92	1.90	2.56	2.18
	10.00	20.00	212.60	163.32	2.86	2.72	2.79
	20.00	30.00	162.52	106.46	2.87	2.63	2.75
	30.00	40.00	99.84	160.20	3.24	1.53	2.05
	40.00	50.00	98.73	316.78	2.47	2.54	2.50
	50.00	60.00	85.14	297.43	3.00	2.24	2.55
	60.00	70.00	44.06	87.16	2.99	2.51	2.73
	70.00	80.00	74.72	179.57	3.36	2.46	2.82
	80.00	90.00	67.59	222.80	3.60	2.82	3.13
	90.00	100.00	31.66	147.44	3.63	2.66	3.03
	100.00	110.00	84.74	125.76	3.38	2.93	3.13
	110.00	120.00	136.34	105.34	2.45	2.11	2.27
	120.00	130.00	28.47	128.04	3.45	3.17	3.30
	130.00	140.00	151.54	448.34	2.39	1.31	1.70
	140.00	150.00	1434.99	1458.89	.00	.00	.00
	150.00	160.00	1503.40	1172.79	.11	.27	.17
	160.00	170.00	311.15	311.01	2.15	2.26	2.20
	170.00	180.00	65.20	222.80	2.90	2.71	2.80
	180.00	190.00	92.45	70.47	2.87	3.29	3.06
	190.00	200.00	70.66	137.74	3.15	3.55	3.33
	200.00	210.00	120.08	158.89	3.29	3.17	3.23
	210.00	220.00	118.75	203.26	2.22	3.07	2.55
	220.00	230.00	101.75	167.83	2.50	2.86	2.67
	230.00	240.00	154.17	140.63	2.88	3.39	3.10
	240.00	250.00	197.71	98.96	2.62	3.71	3.03
	250.00	260.00	133.31	145.30	2.68	3.34	2.96
	260.00	270.00	61.76	144.65	3.15	3.10	3.12
	270.00	280.00	71.37	120.17	2.90	3.17	3.03
	280.00	290.00	85.64	169.76	2.48	2.67	2.57
	290.00	300.00	105.98	75.15	2.41	2.34	2.38
	300.00	310.00	137.16	145.05	1.94	3.31	2.41
	310.00	320.00	137.01	227.75	2.12	2.76	2.39
	320.00	330.00	82.15	63.69	2.57	2.74	2.65
	330.00	340.00	77.20	137.71	2.49	2.47	2.48
	340.00	350.00	66.17	79.22	3.04	3.43	3.22
	350.00	360.00	44.73	109.30	2.71	2.69	2.70
	360.00	370.00	92.08	69.44	2.63	2.81	2.72
	370.00	380.00	116.21	67.23	2.18	3.42	2.62
	380.00	390.00	125.15	105.51	3.02	2.59	2.78
	390.00	400.00	112.74	99.95	2.17	1.76	1.95
	400.00	410.00	132.05	98.10	2.84	3.14	2.98

410.00	420.00	174.44	108.51	2.32	1.42	1.76
420.00	430.00	64.83	84.02	1.50	2.29	1.81
430.00	440.00	101.66	48.54	2.28	3.31	2.67
440.00	450.00	136.09	53.86	2.40	2.22	2.30
450.00	460.00	90.63	66.01	1.30	1.66	1.46
460.00	470.00	93.15	51.39	2.63	2.71	2.67
470.00	480.00	211.20	227.17	1.92	1.66	1.78
480.00	490.00	126.59	165.13	2.25	1.86	2.03
490.00	500.00	137.19	91.76	2.24	2.95	2.53
500.00	510.00	135.12	98.19	2.62	2.07	2.31
510.00	520.00	226.41	51.87	1.99	2.34	2.15
520.00	529.48	76.88	165.84	3.32	2.24	2.64

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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\SR55NB.ERD							
	.00	529.74	201.34	246.32	.92	1.14	1.02
	.00	10.00	183.51	157.21	2.21	1.69	1.91
	10.00	20.00	250.65	263.77	1.66	1.78	1.72
	20.00	30.00	204.67	280.06	1.52	1.33	1.42
	30.00	40.00	112.75	224.98	2.04	1.97	2.00
	40.00	50.00	119.54	211.36	1.18	1.39	1.28
	50.00	60.00	163.25	218.58	2.11	1.89	1.99
	60.00	70.00	82.56	162.67	2.07	3.02	2.44
	70.00	80.00	183.33	92.34	1.71	2.70	2.09
	80.00	90.00	185.47	111.25	2.28	2.97	2.57
	90.00	100.00	123.18	288.56	1.86	.88	1.22
	100.00	110.00	132.26	147.01	3.02	2.88	2.95
	110.00	120.00	167.52	232.23	1.68	1.74	1.71
	120.00	130.00	72.62	89.44	2.89	3.34	3.09
	130.00	140.00	92.29	136.80	2.02	2.87	2.36
	140.00	150.00	106.31	228.17	3.14	2.22	2.58
	150.00	160.00	40.87	138.73	2.13	2.79	2.40
	160.00	170.00	90.29	90.69	2.19	2.50	2.33
	170.00	180.00	123.67	203.05	2.25	2.51	2.37
	180.00	190.00	123.79	322.51	2.20	1.73	1.93
	190.00	200.00	141.92	192.87	2.63	2.72	2.67
	200.00	210.00	140.49	128.19	2.44	3.09	2.71
	210.00	220.00	104.24	66.43	1.89	3.39	2.39
	220.00	230.00	107.20	56.94	2.44	3.23	2.76
	230.00	240.00	72.75	115.38	2.63	2.22	2.40
	240.00	250.00	116.29	225.90	1.69	2.39	1.98
	250.00	260.00	150.63	135.23	1.44	2.09	1.71
	260.00	270.00	165.88	95.57	1.99	2.66	2.27
	270.00	280.00	85.35	256.48	1.83	1.39	1.58
	280.00	290.00	116.00	91.86	1.96	1.72	1.83
	290.00	300.00	232.76	380.19	2.09	1.67	1.86
	300.00	310.00	154.59	332.74	2.18	1.61	1.85
	310.00	320.00	369.36	275.63	1.73	.75	1.08
	320.00	330.00	1543.97	1537.38	.00	.00	.00
	330.00	340.00	1144.80	1138.04	.76	.87	.81
	340.00	350.00	356.18	329.89	1.75	2.01	1.87
	350.00	360.00	476.84	657.14	2.21	2.81	2.47
	360.00	370.00	294.03	484.80	2.34	2.26	2.30
	370.00	380.00	222.92	368.81	2.45	3.03	2.70
	380.00	390.00	291.88	461.37	2.90	2.77	2.83
	390.00	400.00	150.48	304.45	2.05	2.49	2.24
	400.00	410.00	160.06	294.33	2.00	1.80	1.89

410.00	420.00	216.53	207.37	1.94	2.89	2.30
420.00	430.00	109.06	90.60	2.12	2.97	2.46
430.00	440.00	74.89	78.09	2.13	1.94	2.03
440.00	450.00	83.86	140.33	1.87	1.89	1.88
450.00	460.00	117.48	187.11	2.67	1.91	2.22
460.00	470.00	158.60	119.02	2.26	2.39	2.32
470.00	480.00	80.90	160.75	1.94	2.07	2.00
480.00	490.00	106.78	158.85	1.94	1.76	1.84
490.00	500.00	131.21	101.51	2.05	1.84	1.94
500.00	510.00	141.76	113.55	1.80	2.27	2.00
510.00	520.00	178.14	69.59	2.27	2.74	2.48
520.00	529.74	115.61	126.88	1.99	2.56	2.23

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Input files from directory "F:\MM\RAW\SYNC\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\SYNC\ERD\SR55NB.ERD							
	.00	529.22	213.15	239.23	.98	1.13	1.05
	.00	10.00	189.29	166.42	2.02	1.48	1.71
	10.00	20.00	250.77	342.09	1.59	1.75	1.67
	20.00	30.00	209.70	272.63	1.61	1.15	1.35
	30.00	40.00	161.81	217.69	2.15	1.96	2.05
	40.00	50.00	234.08	211.05	1.55	1.30	1.42
	50.00	60.00	181.46	214.12	1.94	2.01	1.97
	60.00	70.00	84.22	193.35	2.37	2.50	2.43
	70.00	80.00	149.58	88.67	2.06	2.90	2.40
	80.00	90.00	230.08	121.69	2.65	2.55	2.60
	90.00	100.00	173.74	246.46	1.88	1.18	1.45
	100.00	110.00	187.30	152.07	2.66	2.75	2.70
	110.00	120.00	245.56	130.92	1.64	1.92	1.77
	120.00	130.00	90.20	81.27	3.18	3.50	3.33
	130.00	140.00	157.99	104.79	2.01	2.98	2.39
	140.00	150.00	197.83	156.31	1.77	3.31	2.27
	150.00	160.00	101.35	131.35	2.29	2.56	2.41
	160.00	170.00	129.42	128.65	3.00	3.22	3.11
	170.00	180.00	195.87	128.19	1.70	2.78	2.10
	180.00	190.00	247.40	237.27	2.31	2.47	2.39
	190.00	200.00	167.99	60.89	2.77	3.55	3.08
	200.00	210.00	119.87	76.93	3.16	3.02	3.09
	210.00	220.00	97.36	73.60	2.56	2.62	2.59
	220.00	230.00	99.52	90.76	3.05	2.57	2.78
	230.00	240.00	73.59	85.38	2.84	3.18	3.00
	240.00	250.00	118.36	166.46	2.76	2.83	2.80
	250.00	260.00	169.56	115.07	1.48	2.31	1.80
	260.00	270.00	150.45	123.21	2.90	2.88	2.89
	270.00	280.00	125.49	122.20	1.98	2.16	2.07
	280.00	290.00	200.75	148.05	2.49	1.65	1.98
	290.00	300.00	224.69	239.65	1.81	2.17	1.97
	300.00	310.00	112.62	347.76	2.66	1.61	2.00
	310.00	320.00	341.54	264.21	1.84	1.50	1.66
	320.00	330.00	1543.80	1507.61	.00	.00	.00
	330.00	340.00	1189.42	1303.62	.39	.55	.46
	340.00	350.00	230.83	285.97	1.55	2.10	1.78
	350.00	360.00	479.08	596.38	2.00	2.69	2.28
	360.00	370.00	288.47	500.13	2.18	2.18	2.18
	370.00	380.00	204.09	335.19	1.96	2.92	2.33
	380.00	390.00	229.70	467.47	2.39	2.70	2.53
	390.00	400.00	175.41	246.86	1.65	2.41	1.96

400.00	410.00	65.49	256.80	2.12	1.62	1.84
410.00	420.00	64.01	270.50	2.28	2.17	2.22
420.00	430.00	98.94	142.85	3.02	3.67	3.29
430.00	440.00	87.85	215.39	1.99	1.93	1.96
440.00	450.00	75.02	198.27	2.50	1.97	2.20
450.00	460.00	157.63	125.78	2.18	2.41	2.29
460.00	470.00	176.86	159.75	2.22	1.91	2.05
470.00	480.00	86.96	101.24	1.86	2.21	2.02
480.00	490.00	130.46	130.49	2.00	2.75	2.31
490.00	500.00	50.39	94.19	2.84	2.25	2.50
500.00	510.00	146.67	148.41	2.34	1.78	2.02
510.00	520.00	215.76	138.86	2.18	1.59	1.84
520.00	529.22	113.95	164.01	2.03	2.02	2.02

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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
F:\NEW\10THS\ERD\SR352WB.ERD	.00	529.48	302.42	346.36	.77	.77	.77
	.00	10.00	407.15	375.17	1.39	1.27	1.33
	10.00	20.00	335.87	503.92	2.59	1.40	1.81
	20.00	30.00	352.30	396.23	1.72	1.25	1.45
	30.00	40.00	304.35	378.05	2.05	2.38	2.20
	40.00	50.00	479.93	393.45	1.41	1.49	1.45
	50.00	60.00	119.07	164.46	3.09	3.05	3.07
	60.00	70.00	265.54	227.09	1.58	2.30	1.88
	70.00	80.00	218.42	95.64	1.64	1.90	1.76
	80.00	90.00	925.18	835.51	.36	.37	.36
	90.00	100.00	328.99	249.16	3.07	2.43	2.70
	100.00	110.00	160.37	221.76	2.24	2.12	2.18
	110.00	120.00	285.06	246.67	1.63	2.24	1.89
	120.00	130.00	650.82	637.38	.77	.82	.79
	130.00	140.00	665.98	740.55	.00	.00	.00
	140.00	150.00	995.06	1474.61	.55	.00	.02
	150.00	160.00	378.04	589.73	.62	.36	.47
	160.00	170.00	272.47	352.73	2.52	2.65	2.58
	170.00	180.00	348.15	431.69	2.14	2.57	2.33
	180.00	190.00	121.62	505.72	1.37	.76	.99
	190.00	200.00	415.61	542.34	1.60	1.17	1.36
	200.00	210.00	209.25	162.53	2.55	2.29	2.41
	210.00	220.00	400.38	577.45	3.24	2.88	3.04
	220.00	230.00	200.23	485.17	2.42	1.30	1.69
	230.00	240.00	194.78	226.77	2.02	1.71	1.85
	240.00	250.00	236.41	451.58	2.26	2.28	2.27
	250.00	260.00	163.04	246.98	2.54	2.05	2.26
	260.00	270.00	113.99	309.08	2.07	2.01	2.04
	270.00	280.00	180.92	202.29	2.63	2.40	2.50
	280.00	290.00	224.73	312.99	2.33	1.61	1.90
	290.00	300.00	173.14	243.99	2.28	2.31	2.30
	300.00	310.00	265.15	201.44	1.91	2.10	2.00
	310.00	320.00	396.84	178.74	1.59	2.25	1.87
	320.00	330.00	331.55	263.16	2.14	2.28	2.21
	330.00	340.00	178.47	164.43	3.04	2.03	2.42
	340.00	350.00	187.07	199.90	1.97	2.19	2.08
	350.00	360.00	240.49	159.68	1.32	1.84	1.54
	360.00	370.00	196.69	262.85	1.94	2.06	1.99
	370.00	380.00	189.76	334.76	2.94	2.38	2.62
	380.00	390.00	262.76	399.32	1.76	1.34	1.53
	390.00	400.00	201.62	342.28	1.79	2.08	1.93

400.00	410.00	327.95	315.45	1.60	2.05	1.80
410.00	420.00	148.06	243.75	2.25	2.09	2.17
420.00	430.00	176.56	211.89	2.34	2.69	2.50
430.00	440.00	241.73	155.65	2.55	2.41	2.48
440.00	450.00	246.95	330.19	1.97	1.92	1.94
450.00	460.00	324.10	459.78	2.09	1.54	1.77
460.00	470.00	347.53	313.73	1.52	1.34	1.43
470.00	480.00	199.43	302.71	1.77	2.19	1.95
480.00	490.00	352.00	170.50	1.77	1.69	1.73
490.00	500.00	330.35	204.97	1.88	2.07	1.97
500.00	510.00	267.40	201.15	1.97	2.62	2.24
510.00	520.00	201.34	133.96	2.06	2.23	2.14
520.00	529.48	182.90	193.42	1.52	2.56	1.91

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\MM\RAW\SYNC\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\SYNC\ERD\SR352WB.ERD							
	.00	529.22	302.13	368.18	.79	.77	.78
	.00	10.00	440.03	447.92	1.18	1.26	1.22
	10.00	20.00	332.44	387.07	2.38	2.67	2.51
	20.00	30.00	384.31	343.11	1.26	.93	1.08
	30.00	40.00	338.97	376.68	2.98	3.16	3.06
	40.00	50.00	447.78	387.34	1.18	1.41	1.29
	50.00	60.00	144.37	151.13	3.29	2.94	3.10
	60.00	70.00	240.83	290.88	2.29	1.79	2.01
	70.00	80.00	239.65	251.28	.90	.67	.77
	80.00	90.00	821.75	818.94	.80	.60	.69
	90.00	100.00	272.25	169.25	2.69	2.46	2.57
	100.00	110.00	135.76	174.36	2.18	1.87	2.01
	110.00	120.00	285.40	264.39	1.56	2.10	1.79
	120.00	130.00	659.79	584.41	.74	.84	.79
	130.00	140.00	695.32	834.15	.00	.00	.00
	140.00	150.00	940.12	1360.44	.53	.01	.03
	150.00	160.00	370.44	552.87	.67	.53	.60
	160.00	170.00	193.43	337.48	2.86	2.52	2.67
	170.00	180.00	348.76	449.21	1.98	2.23	2.10
	180.00	190.00	241.76	509.41	.77	.59	.67
	190.00	200.00	478.07	528.06	1.81	1.44	1.61
	200.00	210.00	201.47	211.57	2.27	2.27	2.27
	210.00	220.00	409.89	522.01	2.62	1.79	2.12
	220.00	230.00	200.42	412.68	2.84	1.72	2.13
	230.00	240.00	263.66	236.51	2.11	1.43	1.70
	240.00	250.00	210.61	530.72	2.49	2.43	2.46
	250.00	260.00	176.23	277.09	2.85	2.34	2.57
	260.00	270.00	329.80	250.18	1.23	2.30	1.61
	270.00	280.00	105.49	228.18	2.03	2.60	2.27
	280.00	290.00	171.47	510.31	1.61	.84	1.13
	290.00	300.00	267.74	274.09	1.71	2.11	1.89
	300.00	310.00	303.61	396.24	2.09	1.45	1.71
	310.00	320.00	464.80	278.12	1.46	2.67	1.88
	320.00	330.00	311.99	277.04	2.18	2.24	2.21
	330.00	340.00	261.99	168.71	2.42	2.17	2.29
	340.00	350.00	218.86	186.56	1.63	2.34	1.92
	350.00	360.00	219.69	159.06	1.40	2.33	1.75
	360.00	370.00	262.46	402.59	2.07	1.44	1.70
	370.00	380.00	206.37	356.77	2.81	2.09	2.39
	380.00	390.00	282.33	388.37	1.53	1.34	1.43
	390.00	400.00	153.93	338.80	1.87	2.25	2.04

400.00	410.00	236.48	443.67	1.81	1.45	1.61
410.00	420.00	216.81	213.06	1.57	2.05	1.78
420.00	430.00	165.91	219.89	2.65	2.81	2.72
430.00	440.00	168.48	261.31	2.63	2.42	2.52
440.00	450.00	190.46	413.09	1.44	1.56	1.49
450.00	460.00	378.47	583.62	1.43	1.33	1.38
460.00	470.00	305.31	281.48	1.39	1.53	1.45
470.00	480.00	138.72	264.07	2.44	2.19	2.31
480.00	490.00	246.44	254.99	1.69	1.49	1.58
490.00	500.00	318.40	423.01	1.75	1.26	1.47
500.00	510.00	189.79	289.73	2.12	2.25	2.18
510.00	520.00	207.00	94.07	1.50	2.56	1.89
520.00	529.22	170.62	152.56	1.83	1.71	1.77

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
F:\NEW\10THS\ERD\SR352EB.ERD	.00	529.48	300.77	429.25	.82	.60	.70
	.00	10.00	285.70	319.43	1.27	1.07	1.16
	10.00	20.00	256.90	158.19	1.80	1.27	1.50
	20.00	30.00	252.33	361.03	1.73	1.61	1.67
	30.00	40.00	122.73	271.49	2.18	2.53	2.34
	40.00	50.00	213.27	306.58	2.19	1.62	1.86
	50.00	60.00	421.70	464.69	2.12	2.02	2.07
	60.00	70.00	112.11	184.58	2.08	2.29	2.18
	70.00	80.00	144.41	247.77	1.60	2.24	1.86
	80.00	90.00	207.60	248.54	1.90	2.52	2.16
	90.00	100.00	155.35	365.78	1.96	1.47	1.68
	100.00	110.00	161.26	248.50	1.63	1.91	1.76
	110.00	120.00	137.03	251.60	2.58	2.55	2.56
	120.00	130.00	295.77	223.95	1.81	2.50	2.09
	130.00	140.00	108.95	192.67	3.41	2.19	2.62
	140.00	150.00	171.48	152.53	2.10	2.13	2.12
	150.00	160.00	248.88	294.15	1.56	1.55	1.55
	160.00	170.00	189.69	329.73	2.36	2.38	2.37
	170.00	180.00	208.50	378.25	2.08	1.91	1.99
	180.00	190.00	141.91	213.62	3.03	2.32	2.61
	190.00	200.00	95.78	114.63	2.98	2.69	2.82
	200.00	210.00	83.88	188.30	3.49	2.25	2.69
	210.00	220.00	154.66	393.38	3.11	1.22	1.75
	220.00	230.00	163.53	431.63	2.99	1.27	1.78
	230.00	240.00	132.26	203.63	3.01	2.13	2.48
	240.00	250.00	127.81	465.04	3.31	2.73	2.98
	250.00	260.00	137.65	381.40	3.37	2.07	2.53
	260.00	270.00	111.30	490.83	2.90	1.61	2.05
	270.00	280.00	127.17	396.84	2.57	1.51	1.90
	280.00	290.00	56.53	124.31	2.66	2.42	2.53
	290.00	300.00	90.00	160.91	2.76	2.31	2.51
	300.00	310.00	86.67	225.17	2.57	1.64	2.00
	310.00	320.00	87.57	333.37	2.72	1.74	2.12
	320.00	330.00	137.61	215.95	2.60	1.81	2.13
	330.00	340.00	357.50	269.37	2.15	2.00	2.07
	340.00	350.00	203.55	272.10	1.73	1.09	1.34
	350.00	360.00	375.46	328.48	.85	.59	.70
	360.00	370.00	156.99	634.23	.90	.44	.61
	370.00	380.00	373.58	413.86	2.16	.59	.99
	380.00	390.00	240.32	529.58	1.82	.56	.91
	390.00	400.00	280.40	941.23	1.75	.28	.58

400.00	410.00	179.78	818.39	2.20	.47	.85
410.00	420.00	198.83	521.13	3.68	.67	1.19
420.00	430.00	167.55	550.16	1.83	.66	1.01
430.00	440.00	857.19	1579.51	.77	.19	.35
440.00	450.00	499.25	865.80	1.51	1.23	1.35
450.00	460.00	326.03	519.91	2.65	2.24	2.43
460.00	470.00	333.35	697.72	.52	.65	.58
470.00	480.00	654.92	498.73	.66	.40	.50
480.00	490.00	2108.66	1382.25	.00	.00	.00
490.00	500.00	1245.08	1586.11	.33	.02	.06
500.00	510.00	190.55	242.27	1.67	1.68	1.68
510.00	520.00	430.27	361.63	.91	2.43	1.35
520.00	529.48	1329.74	388.67	.18	.88	.35

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\MM\RAW\SYNC\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\SYNC\ERD\SR352EB.ERD	.00	529.22	325.01	421.02	.83	.57	.68
	.00	10.00	270.53	291.68	1.25	1.15	1.20
	10.00	20.00	288.92	173.47	1.65	1.24	1.42
	20.00	30.00	260.67	374.29	1.53	1.22	1.36
	30.00	40.00	112.65	277.52	2.13	2.44	2.27
	40.00	50.00	192.60	305.16	2.32	1.59	1.88
	50.00	60.00	437.47	480.77	2.02	2.05	2.03
	60.00	70.00	116.74	191.28	2.01	2.22	2.11
	70.00	80.00	129.46	243.93	1.68	2.26	1.93
	80.00	90.00	211.75	251.51	1.81	2.57	2.12
	90.00	100.00	146.42	350.04	2.02	1.50	1.72
	100.00	110.00	161.22	239.58	1.62	1.83	1.72
	110.00	120.00	122.89	256.96	2.50	2.50	2.50
	120.00	130.00	305.34	223.46	1.75	2.49	2.05
	130.00	140.00	110.59	175.61	3.40	2.37	2.76
	140.00	150.00	152.54	162.13	2.30	2.30	2.30
	150.00	160.00	232.94	250.88	1.68	1.63	1.65
	160.00	170.00	191.41	329.34	2.48	2.33	2.40
	170.00	180.00	213.31	352.04	2.00	1.96	1.98
	180.00	190.00	176.52	275.05	2.76	2.02	2.33
	190.00	200.00	112.18	101.39	2.80	2.45	2.61
	200.00	210.00	97.23	184.93	3.19	2.09	2.50
	210.00	220.00	184.54	308.58	3.02	.75	1.25
	220.00	230.00	157.83	465.09	2.64	.90	1.37
	230.00	240.00	122.09	148.88	3.23	2.87	3.03
	240.00	250.00	125.77	464.81	3.21	2.73	2.94
	250.00	260.00	136.55	331.55	2.40	2.04	2.20
	260.00	270.00	103.18	367.06	2.70	1.54	1.96
	270.00	280.00	121.45	475.55	2.27	.89	1.30
	280.00	290.00	162.19	179.27	2.50	1.82	2.10
	290.00	300.00	110.65	179.99	1.96	1.94	1.95
	300.00	310.00	177.54	281.60	1.85	1.34	1.56
	310.00	320.00	270.66	282.80	1.67	1.96	1.80
	320.00	330.00	256.36	210.44	1.44	2.40	1.80
	330.00	340.00	526.61	225.58	1.37	1.70	1.52
	340.00	350.00	657.50	202.70	.57	1.18	.79
	350.00	360.00	359.71	377.58	1.13	.60	.80
	360.00	370.00	194.50	579.95	.92	.52	.68
	370.00	380.00	594.61	426.10	1.18	.87	1.01
	380.00	390.00	341.81	566.02	1.45	.62	.90
	390.00	400.00	290.56	854.20	1.42	.31	.58
	400.00	410.00	180.27	802.55	2.26	.46	.84
	410.00	420.00	205.36	510.47	3.61	.62	1.12
	420.00	430.00	152.92	479.14	1.92	.77	1.13

430.00	440.00	848.91	1594.69	.72	.18	.33
440.00	450.00	525.37	895.65	1.42	1.28	1.35
450.00	460.00	327.52	533.52	2.57	2.06	2.28
460.00	470.00	323.57	729.13	.68	.61	.64
470.00	480.00	692.62	455.86	.58	.42	.49
480.00	490.00	2197.14	1378.87	.00	.00	.00
490.00	500.00	1211.82	1572.61	.37	.00	.01
500.00	510.00	218.06	227.47	1.56	1.68	1.62
510.00	520.00	369.56	349.94	1.40	2.40	1.77
520.00	529.22	1001.95	309.64	.43	1.13	.66

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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\US421SB1.ERD							
	.00	529.48	198.23	177.53	1.31	1.09	1.19
	.00	10.00	95.23	71.67	3.17	3.21	3.19
	10.00	20.00	75.10	82.64	3.82	3.51	3.65
	20.00	30.00	136.75	89.06	3.67	3.61	3.64
	30.00	40.00	80.31	87.39	2.93	3.41	3.14
	40.00	50.00	96.74	115.83	3.77	2.70	3.10
	50.00	60.00	149.17	144.33	3.40	2.47	2.83
	60.00	70.00	128.58	229.12	3.18	2.92	3.04
	70.00	80.00	130.19	96.08	2.27	1.72	1.96
	80.00	90.00	402.63	285.98	1.20	1.39	1.29
	90.00	100.00	530.92	212.59	1.10	.96	1.02
	100.00	110.00	305.33	146.46	1.79	3.60	2.33
	110.00	120.00	408.22	211.27	2.35	3.91	2.85
	120.00	130.00	195.22	198.62	3.37	3.83	3.57
	130.00	140.00	94.06	128.41	3.08	2.10	2.48
	140.00	150.00	154.92	114.75	3.69	3.67	3.68
	150.00	160.00	123.72	147.84	3.68	2.83	3.17
	160.00	170.00	25.07	55.56	3.44	3.92	3.65
	170.00	180.00	98.21	93.17	3.44	3.68	3.55
	180.00	190.00	55.16	103.44	2.94	1.34	1.83
	190.00	200.00	47.29	153.63	3.41	3.64	3.52
	200.00	210.00	66.29	29.39	3.29	4.02	3.58
	210.00	220.00	114.21	33.16	3.41	3.79	3.58
	220.00	230.00	85.72	54.78	3.43	3.68	3.55
	230.00	240.00	469.26	282.81	.93	1.68	1.21
	240.00	250.00	243.65	281.60	2.56	2.56	2.56
	250.00	260.00	264.81	372.55	1.18	1.35	1.26
	260.00	270.00	1015.82	953.93	.00	.00	.00
	270.00	280.00	1504.81	1179.88	.13	.22	.17
	280.00	290.00	578.04	207.80	.35	.38	.36
	290.00	300.00	281.21	138.92	.95	1.68	1.22
	300.00	310.00	256.31	282.54	2.59	3.05	2.80
	310.00	320.00	127.47	132.11	2.55	3.65	2.96
	320.00	330.00	100.33	143.07	3.73	3.31	3.50
	330.00	340.00	148.02	162.32	3.61	1.14	1.71
	340.00	350.00	194.50	199.24	3.50	1.75	2.28
	350.00	360.00	55.38	72.85	3.77	1.93	2.48
	360.00	370.00	85.48	247.90	3.06	.80	1.30
	370.00	380.00	35.93	66.64	3.17	1.37	1.89
	380.00	390.00	178.03	133.94	2.22	1.34	1.68
	390.00	400.00	143.89	126.99	2.94	2.66	2.79
	400.00	410.00	82.75	127.25	2.48	1.99	2.21
	410.00	420.00	81.66	59.26	2.87	3.37	3.09

420.00	430.00	112.01	118.58	2.25	1.53	1.82
430.00	440.00	173.72	155.18	2.89	2.74	2.81
440.00	450.00	95.87	26.56	3.50	3.53	3.52
450.00	460.00	76.60	61.89	3.64	3.77	3.70
460.00	470.00	58.21	44.14	3.51	3.69	3.60
470.00	480.00	90.45	209.32	3.53	3.81	3.66
480.00	490.00	96.13	140.67	3.47	3.49	3.48
490.00	500.00	141.33	104.84	3.16	3.81	3.42
500.00	510.00	140.15	197.60	3.13	3.37	3.24
510.00	520.00	92.55	183.63	3.75	3.03	3.33
520.00	529.48	53.15	126.29	3.81	3.58	3.68

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\MM\RAW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\10THS\ERD\US421SB1.ERD	.00	529.22	194.83	171.37	1.22	1.17	1.20
	.00	10.00	87.21	78.13	3.39	3.15	3.26
	10.00	20.00	94.42	93.49	3.61	3.39	3.50
	20.00	30.00	142.79	98.83	3.39	3.45	3.42
	30.00	40.00	77.71	118.93	2.95	3.21	3.07
	40.00	50.00	131.12	133.69	3.47	2.96	3.18
	50.00	60.00	165.53	144.96	2.95	2.43	2.66
	60.00	70.00	142.36	213.80	2.90	2.63	2.76
	70.00	80.00	130.02	112.37	2.28	1.16	1.55
	80.00	90.00	367.60	349.72	1.09	.78	.92
	90.00	100.00	493.32	192.75	1.51	.95	1.17
	100.00	110.00	249.51	147.32	2.32	3.37	2.71
	110.00	120.00	249.40	214.95	2.59	3.60	2.97
	120.00	130.00	201.26	195.78	3.64	3.95	3.78
	130.00	140.00	100.58	145.53	3.00	1.26	1.77
	140.00	150.00	173.31	110.87	3.60	3.82	3.70
	150.00	160.00	139.03	131.04	3.52	3.74	3.62
	160.00	170.00	58.64	47.69	3.56	3.75	3.65
	170.00	180.00	105.11	70.27	3.34	3.80	3.54
	180.00	190.00	69.13	104.59	3.62	1.16	1.74
	190.00	200.00	43.93	153.46	3.60	3.52	3.56
	200.00	210.00	39.08	26.34	3.40	3.74	3.55
	210.00	220.00	77.61	12.76	3.57	4.06	3.78
	220.00	230.00	72.14	44.83	3.18	3.85	3.46
	230.00	240.00	471.77	279.40	.98	1.58	1.22
	240.00	250.00	265.80	246.34	2.79	3.02	2.90
	250.00	260.00	235.35	301.37	1.63	1.38	1.50
	260.00	270.00	777.13	889.52	.00	.00	.00
	270.00	280.00	1588.45	1080.61	.08	.23	.13
	280.00	290.00	654.17	203.25	.31	.38	.35
	290.00	300.00	273.35	144.10	.96	1.59	1.21
	300.00	310.00	239.12	276.05	2.53	3.06	2.76
	310.00	320.00	117.07	119.03	2.94	3.43	3.15
	320.00	330.00	130.22	136.47	3.36	3.34	3.35
	330.00	340.00	157.23	113.16	3.72	3.08	3.35
	340.00	350.00	183.85	201.71	3.15	2.93	3.03
	350.00	360.00	65.11	96.48	3.54	2.33	2.77
	360.00	370.00	120.49	278.60	2.68	.46	.88
	370.00	380.00	54.53	106.49	3.12	2.90	3.00
	380.00	390.00	82.82	121.82	3.22	1.73	2.22
	390.00	400.00	157.78	100.07	3.45	3.37	3.41
	400.00	410.00	94.47	87.79	3.41	3.48	3.44
	410.00	420.00	69.08	67.64	3.33	3.30	3.32

420.00	430.00	107.08	115.51	2.79	1.51	1.95
430.00	440.00	198.96	142.05	2.85	3.27	3.04
440.00	450.00	77.66	20.40	3.64	3.90	3.76
450.00	460.00	80.42	44.88	3.65	3.71	3.68
460.00	470.00	67.20	33.87	3.67	3.76	3.71
470.00	480.00	115.32	195.42	3.75	3.62	3.68
480.00	490.00	93.74	144.24	3.57	3.40	3.48
490.00	500.00	157.54	92.45	3.00	3.54	3.23
500.00	510.00	145.80	193.46	3.21	3.55	3.36
510.00	520.00	92.14	193.74	3.91	3.01	3.36
520.00	529.22	41.90	105.25	3.69	3.52	3.60

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\US421NB1.ERD							
	.00	529.48	170.56	184.44	1.43	1.54	1.49
	.00	10.00	147.37	187.62	2.98	2.33	2.60
	10.00	20.00	166.27	154.64	3.31	3.49	3.39
	20.00	30.00	217.84	157.11	3.81	3.16	3.43
	30.00	40.00	85.57	93.70	1.95	3.49	2.45
	40.00	50.00	180.22	129.51	3.83	3.90	3.87
	50.00	60.00	133.55	46.93	3.78	3.99	3.88
	60.00	70.00	93.25	68.13	3.29	4.03	3.58
	70.00	80.00	69.74	45.31	3.58	4.03	3.77
	80.00	90.00	53.37	92.97	3.96	3.79	3.87
	90.00	100.00	63.31	40.37	3.73	3.82	3.77
	100.00	110.00	138.95	62.76	2.37	3.12	2.68
	110.00	120.00	89.06	52.34	3.08	3.67	3.33
	120.00	130.00	55.16	42.64	3.45	3.93	3.65
	130.00	140.00	60.74	112.30	3.98	3.90	3.94
	140.00	150.00	31.57	92.51	4.08	3.78	3.92
	150.00	160.00	26.71	100.03	3.82	4.11	3.95
	160.00	170.00	61.30	122.82	3.61	1.56	2.12
	170.00	180.00	84.14	29.88	3.83	4.14	3.97
	180.00	190.00	63.35	86.85	3.67	3.17	3.39
	190.00	200.00	81.24	118.32	3.48	3.70	3.59
	200.00	210.00	61.53	56.63	3.73	3.52	3.62
	210.00	220.00	108.80	66.70	3.66	3.72	3.69
	220.00	230.00	199.28	207.28	2.90	2.77	2.83
	230.00	240.00	516.86	463.81	1.17	1.29	1.23
	240.00	250.00	346.07	396.26	1.12	1.02	1.07
	250.00	260.00	299.31	374.14	1.07	.63	.80
	260.00	270.00	937.40	1144.48	.00	.01	.00
	270.00	280.00	568.66	441.39	.49	.84	.63
	280.00	290.00	189.80	182.96	2.02	2.62	2.27
	290.00	300.00	245.71	343.77	1.38	2.13	1.68
	300.00	310.00	311.45	196.81	2.76	2.99	2.87
	310.00	320.00	262.14	251.09	3.83	3.68	3.75
	320.00	330.00	347.86	309.84	3.75	3.82	3.78
	330.00	340.00	81.83	151.56	3.12	3.60	3.33
	340.00	350.00	109.17	112.22	3.60	3.86	3.72
	350.00	360.00	143.11	194.32	3.69	3.10	3.35
	360.00	370.00	84.40	96.91	3.38	2.82	3.06
	370.00	380.00	105.87	63.11	3.74	3.80	3.77
	380.00	390.00	37.40	105.48	3.71	3.68	3.70
	390.00	400.00	59.53	39.47	3.48	3.61	3.55
	400.00	410.00	112.44	87.05	2.14	2.30	2.22

410.00	420.00	87.37	121.46	3.31	3.38	3.34
420.00	430.00	146.46	98.93	2.79	2.91	2.85
430.00	440.00	284.86	405.67	1.43	1.24	1.33
440.00	450.00	227.56	309.72	2.25	1.06	1.46
450.00	460.00	214.37	252.40	2.43	2.06	2.23
460.00	470.00	144.91	206.65	2.23	2.00	2.11
470.00	480.00	134.13	186.97	2.62	2.10	2.33
480.00	490.00	128.10	326.44	2.72	2.80	2.76
490.00	500.00	211.01	235.02	3.12	3.23	3.18
500.00	510.00	231.67	172.57	2.22	2.83	2.48
510.00	520.00	65.75	171.56	3.12	3.23	3.17
520.00	529.48	128.73	129.29	3.14	3.46	3.28

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Input files from directory "F:\MM\RAW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\10THS\ERD\US421NB1.ERD							
	.00	529.22	170.61	186.27	1.42	1.36	1.39
	.00	10.00	142.90	192.91	2.96	2.40	2.64
	10.00	20.00	160.59	166.68	3.17	3.42	3.29
	20.00	30.00	203.69	148.82	3.50	2.62	2.97
	30.00	40.00	95.06	130.06	2.00	3.12	2.41
	40.00	50.00	169.82	121.84	3.78	3.70	3.74
	50.00	60.00	123.64	47.94	3.70	3.94	3.81
	60.00	70.00	106.96	57.11	3.20	3.97	3.50
	70.00	80.00	62.93	42.13	3.50	3.96	3.70
	80.00	90.00	55.32	95.06	4.05	3.93	3.98
	90.00	100.00	53.84	27.10	3.95	3.96	3.96
	100.00	110.00	119.84	55.75	2.34	2.78	2.54
	110.00	120.00	106.87	49.74	3.05	3.37	3.20
	120.00	130.00	50.04	36.02	3.31	3.92	3.56
	130.00	140.00	61.23	117.54	3.98	3.87	3.92
	140.00	150.00	36.88	92.15	4.04	3.87	3.95
	150.00	160.00	37.41	92.62	3.90	3.92	3.91
	160.00	170.00	59.81	113.68	3.44	1.77	2.29
	170.00	180.00	57.25	30.31	3.97	4.03	4.00
	180.00	190.00	55.59	80.55	3.49	3.32	3.40
	190.00	200.00	78.47	126.46	3.70	3.36	3.51
	200.00	210.00	49.42	63.15	3.80	3.46	3.61
	210.00	220.00	102.81	62.05	3.76	3.48	3.61
	220.00	230.00	201.62	204.46	2.67	2.79	2.73
	230.00	240.00	480.60	428.53	1.16	1.31	1.23
	240.00	250.00	391.49	413.00	1.06	1.02	1.04
	250.00	260.00	269.15	391.94	1.31	1.26	1.29
	260.00	270.00	926.91	1142.69	.00	.00	.00
	270.00	280.00	600.28	437.98	.39	.74	.52
	280.00	290.00	192.31	173.24	1.95	2.57	2.22
	290.00	300.00	204.13	325.84	1.45	2.05	1.70
	300.00	310.00	352.95	214.14	2.66	3.10	2.86
	310.00	320.00	251.42	250.77	3.56	3.75	3.65
	320.00	330.00	347.65	308.59	3.57	4.09	3.79
	330.00	340.00	95.71	160.10	3.36	3.32	3.34
	340.00	350.00	103.33	111.81	3.42	3.29	3.35
	350.00	360.00	147.38	183.36	3.62	3.60	3.61
	360.00	370.00	70.35	99.48	3.48	3.14	3.30
	370.00	380.00	111.56	73.67	3.22	3.47	3.34
	380.00	390.00	51.15	94.09	3.64	3.61	3.63
	390.00	400.00	54.28	57.14	3.84	3.73	3.78
	400.00	410.00	102.67	65.22	2.61	2.01	2.27

410.00	420.00	45.50	136.85	3.68	3.12	3.36
420.00	430.00	125.89	106.15	2.87	2.99	2.93
430.00	440.00	280.88	380.06	1.41	1.16	1.27
440.00	450.00	275.25	367.40	2.00	1.51	1.72
450.00	460.00	214.34	258.51	2.09	1.81	1.94
460.00	470.00	148.20	250.39	2.36	1.98	2.15
470.00	480.00	137.34	195.61	2.78	2.39	2.57
480.00	490.00	146.41	347.20	2.46	2.82	2.62
490.00	500.00	191.08	233.88	3.00	2.56	2.76
500.00	510.00	271.03	150.91	1.97	2.78	2.30
510.00	520.00	90.91	179.29	3.08	3.28	3.18
520.00	529.22	121.67	137.12	3.26	3.06	3.15

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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\SR24E1~1.ERD							
	.00	529.48	260.40	255.49	1.18	1.15	1.17
	.00	10.00	144.37	165.25	2.78	2.70	2.74
	10.00	20.00	221.01	194.82	2.24	1.65	1.90
	20.00	30.00	174.75	154.98	3.72	3.56	3.63
	30.00	40.00	84.44	241.82	2.03	2.27	2.14
	40.00	50.00	182.49	220.08	2.96	3.27	3.10
	50.00	60.00	88.17	124.36	2.17	2.66	2.38
	60.00	70.00	183.74	155.85	3.79	3.57	3.67
	70.00	80.00	69.14	59.38	3.58	3.58	3.58
	80.00	90.00	103.81	126.62	3.80	3.42	3.59
	90.00	100.00	86.23	113.53	3.50	3.68	3.59
	100.00	110.00	36.89	82.04	3.48	3.52	3.50
	110.00	120.00	49.79	74.66	3.54	3.54	3.54
	120.00	130.00	90.62	94.90	3.34	3.57	3.45
	130.00	140.00	82.51	76.37	3.67	3.66	3.66
	140.00	150.00	28.37	33.27	3.82	3.79	3.81
	150.00	160.00	76.37	65.56	3.24	3.43	3.33
	160.00	170.00	127.37	148.31	3.44	3.10	3.26
	170.00	180.00	70.08	66.17	3.29	3.98	3.57
	180.00	190.00	368.97	183.52	2.49	2.97	2.70
	190.00	200.00	465.00	441.49	1.27	1.38	1.33
	200.00	210.00	442.55	393.10	1.24	.71	.92
	210.00	220.00	345.43	161.14	2.06	3.29	2.50
	220.00	230.00	293.81	449.07	2.97	2.29	2.57
	230.00	240.00	221.08	289.16	1.97	2.10	2.03
	240.00	250.00	100.08	340.14	2.71	.80	1.27
	250.00	260.00	1387.90	1869.77	.03	.03	.03
	260.00	270.00	1924.57	1711.88	.01	.00	.01
	270.00	280.00	1604.34	877.52	.03	.15	.06
	280.00	290.00	616.88	438.40	1.89	2.13	2.00
	290.00	300.00	476.99	366.45	3.27	2.35	2.71
	300.00	310.00	227.81	421.67	2.83	2.58	2.70
	310.00	320.00	409.03	315.46	3.07	2.61	2.82
	320.00	330.00	140.64	188.75	2.84	2.71	2.78
	330.00	340.00	382.36	271.58	2.60	2.34	2.46
	340.00	350.00	270.62	186.36	3.01	3.07	3.04
	350.00	360.00	431.99	485.28	3.41	3.83	3.59
	360.00	370.00	143.19	159.77	3.64	3.62	3.63
	370.00	380.00	198.05	256.52	3.36	3.62	3.48
	380.00	390.00	361.86	353.39	3.62	3.63	3.62
	390.00	400.00	104.92	66.21	3.79	3.95	3.87
	400.00	410.00	122.99	83.89	3.71	3.65	3.68

410.00	420.00	115.88	76.43	4.30	3.84	4.03
420.00	430.00	82.18	119.06	3.95	3.47	3.67
430.00	440.00	48.71	80.58	3.99	3.75	3.86
440.00	450.00	53.93	65.72	4.03	3.99	4.01
450.00	460.00	25.69	71.58	3.71	3.80	3.75
460.00	470.00	69.96	60.45	4.05	4.05	4.05
470.00	480.00	56.03	78.79	3.79	3.92	3.85
480.00	490.00	87.27	131.59	3.80	3.97	3.88
490.00	500.00	48.77	89.88	3.55	3.67	3.61
500.00	510.00	35.87	84.97	4.07	3.96	4.01
510.00	520.00	46.54	27.89	3.91	3.90	3.90
520.00	529.48	61.87	44.37	3.70	3.95	3.82

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Input files from directory "F:\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
F:\10THS\ERD\SR24WB.ERD	.00	529.48	231.14	262.58	1.02	.97	.99
	.00	10.00	174.43	128.95	2.76	2.84	2.80
	10.00	20.00	144.07	149.76	3.22	3.69	3.43
	20.00	30.00	116.08	129.41	3.67	3.48	3.57
	30.00	40.00	39.74	107.93	3.89	3.73	3.81
	40.00	50.00	200.41	160.27	2.23	2.62	2.41
	50.00	60.00	90.52	73.05	2.94	2.99	2.96
	60.00	70.00	183.96	125.32	1.86	2.02	1.94
	70.00	80.00	173.85	103.59	2.99	2.80	2.89
	80.00	90.00	88.90	71.79	2.53	2.87	2.68
	90.00	100.00	115.24	147.75	3.66	3.18	3.39
	100.00	110.00	46.08	133.76	3.60	3.17	3.36
	110.00	120.00	83.62	95.36	3.37	3.39	3.38
	120.00	130.00	46.69	165.92	3.84	3.24	3.49
	130.00	140.00	59.26	137.09	3.64	3.48	3.55
	140.00	150.00	112.63	93.79	3.79	3.56	3.67
	150.00	160.00	78.77	98.61	3.47	3.50	3.49
	160.00	170.00	73.05	84.95	3.80	3.57	3.68
	170.00	180.00	79.56	118.62	3.60	3.76	3.67
	180.00	190.00	61.62	60.96	3.78	3.81	3.79
	190.00	200.00	19.57	62.21	3.83	3.74	3.79
	200.00	210.00	74.70	57.97	3.64	3.55	3.59
	210.00	220.00	73.19	109.64	3.71	3.72	3.71
	220.00	230.00	401.22	274.85	1.60	1.83	1.70
	230.00	240.00	353.72	384.83	2.00	1.86	1.93
	240.00	250.00	243.45	480.94	2.98	3.14	3.06
	250.00	260.00	510.17	451.89	2.91	3.12	3.01
	260.00	270.00	270.21	322.17	1.82	1.86	1.84
	270.00	280.00	315.77	529.11	3.29	1.94	2.40
	280.00	290.00	712.54	756.44	.02	.03	.03
	290.00	300.00	1952.25	1455.63	.02	.01	.02
	300.00	310.00	1990.64	2149.06	.00	.00	.00
	310.00	320.00	329.95	826.88	.91	.26	.45
	320.00	330.00	234.44	326.94	1.92	1.73	1.82
	330.00	340.00	112.70	334.72	2.94	3.11	3.02
	340.00	350.00	156.66	160.90	2.82	2.26	2.50
	350.00	360.00	172.50	422.08	1.37	.98	1.14
	360.00	370.00	273.07	329.24	2.41	1.88	2.11
	370.00	380.00	171.10	138.78	3.32	2.22	2.63
	380.00	390.00	178.46	161.09	3.53	3.06	3.27
	390.00	400.00	213.60	187.48	3.75	3.23	3.45

400.00	410.00	87.52	132.87	3.85	3.72	3.78
410.00	420.00	136.30	66.99	3.83	3.01	3.34
420.00	430.00	193.20	199.20	3.41	3.44	3.42
430.00	440.00	118.81	210.60	4.09	3.76	3.91
440.00	450.00	112.07	143.42	3.34	3.44	3.39
450.00	460.00	178.77	213.08	3.86	3.16	3.45
460.00	470.00	45.80	159.48	3.91	3.26	3.53
470.00	480.00	51.91	64.75	4.05	3.70	3.86
480.00	490.00	48.59	83.45	3.58	3.65	3.61
490.00	500.00	89.67	98.57	3.33	3.82	3.54
500.00	510.00	75.42	88.04	3.51	3.79	3.64
510.00	520.00	183.89	165.09	3.09	3.99	3.44
520.00	529.48	161.22	119.57	3.26	2.95	3.09

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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
F:\10THS\SR25SB1.ERD	.00	529.48	138.33	172.89	.97	1.01	.99
	.00	10.00	98.63	123.60	2.36	2.43	2.40
	10.00	20.00	136.03	148.81	3.37	2.88	3.09
	20.00	30.00	169.26	204.06	2.24	3.37	2.65
	30.00	40.00	38.75	50.75	3.79	3.54	3.66
	40.00	50.00	63.44	78.01	3.63	3.22	3.40
	50.00	60.00	98.43	118.04	3.74	3.60	3.67
	60.00	70.00	67.76	59.91	3.74	3.51	3.62
	70.00	80.00	51.46	40.79	3.53	3.21	3.36
	80.00	90.00	43.17	77.51	3.74	3.32	3.51
	90.00	100.00	66.98	132.89	3.62	3.04	3.28
	100.00	110.00	150.59	257.65	2.31	2.27	2.29
	110.00	120.00	97.36	119.24	3.83	3.55	3.68
	120.00	130.00	43.20	48.44	4.09	3.65	3.84
	130.00	140.00	45.27	130.05	3.91	3.25	3.52
	140.00	150.00	55.01	108.63	3.89	3.63	3.75
	150.00	160.00	52.93	100.86	3.40	3.42	3.41
	160.00	170.00	93.02	81.18	3.42	2.88	3.11
	170.00	180.00	125.13	60.73	3.11	2.95	3.03
	180.00	190.00	142.76	108.73	2.56	2.56	2.56
	190.00	200.00	95.56	118.67	1.27	2.50	1.68
	200.00	210.00	115.55	151.62	3.16	2.07	2.48
	210.00	220.00	157.44	191.64	1.81	2.47	2.08
	220.00	230.00	336.55	164.20	1.97	2.25	2.10
	230.00	240.00	289.82	122.13	1.63	2.18	1.86
	240.00	250.00	192.75	300.38	1.41	.63	.90
	250.00	260.00	526.96	669.22	.23	.02	.05
	260.00	270.00	606.14	1020.98	.00	.00	.00
	270.00	280.00	624.59	1882.93	.03	.05	.04
	280.00	290.00	327.62	338.39	1.81	1.83	1.82
	290.00	300.00	217.46	181.13	2.67	2.85	2.75
	300.00	310.00	159.78	148.81	2.76	2.59	2.67
	310.00	320.00	221.66	150.83	2.86	2.88	2.87
	320.00	330.00	70.69	54.45	3.03	3.23	3.12
	330.00	340.00	131.17	118.53	3.20	3.38	3.28
	340.00	350.00	104.89	52.04	3.37	3.03	3.19
	350.00	360.00	64.37	129.02	3.13	3.34	3.23
	360.00	370.00	55.50	78.10	3.04	2.90	2.97
	370.00	380.00	118.11	63.79	2.92	3.27	3.08
	380.00	390.00	100.38	67.41	3.21	3.21	3.21
	390.00	400.00	105.21	79.48	3.34	3.69	3.50

400.00	410.00	73.52	71.18	3.50	3.44	3.47
410.00	420.00	40.18	103.95	3.47	3.59	3.53
420.00	430.00	83.04	82.38	3.57	3.37	3.46
430.00	440.00	48.67	41.78	3.59	3.51	3.55
440.00	450.00	38.66	49.78	2.50	3.39	2.85
450.00	460.00	77.93	95.15	3.96	3.74	3.84
460.00	470.00	64.15	73.81	3.33	3.57	3.44
470.00	480.00	109.11	30.41	3.44	3.55	3.50
480.00	490.00	78.81	56.47	3.56	3.73	3.64
490.00	500.00	144.73	85.45	2.80	3.42	3.06
500.00	510.00	175.98	88.35	3.48	1.91	2.42
510.00	520.00	63.79	72.75	3.72	3.90	3.80
520.00	529.48	78.41	93.83	3.97	3.63	3.78

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
F:\10THS\SR25NB1.ERD	.00	529.48	192.03	194.68	.36	.10	.18
	.00	10.00	126.24	122.62	2.74	2.97	2.85
	10.00	20.00	127.04	116.22	3.53	3.59	3.56
	20.00	30.00	98.94	108.62	3.38	3.35	3.36
	30.00	40.00	62.34	26.83	3.76	3.95	3.85
	40.00	50.00	76.49	104.66	3.52	2.94	3.19
	50.00	60.00	50.08	116.55	3.77	3.32	3.52
	60.00	70.00	60.11	42.00	3.28	3.35	3.31
	70.00	80.00	48.46	45.95	3.75	3.30	3.50
	80.00	90.00	31.94	42.89	3.90	3.81	3.85
	90.00	100.00	121.67	87.99	3.50	3.22	3.35
	100.00	110.00	51.66	82.18	4.05	3.39	3.66
	110.00	120.00	50.22	231.05	3.65	2.49	2.91
	120.00	130.00	51.04	110.56	3.28	3.08	3.18
	130.00	140.00	37.13	90.12	3.68	3.41	3.53
	140.00	150.00	43.77	57.64	3.50	3.68	3.59
	150.00	160.00	63.63	60.16	3.78	3.89	3.83
	160.00	170.00	42.80	44.02	3.80	3.62	3.71
	170.00	180.00	98.46	151.25	3.31	3.22	3.26
	180.00	190.00	183.95	80.50	2.95	3.26	3.10
	190.00	200.00	83.34	71.58	3.75	3.46	3.59
	200.00	210.00	99.68	60.21	3.32	3.71	3.50
	210.00	220.00	55.88	162.88	3.70	3.27	3.46
	220.00	230.00	95.59	192.51	3.70	2.90	3.22
	230.00	240.00	214.96	260.11	2.95	3.35	3.13
	240.00	250.00	117.07	263.47	3.07	1.74	2.20
	250.00	260.00	647.15	899.00	.02	.00	.00
	260.00	270.00	1960.46	1783.00	.00	.00	.00
	270.00	280.00	1425.32	955.73	.10	.24	.15
	280.00	290.00	796.76	538.13	1.11	.91	1.00
	290.00	300.00	265.58	131.40	1.99	2.77	2.30
	300.00	310.00	325.21	366.09	2.05	2.14	2.09
	310.00	320.00	382.18	442.90	2.79	2.98	2.88
	320.00	330.00	131.43	159.22	3.52	3.31	3.41
	330.00	340.00	249.95	202.58	3.24	3.65	3.42
	340.00	350.00	272.47	397.04	3.00	2.72	2.85
	350.00	360.00	209.20	144.95	3.11	3.07	3.09
	360.00	370.00	237.16	114.14	3.07	3.00	3.03
	370.00	380.00	59.63	123.60	3.80	3.38	3.56
	380.00	390.00	79.37	37.02	3.28	3.68	3.46
	390.00	400.00	34.99	21.60	3.85	3.46	3.63

400.00	410.00	60.23	64.27	3.27	3.33	3.30
410.00	420.00	35.63	56.25	3.62	3.77	3.69
420.00	430.00	67.74	106.20	2.76	2.64	2.70
430.00	440.00	235.60	206.62	1.86	3.31	2.35
440.00	450.00	64.39	70.92	3.31	3.44	3.37
450.00	460.00	23.70	63.28	3.63	3.78	3.70
460.00	470.00	108.98	93.07	.70	3.14	1.20
470.00	480.00	64.01	101.12	3.44	3.12	3.26
480.00	490.00	49.55	45.26	3.44	3.12	3.27
490.00	500.00	55.12	48.90	3.33	3.64	3.47
500.00	510.00	74.94	264.42	3.16	2.13	2.52
510.00	520.00	79.39	59.71	2.64	3.34	2.93
520.00	529.48	104.21	50.68	3.45	3.43	3.44

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\10THS"

Filename	Start:	End:	IRI:	(in/mi)		RN: 0-5		Both
	ft	ft	LElev.	RElev.	LElev.	RElev.		
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F:\10THS\SR25SB2.ERD								
	.00	529.74	185.72	188.91	.17	.49	.27	
	.00	10.00	144.39	151.55	2.88	2.58	2.72	
	10.00	20.00	102.41	116.77	3.49	3.38	3.43	
	20.00	30.00	137.27	151.91	3.61	3.60	3.60	
	30.00	40.00	50.31	86.45	4.00	3.74	3.86	
	40.00	50.00	53.28	61.16	3.68	3.57	3.62	
	50.00	60.00	76.88	99.77	3.56	3.39	3.47	
	60.00	70.00	61.54	87.42	3.74	3.62	3.67	
	70.00	80.00	28.88	51.68	3.69	3.62	3.65	
	80.00	90.00	37.29	93.06	3.75	3.39	3.55	
	90.00	100.00	77.70	94.44	3.55	3.31	3.42	
	100.00	110.00	48.40	58.56	3.84	3.61	3.72	
	110.00	120.00	76.85	81.92	3.60	3.51	3.55	
	120.00	130.00	63.86	53.58	3.79	3.55	3.66	
	130.00	140.00	39.98	34.05	3.80	3.56	3.67	
	140.00	150.00	90.38	59.68	3.59	3.84	3.70	
	150.00	160.00	66.54	124.88	3.33	3.23	3.28	
	160.00	170.00	296.50	118.39	2.04	3.12	2.44	
	170.00	180.00	138.16	97.00	2.83	3.18	2.99	
	180.00	190.00	73.15	186.07	3.17	2.42	2.73	
	190.00	200.00	193.61	198.28	2.83	2.60	2.71	
	200.00	210.00	225.98	221.64	2.33	2.37	2.35	
	210.00	220.00	91.23	137.51	2.74	2.61	2.67	
	220.00	230.00	184.08	509.61	2.62	1.31	1.75	
	230.00	240.00	151.38	270.41	2.62	1.33	1.77	
	240.00	250.00	379.55	363.85	.59	.00	.00	
	250.00	260.00	1251.36	985.92	.00	.00	.00	
	260.00	270.00	1384.04	731.01	.00	.06	.00	
	270.00	280.00	1500.35	1192.49	.09	.24	.14	
	280.00	290.00	674.41	299.82	1.31	2.84	1.79	
	290.00	300.00	395.85	621.23	2.24	3.20	2.61	
	300.00	310.00	139.26	112.59	2.31	2.72	2.50	
	310.00	320.00	153.11	69.71	2.99	3.12	3.06	
	320.00	330.00	166.87	279.89	2.19	2.82	2.45	
	330.00	340.00	74.11	55.79	3.39	3.48	3.44	
	340.00	350.00	55.00	107.68	3.71	3.57	3.64	
	350.00	360.00	70.50	133.42	3.52	3.35	3.43	
	360.00	370.00	77.60	101.05	3.50	3.24	3.36	
	370.00	380.00	44.86	91.80	3.21	3.16	3.18	
	380.00	390.00	73.03	160.65	3.16	3.37	3.26	
	390.00	400.00	55.98	138.15	3.38	2.91	3.12	
	400.00	410.00	96.87	125.84	2.73	3.34	2.99	
	410.00	420.00	147.19	292.43	2.19	1.97	2.07	

420.00	430.00	81.21	81.11	3.54	2.89	3.16
430.00	440.00	95.14	60.84	3.47	3.23	3.34
440.00	450.00	53.95	62.99	3.30	3.09	3.19
450.00	460.00	77.11	150.60	3.48	2.86	3.12
460.00	470.00	71.35	86.90	3.57	3.02	3.26
470.00	480.00	30.52	133.35	3.69	2.39	2.85
480.00	490.00	37.84	73.16	3.61	3.25	3.41
490.00	500.00	61.88	55.33	3.71	3.39	3.53
500.00	510.00	16.94	121.16	3.95	2.57	3.04
510.00	520.00	80.78	39.57	3.44	3.47	3.45
520.00	529.74	31.79	89.92	3.67	3.51	3.59

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\SR25NB2.ERD	.00	529.48	204.88	251.43	.50	.37	.43
	.00	10.00	123.36	124.91	2.90	2.83	2.86
	10.00	20.00	153.55	140.12	3.43	3.40	3.42
	20.00	30.00	126.64	153.37	3.45	3.33	3.39
	30.00	40.00	92.07	94.07	3.92	3.46	3.66
	40.00	50.00	66.31	109.34	3.64	3.26	3.43
	50.00	60.00	97.80	143.19	3.74	2.96	3.27
	60.00	70.00	115.68	116.43	3.10	3.33	3.21
	70.00	80.00	87.22	90.83	3.45	3.56	3.50
	80.00	90.00	81.09	69.31	3.36	3.75	3.54
	90.00	100.00	95.41	67.94	3.57	3.43	3.50
	100.00	110.00	55.13	21.17	3.86	3.93	3.89
	110.00	120.00	22.44	56.30	3.69	3.34	3.50
	120.00	130.00	138.41	195.68	2.90	2.73	2.81
	130.00	140.00	63.21	148.80	3.55	3.20	3.36
	140.00	150.00	120.67	97.63	3.01	3.40	3.19
	150.00	160.00	167.22	116.78	2.50	1.60	1.95
	160.00	170.00	61.91	255.95	3.17	3.15	3.16
	170.00	180.00	121.20	118.56	3.42	3.12	3.26
	180.00	190.00	77.49	121.77	3.66	3.62	3.64
	190.00	200.00	33.57	129.83	3.55	4.14	3.79
	200.00	210.00	52.17	115.43	3.68	3.49	3.58
	210.00	220.00	139.28	294.68	3.46	3.09	3.26
	220.00	230.00	125.91	242.39	2.98	1.92	2.32
	230.00	240.00	437.29	1148.48	.94	.00	.00
	240.00	250.00	1181.95	1216.10	.08	.00	.01
	250.00	260.00	1916.07	1837.32	.00	.00	.00
	260.00	270.00	1942.77	1110.97	.00	.18	.00
	270.00	280.00	480.51	806.53	.64	.54	.59
	280.00	290.00	311.30	602.77	2.53	1.94	2.19
	290.00	300.00	106.13	224.27	3.28	3.04	3.15
	300.00	310.00	81.99	55.68	3.61	3.24	3.41
	310.00	320.00	78.01	135.57	3.59	3.13	3.33
	320.00	330.00	92.92	105.75	3.29	3.05	3.17
	330.00	340.00	89.39	114.17	3.07	2.78	2.91
	340.00	350.00	121.59	156.83	3.53	2.64	2.99
	350.00	360.00	87.57	132.91	2.93	3.40	3.14
	360.00	370.00	92.03	115.22	2.80	2.66	2.73
	370.00	380.00	402.13	106.12	1.45	2.63	1.87
	380.00	390.00	140.94	121.60	2.98	2.94	2.96
	390.00	400.00	74.79	73.89	2.84	2.75	2.80
	400.00	410.00	118.14	135.86	3.65	2.14	2.64
	410.00	420.00	61.60	295.32	3.47	1.99	2.48

420.00	430.00	35.44	407.57	2.74	1.25	1.72
430.00	440.00	88.37	522.10	3.52	1.14	1.71
440.00	450.00	68.67	148.22	3.34	3.01	3.16
450.00	460.00	46.73	74.23	3.09	3.00	3.04
460.00	470.00	52.52	162.25	3.25	3.20	3.22
470.00	480.00	35.95	94.05	3.78	3.21	3.45
480.00	490.00	33.11	63.18	3.98	3.66	3.80
490.00	500.00	152.23	133.76	2.83	2.68	2.75
500.00	510.00	59.91	38.48	3.62	3.70	3.66
510.00	520.00	48.15	75.63	3.50	3.55	3.53
520.00	529.48	149.63	36.21	2.78	3.74	3.15

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Input files from directory "F:\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\ERD\SR29NB1.ERD							
	.00	529.48	156.58	169.09	1.62	1.43	1.52
	.00	10.00	137.01	114.20	3.20	3.28	3.24
	10.00	20.00	177.52	134.78	3.47	3.63	3.55
	20.00	30.00	150.13	111.72	3.80	3.72	3.76
	30.00	40.00	80.43	77.67	3.97	3.91	3.94
	40.00	50.00	212.64	209.30	3.94	3.44	3.66
	50.00	60.00	183.63	92.78	3.16	3.17	3.16
	60.00	70.00	133.20	106.93	3.60	3.46	3.53
	70.00	80.00	207.75	212.94	3.74	3.74	3.74
	80.00	90.00	251.40	274.82	3.15	2.97	3.06
	90.00	100.00	178.73	141.45	3.41	3.48	3.44
	100.00	110.00	168.63	145.35	2.85	2.50	2.66
	110.00	120.00	319.16	348.17	3.00	3.04	3.02
	120.00	130.00	94.00	52.42	3.43	3.66	3.54
	130.00	140.00	117.42	173.19	3.96	3.93	3.94
	140.00	150.00	152.38	154.99	3.51	3.29	3.39
	150.00	160.00	65.29	94.75	3.83	3.82	3.82
	160.00	170.00	102.52	199.63	3.84	3.61	3.72
	170.00	180.00	132.46	161.71	3.74	3.86	3.80
	180.00	190.00	66.53	51.35	3.73	3.94	3.83
	190.00	200.00	54.12	106.59	3.94	3.74	3.83
	200.00	210.00	64.55	65.87	3.38	3.64	3.50
	210.00	220.00	190.29	220.41	3.04	2.76	2.89
	220.00	230.00	59.43	112.89	3.68	3.29	3.47
	230.00	240.00	65.72	93.65	3.85	3.54	3.68
	240.00	250.00	79.45	165.64	3.67	3.19	3.40
	250.00	260.00	89.93	54.16	3.43	3.83	3.61
	260.00	270.00	62.36	88.78	3.88	3.84	3.86
	270.00	280.00	130.66	115.22	3.06	3.77	3.35
	280.00	290.00	77.63	84.16	3.20	3.41	3.30
	290.00	300.00	158.99	169.76	2.67	2.58	2.62
	300.00	310.00	255.48	317.91	1.54	2.19	1.81
	310.00	320.00	1016.73	983.46	.00	.01	.00
	320.00	330.00	727.62	658.55	.79	.02	.08
	330.00	340.00	368.70	306.36	1.94	1.83	1.88
	340.00	350.00	270.50	299.95	2.85	2.39	2.60
	350.00	360.00	285.63	385.39	3.39	2.78	3.04
	360.00	370.00	222.25	270.39	3.46	3.54	3.50
	370.00	380.00	247.59	433.66	3.92	3.52	3.70
	380.00	390.00	65.91	142.17	3.86	3.26	3.51
	390.00	400.00	125.55	181.98	4.20	3.79	3.97
	400.00	410.00	106.84	109.38	4.03	3.80	3.91
	410.00	420.00	42.70	79.82	4.06	3.85	3.94

420.00	430.00	75.43	83.25	4.04	3.73	3.87
430.00	440.00	32.59	26.90	4.23	3.96	4.08
440.00	450.00	54.52	79.35	4.03	3.72	3.86
450.00	460.00	24.75	54.28	3.85	3.82	3.83
460.00	470.00	25.70	43.19	3.83	3.86	3.84
470.00	480.00	59.94	57.22	3.67	3.50	3.58
480.00	490.00	31.85	44.58	3.82	3.56	3.68
490.00	500.00	27.85	47.08	3.75	3.62	3.68
500.00	510.00	46.83	57.26	3.73	3.85	3.78
510.00	520.00	96.16	70.42	3.60	3.34	3.46
520.00	529.48	103.34	70.32	3.36	3.40	3.38

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Input files from directory "F:\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\ERD\SR29SB1.ERD	.00	529.48	154.53	152.99	1.43	1.58	1.51
	.00	10.00	133.24	105.30	2.94	2.97	2.96
	10.00	20.00	89.34	135.79	3.83	3.73	3.78
	20.00	30.00	109.33	120.93	3.71	3.87	3.79
	30.00	40.00	33.17	104.18	3.57	3.37	3.46
	40.00	50.00	99.58	79.16	3.59	3.75	3.67
	50.00	60.00	53.34	39.72	4.00	3.80	3.89
	60.00	70.00	16.95	54.50	3.84	3.81	3.82
	70.00	80.00	45.12	53.21	3.48	3.99	3.69
	80.00	90.00	43.75	83.52	3.89	3.67	3.77
	90.00	100.00	61.28	75.99	3.26	3.83	3.50
	100.00	110.00	53.62	30.24	3.68	3.74	3.71
	110.00	120.00	85.83	114.66	3.07	3.41	3.22
	120.00	130.00	76.96	60.75	3.40	3.49	3.44
	130.00	140.00	57.51	103.27	3.53	3.80	3.66
	140.00	150.00	76.57	113.39	3.73	3.55	3.63
	150.00	160.00	85.54	124.81	3.87	3.59	3.72
	160.00	170.00	66.47	136.54	3.85	3.44	3.62
	170.00	180.00	128.29	146.96	3.41	3.18	3.29
	180.00	190.00	53.48	81.79	3.63	3.76	3.70
	190.00	200.00	51.75	43.47	4.00	3.79	3.89
	200.00	210.00	73.36	82.60	3.66	3.59	3.62
	210.00	220.00	83.75	112.68	3.62	3.96	3.77
	220.00	230.00	69.63	73.94	3.87	3.51	3.67
	230.00	240.00	62.91	83.46	3.79	3.31	3.52
	240.00	250.00	36.32	70.24	3.73	3.81	3.77
	250.00	260.00	89.92	53.21	3.27	3.51	3.38
	260.00	270.00	110.98	102.00	3.53	3.47	3.50
	270.00	280.00	45.36	97.75	3.34	3.11	3.22
	280.00	290.00	271.78	311.05	3.07	2.72	2.88
	290.00	300.00	252.70	173.15	2.80	3.27	3.00
	300.00	310.00	133.43	183.81	3.52	3.43	3.48
	310.00	320.00	273.19	395.08	2.45	2.07	2.24
	320.00	330.00	242.83	160.01	.94	2.79	1.43
	330.00	340.00	1209.24	1206.24	.00	.01	.00
	340.00	350.00	1047.58	883.35	.44	.03	.08
	350.00	360.00	559.87	410.81	1.43	2.98	1.92
	360.00	370.00	279.55	128.95	1.72	3.16	2.20
	370.00	380.00	246.90	234.91	1.69	3.30	2.20
	380.00	390.00	513.63	362.40	1.34	2.23	1.67
	390.00	400.00	168.44	59.03	2.91	3.39	3.12
	400.00	410.00	65.03	77.73	3.53	3.59	3.56
	410.00	420.00	57.16	63.06	3.41	3.97	3.65

420.00	430.00	124.79	63.55	3.24	3.79	3.47
430.00	440.00	98.46	129.88	3.63	3.47	3.55
440.00	450.00	86.97	100.81	3.45	3.82	3.62
450.00	460.00	73.40	67.09	3.75	4.00	3.87
460.00	470.00	83.35	54.02	3.02	3.93	3.37
470.00	480.00	68.24	103.59	3.67	3.87	3.76
480.00	490.00	77.09	78.59	3.33	4.08	3.62
490.00	500.00	30.08	40.58	3.68	3.89	3.78
500.00	510.00	59.13	97.01	3.81	3.98	3.89
510.00	520.00	80.85	123.04	3.42	3.81	3.60
520.00	529.48	62.99	63.29	3.79	3.75	3.77

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\SR29NB2.ERD							
	.00	529.48	127.34	161.25	1.91	2.01	1.96
	.00	10.00	137.16	160.59	2.84	2.53	2.67
	10.00	20.00	200.86	200.78	2.37	2.79	2.56
	20.00	30.00	234.21	149.08	3.22	2.26	2.63
	30.00	40.00	28.70	88.56	3.95	3.72	3.83
	40.00	50.00	190.97	247.46	2.24	2.32	2.28
	50.00	60.00	186.45	297.47	3.67	3.71	3.69
	60.00	70.00	51.25	88.10	3.93	3.88	3.91
	70.00	80.00	93.08	183.48	3.76	3.80	3.78
	80.00	90.00	68.92	113.53	3.75	4.11	3.91
	90.00	100.00	95.14	129.51	3.95	3.77	3.85
	100.00	110.00	100.55	151.86	3.80	3.44	3.60
	110.00	120.00	105.27	212.77	3.97	3.61	3.77
	120.00	130.00	83.29	129.26	3.86	3.64	3.74
	130.00	140.00	83.82	94.32	3.99	4.20	4.09
	140.00	150.00	133.19	260.32	3.49	3.54	3.52
	150.00	160.00	110.14	108.21	3.45	3.52	3.49
	160.00	170.00	85.00	177.64	3.94	3.94	3.94
	170.00	180.00	48.77	72.78	3.72	3.76	3.74
	180.00	190.00	16.62	103.07	4.21	3.45	3.74
	190.00	200.00	136.01	214.76	3.47	2.62	2.96
	200.00	210.00	115.95	66.49	3.79	3.49	3.63
	210.00	220.00	156.13	188.65	3.18	3.40	3.28
	220.00	230.00	146.10	141.58	1.64	2.86	2.07
	230.00	240.00	307.98	461.63	1.39	3.36	1.94
	240.00	250.00	254.53	354.97	2.18	1.78	1.95
	250.00	260.00	188.61	442.30	3.00	2.36	2.63
	260.00	270.00	779.56	792.87	.01	.02	.01
	270.00	280.00	553.66	436.08	1.38	2.00	1.64
	280.00	290.00	437.62	528.51	2.85	3.07	2.96
	290.00	300.00	260.31	332.07	1.15	3.11	1.68
	300.00	310.00	208.26	228.56	2.61	3.24	2.88
	310.00	320.00	359.97	343.18	3.76	3.92	3.84
	320.00	330.00	157.18	222.32	4.00	4.04	4.02
	330.00	340.00	75.26	98.91	3.95	4.07	4.01
	340.00	350.00	32.34	59.30	3.97	3.97	3.97
	350.00	360.00	32.04	38.04	4.13	4.13	4.13
	360.00	370.00	23.93	30.23	4.07	3.79	3.92
	370.00	380.00	44.54	73.75	3.96	3.95	3.96
	380.00	390.00	34.72	44.33	4.16	3.98	4.06
	390.00	400.00	21.30	16.51	3.94	4.19	4.05
	400.00	410.00	20.23	12.72	3.96	4.17	4.06
	410.00	420.00	46.39	37.21	3.97	4.15	4.06

420.00	430.00	38.70	45.99	4.08	4.13	4.10
430.00	440.00	32.54	32.85	3.92	3.94	3.93
440.00	450.00	29.52	27.45	4.27	4.10	4.18
450.00	460.00	29.32	12.48	4.02	4.11	4.06
460.00	470.00	8.08	29.64	4.06	4.01	4.03
470.00	480.00	38.67	47.01	4.04	4.04	4.04
480.00	490.00	10.65	15.52	4.17	3.96	4.06
490.00	500.00	21.04	65.63	3.98	3.84	3.91
500.00	510.00	25.68	32.26	4.12	4.07	4.09
510.00	520.00	24.30	67.57	4.06	4.05	4.06
520.00	529.48	35.28	32.83	4.22	3.98	4.09

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\MM\RAW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\10THS\ERD\SR29NB2.ERD							
	.00	529.48	130.78	162.42	1.89	2.14	2.00
	.00	10.00	133.20	154.28	2.81	2.55	2.67
	10.00	20.00	184.84	194.37	2.55	2.85	2.69
	20.00	30.00	245.73	136.92	3.13	2.31	2.64
	30.00	40.00	33.39	94.40	3.91	3.67	3.78
	40.00	50.00	188.21	242.77	2.22	2.35	2.28
	50.00	60.00	191.71	290.47	3.79	3.92	3.85
	60.00	70.00	46.35	84.06	3.92	3.85	3.89
	70.00	80.00	96.97	184.61	3.89	3.67	3.77
	80.00	90.00	73.89	115.48	3.72	4.01	3.85
	90.00	100.00	96.52	124.71	3.91	4.05	3.97
	100.00	110.00	107.02	158.21	3.64	3.54	3.59
	110.00	120.00	115.01	212.01	4.01	3.58	3.77
	120.00	130.00	82.36	138.65	3.80	3.64	3.72
	130.00	140.00	85.91	94.83	3.98	3.94	3.96
	140.00	150.00	121.66	264.34	3.85	3.33	3.55
	150.00	160.00	109.03	116.77	3.59	3.52	3.55
	160.00	170.00	87.07	183.53	4.01	3.75	3.87
	170.00	180.00	61.45	88.42	3.74	3.57	3.65
	180.00	190.00	38.41	112.83	4.18	3.54	3.80
	190.00	200.00	144.01	230.88	3.42	2.85	3.10
	200.00	210.00	99.18	79.94	3.45	3.32	3.38
	210.00	220.00	173.28	193.93	3.28	3.54	3.40
	220.00	230.00	132.50	145.23	2.33	2.86	2.56
	230.00	240.00	296.92	473.92	2.06	3.33	2.51
	240.00	250.00	239.57	345.99	2.40	1.72	2.00
	250.00	260.00	218.08	457.25	2.81	2.31	2.53
	260.00	270.00	819.70	738.31	.01	.02	.02
	270.00	280.00	568.45	433.09	1.33	2.12	1.64
	280.00	290.00	433.37	525.33	2.85	2.97	2.90
	290.00	300.00	275.40	340.05	1.24	3.09	1.76
	300.00	310.00	208.46	232.44	2.59	3.35	2.90
	310.00	320.00	361.54	349.27	3.78	3.82	3.80
	320.00	330.00	169.86	215.45	3.96	3.92	3.94
	330.00	340.00	69.69	102.25	4.04	4.25	4.14
	340.00	350.00	26.78	61.23	4.09	4.10	4.10
	350.00	360.00	44.08	46.59	4.05	4.32	4.17
	360.00	370.00	23.03	37.45	4.12	4.27	4.19
	370.00	380.00	46.23	66.68	4.09	4.41	4.23
	380.00	390.00	35.09	41.68	4.13	3.96	4.04
	390.00	400.00	22.81	26.75	4.21	3.98	4.08
	400.00	410.00	21.98	10.92	4.17	4.25	4.21
	410.00	420.00	63.73	55.27	4.05	4.13	4.09

420.00	430.00	31.05	33.28	4.35	4.11	4.22
430.00	440.00	22.01	29.57	4.00	4.16	4.07
440.00	450.00	30.44	29.79	4.14	4.06	4.10
450.00	460.00	28.61	14.19	4.16	3.90	4.02
460.00	470.00	19.59	33.09	4.25	4.29	4.27
470.00	480.00	29.99	44.26	4.40	4.11	4.24
480.00	490.00	17.07	28.79	4.18	3.74	3.93
490.00	500.00	28.56	57.11	4.21	4.01	4.10
500.00	510.00	27.72	30.71	4.04	3.94	3.99
510.00	520.00	26.54	65.61	4.02	3.94	3.98
520.00	529.48	55.14	38.42	4.19	4.04	4.11

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\SR29SB2.ERD							
	.00	529.74	140.04	162.96	1.94	2.23	2.08
	.00	10.00	108.00	156.12	2.79	2.71	2.75
	10.00	20.00	120.25	93.31	3.27	3.41	3.34
	20.00	30.00	177.17	215.53	2.67	2.61	2.64
	30.00	40.00	131.92	181.35	3.73	3.33	3.51
	40.00	50.00	138.21	176.33	2.21	2.39	2.30
	50.00	60.00	83.10	131.73	3.81	3.85	3.83
	60.00	70.00	67.25	42.40	4.11	3.94	4.02
	70.00	80.00	55.91	44.48	3.74	3.98	3.85
	80.00	90.00	43.73	42.98	3.96	3.95	3.95
	90.00	100.00	41.02	77.70	3.67	3.76	3.71
	100.00	110.00	30.63	28.77	4.02	3.96	3.99
	110.00	120.00	49.18	89.31	3.86	4.04	3.95
	120.00	130.00	48.55	64.72	3.88	3.92	3.90
	130.00	140.00	27.54	56.94	4.06	4.20	4.13
	140.00	150.00	28.50	68.31	3.91	3.90	3.91
	150.00	160.00	60.39	35.89	4.17	4.16	4.17
	160.00	170.00	13.47	22.42	3.98	4.20	4.08
	170.00	180.00	67.18	56.52	3.94	3.94	3.94
	180.00	190.00	87.86	87.24	3.63	3.94	3.77
	190.00	200.00	61.45	66.13	4.24	4.26	4.25
	200.00	210.00	96.99	55.42	3.87	4.10	3.97
	210.00	220.00	124.43	104.11	3.41	4.03	3.66
	220.00	230.00	259.31	180.47	2.86	3.32	3.06
	230.00	240.00	180.33	209.78	3.28	2.49	2.81
	240.00	250.00	209.91	249.69	2.10	1.94	2.02
	250.00	260.00	383.17	398.06	2.20	1.94	2.06
	260.00	270.00	587.28	846.26	.01	.04	.02
	270.00	280.00	610.46	627.79	1.84	1.55	1.69
	280.00	290.00	410.11	641.91	2.89	2.32	2.57
	290.00	300.00	615.99	828.94	3.17	3.40	3.28
	300.00	310.00	204.62	254.91	3.38	2.38	2.76
	310.00	320.00	106.48	243.68	3.81	3.37	3.56
	320.00	330.00	291.20	327.86	3.80	3.42	3.59
	330.00	340.00	352.70	273.99	3.66	3.63	3.64
	340.00	350.00	116.38	74.94	3.55	3.62	3.59
	350.00	360.00	168.09	107.12	3.85	3.67	3.75
	360.00	370.00	70.06	56.34	3.86	4.02	3.94
	370.00	380.00	143.16	137.42	3.26	3.50	3.37
	380.00	390.00	201.61	217.66	3.37	3.44	3.40
	390.00	400.00	78.02	98.07	4.02	4.09	4.05
	400.00	410.00	115.82	156.35	3.54	4.11	3.78
	410.00	420.00	133.35	175.81	3.68	4.06	3.85

420.00	430.00	74.68	81.38	4.02	4.08	4.05
430.00	440.00	40.05	35.62	4.16	4.08	4.12
440.00	450.00	63.95	112.37	4.02	4.19	4.10
450.00	460.00	35.93	40.13	4.01	3.85	3.92
460.00	470.00	35.12	32.93	4.19	4.08	4.13
470.00	480.00	51.72	57.47	4.03	4.05	4.04
480.00	490.00	28.58	48.60	3.98	4.16	4.07
490.00	500.00	21.83	27.04	4.11	4.21	4.16
500.00	510.00	47.32	41.95	3.99	4.07	4.03
510.00	520.00	49.54	59.55	4.05	3.95	4.00
520.00	529.74	57.71	95.80	3.58	4.13	3.81

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\MM\RAW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\10THS\ERD\SR29SB2.ERD							
	.00	529.22	137.22	161.43	2.03	2.27	2.14
	.00	10.00	83.51	109.78	3.12	3.14	3.13
	10.00	20.00	111.26	124.18	2.98	2.94	2.96
	20.00	30.00	176.08	253.36	2.98	2.36	2.63
	30.00	40.00	139.84	197.77	3.78	3.35	3.54
	40.00	50.00	153.05	199.76	2.26	2.41	2.33
	50.00	60.00	75.64	93.92	3.87	3.86	3.87
	60.00	70.00	71.06	56.34	4.04	4.21	4.12
	70.00	80.00	58.41	45.98	3.69	4.22	3.91
	80.00	90.00	41.27	42.30	4.15	4.05	4.10
	90.00	100.00	40.41	76.43	3.89	3.78	3.83
	100.00	110.00	19.90	30.52	3.97	3.87	3.92
	110.00	120.00	38.55	97.80	4.04	4.14	4.09
	120.00	130.00	22.79	58.08	3.99	3.80	3.89
	130.00	140.00	22.83	62.84	4.12	4.21	4.16
	140.00	150.00	24.60	50.95	3.99	3.88	3.93
	150.00	160.00	49.13	45.65	4.05	4.23	4.14
	160.00	170.00	22.03	23.49	4.20	4.17	4.18
	170.00	180.00	51.55	44.65	3.90	3.93	3.92
	180.00	190.00	59.11	78.00	3.88	3.89	3.89
	190.00	200.00	57.79	70.60	4.19	4.14	4.16
	200.00	210.00	102.44	46.48	3.54	4.13	3.78
	210.00	220.00	155.30	118.31	3.57	3.93	3.73
	220.00	230.00	243.90	167.96	2.96	3.64	3.24
	230.00	240.00	166.94	242.60	3.14	2.51	2.78
	240.00	250.00	232.29	255.47	2.13	1.98	2.05
	250.00	260.00	370.02	409.38	2.08	1.80	1.93
	260.00	270.00	639.19	878.56	.01	.04	.02
	270.00	280.00	494.86	523.44	1.87	1.64	1.75
	280.00	290.00	457.60	682.69	2.94	2.43	2.65
	290.00	300.00	576.50	796.55	3.24	3.43	3.33
	300.00	310.00	195.61	242.39	3.35	2.46	2.81
	310.00	320.00	117.76	231.09	3.77	3.49	3.62
	320.00	330.00	297.32	325.56	3.55	3.37	3.45
	330.00	340.00	353.43	278.51	3.63	3.68	3.66
	340.00	350.00	106.67	69.31	3.56	4.01	3.76
	350.00	360.00	163.83	95.06	3.70	3.96	3.82
	360.00	370.00	82.66	55.13	3.78	4.00	3.88
	370.00	380.00	146.73	136.82	3.33	3.38	3.36
	380.00	390.00	188.56	210.34	3.51	3.40	3.45
	390.00	400.00	77.51	91.41	4.03	3.99	4.01
	400.00	410.00	132.43	171.06	3.69	3.97	3.82
	410.00	420.00	126.40	172.00	3.71	4.13	3.89

420.00	430.00	72.54	71.36	4.05	4.23	4.14
430.00	440.00	43.59	53.25	3.85	3.99	3.92
440.00	450.00	66.61	109.69	3.80	4.24	3.99
450.00	460.00	29.95	45.17	4.13	3.86	3.98
460.00	470.00	42.20	33.72	4.06	4.20	4.13
470.00	480.00	71.03	65.22	3.81	4.12	3.95
480.00	490.00	26.70	36.69	3.96	4.14	4.04
490.00	500.00	25.75	36.37	4.13	4.05	4.09
500.00	510.00	38.53	29.31	3.75	4.05	3.88
510.00	520.00	55.63	48.62	4.04	3.91	3.97
520.00	529.22	36.66	54.54	3.47	4.01	3.70

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\10THS"

Filename	Start:	End:	IRI:	(in/mi)		RN: 0-5		Both
	ft	ft	LElev.	RElev.	LElev.	RElev.		
-----								
F:\10THS\SR114EB.ERD								
	.00	529.48	159.79	206.22	.72	.46	.57	
	.00	10.00	68.26	75.03	3.50	3.35	3.42	
	10.00	20.00	99.78	119.76	3.82	3.81	3.81	
	20.00	30.00	76.65	72.02	3.95	3.91	3.93	
	30.00	40.00	80.51	98.00	4.01	3.89	3.95	
	40.00	50.00	21.91	59.71	3.76	4.01	3.88	
	50.00	60.00	143.76	215.41	3.66	3.36	3.50	
	60.00	70.00	120.43	75.09	3.63	3.39	3.50	
	70.00	80.00	114.94	139.21	4.02	3.70	3.84	
	80.00	90.00	75.17	89.98	3.96	3.81	3.89	
	90.00	100.00	82.96	91.92	3.76	3.64	3.70	
	100.00	110.00	100.12	183.24	3.59	3.05	3.28	
	110.00	120.00	209.97	186.41	3.28	3.06	3.16	
	120.00	130.00	275.58	385.26	3.35	3.20	3.27	
	130.00	140.00	280.07	349.71	3.38	2.61	2.92	
	140.00	150.00	201.11	350.13	2.70	2.45	2.57	
	150.00	160.00	84.70	163.24	2.98	3.34	3.14	
	160.00	170.00	111.82	279.38	3.15	3.69	3.38	
	170.00	180.00	89.51	112.54	3.57	3.61	3.59	
	180.00	190.00	139.02	104.30	3.85	3.63	3.74	
	190.00	200.00	112.68	129.53	3.20	3.77	3.44	
	200.00	210.00	218.39	52.00	2.56	2.92	2.72	
	210.00	220.00	263.18	413.74	2.35	.31	.65	
	220.00	230.00	87.77	112.37	3.82	3.75	3.78	
	230.00	240.00	142.57	118.08	3.54	3.79	3.66	
	240.00	250.00	126.82	95.18	2.36	3.50	2.78	
	250.00	260.00	506.14	194.56	.00	2.24	.02	
	260.00	270.00	858.24	504.53	.00	.00	.00	
	270.00	280.00	822.85	1139.03	.16	.00	.00	
	280.00	290.00	422.39	511.24	2.11	.48	.86	
	290.00	300.00	140.38	465.29	2.71	1.83	2.18	
	300.00	310.00	218.31	404.06	2.61	2.07	2.30	
	310.00	320.00	329.98	446.72	2.76	3.01	2.88	
	320.00	330.00	161.61	582.78	3.58	3.37	3.47	
	330.00	340.00	226.59	247.36	3.56	3.23	3.38	
	340.00	350.00	304.31	505.80	3.57	3.31	3.43	
	350.00	360.00	64.34	169.51	3.51	3.21	3.35	
	360.00	370.00	208.81	168.62	3.73	3.88	3.80	
	370.00	380.00	91.32	234.85	3.63	3.89	3.75	
	380.00	390.00	41.62	147.19	3.68	3.86	3.77	
	390.00	400.00	44.92	46.59	3.76	4.03	3.88	
	400.00	410.00	57.71	177.91	3.95	3.99	3.97	
	410.00	420.00	69.98	139.98	4.09	3.92	4.00	

420.00	430.00	44.20	58.75	4.01	3.79	3.89
430.00	440.00	35.49	58.70	3.75	3.85	3.79
440.00	450.00	27.13	55.03	3.94	3.78	3.86
450.00	460.00	62.10	76.73	3.79	3.96	3.87
460.00	470.00	82.06	55.25	4.08	3.88	3.97
470.00	480.00	32.15	30.14	4.11	3.97	4.03
480.00	490.00	77.23	61.13	3.40	3.52	3.46
490.00	500.00	89.50	79.80	3.62	3.74	3.68
500.00	510.00	83.93	147.06	3.89	3.42	3.62
510.00	520.00	50.70	57.37	3.99	4.01	4.00
520.00	529.48	36.77	58.10	3.94	4.03	3.98

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\ERD\SR114WB.ERD	.00	529.74	171.36	216.15	.41	.49	.45
	.00	10.00	151.93	165.72	2.78	2.64	2.71
	10.00	20.00	198.57	251.86	2.63	2.20	2.39
	20.00	30.00	180.66	201.80	3.27	2.90	3.07
	30.00	40.00	105.03	111.07	3.38	3.63	3.50
	40.00	50.00	68.03	92.03	3.59	3.72	3.65
	50.00	60.00	123.80	68.85	3.20	3.74	3.43
	60.00	70.00	54.90	79.18	3.95	3.56	3.73
	70.00	80.00	90.20	127.30	3.58	3.13	3.33
	80.00	90.00	81.05	117.45	3.93	3.60	3.75
	90.00	100.00	101.99	122.51	3.68	3.49	3.58
	100.00	110.00	122.78	197.99	3.39	3.17	3.27
	110.00	120.00	112.70	247.68	3.50	2.37	2.79
	120.00	130.00	104.60	208.58	3.79	2.90	3.25
	130.00	140.00	44.82	95.79	3.83	3.57	3.69
	140.00	150.00	73.14	42.30	3.69	3.70	3.69
	150.00	160.00	86.63	124.41	3.67	3.67	3.67
	160.00	170.00	88.52	118.80	3.88	3.62	3.74
	170.00	180.00	45.71	57.50	3.82	3.74	3.78
	180.00	190.00	76.06	81.27	3.23	3.34	3.28
	190.00	200.00	154.07	230.66	3.48	2.99	3.21
	200.00	210.00	71.00	118.16	3.66	3.71	3.68
	210.00	220.00	169.82	222.71	3.90	3.62	3.75
	220.00	230.00	98.46	144.89	3.49	3.74	3.61
	230.00	240.00	158.30	226.64	3.17	3.19	3.18
	240.00	250.00	183.28	150.25	.13	2.28	.36
	250.00	260.00	150.80	123.05	3.32	3.27	3.29
	260.00	270.00	200.88	139.49	3.72	3.27	3.47
	270.00	280.00	86.02	39.84	2.69	3.35	2.96
	280.00	290.00	506.06	67.42	.00	3.40	.01
	290.00	300.00	1098.99	607.04	.00	.00	.00
	300.00	310.00	801.47	1232.11	.00	.00	.00
	310.00	320.00	486.72	787.19	1.61	.39	.70
	320.00	330.00	313.71	677.49	2.72	2.18	2.41
	330.00	340.00	219.01	638.70	2.98	2.94	2.96
	340.00	350.00	489.21	502.69	3.05	2.66	2.84
	350.00	360.00	367.38	655.35	2.79	3.02	2.90
	360.00	370.00	156.18	203.83	3.88	3.32	3.56
	370.00	380.00	305.27	436.28	3.57	3.36	3.46
	380.00	390.00	139.20	349.95	3.65	3.92	3.78
	390.00	400.00	57.87	108.29	3.85	3.92	3.89
	400.00	410.00	72.57	70.62	3.95	4.12	4.03
	410.00	420.00	38.66	81.44	3.87	4.16	4.00

420.00	430.00	77.56	78.41	3.91	3.85	3.88
430.00	440.00	85.19	27.11	4.02	3.87	3.94
440.00	450.00	72.62	128.41	3.57	3.51	3.54
450.00	460.00	68.91	101.54	3.80	3.98	3.88
460.00	470.00	110.75	109.42	3.77	3.87	3.82
470.00	480.00	129.95	163.16	3.78	3.97	3.87
480.00	490.00	40.24	99.68	4.09	3.93	4.00
490.00	500.00	134.16	146.29	3.91	3.99	3.95
500.00	510.00	78.11	84.16	3.94	3.85	3.89
510.00	520.00	54.59	94.11	3.91	4.12	4.01
520.00	529.74	46.71	56.78	4.13	4.03	4.08

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\ERD\SR231NB1.ERD							
	.00	529.48	432.83	420.36	.57	.69	.63
	.00	10.00	140.71	150.97	2.94	2.96	2.95
	10.00	20.00	112.59	151.47	2.99	3.14	3.06
	20.00	30.00	151.45	120.78	2.73	2.82	2.78
	30.00	40.00	120.72	147.24	3.19	2.73	2.94
	40.00	50.00	278.94	123.79	1.65	2.09	1.85
	50.00	60.00	159.82	119.93	2.38	2.88	2.60
	60.00	70.00	133.77	49.36	2.69	3.55	3.03
	70.00	80.00	61.74	67.36	3.52	3.44	3.48
	80.00	90.00	252.43	195.19	1.53	1.79	1.65
	90.00	100.00	135.71	73.78	3.30	3.34	3.32
	100.00	110.00	221.77	125.14	2.24	1.61	1.87
	110.00	120.00	435.42	187.78	1.64	1.54	1.59
	120.00	130.00	205.87	161.45	3.29	2.86	3.05
	130.00	140.00	225.27	258.79	2.08	1.34	1.64
	140.00	150.00	46.83	71.25	3.43	2.85	3.10
	150.00	160.00	57.19	61.04	2.57	2.87	2.71
	160.00	170.00	183.83	145.62	2.83	2.16	2.44
	170.00	180.00	75.47	121.41	3.45	1.46	2.02
	180.00	190.00	73.25	42.01	3.22	2.97	3.09
	190.00	200.00	25.90	59.09	3.35	2.72	2.98
	200.00	210.00	61.77	80.25	3.66	1.80	2.35
	210.00	220.00	66.64	110.47	3.29	1.43	1.97
	220.00	230.00	107.46	87.79	3.53	2.60	2.97
	230.00	240.00	69.14	131.17	3.47	3.05	3.24
	240.00	250.00	104.46	72.02	3.07	3.45	3.24
	250.00	260.00	116.68	150.17	3.40	2.89	3.11
	260.00	270.00	597.72	565.77	.40	.65	.51
	270.00	280.00	316.27	255.73	1.19	1.74	1.42
	280.00	290.00	231.07	176.80	2.56	1.65	2.00
	290.00	300.00	438.11	528.50	1.48	1.25	1.36
	300.00	310.00	421.12	457.18	1.97	1.78	1.87
	310.00	320.00	752.48	701.49	.78	.68	.73
	320.00	330.00	1644.15	1655.29	.03	.06	.04
	330.00	340.00	1602.26	1391.83	.03	.01	.02
	340.00	350.00	2141.30	1960.04	.00	.01	.01
	350.00	360.00	2132.94	1933.29	.00	.01	.00
	360.00	370.00	1890.18	1369.67	.03	.09	.05
	370.00	380.00	1823.91	1681.20	.39	.72	.51
	380.00	390.00	537.10	636.60	.64	.90	.75
	390.00	400.00	1025.48	1115.50	2.21	1.62	1.87
	400.00	410.00	737.94	1073.90	1.69	1.11	1.35
	410.00	420.00	792.74	1039.42	2.13	2.17	2.15
	420.00	430.00	799.58	911.03	.34	.40	.37
	430.00	440.00	120.80	257.01	1.36	1.18	1.27
	440.00	450.00	358.90	454.18	3.14	2.45	2.74

450.00	460.00	170.71	275.29	3.26	1.90	2.37
460.00	470.00	286.32	328.75	3.66	3.12	3.35
470.00	480.00	93.10	118.72	3.58	3.22	3.38
480.00	490.00	64.18	71.49	3.77	2.80	3.17
490.00	500.00	46.57	108.30	3.36	3.25	3.30
500.00	510.00	112.41	135.01	3.35	2.16	2.59
510.00	520.00	85.97	60.31	2.81	3.62	3.13
520.00	529.48	84.21	31.72	3.55	2.89	3.16

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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\SR231SB1.ERD							
	.00	529.48	369.04	438.98	.60	.64	.62
	.00	10.00	117.40	130.17	2.78	1.64	2.05
	10.00	20.00	118.18	204.15	2.04	1.69	1.85
	20.00	30.00	79.76	92.58	3.31	2.67	2.94
	30.00	40.00	122.47	202.90	2.34	1.48	1.82
	40.00	50.00	79.81	80.83	3.19	2.66	2.89
	50.00	60.00	58.95	47.47	3.23	2.49	2.79
	60.00	70.00	110.63	144.25	2.83	1.52	1.96
	70.00	80.00	112.30	71.69	3.57	3.10	3.30
	80.00	90.00	95.22	64.49	3.02	3.94	3.37
	90.00	100.00	108.99	184.52	2.27	1.60	1.88
	100.00	110.00	88.81	75.15	3.57	2.77	3.09
	110.00	120.00	144.30	219.62	2.53	1.48	1.87
	120.00	130.00	243.72	265.13	2.37	1.04	1.46
	130.00	140.00	77.62	226.98	2.95	1.79	2.21
	140.00	150.00	207.28	311.25	2.05	1.63	1.81
	150.00	160.00	74.26	74.70	2.43	3.45	2.82
	160.00	170.00	143.97	73.63	3.26	3.76	3.48
	170.00	180.00	72.37	106.53	3.39	3.10	3.23
	180.00	190.00	564.65	492.37	.71	.84	.77
	190.00	200.00	279.95	442.76	1.06	1.18	1.11
	200.00	210.00	428.08	205.35	1.75	2.44	2.04
	210.00	220.00	183.91	164.95	1.79	2.50	2.08
	220.00	230.00	300.57	449.29	1.59	1.83	1.70
	230.00	240.00	321.84	546.00	2.18	1.17	1.53
	240.00	250.00	1065.63	1076.39	.01	.04	.02
	250.00	260.00	2131.41	2059.81	.00	.01	.01
	260.00	270.00	1929.79	2237.89	.00	.00	.00
	270.00	280.00	1476.69	1356.76	.08	.06	.07
	280.00	290.00	1229.53	1523.30	.04	.05	.04
	290.00	300.00	1676.55	1906.85	.42	.22	.30
	300.00	310.00	1126.41	1054.31	.44	.48	.46
	310.00	320.00	1316.05	1806.39	1.24	1.86	1.49
	320.00	330.00	286.69	625.57	2.49	2.68	2.58
	330.00	340.00	639.01	1164.49	1.41	1.20	1.30
	340.00	350.00	731.74	773.16	.28	.74	.43
	350.00	360.00	218.32	281.38	1.91	2.61	2.20
	360.00	370.00	111.77	202.01	3.25	2.76	2.98
	370.00	380.00	115.01	152.27	2.89	3.21	3.04
	380.00	390.00	70.46	88.56	2.82	3.18	2.98
	390.00	400.00	90.94	71.45	2.85	2.88	2.86
	400.00	410.00	96.92	169.06	3.26	2.93	3.08
	410.00	420.00	114.93	109.89	3.03	3.74	3.32
	420.00	430.00	80.35	102.16	3.58	3.70	3.64
	430.00	440.00	88.51	165.86	3.12	3.40	3.25
	440.00	450.00	62.22	117.81	3.29	2.18	2.59

450.00	460.00	176.14	325.43	1.88	1.86	1.87
460.00	470.00	97.29	135.81	3.47	2.84	3.11
470.00	480.00	78.00	177.85	3.79	3.71	3.75
480.00	490.00	70.82	196.41	3.83	1.67	2.25
490.00	500.00	105.84	59.09	3.28	2.96	3.11
500.00	510.00	48.86	116.84	3.52	3.10	3.28
510.00	520.00	72.89	172.10	2.70	1.84	2.18
520.00	529.48	48.41	148.54	3.95	.58	1.09

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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\SR218EB1.ERD							
	.00	529.48	174.98	252.41	2.18	1.65	1.88
	.00	10.00	204.71	144.80	2.17	1.59	1.84
	10.00	20.00	127.06	334.60	3.29	2.02	2.47
	20.00	30.00	268.53	286.70	3.36	3.05	3.19
	30.00	40.00	158.53	69.40	3.65	2.79	3.13
	40.00	50.00	78.48	105.70	3.33	3.02	3.16
	50.00	60.00	231.09	248.34	3.20	2.99	3.09
	60.00	70.00	109.46	269.04	3.42	2.52	2.87
	70.00	80.00	138.67	254.92	3.12	2.41	2.71
	80.00	90.00	161.56	343.92	3.14	1.59	2.08
	90.00	100.00	135.01	520.68	3.27	1.36	1.90
	100.00	110.00	250.26	374.86	3.17	2.69	2.91
	110.00	120.00	132.47	268.95	3.17	2.21	2.58
	120.00	130.00	85.03	204.29	3.50	3.03	3.24
	130.00	140.00	38.73	94.93	3.69	3.30	3.48
	140.00	150.00	94.98	109.62	3.51	3.32	3.41
	150.00	160.00	55.77	73.66	3.81	3.28	3.50
	160.00	170.00	71.64	60.97	3.27	3.43	3.35
	170.00	180.00	127.15	26.97	3.22	3.67	3.42
	180.00	190.00	102.84	249.25	2.53	1.97	2.21
	190.00	200.00	282.55	188.30	2.37	2.10	2.23
	200.00	210.00	117.79	202.79	3.58	3.42	3.50
	210.00	220.00	224.44	150.32	3.31	3.06	3.18
	220.00	230.00	209.35	259.55	3.07	2.68	2.86
	230.00	240.00	231.02	164.91	2.62	2.58	2.60
	240.00	250.00	197.91	377.56	2.64	2.82	2.73
	250.00	260.00	270.17	651.81	3.35	2.65	2.94
	260.00	270.00	726.28	559.69	.07	.02	.03
	270.00	280.00	328.50	909.85	1.05	.36	.58
	280.00	290.00	688.81	932.69	1.03	1.69	1.29
	290.00	300.00	551.82	671.19	1.95	2.17	2.05
	300.00	310.00	228.47	240.51	2.71	2.40	2.55
	310.00	320.00	607.54	1102.71	1.47	.70	.98
	320.00	330.00	399.69	865.97	1.68	.82	1.12
	330.00	340.00	196.79	129.88	3.07	2.18	2.53
	340.00	350.00	150.71	336.05	3.39	3.12	3.25
	350.00	360.00	107.76	275.08	3.60	3.22	3.39
	360.00	370.00	85.90	243.23	3.59	2.82	3.14
	370.00	380.00	76.55	143.61	3.44	3.32	3.38
	380.00	390.00	72.76	47.27	3.91	3.26	3.53
	390.00	400.00	56.63	86.38	3.83	3.59	3.70
	400.00	410.00	56.64	63.83	3.62	3.70	3.66
	410.00	420.00	45.95	54.73	3.97	3.58	3.75
	420.00	430.00	108.26	116.89	3.40	3.60	3.50
	430.00	440.00	104.76	65.90	3.40	3.78	3.57

440.00	450.00	77.52	20.83	3.61	3.95	3.76
450.00	460.00	70.12	76.57	3.84	3.73	3.79
460.00	470.00	107.59	64.39	3.59	3.80	3.69
470.00	480.00	44.14	52.49	3.83	3.78	3.80
480.00	490.00	53.92	47.48	3.91	3.60	3.74
490.00	500.00	27.53	53.72	3.73	3.83	3.78
500.00	510.00	49.35	70.90	3.84	3.77	3.80
510.00	520.00	60.78	30.65	3.62	3.88	3.74
520.00	529.48	30.79	30.36	3.81	3.87	3.84

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\MM\RAW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\10THS\ERD\SR218EB1.ERD							
	.00	529.22	172.46	257.40	2.12	1.48	1.74
	.00	10.00	226.72	185.51	2.00	1.84	1.92
	10.00	20.00	110.90	388.41	2.99	1.75	2.19
	20.00	30.00	289.53	314.44	3.35	2.51	2.84
	30.00	40.00	131.54	76.09	3.59	2.75	3.08
	40.00	50.00	97.69	106.64	3.33	3.14	3.23
	50.00	60.00	221.53	267.03	3.27	2.83	3.03
	60.00	70.00	83.29	287.39	3.33	2.75	3.00
	70.00	80.00	140.48	240.73	3.16	2.54	2.81
	80.00	90.00	170.48	413.99	3.25	1.24	1.78
	90.00	100.00	136.89	608.22	2.91	1.16	1.66
	100.00	110.00	243.15	295.04	3.27	3.19	3.23
	110.00	120.00	148.80	274.76	3.04	3.36	3.19
	120.00	130.00	64.80	181.72	3.61	3.21	3.39
	130.00	140.00	41.73	112.82	3.52	3.38	3.45
	140.00	150.00	72.39	100.67	3.56	3.59	3.58
	150.00	160.00	47.61	66.86	3.59	3.38	3.47
	160.00	170.00	77.82	66.53	3.55	3.57	3.56
	170.00	180.00	109.60	43.47	3.29	3.61	3.44
	180.00	190.00	98.10	251.09	2.74	2.18	2.42
	190.00	200.00	288.03	180.87	2.40	2.28	2.34
	200.00	210.00	98.99	234.34	3.43	3.37	3.40
	210.00	220.00	202.56	157.75	3.38	3.22	3.30
	220.00	230.00	205.23	257.42	3.01	2.77	2.88
	230.00	240.00	255.90	160.36	2.66	3.03	2.83
	240.00	250.00	202.68	384.64	2.78	2.47	2.62
	250.00	260.00	312.74	685.71	3.19	2.78	2.97
	260.00	270.00	637.97	570.49	.05	.01	.02
	270.00	280.00	340.88	907.81	1.04	.35	.56
	280.00	290.00	687.56	956.42	1.06	1.62	1.29
	290.00	300.00	548.53	677.17	1.92	1.85	1.88
	300.00	310.00	209.16	247.46	2.88	2.20	2.48
	310.00	320.00	623.28	1103.93	1.49	.66	.94
	320.00	330.00	404.55	883.89	1.60	.83	1.11
	330.00	340.00	184.99	124.52	2.95	2.20	2.51
	340.00	350.00	154.04	351.57	3.36	3.12	3.23
	350.00	360.00	104.49	274.83	3.67	3.30	3.47
	360.00	370.00	89.53	227.95	3.62	2.85	3.16
	370.00	380.00	93.91	148.70	3.43	3.34	3.38
	380.00	390.00	61.08	39.99	3.91	3.46	3.65
	390.00	400.00	40.89	96.02	3.97	3.40	3.64
	400.00	410.00	46.46	70.84	4.01	3.85	3.93
	410.00	420.00	60.25	38.04	3.54	3.52	3.53
	420.00	430.00	85.55	113.56	3.50	3.58	3.54
	430.00	440.00	107.83	63.55	3.75	3.90	3.82

440.00	450.00	72.02	45.77	3.69	3.72	3.71
450.00	460.00	68.47	55.38	3.65	3.44	3.54
460.00	470.00	82.44	69.21	3.53	3.66	3.59
470.00	480.00	41.77	26.46	3.68	3.80	3.74
480.00	490.00	69.77	35.59	3.95	3.79	3.87
490.00	500.00	49.87	35.54	3.73	3.84	3.78
500.00	510.00	56.29	34.58	3.67	3.89	3.77
510.00	520.00	76.08	32.30	3.86	4.10	3.97
520.00	529.22	22.90	21.06	3.74	3.79	3.77

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\SR218WB1.ERD							
	.00	529.48	178.92	236.42	2.02	1.45	1.69
	.00	10.00	67.54	64.61	3.01	2.60	2.79
	10.00	20.00	41.14	81.30	3.92	3.58	3.73
	20.00	30.00	37.84	73.44	3.30	3.71	3.48
	30.00	40.00	108.08	88.53	3.16	3.61	3.36
	40.00	50.00	70.28	55.91	3.77	3.52	3.64
	50.00	60.00	42.97	55.34	3.81	3.79	3.80
	60.00	70.00	38.74	36.94	3.88	3.56	3.71
	70.00	80.00	46.99	132.96	3.65	2.97	3.25
	80.00	90.00	47.52	58.55	3.55	3.68	3.62
	90.00	100.00	52.60	105.37	3.88	3.61	3.73
	100.00	110.00	64.29	60.42	3.60	3.58	3.59
	110.00	120.00	72.80	74.78	3.69	2.65	3.04
	120.00	130.00	79.29	135.89	3.58	3.06	3.28
	130.00	140.00	85.23	187.29	3.37	3.05	3.20
	140.00	150.00	84.98	133.43	3.49	3.12	3.29
	150.00	160.00	82.55	153.26	3.47	3.41	3.44
	160.00	170.00	116.79	102.40	3.53	3.24	3.37
	170.00	180.00	84.14	95.96	3.56	3.56	3.56
	180.00	190.00	41.92	146.06	3.60	3.26	3.41
	190.00	200.00	120.82	130.47	3.61	3.38	3.49
	200.00	210.00	125.66	218.33	1.73	1.74	1.74
	210.00	220.00	133.87	470.49	1.34	.14	.34
	220.00	230.00	296.07	465.23	2.90	1.84	2.24
	230.00	240.00	258.73	496.98	1.78	1.10	1.37
	240.00	250.00	234.16	156.24	2.36	2.24	2.30
	250.00	260.00	278.31	671.76	.83	.74	.78
	260.00	270.00	765.05	983.72	.06	.01	.02
	270.00	280.00	367.49	264.38	1.56	1.70	1.63
	280.00	290.00	532.29	885.15	2.17	2.40	2.28
	290.00	300.00	403.04	617.40	2.94	2.94	2.94
	300.00	310.00	111.09	286.97	3.12	2.90	3.00
	310.00	320.00	353.10	634.65	2.89	3.45	3.13
	320.00	330.00	529.85	778.53	3.32	3.00	3.14
	330.00	340.00	207.12	264.41	2.72	2.59	2.65
	340.00	350.00	421.63	475.32	2.34	2.41	2.37
	350.00	360.00	170.63	146.10	3.66	3.51	3.58
	360.00	370.00	129.77	57.41	3.12	3.43	3.27
	370.00	380.00	63.28	59.71	3.45	3.42	3.43
	380.00	390.00	114.17	67.19	3.66	3.69	3.67
	390.00	400.00	202.69	45.99	3.84	3.37	3.58
	400.00	410.00	90.74	35.26	3.94	2.97	3.33
	410.00	420.00	126.29	82.30	3.53	2.84	3.13
	420.00	430.00	153.89	85.81	3.36	3.19	3.27

430.00	440.00	75.24	174.57	3.47	3.17	3.31
440.00	450.00	333.46	218.71	1.25	1.28	1.26
450.00	460.00	401.93	513.30	.92	1.00	.96
460.00	470.00	327.94	346.29	2.12	1.43	1.71
470.00	480.00	206.63	266.51	1.97	2.41	2.17
480.00	490.00	227.60	237.68	2.44	3.25	2.77
490.00	500.00	232.82	218.37	2.78	3.42	3.05
500.00	510.00	57.66	176.82	3.63	3.06	3.30
510.00	520.00	88.99	98.76	3.70	2.76	3.13
520.00	529.48	72.18	77.43	3.93	3.24	3.52

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Input files from directory "F:\MM\RAW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\10THS\ERD\SR218WB1.ERD							
	.00	529.22	173.52	243.51	1.76	1.14	1.39
	.00	10.00	86.69	96.60	3.29	2.42	2.76
	10.00	20.00	45.64	83.46	3.73	3.64	3.68
	20.00	30.00	38.97	74.99	3.14	3.71	3.38
	30.00	40.00	104.60	83.91	2.79	3.44	3.06
	40.00	50.00	67.61	61.42	3.70	3.22	3.43
	50.00	60.00	46.94	46.25	3.80	3.74	3.77
	60.00	70.00	43.34	33.92	3.91	3.86	3.89
	70.00	80.00	50.80	125.49	3.38	2.67	2.96
	80.00	90.00	55.86	70.99	3.16	3.57	3.34
	90.00	100.00	41.91	115.40	3.98	3.15	3.48
	100.00	110.00	59.51	69.36	3.61	3.54	3.57
	110.00	120.00	65.10	80.79	3.50	2.42	2.82
	120.00	130.00	61.36	147.32	3.75	3.23	3.45
	130.00	140.00	85.49	157.54	3.54	3.11	3.30
	140.00	150.00	96.14	131.80	3.23	3.27	3.25
	150.00	160.00	62.24	140.56	3.22	3.64	3.41
	160.00	170.00	131.42	93.71	3.48	3.68	3.58
	170.00	180.00	70.05	115.71	3.83	3.12	3.41
	180.00	190.00	32.39	139.73	3.75	3.45	3.59
	190.00	200.00	126.89	116.85	3.47	3.46	3.46
	200.00	210.00	138.29	191.62	1.98	2.97	2.36
	210.00	220.00	141.00	452.38	.97	.23	.43
	220.00	230.00	321.66	437.96	2.55	2.00	2.24
	230.00	240.00	203.26	485.39	2.07	1.07	1.42
	240.00	250.00	231.12	163.92	2.19	2.46	2.31
	250.00	260.00	157.65	637.99	1.42	.82	1.06
	260.00	270.00	859.61	1084.04	.03	.00	.01
	270.00	280.00	284.41	272.38	1.06	1.44	1.23
	280.00	290.00	471.54	868.28	2.28	2.07	2.17
	290.00	300.00	396.06	631.76	3.11	2.72	2.90
	300.00	310.00	102.68	263.50	3.37	2.58	2.90
	310.00	320.00	295.94	612.21	2.57	3.04	2.78
	320.00	330.00	527.47	772.01	3.22	3.10	3.16
	330.00	340.00	206.18	267.77	3.07	2.65	2.84
	340.00	350.00	412.47	484.78	2.47	2.35	2.40
	350.00	360.00	181.75	149.96	3.42	3.44	3.43
	360.00	370.00	140.39	54.34	3.21	3.17	3.19
	370.00	380.00	47.63	63.37	3.64	3.42	3.52
	380.00	390.00	97.77	58.78	3.60	3.57	3.58
	390.00	400.00	223.18	57.58	4.05	3.03	3.41
	400.00	410.00	103.39	64.39	3.52	2.89	3.15
	410.00	420.00	138.13	64.66	3.48	3.17	3.31
	420.00	430.00	148.00	56.60	3.11	3.62	3.33

430.00	440.00	147.27	138.76	.36	3.46	.77
440.00	450.00	254.69	235.61	1.11	.53	.74
450.00	460.00	455.07	1236.78	1.12	.13	.30
460.00	470.00	296.26	224.69	2.09	1.60	1.81
470.00	480.00	104.35	300.86	2.32	3.06	2.63
480.00	490.00	226.23	143.28	2.04	3.12	2.44
490.00	500.00	229.62	213.71	1.41	3.59	1.98
500.00	510.00	80.91	132.96	3.52	3.65	3.58
510.00	520.00	116.24	72.44	3.53	3.34	3.43
520.00	529.22	63.41	36.22	3.67	3.37	3.51

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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\SR218EB2.ERD							
	.00	529.48	177.68	190.93	1.34	1.37	1.36
	.00	10.00	70.79	113.34	3.08	2.85	2.96
	10.00	20.00	95.07	128.86	3.65	3.52	3.58
	20.00	30.00	90.50	36.11	2.86	3.08	2.96
	30.00	40.00	89.07	27.70	3.52	3.39	3.45
	40.00	50.00	22.74	56.60	3.58	2.91	3.19
	50.00	60.00	110.83	114.09	2.87	3.52	3.14
	60.00	70.00	74.29	94.39	3.33	2.94	3.12
	70.00	80.00	108.95	125.65	3.49	3.67	3.57
	80.00	90.00	47.18	78.27	3.57	3.14	3.33
	90.00	100.00	46.23	40.54	3.34	3.33	3.34
	100.00	110.00	51.73	125.04	2.95	2.81	2.88
	110.00	120.00	76.86	78.58	3.48	3.01	3.22
	120.00	130.00	55.88	83.79	3.48	3.23	3.35
	130.00	140.00	126.37	80.11	2.97	3.10	3.03
	140.00	150.00	84.44	79.50	3.12	3.33	3.22
	150.00	160.00	176.75	94.71	2.92	3.12	3.02
	160.00	170.00	81.96	64.86	3.09	2.93	3.01
	170.00	180.00	96.54	173.39	2.97	2.68	2.81
	180.00	190.00	216.74	251.14	2.72	2.71	2.72
	190.00	200.00	88.78	99.67	3.01	3.53	3.23
	200.00	210.00	157.37	139.94	3.53	3.71	3.62
	210.00	220.00	128.56	138.03	2.75	3.20	2.95
	220.00	230.00	160.62	197.25	2.96	2.45	2.68
	230.00	240.00	134.14	199.92	2.80	2.29	2.51
	240.00	250.00	63.36	484.56	2.64	1.09	1.55
	250.00	260.00	682.04	1437.50	.29	.01	.03
	260.00	270.00	968.89	1068.21	.00	.02	.01
	270.00	280.00	1406.14	789.77	.14	1.41	.35
	280.00	290.00	1089.81	658.36	.68	2.18	1.08
	290.00	300.00	185.66	219.76	1.03	2.89	1.53
	300.00	310.00	359.89	327.67	2.41	2.99	2.66
	310.00	320.00	214.54	179.74	2.69	3.47	3.01
	320.00	330.00	191.47	149.05	3.42	3.51	3.46
	330.00	340.00	107.01	118.51	3.36	3.24	3.30
	340.00	350.00	87.06	114.19	3.51	3.49	3.50
	350.00	360.00	136.07	114.97	2.94	3.54	3.19
	360.00	370.00	106.80	92.78	3.38	3.13	3.24
	370.00	380.00	92.41	85.98	3.57	3.36	3.46
	380.00	390.00	46.47	62.02	3.34	3.55	3.44
	390.00	400.00	90.20	127.84	3.42	2.12	2.58
	400.00	410.00	98.12	65.52	3.68	3.31	3.48
	410.00	420.00	99.43	99.19	3.39	3.23	3.31

420.00	430.00	79.36	76.46	3.31	3.43	3.37
430.00	440.00	57.28	89.85	3.45	3.32	3.38
440.00	450.00	93.95	152.73	2.98	3.17	3.07
450.00	460.00	151.11	146.56	1.71	2.24	1.94
460.00	470.00	41.35	124.88	3.33	2.38	2.75
470.00	480.00	113.24	182.94	2.89	2.79	2.84
480.00	490.00	82.30	87.13	3.18	3.56	3.35
490.00	500.00	56.98	105.18	3.00	2.54	2.74
500.00	510.00	55.15	64.11	2.97	3.42	3.17
510.00	520.00	81.22	119.01	2.89	1.79	2.20
520.00	529.48	126.44	156.08	3.14	3.17	3.15

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Input files from directory "F:\MM\RAW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\10THS\ERD\SR218EB2.ERD	.00	529.22	169.17	190.27	.94	1.21	1.06
	.00	10.00	62.79	129.78	3.12	2.83	2.97
	10.00	20.00	91.50	113.60	3.15	3.14	3.15
	20.00	30.00	57.35	70.31	3.01	3.45	3.21
	30.00	40.00	50.75	33.65	3.39	3.32	3.35
	40.00	50.00	19.93	66.46	3.22	2.80	2.99
	50.00	60.00	66.61	105.74	3.18	3.61	3.37
	60.00	70.00	83.50	86.31	3.19	3.09	3.14
	70.00	80.00	66.04	117.49	3.06	3.73	3.34
	80.00	90.00	28.00	46.25	3.40	3.39	3.40
	90.00	100.00	34.59	34.61	3.16	3.29	3.22
	100.00	110.00	72.94	99.11	3.39	3.14	3.26
	110.00	120.00	68.81	53.54	3.56	3.09	3.30
	120.00	130.00	50.93	65.86	3.60	3.57	3.59
	130.00	140.00	55.09	39.29	2.67	3.33	2.94
	140.00	150.00	51.18	70.34	3.01	3.24	3.12
	150.00	160.00	69.94	99.98	3.33	3.24	3.28
	160.00	170.00	59.12	54.60	3.23	3.18	3.21
	170.00	180.00	92.84	190.98	2.81	2.55	2.67
	180.00	190.00	201.67	253.23	2.66	2.56	2.61
	190.00	200.00	70.82	80.27	3.36	3.53	3.44
	200.00	210.00	161.17	139.28	3.60	3.98	3.77
	210.00	220.00	126.34	166.93	2.75	2.96	2.85
	220.00	230.00	151.90	246.02	3.17	2.19	2.57
	230.00	240.00	158.72	178.92	2.62	2.57	2.60
	240.00	250.00	68.00	471.81	2.96	1.30	1.80
	250.00	260.00	497.21	1315.47	.40	.01	.03
	260.00	270.00	1230.00	1187.57	.00	.01	.00
	270.00	280.00	1515.34	817.69	.07	1.49	.21
	280.00	290.00	1047.67	700.37	.56	1.72	.89
	290.00	300.00	125.02	191.29	1.05	2.85	1.54
	300.00	310.00	353.32	354.75	2.99	2.73	2.85
	310.00	320.00	201.91	176.79	3.03	3.37	3.18
	320.00	330.00	159.76	138.05	3.25	3.75	3.47
	330.00	340.00	113.29	144.77	3.43	3.50	3.47
	340.00	350.00	72.79	135.17	3.43	3.14	3.28
	350.00	360.00	105.61	111.35	3.09	3.26	3.17
	360.00	370.00	98.43	109.72	3.19	3.20	3.19
	370.00	380.00	70.58	85.49	3.69	3.26	3.45
	380.00	390.00	40.00	48.12	3.74	3.77	3.76
	390.00	400.00	97.14	138.87	3.27	2.40	2.75
	400.00	410.00	72.16	40.74	3.74	3.50	3.61
	410.00	420.00	61.03	103.88	3.91	2.85	3.24

420.00	430.00	74.30	72.27	3.55	3.76	3.65
430.00	440.00	37.46	92.49	3.66	3.61	3.64
440.00	450.00	110.40	130.84	3.17	3.37	3.27
450.00	460.00	160.09	155.50	1.74	1.94	1.83
460.00	470.00	61.65	125.94	3.20	2.43	2.74
470.00	480.00	127.29	187.99	2.90	2.71	2.80
480.00	490.00	93.93	93.29	2.81	3.30	3.02
490.00	500.00	55.04	73.81	2.51	2.85	2.66
500.00	510.00	77.08	61.03	3.12	3.01	3.06
510.00	520.00	77.73	114.41	2.88	1.77	2.18
520.00	529.22	117.34	136.18	3.14	3.22	3.18

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\SR218WB2.ERD							
	.00	529.48	204.41	216.67	1.35	1.27	1.31
	.00	10.00	271.12	182.52	1.69	2.11	1.88
	10.00	20.00	229.46	133.54	2.42	2.62	2.51
	20.00	30.00	201.56	159.41	3.22	2.98	3.09
	30.00	40.00	61.40	61.94	3.26	2.97	3.11
	40.00	50.00	126.64	111.17	2.77	2.11	2.39
	50.00	60.00	148.56	140.28	3.12	2.89	3.00
	60.00	70.00	57.67	53.24	3.57	3.41	3.49
	70.00	80.00	56.81	30.54	3.03	2.81	2.91
	80.00	90.00	45.86	107.65	3.09	2.82	2.94
	90.00	100.00	122.89	255.05	2.98	1.43	1.91
	100.00	110.00	82.66	119.00	3.38	3.26	3.32
	110.00	120.00	105.45	156.27	3.65	3.16	3.37
	120.00	130.00	100.35	167.28	3.53	3.39	3.46
	130.00	140.00	63.06	82.31	3.73	3.66	3.69
	140.00	150.00	90.90	51.78	3.51	3.70	3.60
	150.00	160.00	64.27	91.62	3.69	3.67	3.68
	160.00	170.00	59.40	90.73	3.41	3.07	3.22
	170.00	180.00	57.76	82.97	3.54	3.72	3.62
	180.00	190.00	77.54	85.68	3.80	3.76	3.78
	190.00	200.00	64.80	70.29	3.48	3.43	3.45
	200.00	210.00	77.28	34.42	3.43	3.35	3.39
	210.00	220.00	86.38	258.46	2.83	2.12	2.41
	220.00	230.00	120.19	201.34	3.20	2.65	2.89
	230.00	240.00	126.17	190.72	2.45	2.01	2.21
	240.00	250.00	712.26	1048.92	.92	.17	.35
	250.00	260.00	952.96	1716.73	.15	.00	.02
	260.00	270.00	1528.32	1172.95	.01	.06	.02
	270.00	280.00	1437.39	785.68	.04	.76	.14
	280.00	290.00	582.37	205.49	1.79	1.70	1.75
	290.00	300.00	137.31	196.53	2.88	3.12	3.00
	300.00	310.00	207.77	315.88	3.17	2.87	3.01
	310.00	320.00	399.86	188.64	2.51	2.06	2.26
	320.00	330.00	174.21	236.34	2.95	3.43	3.16
	330.00	340.00	229.93	354.21	3.43	3.33	3.38
	340.00	350.00	80.99	179.56	3.54	3.48	3.51
	350.00	360.00	93.05	159.35	3.32	2.94	3.11
	360.00	370.00	173.32	194.79	2.49	3.25	2.80
	370.00	380.00	123.78	100.09	3.54	3.42	3.48
	380.00	390.00	148.97	149.18	2.98	2.94	2.96
	390.00	400.00	136.75	162.26	3.50	3.04	3.24
	400.00	410.00	100.22	110.37	2.87	3.17	3.01

410.00	420.00	141.67	165.40	2.92	2.91	2.91
420.00	430.00	68.22	145.37	3.28	3.10	3.19
430.00	440.00	107.28	187.44	3.13	2.59	2.83
440.00	450.00	98.37	116.69	3.08	3.16	3.12
450.00	460.00	52.29	70.10	3.09	3.41	3.24
460.00	470.00	95.16	49.77	2.85	2.99	2.92
470.00	480.00	81.86	134.59	3.41	3.02	3.20
480.00	490.00	130.55	205.83	2.87	2.23	2.50
490.00	500.00	72.27	69.57	3.21	3.06	3.14
500.00	510.00	77.11	63.65	3.22	3.00	3.11
510.00	520.00	86.10	40.05	3.56	3.62	3.59
520.00	529.48	53.12	86.85	3.10	2.90	2.99

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Input files from directory "F:\MM\RAW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\10THS\ERD\SR218WB2.ERD	.00	529.22	206.79	212.83	.84	1.26	1.02
	.00	10.00	292.36	162.38	1.71	2.23	1.94
	10.00	20.00	223.09	111.20	2.36	2.68	2.50
	20.00	30.00	209.84	168.40	3.02	3.05	3.04
	30.00	40.00	58.32	65.15	3.21	2.89	3.04
	40.00	50.00	150.63	110.36	2.51	2.31	2.40
	50.00	60.00	136.34	139.25	3.09	2.62	2.83
	60.00	70.00	57.68	35.81	3.41	3.45	3.43
	70.00	80.00	46.64	30.26	3.32	3.00	3.15
	80.00	90.00	48.21	110.33	3.11	2.44	2.72
	90.00	100.00	131.11	250.05	2.92	1.65	2.09
	100.00	110.00	83.64	109.44	3.66	3.36	3.50
	110.00	120.00	114.56	164.46	3.51	3.41	3.45
	120.00	130.00	86.09	148.10	3.62	3.44	3.52
	130.00	140.00	52.44	80.15	3.66	3.69	3.68
	140.00	150.00	97.44	64.46	3.75	3.40	3.56
	150.00	160.00	36.70	81.44	3.53	3.11	3.30
	160.00	170.00	36.33	67.70	3.63	3.38	3.50
	170.00	180.00	62.17	69.68	3.69	3.50	3.59
	180.00	190.00	71.46	87.35	3.73	3.56	3.64
	190.00	200.00	59.48	82.68	3.71	3.58	3.65
	200.00	210.00	68.23	36.24	3.42	3.49	3.46
	210.00	220.00	110.16	276.36	2.63	2.31	2.46
	220.00	230.00	94.16	160.70	3.31	2.64	2.92
	230.00	240.00	182.74	214.52	2.12	1.48	1.75
	240.00	250.00	614.12	1192.24	1.41	.27	.53
	250.00	260.00	933.13	1519.64	.11	.00	.02
	260.00	270.00	1539.90	1270.86	.00	.04	.01
	270.00	280.00	1543.75	759.68	.00	1.28	.01
	280.00	290.00	562.70	187.37	1.76	2.00	1.87
	290.00	300.00	170.59	189.84	3.04	2.90	2.97
	300.00	310.00	221.04	335.08	3.41	2.51	2.86
	310.00	320.00	435.97	184.30	1.82	2.26	2.02
	320.00	330.00	236.33	268.95	3.20	3.42	3.31
	330.00	340.00	199.54	322.54	3.35	3.33	3.34
	340.00	350.00	78.66	164.82	3.46	3.24	3.34
	350.00	360.00	126.68	183.88	2.48	2.70	2.58
	360.00	370.00	214.44	135.02	2.71	3.01	2.85
	370.00	380.00	125.55	116.91	3.21	3.20	3.20
	380.00	390.00	149.37	168.57	3.33	3.32	3.33
	390.00	400.00	92.98	150.60	3.05	2.73	2.88
	400.00	410.00	88.76	95.87	2.88	3.01	2.94

410.00	420.00	158.55	171.80	3.04	2.78	2.90
420.00	430.00	84.44	126.11	3.25	2.89	3.05
430.00	440.00	117.27	172.99	3.11	2.66	2.86
440.00	450.00	68.07	92.64	2.94	2.64	2.78
450.00	460.00	46.23	40.44	3.48	2.97	3.19
460.00	470.00	72.37	54.32	3.23	3.12	3.18
470.00	480.00	63.33	148.57	3.46	3.20	3.32
480.00	490.00	126.70	181.59	2.87	2.06	2.38
490.00	500.00	96.00	79.54	3.41	2.89	3.12
500.00	510.00	78.65	42.96	3.53	3.26	3.38
510.00	520.00	104.58	46.01	3.32	3.35	3.33
520.00	529.22	73.10	108.95	3.31	2.81	3.03

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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\SR47NB.ERD							
	.00	529.74	161.72	153.44	1.32	1.28	1.30
	.00	10.00	114.17	145.77	3.11	2.90	3.00
	10.00	20.00	148.60	140.16	3.12	3.10	3.11
	20.00	30.00	107.05	88.36	3.50	3.37	3.43
	30.00	40.00	40.22	22.71	3.66	3.65	3.66
	40.00	50.00	54.93	63.44	3.86	3.61	3.72
	50.00	60.00	50.21	59.03	3.74	3.89	3.81
	60.00	70.00	13.88	50.08	3.60	3.83	3.71
	70.00	80.00	40.36	55.36	3.64	3.22	3.40
	80.00	90.00	28.07	58.37	3.45	2.82	3.08
	90.00	100.00	36.61	39.29	3.54	3.53	3.54
	100.00	110.00	18.53	82.67	3.84	3.40	3.59
	110.00	120.00	45.05	49.83	3.62	3.50	3.56
	120.00	130.00	61.84	77.38	3.63	2.96	3.24
	130.00	140.00	40.44	69.32	3.59	3.48	3.53
	140.00	150.00	78.32	63.17	3.31	3.41	3.36
	150.00	160.00	144.27	148.25	3.35	3.65	3.49
	160.00	170.00	83.95	70.29	3.39	3.34	3.36
	170.00	180.00	71.54	102.71	3.60	3.18	3.37
	180.00	190.00	41.06	91.39	3.41	3.09	3.24
	190.00	200.00	28.83	105.20	3.68	3.33	3.49
	200.00	210.00	59.15	183.45	3.51	3.13	3.30
	210.00	220.00	65.39	101.48	3.69	3.52	3.60
	220.00	230.00	74.09	98.15	3.51	3.71	3.60
	230.00	240.00	215.56	292.89	2.16	1.96	2.05
	240.00	250.00	161.20	155.57	3.47	3.17	3.30
	250.00	260.00	215.16	194.66	2.04	2.00	2.02
	260.00	270.00	1613.34	1044.29	.00	.00	.00
	270.00	280.00	1377.44	758.73	.35	.24	.29
	280.00	290.00	399.62	177.07	1.55	1.75	1.65
	290.00	300.00	100.37	141.90	2.96	3.42	3.17
	300.00	310.00	255.07	165.04	3.37	3.03	3.18
	310.00	320.00	313.95	231.95	2.88	2.80	2.84
	320.00	330.00	87.89	121.83	3.43	3.58	3.50
	330.00	340.00	251.71	212.46	3.54	3.60	3.57
	340.00	350.00	197.84	293.74	3.64	3.70	3.67
	350.00	360.00	36.94	125.65	3.57	3.68	3.62
	360.00	370.00	151.69	115.81	3.39	3.48	3.43
	370.00	380.00	162.48	272.47	3.31	3.51	3.41
	380.00	390.00	75.84	145.48	3.44	3.23	3.33
	390.00	400.00	96.21	123.31	3.55	3.25	3.39
	400.00	410.00	158.81	168.26	3.80	3.55	3.67

410.00	420.00	61.93	95.93	3.30	3.33	3.31
420.00	430.00	64.50	48.19	3.54	3.54	3.54
430.00	440.00	72.87	59.89	3.76	3.46	3.60
440.00	450.00	39.80	75.57	3.65	3.50	3.57
450.00	460.00	115.37	129.31	3.74	3.52	3.63
460.00	470.00	64.28	86.48	3.58	3.70	3.64
470.00	480.00	121.00	140.60	3.71	3.50	3.60
480.00	490.00	50.70	51.66	3.80	3.27	3.50
490.00	500.00	154.00	176.80	3.68	3.50	3.58
500.00	510.00	90.13	131.86	3.23	3.21	3.22
510.00	520.00	246.84	273.62	3.28	3.18	3.23
520.00	529.74	102.17	119.55	3.31	3.29	3.30

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\10THS"

Filename	Start:	End:	IRI:	(in/mi)		RN: 0-5		Both
	ft	ft	LElev.	RElev.	LElev.	RElev.		
-----								
F:\10THS\SR47SB.ERD								
	.00	529.48	154.11	173.50	1.38	1.19	1.28	
	.00	10.00	120.39	112.31	2.69	2.85	2.77	
	10.00	20.00	81.59	55.31	3.09	3.52	3.28	
	20.00	30.00	54.76	31.43	3.36	3.49	3.42	
	30.00	40.00	192.20	94.06	3.64	3.69	3.67	
	40.00	50.00	89.60	60.77	2.97	3.88	3.32	
	50.00	60.00	87.59	63.46	3.89	3.78	3.84	
	60.00	70.00	136.91	188.13	3.24	3.18	3.21	
	70.00	80.00	114.63	127.00	3.50	3.36	3.43	
	80.00	90.00	152.02	170.31	3.30	3.31	3.30	
	90.00	100.00	54.46	116.21	3.72	3.57	3.64	
	100.00	110.00	119.07	151.22	3.62	3.26	3.42	
	110.00	120.00	42.55	109.37	3.46	3.53	3.50	
	120.00	130.00	50.71	64.90	3.47	3.64	3.55	
	130.00	140.00	14.37	87.58	3.50	3.01	3.23	
	140.00	150.00	58.67	91.49	3.43	3.59	3.51	
	150.00	160.00	64.88	67.99	3.37	3.28	3.32	
	160.00	170.00	70.00	160.04	3.55	2.99	3.23	
	170.00	180.00	145.33	142.44	3.54	3.11	3.30	
	180.00	190.00	65.26	51.95	3.43	3.67	3.54	
	190.00	200.00	100.72	99.28	3.70	3.59	3.65	
	200.00	210.00	159.99	204.02	3.76	3.53	3.64	
	210.00	220.00	86.93	165.09	2.76	2.05	2.35	
	220.00	230.00	60.90	115.94	3.59	3.36	3.47	
	230.00	240.00	258.98	273.31	2.42	2.06	2.22	
	240.00	250.00	287.32	199.57	2.25	2.70	2.45	
	250.00	260.00	288.29	177.44	1.64	2.28	1.91	
	260.00	270.00	1397.82	1176.65	.00	.00	.00	
	270.00	280.00	913.05	1497.54	.47	.19	.29	
	280.00	290.00	332.49	277.77	1.48	1.93	1.67	
	290.00	300.00	169.22	193.22	2.46	2.75	2.60	
	300.00	310.00	224.15	250.27	2.19	3.04	2.53	
	310.00	320.00	283.47	225.14	2.87	2.86	2.87	
	320.00	330.00	119.23	173.94	2.81	3.34	3.04	
	330.00	340.00	270.28	246.75	2.19	3.11	2.55	
	340.00	350.00	151.49	231.79	2.25	2.71	2.45	
	350.00	360.00	179.15	102.24	2.13	2.96	2.46	
	360.00	370.00	188.96	160.35	2.91	2.83	2.87	
	370.00	380.00	63.77	161.02	2.49	3.02	2.72	
	380.00	390.00	76.18	120.00	3.28	2.96	3.11	
	390.00	400.00	72.62	89.24	3.30	2.09	2.52	
	400.00	410.00	90.76	54.01	3.42	2.41	2.79	

410.00	420.00	57.24	43.72	3.46	2.63	2.96
420.00	430.00	110.43	283.92	3.30	2.76	3.00
430.00	440.00	34.43	50.56	3.60	2.88	3.18
440.00	450.00	68.02	132.85	3.61	3.08	3.31
450.00	460.00	32.06	113.58	3.59	3.42	3.50
460.00	470.00	57.32	80.63	3.39	3.16	3.27
470.00	480.00	69.18	79.42	3.80	2.74	3.13
480.00	490.00	55.94	61.59	3.00	3.01	3.01
490.00	500.00	76.69	57.25	2.73	3.45	3.03
500.00	510.00	64.62	42.84	3.56	3.11	3.31
510.00	520.00	51.66	38.08	3.39	2.95	3.14
520.00	529.48	38.07	25.35	3.61	2.99	3.25

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
F:\10THS\SR267NB.ERD	.00	529.48	198.39	221.92	.55	.59	.57
	.00	10.00	182.29	150.69	2.49	2.50	2.50
	10.00	20.00	109.91	139.71	3.75	2.78	3.15
	20.00	30.00	121.36	121.16	3.05	3.29	3.16
	30.00	40.00	142.21	136.05	3.02	3.04	3.03
	40.00	50.00	61.31	84.93	3.22	3.45	3.33
	50.00	60.00	100.66	156.18	3.32	3.05	3.18
	60.00	70.00	138.73	142.06	3.38	3.05	3.20
	70.00	80.00	90.40	127.02	3.75	3.32	3.51
	80.00	90.00	92.33	88.01	3.27	3.05	3.15
	90.00	100.00	134.32	67.49	2.73	3.72	3.10
	100.00	110.00	114.05	109.36	3.20	3.19	3.20
	110.00	120.00	94.80	91.07	3.65	3.16	3.37
	120.00	130.00	104.13	194.58	3.42	3.18	3.29
	130.00	140.00	120.06	151.99	3.51	3.03	3.24
	140.00	150.00	123.90	148.01	3.59	3.36	3.47
	150.00	160.00	133.73	266.30	2.32	1.89	2.08
	160.00	170.00	297.74	288.28	2.24	2.00	2.11
	170.00	180.00	117.48	198.67	2.63	2.78	2.70
	180.00	190.00	228.95	316.65	2.78	1.62	2.03
	190.00	200.00	342.86	383.60	1.61	1.75	1.68
	200.00	210.00	469.17	278.39	1.61	1.94	1.76
	210.00	220.00	561.86	240.44	2.19	2.94	2.50
	220.00	230.00	230.06	503.75	1.59	.66	.96
	230.00	240.00	341.67	436.82	2.91	2.10	2.42
	240.00	250.00	205.87	282.24	2.15	1.42	1.71
	250.00	260.00	359.12	544.85	.88	.00	.01
	260.00	270.00	789.51	819.84	.00	.00	.00
	270.00	280.00	979.37	492.61	.00	2.03	.01
	280.00	290.00	259.90	465.47	2.69	1.21	1.67
	290.00	300.00	110.70	202.49	3.46	1.79	2.31
	300.00	310.00	134.16	228.77	3.39	1.91	2.40
	310.00	320.00	48.24	120.29	3.51	3.43	3.47
	320.00	330.00	165.28	278.65	2.62	1.55	1.94
	330.00	340.00	91.88	57.11	3.59	3.19	3.37
	340.00	350.00	175.20	182.93	2.91	3.08	3.00
	350.00	360.00	155.26	121.92	2.92	3.13	3.02
	360.00	370.00	199.62	167.50	2.75	2.07	2.35
	370.00	380.00	135.45	367.84	3.44	.37	.78
	380.00	390.00	167.93	179.83	2.41	1.94	2.15
	390.00	400.00	273.47	247.22	3.09	3.15	3.12
	400.00	410.00	267.09	351.73	3.34	3.17	3.25

410.00	420.00	236.11	218.61	3.06	3.13	3.09
420.00	430.00	313.66	419.05	2.90	3.52	3.16
430.00	440.00	149.67	157.42	3.18	3.48	3.32
440.00	450.00	84.89	114.05	3.84	3.56	3.69
450.00	460.00	124.70	180.38	3.29	3.63	3.45
460.00	470.00	67.91	80.73	3.54	3.65	3.59
470.00	480.00	71.16	122.29	2.87	3.21	3.02
480.00	490.00	181.46	103.01	3.03	2.66	2.83
490.00	500.00	78.60	99.94	2.55	3.21	2.83
500.00	510.00	83.78	57.81	3.44	3.50	3.47
510.00	520.00	67.31	104.10	3.58	3.46	3.52
520.00	529.48	89.15	130.16	3.67	3.73	3.70

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Input files from directory "F:\10THS"

Filename	Start:	End:	IRI:		RN: 0-5		Both
	ft	ft	LElev.	RElev.	LElev.	RElev.	
-----							
F:\10THS\SR267SB.ERD							
	.00	529.48	187.22	188.35	.46	.52	.49
	.00	10.00	81.01	71.95	3.30	3.54	3.41
	10.00	20.00	94.62	124.18	3.36	3.07	3.21
	20.00	30.00	52.74	76.33	3.92	3.51	3.69
	30.00	40.00	45.49	56.07	3.90	3.34	3.58
	40.00	50.00	100.72	125.13	3.56	3.36	3.46
	50.00	60.00	143.65	116.14	3.21	3.12	3.16
	60.00	70.00	84.30	160.70	3.60	3.49	3.54
	70.00	80.00	162.10	135.48	3.52	3.48	3.49
	80.00	90.00	199.21	163.65	3.77	3.74	3.75
	90.00	100.00	90.30	117.73	3.51	3.43	3.47
	100.00	110.00	79.48	81.50	3.35	3.51	3.42
	110.00	120.00	38.21	76.92	3.59	3.23	3.39
	120.00	130.00	68.02	92.41	3.81	3.51	3.65
	130.00	140.00	18.21	116.87	3.72	3.20	3.43
	140.00	150.00	83.21	65.93	3.60	3.80	3.69
	150.00	160.00	46.68	94.34	3.42	3.23	3.32
	160.00	170.00	50.07	132.38	3.34	3.28	3.31
	170.00	180.00	204.16	108.23	3.18	3.17	3.17
	180.00	190.00	129.05	98.73	2.99	3.30	3.13
	190.00	200.00	341.10	217.92	1.08	3.09	1.61
	200.00	210.00	149.72	110.62	2.70	3.49	3.02
	210.00	220.00	258.06	355.66	2.63	1.85	2.16
	220.00	230.00	164.52	95.20	2.50	3.05	2.74
	230.00	240.00	226.25	255.81	2.39	2.11	2.24
	240.00	250.00	138.72	408.52	2.27	.75	1.17
	250.00	260.00	426.50	671.27	.00	.00	.00
	260.00	270.00	1244.71	1076.90	.00	.00	.00
	270.00	280.00	1503.62	262.24	.00	1.13	.01
	280.00	290.00	226.89	542.34	2.57	1.27	1.70
	290.00	300.00	111.64	424.37	3.06	1.34	1.85
	300.00	310.00	139.49	230.69	3.04	1.98	2.38
	310.00	320.00	103.03	198.23	2.72	2.35	2.52
	320.00	330.00	84.28	196.05	3.06	2.72	2.87
	330.00	340.00	121.20	164.68	2.76	2.75	2.75
	340.00	350.00	139.50	172.90	2.93	2.86	2.90
	350.00	360.00	318.02	202.81	1.51	2.58	1.90
	360.00	370.00	208.84	117.79	3.16	3.14	3.15
	370.00	380.00	211.91	167.74	3.59	3.29	3.43
	380.00	390.00	64.13	124.17	4.00	3.54	3.74
	390.00	400.00	211.26	47.55	3.43	3.88	3.62
	400.00	410.00	95.91	157.34	3.52	3.65	3.58

410.00	420.00	106.29	89.52	3.59	3.37	3.48
420.00	430.00	167.04	36.35	3.75	3.62	3.68
430.00	440.00	58.96	60.82	3.78	3.63	3.71
440.00	450.00	64.22	173.71	2.88	3.50	3.14
450.00	460.00	215.07	144.59	2.69	3.20	2.92
460.00	470.00	132.42	159.61	3.43	2.87	3.11
470.00	480.00	168.91	175.45	3.79	3.31	3.52
480.00	490.00	115.25	117.15	3.30	3.54	3.41
490.00	500.00	194.27	165.09	2.80	3.30	3.02
500.00	510.00	76.21	132.17	3.08	3.07	3.07
510.00	520.00	117.53	153.47	3.30	3.00	3.14
520.00	529.48	284.89	303.33	3.04	2.68	2.85

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\SR136WB1.ERD							
	.00	529.48	264.13	300.73	.79	.87	.83
	.00	10.00	178.20	164.36	1.52	1.93	1.70
	10.00	20.00	174.31	169.14	1.46	1.75	1.59
	20.00	30.00	789.91	793.67	.39	.50	.44
	30.00	40.00	258.46	325.93	1.58	.89	1.15
	40.00	50.00	268.36	310.34	2.59	2.15	2.35
	50.00	60.00	167.81	232.21	2.10	2.25	2.18
	60.00	70.00	58.33	66.10	3.34	2.99	3.15
	70.00	80.00	145.15	177.00	2.46	1.56	1.91
	80.00	90.00	86.07	378.80	2.57	1.12	1.57
	90.00	100.00	127.76	255.30	2.06	2.07	2.06
	100.00	110.00	193.42	192.11	2.12	1.21	1.54
	110.00	120.00	113.03	212.97	2.61	2.68	2.65
	120.00	130.00	94.70	167.27	2.30	2.34	2.32
	130.00	140.00	170.43	206.81	2.73	2.39	2.55
	140.00	150.00	115.39	289.16	1.43	1.08	1.23
	150.00	160.00	140.82	257.41	2.53	1.12	1.56
	160.00	170.00	287.66	400.62	1.68	1.45	1.55
	170.00	180.00	133.86	223.80	2.31	1.69	1.95
	180.00	190.00	173.86	254.42	2.72	2.41	2.56
	190.00	200.00	57.33	90.25	1.82	2.29	2.03
	200.00	210.00	111.62	193.22	.71	2.18	1.12
	210.00	220.00	628.78	558.30	.25	.54	.35
	220.00	230.00	430.90	497.14	1.08	.99	1.03
	230.00	240.00	181.11	330.42	2.61	1.85	2.16
	240.00	250.00	418.15	331.04	.73	.74	.74
	250.00	260.00	840.80	1756.26	.36	.01	.03
	260.00	270.00	1227.45	1147.92	.00	.01	.00
	270.00	280.00	1656.43	908.83	.08	.32	.15
	280.00	290.00	295.37	443.37	.58	1.20	.80
	290.00	300.00	776.71	267.17	.04	1.72	.16
	300.00	310.00	264.56	171.39	1.79	.70	1.04
	310.00	320.00	222.00	206.48	2.21	2.06	2.13
	320.00	330.00	336.31	429.13	2.61	1.54	1.93
	330.00	340.00	249.01	404.56	2.12	.43	.80
	340.00	350.00	236.44	218.20	2.45	.91	1.36
	350.00	360.00	201.76	319.89	2.45	2.90	2.65
	360.00	370.00	149.27	223.91	3.23	.47	.91
	370.00	380.00	89.01	372.36	3.00	.99	1.51
	380.00	390.00	183.67	214.01	2.46	2.91	2.66
	390.00	400.00	123.96	177.05	3.06	1.92	2.34
	400.00	410.00	89.76	156.96	2.73	2.21	2.44

410.00	420.00	77.47	142.86	2.28	2.78	2.50
420.00	430.00	182.68	136.95	2.16	2.52	2.33
430.00	440.00	85.53	39.43	3.19	2.90	3.04
440.00	450.00	114.57	93.10	2.42	2.89	2.62
450.00	460.00	173.86	149.10	3.16	2.92	3.03
460.00	470.00	115.50	122.22	2.68	2.73	2.70
470.00	480.00	130.82	128.10	2.27	2.86	2.52
480.00	490.00	146.77	159.23	2.18	2.26	2.22
490.00	500.00	63.43	80.21	3.08	3.18	3.13
500.00	510.00	221.86	238.17	1.96	1.55	1.73
510.00	520.00	88.38	60.72	2.84	2.71	2.77
520.00	529.48	134.67	67.47	2.50	2.86	2.66

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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\SR136EB1.ERD							
	.00	529.48	219.35	263.25	1.05	.71	.86
	.00	10.00	192.63	136.04	1.94	1.74	1.84
	10.00	20.00	136.50	180.54	2.72	1.88	2.21
	20.00	30.00	163.39	135.88	2.08	2.46	2.25
	30.00	40.00	187.11	152.36	1.71	1.89	1.80
	40.00	50.00	55.77	141.08	1.85	2.61	2.16
	50.00	60.00	182.86	158.04	1.50	2.88	1.96
	60.00	70.00	193.72	132.63	2.03	2.90	2.37
	70.00	80.00	280.12	152.92	2.17	2.74	2.42
	80.00	90.00	99.06	61.80	2.25	2.16	2.20
	90.00	100.00	126.61	112.26	2.23	2.63	2.41
	100.00	110.00	84.89	103.60	2.57	2.66	2.61
	110.00	120.00	80.95	105.74	2.75	2.82	2.78
	120.00	130.00	107.96	28.12	2.54	2.76	2.64
	130.00	140.00	60.90	238.24	2.94	.44	.86
	140.00	150.00	72.52	110.09	3.18	3.00	3.09
	150.00	160.00	131.30	202.25	2.22	1.22	1.58
	160.00	170.00	193.44	212.58	3.05	.92	1.43
	170.00	180.00	85.08	92.63	2.37	2.37	2.37
	180.00	190.00	107.77	216.21	2.57	1.41	1.82
	190.00	200.00	201.87	332.39	1.44	2.11	1.71
	200.00	210.00	224.51	153.98	2.32	2.56	2.43
	210.00	220.00	147.50	192.46	2.04	2.81	2.35
	220.00	230.00	231.57	332.73	2.38	1.18	1.59
	230.00	240.00	119.20	116.86	2.36	2.37	2.37
	240.00	250.00	202.78	320.46	1.52	.85	1.10
	250.00	260.00	1088.15	1143.59	.18	.01	.03
	260.00	270.00	1052.32	1230.10	.01	.01	.01
	270.00	280.00	1629.84	766.12	.02	.41	.08
	280.00	290.00	308.66	458.69	.72	.91	.81
	290.00	300.00	281.46	328.15	2.24	.00	.04
	300.00	310.00	108.82	597.81	2.13	2.10	2.11
	310.00	320.00	221.16	358.24	2.41	2.07	2.22
	320.00	330.00	490.11	639.01	1.31	.68	.92
	330.00	340.00	296.36	179.43	1.03	2.30	1.44
	340.00	350.00	132.99	101.35	2.03	2.63	2.28
	350.00	360.00	62.13	173.07	2.91	2.27	2.54
	360.00	370.00	81.70	181.37	2.51	2.27	2.38
	370.00	380.00	186.97	237.77	2.01	1.79	1.89
	380.00	390.00	71.30	144.04	2.45	2.11	2.27
	390.00	400.00	150.35	163.50	1.89	1.34	1.57
	400.00	410.00	118.77	191.82	3.23	1.55	2.07

410.00	420.00	115.03	169.92	2.47	2.05	2.24
420.00	430.00	133.21	127.58	2.14	2.12	2.13
430.00	440.00	111.94	374.56	2.81	1.67	2.08
440.00	450.00	80.15	265.04	3.11	1.46	1.97
450.00	460.00	134.84	211.12	2.38	1.79	2.04
460.00	470.00	129.41	264.66	2.88	1.95	2.31
470.00	480.00	70.56	217.91	1.95	2.16	2.05
480.00	490.00	141.71	258.07	2.50	1.65	1.98
490.00	500.00	100.63	252.96	2.84	1.87	2.24
500.00	510.00	196.34	97.77	2.54	1.75	2.07
510.00	520.00	267.57	384.36	1.12	1.76	1.38
520.00	529.48	182.21	218.44	1.35	1.32	1.34

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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\SR136EB2.ERD							
	.00	529.48	249.13	237.40	1.20	1.18	1.19
	.00	10.00	299.44	344.81	1.96	1.66	1.80
	10.00	20.00	198.67	241.06	2.26	.48	.86
	20.00	30.00	465.22	601.76	2.57	1.85	2.14
	30.00	40.00	408.20	384.06	2.07	1.72	1.88
	40.00	50.00	371.23	327.65	2.98	3.27	3.12
	50.00	60.00	500.91	540.49	2.34	2.80	2.55
	60.00	70.00	358.68	399.12	1.09	1.23	1.16
	70.00	80.00	692.22	739.32	.01	.00	.00
	80.00	90.00	1002.10	528.79	.18	.19	.19
	90.00	100.00	482.93	837.31	.74	1.13	.90
	100.00	110.00	856.30	693.89	.13	.61	.25
	110.00	120.00	461.30	529.26	1.73	1.88	1.80
	120.00	130.00	786.87	604.17	1.99	2.92	2.35
	130.00	140.00	572.99	280.42	1.10	2.64	1.57
	140.00	150.00	303.37	198.76	2.15	3.35	2.58
	150.00	160.00	196.21	221.38	2.65	3.83	3.07
	160.00	170.00	355.38	259.61	2.88	3.85	3.25
	170.00	180.00	238.45	130.02	3.41	3.08	3.23
	180.00	190.00	182.22	162.04	3.28	2.49	2.81
	190.00	200.00	181.64	249.36	2.38	2.16	2.26
	200.00	210.00	141.63	195.46	2.56	2.50	2.53
	210.00	220.00	57.09	105.29	3.49	3.51	3.50
	220.00	230.00	40.64	41.13	4.07	3.60	3.80
	230.00	240.00	97.29	162.00	3.80	3.04	3.34
	240.00	250.00	95.05	146.53	3.68	3.69	3.69
	250.00	260.00	90.15	74.14	3.75	3.45	3.59
	260.00	270.00	224.18	336.17	.69	1.10	.86
	270.00	280.00	92.13	136.91	3.39	3.55	3.46
	280.00	290.00	39.15	83.84	3.53	3.22	3.36
	290.00	300.00	104.70	99.69	3.54	3.73	3.63
	300.00	310.00	98.15	96.86	3.59	3.56	3.58
	310.00	320.00	69.03	55.94	3.29	3.96	3.57
	320.00	330.00	100.24	128.60	2.89	3.16	3.02
	330.00	340.00	187.32	134.69	1.20	3.28	1.75
	340.00	350.00	161.43	107.15	1.02	3.31	1.57
	350.00	360.00	167.82	123.41	1.60	3.60	2.16
	360.00	370.00	89.89	70.57	2.87	3.75	3.21
	370.00	380.00	75.73	43.97	2.74	3.24	2.96
	380.00	390.00	70.97	173.29	2.18	1.85	2.00
	390.00	400.00	59.90	54.67	3.20	3.59	3.38

400.00	410.00	84.82	76.04	3.24	3.54	3.38
410.00	420.00	190.30	39.96	2.13	3.65	2.63
420.00	430.00	65.29	73.18	3.66	3.88	3.76
430.00	440.00	109.44	93.15	3.80	3.46	3.61
440.00	450.00	59.06	57.09	3.94	3.36	3.61
450.00	460.00	53.76	46.06	3.88	3.81	3.85
460.00	470.00	71.55	80.96	2.54	3.05	2.77
470.00	480.00	87.50	57.60	2.43	3.64	2.86
480.00	490.00	78.05	178.27	3.57	1.96	2.48
490.00	500.00	83.08	161.96	3.34	2.62	2.92
500.00	510.00	407.86	517.89	.33	.65	.45
510.00	520.00	692.41	346.45	.90	1.63	1.17
520.00	529.48	187.97	207.51	2.40	3.23	2.73

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\MM\RAW\SYNC\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\SYNC\ERD\SR136EB2.ERD							
	.00	529.22	232.18	241.54	1.47	1.14	1.28
	.00	10.00	316.47	308.09	.60	1.13	.80
	10.00	20.00	319.50	337.10	2.96	2.55	2.74
	20.00	30.00	403.57	406.62	2.15	2.25	2.20
	30.00	40.00	308.70	374.84	2.33	1.89	2.09
	40.00	50.00	394.12	333.75	2.76	2.98	2.86
	50.00	60.00	435.98	482.40	2.63	2.51	2.57
	60.00	70.00	264.45	449.28	1.62	1.28	1.43
	70.00	80.00	762.84	769.95	.02	.00	.00
	80.00	90.00	817.46	430.61	.70	1.36	.94
	90.00	100.00	485.42	1230.51	.97	1.06	1.01
	100.00	110.00	733.07	727.36	.78	.68	.73
	110.00	120.00	480.66	660.12	1.94	1.76	1.85
	120.00	130.00	679.66	645.53	2.14	1.98	2.06
	130.00	140.00	436.61	324.48	1.79	2.16	1.96
	140.00	150.00	210.80	103.66	2.89	3.31	3.08
	150.00	160.00	213.50	187.28	3.67	3.64	3.65
	160.00	170.00	389.98	212.78	3.95	3.75	3.84
	170.00	180.00	117.40	155.96	3.86	2.92	3.28
	180.00	190.00	181.23	204.50	2.16	1.94	2.05
	190.00	200.00	191.63	142.41	2.49	2.35	2.42
	200.00	210.00	146.34	190.24	1.80	2.58	2.12
	210.00	220.00	69.29	103.80	3.63	3.48	3.55
	220.00	230.00	52.58	114.02	3.71	3.60	3.65
	230.00	240.00	84.32	161.55	3.66	3.09	3.33
	240.00	250.00	103.67	135.33	3.73	3.69	3.71
	250.00	260.00	61.65	64.19	3.27	3.50	3.38
	260.00	270.00	229.50	342.26	.90	1.13	1.01
	270.00	280.00	114.42	136.25	3.40	3.47	3.43
	280.00	290.00	56.48	86.83	3.20	2.87	3.02
	290.00	300.00	89.64	80.32	3.63	3.55	3.59
	300.00	310.00	84.05	101.75	3.64	3.60	3.62
	310.00	320.00	61.72	47.83	3.51	3.98	3.71
	320.00	330.00	78.73	130.29	3.92	3.18	3.48
	330.00	340.00	149.80	148.67	1.86	3.28	2.34
	340.00	350.00	94.71	120.83	3.14	3.08	3.11
	350.00	360.00	65.55	130.48	2.91	3.45	3.14
	360.00	370.00	76.72	75.72	1.37	3.71	1.96
	370.00	380.00	145.68	57.85	1.90	2.35	2.10
	380.00	390.00	84.90	153.07	1.52	1.95	1.71
	390.00	400.00	79.85	61.19	3.08	3.31	3.19

400.00	410.00	113.18	90.14	3.34	3.59	3.46
410.00	420.00	183.84	42.05	1.68	3.50	2.22
420.00	430.00	54.91	65.93	3.83	3.64	3.73
430.00	440.00	95.66	91.01	3.48	3.39	3.43
440.00	450.00	59.69	38.42	3.85	3.74	3.79
450.00	460.00	48.44	41.95	3.95	3.95	3.95
460.00	470.00	74.66	77.96	2.27	3.29	2.66
470.00	480.00	79.84	55.41	2.30	3.77	2.79
480.00	490.00	81.17	158.40	3.51	2.18	2.64
490.00	500.00	67.46	164.99	3.34	2.66	2.94
500.00	510.00	460.55	543.46	.26	.74	.42
510.00	520.00	730.72	320.60	.83	1.79	1.16
520.00	529.22	179.89	190.83	2.15	3.20	2.54

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Input files from directory "F:\NEW\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\NEW\10THS\ERD\SR136WB2.ERD							
	.00	529.48	205.37	235.63	1.68	1.23	1.43
	.00	10.00	100.40	110.57	2.55	2.92	2.72
	10.00	20.00	274.90	106.51	1.74	3.84	2.32
	20.00	30.00	67.17	132.15	3.86	3.60	3.72
	30.00	40.00	70.18	77.76	3.75	3.63	3.69
	40.00	50.00	49.49	90.24	3.96	3.58	3.75
	50.00	60.00	146.12	180.87	3.66	3.68	3.67
	60.00	70.00	87.01	86.71	4.01	3.13	3.47
	70.00	80.00	79.39	128.28	4.04	3.73	3.87
	80.00	90.00	145.00	108.27	3.84	3.71	3.77
	90.00	100.00	149.41	152.51	1.22	2.52	1.64
	100.00	110.00	66.77	176.75	2.96	2.88	2.92
	110.00	120.00	374.55	495.21	.53	.64	.58
	120.00	130.00	214.43	343.85	2.29	.65	1.07
	130.00	140.00	109.83	109.05	3.84	3.06	3.37
	140.00	150.00	157.22	347.81	2.34	1.20	1.60
	150.00	160.00	270.76	324.33	1.52	1.33	1.42
	160.00	170.00	159.18	293.02	3.78	1.40	1.98
	170.00	180.00	193.10	354.75	2.00	.95	1.31
	180.00	190.00	69.44	177.64	3.94	2.47	2.95
	190.00	200.00	52.00	83.88	3.90	3.79	3.85
	200.00	210.00	72.71	79.92	3.69	3.71	3.70
	210.00	220.00	37.29	66.98	3.89	3.49	3.67
	220.00	230.00	324.64	110.46	1.00	2.94	1.51
	230.00	240.00	279.43	138.89	2.31	3.20	2.66
	240.00	250.00	132.11	206.37	3.40	2.09	2.55
	250.00	260.00	50.05	93.46	3.71	3.09	3.35
	260.00	270.00	68.03	112.16	3.51	3.57	3.54
	270.00	280.00	68.96	121.77	2.25	2.65	2.43
	280.00	290.00	300.59	93.23	1.90	2.89	2.27
	290.00	300.00	57.63	116.48	3.43	3.13	3.27
	300.00	310.00	64.88	55.00	3.34	3.85	3.56
	310.00	320.00	71.40	55.87	3.35	3.61	3.47
	320.00	330.00	64.51	58.15	4.00	2.90	3.30
	330.00	340.00	66.95	123.27	3.48	2.76	3.06
	340.00	350.00	129.05	85.15	3.13	3.31	3.22
	350.00	360.00	59.39	50.08	3.00	3.44	3.20
	360.00	370.00	433.31	550.53	1.08	1.07	1.07
	370.00	380.00	153.17	74.54	2.53	3.08	2.77
	380.00	390.00	561.75	287.25	.37	.50	.43
	390.00	400.00	586.81	552.34	.76	.98	.86
	400.00	410.00	486.17	447.81	.76	.95	.84
	410.00	420.00	958.53	803.08	.04	.00	.01
	420.00	430.00	520.01	512.93	2.74	1.91	2.24

430.00	440.00	263.64	299.50	2.52	2.98	2.72
440.00	450.00	123.78	237.57	2.89	3.30	3.08
450.00	460.00	229.71	181.77	2.36	3.02	2.64
460.00	470.00	247.69	347.40	3.64	2.33	2.79
470.00	480.00	209.10	389.40	3.30	1.89	2.36
480.00	490.00	558.92	1000.67	2.92	2.56	2.73
490.00	500.00	378.46	383.46	3.42	2.66	2.97
500.00	510.00	109.47	295.16	3.60	3.07	3.30
510.00	520.00	226.12	512.06	2.79	2.73	2.76
520.00	529.48	127.01	76.40	3.06	2.92	2.99

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\MM\RAW\SYNC\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\MM\RAW\SYNC\ERD\SR136WB2.ERD							
	.00	529.22	203.25	239.00	1.64	1.17	1.37
	.00	10.00	92.58	128.14	3.17	2.70	2.91
	10.00	20.00	295.54	126.94	1.24	3.53	1.81
	20.00	30.00	67.03	144.99	3.88	3.92	3.90
	30.00	40.00	64.76	84.34	3.90	3.46	3.65
	40.00	50.00	37.33	96.85	3.87	3.19	3.47
	50.00	60.00	137.61	195.07	4.10	3.52	3.76
	60.00	70.00	82.07	71.32	4.07	3.54	3.76
	70.00	80.00	62.75	150.97	3.72	3.66	3.69
	80.00	90.00	155.39	108.28	3.92	3.58	3.73
	90.00	100.00	143.40	146.46	1.89	2.53	2.16
	100.00	110.00	52.44	179.11	3.10	2.95	3.02
	110.00	120.00	407.48	460.89	.42	.63	.51
	120.00	130.00	186.67	372.71	2.45	.37	.74
	130.00	140.00	107.75	164.77	3.72	3.10	3.36
	140.00	150.00	167.88	338.55	1.67	1.13	1.36
	150.00	160.00	250.16	348.57	1.52	1.39	1.45
	160.00	170.00	158.75	286.02	3.75	1.45	2.04
	170.00	180.00	197.25	349.67	1.99	.99	1.34
	180.00	190.00	69.32	178.73	3.84	2.54	2.99
	190.00	200.00	47.31	95.37	3.91	3.80	3.85
	200.00	210.00	78.29	79.97	3.42	3.46	3.44
	210.00	220.00	47.28	63.75	3.72	3.48	3.59
	220.00	230.00	269.55	102.12	1.12	2.92	1.62
	230.00	240.00	316.21	138.99	2.21	3.04	2.54
	240.00	250.00	128.72	196.56	3.36	2.11	2.55
	250.00	260.00	64.13	91.50	3.63	3.02	3.28
	260.00	270.00	65.55	120.90	3.68	3.50	3.59
	270.00	280.00	48.73	108.55	2.85	3.26	3.04
	280.00	290.00	292.14	88.03	1.39	2.84	1.86
	290.00	300.00	81.03	124.46	3.34	2.95	3.12
	300.00	310.00	74.90	54.70	3.48	3.60	3.54
	310.00	320.00	70.19	73.01	3.58	3.42	3.50
	320.00	330.00	52.26	99.30	3.64	2.04	2.55
	330.00	340.00	52.71	134.66	3.35	2.27	2.67
	340.00	350.00	126.85	80.47	3.07	3.31	3.19
	350.00	360.00	88.21	42.56	3.32	3.49	3.40
	360.00	370.00	406.21	564.23	1.10	1.09	1.10
	370.00	380.00	146.22	92.82	2.51	2.89	2.68
	380.00	390.00	554.71	290.42	.40	.38	.39
	390.00	400.00	573.07	556.93	.75	.98	.85
	400.00	410.00	500.67	451.18	.69	1.39	.94
	410.00	420.00	968.30	801.73	.04	.00	.01
	420.00	430.00	542.73	549.43	2.66	1.81	2.14

430.00	440.00	283.01	284.86	2.20	2.96	2.51
440.00	450.00	126.65	216.85	3.09	3.13	3.11
450.00	460.00	209.45	208.32	2.23	2.85	2.49
460.00	470.00	255.95	311.66	3.63	2.49	2.91
470.00	480.00	183.03	352.22	2.81	1.86	2.23
480.00	490.00	545.17	983.74	3.45	2.53	2.89
490.00	500.00	359.95	392.29	3.32	2.62	2.91
500.00	510.00	107.68	308.04	3.69	3.17	3.39
510.00	520.00	195.95	496.73	3.12	2.39	2.69
520.00	529.22	148.54	101.33	3.28	3.16	3.22

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Input files from directory "F:\10THS\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
F:\10THS\ERD\SR3247EB.ERD	.00	529.48	155.75	181.27	1.16	1.34	1.25
	.00	10.00	197.07	221.78	2.20	2.11	2.15
	10.00	20.00	232.78	274.02	1.80	1.24	1.48
	20.00	30.00	188.73	222.47	3.61	3.47	3.54
	30.00	40.00	52.43	51.73	3.68	3.76	3.72
	40.00	50.00	180.53	186.36	3.49	3.51	3.50
	50.00	60.00	166.73	142.89	3.57	3.80	3.68
	60.00	70.00	44.83	61.47	3.84	3.77	3.80
	70.00	80.00	94.95	106.69	2.54	2.83	2.67
	80.00	90.00	111.12	148.83	3.06	2.85	2.95
	90.00	100.00	90.41	106.00	3.34	3.35	3.34
	100.00	110.00	46.62	31.53	3.38	3.66	3.51
	110.00	120.00	67.87	60.75	3.56	3.40	3.48
	120.00	130.00	137.74	174.85	3.20	3.63	3.39
	130.00	140.00	113.93	106.85	2.53	3.02	2.75
	140.00	150.00	151.06	174.67	3.69	3.04	3.31
	150.00	160.00	158.63	163.37	2.34	1.78	2.02
	160.00	170.00	84.05	102.61	3.44	3.57	3.50
	170.00	180.00	202.08	206.36	2.68	2.29	2.47
	180.00	190.00	358.25	668.12	1.13	.07	.21
	190.00	200.00	1030.19	1110.04	.00	.01	.00
	200.00	210.00	1152.22	978.83	.05	.29	.11
	210.00	220.00	73.50	493.61	.99	.78	.87
	220.00	230.00	172.25	153.03	2.84	3.15	2.98
	230.00	240.00	204.31	383.90	3.01	2.76	2.87
	240.00	250.00	214.22	381.86	3.53	3.57	3.55
	250.00	260.00	64.30	101.56	3.40	3.54	3.47
	260.00	270.00	68.90	141.18	3.56	3.49	3.52
	270.00	280.00	34.86	57.70	3.80	3.67	3.73
	280.00	290.00	47.90	36.19	3.85	3.70	3.77
	290.00	300.00	76.89	121.43	3.54	2.71	3.04
	300.00	310.00	141.16	84.60	3.93	3.85	3.89
	310.00	320.00	67.62	92.43	2.97	3.11	3.04
	320.00	330.00	112.30	112.40	2.93	3.25	3.08
	330.00	340.00	260.33	307.92	1.79	1.61	1.69
	340.00	350.00	106.88	106.57	2.73	3.74	3.11
	350.00	360.00	82.83	43.39	3.15	3.88	3.44
	360.00	370.00	55.23	55.22	3.33	3.18	3.25
	370.00	380.00	174.24	155.10	2.16	2.10	2.13
	380.00	390.00	45.77	52.52	3.22	3.55	3.37
	390.00	400.00	58.70	73.01	2.90	3.41	3.12
	400.00	410.00	51.04	85.64	3.63	3.60	3.62
	410.00	420.00	56.38	27.83	3.46	3.49	3.48
	420.00	430.00	81.26	97.41	3.58	4.01	3.77

430.00	440.00	44.08	43.43	3.86	3.74	3.80
440.00	450.00	87.52	145.37	2.88	1.75	2.16
450.00	460.00	75.36	152.33	2.35	1.88	2.09
460.00	470.00	33.64	46.43	3.74	3.51	3.62
470.00	480.00	46.65	66.78	3.76	3.21	3.45
480.00	490.00	118.82	71.78	1.27	1.61	1.42
490.00	500.00	300.80	175.44	2.39	2.49	2.44
500.00	510.00	111.33	74.39	3.28	3.96	3.56
510.00	520.00	170.71	217.41	2.25	2.26	2.25
520.00	529.48	124.18	192.17	2.67	2.28	2.46

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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\SR3247EB.ERD							
	.00	529.48	153.51	180.54	1.17	1.35	1.26
	.00	10.00	214.66	206.62	2.20	2.28	2.24
	10.00	20.00	192.32	277.21	3.36	3.06	3.20
	20.00	30.00	201.26	308.03	1.94	1.24	1.52
	30.00	40.00	43.21	53.01	3.53	3.89	3.69
	40.00	50.00	102.52	151.35	3.60	3.51	3.55
	50.00	60.00	189.43	172.27	3.39	3.80	3.57
	60.00	70.00	66.86	36.60	3.89	3.60	3.73
	70.00	80.00	63.21	81.79	3.48	3.47	3.47
	80.00	90.00	119.72	120.70	2.57	2.81	2.68
	90.00	100.00	91.64	168.60	3.48	2.94	3.17
	100.00	110.00	53.33	40.67	3.44	3.64	3.53
	110.00	120.00	45.17	37.39	3.50	3.61	3.55
	120.00	130.00	107.64	89.60	3.14	3.55	3.32
	130.00	140.00	123.15	170.63	3.36	3.31	3.34
	140.00	150.00	115.91	119.60	2.61	3.09	2.83
	150.00	160.00	161.81	209.30	2.34	1.87	2.07
	160.00	170.00	116.04	106.37	3.62	3.03	3.28
	170.00	180.00	170.53	121.72	2.67	3.21	2.91
	180.00	190.00	328.01	341.98	2.67	2.11	2.36
	190.00	200.00	583.54	803.73	.01	.01	.01
	200.00	210.00	1442.14	1274.78	.00	.02	.01
	210.00	220.00	294.11	603.48	.60	.78	.68
	220.00	230.00	164.81	345.43	1.17	1.95	1.47
	230.00	240.00	141.39	206.39	2.90	2.74	2.82
	240.00	250.00	259.66	471.99	3.30	3.66	3.47
	250.00	260.00	80.20	206.82	3.57	3.33	3.44
	260.00	270.00	101.25	165.71	3.17	3.64	3.38
	270.00	280.00	32.09	72.17	3.76	3.47	3.60
	280.00	290.00	34.58	46.98	3.90	3.74	3.81
	290.00	300.00	54.73	82.25	3.43	2.71	3.01
	300.00	310.00	108.03	76.83	4.11	3.81	3.95
	310.00	320.00	135.69	122.49	3.04	3.07	3.06
	320.00	330.00	56.27	59.38	3.30	3.64	3.46
	330.00	340.00	270.21	305.91	1.70	1.61	1.66
	340.00	350.00	101.41	159.57	2.84	3.59	3.14
	350.00	360.00	98.24	53.59	2.92	3.83	3.27
	360.00	370.00	68.32	59.36	3.54	3.94	3.71
	370.00	380.00	159.14	151.27	2.19	2.11	2.15
	380.00	390.00	72.20	68.46	3.17	3.48	3.31
	390.00	400.00	73.01	53.39	2.88	3.29	3.07
	400.00	410.00	35.40	90.33	3.68	3.95	3.80
	410.00	420.00	61.44	43.05	3.58	3.40	3.49
	420.00	430.00	76.88	70.61	3.43	3.87	3.62

430.00	440.00	50.68	69.33	3.78	3.83	3.80
440.00	450.00	67.77	60.55	3.93	3.59	3.74
450.00	460.00	102.03	216.17	2.19	1.23	1.58
460.00	470.00	37.97	66.00	3.93	3.61	3.75
470.00	480.00	39.71	62.15	3.57	3.06	3.28
480.00	490.00	37.59	61.03	3.79	3.79	3.79
490.00	500.00	364.09	160.25	1.17	1.40	1.28
500.00	510.00	130.72	85.70	3.31	3.80	3.52
510.00	520.00	118.69	107.69	2.24	2.55	2.38
520.00	529.48	144.02	243.93	3.34	2.62	2.92

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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\SR231SB2.ERD							
	.00	529.48	244.30	246.13	1.54	1.76	1.65
	.00	10.00	98.82	91.01	3.01	3.20	3.10
	10.00	20.00	94.31	110.00	3.70	3.70	3.70
	20.00	30.00	83.36	102.30	4.09	3.67	3.85
	30.00	40.00	29.27	65.44	4.33	2.92	3.38
	40.00	50.00	20.42	90.89	4.14	3.49	3.76
	50.00	60.00	46.17	87.74	3.91	3.45	3.65
	60.00	70.00	51.37	41.41	4.01	3.61	3.79
	70.00	80.00	93.97	29.67	3.52	3.91	3.69
	80.00	90.00	88.71	42.17	3.78	3.65	3.71
	90.00	100.00	61.62	39.60	3.46	3.75	3.59
	100.00	110.00	39.30	37.85	3.73	3.96	3.84
	110.00	120.00	39.89	33.20	3.82	3.78	3.80
	120.00	130.00	44.03	75.02	3.84	3.59	3.70
	130.00	140.00	66.68	70.51	3.56	3.50	3.53
	140.00	150.00	53.71	73.98	3.75	3.97	3.85
	150.00	160.00	70.50	40.20	3.66	3.92	3.78
	160.00	170.00	148.42	82.85	3.72	3.80	3.76
	170.00	180.00	72.46	112.09	3.88	3.63	3.74
	180.00	190.00	137.42	103.36	3.49	3.12	3.28
	190.00	200.00	174.92	104.27	1.80	3.03	2.24
	200.00	210.00	537.11	145.37	1.14	2.37	1.55
	210.00	220.00	389.41	133.70	1.47	3.05	1.96
	220.00	230.00	170.83	226.84	2.50	2.09	2.27
	230.00	240.00	141.45	166.49	2.28	2.15	2.21
	240.00	250.00	336.76	309.61	1.52	2.59	1.91
	250.00	260.00	449.05	248.02	1.07	2.34	1.49
	260.00	270.00	765.18	627.34	.01	.06	.03
	270.00	280.00	965.29	926.90	.69	.10	.22
	280.00	290.00	442.18	451.31	2.50	1.77	2.06
	290.00	300.00	525.46	598.63	2.03	2.80	2.34
	300.00	310.00	136.54	377.30	3.09	3.22	3.15
	310.00	320.00	511.36	702.44	2.49	1.34	1.74
	320.00	330.00	441.19	723.12	2.82	2.04	2.35
	330.00	340.00	445.45	518.65	2.06	1.25	1.56
	340.00	350.00	627.09	1131.25	.71	.96	.82
	350.00	360.00	318.32	248.38	2.84	1.59	2.03
	360.00	370.00	794.66	956.05	3.52	3.79	3.65
	370.00	380.00	316.73	580.35	2.81	2.14	2.42
	380.00	390.00	123.56	168.72	3.48	3.37	3.42
	390.00	400.00	372.82	386.27	2.07	3.58	2.56
	400.00	410.00	261.30	427.24	1.49	3.10	1.99
	410.00	420.00	594.52	168.24	.46	2.13	.84
	420.00	430.00	343.25	197.60	.85	1.76	1.17

430.00	440.00	114.71	119.83	1.94	1.87	1.91
440.00	450.00	124.13	55.95	3.48	3.60	3.54
450.00	460.00	99.71	99.16	2.21	2.77	2.45
460.00	470.00	114.92	127.90	2.96	2.84	2.90
470.00	480.00	83.22	47.19	3.33	3.60	3.46
480.00	490.00	215.03	113.18	3.54	2.68	3.02
490.00	500.00	100.86	123.09	3.60	3.62	3.61
500.00	510.00	205.17	133.47	3.77	3.89	3.83
510.00	520.00	246.52	262.31	2.54	3.30	2.85
520.00	529.48	82.36	105.19	3.93	3.41	3.63

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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\SR231NB2.ERD							
	.00	529.48	238.02	311.85	1.64	.98	1.24
	.00	10.00	175.32	258.96	2.33	2.22	2.28
	10.00	20.00	479.03	430.42	.76	.62	.68
	20.00	30.00	550.39	737.20	.71	.68	.69
	30.00	40.00	251.98	462.53	2.50	.90	1.35
	40.00	50.00	228.08	845.13	2.48	.46	.86
	50.00	60.00	199.80	182.51	2.22	1.92	2.06
	60.00	70.00	111.09	189.64	3.53	1.37	1.94
	70.00	80.00	320.96	179.76	.57	2.48	1.00
	80.00	90.00	219.61	310.98	1.22	1.77	1.45
	90.00	100.00	277.43	243.18	1.59	1.39	1.48
	100.00	110.00	207.51	689.59	1.47	.40	.69
	110.00	120.00	159.92	407.61	2.63	.19	.47
	120.00	130.00	161.80	595.90	2.72	.26	.59
	130.00	140.00	163.62	251.19	1.35	1.56	1.45
	140.00	150.00	160.95	268.66	2.12	.60	.99
	150.00	160.00	174.54	982.99	2.93	.23	.54
	160.00	170.00	96.50	387.50	2.64	.11	.33
	170.00	180.00	183.01	197.20	2.51	2.77	2.63
	180.00	190.00	340.79	845.47	.79	.06	.17
	190.00	200.00	276.21	265.19	2.43	2.23	2.32
	200.00	210.00	631.20	702.79	2.48	2.12	2.29
	210.00	220.00	545.08	532.10	3.44	2.87	3.12
	220.00	230.00	178.84	214.39	3.36	3.51	3.43
	230.00	240.00	504.15	447.44	2.64	2.36	2.49
	240.00	250.00	242.60	315.66	1.73	1.84	1.79
	250.00	260.00	165.76	376.20	.78	1.66	1.09
	260.00	270.00	568.74	552.48	.09	.07	.08
	270.00	280.00	830.54	426.38	.28	.18	.22
	280.00	290.00	459.01	396.37	2.07	2.95	2.42
	290.00	300.00	360.12	412.71	2.47	1.47	1.84
	300.00	310.00	559.59	437.75	1.37	1.51	1.43
	310.00	320.00	281.22	414.46	1.30	1.98	1.57
	320.00	330.00	367.69	312.54	1.56	2.05	1.77
	330.00	340.00	381.37	401.93	2.24	2.38	2.31
	340.00	350.00	137.20	268.75	3.16	3.52	3.32
	350.00	360.00	166.66	103.59	3.47	3.96	3.68
	360.00	370.00	111.66	83.07	3.63	3.90	3.75
	370.00	380.00	40.80	68.95	3.92	3.83	3.87
	380.00	390.00	168.54	96.70	3.86	3.84	3.85
	390.00	400.00	128.04	152.25	3.76	3.92	3.84
	400.00	410.00	103.82	85.56	3.70	3.92	3.80
	410.00	420.00	83.90	135.52	3.85	3.93	3.89
	420.00	430.00	142.15	181.65	3.94	3.82	3.88

430.00	440.00	64.40	68.31	3.03	2.98	3.01
440.00	450.00	26.76	88.73	4.04	3.77	3.89
450.00	460.00	126.18	105.95	3.66	4.05	3.83
460.00	470.00	146.42	54.51	3.31	3.51	3.41
470.00	480.00	59.15	75.73	3.54	3.51	3.52
480.00	490.00	66.21	42.48	3.69	3.16	3.38
490.00	500.00	49.65	67.59	4.09	3.83	3.95
500.00	510.00	43.76	73.70	3.91	4.06	3.99
510.00	520.00	65.55	42.56	3.79	4.00	3.89
520.00	529.48	42.24	57.06	4.12	3.98	4.05

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\SR236EB.ERD							
	.00	529.48	314.45	341.45	.65	.44	.53
	.00	10.00	144.42	179.91	2.39	2.64	2.51
	10.00	20.00	153.82	203.16	2.08	1.15	1.49
	20.00	30.00	230.10	295.47	2.20	1.68	1.91
	30.00	40.00	158.14	111.30	1.97	2.27	2.11
	40.00	50.00	134.55	178.48	2.00	1.32	1.59
	50.00	60.00	131.95	119.78	2.47	1.72	2.03
	60.00	70.00	179.84	170.51	1.60	1.23	1.39
	70.00	80.00	152.84	237.11	2.17	.33	.67
	80.00	90.00	126.42	235.88	1.89	.15	.38
	90.00	100.00	112.39	180.27	1.35	.27	.52
	100.00	110.00	199.46	323.01	2.22	.48	.87
	110.00	120.00	83.55	203.40	3.32	.25	.58
	120.00	130.00	114.59	195.13	2.38	.81	1.25
	130.00	140.00	141.30	163.43	2.58	1.31	1.74
	140.00	150.00	127.48	130.17	2.39	1.84	2.08
	150.00	160.00	51.60	71.01	2.35	2.34	2.35
	160.00	170.00	49.66	94.15	2.29	2.04	2.16
	170.00	180.00	72.48	140.34	2.14	1.10	1.46
	180.00	190.00	136.76	165.49	2.91	.44	.86
	190.00	200.00	64.98	149.86	2.98	.65	1.13
	200.00	210.00	33.46	265.94	2.18	.25	.55
	210.00	220.00	136.09	315.70	1.91	.16	.41
	220.00	230.00	280.88	463.17	1.58	.07	.21
	230.00	240.00	404.29	636.60	1.68	.35	.66
	240.00	250.00	738.92	809.63	.67	.85	.75
	250.00	260.00	1056.22	1109.05	.04	.03	.03
	260.00	270.00	1666.93	906.00	.00	.01	.00
	270.00	280.00	2059.64	1958.82	.00	.00	.00
	280.00	290.00	596.88	393.96	.27	.32	.29
	290.00	300.00	1318.46	1549.64	.54	.05	.14
	300.00	310.00	1053.20	1009.32	.43	.33	.37
	310.00	320.00	700.35	927.13	1.37	1.60	1.48
	320.00	330.00	316.41	298.52	2.37	2.73	2.53
	330.00	340.00	234.89	335.47	2.13	2.10	2.12
	340.00	350.00	321.36	314.79	2.27	1.00	1.41
	350.00	360.00	277.17	140.02	1.06	2.91	1.57
	360.00	370.00	290.00	169.43	1.27	.79	.98
	370.00	380.00	165.47	164.07	1.36	1.44	1.40
	380.00	390.00	192.77	135.14	2.48	3.02	2.71
	390.00	400.00	94.10	146.48	1.91	2.77	2.25
	400.00	410.00	117.33	226.86	1.13	1.17	1.15
	410.00	420.00	90.98	110.22	2.86	1.86	2.24
	420.00	430.00	127.21	170.17	2.59	1.58	1.96

430.00	440.00	151.97	149.16	2.76	3.07	2.90
440.00	450.00	194.54	207.36	.70	1.74	1.03
450.00	460.00	238.73	393.16	3.10	1.63	2.11
460.00	470.00	129.76	178.80	3.11	2.79	2.94
470.00	480.00	115.75	195.77	3.12	3.08	3.10
480.00	490.00	203.42	179.65	1.90	2.53	2.17
490.00	500.00	381.90	177.99	1.00	1.49	1.20
500.00	510.00	89.82	194.24	2.97	2.00	2.38
510.00	520.00	159.32	144.68	2.14	1.34	1.65
520.00	529.48	91.53	143.32	2.32	2.03	2.16

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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\SR236WB.ERD							
	.00	529.48	346.74	375.49	.45	.47	.46
	.00	10.00	69.63	336.70	3.27	.49	.94
	10.00	20.00	245.18	401.00	1.20	1.34	1.27
	20.00	30.00	87.55	137.20	2.93	3.12	3.02
	30.00	40.00	271.48	186.20	1.20	1.03	1.11
	40.00	50.00	177.48	106.68	1.59	.71	1.01
	50.00	60.00	121.57	326.30	2.63	1.90	2.20
	60.00	70.00	86.43	225.21	2.08	.11	.32
	70.00	80.00	129.08	533.27	1.75	.01	.07
	80.00	90.00	395.36	272.65	.43	1.31	.69
	90.00	100.00	256.34	510.83	2.83	2.45	2.62
	100.00	110.00	132.96	190.83	2.66	2.71	2.69
	110.00	120.00	220.59	321.32	2.77	3.11	2.93
	120.00	130.00	119.47	225.02	.43	1.07	.64
	130.00	140.00	70.56	152.70	2.69	2.48	2.58
	140.00	150.00	98.86	120.60	3.06	2.75	2.89
	150.00	160.00	320.42	151.13	1.07	1.77	1.34
	160.00	170.00	156.90	186.13	2.32	1.74	1.98
	170.00	180.00	136.80	257.96	2.59	1.21	1.66
	180.00	190.00	129.47	52.88	1.03	1.78	1.32
	190.00	200.00	185.14	170.54	1.73	1.46	1.59
	200.00	210.00	175.40	359.88	2.99	2.07	2.43
	210.00	220.00	213.20	380.23	2.30	1.83	2.04
	220.00	230.00	343.63	679.25	.67	.38	.49
	230.00	240.00	1022.19	1020.80	.25	.28	.26
	240.00	250.00	538.65	445.13	.73	1.53	1.01
	250.00	260.00	1543.95	1369.07	.01	.00	.00
	260.00	270.00	2245.05	1832.33	.00	.00	.00
	270.00	280.00	1146.95	1140.64	.02	.13	.04
	280.00	290.00	1157.50	1028.64	1.53	.93	1.17
	290.00	300.00	1327.49	1205.12	.10	.23	.15
	300.00	310.00	1003.57	1111.78	.02	1.90	.09
	310.00	320.00	681.25	347.48	.34	2.55	.70
	320.00	330.00	755.04	765.35	2.66	2.91	2.78
	330.00	340.00	501.34	526.90	2.66	2.97	2.80
	340.00	350.00	171.61	93.70	2.56	2.80	2.67
	350.00	360.00	307.83	319.13	3.01	2.96	2.98
	360.00	370.00	220.84	269.73	1.89	1.78	1.84
	370.00	380.00	67.91	102.89	2.40	2.73	2.55
	380.00	390.00	146.91	130.38	2.29	2.37	2.33
	390.00	400.00	103.13	149.64	1.44	2.10	1.71
	400.00	410.00	87.67	69.13	2.53	2.80	2.65
	410.00	420.00	124.34	83.76	1.35	2.81	1.82
	420.00	430.00	206.18	103.61	.41	2.64	.81

430.00	440.00	265.60	114.99	.33	1.90	.66
440.00	450.00	86.45	189.51	2.05	2.51	2.25
450.00	460.00	38.96	82.38	2.49	2.59	2.54
460.00	470.00	84.14	149.20	3.08	2.72	2.88
470.00	480.00	49.84	213.26	2.96	2.47	2.69
480.00	490.00	111.50	122.83	1.53	2.18	1.80
490.00	500.00	105.00	79.22	1.69	2.55	2.03
500.00	510.00	64.33	163.87	1.83	1.32	1.54
510.00	520.00	49.40	103.71	3.05	1.72	2.18
520.00	529.48	52.86	286.38	1.77	1.00	1.29

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
F:\10THS\SR234EB.ERD	.00	529.74	301.35	346.77	1.46	1.35	1.40
	.00	10.00	365.30	435.80	1.61	.35	.65
	10.00	20.00	330.57	332.66	2.95	.89	1.40
	20.00	30.00	191.01	195.08	2.58	1.53	1.91
	30.00	40.00	127.55	94.96	2.61	2.22	2.40
	40.00	50.00	159.20	185.29	3.22	2.38	2.71
	50.00	60.00	298.57	267.67	1.34	1.58	1.45
	60.00	70.00	332.55	295.33	2.39	1.55	1.88
	70.00	80.00	451.68	259.54	1.45	1.67	1.55
	80.00	90.00	119.89	215.78	2.35	2.66	2.49
	90.00	100.00	121.35	76.03	2.95	2.92	2.94
	100.00	110.00	167.98	131.37	2.69	2.44	2.56
	110.00	120.00	60.53	196.11	3.23	2.01	2.44
	120.00	130.00	117.15	213.63	2.74	1.61	2.02
	130.00	140.00	201.16	215.96	3.40	2.37	2.76
	140.00	150.00	120.35	113.81	3.62	2.68	3.04
	150.00	160.00	81.94	223.70	3.47	1.93	2.43
	160.00	170.00	113.04	212.10	3.20	2.08	2.49
	170.00	180.00	186.90	195.17	2.42	2.32	2.37
	180.00	190.00	243.13	238.84	2.31	2.65	2.46
	190.00	200.00	127.56	421.75	3.26	1.74	2.24
	200.00	210.00	387.04	506.86	1.78	1.38	1.55
	210.00	220.00	412.31	800.67	1.70	.34	.64
	220.00	230.00	598.16	973.05	.66	.61	.64
	230.00	240.00	173.38	684.25	2.43	2.63	2.52
	240.00	250.00	215.37	432.66	2.32	1.79	2.02
	250.00	260.00	723.00	426.61	.50	.93	.66
	260.00	270.00	1048.28	769.14	.02	.05	.03
	270.00	280.00	917.81	781.46	.43	.50	.46
	280.00	290.00	909.73	964.62	1.26	1.17	1.21
	290.00	300.00	1059.98	1226.75	2.79	2.98	2.88
	300.00	310.00	828.05	1006.91	.45	.55	.50
	310.00	320.00	706.29	726.86	.88	1.97	1.24
	320.00	330.00	540.78	829.20	2.60	2.55	2.57
	330.00	340.00	551.52	709.06	3.64	2.28	2.74
	340.00	350.00	206.49	328.48	2.90	2.26	2.53
	350.00	360.00	438.48	642.69	1.64	.91	1.19
	360.00	370.00	418.49	336.61	2.42	2.80	2.60
	370.00	380.00	166.47	43.35	2.24	2.28	2.26
	380.00	390.00	57.67	78.52	3.07	2.46	2.72
	390.00	400.00	134.20	95.16	3.00	2.96	2.98
	400.00	410.00	191.05	155.37	2.65	2.00	2.27
	410.00	420.00	181.44	87.21	2.60	3.21	2.86
	420.00	430.00	164.40	60.32	2.95	2.55	2.73

430.00	440.00	177.09	84.69	2.65	2.48	2.56
440.00	450.00	144.28	111.36	2.77	3.03	2.89
450.00	460.00	57.33	82.91	2.33	2.82	2.55
460.00	470.00	75.26	107.55	2.86	2.57	2.71
470.00	480.00	80.24	83.75	2.76	3.24	2.97
480.00	490.00	103.98	86.44	2.94	2.73	2.83
490.00	500.00	86.50	84.49	3.48	2.75	3.05
500.00	510.00	118.21	131.35	3.20	2.54	2.82
510.00	520.00	145.44	236.58	2.61	1.98	2.25
520.00	529.74	48.46	149.56	3.33	1.37	1.92

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\SR234WB.ERD							
	.00	529.48	323.81	309.11	1.27	1.45	1.36
	.00	10.00	128.82	134.85	2.45	2.65	2.54
	10.00	20.00	208.87	152.83	2.70	2.54	2.62
	20.00	30.00	84.81	187.33	3.45	2.55	2.91
	30.00	40.00	55.94	99.94	3.44	2.54	2.90
	40.00	50.00	78.53	115.52	3.34	3.26	3.30
	50.00	60.00	78.01	92.85	3.52	3.24	3.37
	60.00	70.00	45.89	88.85	3.70	3.14	3.38
	70.00	80.00	30.41	64.71	3.58	3.46	3.52
	80.00	90.00	53.57	34.18	3.53	3.57	3.55
	90.00	100.00	77.85	48.14	3.61	3.24	3.41
	100.00	110.00	223.19	119.84	2.82	3.42	3.07
	110.00	120.00	102.01	96.26	3.56	3.37	3.46
	120.00	130.00	199.52	171.62	2.21	1.38	1.70
	130.00	140.00	120.75	223.53	3.13	2.46	2.74
	140.00	150.00	127.04	130.26	3.29	3.09	3.18
	150.00	160.00	235.53	113.03	2.88	3.21	3.03
	160.00	170.00	130.16	151.84	1.37	2.81	1.83
	170.00	180.00	873.31	190.27	.11	1.55	.30
	180.00	190.00	763.82	247.32	.89	3.34	1.43
	190.00	200.00	241.48	108.45	3.13	3.44	3.27
	200.00	210.00	139.94	55.18	3.20	2.73	2.94
	210.00	220.00	170.10	48.84	3.10	3.45	3.26
	220.00	230.00	673.99	522.01	.87	1.10	.98
	230.00	240.00	228.34	192.36	2.67	2.65	2.66
	240.00	250.00	445.47	507.58	1.94	2.49	2.18
	250.00	260.00	401.17	306.61	.51	1.28	.76
	260.00	270.00	880.20	1016.80	.02	.02	.02
	270.00	280.00	1669.01	1700.04	.08	.12	.09
	280.00	290.00	716.95	566.44	.51	.46	.49
	290.00	300.00	1508.39	2070.23	1.93	1.18	1.47
	300.00	310.00	571.36	1088.91	.91	.48	.64
	310.00	320.00	670.44	776.21	1.94	.95	1.29
	320.00	330.00	710.03	742.63	3.20	2.37	2.71
	330.00	340.00	668.35	882.42	2.47	2.77	2.61
	340.00	350.00	172.65	258.41	1.44	2.36	1.79
	350.00	360.00	570.19	561.65	1.93	2.86	2.29
	360.00	370.00	213.53	388.29	3.12	3.64	3.35
	370.00	380.00	75.65	76.27	3.34	3.60	3.46
	380.00	390.00	207.25	77.43	2.80	3.38	3.05
	390.00	400.00	315.36	139.23	2.28	3.22	2.65
	400.00	410.00	138.92	165.17	2.38	2.12	2.24
	410.00	420.00	193.67	112.65	2.99	2.90	2.94
	420.00	430.00	214.55	54.64	2.48	2.82	2.64

430.00	440.00	337.90	123.50	1.96	3.03	2.36
440.00	450.00	156.95	113.49	2.42	3.19	2.73
450.00	460.00	254.87	307.82	1.63	1.55	1.59
460.00	470.00	353.95	282.69	1.47	2.32	1.80
470.00	480.00	158.51	89.95	3.00	3.11	3.05
480.00	490.00	28.57	92.69	3.52	3.21	3.35
490.00	500.00	109.88	148.68	3.38	2.85	3.08
500.00	510.00	91.36	72.95	3.76	3.01	3.31
510.00	520.00	124.69	136.32	3.11	3.32	3.21
520.00	529.48	83.58	81.51	3.33	3.23	3.27

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\10THS\SR36EB.ERD	.00	529.48	182.56	242.14	1.25	.98	1.10
	.00	10.00	124.99	119.27	2.98	2.71	2.84
	10.00	20.00	136.27	138.67	3.28	3.03	3.15
	20.00	30.00	123.88	144.93	3.48	3.75	3.60
	30.00	40.00	67.82	51.90	3.70	2.77	3.13
	40.00	50.00	57.80	80.18	3.10	2.78	2.93
	50.00	60.00	99.96	48.97	3.45	3.55	3.50
	60.00	70.00	31.40	33.14	3.90	2.58	3.03
	70.00	80.00	49.47	31.32	4.14	3.91	4.02
	80.00	90.00	53.23	30.92	2.88	2.71	2.79
	90.00	100.00	78.04	40.19	3.39	3.80	3.58
	100.00	110.00	115.25	89.08	3.71	3.24	3.44
	110.00	120.00	107.40	152.36	3.58	3.51	3.54
	120.00	130.00	152.50	101.66	2.70	2.17	2.40
	130.00	140.00	56.44	63.40	3.47	3.08	3.26
	140.00	150.00	59.38	31.74	3.16	2.75	2.94
	150.00	160.00	86.15	80.81	3.30	3.83	3.53
	160.00	170.00	96.52	45.10	2.19	2.77	2.44
	170.00	180.00	103.95	101.67	2.73	2.69	2.71
	180.00	190.00	55.83	143.32	3.33	2.16	2.59
	190.00	200.00	74.79	94.83	2.53	2.56	2.55
	200.00	210.00	73.29	242.21	3.02	2.92	2.97
	210.00	220.00	162.33	175.49	2.74	2.32	2.51
	220.00	230.00	199.50	316.83	3.02	3.04	3.03
	230.00	240.00	258.76	284.46	2.84	2.84	2.84
	240.00	250.00	107.64	242.88	2.62	1.12	1.58
	250.00	260.00	423.29	610.51	.75	.22	.38
	260.00	270.00	1588.15	1735.71	.00	.00	.00
	270.00	280.00	1323.80	2330.39	.04	.02	.02
	280.00	290.00	627.37	953.65	.54	.28	.38
	290.00	300.00	332.32	307.96	1.04	.87	.95
	300.00	310.00	245.58	389.45	2.32	2.76	2.52
	310.00	320.00	119.39	431.11	2.96	3.22	3.08
	320.00	330.00	176.55	208.07	1.96	2.48	2.19
	330.00	340.00	148.25	411.60	3.34	3.23	3.29
	340.00	350.00	190.83	313.36	2.43	3.23	2.75
	350.00	360.00	129.37	44.80	3.09	3.18	3.13
	360.00	370.00	52.71	108.12	3.40	2.47	2.83
	370.00	380.00	169.37	196.12	2.51	2.38	2.44
	380.00	390.00	311.38	231.59	2.62	2.26	2.42
	390.00	400.00	209.66	116.57	2.77	3.38	3.03
	400.00	410.00	159.89	279.39	3.37	2.69	2.98
	410.00	420.00	69.00	125.98	3.73	3.53	3.62
	420.00	430.00	58.98	127.30	2.78	2.47	2.62

430.00	440.00	69.23	84.69	3.51	3.59	3.55
440.00	450.00	61.07	67.00	3.58	3.62	3.60
450.00	460.00	51.90	72.00	3.60	3.95	3.76
460.00	470.00	84.65	134.37	2.23	2.96	2.53
470.00	480.00	88.33	88.54	2.92	2.88	2.90
480.00	490.00	78.80	122.68	2.98	3.23	3.10
490.00	500.00	111.86	111.46	3.30	2.61	2.90
500.00	510.00	52.26	155.69	3.36	2.87	3.08
510.00	520.00	58.26	76.09	3.71	3.30	3.48
520.00	529.48	41.65	98.41	3.35	3.57	3.46

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Input files from directory "F:\10THS"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
F:\10THS\SR36WB.ERD	.00	529.48	230.29	244.81	1.02	.90	.96
	.00	10.00	133.95	147.51	2.83	2.63	2.73
	10.00	20.00	145.34	152.11	3.37	3.47	3.42
	20.00	30.00	157.91	180.84	3.46	3.79	3.61
	30.00	40.00	110.91	84.89	3.45	3.56	3.51
	40.00	50.00	85.77	124.36	4.03	3.92	3.97
	50.00	60.00	103.46	140.52	3.53	3.93	3.71
	60.00	70.00	62.51	73.24	2.91	2.93	2.92
	70.00	80.00	63.06	150.27	3.71	3.79	3.75
	80.00	90.00	47.46	111.06	3.63	3.52	3.57
	90.00	100.00	102.22	139.97	3.68	3.98	3.82
	100.00	110.00	86.78	133.60	3.48	3.37	3.42
	110.00	120.00	46.10	101.98	3.52	3.89	3.68
	120.00	130.00	42.38	53.61	2.77	3.68	3.12
	130.00	140.00	30.07	70.10	3.58	3.70	3.64
	140.00	150.00	79.85	27.16	3.52	3.90	3.69
	150.00	160.00	86.38	143.01	2.55	2.67	2.61
	160.00	170.00	106.66	133.61	2.82	3.21	3.00
	170.00	180.00	82.18	111.46	3.18	3.37	3.27
	180.00	190.00	58.69	67.82	3.44	3.72	3.57
	190.00	200.00	79.59	129.58	3.08	3.51	3.27
	200.00	210.00	114.06	100.53	2.28	2.37	2.32
	210.00	220.00	203.83	181.50	3.69	3.21	3.42
	220.00	230.00	202.72	216.35	3.05	3.20	3.12
	230.00	240.00	309.78	281.29	1.12	1.85	1.40
	240.00	250.00	419.12	467.19	1.16	1.11	1.13
	250.00	260.00	774.89	1138.74	.31	.03	.08
	260.00	270.00	2336.34	2508.73	.00	.00	.00
	270.00	280.00	2814.85	2445.66	.03	.09	.05
	280.00	290.00	419.34	854.62	1.02	.57	.75
	290.00	300.00	206.46	161.43	2.92	2.47	2.67
	300.00	310.00	249.71	151.55	2.69	3.44	3.00
	310.00	320.00	308.72	204.25	2.71	2.75	2.73
	320.00	330.00	364.54	424.75	3.07	3.00	3.03
	330.00	340.00	150.33	183.13	2.09	2.10	2.10
	340.00	350.00	256.75	238.86	3.13	3.18	3.16
	350.00	360.00	234.76	252.29	3.59	3.92	3.74
	360.00	370.00	74.01	69.04	3.01	3.34	3.16
	370.00	380.00	140.03	96.13	3.36	3.72	3.52
	380.00	390.00	69.83	66.01	3.26	3.39	3.32
	390.00	400.00	83.29	46.40	3.54	3.99	3.74
	400.00	410.00	111.96	57.96	3.20	2.55	2.83
	410.00	420.00	64.59	55.20	3.64	3.64	3.64
	420.00	430.00	67.14	32.52	3.47	3.41	3.44

430.00	440.00	87.84	86.03	3.47	3.67	3.56
440.00	450.00	57.09	62.49	3.45	3.42	3.43
450.00	460.00	44.19	43.05	3.42	3.89	3.62
460.00	470.00	55.44	66.50	3.15	3.65	3.37
470.00	480.00	55.02	56.88	3.21	2.93	3.06
480.00	490.00	79.60	61.95	3.33	3.61	3.46
490.00	500.00	35.21	40.98	2.85	3.55	3.14
500.00	510.00	46.12	36.08	3.77	3.35	3.54
510.00	520.00	51.87	48.30	3.23	2.37	2.71
520.00	529.48	38.51	30.18	3.93	3.93	3.93

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**Appendix C**  
**IRI Data (1/10 mile)**  
**Crossings Edited Out**

\* IRI and Ride Number Calculation  
 \* Last modified at UMTRI September 14, 1996  
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Input files from directory "F:\EXP\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\EXP\ERD\SR26WB.ERD							
	.00	520.06	220.08	222.91	.81	.51	.63
	.00	10.00	56.18	60.44	3.58	3.30	3.43
	10.00	20.00	37.48	93.17	3.67	3.62	3.64
	20.00	30.00	39.37	130.50	3.48	3.45	3.46
	30.00	40.00	102.86	103.07	3.94	3.69	3.81
	40.00	50.00	66.83	68.62	3.88	3.71	3.79
	50.00	60.00	92.50	53.31	3.37	3.66	3.50
	60.00	70.00	86.94	38.65	2.46	3.68	2.89
	70.00	80.00	113.28	75.06	3.87	3.85	3.86
	80.00	90.00	145.99	122.00	3.82	3.86	3.84
	90.00	100.00	85.06	94.25	3.85	3.96	3.90
	100.00	110.00	64.17	73.92	3.72	3.77	3.74
	110.00	120.00	90.40	98.74	3.32	3.33	3.32
	120.00	130.00	86.78	61.94	2.99	4.05	3.38
	130.00	140.00	46.53	53.17	3.77	3.80	3.79
	140.00	150.00	49.32	28.35	3.73	4.00	3.86
	150.00	160.00	78.32	63.86	3.23	4.09	3.55
	160.00	170.00	86.84	35.38	3.33	3.82	3.54
	170.00	180.00	106.70	116.97	3.46	3.26	3.36
	180.00	190.00	100.97	90.10	3.34	3.82	3.55
	190.00	200.00	67.17	72.06	3.48	3.29	3.38
	200.00	210.00	95.72	185.58	2.94	1.81	2.22
	210.00	220.00	538.64	842.73	1.09	.62	.80
	220.00	230.00	92.91	283.53	2.23	1.57	1.84
	230.00	240.00	193.66	136.40	2.07	2.63	2.31
	240.00	250.00	251.00	235.75	1.77	2.09	1.92
	250.00	260.00	320.11	295.12	.07	2.47	.24
	260.00	270.00	1526.25	1089.67	.00	.00	.00
	270.00	280.00	779.42	866.50	.51	.00	.01
	280.00	290.00	373.89	915.43	.91	1.77	1.22
	290.00	300.00	536.66	484.81	1.79	.81	1.14
	300.00	310.00	304.05	476.91	1.74	1.42	1.57
	310.00	320.00	325.39	204.68	1.91	2.60	2.19
	320.00	330.00	220.21	264.00	2.61	2.16	2.36
	330.00	340.00	230.17	257.88	2.40	2.09	2.23
	340.00	350.00	268.31	181.23	3.06	3.08	3.07
	350.00	360.00	165.95	187.75	2.98	3.39	3.16
	360.00	370.00	439.66	301.64	2.78	3.32	3.01
	370.00	380.00	276.66	163.18	2.82	2.84	2.83
	380.00	390.00	146.31	200.69	2.42	1.86	2.10
	390.00	400.00	341.00	241.21	2.56	2.30	2.42
	400.00	410.00	142.42	140.74	3.18	2.53	2.80
	410.00	420.00	180.88	273.28	2.99	2.41	2.66
	420.00	430.00	124.40	147.71	3.03	2.65	2.82
	430.00	440.00	185.54	107.19	2.82	3.18	2.99

440.00	450.00	253.10	154.96	1.35	2.81	1.82
450.00	460.00	175.22	132.56	2.51	3.38	2.86
460.00	470.00	174.95	135.02	2.18	1.86	2.01
470.00	480.00	147.98	227.06	1.88	1.99	1.93
480.00	490.00	219.19	150.15	1.79	2.14	1.95
490.00	500.00	258.08	317.11	3.40	2.24	2.66
500.00	510.00	169.62	181.05	3.03	3.29	3.15
510.00	520.00	319.21	246.47	3.05	3.04	3.05

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\EXP\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\EXP\ERD\SR26EB.ERD							
	.00	520.06	243.60	249.53	1.17	.55	.77
	.00	10.00	216.99	252.29	2.53	2.42	2.47
	10.00	20.00	355.23	184.47	1.61	1.97	1.77
	20.00	30.00	224.81	444.89	3.15	2.14	2.52
	30.00	40.00	202.03	263.42	2.82	2.51	2.65
	40.00	50.00	160.49	248.98	2.82	1.52	1.96
	50.00	60.00	255.78	396.35	3.06	2.18	2.53
	60.00	70.00	94.82	107.01	2.90	2.27	2.54
	70.00	80.00	59.85	78.44	3.02	2.90	2.96
	80.00	90.00	230.28	217.79	2.72	3.04	2.87
	90.00	100.00	228.32	106.13	2.56	3.32	2.87
	100.00	110.00	203.50	158.16	2.68	2.68	2.68
	110.00	120.00	185.24	134.64	2.94	2.52	2.71
	120.00	130.00	104.25	206.60	2.53	1.20	1.63
	130.00	140.00	145.20	59.95	2.96	3.41	3.16
	140.00	150.00	152.34	186.16	3.01	2.75	2.87
	150.00	160.00	371.61	314.16	2.31	2.92	2.57
	160.00	170.00	258.61	192.68	2.31	2.00	2.14
	170.00	180.00	284.78	373.59	2.41	2.75	2.56
	180.00	190.00	430.75	431.41	2.41	1.86	2.09
	190.00	200.00	363.89	537.11	2.63	1.37	1.80
	200.00	210.00	465.51	454.96	2.03	2.33	2.17
	210.00	220.00	503.16	491.20	1.97	2.61	2.24
	220.00	230.00	106.10	71.51	2.43	2.55	2.49
	230.00	240.00	416.47	154.55	1.48	2.74	1.91
	240.00	250.00	765.99	487.32	.83	1.99	1.20
	250.00	260.00	440.83	420.63	.09	.01	.02
	260.00	270.00	1226.26	831.68	.00	.00	.00
	270.00	280.00	360.26	1005.54	1.53	.03	.12
	280.00	290.00	145.61	436.20	2.37	1.48	1.82
	290.00	300.00	772.00	731.01	.35	.56	.44
	300.00	310.00	433.14	331.15	1.49	1.99	1.71
	310.00	320.00	218.25	237.13	2.92	2.53	2.70
	320.00	330.00	295.16	468.45	3.26	2.92	3.08
	330.00	340.00	135.38	244.75	3.45	3.40	3.42
	340.00	350.00	112.77	96.25	3.52	3.42	3.47
	350.00	360.00	118.62	185.40	3.82	3.54	3.67
	360.00	370.00	202.89	257.53	3.73	3.63	3.68
	370.00	380.00	155.13	125.20	3.25	3.45	3.34
	380.00	390.00	137.01	184.45	3.16	3.17	3.17
	390.00	400.00	105.93	107.38	3.57	3.30	3.43
	400.00	410.00	112.48	34.66	3.22	3.90	3.50
	410.00	420.00	75.91	65.99	3.84	3.92	3.88
	420.00	430.00	83.22	146.33	4.04	3.94	3.98
	430.00	440.00	89.71	74.83	3.17	3.87	3.45

440.00	450.00	110.96	48.36	3.61	3.93	3.76
450.00	460.00	92.43	122.75	3.50	3.60	3.55
460.00	470.00	124.48	73.08	3.53	3.78	3.65
470.00	480.00	51.49	39.75	3.82	3.64	3.72
480.00	490.00	70.20	70.46	3.55	3.91	3.71
490.00	500.00	65.03	87.46	3.51	3.58	3.54
500.00	510.00	104.26	32.24	3.95	3.93	3.94
510.00	520.00	71.14	57.08	3.74	3.48	3.60

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\EXP\ERD"

Filename	Start:	End:	IRI:	(in/mi)		RN: 0-5		Both
	ft	ft	LElev.	RElev.	LElev.	RElev.		
-----								
F:\EXP\ERD\US52SBDL.ERD								
	.00	490.24	147.70	138.14	1.69	1.71	1.70	
	.00	10.00	99.12	108.38	3.16	2.97	3.06	
	10.00	20.00	81.82	108.04	3.57	3.29	3.42	
	20.00	30.00	98.25	91.88	3.83	3.70	3.76	
	30.00	40.00	61.11	58.87	3.94	3.63	3.77	
	40.00	50.00	48.56	89.71	4.11	3.89	3.99	
	50.00	60.00	86.11	67.46	3.65	4.08	3.84	
	60.00	70.00	36.01	38.07	3.79	3.60	3.69	
	70.00	80.00	33.96	45.88	3.96	3.81	3.88	
	80.00	90.00	26.30	42.58	3.91	3.61	3.75	
	90.00	100.00	66.29	66.00	3.71	3.73	3.72	
	100.00	110.00	48.47	21.94	3.93	3.60	3.75	
	110.00	120.00	45.14	62.61	3.96	3.81	3.88	
	120.00	130.00	16.72	30.01	3.79	3.70	3.75	
	130.00	140.00	46.10	42.88	3.96	3.86	3.91	
	140.00	150.00	25.79	54.73	3.84	3.27	3.51	
	150.00	160.00	48.84	60.68	3.64	3.59	3.61	
	160.00	170.00	55.63	27.00	3.64	3.87	3.75	
	170.00	180.00	53.12	47.35	3.78	3.81	3.79	
	180.00	190.00	26.10	92.90	3.94	3.46	3.66	
	190.00	200.00	113.43	103.30	3.68	3.32	3.48	
	200.00	210.00	117.87	101.53	3.48	2.95	3.18	
	210.00	220.00	252.54	103.77	2.48	2.50	2.49	
	220.00	230.00	87.81	215.16	3.14	2.53	2.79	
	230.00	240.00	434.61	847.41	1.86	.36	.68	
	240.00	250.00	1689.77	1176.31	.01	.01	.01	
	250.00	260.00	753.17	430.30	.59	2.00	.97	
	260.00	270.00	529.38	173.88	2.18	2.58	2.36	
	270.00	280.00	358.37	186.41	2.67	3.59	3.03	
	280.00	290.00	132.32	71.72	3.34	3.25	3.29	
	290.00	300.00	212.47	97.69	3.35	2.84	3.06	
	300.00	310.00	98.75	166.60	2.67	3.39	2.97	
	310.00	320.00	123.15	97.56	3.38	3.25	3.31	
	320.00	330.00	262.25	226.00	2.83	3.40	3.08	
	330.00	340.00	86.65	140.39	3.15	3.17	3.16	
	340.00	350.00	139.92	237.50	2.71	3.76	3.10	
	350.00	360.00	114.47	100.91	3.50	3.75	3.62	
	360.00	370.00	63.48	117.35	3.70	3.34	3.50	
	370.00	380.00	56.35	62.85	3.65	3.68	3.67	
	380.00	390.00	39.09	38.59	3.87	3.48	3.65	
	390.00	400.00	41.26	98.65	3.62	3.33	3.47	
	400.00	410.00	34.39	81.65	4.02	3.78	3.89	
	410.00	420.00	41.03	61.48	3.75	3.70	3.72	
	420.00	430.00	42.78	88.20	3.74	3.73	3.73	

430.00	440.00	43.96	114.38	3.61	2.93	3.21
440.00	450.00	95.71	131.21	3.63	3.21	3.40
450.00	460.00	69.50	56.06	3.26	3.44	3.35
460.00	470.00	117.52	144.77	3.15	3.31	3.23
470.00	480.00	59.80	67.28	3.83	3.57	3.69
480.00	490.00	33.54	74.22	3.68	3.65	3.66

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\EXP\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\EXP\ERD\US52NBDL.ERD							
	.00	490.24	181.59	180.83	2.00	1.50	1.72
	.00	10.00	171.81	151.44	2.64	2.47	2.55
	10.00	20.00	127.75	183.83	3.76	3.24	3.46
	20.00	30.00	146.87	96.03	3.66	3.44	3.54
	30.00	40.00	85.51	53.62	3.12	3.61	3.33
	40.00	50.00	146.33	115.02	3.48	3.19	3.33
	50.00	60.00	99.10	70.03	3.48	3.83	3.63
	60.00	70.00	82.42	68.76	3.49	3.78	3.63
	70.00	80.00	43.08	53.70	3.03	3.87	3.36
	80.00	90.00	70.20	57.75	3.77	3.42	3.57
	90.00	100.00	34.27	24.51	3.82	3.84	3.83
	100.00	110.00	42.72	54.13	3.72	3.49	3.60
	110.00	120.00	61.34	144.37	3.27	1.45	1.98
	120.00	130.00	70.45	44.53	3.60	3.81	3.70
	130.00	140.00	61.40	41.55	3.66	3.84	3.75
	140.00	150.00	114.57	80.78	2.22	2.11	2.17
	150.00	160.00	67.90	75.76	3.82	3.77	3.79
	160.00	170.00	90.29	58.47	3.62	3.59	3.61
	170.00	180.00	114.15	130.81	3.21	3.73	3.43
	180.00	190.00	87.63	124.03	2.89	3.27	3.06
	190.00	200.00	82.14	195.39	2.49	2.11	2.29
	200.00	210.00	240.45	274.31	2.51	2.62	2.57
	210.00	220.00	111.94	132.66	2.88	3.20	3.03
	220.00	230.00	84.12	124.74	3.21	2.95	3.07
	230.00	240.00	455.36	640.20	1.25	1.84	1.49
	240.00	250.00	1103.66	1282.42	.04	.00	.01
	250.00	260.00	866.97	921.53	.45	.69	.55
	260.00	270.00	572.25	346.22	2.64	2.07	2.31
	270.00	280.00	713.84	536.30	2.99	2.96	2.97
	280.00	290.00	373.71	337.22	2.82	1.96	2.30
	290.00	300.00	577.98	314.19	3.08	2.34	2.64
	300.00	310.00	166.82	158.15	3.20	2.61	2.86
	310.00	320.00	150.18	251.37	2.70	2.05	2.33
	320.00	330.00	208.37	196.47	3.07	3.08	3.08
	330.00	340.00	313.38	313.96	3.25	3.24	3.24
	340.00	350.00	99.92	116.45	3.51	3.01	3.22
	350.00	360.00	279.04	262.34	3.48	3.59	3.53
	360.00	370.00	128.79	124.23	3.66	3.62	3.64
	370.00	380.00	66.15	63.97	3.75	3.58	3.66
	380.00	390.00	56.14	95.68	3.73	3.42	3.56
	390.00	400.00	105.95	145.09	3.37	2.78	3.03
	400.00	410.00	71.27	67.31	3.74	3.49	3.61
	410.00	420.00	83.40	79.82	3.58	3.61	3.59
	420.00	430.00	58.78	31.77	3.63	3.75	3.69

430.00	440.00	38.63	38.70	3.77	3.62	3.69
440.00	450.00	40.33	42.18	2.60	3.66	3.00
450.00	460.00	67.37	55.45	3.59	3.69	3.64
460.00	470.00	83.52	46.85	3.50	3.21	3.34
470.00	480.00	30.46	27.89	4.00	3.46	3.69
480.00	490.00	33.10	54.92	3.88	3.97	3.92

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\EXP\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\EXP\ERD\SR28WB1.ERD							
	.00	519.80	246.93	296.78	2.25	1.83	2.02
	.00	10.00	98.25	89.19	3.16	3.19	3.18
	10.00	20.00	88.37	99.23	3.65	3.80	3.72
	20.00	30.00	141.87	106.13	4.10	3.87	3.98
	30.00	40.00	70.84	43.55	3.71	3.85	3.77
	40.00	50.00	50.59	47.60	3.89	3.87	3.88
	50.00	60.00	95.04	65.68	4.17	4.00	4.08
	60.00	70.00	101.97	84.39	3.62	3.65	3.64
	70.00	80.00	64.85	86.62	3.87	3.71	3.79
	80.00	90.00	54.63	64.22	3.88	3.57	3.71
	90.00	100.00	67.28	82.49	3.83	3.87	3.85
	100.00	110.00	50.54	65.97	3.26	3.68	3.45
	110.00	120.00	52.32	64.10	3.70	3.95	3.82
	120.00	130.00	35.48	41.38	3.82	3.65	3.73
	130.00	140.00	47.45	62.57	3.74	3.99	3.86
	140.00	150.00	59.62	51.61	3.67	3.90	3.78
	150.00	160.00	127.48	162.90	3.15	3.11	3.13
	160.00	170.00	104.46	256.54	2.84	1.69	2.10
	170.00	180.00	209.27	357.89	3.02	2.54	2.75
	180.00	190.00	66.05	70.02	3.48	3.63	3.55
	190.00	200.00	83.33	141.69	3.47	3.24	3.35
	200.00	210.00	46.36	96.14	3.39	3.36	3.38
	210.00	220.00	56.31	179.36	3.53	2.85	3.13
	220.00	230.00	55.04	79.79	3.73	3.36	3.53
	230.00	240.00	69.01	233.27	3.95	3.42	3.64
	240.00	250.00	187.13	298.46	3.31	2.04	2.49
	250.00	260.00	114.62	102.13	3.52	3.47	3.50
	260.00	270.00	191.96	238.36	3.65	3.73	3.68
	270.00	280.00	212.82	278.58	3.38	3.46	3.42
	280.00	290.00	99.80	189.33	3.02	2.76	2.88
	290.00	300.00	278.07	909.23	1.59	.51	.82
	300.00	310.00	220.84	396.13	1.98	2.71	2.28
	310.00	320.00	367.29	323.39	1.52	2.05	1.75
	320.00	330.00	416.29	516.52	2.23	2.28	2.25
	330.00	340.00	826.32	1019.31	.99	.18	.37
	340.00	350.00	1128.38	1141.40	.16	.09	.12
	350.00	360.00	380.47	425.77	1.46	2.16	1.74
	360.00	370.00	1613.25	1619.25	1.38	1.14	1.25
	370.00	380.00	975.37	980.65	1.51	1.11	1.29
	380.00	390.00	248.43	464.62	1.38	.85	1.06
	390.00	400.00	1063.38	1016.61	2.00	1.46	1.69
	400.00	410.00	1028.24	1015.76	3.08	2.47	2.73
	410.00	420.00	310.02	250.33	2.09	3.12	2.48
	420.00	430.00	448.20	158.72	1.73	2.28	1.96
	430.00	440.00	146.71	211.47	2.87	3.13	2.99

440.00	450.00	65.28	105.62	3.58	3.14	3.33
450.00	460.00	135.42	340.18	2.98	1.66	2.12
460.00	470.00	43.99	78.34	3.71	3.52	3.61
470.00	480.00	43.07	107.00	3.61	3.78	3.69
480.00	490.00	81.07	52.18	3.57	3.43	3.50
490.00	500.00	52.03	124.43	3.79	3.52	3.64
500.00	510.00	106.48	230.49	3.49	3.75	3.61
510.00	519.80	164.76	215.38	3.14	2.87	3.00

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\EXP\ERD"

Filename	Start:	End:	IRI:	(in/mi)		RN: 0-5		Both
	ft	ft	LElev.	RElev.	LElev.	RElev.		
-----								
F:\EXP\ERD\SR28EB1.ERD								
	.00	519.80	257.85	268.45	1.50	1.36	1.43	
	.00	10.00	109.66	124.80	3.15	3.05	3.10	
	10.00	20.00	122.35	131.39	3.55	3.78	3.66	
	20.00	30.00	91.57	92.27	3.82	3.82	3.82	
	30.00	40.00	29.41	48.25	3.76	4.00	3.87	
	40.00	50.00	44.97	34.49	4.01	4.03	4.02	
	50.00	60.00	38.02	43.96	3.83	3.81	3.82	
	60.00	70.00	52.59	30.89	3.89	4.19	4.03	
	70.00	80.00	23.65	27.31	3.74	3.87	3.80	
	80.00	90.00	81.90	80.88	3.61	3.38	3.49	
	90.00	100.00	57.92	71.73	3.71	3.48	3.59	
	100.00	110.00	89.96	106.38	3.13	2.84	2.97	
	110.00	120.00	30.57	39.11	3.47	3.43	3.45	
	120.00	130.00	21.96	48.35	3.91	3.86	3.88	
	130.00	140.00	35.32	67.65	3.43	3.49	3.46	
	140.00	150.00	35.00	37.48	3.83	3.65	3.74	
	150.00	160.00	69.65	47.80	3.66	3.73	3.70	
	160.00	170.00	36.45	32.53	3.56	3.92	3.72	
	170.00	180.00	111.85	60.96	3.05	3.62	3.29	
	180.00	190.00	122.02	83.53	3.35	3.50	3.42	
	190.00	200.00	254.02	88.91	2.59	2.88	2.73	
	200.00	210.00	128.13	117.63	3.27	2.97	3.11	
	210.00	220.00	72.46	119.90	3.61	2.88	3.18	
	220.00	230.00	122.44	137.57	2.76	3.02	2.88	
	230.00	240.00	176.12	256.02	2.11	1.27	1.59	
	240.00	250.00	346.94	246.55	.80	2.17	1.21	
	250.00	260.00	365.56	694.70	1.66	1.47	1.56	
	260.00	270.00	613.70	667.04	1.68	2.01	1.83	
	270.00	280.00	725.68	952.17	.00	.00	.00	
	280.00	290.00	1184.77	1391.66	.02	.01	.01	
	290.00	300.00	730.47	592.54	1.05	1.06	1.05	
	300.00	310.00	1861.56	1929.63	1.95	.80	1.16	
	310.00	320.00	865.71	542.93	2.06	1.64	1.83	
	320.00	330.00	546.27	443.90	1.18	1.19	1.18	
	330.00	340.00	837.03	993.38	2.35	2.31	2.33	
	340.00	350.00	845.67	709.10	3.41	2.90	3.12	
	350.00	360.00	344.60	273.79	3.55	3.34	3.44	
	360.00	370.00	320.21	372.48	3.23	3.27	3.25	
	370.00	380.00	245.88	330.55	2.62	3.72	3.03	
	380.00	390.00	129.86	99.48	3.78	3.56	3.66	
	390.00	400.00	211.56	317.08	3.48	3.54	3.51	
	400.00	410.00	243.42	278.81	3.71	3.51	3.60	
	410.00	420.00	86.61	133.17	3.77	3.61	3.69	
	420.00	430.00	119.95	193.20	3.40	4.08	3.67	
	430.00	440.00	150.72	90.49	3.48	3.60	3.54	

440.00	450.00	97.78	97.41	3.67	3.56	3.61
450.00	460.00	213.43	242.81	2.20	2.16	2.18
460.00	470.00	119.46	107.38	3.64	3.41	3.52
470.00	480.00	48.34	62.82	3.97	3.80	3.88
480.00	490.00	69.52	99.67	4.02	3.61	3.79
490.00	500.00	41.85	74.94	3.74	3.72	3.73
500.00	510.00	33.31	18.60	3.96	3.93	3.95
510.00	519.80	32.85	50.67	3.78	4.07	3.91

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\EXP\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
F:\EXP\ERD\SR231NB3.ERD							
	.00	490.24	239.32	296.67	2.47	2.22	2.34
	.00	10.00	111.80	154.07	3.00	2.93	2.97
	10.00	20.00	118.01	148.94	3.61	3.80	3.70
	20.00	30.00	76.11	36.19	3.64	3.59	3.61
	30.00	40.00	90.10	96.20	3.71	3.51	3.61
	40.00	50.00	83.39	79.50	3.44	3.44	3.44
	50.00	60.00	91.85	111.07	3.15	3.50	3.31
	60.00	70.00	68.05	69.45	3.48	3.65	3.56
	70.00	80.00	74.43	43.04	4.04	3.87	3.95
	80.00	90.00	41.59	94.04	3.70	3.73	3.72
	90.00	100.00	100.42	104.11	3.99	3.77	3.87
	100.00	110.00	94.01	92.69	2.94	3.36	3.13
	110.00	120.00	51.68	62.79	3.67	3.57	3.62
	120.00	130.00	105.64	91.81	3.56	3.82	3.68
	130.00	140.00	93.06	142.85	3.78	3.66	3.71
	140.00	150.00	47.63	69.87	3.53	3.63	3.58
	150.00	160.00	83.25	112.55	3.47	3.35	3.41
	160.00	170.00	87.47	235.37	3.56	2.58	2.95
	170.00	180.00	114.47	173.85	3.54	2.84	3.13
	180.00	190.00	85.96	129.13	3.56	3.48	3.51
	190.00	200.00	50.69	83.53	3.41	3.90	3.62
	200.00	210.00	261.89	114.71	2.88	3.38	3.10
	210.00	220.00	236.95	299.81	2.67	2.14	2.37
	220.00	230.00	471.53	435.00	1.90	2.04	1.97
	230.00	240.00	199.87	257.69	2.77	3.13	2.94
	240.00	250.00	442.42	573.71	.40	.08	.16
	250.00	260.00	1352.91	1409.77	.90	.80	.84
	260.00	270.00	298.15	1022.59	1.30	1.62	1.44
	270.00	280.00	557.00	1611.27	1.63	1.25	1.42
	280.00	290.00	1022.62	1331.43	2.59	1.43	1.84
	290.00	300.00	285.64	501.65	2.76	3.39	3.03
	300.00	310.00	617.11	1013.08	3.88	3.85	3.86
	310.00	320.00	463.45	676.48	3.64	3.00	3.27
	320.00	330.00	176.57	140.88	3.20	3.49	3.34
	330.00	340.00	358.46	525.09	3.55	3.65	3.60
	340.00	350.00	301.51	524.99	3.66	3.90	3.77
	350.00	360.00	146.50	148.78	3.43	4.09	3.70
	360.00	370.00	61.40	178.80	3.62	3.69	3.66
	370.00	380.00	344.89	175.66	1.20	3.53	1.77
	380.00	390.00	328.00	51.69	3.04	3.89	3.37
	390.00	400.00	241.94	70.03	2.36	3.98	2.87
	400.00	410.00	151.34	102.77	3.30	3.86	3.54
	410.00	420.00	100.67	96.99	3.54	3.72	3.62
	420.00	430.00	291.01	154.28	2.70	3.98	3.14

430.00	440.00	96.99	127.22	2.51	3.86	2.97
440.00	450.00	422.84	104.90	1.87	3.66	2.41
450.00	460.00	129.99	112.06	2.62	3.86	3.06
460.00	470.00	373.01	293.55	3.41	3.58	3.49
470.00	480.00	249.70	262.01	3.51	3.97	3.71
480.00	490.00	74.68	72.68	3.73	4.18	3.92

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\EXP\ERD"

Filename	Start:	End:	IRI:	(in/mi)		RN: 0-5		Both
	ft	ft	LElev.	RElev.	LElev.	RElev.		
-----								
F:\EXP\ERD\SR231SB3.ERD								
	.00	489.98	214.05	254.10	2.40	1.50	1.84	
	.00	10.00	180.63	147.09	1.73	2.72	2.11	
	10.00	20.00	287.87	188.07	2.37	3.63	2.82	
	20.00	30.00	252.64	164.63	1.81	2.25	2.00	
	30.00	40.00	173.65	109.64	3.33	3.73	3.51	
	40.00	50.00	125.73	74.01	3.59	3.80	3.69	
	50.00	60.00	316.57	91.90	3.68	3.65	3.67	
	60.00	70.00	223.36	236.15	3.87	3.80	3.83	
	70.00	80.00	107.15	114.73	3.72	3.55	3.63	
	80.00	90.00	219.63	110.79	3.32	3.87	3.55	
	90.00	100.00	197.71	234.74	2.40	3.92	2.89	
	100.00	110.00	248.79	164.01	2.04	3.78	2.57	
	110.00	120.00	111.30	54.59	3.12	3.97	3.45	
	120.00	130.00	84.48	110.77	3.25	3.42	3.33	
	130.00	140.00	153.76	137.74	3.49	3.79	3.63	
	140.00	150.00	59.00	147.05	3.60	4.02	3.78	
	150.00	160.00	109.92	114.44	3.24	3.41	3.32	
	160.00	170.00	128.91	53.74	3.49	3.97	3.70	
	170.00	180.00	259.15	93.73	3.16	3.80	3.42	
	180.00	190.00	181.27	83.73	2.77	3.68	3.13	
	190.00	200.00	134.04	81.31	3.36	2.22	2.64	
	200.00	210.00	262.94	426.62	3.11	1.61	2.10	
	210.00	220.00	202.50	458.31	3.24	2.66	2.91	
	220.00	230.00	383.17	472.83	1.56	1.42	1.49	
	230.00	240.00	392.53	762.08	2.62	2.45	2.53	
	240.00	250.00	629.04	1132.64	.19	.00	.02	
	250.00	260.00	1126.08	859.99	1.12	1.06	1.09	
	260.00	270.00	417.19	315.49	1.32	1.83	1.54	
	270.00	280.00	700.64	669.91	2.75	2.83	2.79	
	280.00	290.00	464.11	830.57	2.92	3.03	2.97	
	290.00	300.00	253.74	254.31	3.40	3.17	3.28	
	300.00	310.00	411.79	635.58	3.77	3.90	3.83	
	310.00	320.00	281.33	437.89	3.53	3.57	3.55	
	320.00	330.00	127.77	201.58	3.69	3.40	3.53	
	330.00	340.00	112.41	146.75	3.66	3.86	3.75	
	340.00	350.00	34.86	106.18	3.64	3.83	3.73	
	350.00	360.00	68.99	58.61	3.89	3.84	3.86	
	360.00	370.00	85.07	66.98	3.15	3.48	3.30	
	370.00	380.00	95.53	152.47	3.63	3.95	3.77	
	380.00	390.00	102.90	98.59	3.60	3.69	3.65	
	390.00	400.00	65.79	116.76	3.70	3.69	3.70	
	400.00	410.00	49.25	122.16	3.87	3.48	3.65	
	410.00	420.00	91.69	87.22	3.72	3.00	3.30	
	420.00	430.00	115.49	155.13	3.89	3.30	3.55	

430.00	440.00	48.31	232.65	3.82	2.67	3.09
440.00	450.00	89.76	230.63	3.74	3.07	3.34
450.00	460.00	68.30	197.22	3.65	2.24	2.71
460.00	470.00	85.76	190.21	3.65	2.97	3.25
470.00	480.00	74.46	212.14	3.36	3.10	3.22
480.00	489.98	79.60	270.08	3.63	3.19	3.38

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\US421NB2.ERD							
	.00	519.80	234.77	303.43	1.51	1.04	1.24
	.00	10.00	509.59	405.21	.97	1.50	1.19
	10.00	20.00	370.51	166.61	1.29	1.97	1.56
	20.00	30.00	568.45	388.06	2.97	1.27	1.77
	30.00	40.00	257.04	173.10	3.03	2.43	2.69
	40.00	50.00	361.28	273.50	2.34	2.67	2.49
	50.00	60.00	152.67	100.35	3.36	3.06	3.20
	60.00	70.00	145.44	226.80	3.49	1.42	1.98
	70.00	80.00	138.67	140.15	3.30	3.51	3.40
	80.00	90.00	77.79	107.38	3.29	1.52	2.04
	90.00	100.00	101.65	422.53	3.42	1.31	1.86
	100.00	110.00	121.08	282.36	2.88	1.93	2.30
	110.00	120.00	111.27	212.84	3.18	2.94	3.05
	120.00	130.00	103.71	187.31	2.92	2.62	2.76
	130.00	140.00	155.10	134.01	3.06	3.26	3.15
	140.00	150.00	148.07	250.84	3.16	2.79	2.96
	150.00	160.00	124.15	226.12	2.96	2.84	2.90
	160.00	170.00	129.96	511.20	3.21	1.63	2.13
	170.00	180.00	69.51	179.91	3.10	1.66	2.13
	180.00	190.00	200.74	463.13	2.75	1.53	1.96
	190.00	200.00	76.80	154.31	3.11	2.58	2.81
	200.00	210.00	120.09	256.43	3.32	1.88	2.36
	210.00	220.00	361.10	587.95	1.06	.95	1.00
	220.00	230.00	372.33	263.10	1.85	2.83	2.22
	230.00	240.00	213.71	89.48	2.36	2.95	2.61
	240.00	250.00	163.74	83.30	2.31	3.35	2.70
	250.00	260.00	426.51	439.58	.03	.00	.01
	260.00	270.00	951.41	1222.05	.08	.01	.03
	270.00	280.00	523.99	717.47	2.25	2.41	2.33
	280.00	290.00	574.86	863.90	.27	2.09	.58
	290.00	300.00	240.77	673.60	.87	.92	.89
	300.00	310.00	235.93	726.45	1.49	.26	.52
	310.00	320.00	516.04	414.06	.88	1.05	.96
	320.00	330.00	509.52	817.11	3.04	2.96	3.00
	330.00	340.00	333.49	383.56	2.95	2.93	2.94
	340.00	350.00	261.66	363.87	2.50	3.21	2.79
	350.00	360.00	317.39	397.64	1.77	2.61	2.10
	360.00	370.00	101.64	122.88	2.93	3.40	3.13
	370.00	380.00	79.29	122.15	2.68	3.10	2.87
	380.00	390.00	77.82	137.06	3.41	3.59	3.49
	390.00	400.00	101.53	102.89	2.30	3.06	2.61
	400.00	410.00	98.71	111.68	3.25	3.00	3.12
	410.00	420.00	72.10	48.32	2.96	3.15	3.05
	420.00	430.00	101.46	110.61	3.30	3.36	3.33
	430.00	440.00	167.27	233.98	2.43	2.09	2.25

440.00	450.00	270.91	159.84	2.62	2.94	2.77
450.00	460.00	200.45	159.07	1.80	2.96	2.22
460.00	470.00	207.47	64.33	3.31	2.49	2.82
470.00	480.00	136.14	698.54	3.18	.88	1.40
480.00	490.00	101.57	113.76	3.16	3.11	3.13
490.00	500.00	163.28	119.31	2.77	2.88	2.83
500.00	510.00	137.78	100.38	2.98	3.37	3.16
510.00	519.80	170.09	111.23	2.88	3.07	2.97

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\US421NB2.ERD							
	.00	519.80	239.86	315.21	1.14	.96	1.04
	.00	10.00	516.82	359.80	.07	1.64	.23
	10.00	20.00	418.14	186.18	1.14	2.41	1.56
	20.00	30.00	632.06	422.17	2.71	2.12	2.37
	30.00	40.00	197.44	176.11	2.99	2.14	2.48
	40.00	50.00	400.68	283.18	2.20	2.77	2.45
	50.00	60.00	169.96	102.49	3.32	3.21	3.26
	60.00	70.00	122.19	209.43	3.80	1.53	2.12
	70.00	80.00	154.38	136.64	3.35	3.48	3.41
	80.00	90.00	71.17	128.38	3.39	2.76	3.03
	90.00	100.00	108.53	391.53	3.30	1.14	1.69
	100.00	110.00	108.70	275.74	2.71	1.81	2.16
	110.00	120.00	156.16	241.04	3.21	2.54	2.82
	120.00	130.00	111.35	212.79	2.80	2.52	2.65
	130.00	140.00	129.20	106.76	3.32	3.73	3.50
	140.00	150.00	163.72	209.29	2.88	3.09	2.98
	150.00	160.00	98.80	260.51	2.68	2.80	2.74
	160.00	170.00	136.89	475.21	3.30	1.82	2.31
	170.00	180.00	82.10	174.46	2.74	1.62	2.03
	180.00	190.00	158.05	551.53	2.83	1.51	1.96
	190.00	200.00	84.09	223.96	3.30	2.23	2.63
	200.00	210.00	119.27	229.79	2.79	1.65	2.06
	210.00	220.00	286.53	589.02	1.10	.97	1.03
	220.00	230.00	293.28	269.09	2.13	2.89	2.44
	230.00	240.00	168.92	79.28	2.46	2.95	2.67
	240.00	250.00	139.09	87.58	2.50	3.32	2.83
	250.00	260.00	378.94	329.87	.01	.00	.00
	260.00	270.00	1341.22	1718.49	.02	.00	.01
	270.00	280.00	546.20	625.32	2.52	2.34	2.43
	280.00	290.00	553.42	909.36	.25	2.03	.54
	290.00	300.00	269.37	632.49	.74	.90	.81
	300.00	310.00	231.70	732.75	1.43	.25	.51
	310.00	320.00	472.22	444.66	.70	1.05	.85
	320.00	330.00	559.14	820.21	3.19	2.65	2.88
	330.00	340.00	317.29	425.67	2.77	3.12	2.93
	340.00	350.00	257.37	354.13	1.87	2.88	2.25
	350.00	360.00	300.98	388.32	2.00	2.70	2.29
	360.00	370.00	136.79	137.42	3.68	4.02	3.83
	370.00	380.00	63.43	110.22	2.75	3.01	2.87
	380.00	390.00	66.40	136.04	3.33	3.35	3.34
	390.00	400.00	100.59	91.81	2.31	3.06	2.62
	400.00	410.00	113.60	117.28	2.98	2.85	2.91
	410.00	420.00	76.89	34.81	2.95	3.22	3.08
	420.00	430.00	86.40	94.37	3.49	3.65	3.57
	430.00	440.00	176.84	203.24	2.63	2.29	2.44

440.00	450.00	248.41	161.79	2.51	3.06	2.75
450.00	460.00	226.93	152.04	2.09	2.88	2.41
460.00	470.00	210.33	86.13	3.20	3.19	3.20
470.00	480.00	146.00	801.35	3.57	.69	1.21
480.00	490.00	95.09	131.98	3.75	3.25	3.47
490.00	500.00	151.43	123.36	3.02	3.00	3.01
500.00	510.00	145.38	92.08	3.05	3.33	3.18
510.00	519.80	159.96	148.57	2.96	3.04	3.00

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\US421SB2.ERD							
	.00	520.06	253.55	334.98	1.54	1.33	1.43
	.00	10.00	298.22	265.16	1.68	1.93	1.80
	10.00	20.00	342.85	325.25	1.53	2.27	1.82
	20.00	30.00	182.14	173.43	2.56	.78	1.24
	30.00	40.00	80.97	343.10	2.50	2.08	2.27
	40.00	50.00	230.51	212.67	2.75	3.33	3.00
	50.00	60.00	66.19	179.59	3.29	3.71	3.48
	60.00	70.00	84.15	56.66	2.63	2.31	2.46
	70.00	80.00	194.36	154.15	3.04	3.40	3.20
	80.00	90.00	149.47	109.78	2.72	1.71	2.09
	90.00	100.00	194.99	184.62	3.21	3.28	3.25
	100.00	110.00	156.05	159.49	2.10	.85	1.24
	110.00	120.00	155.75	202.20	3.05	1.55	2.03
	120.00	130.00	132.03	141.04	2.88	3.37	3.09
	130.00	140.00	103.51	56.47	2.27	3.41	2.69
	140.00	150.00	128.91	141.31	2.11	1.99	2.05
	150.00	160.00	58.55	99.33	3.16	2.70	2.90
	160.00	170.00	204.54	164.79	1.47	1.59	1.53
	170.00	180.00	202.92	264.19	3.19	1.33	1.86
	180.00	190.00	231.56	684.30	1.63	.72	1.03
	190.00	200.00	422.79	509.54	1.10	.78	.92
	200.00	210.00	121.78	413.48	.96	1.49	1.17
	210.00	220.00	363.44	699.51	.20	.23	.21
	220.00	230.00	455.43	593.86	.98	1.09	1.03
	230.00	240.00	530.09	833.96	.88	.75	.81
	240.00	250.00	546.73	862.56	1.15	1.85	1.43
	250.00	260.00	494.17	588.69	.51	.50	.50
	260.00	270.00	747.29	792.05	.19	.26	.22
	270.00	280.00	670.31	1079.89	1.96	1.29	1.56
	280.00	290.00	742.29	1067.02	1.41	1.76	1.57
	290.00	300.00	203.39	285.09	1.81	1.86	1.83
	300.00	310.00	952.68	1120.27	.44	.18	.27
	310.00	320.00	425.93	290.79	1.56	1.08	1.28
	320.00	330.00	83.93	303.34	2.42	2.56	2.49
	330.00	340.00	137.11	472.03	1.65	2.00	1.81
	340.00	350.00	147.34	231.53	2.64	1.08	1.55
	350.00	360.00	341.05	413.33	.52	1.99	.89
	360.00	370.00	604.90	427.84	2.28	2.05	2.16
	370.00	380.00	100.42	172.21	3.22	2.47	2.78
	380.00	390.00	165.63	154.25	2.60	2.50	2.55
	390.00	400.00	65.18	141.13	2.79	3.08	2.93
	400.00	410.00	146.73	79.95	2.59	3.57	2.96
	410.00	420.00	196.10	183.36	2.99	2.16	2.50
	420.00	430.00	136.01	124.06	2.53	2.41	2.47
	430.00	440.00	265.74	456.93	2.04	.33	.66

440.00	450.00	104.47	277.39	3.70	1.41	1.99
450.00	460.00	56.83	93.99	3.04	3.55	3.26
460.00	470.00	150.79	123.71	2.79	3.18	2.97
470.00	480.00	87.54	181.57	3.24	3.28	3.26
480.00	490.00	176.38	126.25	2.70	3.25	2.94
490.00	500.00	119.47	118.23	3.29	3.26	3.27
500.00	510.00	49.73	130.87	2.62	2.06	2.30
510.00	520.00	190.40	236.58	2.63	2.05	2.30

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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\US421SB2.ERD							
	.00	519.54	253.74	322.88	1.34	1.34	1.34
	.00	10.00	262.67	269.48	2.01	2.02	2.01
	10.00	20.00	319.22	342.50	1.67	2.12	1.87
	20.00	30.00	133.25	146.03	2.26	2.28	2.27
	30.00	40.00	71.57	240.25	3.15	2.18	2.55
	40.00	50.00	213.08	210.10	2.80	3.17	2.97
	50.00	60.00	66.51	166.74	3.65	3.56	3.60
	60.00	70.00	81.01	56.32	3.00	2.50	2.72
	70.00	80.00	224.15	133.66	2.82	3.17	2.98
	80.00	90.00	145.86	95.03	2.42	1.85	2.10
	90.00	100.00	200.75	192.87	3.19	3.24	3.21
	100.00	110.00	125.03	96.32	2.64	1.21	1.66
	110.00	120.00	168.77	140.15	3.16	1.15	1.69
	120.00	130.00	124.03	160.32	3.18	3.29	3.23
	130.00	140.00	126.80	42.53	3.01	3.99	3.37
	140.00	150.00	117.91	152.58	2.56	2.50	2.53
	150.00	160.00	71.14	66.05	3.42	3.22	3.32
	160.00	170.00	146.92	135.67	1.95	2.05	2.00
	170.00	180.00	186.58	275.35	3.19	1.52	2.03
	180.00	190.00	219.23	654.32	1.40	.72	.97
	190.00	200.00	324.64	496.08	1.30	.88	1.06
	200.00	210.00	94.30	391.39	1.37	1.09	1.22
	210.00	220.00	498.22	760.89	.05	.08	.06
	220.00	230.00	418.71	574.12	1.29	.75	.96
	230.00	240.00	539.39	932.11	.93	.83	.88
	240.00	250.00	528.94	723.74	.80	1.87	1.15
	250.00	260.00	626.42	712.53	.09	.45	.18
	260.00	270.00	1214.97	828.82	.14	.21	.17
	270.00	280.00	630.01	846.65	2.01	1.72	1.85
	280.00	290.00	818.10	1148.90	1.10	1.44	1.25
	290.00	300.00	182.87	309.27	1.56	2.21	1.83
	300.00	310.00	752.58	844.52	.68	.49	.58
	310.00	320.00	399.53	506.84	2.09	.52	.89
	320.00	330.00	95.91	327.88	2.88	2.14	2.44
	330.00	340.00	131.94	339.72	2.42	2.33	2.37
	340.00	350.00	138.52	237.24	3.19	1.32	1.85
	350.00	360.00	235.39	339.59	1.02	2.36	1.45
	360.00	370.00	477.12	428.43	1.47	2.39	1.82
	370.00	380.00	104.44	204.75	3.42	2.45	2.82
	380.00	390.00	197.80	124.60	2.68	2.57	2.62
	390.00	400.00	93.76	179.15	2.95	2.86	2.91
	400.00	410.00	162.53	74.83	2.99	3.54	3.22
	410.00	420.00	214.33	188.18	3.20	2.71	2.92
	420.00	430.00	110.66	117.06	3.10	2.54	2.78
	430.00	440.00	225.83	436.26	2.67	.54	.97

440.00	450.00	135.10	206.80	3.46	2.93	3.16
450.00	460.00	63.52	80.48	3.25	3.64	3.43
460.00	470.00	150.34	103.98	3.07	3.50	3.26
470.00	480.00	86.96	162.94	3.58	3.27	3.41
480.00	490.00	193.64	135.84	2.52	3.35	2.85
490.00	500.00	117.67	128.59	3.31	3.06	3.18
500.00	510.00	51.74	127.62	2.53	2.34	2.43
510.00	519.54	171.74	205.95	2.72	2.42	2.55

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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR3942~1.ERD							
	.00	519.80	335.19	338.31	1.34	1.74	1.51
	.00	10.00	1090.03	430.20	.34	1.53	.63
	10.00	20.00	397.13	142.59	1.24	2.35	1.63
	20.00	30.00	130.10	97.90	2.54	2.92	2.71
	30.00	40.00	217.65	102.41	1.95	2.39	2.15
	40.00	50.00	195.71	167.07	3.08	3.07	3.07
	50.00	60.00	114.81	144.04	2.75	3.05	2.89
	60.00	70.00	199.98	235.67	2.99	2.89	2.94
	70.00	80.00	65.40	112.90	3.03	2.23	2.55
	80.00	90.00	173.59	187.53	2.62	2.51	2.56
	90.00	100.00	100.34	86.27	1.75	2.87	2.16
	100.00	110.00	83.57	243.11	2.16	1.35	1.66
	110.00	120.00	143.19	120.81	1.99	2.52	2.22
	120.00	130.00	584.69	409.71	.56	.80	.66
	130.00	140.00	455.84	366.44	1.46	1.72	1.58
	140.00	150.00	791.07	870.43	2.69	2.38	2.52
	150.00	160.00	831.66	1050.53	.02	.07	.04
	160.00	170.00	1048.45	1001.80	.05	.17	.08
	170.00	180.00	942.88	1001.89	.53	.71	.61
	180.00	190.00	500.99	485.75	1.31	1.54	1.42
	190.00	200.00	457.38	391.79	1.18	1.55	1.34
	200.00	210.00	876.63	964.08	.99	1.54	1.21
	210.00	220.00	619.84	721.38	1.49	1.66	1.57
	220.00	230.00	390.77	579.36	1.92	2.64	2.21
	230.00	240.00	802.96	903.92	1.55	2.23	1.82
	240.00	250.00	243.63	182.67	1.86	1.85	1.85
	250.00	260.00	50.93	90.11	3.29	2.75	2.99
	260.00	270.00	56.55	128.19	3.92	2.34	2.84
	270.00	280.00	87.16	153.56	3.35	3.67	3.50
	280.00	290.00	147.93	174.85	3.39	3.64	3.51
	290.00	300.00	147.45	81.42	3.81	3.81	3.81
	300.00	310.00	131.70	99.54	2.88	3.12	3.00
	310.00	320.00	126.30	204.70	3.30	3.12	3.20
	320.00	330.00	79.89	93.55	2.70	3.06	2.87
	330.00	340.00	225.44	189.41	1.76	2.58	2.09
	340.00	350.00	104.28	184.48	3.84	3.06	3.37
	350.00	360.00	107.00	51.46	3.28	3.23	3.26
	360.00	370.00	109.46	84.47	3.06	3.33	3.19
	370.00	380.00	55.55	184.62	3.38	2.49	2.84
	380.00	390.00	87.72	152.14	3.79	2.89	3.24
	390.00	400.00	63.61	67.09	3.46	2.79	3.07
	400.00	410.00	45.52	138.88	3.57	3.01	3.25
	410.00	420.00	207.20	254.66	2.61	2.27	2.43
	420.00	430.00	138.40	218.19	3.15	2.38	2.69
	430.00	440.00	63.80	141.63	3.67	3.00	3.27

440.00	450.00	144.74	210.49	3.14	3.13	3.14
450.00	460.00	190.07	225.41	2.20	2.69	2.42
460.00	470.00	285.36	242.84	2.08	2.02	2.05
470.00	480.00	721.07	742.56	1.08	1.29	1.18
480.00	490.00	541.02	620.27	1.00	1.14	1.07
490.00	500.00	1076.43	827.20	1.84	2.42	2.09
500.00	510.00	556.23	541.99	1.02	2.11	1.40
510.00	519.80	409.62	440.57	1.94	3.06	2.35

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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\SR3942~1.ERD							
	.00	519.54	329.57	355.32	.97	1.06	1.01
	.00	10.00	848.09	1275.36	.01	.00	.00
	10.00	20.00	268.97	152.95	2.04	2.07	2.05
	20.00	30.00	84.94	142.87	2.92	2.79	2.85
	30.00	40.00	174.87	121.29	2.38	2.21	2.29
	40.00	50.00	164.71	131.45	2.76	3.12	2.93
	50.00	60.00	181.22	184.55	2.70	1.86	2.19
	60.00	70.00	207.44	194.48	2.04	3.09	2.44
	70.00	80.00	79.82	85.46	2.41	2.38	2.40
	80.00	90.00	238.12	142.54	2.16	2.72	2.40
	90.00	100.00	141.61	66.04	1.75	3.56	2.29
	100.00	110.00	96.09	250.46	2.01	1.29	1.58
	110.00	120.00	140.07	196.79	2.28	2.53	2.40
	120.00	130.00	622.74	574.90	.53	.36	.43
	130.00	140.00	459.20	393.57	1.50	1.80	1.63
	140.00	150.00	808.41	851.81	2.55	2.92	2.72
	150.00	160.00	848.24	1062.94	.01	.07	.03
	160.00	170.00	1192.16	1005.74	.22	.84	.39
	170.00	180.00	944.81	999.83	.52	.57	.54
	180.00	190.00	545.98	502.57	1.10	1.54	1.29
	190.00	200.00	426.33	405.44	1.18	1.34	1.25
	200.00	210.00	873.22	980.09	1.04	1.36	1.18
	210.00	220.00	620.52	792.79	1.48	1.69	1.58
	220.00	230.00	411.98	631.88	2.06	2.31	2.18
	230.00	240.00	765.83	946.23	1.68	1.58	1.63
	240.00	250.00	207.46	226.77	2.16	1.86	2.00
	250.00	260.00	74.85	89.94	3.57	2.64	3.00
	260.00	270.00	48.27	126.64	3.38	2.69	2.98
	270.00	280.00	142.52	168.76	3.29	3.39	3.34
	280.00	290.00	127.84	206.70	3.41	2.97	3.16
	290.00	300.00	110.41	43.80	3.88	3.79	3.84
	300.00	310.00	78.80	90.23	3.25	3.45	3.34
	310.00	320.00	128.13	165.38	3.14	3.02	3.08
	320.00	330.00	72.93	132.97	2.95	2.33	2.59
	330.00	340.00	172.70	189.98	2.41	2.92	2.63
	340.00	350.00	135.43	184.33	3.66	3.09	3.33
	350.00	360.00	79.81	61.61	3.07	3.41	3.22
	360.00	370.00	113.18	84.33	3.13	3.39	3.25
	370.00	380.00	66.60	161.98	3.49	2.86	3.12
	380.00	390.00	84.28	104.73	3.57	3.37	3.46
	390.00	400.00	82.96	100.99	3.33	2.68	2.95
	400.00	410.00	40.88	119.82	3.18	2.97	3.07
	410.00	420.00	215.33	243.26	3.00	2.39	2.65
	420.00	430.00	119.00	172.94	2.90	2.48	2.67
	430.00	440.00	96.58	99.92	3.07	3.03	3.05

440.00	450.00	156.58	217.00	3.11	2.54	2.79
450.00	460.00	127.43	250.87	2.34	2.54	2.43
460.00	470.00	225.60	151.57	2.19	2.54	2.35
470.00	480.00	659.39	636.34	1.28	1.92	1.54
480.00	490.00	571.73	588.19	1.13	1.38	1.24
490.00	500.00	1038.77	808.91	2.02	2.07	2.04
500.00	510.00	633.69	451.92	.80	2.01	1.18
510.00	519.54	372.28	472.16	1.98	2.59	2.24

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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR3942~2.ERD							
	.00	520.06	378.46	500.06	.81	.68	.74
	.00	10.00	234.13	368.49	2.16	1.55	1.80
	10.00	20.00	184.01	715.31	2.99	.46	.89
	20.00	30.00	468.42	780.62	1.60	.88	1.15
	30.00	40.00	359.47	569.85	2.28	1.48	1.80
	40.00	50.00	136.35	316.85	2.12	1.64	1.85
	50.00	60.00	782.60	495.59	.86	1.61	1.13
	60.00	70.00	738.02	941.75	.53	.47	.50
	70.00	80.00	828.58	976.89	1.85	2.08	1.96
	80.00	90.00	346.92	515.25	3.33	2.58	2.89
	90.00	100.00	415.02	441.73	2.88	3.25	3.05
	100.00	110.00	442.23	538.88	3.66	3.59	3.63
	110.00	120.00	185.25	290.67	2.68	2.14	2.37
	120.00	130.00	119.40	149.07	3.88	3.18	3.47
	130.00	140.00	245.08	380.21	3.80	2.62	3.05
	140.00	150.00	116.07	213.14	3.28	2.19	2.60
	150.00	160.00	53.01	64.81	3.92	2.96	3.32
	160.00	170.00	118.75	132.44	3.78	2.77	3.15
	170.00	180.00	113.31	248.36	3.50	2.68	3.01
	180.00	190.00	80.75	89.16	3.39	2.95	3.15
	190.00	200.00	80.04	74.27	3.23	2.95	3.08
	200.00	210.00	119.88	197.13	3.58	2.70	3.04
	210.00	220.00	123.64	507.10	3.58	.15	.41
	220.00	230.00	114.38	615.09	3.62	.94	1.50
	230.00	240.00	98.19	156.20	3.57	1.90	2.42
	240.00	250.00	36.18	216.99	3.93	2.28	2.80
	250.00	260.00	66.82	109.27	3.57	2.62	2.99
	260.00	270.00	107.24	196.13	3.52	2.06	2.55
	270.00	280.00	66.82	216.47	3.07	1.58	2.06
	280.00	290.00	531.02	793.18	1.27	.72	.94
	290.00	300.00	606.54	842.72	1.75	.82	1.14
	300.00	310.00	180.87	318.82	2.46	1.07	1.50
	310.00	320.00	441.52	347.61	.85	1.40	1.07
	320.00	330.00	493.35	347.20	1.25	1.71	1.45
	330.00	340.00	465.67	699.03	1.56	1.27	1.40
	340.00	350.00	560.70	489.31	1.22	1.43	1.32
	350.00	360.00	1097.57	1157.61	.00	.00	.00
	360.00	370.00	1635.02	1505.66	.00	.00	.00
	370.00	380.00	205.70	380.32	1.76	.73	1.07
	380.00	390.00	935.55	1290.18	.43	.48	.45
	390.00	400.00	787.40	888.73	.35	.48	.41
	400.00	410.00	648.65	927.65	1.40	1.43	1.41
	410.00	420.00	1141.27	1569.23	1.82	1.57	1.69
	420.00	430.00	734.21	916.85	3.04	1.37	1.88
	430.00	440.00	279.43	551.69	1.56	1.46	1.51

440.00	450.00	591.61	546.64	3.02	1.93	2.33
450.00	460.00	345.36	334.45	3.33	2.96	3.13
460.00	470.00	170.09	389.28	3.27	2.30	2.68
470.00	480.00	209.15	353.83	2.89	1.62	2.06
480.00	490.00	115.31	195.93	3.37	2.87	3.09
490.00	500.00	85.75	170.50	3.21	3.06	3.13
500.00	510.00	185.07	275.05	2.96	2.40	2.64
510.00	520.00	472.85	240.87	.45	1.83	.79

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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\SR3942~2.ERD							
	.00	519.54	366.71	497.03	1.05	1.08	1.07
	.00	10.00	269.37	320.86	1.86	1.15	1.43
	10.00	20.00	178.99	331.26	3.09	1.92	2.34
	20.00	30.00	304.59	653.61	1.68	1.16	1.38
	30.00	40.00	434.01	548.49	2.02	1.51	1.73
	40.00	50.00	273.15	443.16	1.54	1.65	1.59
	50.00	60.00	553.53	545.25	.86	1.24	1.02
	60.00	70.00	824.67	1054.69	.60	.50	.55
	70.00	80.00	845.20	984.16	1.99	2.07	2.03
	80.00	90.00	368.77	610.37	3.41	2.71	3.00
	90.00	100.00	359.41	407.56	3.68	3.61	3.64
	100.00	110.00	452.27	568.83	3.32	3.38	3.35
	110.00	120.00	215.30	327.02	2.71	2.38	2.53
	120.00	130.00	93.19	155.16	3.96	3.15	3.47
	130.00	140.00	230.35	347.72	3.67	2.40	2.85
	140.00	150.00	148.22	329.68	3.44	2.07	2.54
	150.00	160.00	49.27	59.43	3.69	3.07	3.33
	160.00	170.00	92.10	106.76	3.82	3.23	3.48
	170.00	180.00	124.79	244.47	3.98	2.87	3.27
	180.00	190.00	62.26	105.60	3.37	3.12	3.24
	190.00	200.00	85.78	138.09	2.84	2.68	2.76
	200.00	210.00	132.07	201.55	3.57	2.44	2.86
	210.00	220.00	107.13	400.71	3.58	.25	.60
	220.00	230.00	109.02	708.54	3.43	.48	.93
	230.00	240.00	80.61	132.76	3.43	1.93	2.42
	240.00	250.00	49.57	245.49	3.91	2.36	2.86
	250.00	260.00	72.93	94.85	3.61	2.86	3.17
	260.00	270.00	84.60	191.17	3.33	2.09	2.53
	270.00	280.00	89.23	207.68	3.48	1.97	2.47
	280.00	290.00	433.62	773.33	1.42	.78	1.03
	290.00	300.00	648.33	752.65	1.58	.76	1.05
	300.00	310.00	188.79	431.61	2.38	1.01	1.44
	310.00	320.00	428.10	285.03	.92	1.39	1.11
	320.00	330.00	507.77	380.94	1.12	1.77	1.38
	330.00	340.00	536.43	707.87	1.59	1.32	1.44
	340.00	350.00	535.36	515.73	1.05	1.32	1.18
	350.00	360.00	957.68	954.49	.00	.04	.01
	360.00	370.00	1168.04	1120.84	.15	.06	.10
	370.00	380.00	162.03	525.63	2.35	.57	.98
	380.00	390.00	921.45	1330.39	.76	.58	.66
	390.00	400.00	788.12	1008.45	.18	.79	.34
	400.00	410.00	773.19	879.59	1.31	.97	1.12
	410.00	420.00	1165.09	1531.21	2.21	1.66	1.89
	420.00	430.00	871.88	1138.60	2.70	1.31	1.76
	430.00	440.00	289.32	410.21	1.57	1.68	1.62

440.00	450.00	549.55	662.25	3.07	1.64	2.12
450.00	460.00	397.01	362.31	3.61	3.07	3.30
460.00	470.00	180.18	371.44	3.31	2.16	2.58
470.00	480.00	198.39	311.10	3.06	1.60	2.08
480.00	490.00	97.32	251.45	2.99	2.60	2.78
490.00	500.00	84.90	143.00	2.89	3.38	3.11
500.00	510.00	188.80	304.73	2.98	2.30	2.59
510.00	519.54	373.25	201.29	1.26	2.42	1.66

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR28WB2.ERD	.00	519.80	326.24	347.46	.87	.66	.75
	.00	10.00	827.83	664.02	.14	.22	.17
	10.00	20.00	203.85	215.91	1.76	1.84	1.80
	20.00	30.00	255.75	324.32	2.71	1.68	2.06
	30.00	40.00	346.57	533.68	1.49	1.29	1.39
	40.00	50.00	319.06	177.17	2.21	.99	1.39
	50.00	60.00	400.33	344.91	1.74	2.33	1.99
	60.00	70.00	295.81	101.81	2.53	3.26	2.83
	70.00	80.00	188.75	485.41	2.11	1.29	1.61
	80.00	90.00	238.81	220.60	2.96	2.81	2.89
	90.00	100.00	190.82	157.90	3.11	2.86	2.98
	100.00	110.00	156.44	113.13	3.11	3.07	3.09
	110.00	120.00	171.54	333.23	1.86	1.28	1.52
	120.00	130.00	240.70	149.04	2.69	2.96	2.81
	130.00	140.00	332.71	177.63	1.89	2.28	2.07
	140.00	150.00	120.71	60.44	3.12	2.79	2.95
	150.00	160.00	246.25	209.20	2.20	2.06	2.13
	160.00	170.00	256.29	330.62	1.44	1.69	1.55
	170.00	180.00	560.64	661.84	1.61	1.06	1.28
	180.00	190.00	267.38	377.77	1.19	1.16	1.17
	190.00	200.00	205.46	315.19	1.62	1.81	1.71
	200.00	210.00	335.84	251.92	1.72	2.76	2.11
	210.00	220.00	223.17	239.83	1.34	2.03	1.62
	220.00	230.00	154.07	248.38	2.58	1.39	1.80
	230.00	240.00	168.87	305.67	2.46	.88	1.33
	240.00	250.00	511.47	508.40	.52	.71	.61
	250.00	260.00	319.67	512.84	.00	.00	.00
	260.00	270.00	1471.22	1565.83	.01	.00	.00
	270.00	280.00	937.10	694.30	.09	.18	.13
	280.00	290.00	625.57	654.26	1.26	.19	.41
	290.00	300.00	456.87	608.61	.49	1.42	.77
	300.00	310.00	694.12	774.66	2.88	2.60	2.73
	310.00	320.00	274.11	330.89	1.88	2.42	2.11
	320.00	330.00	327.43	489.11	2.10	2.83	2.40
	330.00	340.00	271.17	171.18	.88	1.67	1.17
	340.00	350.00	412.60	319.95	1.64	1.94	1.78
	350.00	360.00	161.37	167.58	2.26	1.53	1.82
	360.00	370.00	316.88	336.97	2.59	1.81	2.12
	370.00	380.00	213.89	322.21	2.43	2.25	2.34
	380.00	390.00	132.64	187.26	2.70	2.56	2.63
	390.00	400.00	148.78	312.98	2.35	2.67	2.50
	400.00	410.00	161.56	174.03	2.21	3.25	2.61
	410.00	420.00	505.30	261.47	.64	1.44	.92
	420.00	430.00	203.76	171.74	1.94	2.28	2.10
	430.00	440.00	220.93	227.01	2.16	2.62	2.36

440.00	450.00	204.08	117.36	1.86	2.18	2.00
450.00	460.00	122.24	228.62	2.03	2.46	2.22
460.00	470.00	186.47	184.06	1.85	2.53	2.13
470.00	480.00	134.67	188.37	3.02	2.47	2.70
480.00	490.00	414.90	440.17	1.24	.70	.91
490.00	500.00	241.95	264.42	2.15	2.52	2.32
500.00	510.00	252.41	606.88	2.05	.84	1.22
510.00	519.80	331.71	300.15	1.53	1.43	1.48

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\SR28WB2.ERD							
	.00	519.54	344.32	353.70	.84	.73	.78
	.00	10.00	844.10	769.39	.13	.18	.15
	10.00	20.00	208.08	243.76	1.74	1.96	1.84
	20.00	30.00	230.69	332.99	2.61	2.24	2.41
	30.00	40.00	310.45	568.16	1.52	1.33	1.42
	40.00	50.00	349.39	165.87	1.77	1.56	1.66
	50.00	60.00	388.75	360.98	1.60	2.36	1.91
	60.00	70.00	297.95	107.74	2.50	3.24	2.80
	70.00	80.00	210.71	462.12	1.85	1.25	1.50
	80.00	90.00	228.07	241.26	3.40	2.98	3.17
	90.00	100.00	189.45	148.75	3.11	3.28	3.19
	100.00	110.00	166.92	135.95	3.23	3.29	3.26
	110.00	120.00	151.46	316.07	1.80	1.26	1.49
	120.00	130.00	249.31	167.82	2.53	3.12	2.78
	130.00	140.00	320.07	141.40	1.94	1.61	1.76
	140.00	150.00	122.07	82.69	2.60	2.45	2.52
	150.00	160.00	263.38	223.40	2.06	1.99	2.03
	160.00	170.00	286.26	309.68	1.44	1.63	1.53
	170.00	180.00	585.86	600.48	1.74	1.06	1.33
	180.00	190.00	324.68	443.81	1.24	.97	1.10
	190.00	200.00	226.86	325.21	1.88	1.69	1.78
	200.00	210.00	409.71	247.54	2.21	2.99	2.53
	210.00	220.00	232.51	271.82	1.27	1.96	1.55
	220.00	230.00	164.68	231.03	2.60	2.10	2.32
	230.00	240.00	143.30	308.97	2.48	1.21	1.64
	240.00	250.00	512.04	576.40	.41	.78	.55
	250.00	260.00	493.93	543.71	.00	.00	.00
	260.00	270.00	1445.07	1477.13	.13	.16	.14
	270.00	280.00	771.52	395.69	.53	.35	.43
	280.00	290.00	782.64	905.09	.71	.18	.33
	290.00	300.00	896.43	741.37	.04	1.34	.15
	300.00	310.00	574.37	803.82	2.71	2.69	2.70
	310.00	320.00	339.00	277.44	1.74	2.43	2.02
	320.00	330.00	314.87	515.47	2.90	2.79	2.84
	330.00	340.00	200.66	229.01	1.18	1.57	1.35
	340.00	350.00	472.53	333.03	.91	1.42	1.11
	350.00	360.00	180.85	168.88	2.01	1.46	1.69
	360.00	370.00	278.69	299.99	2.55	1.98	2.22
	370.00	380.00	228.67	346.14	2.51	2.47	2.49
	380.00	390.00	93.82	229.42	3.08	1.74	2.20
	390.00	400.00	174.50	286.63	2.77	2.62	2.69
	400.00	410.00	167.54	208.26	1.48	3.09	1.98
	410.00	420.00	741.48	231.06	.12	1.21	.30
	420.00	430.00	218.08	143.61	1.67	2.79	2.08
	430.00	440.00	240.18	228.65	2.22	2.40	2.31

440.00	450.00	183.09	125.84	1.96	2.20	2.07
450.00	460.00	115.21	200.61	1.83	2.31	2.04
460.00	470.00	210.18	144.59	1.80	2.04	1.91
470.00	480.00	150.32	204.62	3.13	2.58	2.82
480.00	490.00	454.45	439.34	1.05	.75	.88
490.00	500.00	252.90	269.08	1.84	2.30	2.04
500.00	510.00	214.56	635.55	2.11	.88	1.27
510.00	519.54	290.30	295.73	.99	1.32	1.14

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR28EB2.ERD	.00	519.80	300.55	335.57	1.32	1.18	1.25
	.00	10.00	72.34	103.31	3.40	3.31	3.35
	10.00	20.00	691.29	493.60	.45	.78	.58
	20.00	30.00	123.77	107.35	3.29	3.12	3.20
	30.00	40.00	139.59	459.83	1.92	1.22	1.50
	40.00	50.00	112.01	182.29	3.25	3.06	3.15
	50.00	60.00	189.04	111.52	1.88	2.22	2.03
	60.00	70.00	71.79	196.30	2.72	3.22	2.94
	70.00	80.00	112.78	170.26	1.54	1.07	1.27
	80.00	90.00	136.77	146.83	2.72	3.61	3.07
	90.00	100.00	218.90	178.11	2.57	3.46	2.92
	100.00	110.00	298.76	298.09	3.01	3.39	3.18
	110.00	120.00	138.18	124.15	3.29	3.59	3.43
	120.00	130.00	535.94	433.08	1.50	1.69	1.59
	130.00	140.00	236.66	224.50	2.78	2.88	2.83
	140.00	150.00	392.68	357.88	3.17	3.25	3.21
	150.00	160.00	127.49	226.85	3.09	3.22	3.16
	160.00	170.00	415.24	424.57	.61	.95	.75
	170.00	180.00	251.34	353.65	2.26	2.30	2.28
	180.00	190.00	333.42	421.55	1.22	1.49	1.35
	190.00	200.00	450.41	278.33	.74	.75	.75
	200.00	210.00	345.65	658.85	2.52	2.31	2.41
	210.00	220.00	466.34	749.72	2.62	.40	.80
	220.00	230.00	663.20	824.92	.17	.69	.31
	230.00	240.00	1079.05	801.21	.27	.30	.28
	240.00	250.00	229.09	264.44	1.00	2.10	1.37
	250.00	260.00	476.84	865.63	1.02	.02	.08
	260.00	270.00	745.09	807.88	.18	.27	.22
	270.00	280.00	468.98	649.52	.59	.51	.55
	280.00	290.00	600.93	530.46	.76	1.63	1.06
	290.00	300.00	491.84	408.24	.62	.42	.50
	300.00	310.00	514.47	585.09	.90	.53	.68
	310.00	320.00	343.88	511.19	2.14	1.52	1.78
	320.00	330.00	445.32	436.79	1.50	1.99	1.71
	330.00	340.00	112.61	113.44	2.50	2.12	2.30
	340.00	350.00	464.75	588.77	1.36	.83	1.04
	350.00	360.00	289.50	307.82	2.02	1.78	1.89
	360.00	370.00	208.37	260.13	2.51	2.21	2.35
	370.00	380.00	185.08	169.49	2.60	2.28	2.43
	380.00	390.00	223.21	263.44	2.04	1.75	1.88
	390.00	400.00	71.76	321.53	3.63	3.89	3.75
	400.00	410.00	110.21	108.87	3.78	2.96	3.29
	410.00	420.00	194.32	242.43	3.56	1.66	2.21
	420.00	430.00	231.52	355.95	1.51	1.23	1.36
	430.00	440.00	108.67	84.48	3.17	2.60	2.85

440.00	450.00	67.12	42.24	3.69	3.41	3.54
450.00	460.00	90.99	82.35	2.12	2.71	2.37
460.00	470.00	219.80	344.99	1.69	1.63	1.66
470.00	480.00	164.53	197.67	2.41	2.30	2.35
480.00	490.00	219.67	123.53	2.62	3.57	2.99
490.00	500.00	65.79	75.82	2.66	2.94	2.79
500.00	510.00	298.27	193.62	1.14	1.79	1.40
510.00	519.80	300.59	96.12	1.74	2.55	2.06

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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\SR28EB2.ERD							
	.00	519.80	301.95	334.84	1.30	1.03	1.16
	.00	10.00	145.02	166.59	.76	1.10	.90
	10.00	20.00	660.98	517.27	.82	1.57	1.09
	20.00	30.00	115.72	128.22	3.57	3.27	3.41
	30.00	40.00	124.57	438.19	2.69	1.16	1.63
	40.00	50.00	89.21	155.23	3.56	3.38	3.47
	50.00	60.00	240.29	130.95	1.52	2.41	1.86
	60.00	70.00	87.56	187.40	3.20	3.10	3.15
	70.00	80.00	131.33	136.31	1.62	1.92	1.76
	80.00	90.00	112.86	147.06	3.38	3.38	3.38
	90.00	100.00	247.32	188.95	3.03	3.46	3.22
	100.00	110.00	284.87	265.10	3.29	3.02	3.15
	110.00	120.00	184.28	161.67	2.82	3.19	2.99
	120.00	130.00	511.36	408.40	1.56	1.86	1.70
	130.00	140.00	250.55	256.73	2.89	3.24	3.05
	140.00	150.00	343.03	311.49	3.13	2.95	3.04
	150.00	160.00	208.04	279.21	1.07	1.55	1.27
	160.00	170.00	369.97	416.48	.95	1.48	1.17
	170.00	180.00	226.28	318.91	1.66	2.68	2.04
	180.00	190.00	385.73	426.15	.88	1.28	1.05
	190.00	200.00	516.57	272.07	.47	.85	.62
	200.00	210.00	363.71	758.26	2.70	1.81	2.16
	210.00	220.00	486.72	687.29	2.56	.44	.84
	220.00	230.00	662.76	795.84	.40	.61	.49
	230.00	240.00	1099.18	821.66	.29	.24	.27
	240.00	250.00	284.63	272.83	1.04	2.03	1.39
	250.00	260.00	507.85	883.03	.30	.00	.02
	260.00	270.00	561.64	484.10	.17	.07	.10
	270.00	280.00	629.11	767.33	.53	.32	.41
	280.00	290.00	541.58	571.71	1.06	2.33	1.47
	290.00	300.00	391.79	416.75	.57	.39	.46
	300.00	310.00	527.83	602.73	1.24	1.01	1.12
	310.00	320.00	303.52	533.68	2.66	1.39	1.82
	320.00	330.00	420.45	367.86	1.49	1.51	1.50
	330.00	340.00	111.58	156.75	1.90	1.53	1.69
	340.00	350.00	483.67	625.68	1.37	1.11	1.23
	350.00	360.00	279.53	259.09	1.86	1.69	1.77
	360.00	370.00	263.14	284.43	2.34	2.20	2.27
	370.00	380.00	162.06	218.71	2.59	2.43	2.51
	380.00	390.00	195.90	256.17	2.54	2.01	2.24
	390.00	400.00	84.51	331.91	3.87	3.80	3.84
	400.00	410.00	122.91	92.54	3.89	3.03	3.37
	410.00	420.00	192.03	256.96	2.37	1.91	2.11
	420.00	430.00	237.58	319.84	1.62	1.33	1.46
	430.00	440.00	114.65	62.88	3.47	3.00	3.20

440.00	450.00	76.94	54.89	3.51	3.52	3.52
450.00	460.00	96.61	84.13	2.62	2.48	2.54
460.00	470.00	233.62	333.38	1.72	1.92	1.82
470.00	480.00	152.31	201.80	2.90	2.24	2.52
480.00	490.00	141.87	136.37	2.96	3.11	3.03
490.00	500.00	100.25	91.37	1.66	1.80	1.73
500.00	510.00	296.85	229.82	1.98	2.35	2.15
510.00	519.80	331.07	105.15	1.62	2.49	1.96

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR55SB.ERD							
	.00	519.80	144.57	170.99	1.60	1.18	1.36
	.00	10.00	376.04	509.25	.31	.07	.14
	10.00	20.00	197.94	134.62	3.14	2.84	2.98
	20.00	30.00	154.27	149.40	2.73	2.11	2.37
	30.00	40.00	87.70	226.51	3.06	1.23	1.75
	40.00	50.00	95.47	331.93	2.28	2.55	2.41
	50.00	60.00	69.57	312.06	3.01	2.27	2.57
	60.00	70.00	50.78	103.26	2.92	2.61	2.76
	70.00	80.00	73.30	192.50	3.44	2.45	2.83
	80.00	90.00	57.17	243.85	3.49	2.62	2.97
	90.00	100.00	34.25	231.74	3.61	.03	.13
	100.00	110.00	65.56	310.69	3.65	2.84	3.17
	110.00	120.00	117.42	93.19	2.13	2.53	2.31
	120.00	130.00	114.99	102.85	2.58	3.01	2.77
	130.00	140.00	234.76	500.64	.04	.02	.03
	140.00	150.00	809.00	897.65	.07	.08	.07
	150.00	160.00	363.97	254.33	1.71	2.02	1.85
	160.00	170.00	227.17	212.58	2.85	1.98	2.32
	170.00	180.00	184.01	125.90	3.16	2.96	3.06
	180.00	190.00	181.01	140.40	2.65	3.18	2.88
	190.00	200.00	139.27	116.21	3.38	2.98	3.16
	200.00	210.00	101.76	235.60	2.34	2.73	2.51
	210.00	220.00	146.22	181.88	2.18	2.90	2.48
	220.00	230.00	148.78	118.72	2.96	3.61	3.23
	230.00	240.00	161.22	130.50	2.51	3.54	2.90
	240.00	250.00	137.66	173.17	2.83	3.26	3.02
	250.00	260.00	81.95	155.44	2.87	2.83	2.85
	260.00	270.00	85.04	140.32	3.52	2.94	3.19
	270.00	280.00	115.77	170.76	2.53	2.66	2.59
	280.00	290.00	92.82	72.70	2.56	2.51	2.54
	290.00	300.00	138.45	161.58	1.88	3.84	2.44
	300.00	310.00	126.56	229.85	2.17	2.92	2.48
	310.00	320.00	102.18	44.31	2.49	2.66	2.57
	320.00	330.00	83.85	142.54	2.49	2.49	2.49
	330.00	340.00	77.90	83.93	3.14	3.48	3.30
	340.00	350.00	46.46	94.99	3.03	2.47	2.71
	350.00	360.00	102.22	66.09	2.41	3.03	2.68
	360.00	370.00	135.50	60.37	2.05	2.99	2.41
	370.00	380.00	107.96	86.44	3.27	2.77	2.99
	380.00	390.00	85.74	100.80	2.39	1.81	2.06
	390.00	400.00	130.42	99.84	2.99	3.34	3.15
	400.00	410.00	159.78	72.85	2.30	1.54	1.84
	410.00	420.00	79.72	75.19	1.90	2.20	2.04
	420.00	430.00	127.45	55.00	2.09	3.50	2.57
	430.00	440.00	91.23	45.10	3.26	2.20	2.60

440.00	450.00	116.50	70.43	1.35	1.37	1.36
450.00	460.00	110.44	56.84	2.77	2.91	2.84
460.00	470.00	220.66	199.42	1.41	1.49	1.45
470.00	480.00	131.45	160.60	2.03	1.86	1.94
480.00	490.00	113.24	77.66	2.78	2.94	2.85
490.00	500.00	118.74	104.01	2.60	1.74	2.08
500.00	510.00	278.83	59.99	2.07	3.32	2.51
510.00	519.80	129.37	185.99	3.22	2.64	2.89

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\SR55SB.ERD							
	.00	519.80	143.58	157.53	1.16	1.22	1.19
	.00	10.00	179.26	107.92	1.90	2.56	2.18
	10.00	20.00	212.60	163.32	2.86	2.72	2.79
	20.00	30.00	162.52	106.46	2.87	2.63	2.75
	30.00	40.00	99.84	160.20	3.24	1.53	2.05
	40.00	50.00	98.73	316.78	2.47	2.54	2.50
	50.00	60.00	85.14	297.43	3.00	2.24	2.55
	60.00	70.00	44.06	87.16	2.99	2.51	2.73
	70.00	80.00	74.72	179.57	3.36	2.46	2.82
	80.00	90.00	67.59	222.80	3.60	2.82	3.13
	90.00	100.00	31.66	147.44	3.63	2.66	3.03
	100.00	110.00	84.74	125.76	3.38	2.93	3.13
	110.00	120.00	136.34	105.34	2.45	2.11	2.27
	120.00	130.00	28.47	128.04	3.45	3.17	3.30
	130.00	140.00	297.01	584.65	.00	.00	.00
	140.00	150.00	1133.46	969.42	.02	.05	.03
	150.00	160.00	347.44	211.07	1.52	1.96	1.71
	160.00	170.00	265.10	210.46	2.60	2.60	2.60
	170.00	180.00	129.19	113.49	3.08	3.08	3.08
	180.00	190.00	171.68	175.63	3.19	3.24	3.22
	190.00	200.00	118.96	122.80	3.30	3.08	3.19
	200.00	210.00	105.72	199.79	2.23	3.06	2.56
	210.00	220.00	99.03	192.22	2.54	2.89	2.70
	220.00	230.00	155.63	117.47	2.85	3.48	3.11
	230.00	240.00	195.59	92.77	2.62	3.66	3.01
	240.00	250.00	138.61	159.10	2.58	3.43	2.92
	250.00	260.00	67.21	140.94	3.26	3.11	3.18
	260.00	270.00	71.55	119.20	3.15	3.22	3.19
	270.00	280.00	91.10	174.15	2.55	2.74	2.64
	280.00	290.00	108.74	67.65	2.45	2.40	2.42
	290.00	300.00	131.87	139.08	2.04	3.54	2.54
	300.00	310.00	137.99	225.35	2.23	2.80	2.48
	310.00	320.00	84.73	73.61	2.42	2.70	2.55
	320.00	330.00	77.38	138.46	2.44	2.42	2.43
	330.00	340.00	72.36	81.29	3.04	3.47	3.23
	340.00	350.00	51.28	100.27	2.69	2.56	2.63
	350.00	360.00	93.90	75.05	2.60	2.80	2.69
	360.00	370.00	110.44	70.38	2.11	3.48	2.58
	370.00	380.00	122.23	105.61	2.93	2.57	2.73
	380.00	390.00	108.73	108.16	2.22	1.73	1.95
	390.00	400.00	131.26	98.92	2.77	3.05	2.90
	400.00	410.00	169.01	106.83	2.26	1.41	1.74
	410.00	420.00	68.97	84.07	1.48	2.21	1.77
	420.00	430.00	100.48	47.92	2.29	3.32	2.68

430.00	440.00	141.68	50.46	2.76	2.84	2.80
440.00	450.00	91.15	64.86	1.30	1.44	1.36
450.00	460.00	93.41	50.71	2.93	2.69	2.80
460.00	470.00	213.59	228.95	1.87	1.65	1.75
470.00	480.00	120.37	175.20	2.38	1.78	2.03
480.00	490.00	141.47	88.63	2.27	3.04	2.59
490.00	500.00	134.87	101.40	2.54	2.07	2.27
500.00	510.00	220.69	49.87	1.96	2.76	2.28
510.00	519.80	84.94	162.89	3.27	2.12	2.54

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR55NB.ERD	.00	520.06	164.25	205.66	2.00	2.07	2.03
	.00	10.00	183.51	157.21	2.21	1.69	1.91
	10.00	20.00	250.65	263.77	1.66	1.78	1.72
	20.00	30.00	204.67	280.06	1.52	1.33	1.42
	30.00	40.00	112.75	224.98	2.04	1.97	2.00
	40.00	50.00	119.54	211.36	1.18	1.39	1.28
	50.00	60.00	163.25	218.58	2.11	1.89	1.99
	60.00	70.00	82.56	162.67	2.07	3.02	2.44
	70.00	80.00	183.33	92.34	1.71	2.70	2.09
	80.00	90.00	185.47	111.25	2.28	2.97	2.57
	90.00	100.00	123.18	288.56	1.86	.88	1.22
	100.00	110.00	132.26	147.01	3.02	2.88	2.95
	110.00	120.00	167.52	232.23	1.68	1.74	1.71
	120.00	130.00	72.62	89.44	2.89	3.34	3.09
	130.00	140.00	92.29	136.80	2.02	2.87	2.36
	140.00	150.00	106.31	228.17	3.14	2.22	2.58
	150.00	160.00	40.87	138.73	2.13	2.79	2.40
	160.00	170.00	90.29	90.69	2.19	2.50	2.33
	170.00	180.00	123.67	203.05	2.25	2.51	2.37
	180.00	190.00	123.79	322.51	2.20	1.73	1.93
	190.00	200.00	141.92	192.87	2.63	2.72	2.67
	200.00	210.00	140.49	128.19	2.44	3.09	2.71
	210.00	220.00	104.24	66.43	1.89	3.39	2.39
	220.00	230.00	107.20	56.94	2.44	3.23	2.76
	230.00	240.00	72.75	115.38	2.63	2.22	2.40
	240.00	250.00	116.29	225.90	1.69	2.39	1.98
	250.00	260.00	150.63	135.23	1.44	2.09	1.71
	260.00	270.00	165.88	95.57	1.99	2.66	2.27
	270.00	280.00	85.35	256.48	1.83	1.39	1.58
	280.00	290.00	116.00	91.86	1.96	1.72	1.83
	290.00	300.00	232.76	380.19	2.09	1.67	1.86
	300.00	310.00	154.59	332.74	2.18	1.61	1.85
	310.00	320.00	374.85	287.96	1.56	1.49	1.53
	320.00	330.00	655.32	663.75	1.01	1.01	1.01
	330.00	340.00	319.89	194.40	2.02	2.06	2.04
	340.00	350.00	458.23	548.42	2.25	2.71	2.46
	350.00	360.00	304.15	561.95	2.38	2.26	2.32
	360.00	370.00	191.19	243.34	2.40	2.99	2.66
	370.00	380.00	263.35	396.80	2.86	2.71	2.78
	380.00	390.00	152.15	295.23	2.03	2.50	2.24
	390.00	400.00	160.18	296.21	2.00	1.85	1.92
	400.00	410.00	222.98	194.78	1.86	2.81	2.23
	410.00	420.00	109.38	94.91	2.10	2.88	2.41
	420.00	430.00	72.47	78.35	2.05	1.99	2.02
	430.00	440.00	76.91	122.19	1.84	2.05	1.94

440.00	450.00	113.58	193.95	2.70	1.88	2.21
450.00	460.00	155.13	125.99	2.21	2.32	2.27
460.00	470.00	91.89	161.84	1.89	1.92	1.91
470.00	480.00	99.31	157.11	1.90	2.15	2.02
480.00	490.00	122.92	105.26	2.05	1.69	1.85
490.00	500.00	150.79	112.79	1.77	2.41	2.04
500.00	510.00	183.43	72.25	2.23	2.71	2.44
510.00	520.00	117.49	125.18	2.07	2.57	2.29

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\SR55NB.ERD							
	.00	519.54	177.06	193.33	1.80	1.86	1.83
	.00	10.00	189.29	166.42	2.02	1.48	1.71
	10.00	20.00	250.77	342.09	1.59	1.75	1.67
	20.00	30.00	209.70	272.63	1.61	1.15	1.35
	30.00	40.00	161.81	217.69	2.15	1.96	2.05
	40.00	50.00	234.08	211.05	1.55	1.30	1.42
	50.00	60.00	181.46	214.12	1.94	2.01	1.97
	60.00	70.00	84.22	193.35	2.37	2.50	2.43
	70.00	80.00	149.58	88.67	2.06	2.90	2.40
	80.00	90.00	230.08	121.69	2.65	2.55	2.60
	90.00	100.00	173.74	246.46	1.88	1.18	1.45
	100.00	110.00	187.30	152.07	2.66	2.75	2.70
	110.00	120.00	245.56	130.92	1.64	1.92	1.77
	120.00	130.00	90.20	81.27	3.18	3.50	3.33
	130.00	140.00	157.99	104.79	2.01	2.98	2.39
	140.00	150.00	197.83	156.31	1.77	3.31	2.27
	150.00	160.00	101.35	131.35	2.29	2.56	2.41
	160.00	170.00	129.42	128.65	3.00	3.22	3.11
	170.00	180.00	195.87	128.19	1.70	2.78	2.10
	180.00	190.00	247.40	237.27	2.31	2.47	2.39
	190.00	200.00	167.99	60.89	2.77	3.55	3.08
	200.00	210.00	119.87	76.93	3.16	3.02	3.09
	210.00	220.00	97.36	73.60	2.56	2.62	2.59
	220.00	230.00	99.52	90.76	3.05	2.57	2.78
	230.00	240.00	73.59	85.38	2.84	3.18	3.00
	240.00	250.00	118.36	166.46	2.76	2.83	2.80
	250.00	260.00	169.56	115.07	1.48	2.31	1.80
	260.00	270.00	150.45	123.21	2.90	2.88	2.89
	270.00	280.00	125.49	122.20	1.98	2.16	2.07
	280.00	290.00	200.75	148.05	2.49	1.65	1.98
	290.00	300.00	224.69	239.65	1.81	2.17	1.97
	300.00	310.00	112.62	347.76	2.66	1.61	2.00
	310.00	320.00	300.34	246.53	.16	.17	.16
	320.00	330.00	891.94	741.87	.18	.25	.21
	330.00	340.00	272.51	191.70	1.79	2.24	1.99
	340.00	350.00	364.43	383.82	1.95	2.72	2.26
	350.00	360.00	304.46	556.71	2.44	2.21	2.32
	360.00	370.00	135.75	194.94	1.91	2.96	2.30
	370.00	380.00	155.04	348.66	2.60	2.63	2.61
	380.00	390.00	154.92	226.43	1.68	2.68	2.06
	390.00	400.00	85.31	274.19	2.24	1.68	1.92
	400.00	410.00	67.75	256.26	2.21	2.17	2.19
	410.00	420.00	90.52	145.71	3.04	3.59	3.27
	420.00	430.00	86.31	208.16	2.10	1.94	2.02

430.00	440.00	78.17	210.78	2.49	2.01	2.22
440.00	450.00	159.90	125.85	2.18	2.40	2.29
450.00	460.00	177.12	159.30	2.15	1.91	2.02
460.00	470.00	91.94	100.28	1.89	2.24	2.05
470.00	480.00	129.97	139.67	2.02	2.99	2.39
480.00	490.00	59.73	94.27	2.87	2.30	2.55
490.00	500.00	143.16	149.07	2.38	1.77	2.03
500.00	510.00	219.22	130.87	2.20	1.63	1.87
510.00	519.54	114.28	158.32	2.03	2.01	2.02

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start:	End:	IRI:	(in/mi)		RN: 0-5		Both
	ft	ft	LElev.	RElev.	LElev.	RElev.		
-----								
F:\METHOD2\WO_MM\ERD\SR352WB.ERD								
	.00	519.80	310.71	354.93	1.36	.92	1.11	
	.00	10.00	407.15	375.17	1.39	1.27	1.33	
	10.00	20.00	335.87	503.92	2.59	1.40	1.81	
	20.00	30.00	352.30	396.23	1.72	1.25	1.45	
	30.00	40.00	304.35	378.05	2.05	2.38	2.20	
	40.00	50.00	479.93	393.45	1.41	1.49	1.45	
	50.00	60.00	119.07	164.46	3.09	3.05	3.07	
	60.00	70.00	265.54	227.09	1.58	2.30	1.88	
	70.00	80.00	218.42	95.64	1.64	1.90	1.76	
	80.00	90.00	925.18	835.51	.36	.37	.36	
	90.00	100.00	328.99	249.16	3.07	2.43	2.70	
	100.00	110.00	160.37	221.76	2.24	2.12	2.18	
	110.00	120.00	285.06	246.67	1.63	2.24	1.89	
	120.00	130.00	694.42	685.07	.04	.04	.04	
	130.00	140.00	1278.14	1977.43	.07	.00	.01	
	140.00	150.00	454.31	619.76	.66	.39	.50	
	150.00	160.00	613.70	578.24	2.22	2.52	2.36	
	160.00	170.00	224.41	320.27	1.96	2.42	2.16	
	170.00	180.00	115.77	491.74	1.45	.81	1.06	
	180.00	190.00	580.18	652.83	1.51	1.12	1.29	
	190.00	200.00	205.14	141.87	2.50	2.25	2.37	
	200.00	210.00	406.89	564.56	3.24	2.87	3.04	
	210.00	220.00	256.45	533.35	2.40	1.28	1.67	
	220.00	230.00	203.84	222.42	2.13	1.71	1.89	
	230.00	240.00	240.55	461.42	2.29	2.32	2.31	
	240.00	250.00	161.16	251.14	2.58	1.99	2.24	
	250.00	260.00	100.16	296.26	1.99	2.06	2.03	
	260.00	270.00	174.80	208.71	2.73	2.59	2.66	
	270.00	280.00	221.62	303.59	2.33	1.64	1.93	
	280.00	290.00	174.60	251.66	2.25	2.34	2.29	
	290.00	300.00	260.15	199.22	2.01	2.11	2.06	
	300.00	310.00	374.57	180.40	1.53	2.26	1.83	
	310.00	320.00	346.80	267.94	2.08	2.28	2.17	
	320.00	330.00	190.09	151.30	2.99	2.03	2.40	
	330.00	340.00	189.93	211.56	1.95	2.21	2.07	
	340.00	350.00	244.47	165.04	1.26	1.85	1.50	
	350.00	360.00	197.71	254.51	1.96	2.01	1.98	
	360.00	370.00	181.88	321.12	2.98	2.34	2.61	
	370.00	380.00	256.95	392.79	1.76	1.37	1.54	
	380.00	390.00	209.20	369.37	1.79	2.11	1.94	
	390.00	400.00	314.31	305.01	1.54	2.16	1.80	
	400.00	410.00	151.79	247.52	2.21	2.14	2.18	
	410.00	420.00	178.51	221.18	2.18	2.52	2.34	
	420.00	430.00	232.46	155.07	2.60	2.42	2.51	
	430.00	440.00	257.32	332.65	1.93	1.93	1.93	

440.00	450.00	306.14	435.45	2.24	1.70	1.93
450.00	460.00	356.30	326.39	1.57	1.38	1.47
460.00	470.00	204.58	299.75	1.79	2.06	1.91
470.00	480.00	334.21	170.86	1.72	1.65	1.69
480.00	490.00	353.99	208.57	1.84	2.06	1.95
490.00	500.00	262.59	210.52	2.03	2.60	2.28
500.00	510.00	204.83	139.43	2.06	2.24	2.15
510.00	519.80	181.59	189.30	1.57	2.57	1.94

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start:	End:	IRI:	(in/mi)		RN: 0-5		Both
	ft	ft	LElev.	RElev.	LElev.	RElev.		
-----								
F:\METHOD2\MM\ERD\SR352WB.ERD								
	.00	519.54	306.18	374.49	1.25	.86	1.03	
	.00	10.00	440.03	447.92	1.18	1.26	1.22	
	10.00	20.00	332.44	387.07	2.38	2.67	2.51	
	20.00	30.00	384.31	343.11	1.26	.93	1.08	
	30.00	40.00	338.97	376.68	2.98	3.16	3.06	
	40.00	50.00	447.78	387.34	1.18	1.41	1.29	
	50.00	60.00	144.37	151.13	3.29	2.94	3.10	
	60.00	70.00	240.83	290.88	2.29	1.79	2.01	
	70.00	80.00	239.65	251.28	.90	.67	.77	
	80.00	90.00	821.75	818.94	.80	.60	.69	
	90.00	100.00	272.25	169.25	2.69	2.46	2.57	
	100.00	110.00	135.76	174.36	2.18	1.87	2.01	
	110.00	120.00	285.40	264.39	1.56	2.10	1.79	
	120.00	130.00	753.73	703.82	.03	.01	.02	
	130.00	140.00	1079.82	1860.99	.14	.00	.01	
	140.00	150.00	430.72	580.80	.70	.57	.63	
	150.00	160.00	490.87	518.43	2.39	2.50	2.44	
	160.00	170.00	213.96	346.56	1.94	2.04	1.99	
	170.00	180.00	217.35	496.64	.78	.63	.70	
	180.00	190.00	639.81	626.67	1.72	1.32	1.50	
	190.00	200.00	167.86	154.58	2.21	2.31	2.26	
	200.00	210.00	425.99	495.78	2.75	1.91	2.24	
	210.00	220.00	243.29	467.06	2.81	1.67	2.08	
	220.00	230.00	267.68	231.74	2.16	1.45	1.74	
	230.00	240.00	216.20	536.09	2.48	2.53	2.51	
	240.00	250.00	175.17	286.31	2.86	2.09	2.41	
	250.00	260.00	330.36	242.34	1.18	2.35	1.58	
	260.00	270.00	113.06	229.98	2.03	2.69	2.30	
	270.00	280.00	173.89	487.56	1.61	.85	1.13	
	280.00	290.00	260.96	305.05	1.75	2.09	1.90	
	290.00	300.00	295.08	372.34	2.04	1.44	1.69	
	300.00	310.00	462.95	303.80	1.48	2.23	1.78	
	310.00	320.00	325.64	277.19	2.16	2.24	2.20	
	320.00	330.00	262.11	158.03	2.43	2.14	2.27	
	330.00	340.00	214.58	195.74	1.80	2.39	2.05	
	340.00	350.00	228.10	141.36	1.34	2.22	1.67	
	350.00	360.00	256.85	387.95	2.02	1.46	1.70	
	360.00	370.00	197.14	356.45	2.74	2.09	2.36	
	370.00	380.00	280.88	384.86	1.55	1.34	1.44	
	380.00	390.00	162.39	358.17	1.82	2.11	1.95	
	390.00	400.00	225.60	430.11	1.98	1.46	1.68	
	400.00	410.00	215.64	209.45	1.57	2.01	1.76	
	410.00	420.00	172.66	223.00	2.53	2.71	2.62	
	420.00	430.00	174.13	250.54	2.66	2.40	2.52	
	430.00	440.00	179.11	406.29	1.56	1.58	1.57	

440.00	450.00	379.42	589.45	1.55	1.35	1.44
450.00	460.00	324.44	293.86	1.28	1.70	1.47
460.00	470.00	136.17	262.81	2.30	2.14	2.22
470.00	480.00	249.83	242.05	1.61	1.47	1.53
480.00	490.00	312.14	421.98	1.75	1.34	1.52
490.00	500.00	194.42	308.14	2.09	2.07	2.08
500.00	510.00	203.90	88.59	1.50	2.51	1.88
510.00	519.54	173.08	152.85	1.86	1.73	1.79

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR352EB.ERD							
	.00	519.80	272.55	411.14	1.30	.79	.99
	.00	10.00	285.70	319.43	1.27	1.07	1.16
	10.00	20.00	256.90	158.19	1.80	1.27	1.50
	20.00	30.00	252.33	361.03	1.73	1.61	1.67
	30.00	40.00	122.73	271.49	2.18	2.53	2.34
	40.00	50.00	213.27	306.58	2.19	1.62	1.86
	50.00	60.00	421.70	464.69	2.12	2.02	2.07
	60.00	70.00	112.11	184.58	2.08	2.29	2.18
	70.00	80.00	144.41	247.77	1.60	2.24	1.86
	80.00	90.00	207.60	248.54	1.90	2.52	2.16
	90.00	100.00	155.35	365.78	1.96	1.47	1.68
	100.00	110.00	161.26	248.50	1.63	1.91	1.76
	110.00	120.00	137.03	251.60	2.58	2.55	2.56
	120.00	130.00	295.77	223.95	1.81	2.50	2.09
	130.00	140.00	108.95	192.67	3.41	2.19	2.62
	140.00	150.00	171.48	152.53	2.10	2.13	2.12
	150.00	160.00	248.88	294.15	1.56	1.55	1.55
	160.00	170.00	189.69	329.73	2.36	2.38	2.37
	170.00	180.00	208.50	378.25	2.08	1.91	1.99
	180.00	190.00	141.91	213.62	3.03	2.32	2.61
	190.00	200.00	95.78	114.63	2.98	2.69	2.82
	200.00	210.00	83.88	188.30	3.49	2.25	2.69
	210.00	220.00	154.66	393.38	3.11	1.22	1.75
	220.00	230.00	163.53	431.63	2.99	1.27	1.78
	230.00	240.00	132.26	203.63	3.01	2.13	2.48
	240.00	250.00	127.81	465.04	3.31	2.73	2.98
	250.00	260.00	137.65	381.40	3.37	2.07	2.53
	260.00	270.00	111.30	490.83	2.90	1.61	2.05
	270.00	280.00	127.17	396.84	2.57	1.51	1.90
	280.00	290.00	56.53	124.31	2.66	2.42	2.53
	290.00	300.00	90.00	160.91	2.76	2.31	2.51
	300.00	310.00	86.67	225.17	2.57	1.64	2.00
	310.00	320.00	87.57	333.37	2.72	1.74	2.12
	320.00	330.00	137.61	215.95	2.60	1.81	2.13
	330.00	340.00	357.50	269.37	2.15	2.00	2.07
	340.00	350.00	203.55	272.10	1.73	1.09	1.34
	350.00	360.00	375.46	328.48	.85	.59	.70
	360.00	370.00	156.99	634.23	.90	.44	.61
	370.00	380.00	373.58	413.86	2.16	.59	.99
	380.00	390.00	240.32	529.58	1.82	.56	.91
	390.00	400.00	280.40	941.23	1.75	.28	.58
	400.00	410.00	179.78	818.39	2.20	.47	.85
	410.00	420.00	198.83	521.13	3.68	.67	1.19
	420.00	430.00	167.55	550.16	1.83	.66	1.01
	430.00	440.00	857.19	1579.51	.77	.19	.35

440.00	450.00	499.25	865.80	1.51	1.23	1.35
450.00	460.00	326.03	519.91	2.65	2.24	2.43
460.00	470.00	333.35	697.72	.52	.65	.58
470.00	480.00	700.71	554.15	.03	.01	.02
480.00	490.00	1576.09	1613.19	.07	.01	.02
490.00	500.00	267.31	269.32	1.46	1.06	1.23
500.00	510.00	380.34	305.64	.94	2.37	1.37
510.00	519.80	1297.80	386.94	.18	.88	.36

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\SR352EB.ERD							
	.00	519.54	289.98	398.09	1.26	.52	.77
	.00	10.00	270.53	291.68	1.25	1.15	1.20
	10.00	20.00	288.92	173.47	1.65	1.24	1.42
	20.00	30.00	260.67	374.29	1.53	1.22	1.36
	30.00	40.00	112.65	277.52	2.13	2.44	2.27
	40.00	50.00	192.60	305.16	2.32	1.59	1.88
	50.00	60.00	437.47	480.77	2.02	2.05	2.03
	60.00	70.00	116.74	191.28	2.01	2.22	2.11
	70.00	80.00	129.46	243.93	1.68	2.26	1.93
	80.00	90.00	211.75	251.51	1.81	2.57	2.12
	90.00	100.00	146.42	350.04	2.02	1.50	1.72
	100.00	110.00	161.22	239.58	1.62	1.83	1.72
	110.00	120.00	122.89	256.96	2.50	2.50	2.50
	120.00	130.00	305.34	223.46	1.75	2.49	2.05
	130.00	140.00	110.59	175.61	3.40	2.37	2.76
	140.00	150.00	152.54	162.13	2.30	2.30	2.30
	150.00	160.00	232.94	250.88	1.68	1.63	1.65
	160.00	170.00	191.41	329.34	2.48	2.33	2.40
	170.00	180.00	213.31	352.04	2.00	1.96	1.98
	180.00	190.00	176.52	275.05	2.76	2.02	2.33
	190.00	200.00	112.18	101.39	2.80	2.45	2.61
	200.00	210.00	97.23	184.93	3.19	2.09	2.50
	210.00	220.00	184.54	308.58	3.02	.75	1.25
	220.00	230.00	157.83	465.09	2.64	.90	1.37
	230.00	240.00	122.09	148.88	3.23	2.87	3.03
	240.00	250.00	125.77	464.81	3.21	2.73	2.94
	250.00	260.00	136.55	331.55	2.40	2.04	2.20
	260.00	270.00	103.18	367.06	2.70	1.54	1.96
	270.00	280.00	121.45	475.55	2.27	.89	1.30
	280.00	290.00	162.19	179.27	2.50	1.82	2.10
	290.00	300.00	110.65	179.99	1.96	1.94	1.95
	300.00	310.00	177.54	281.60	1.85	1.34	1.56
	310.00	320.00	270.66	282.80	1.67	1.96	1.80
	320.00	330.00	256.36	210.44	1.44	2.40	1.80
	330.00	340.00	526.61	225.58	1.37	1.70	1.52
	340.00	350.00	657.50	202.70	.57	1.18	.79
	350.00	360.00	359.71	377.58	1.13	.60	.80
	360.00	370.00	194.50	579.95	.92	.52	.68
	370.00	380.00	594.61	426.10	1.18	.87	1.01
	380.00	390.00	341.81	566.02	1.45	.62	.90
	390.00	400.00	290.56	854.20	1.42	.31	.58
	400.00	410.00	180.27	802.55	2.26	.46	.84
	410.00	420.00	205.36	510.47	3.61	.62	1.12
	420.00	430.00	152.92	479.14	1.92	.77	1.13
	430.00	440.00	848.91	1594.69	.72	.18	.33

440.00	450.00	525.37	895.65	1.42	1.28	1.35
450.00	460.00	327.52	533.52	2.57	2.06	2.28
460.00	470.00	323.57	729.13	.68	.61	.64
470.00	480.00	783.52	613.64	.03	.00	.00
480.00	490.00	1435.95	1399.32	.27	.00	.01
490.00	500.00	139.06	282.40	1.17	.99	1.07
500.00	510.00	318.96	199.94	1.36	2.18	1.68
510.00	519.54	947.41	302.55	.44	1.16	.67

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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\US421SB1.ERD							
	.00	519.80	183.29	170.25	2.03	1.81	1.91
	.00	10.00	95.23	71.67	3.17	3.21	3.19
	10.00	20.00	75.10	82.64	3.82	3.51	3.65
	20.00	30.00	136.75	89.06	3.67	3.61	3.64
	30.00	40.00	80.31	87.39	2.93	3.41	3.14
	40.00	50.00	96.74	115.83	3.77	2.70	3.10
	50.00	60.00	149.17	144.33	3.40	2.47	2.83
	60.00	70.00	128.58	229.12	3.18	2.92	3.04
	70.00	80.00	130.19	96.08	2.27	1.72	1.96
	80.00	90.00	402.63	285.98	1.20	1.39	1.29
	90.00	100.00	530.92	212.59	1.10	.96	1.02
	100.00	110.00	305.33	146.46	1.79	3.60	2.33
	110.00	120.00	408.22	211.27	2.35	3.91	2.85
	120.00	130.00	195.22	198.62	3.37	3.83	3.57
	130.00	140.00	94.06	128.41	3.08	2.10	2.48
	140.00	150.00	154.92	114.75	3.69	3.67	3.68
	150.00	160.00	123.72	147.84	3.68	2.83	3.17
	160.00	170.00	25.07	55.56	3.44	3.92	3.65
	170.00	180.00	98.21	93.17	3.44	3.68	3.55
	180.00	190.00	55.16	103.44	2.94	1.34	1.83
	190.00	200.00	47.29	153.63	3.41	3.64	3.52
	200.00	210.00	66.29	29.39	3.29	4.02	3.58
	210.00	220.00	114.21	33.16	3.41	3.79	3.58
	220.00	230.00	85.72	54.78	3.43	3.68	3.55
	230.00	240.00	469.26	282.81	.93	1.68	1.21
	240.00	250.00	243.65	281.60	2.56	2.56	2.56
	250.00	260.00	248.29	351.67	.88	.37	.55
	260.00	270.00	1302.84	1373.85	.14	.11	.13
	270.00	280.00	603.59	237.57	.44	.44	.44
	280.00	290.00	267.67	186.25	.97	1.67	1.24
	290.00	300.00	362.83	378.02	2.53	2.93	2.71
	300.00	310.00	154.46	135.48	2.55	3.61	2.94
	310.00	320.00	119.81	143.19	3.64	3.24	3.42
	320.00	330.00	168.45	169.39	3.65	1.13	1.70
	330.00	340.00	209.61	204.94	3.48	1.77	2.30
	340.00	350.00	58.28	78.74	3.73	1.86	2.41
	350.00	360.00	91.31	244.42	3.13	.83	1.35
	360.00	370.00	37.26	63.35	3.09	1.40	1.91
	370.00	380.00	169.93	129.11	2.26	1.34	1.69
	380.00	390.00	143.11	117.84	3.01	2.92	2.96
	390.00	400.00	87.59	136.70	2.32	1.87	2.07
	400.00	410.00	81.34	57.03	2.86	3.41	3.10
	410.00	420.00	113.30	115.14	2.21	1.48	1.77
	420.00	430.00	170.82	163.35	2.99	2.78	2.88
	430.00	440.00	97.62	20.91	3.50	3.74	3.61

440.00	450.00	75.90	58.12	3.58	3.83	3.69
450.00	460.00	58.18	36.69	3.52	3.75	3.63
460.00	470.00	95.68	203.43	3.36	3.74	3.53
470.00	480.00	90.37	141.31	3.34	3.60	3.46
480.00	490.00	147.85	104.98	3.11	3.67	3.34
490.00	500.00	135.46	189.80	3.20	3.51	3.34
500.00	510.00	88.58	190.72	3.76	3.01	3.31
510.00	519.80	52.47	124.52	3.82	3.53	3.66

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\US421SB1.ERD							
	.00	519.54	185.09	160.02	2.00	1.81	1.90
	.00	10.00	87.21	78.13	3.39	3.15	3.26
	10.00	20.00	94.42	93.49	3.61	3.39	3.50
	20.00	30.00	142.79	98.83	3.39	3.45	3.42
	30.00	40.00	77.71	118.93	2.95	3.21	3.07
	40.00	50.00	131.12	133.69	3.47	2.96	3.18
	50.00	60.00	165.53	144.96	2.95	2.43	2.66
	60.00	70.00	142.36	213.80	2.90	2.63	2.76
	70.00	80.00	130.02	112.37	2.28	1.16	1.55
	80.00	90.00	367.60	349.72	1.09	.78	.92
	90.00	100.00	493.32	192.75	1.51	.95	1.17
	100.00	110.00	249.51	147.32	2.32	3.37	2.71
	110.00	120.00	249.40	214.95	2.59	3.60	2.97
	120.00	130.00	201.26	195.78	3.64	3.95	3.78
	130.00	140.00	100.58	145.53	3.00	1.26	1.77
	140.00	150.00	173.31	110.87	3.60	3.82	3.70
	150.00	160.00	139.03	131.04	3.52	3.74	3.62
	160.00	170.00	58.64	47.69	3.56	3.75	3.65
	170.00	180.00	105.11	70.27	3.34	3.80	3.54
	180.00	190.00	69.13	104.59	3.62	1.16	1.74
	190.00	200.00	43.93	153.46	3.60	3.52	3.56
	200.00	210.00	39.08	26.34	3.40	3.74	3.55
	210.00	220.00	77.61	12.76	3.57	4.06	3.78
	220.00	230.00	72.14	44.83	3.18	3.85	3.46
	230.00	240.00	471.77	279.40	.98	1.58	1.22
	240.00	250.00	265.80	246.34	2.79	3.02	2.90
	250.00	260.00	235.51	253.06	1.31	.32	.57
	260.00	270.00	1432.08	1089.53	.09	.20	.13
	270.00	280.00	687.11	231.16	.39	.44	.42
	280.00	290.00	246.72	142.23	.95	1.68	1.23
	290.00	300.00	344.92	350.93	2.44	3.07	2.71
	300.00	310.00	160.36	141.78	2.91	3.38	3.12
	310.00	320.00	139.13	125.75	3.33	3.22	3.27
	320.00	330.00	176.61	114.57	3.61	3.06	3.30
	330.00	340.00	199.36	210.39	3.14	2.91	3.02
	340.00	350.00	68.11	106.16	3.52	2.38	2.80
	350.00	360.00	123.36	263.22	2.74	.49	.92
	360.00	370.00	60.04	107.95	3.16	3.20	3.18
	370.00	380.00	75.45	121.73	3.24	1.70	2.20
	380.00	390.00	153.66	97.69	3.54	3.56	3.55
	390.00	400.00	102.30	87.77	3.26	3.60	3.41
	400.00	410.00	66.49	63.34	3.41	3.28	3.34
	410.00	420.00	107.75	113.73	2.74	1.51	1.94
	420.00	430.00	189.02	142.96	2.96	3.24	3.09
	430.00	440.00	76.39	14.61	3.78	3.83	3.80

440.00	450.00	78.25	44.09	3.63	3.69	3.66
450.00	460.00	73.38	33.90	3.72	3.72	3.72
460.00	470.00	117.76	187.61	3.64	3.72	3.68
470.00	480.00	86.71	152.97	3.57	3.59	3.58
480.00	490.00	159.60	92.73	3.03	3.48	3.23
490.00	500.00	148.68	186.28	3.18	3.65	3.39
500.00	510.00	92.79	207.47	4.05	3.00	3.38
510.00	519.54	40.93	104.00	3.56	3.29	3.41

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\US421NB1.ERD							
	.00	519.80	157.28	163.54	2.39	2.36	2.38
	.00	10.00	147.37	187.62	2.98	2.33	2.60
	10.00	20.00	166.27	154.64	3.31	3.49	3.39
	20.00	30.00	217.84	157.11	3.81	3.16	3.43
	30.00	40.00	85.57	93.70	1.95	3.49	2.45
	40.00	50.00	180.22	129.51	3.83	3.90	3.87
	50.00	60.00	133.55	46.93	3.78	3.99	3.88
	60.00	70.00	93.25	68.13	3.29	4.03	3.58
	70.00	80.00	69.74	45.31	3.58	4.03	3.77
	80.00	90.00	53.37	92.97	3.96	3.79	3.87
	90.00	100.00	63.31	40.37	3.73	3.82	3.77
	100.00	110.00	138.95	62.76	2.37	3.12	2.68
	110.00	120.00	89.06	52.34	3.08	3.67	3.33
	120.00	130.00	55.16	42.64	3.45	3.93	3.65
	130.00	140.00	60.74	112.30	3.98	3.90	3.94
	140.00	150.00	31.57	92.51	4.08	3.78	3.92
	150.00	160.00	26.71	100.03	3.82	4.11	3.95
	160.00	170.00	61.30	122.82	3.61	1.56	2.12
	170.00	180.00	84.14	29.88	3.83	4.14	3.97
	180.00	190.00	63.35	86.85	3.67	3.17	3.39
	190.00	200.00	81.24	118.32	3.48	3.70	3.59
	200.00	210.00	61.53	56.63	3.73	3.52	3.62
	210.00	220.00	108.80	66.70	3.66	3.72	3.69
	220.00	230.00	199.28	207.28	2.90	2.77	2.83
	230.00	240.00	516.86	463.81	1.17	1.29	1.23
	240.00	250.00	346.07	396.26	1.12	1.02	1.07
	250.00	260.00	291.89	372.75	.84	.68	.76
	260.00	270.00	541.70	719.79	.36	.41	.39
	270.00	280.00	199.06	123.21	2.40	3.04	2.67
	280.00	290.00	283.37	248.53	1.37	2.11	1.67
	290.00	300.00	377.09	178.38	2.67	3.03	2.84
	300.00	310.00	243.22	181.89	3.76	3.60	3.67
	310.00	320.00	355.24	236.06	3.80	3.80	3.80
	320.00	330.00	92.26	127.03	3.21	3.74	3.44
	330.00	340.00	107.85	98.55	3.44	3.80	3.60
	340.00	350.00	150.87	171.03	3.70	3.21	3.42
	350.00	360.00	87.53	102.06	3.42	2.80	3.06
	360.00	370.00	108.74	66.65	3.54	3.68	3.60
	370.00	380.00	38.01	98.88	3.75	3.63	3.69
	380.00	390.00	52.82	41.01	3.57	3.53	3.55
	390.00	400.00	109.68	78.38	2.14	2.37	2.25
	400.00	410.00	83.41	128.91	3.34	3.42	3.38
	410.00	420.00	146.51	93.00	2.86	2.92	2.89
	420.00	430.00	272.01	385.02	1.42	1.25	1.33
	430.00	440.00	240.77	336.42	2.16	1.04	1.42

440.00	450.00	209.75	247.57	2.47	2.07	2.25
450.00	460.00	145.64	200.53	2.21	2.00	2.10
460.00	470.00	138.31	192.36	2.52	2.18	2.34
470.00	480.00	131.79	318.09	2.57	2.78	2.67
480.00	490.00	198.43	239.59	3.16	3.33	3.24
490.00	500.00	239.54	179.32	2.25	2.78	2.48
500.00	510.00	66.60	170.62	3.13	3.20	3.17
510.00	519.80	127.46	128.28	3.12	3.47	3.28

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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\US421NB1.ERD							
	.00	519.54	158.98	163.88	2.20	2.41	2.30
	.00	10.00	142.90	192.91	2.96	2.40	2.64
	10.00	20.00	160.59	166.68	3.17	3.42	3.29
	20.00	30.00	203.69	148.82	3.50	2.62	2.97
	30.00	40.00	95.06	130.06	2.00	3.12	2.41
	40.00	50.00	169.82	121.84	3.78	3.70	3.74
	50.00	60.00	123.64	47.94	3.70	3.94	3.81
	60.00	70.00	106.96	57.11	3.20	3.97	3.50
	70.00	80.00	62.93	42.13	3.50	3.96	3.70
	80.00	90.00	55.32	95.06	4.05	3.93	3.98
	90.00	100.00	53.84	27.10	3.95	3.96	3.96
	100.00	110.00	119.84	55.75	2.34	2.78	2.54
	110.00	120.00	106.87	49.74	3.05	3.37	3.20
	120.00	130.00	50.04	36.02	3.31	3.92	3.56
	130.00	140.00	61.23	117.54	3.98	3.87	3.92
	140.00	150.00	36.88	92.15	4.04	3.87	3.95
	150.00	160.00	37.41	92.62	3.90	3.92	3.91
	160.00	170.00	59.81	113.68	3.44	1.77	2.29
	170.00	180.00	57.25	30.31	3.97	4.03	4.00
	180.00	190.00	55.59	80.55	3.49	3.32	3.40
	190.00	200.00	78.47	126.46	3.70	3.36	3.51
	200.00	210.00	49.42	63.15	3.80	3.46	3.61
	210.00	220.00	102.81	62.05	3.76	3.48	3.61
	220.00	230.00	201.62	204.46	2.67	2.79	2.73
	230.00	240.00	480.60	428.53	1.16	1.31	1.23
	240.00	250.00	391.49	413.00	1.06	1.02	1.04
	250.00	260.00	302.81	393.69	.39	1.09	.61
	260.00	270.00	651.88	720.85	.28	.51	.37
	270.00	280.00	192.59	105.10	2.33	2.84	2.56
	280.00	290.00	254.33	200.37	1.40	1.95	1.63
	290.00	300.00	401.10	193.76	2.62	3.12	2.84
	300.00	310.00	237.26	162.80	3.60	3.89	3.74
	310.00	320.00	358.67	225.87	3.58	3.94	3.74
	320.00	330.00	104.27	131.61	3.79	3.62	3.70
	330.00	340.00	107.25	95.87	3.25	3.32	3.28
	340.00	350.00	148.94	160.35	3.49	3.63	3.56
	350.00	360.00	71.39	96.74	3.42	3.30	3.36
	360.00	370.00	105.58	71.77	3.24	3.46	3.35
	370.00	380.00	52.84	88.65	3.60	3.64	3.62
	380.00	390.00	51.94	59.41	3.77	3.74	3.76
	390.00	400.00	95.88	58.63	2.58	2.10	2.31
	400.00	410.00	50.51	135.56	3.66	3.17	3.38
	410.00	420.00	125.93	99.89	2.81	2.98	2.89
	420.00	430.00	263.58	369.72	1.37	1.24	1.30
	430.00	440.00	292.06	388.53	1.97	1.31	1.58

440.00	450.00	216.88	252.23	2.07	1.82	1.94
450.00	460.00	154.57	247.20	2.47	2.04	2.23
460.00	470.00	140.89	201.17	2.86	2.35	2.58
470.00	480.00	150.70	340.17	2.48	2.69	2.58
480.00	490.00	182.88	239.92	3.06	2.55	2.77
490.00	500.00	272.74	156.50	1.95	2.75	2.27
500.00	510.00	92.43	178.39	3.05	3.33	3.18
510.00	519.54	116.33	136.28	3.16	2.92	3.03

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR24EB.ERD							
	.00	470.10	166.58	174.75	2.84	2.55	2.68
	.00	10.00	144.37	165.25	2.78	2.70	2.74
	10.00	20.00	221.01	194.82	2.24	1.65	1.90
	20.00	30.00	174.75	154.98	3.72	3.56	3.63
	30.00	40.00	84.44	241.82	2.03	2.27	2.14
	40.00	50.00	182.49	220.08	2.96	3.27	3.10
	50.00	60.00	88.17	124.36	2.17	2.66	2.38
	60.00	70.00	183.74	155.85	3.79	3.57	3.67
	70.00	80.00	69.14	59.38	3.58	3.58	3.58
	80.00	90.00	103.81	126.62	3.80	3.42	3.59
	90.00	100.00	86.23	113.53	3.50	3.68	3.59
	100.00	110.00	36.89	82.04	3.48	3.52	3.50
	110.00	120.00	49.79	74.66	3.54	3.54	3.54
	120.00	130.00	90.62	94.90	3.34	3.57	3.45
	130.00	140.00	82.51	76.37	3.67	3.66	3.66
	140.00	150.00	28.37	33.27	3.82	3.79	3.81
	150.00	160.00	76.37	65.56	3.24	3.43	3.33
	160.00	170.00	127.37	148.31	3.44	3.10	3.26
	170.00	180.00	70.08	66.17	3.29	3.98	3.57
	180.00	190.00	368.97	183.52	2.49	2.97	2.70
	190.00	200.00	465.00	441.49	1.27	1.38	1.33
	200.00	210.00	442.55	393.10	1.24	.71	.92
	210.00	220.00	345.43	161.14	2.06	3.29	2.50
	220.00	230.00	293.81	449.07	2.97	2.29	2.57
	230.00	240.00	370.15	603.27	1.14	.39	.62
	240.00	250.00	285.97	469.23	2.73	2.23	2.45
	250.00	260.00	166.24	184.15	2.90	2.42	2.63
	260.00	270.00	188.37	118.46	2.71	2.70	2.70
	270.00	280.00	462.01	368.14	2.67	2.29	2.46
	280.00	290.00	287.25	188.97	2.83	2.98	2.90
	290.00	300.00	474.87	530.68	3.49	3.84	3.65
	300.00	310.00	199.42	205.24	3.80	3.65	3.73
	310.00	320.00	191.80	240.48	3.31	3.66	3.47
	320.00	330.00	394.55	387.47	3.53	3.66	3.59
	330.00	340.00	115.45	79.19	3.74	3.88	3.80
	340.00	350.00	124.84	82.21	3.62	3.61	3.61
	350.00	360.00	134.68	89.58	4.20	3.94	4.06
	360.00	370.00	84.78	122.35	3.89	3.48	3.66
	370.00	380.00	48.39	84.30	4.11	3.63	3.84
	380.00	390.00	58.59	64.92	3.98	3.95	3.96
	390.00	400.00	24.26	65.29	3.73	3.79	3.76
	400.00	410.00	68.70	59.82	3.79	4.02	3.90
	410.00	420.00	62.57	80.23	3.70	3.97	3.82
	420.00	430.00	81.67	124.57	3.93	3.97	3.95
	430.00	440.00	51.91	93.81	3.52	3.72	3.61

440.00	450.00	30.23	83.91	4.07	3.91	3.98
450.00	460.00	51.20	27.68	3.89	3.81	3.85
460.00	470.00	61.14	44.77	3.74	4.03	3.87

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR24WB.ERD							
	.00	470.10	167.94	206.87	2.77	2.64	2.70
	.00	10.00	174.43	128.95	2.76	2.84	2.80
	10.00	20.00	144.07	149.76	3.22	3.69	3.43
	20.00	30.00	116.08	129.41	3.67	3.48	3.57
	30.00	40.00	39.74	107.93	3.89	3.73	3.81
	40.00	50.00	200.41	160.27	2.23	2.62	2.41
	50.00	60.00	90.52	73.05	2.94	2.99	2.96
	60.00	70.00	183.96	125.32	1.86	2.02	1.94
	70.00	80.00	173.85	103.59	2.99	2.80	2.89
	80.00	90.00	88.90	71.79	2.53	2.87	2.68
	90.00	100.00	115.24	147.75	3.66	3.18	3.39
	100.00	110.00	46.08	133.76	3.60	3.17	3.36
	110.00	120.00	83.62	95.36	3.37	3.39	3.38
	120.00	130.00	46.69	165.92	3.84	3.24	3.49
	130.00	140.00	59.26	137.09	3.64	3.48	3.55
	140.00	150.00	112.63	93.79	3.79	3.56	3.67
	150.00	160.00	78.77	98.61	3.47	3.50	3.49
	160.00	170.00	73.05	84.95	3.80	3.57	3.68
	170.00	180.00	79.56	118.62	3.60	3.76	3.67
	180.00	190.00	61.62	60.96	3.78	3.81	3.79
	190.00	200.00	19.57	62.21	3.83	3.74	3.79
	200.00	210.00	74.70	57.97	3.64	3.55	3.59
	210.00	220.00	73.19	109.64	3.71	3.72	3.71
	220.00	230.00	401.22	274.85	1.60	1.83	1.70
	230.00	240.00	353.72	384.83	2.00	1.86	1.93
	240.00	250.00	243.45	480.94	2.98	3.14	3.06
	250.00	260.00	510.17	451.89	2.91	3.12	3.01
	260.00	270.00	746.39	886.87	.86	.87	.87
	270.00	280.00	274.81	339.06	1.40	1.27	1.33
	280.00	290.00	447.52	584.37	3.41	2.84	3.08
	290.00	300.00	376.91	731.61	1.30	.93	1.09
	300.00	310.00	329.20	498.26	2.41	1.84	2.09
	310.00	320.00	320.60	472.37	3.54	2.33	2.77
	320.00	330.00	85.05	208.29	3.49	3.02	3.23
	330.00	340.00	200.92	150.13	3.67	3.24	3.43
	340.00	350.00	118.10	119.08	4.00	3.72	3.84
	350.00	360.00	83.97	117.17	3.90	2.92	3.29
	360.00	370.00	169.41	201.35	3.40	3.36	3.38
	370.00	380.00	154.42	236.71	4.17	3.76	3.93
	380.00	390.00	97.59	128.11	3.45	3.43	3.44
	390.00	400.00	181.03	223.99	3.71	3.15	3.39
	400.00	410.00	54.16	174.99	3.89	3.24	3.51
	410.00	420.00	41.16	67.76	4.06	3.63	3.81
	420.00	430.00	50.22	83.77	3.98	3.70	3.83
	430.00	440.00	86.16	95.08	3.22	3.73	3.44

440.00	450.00	73.24	87.13	3.66	3.83	3.74
450.00	460.00	172.40	161.84	3.12	3.93	3.44
460.00	470.00	159.90	128.11	3.28	2.98	3.12

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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR25SB1.ERD							
	.00	519.80	133.42	156.73	1.61	1.46	1.53
	.00	10.00	98.63	123.60	2.36	2.43	2.40
	10.00	20.00	136.03	148.81	3.37	2.88	3.09
	20.00	30.00	169.26	204.06	2.24	3.37	2.65
	30.00	40.00	38.75	50.75	3.79	3.54	3.66
	40.00	50.00	63.44	78.01	3.63	3.22	3.40
	50.00	60.00	98.43	118.04	3.74	3.60	3.67
	60.00	70.00	67.76	59.91	3.74	3.51	3.62
	70.00	80.00	51.46	40.79	3.53	3.21	3.36
	80.00	90.00	43.17	77.51	3.74	3.32	3.51
	90.00	100.00	66.98	132.89	3.62	3.04	3.28
	100.00	110.00	150.59	257.65	2.31	2.27	2.29
	110.00	120.00	97.36	119.24	3.83	3.55	3.68
	120.00	130.00	43.20	48.44	4.09	3.65	3.84
	130.00	140.00	45.27	130.05	3.91	3.25	3.52
	140.00	150.00	55.01	108.63	3.89	3.63	3.75
	150.00	160.00	52.93	100.86	3.40	3.42	3.41
	160.00	170.00	93.02	81.18	3.42	2.88	3.11
	170.00	180.00	125.13	60.73	3.11	2.95	3.03
	180.00	190.00	142.76	108.73	2.56	2.56	2.56
	190.00	200.00	95.56	118.67	1.27	2.50	1.68
	200.00	210.00	115.55	151.62	3.16	2.07	2.48
	210.00	220.00	157.44	191.64	1.81	2.47	2.08
	220.00	230.00	336.55	164.20	1.97	2.25	2.10
	230.00	240.00	289.82	122.13	1.63	2.18	1.86
	240.00	250.00	192.75	300.38	1.41	.63	.90
	250.00	260.00	511.39	671.58	.04	.01	.02
	260.00	270.00	737.69	1848.59	.03	.04	.03
	270.00	280.00	325.35	329.99	1.52	1.30	1.40
	280.00	290.00	219.15	173.51	2.54	2.57	2.55
	290.00	300.00	148.67	162.47	2.80	2.43	2.60
	300.00	310.00	236.54	174.53	2.88	2.69	2.78
	310.00	320.00	71.79	57.64	2.98	3.34	3.14
	320.00	330.00	134.59	132.44	3.11	3.40	3.24
	330.00	340.00	113.39	57.34	3.27	3.06	3.16
	340.00	350.00	72.73	136.98	3.08	3.48	3.26
	350.00	360.00	56.97	76.99	3.06	3.00	3.03
	360.00	370.00	120.00	67.98	2.96	3.18	3.06
	370.00	380.00	103.58	72.86	3.25	3.32	3.28
	380.00	390.00	110.73	79.99	3.28	3.63	3.44
	390.00	400.00	79.26	71.46	3.42	3.43	3.42
	400.00	410.00	43.35	103.76	3.49	3.57	3.53
	410.00	420.00	79.61	80.28	3.65	3.38	3.50
	420.00	430.00	51.14	40.81	3.51	3.45	3.48
	430.00	440.00	39.64	48.09	2.52	3.53	2.91

440.00	450.00	79.64	93.73	3.90	3.75	3.82
450.00	460.00	65.04	76.40	3.32	3.61	3.45
460.00	470.00	104.61	28.48	3.46	3.52	3.49
470.00	480.00	85.02	51.19	3.54	3.68	3.61
480.00	490.00	141.96	90.69	2.76	3.45	3.05
490.00	500.00	179.31	91.14	3.42	1.86	2.37
500.00	510.00	66.65	71.17	3.68	3.96	3.81
510.00	519.80	77.94	92.93	4.01	3.67	3.82

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR25NB1.ERD	.00	519.80	159.32	184.50	.78	.51	.62
	.00	10.00	126.24	122.62	2.74	2.97	2.85
	10.00	20.00	127.04	116.22	3.53	3.59	3.56
	20.00	30.00	98.94	108.62	3.38	3.35	3.36
	30.00	40.00	62.34	26.83	3.76	3.95	3.85
	40.00	50.00	76.49	104.66	3.52	2.94	3.19
	50.00	60.00	50.08	116.55	3.77	3.32	3.52
	60.00	70.00	60.11	42.00	3.28	3.35	3.31
	70.00	80.00	48.46	45.95	3.75	3.30	3.50
	80.00	90.00	31.94	42.89	3.90	3.81	3.85
	90.00	100.00	121.67	87.99	3.50	3.22	3.35
	100.00	110.00	51.66	82.18	4.05	3.39	3.66
	110.00	120.00	50.22	231.05	3.65	2.49	2.91
	120.00	130.00	51.04	110.56	3.28	3.08	3.18
	130.00	140.00	37.13	90.12	3.68	3.41	3.53
	140.00	150.00	43.77	57.64	3.50	3.68	3.59
	150.00	160.00	63.63	60.16	3.78	3.89	3.83
	160.00	170.00	42.80	44.02	3.80	3.62	3.71
	170.00	180.00	98.46	151.25	3.31	3.22	3.26
	180.00	190.00	183.95	80.50	2.95	3.26	3.10
	190.00	200.00	83.34	71.58	3.75	3.46	3.59
	200.00	210.00	99.68	60.21	3.32	3.71	3.50
	210.00	220.00	55.88	162.88	3.70	3.27	3.46
	220.00	230.00	95.59	192.51	3.70	2.90	3.22
	230.00	240.00	214.96	260.11	2.95	3.35	3.13
	240.00	250.00	117.07	263.47	3.07	1.74	2.20
	250.00	260.00	562.81	962.02	.00	.00	.00
	260.00	270.00	1499.59	2238.81	.00	.00	.00
	270.00	280.00	766.94	283.55	.91	.70	.80
	280.00	290.00	260.05	191.60	1.90	2.40	2.12
	290.00	300.00	395.49	363.72	2.08	2.00	2.04
	300.00	310.00	341.07	300.98	2.67	2.95	2.80
	310.00	320.00	103.56	159.51	3.51	3.24	3.37
	320.00	330.00	288.77	240.74	3.11	3.58	3.32
	330.00	340.00	282.68	359.92	2.97	2.79	2.87
	340.00	350.00	207.86	166.60	3.04	3.01	3.02
	350.00	360.00	249.13	133.87	3.07	3.24	3.15
	360.00	370.00	55.99	112.64	3.74	3.37	3.54
	370.00	380.00	78.36	44.68	3.37	3.76	3.54
	380.00	390.00	43.31	24.61	3.92	3.54	3.71
	390.00	400.00	57.23	65.00	3.26	3.31	3.28
	400.00	410.00	39.49	62.44	3.55	3.69	3.62
	410.00	420.00	60.38	95.72	2.79	2.65	2.72
	420.00	430.00	240.71	214.75	1.87	3.11	2.31
	430.00	440.00	70.30	75.07	3.45	3.41	3.43

440.00	450.00	20.06	68.51	3.73	3.85	3.79
450.00	460.00	108.33	91.36	.69	3.09	1.18
460.00	470.00	63.44	103.54	3.32	3.11	3.21
470.00	480.00	52.33	42.48	3.53	3.08	3.28
480.00	490.00	53.10	41.86	3.54	3.54	3.54
490.00	500.00	69.64	266.76	3.39	2.09	2.55
500.00	510.00	72.35	70.45	2.65	3.26	2.91
510.00	519.80	101.23	50.48	3.36	3.47	3.41

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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR25SB2.ERD							
	.00	520.06	179.35	185.03	.42	.48	.45
	.00	10.00	144.39	151.55	2.88	2.58	2.72
	10.00	20.00	102.41	116.77	3.49	3.38	3.43
	20.00	30.00	137.27	151.91	3.61	3.60	3.60
	30.00	40.00	50.31	86.45	4.00	3.74	3.86
	40.00	50.00	53.28	61.16	3.68	3.57	3.62
	50.00	60.00	76.88	99.77	3.56	3.39	3.47
	60.00	70.00	61.54	87.42	3.74	3.62	3.67
	70.00	80.00	28.88	51.68	3.69	3.62	3.65
	80.00	90.00	37.29	93.06	3.75	3.39	3.55
	90.00	100.00	77.70	94.44	3.55	3.31	3.42
	100.00	110.00	48.40	58.56	3.84	3.61	3.72
	110.00	120.00	76.85	81.92	3.60	3.51	3.55
	120.00	130.00	63.86	53.58	3.79	3.55	3.66
	130.00	140.00	39.98	34.05	3.80	3.56	3.67
	140.00	150.00	90.38	59.68	3.59	3.84	3.70
	150.00	160.00	66.54	124.88	3.33	3.23	3.28
	160.00	170.00	296.50	118.39	2.04	3.12	2.44
	170.00	180.00	138.16	97.00	2.83	3.18	2.99
	180.00	190.00	73.15	186.07	3.17	2.42	2.73
	190.00	200.00	193.61	198.28	2.83	2.60	2.71
	200.00	210.00	225.98	221.64	2.33	2.37	2.35
	210.00	220.00	91.23	137.51	2.74	2.61	2.67
	220.00	230.00	184.08	509.61	2.62	1.31	1.75
	230.00	240.00	151.38	270.41	2.62	1.33	1.77
	240.00	250.00	379.55	363.85	.59	.00	.00
	250.00	260.00	1253.60	977.20	.00	.00	.00
	260.00	270.00	2187.10	1266.12	.04	.03	.03
	270.00	280.00	620.09	354.45	1.43	2.52	1.82
	280.00	290.00	508.32	621.47	2.37	3.54	2.79
	290.00	300.00	114.64	137.63	2.26	2.82	2.50
	300.00	310.00	73.02	156.47	3.01	3.14	3.07
	310.00	320.00	291.77	325.98	2.16	2.77	2.42
	320.00	330.00	68.21	68.38	3.34	3.41	3.37
	330.00	340.00	90.57	122.10	3.74	3.55	3.64
	340.00	350.00	116.37	147.14	3.50	3.39	3.44
	350.00	360.00	65.81	95.40	3.51	3.26	3.38
	360.00	370.00	50.96	83.69	3.21	3.27	3.24
	370.00	380.00	77.99	165.70	3.01	3.44	3.20
	380.00	390.00	57.96	138.77	3.48	2.91	3.16
	390.00	400.00	90.24	116.04	2.75	3.25	2.97
	400.00	410.00	152.07	296.39	2.15	1.95	2.04
	410.00	420.00	79.69	82.24	3.42	2.99	3.18
	420.00	430.00	96.37	59.52	3.60	3.17	3.36
	430.00	440.00	50.93	65.03	3.33	3.08	3.20

440.00	450.00	83.27	149.55	3.29	2.79	3.01
450.00	460.00	71.95	84.23	3.58	3.00	3.25
460.00	470.00	32.65	134.45	3.80	2.36	2.84
470.00	480.00	38.77	74.09	3.59	3.23	3.39
480.00	490.00	60.48	55.51	3.50	3.43	3.46
490.00	500.00	15.10	121.31	3.87	2.64	3.07
500.00	510.00	81.37	38.36	3.42	3.41	3.42
510.00	520.00	33.63	89.70	3.70	3.55	3.62

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR25NB2.ERD	.00	519.80	189.32	249.51	.61	.30	.42
	.00	10.00	123.36	124.91	2.90	2.83	2.86
	10.00	20.00	153.55	140.12	3.43	3.40	3.42
	20.00	30.00	126.64	153.37	3.45	3.33	3.39
	30.00	40.00	92.07	94.07	3.92	3.46	3.66
	40.00	50.00	66.31	109.34	3.64	3.26	3.43
	50.00	60.00	97.80	143.19	3.74	2.96	3.27
	60.00	70.00	115.68	116.43	3.10	3.33	3.21
	70.00	80.00	87.22	90.83	3.45	3.56	3.50
	80.00	90.00	81.09	69.31	3.36	3.75	3.54
	90.00	100.00	95.41	67.94	3.57	3.43	3.50
	100.00	110.00	55.13	21.17	3.86	3.93	3.89
	110.00	120.00	22.44	56.30	3.69	3.34	3.50
	120.00	130.00	138.41	195.68	2.90	2.73	2.81
	130.00	140.00	63.21	148.80	3.55	3.20	3.36
	140.00	150.00	120.67	97.63	3.01	3.40	3.19
	150.00	160.00	167.22	116.78	2.50	1.60	1.95
	160.00	170.00	61.91	255.95	3.17	3.15	3.16
	170.00	180.00	121.20	118.56	3.42	3.12	3.26
	180.00	190.00	77.49	121.77	3.66	3.62	3.64
	190.00	200.00	33.57	129.83	3.55	4.14	3.79
	200.00	210.00	52.17	115.43	3.68	3.49	3.58
	210.00	220.00	139.28	294.68	3.46	3.09	3.26
	220.00	230.00	125.91	242.39	2.98	1.92	2.32
	230.00	240.00	437.29	1148.48	.94	.00	.00
	240.00	250.00	1181.95	1216.10	.08	.00	.01
	250.00	260.00	1980.41	1847.45	.00	.00	.00
	260.00	270.00	1300.75	1546.29	.01	.02	.01
	270.00	280.00	415.12	561.28	1.48	2.01	1.71
	280.00	290.00	122.37	175.38	3.36	3.18	3.27
	290.00	300.00	109.51	122.85	3.56	3.26	3.40
	300.00	310.00	65.90	129.48	3.62	3.19	3.38
	310.00	320.00	103.24	145.15	3.37	3.13	3.24
	320.00	330.00	99.61	114.11	2.96	2.77	2.86
	330.00	340.00	110.82	176.98	3.40	2.57	2.90
	340.00	350.00	79.36	126.51	2.97	3.47	3.19
	350.00	360.00	92.54	113.62	2.94	2.70	2.81
	360.00	370.00	386.79	104.97	1.49	2.68	1.91
	370.00	380.00	152.39	137.55	2.97	2.82	2.89
	380.00	390.00	76.90	53.04	2.75	2.87	2.81
	390.00	400.00	108.64	140.85	3.52	2.05	2.54
	400.00	410.00	63.72	280.92	3.46	1.95	2.45
	410.00	420.00	34.98	389.93	2.62	1.35	1.78
	420.00	430.00	87.61	543.59	3.56	1.13	1.70
	430.00	440.00	73.91	155.34	3.34	2.99	3.15

440.00	450.00	44.17	73.02	3.10	2.97	3.03
450.00	460.00	49.73	159.32	3.24	3.14	3.19
460.00	470.00	37.45	100.97	3.77	3.24	3.47
470.00	480.00	30.82	63.26	3.91	3.79	3.85
480.00	490.00	148.94	131.10	2.83	2.72	2.77
490.00	500.00	63.37	38.18	3.55	3.66	3.60
500.00	510.00	45.13	76.90	3.52	3.59	3.56
510.00	519.80	150.50	34.75	2.69	3.72	3.07

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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR29NB1.ERD							
	.00	519.80	149.64	156.26	2.18	1.90	2.03
	.00	10.00	137.01	114.20	3.20	3.28	3.24
	10.00	20.00	177.52	134.78	3.47	3.63	3.55
	20.00	30.00	150.13	111.72	3.80	3.72	3.76
	30.00	40.00	80.43	77.67	3.97	3.91	3.94
	40.00	50.00	212.64	209.30	3.94	3.44	3.66
	50.00	60.00	183.63	92.78	3.16	3.17	3.16
	60.00	70.00	133.20	106.93	3.60	3.46	3.53
	70.00	80.00	207.75	212.94	3.74	3.74	3.74
	80.00	90.00	251.40	274.82	3.15	2.97	3.06
	90.00	100.00	178.73	141.45	3.41	3.48	3.44
	100.00	110.00	168.63	145.35	2.85	2.50	2.66
	110.00	120.00	319.16	348.17	3.00	3.04	3.02
	120.00	130.00	94.00	52.42	3.43	3.66	3.54
	130.00	140.00	117.42	173.19	3.96	3.93	3.94
	140.00	150.00	152.38	154.99	3.51	3.29	3.39
	150.00	160.00	65.29	94.75	3.83	3.82	3.82
	160.00	170.00	102.52	199.63	3.84	3.61	3.72
	170.00	180.00	132.46	161.71	3.74	3.86	3.80
	180.00	190.00	66.53	51.35	3.73	3.94	3.83
	190.00	200.00	54.12	106.59	3.94	3.74	3.83
	200.00	210.00	64.55	65.87	3.38	3.64	3.50
	210.00	220.00	190.29	220.41	3.04	2.76	2.89
	220.00	230.00	59.43	112.89	3.68	3.29	3.47
	230.00	240.00	65.72	93.65	3.85	3.54	3.68
	240.00	250.00	79.45	165.64	3.67	3.19	3.40
	250.00	260.00	89.93	54.16	3.43	3.83	3.61
	260.00	270.00	62.36	88.78	3.88	3.84	3.86
	270.00	280.00	130.66	115.22	3.06	3.77	3.35
	280.00	290.00	77.63	84.16	3.20	3.41	3.30
	290.00	300.00	158.99	169.76	2.67	2.58	2.62
	300.00	310.00	344.52	355.09	.05	.27	.10
	310.00	320.00	1043.07	397.00	.50	.02	.07
	320.00	330.00	416.83	414.77	1.67	1.82	1.74
	330.00	340.00	315.79	414.37	2.74	2.35	2.52
	340.00	350.00	366.14	534.72	3.49	2.71	3.03
	350.00	360.00	174.67	267.42	3.41	3.61	3.50
	360.00	370.00	255.70	471.04	4.03	3.48	3.71
	370.00	380.00	69.30	163.70	3.76	3.32	3.51
	380.00	390.00	112.59	159.93	4.14	3.70	3.89
	390.00	400.00	109.20	126.40	3.92	3.85	3.88
	400.00	410.00	41.05	61.00	4.17	3.83	3.98
	410.00	420.00	72.06	81.79	4.12	3.71	3.89
	420.00	430.00	33.49	33.79	4.15	3.93	4.03
	430.00	440.00	52.48	80.10	3.93	3.74	3.83

440.00	450.00	25.33	51.22	3.89	3.89	3.89
450.00	460.00	25.81	44.08	3.79	4.03	3.90
460.00	470.00	62.18	55.79	3.77	3.54	3.65
470.00	480.00	33.89	45.02	3.79	3.65	3.72
480.00	490.00	27.60	44.63	3.68	3.73	3.71
490.00	500.00	46.27	54.44	3.82	3.94	3.88
500.00	510.00	100.62	71.94	3.61	3.42	3.51
510.00	519.80	100.21	71.34	3.37	3.45	3.41

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR29SB1.ERD							
	.00	519.80	144.26	138.03	1.86	1.72	1.79
	.00	10.00	133.24	105.30	2.94	2.97	2.96
	10.00	20.00	89.34	135.79	3.83	3.73	3.78
	20.00	30.00	109.33	120.93	3.71	3.87	3.79
	30.00	40.00	33.17	104.18	3.57	3.37	3.46
	40.00	50.00	99.58	79.16	3.59	3.75	3.67
	50.00	60.00	53.34	39.72	4.00	3.80	3.89
	60.00	70.00	16.95	54.50	3.84	3.81	3.82
	70.00	80.00	45.12	53.21	3.48	3.99	3.69
	80.00	90.00	43.75	83.52	3.89	3.67	3.77
	90.00	100.00	61.28	75.99	3.26	3.83	3.50
	100.00	110.00	53.62	30.24	3.68	3.74	3.71
	110.00	120.00	85.83	114.66	3.07	3.41	3.22
	120.00	130.00	76.96	60.75	3.40	3.49	3.44
	130.00	140.00	57.51	103.27	3.53	3.80	3.66
	140.00	150.00	76.57	113.39	3.73	3.55	3.63
	150.00	160.00	85.54	124.81	3.87	3.59	3.72
	160.00	170.00	66.47	136.54	3.85	3.44	3.62
	170.00	180.00	128.29	146.96	3.41	3.18	3.29
	180.00	190.00	53.48	81.79	3.63	3.76	3.70
	190.00	200.00	51.75	43.47	4.00	3.79	3.89
	200.00	210.00	73.36	82.60	3.66	3.59	3.62
	210.00	220.00	83.75	112.68	3.62	3.96	3.77
	220.00	230.00	69.63	73.94	3.87	3.51	3.67
	230.00	240.00	62.91	83.46	3.79	3.31	3.52
	240.00	250.00	36.32	70.24	3.73	3.81	3.77
	250.00	260.00	89.92	53.21	3.27	3.51	3.38
	260.00	270.00	110.98	102.00	3.53	3.47	3.50
	270.00	280.00	45.36	97.75	3.34	3.11	3.22
	280.00	290.00	271.78	311.05	3.07	2.72	2.88
	290.00	300.00	252.70	173.15	2.80	3.27	3.00
	300.00	310.00	133.43	183.81	3.52	3.43	3.48
	310.00	320.00	273.19	395.08	2.45	2.07	2.24
	320.00	330.00	318.16	242.41	.04	.07	.05
	330.00	340.00	1537.05	1300.77	.12	.02	.04
	340.00	350.00	599.08	343.50	1.85	2.26	2.03
	350.00	360.00	301.15	117.34	1.33	2.96	1.82
	360.00	370.00	227.97	103.93	1.63	3.53	2.18
	370.00	380.00	547.94	355.33	1.26	2.19	1.60
	380.00	390.00	97.16	51.71	3.00	3.42	3.19
	390.00	400.00	61.94	69.29	3.66	3.60	3.63
	400.00	410.00	52.17	88.66	3.34	4.06	3.63
	410.00	420.00	130.49	62.62	3.19	3.86	3.47
	420.00	430.00	89.77	131.66	3.71	3.56	3.63
	430.00	440.00	87.73	112.15	3.46	3.89	3.65

440.00	450.00	78.54	69.82	3.74	3.90	3.82
450.00	460.00	87.31	58.11	3.12	3.87	3.42
460.00	470.00	66.88	108.88	3.63	3.77	3.70
470.00	480.00	76.58	84.97	3.33	3.98	3.60
480.00	490.00	31.69	40.46	3.68	3.94	3.80
490.00	500.00	56.31	94.25	3.81	4.03	3.91
500.00	510.00	81.37	123.89	3.36	3.83	3.57
510.00	519.80	61.56	63.98	3.71	3.79	3.75

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR29NB2.ERD							
	.00	519.80	113.82	154.32	2.44	2.11	2.26
	.00	10.00	137.16	160.59	2.84	2.53	2.67
	10.00	20.00	200.86	200.78	2.37	2.79	2.56
	20.00	30.00	234.21	149.08	3.22	2.26	2.63
	30.00	40.00	28.70	88.56	3.95	3.72	3.83
	40.00	50.00	190.97	247.46	2.24	2.32	2.28
	50.00	60.00	186.45	297.47	3.67	3.71	3.69
	60.00	70.00	51.25	88.10	3.93	3.88	3.91
	70.00	80.00	93.08	183.48	3.76	3.80	3.78
	80.00	90.00	68.92	113.53	3.75	4.11	3.91
	90.00	100.00	95.14	129.51	3.95	3.77	3.85
	100.00	110.00	100.55	151.86	3.80	3.44	3.60
	110.00	120.00	105.27	212.77	3.97	3.61	3.77
	120.00	130.00	83.29	129.26	3.86	3.64	3.74
	130.00	140.00	83.82	94.32	3.99	4.20	4.09
	140.00	150.00	133.19	260.32	3.49	3.54	3.52
	150.00	160.00	110.14	108.21	3.45	3.52	3.49
	160.00	170.00	85.00	177.64	3.94	3.94	3.94
	170.00	180.00	48.77	72.78	3.72	3.76	3.74
	180.00	190.00	16.62	103.07	4.21	3.45	3.74
	190.00	200.00	136.01	214.76	3.47	2.62	2.96
	200.00	210.00	115.95	66.49	3.79	3.49	3.63
	210.00	220.00	156.13	188.65	3.18	3.40	3.28
	220.00	230.00	146.10	141.58	1.64	2.86	2.07
	230.00	240.00	307.98	461.63	1.39	3.36	1.94
	240.00	250.00	254.53	354.97	2.18	1.78	1.95
	250.00	260.00	214.63	476.38	.19	.03	.07
	260.00	270.00	989.52	1231.81	.28	.10	.16
	270.00	280.00	232.07	346.90	2.07	2.47	2.25
	280.00	290.00	208.10	202.14	1.22	3.54	1.79
	290.00	300.00	179.37	243.21	2.58	3.17	2.83
	300.00	310.00	192.62	187.40	3.84	3.91	3.87
	310.00	320.00	60.97	84.30	4.04	4.01	4.03
	320.00	330.00	25.65	38.87	4.00	4.05	4.02
	330.00	340.00	53.23	84.91	3.95	3.88	3.91
	340.00	350.00	80.68	86.30	4.04	4.27	4.15
	350.00	360.00	28.65	30.75	4.03	3.72	3.86
	360.00	370.00	52.54	77.73	4.05	3.91	3.98
	370.00	380.00	47.94	58.44	4.04	4.09	4.06
	380.00	390.00	27.54	19.60	3.98	4.27	4.11
	390.00	400.00	14.85	13.83	3.98	4.27	4.11
	400.00	410.00	49.78	34.56	4.05	4.18	4.11
	410.00	420.00	34.63	37.58	3.97	4.18	4.07
	420.00	430.00	26.01	35.97	3.93	4.03	3.98
	430.00	440.00	25.94	27.74	4.25	4.08	4.16

440.00	450.00	29.63	13.96	4.21	4.08	4.14
450.00	460.00	8.19	31.78	4.02	4.10	4.06
460.00	470.00	38.96	46.74	3.87	4.16	4.00
470.00	480.00	13.33	19.22	4.38	3.89	4.09
480.00	490.00	17.89	65.46	4.07	4.03	4.05
490.00	500.00	27.70	32.97	4.17	4.11	4.14
500.00	510.00	25.14	69.94	4.06	4.10	4.08
510.00	519.80	42.44	37.51	4.22	4.00	4.10

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\SR29NB2.ERD							
	.00	519.80	117.00	159.80	2.27	1.92	2.08
	.00	10.00	133.20	154.28	2.81	2.55	2.67
	10.00	20.00	184.84	194.37	2.55	2.85	2.69
	20.00	30.00	245.73	136.92	3.13	2.31	2.64
	30.00	40.00	33.39	94.40	3.91	3.67	3.78
	40.00	50.00	188.21	242.77	2.22	2.35	2.28
	50.00	60.00	191.71	290.47	3.79	3.92	3.85
	60.00	70.00	46.35	84.06	3.92	3.85	3.89
	70.00	80.00	96.97	184.61	3.89	3.67	3.77
	80.00	90.00	73.89	115.48	3.72	4.01	3.85
	90.00	100.00	96.52	124.71	3.91	4.05	3.97
	100.00	110.00	107.02	158.21	3.64	3.54	3.59
	110.00	120.00	115.01	212.01	4.01	3.58	3.77
	120.00	130.00	82.36	138.65	3.80	3.64	3.72
	130.00	140.00	85.91	94.83	3.98	3.94	3.96
	140.00	150.00	121.66	264.34	3.85	3.33	3.55
	150.00	160.00	109.03	116.77	3.59	3.52	3.55
	160.00	170.00	87.07	183.53	4.01	3.75	3.87
	170.00	180.00	61.45	88.42	3.74	3.57	3.65
	180.00	190.00	38.41	112.83	4.18	3.54	3.80
	190.00	200.00	144.01	230.88	3.42	2.85	3.10
	200.00	210.00	99.18	79.94	3.45	3.32	3.38
	210.00	220.00	173.28	193.93	3.28	3.54	3.40
	220.00	230.00	132.50	145.23	2.33	2.86	2.56
	230.00	240.00	296.92	473.92	2.06	3.33	2.51
	240.00	250.00	239.57	345.99	2.40	1.72	2.00
	250.00	260.00	286.41	535.19	.08	.02	.03
	260.00	270.00	1014.59	1297.22	.43	.40	.41
	270.00	280.00	181.91	379.66	1.85	2.26	2.03
	280.00	290.00	221.01	223.12	1.31	3.52	1.88
	290.00	300.00	190.01	258.03	2.44	3.35	2.79
	300.00	310.00	181.43	211.54	3.72	3.78	3.75
	310.00	320.00	67.62	95.35	3.77	3.98	3.87
	320.00	330.00	27.86	38.22	4.06	4.16	4.11
	330.00	340.00	51.73	84.70	4.06	4.18	4.12
	340.00	350.00	97.20	89.33	4.10	4.29	4.19
	350.00	360.00	35.16	35.27	4.06	4.35	4.19
	360.00	370.00	53.55	72.21	4.22	4.28	4.25
	370.00	380.00	53.45	56.79	4.15	3.93	4.03
	380.00	390.00	24.81	24.77	4.24	4.02	4.12
	390.00	400.00	17.25	14.81	4.10	4.26	4.18
	400.00	410.00	66.78	56.18	3.92	4.08	3.99
	410.00	420.00	32.18	28.73	4.25	4.19	4.22
	420.00	430.00	27.67	27.56	4.07	4.11	4.09
	430.00	440.00	30.33	30.42	4.27	3.97	4.10

440.00	450.00	30.54	14.38	4.28	3.95	4.09
450.00	460.00	21.36	33.05	4.21	4.33	4.27
460.00	470.00	37.67	46.80	4.16	3.97	4.06
470.00	480.00	21.83	30.63	3.97	3.68	3.81
480.00	490.00	28.59	55.87	4.11	4.05	4.08
490.00	500.00	30.94	32.72	4.06	3.95	4.00
500.00	510.00	24.44	65.95	3.90	3.90	3.90
510.00	519.80	56.64	35.60	4.20	4.12	4.16

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR29SB2.ERD							
	.00	520.06	114.53	134.36	3.43	3.31	3.37
	.00	10.00	108.00	156.12	2.79	2.71	2.75
	10.00	20.00	120.25	93.31	3.27	3.41	3.34
	20.00	30.00	177.17	215.53	2.67	2.61	2.64
	30.00	40.00	131.92	181.35	3.73	3.33	3.51
	40.00	50.00	138.21	176.33	2.21	2.39	2.30
	50.00	60.00	83.10	131.73	3.81	3.85	3.83
	60.00	70.00	67.25	42.40	4.11	3.94	4.02
	70.00	80.00	55.91	44.48	3.74	3.98	3.85
	80.00	90.00	43.73	42.98	3.96	3.95	3.95
	90.00	100.00	41.02	77.70	3.67	3.76	3.71
	100.00	110.00	30.63	28.77	4.02	3.96	3.99
	110.00	120.00	49.18	89.31	3.86	4.04	3.95
	120.00	130.00	48.55	64.72	3.88	3.92	3.90
	130.00	140.00	27.54	56.94	4.06	4.20	4.13
	140.00	150.00	28.50	68.31	3.91	3.90	3.91
	150.00	160.00	60.39	35.89	4.17	4.16	4.17
	160.00	170.00	13.47	22.42	3.98	4.20	4.08
	170.00	180.00	67.18	56.52	3.94	3.94	3.94
	180.00	190.00	87.86	87.24	3.63	3.94	3.77
	190.00	200.00	61.45	66.13	4.24	4.26	4.25
	200.00	210.00	96.99	55.42	3.87	4.10	3.97
	210.00	220.00	124.43	104.11	3.41	4.03	3.66
	220.00	230.00	259.31	180.47	2.86	3.32	3.06
	230.00	240.00	180.33	209.78	3.28	2.49	2.81
	240.00	250.00	209.91	249.69	2.10	1.94	2.02
	250.00	260.00	383.03	394.82	2.21	1.65	1.89
	260.00	270.00	292.59	519.37	2.48	1.56	1.91
	270.00	280.00	139.26	232.23	3.26	2.71	2.95
	280.00	290.00	403.71	682.33	3.18	3.70	3.40
	290.00	300.00	347.84	390.68	3.40	2.44	2.81
	300.00	310.00	159.11	142.34	3.67	3.30	3.47
	310.00	320.00	133.47	195.20	3.72	3.49	3.60
	320.00	330.00	341.24	289.08	3.69	3.54	3.61
	330.00	340.00	92.98	89.53	3.55	3.56	3.56
	340.00	350.00	122.61	78.69	3.80	3.61	3.70
	350.00	360.00	68.59	50.21	3.90	4.02	3.96
	360.00	370.00	122.09	112.43	3.26	3.57	3.40
	370.00	380.00	198.90	209.81	3.46	3.35	3.41
	380.00	390.00	82.96	108.22	4.15	4.08	4.11
	390.00	400.00	100.15	138.68	3.59	3.98	3.76
	400.00	410.00	126.59	169.31	3.69	4.08	3.86
	410.00	420.00	73.25	82.60	3.92	4.03	3.97
	420.00	430.00	38.25	31.74	4.19	4.16	4.18
	430.00	440.00	64.14	111.72	4.14	4.10	4.12

440.00	450.00	32.58	44.35	4.01	4.00	4.00
450.00	460.00	34.67	31.14	4.14	4.01	4.07
460.00	470.00	51.04	53.28	3.98	4.03	4.01
470.00	480.00	29.36	50.66	3.92	4.14	4.02
480.00	490.00	23.56	28.27	4.19	4.24	4.22
490.00	500.00	44.94	41.82	4.15	4.27	4.20
500.00	510.00	51.02	56.33	4.04	3.94	3.99
510.00	520.00	66.28	98.70	3.62	4.01	3.79

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\SR29SB2.ERD							
	.00	519.54	114.02	136.20	3.45	3.35	3.40
	.00	10.00	83.51	109.78	3.12	3.14	3.13
	10.00	20.00	111.26	124.18	2.98	2.94	2.96
	20.00	30.00	176.08	253.36	2.98	2.36	2.63
	30.00	40.00	139.84	197.77	3.78	3.35	3.54
	40.00	50.00	153.05	199.76	2.26	2.41	2.33
	50.00	60.00	75.64	93.92	3.87	3.86	3.87
	60.00	70.00	71.06	56.34	4.04	4.21	4.12
	70.00	80.00	58.41	45.98	3.69	4.22	3.91
	80.00	90.00	41.27	42.30	4.15	4.05	4.10
	90.00	100.00	40.41	76.43	3.89	3.78	3.83
	100.00	110.00	19.90	30.52	3.97	3.87	3.92
	110.00	120.00	38.55	97.80	4.04	4.14	4.09
	120.00	130.00	22.79	58.08	3.99	3.80	3.89
	130.00	140.00	22.83	62.84	4.12	4.21	4.16
	140.00	150.00	24.60	50.95	3.99	3.88	3.93
	150.00	160.00	49.13	45.65	4.05	4.23	4.14
	160.00	170.00	22.03	23.49	4.20	4.17	4.18
	170.00	180.00	51.55	44.65	3.90	3.93	3.92
	180.00	190.00	59.11	78.00	3.88	3.89	3.89
	190.00	200.00	57.79	70.60	4.19	4.14	4.16
	200.00	210.00	102.44	46.48	3.54	4.13	3.78
	210.00	220.00	155.30	118.31	3.57	3.93	3.73
	220.00	230.00	243.90	167.96	2.96	3.64	3.24
	230.00	240.00	166.94	242.60	3.14	2.51	2.78
	240.00	250.00	232.29	255.47	2.13	1.98	2.05
	250.00	260.00	379.23	394.11	1.76	1.54	1.64
	260.00	270.00	332.60	548.61	2.98	2.39	2.64
	270.00	280.00	152.20	281.00	3.31	2.71	2.97
	280.00	290.00	403.55	699.78	3.39	3.76	3.56
	290.00	300.00	351.74	359.40	3.30	2.44	2.78
	300.00	310.00	138.94	137.55	3.66	3.40	3.52
	310.00	320.00	156.80	210.51	3.52	3.46	3.49
	320.00	330.00	355.14	306.91	3.74	3.65	3.69
	330.00	340.00	77.79	71.33	3.57	4.02	3.77
	340.00	350.00	124.90	72.89	3.83	3.99	3.91
	350.00	360.00	80.02	48.90	3.75	4.09	3.90
	360.00	370.00	131.92	123.89	3.35	3.44	3.39
	370.00	380.00	182.62	204.62	3.44	3.41	3.42
	380.00	390.00	79.46	100.52	4.02	4.24	4.12
	390.00	400.00	124.14	151.99	3.66	3.84	3.75
	400.00	410.00	123.46	168.14	3.84	4.09	3.96
	410.00	420.00	69.92	72.36	4.01	4.24	4.12
	420.00	430.00	40.02	49.70	4.15	3.92	4.03
	430.00	440.00	62.24	110.10	3.92	4.29	4.08

440.00	450.00	35.79	52.11	4.20	3.92	4.05
450.00	460.00	38.95	33.57	4.12	4.19	4.15
460.00	470.00	72.39	62.67	3.73	4.12	3.90
470.00	480.00	27.08	36.20	3.94	4.08	4.01
480.00	490.00	24.21	32.75	4.18	4.16	4.17
490.00	500.00	40.01	27.89	3.79	4.02	3.90
500.00	510.00	55.60	52.05	4.08	3.82	3.94
510.00	519.54	37.34	53.49	3.66	4.07	3.83

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR114EB.ERD							
	.00	519.80	146.00	192.85	1.23	.71	.91
	.00	10.00	68.26	75.03	3.50	3.35	3.42
	10.00	20.00	99.78	119.76	3.82	3.81	3.81
	20.00	30.00	76.65	72.02	3.95	3.91	3.93
	30.00	40.00	80.51	98.00	4.01	3.89	3.95
	40.00	50.00	21.91	59.71	3.76	4.01	3.88
	50.00	60.00	143.76	215.41	3.66	3.36	3.50
	60.00	70.00	120.43	75.09	3.63	3.39	3.50
	70.00	80.00	114.94	139.21	4.02	3.70	3.84
	80.00	90.00	75.17	89.98	3.96	3.81	3.89
	90.00	100.00	82.96	91.92	3.76	3.64	3.70
	100.00	110.00	100.12	183.24	3.59	3.05	3.28
	110.00	120.00	209.97	186.41	3.28	3.06	3.16
	120.00	130.00	275.58	385.26	3.35	3.20	3.27
	130.00	140.00	280.07	349.71	3.38	2.61	2.92
	140.00	150.00	201.11	350.13	2.70	2.45	2.57
	150.00	160.00	84.70	163.24	2.98	3.34	3.14
	160.00	170.00	111.82	279.38	3.15	3.69	3.38
	170.00	180.00	89.51	112.54	3.57	3.61	3.59
	180.00	190.00	139.02	104.30	3.85	3.63	3.74
	190.00	200.00	112.68	129.53	3.20	3.77	3.44
	200.00	210.00	218.39	52.00	2.56	2.92	2.72
	210.00	220.00	263.18	413.74	2.35	.31	.65
	220.00	230.00	87.77	112.37	3.82	3.75	3.78
	230.00	240.00	142.57	118.08	3.54	3.79	3.66
	240.00	250.00	126.82	95.18	2.36	3.50	2.78
	250.00	260.00	486.12	257.48	.01	.01	.01
	260.00	270.00	853.91	876.70	.00	.00	.00
	270.00	280.00	439.73	538.69	1.76	.40	.73
	280.00	290.00	127.43	445.63	2.57	1.79	2.11
	290.00	300.00	180.10	380.46	2.63	2.04	2.29
	300.00	310.00	324.34	382.70	2.61	2.84	2.72
	310.00	320.00	147.26	537.98	3.60	3.44	3.51
	320.00	330.00	222.35	243.08	3.62	3.22	3.40
	330.00	340.00	308.40	502.73	3.59	3.27	3.42
	340.00	350.00	61.48	150.46	3.46	3.13	3.28
	350.00	360.00	197.37	179.27	3.82	3.92	3.87
	360.00	370.00	97.27	234.75	3.85	3.90	3.87
	370.00	380.00	38.73	140.00	3.70	3.70	3.70
	380.00	390.00	43.90	45.81	3.64	4.00	3.80
	390.00	400.00	53.41	177.78	3.93	4.00	3.96
	400.00	410.00	71.67	137.97	4.00	3.92	3.96
	410.00	420.00	42.40	58.44	3.94	3.94	3.94
	420.00	430.00	34.58	57.52	3.94	3.87	3.90
	430.00	440.00	29.92	52.50	4.08	3.77	3.91

440.00	450.00	56.48	77.40	4.03	3.97	4.00
450.00	460.00	85.39	57.11	4.03	3.84	3.92
460.00	470.00	33.77	27.36	4.21	3.98	4.09
470.00	480.00	82.03	68.02	3.40	3.44	3.42
480.00	490.00	88.82	81.20	3.45	3.77	3.60
490.00	500.00	83.67	143.17	4.04	3.38	3.65
500.00	510.00	53.70	57.06	4.04	3.90	3.97
510.00	519.80	39.17	57.35	3.90	3.86	3.88

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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR114WB.ERD							
	.00	520.06	152.24	203.29	.77	.59	.67
	.00	10.00	151.93	165.72	2.78	2.64	2.71
	10.00	20.00	198.57	251.86	2.63	2.20	2.39
	20.00	30.00	180.66	201.80	3.27	2.90	3.07
	30.00	40.00	105.03	111.07	3.38	3.63	3.50
	40.00	50.00	68.03	92.03	3.59	3.72	3.65
	50.00	60.00	123.80	68.85	3.20	3.74	3.43
	60.00	70.00	54.90	79.18	3.95	3.56	3.73
	70.00	80.00	90.20	127.30	3.58	3.13	3.33
	80.00	90.00	81.05	117.45	3.93	3.60	3.75
	90.00	100.00	101.99	122.51	3.68	3.49	3.58
	100.00	110.00	122.78	197.99	3.39	3.17	3.27
	110.00	120.00	112.70	247.68	3.50	2.37	2.79
	120.00	130.00	104.60	208.58	3.79	2.90	3.25
	130.00	140.00	44.82	95.79	3.83	3.57	3.69
	140.00	150.00	73.14	42.30	3.69	3.70	3.69
	150.00	160.00	86.63	124.41	3.67	3.67	3.67
	160.00	170.00	88.52	118.80	3.88	3.62	3.74
	170.00	180.00	45.71	57.50	3.82	3.74	3.78
	180.00	190.00	76.06	81.27	3.23	3.34	3.28
	190.00	200.00	154.07	230.66	3.48	2.99	3.21
	200.00	210.00	71.00	118.16	3.66	3.71	3.68
	210.00	220.00	169.82	222.71	3.90	3.62	3.75
	220.00	230.00	98.46	144.89	3.49	3.74	3.61
	230.00	240.00	158.30	226.64	3.17	3.19	3.18
	240.00	250.00	183.28	150.25	.13	2.28	.36
	250.00	260.00	150.80	123.05	3.32	3.27	3.29
	260.00	270.00	200.88	139.49	3.72	3.27	3.47
	270.00	280.00	86.02	39.84	2.69	3.35	2.96
	280.00	290.00	507.80	152.31	.00	.00	.00
	290.00	300.00	990.58	1074.49	.00	.00	.00
	300.00	310.00	346.40	870.15	1.44	.01	.07
	310.00	320.00	267.63	571.09	2.63	1.94	2.23
	320.00	330.00	226.76	624.21	3.02	2.94	2.98
	330.00	340.00	421.27	466.17	3.04	2.64	2.82
	340.00	350.00	347.01	634.88	2.69	2.99	2.83
	350.00	360.00	146.31	194.04	3.83	3.42	3.61
	360.00	370.00	291.91	427.98	3.55	3.28	3.41
	370.00	380.00	132.25	339.31	3.74	3.89	3.81
	380.00	390.00	62.87	109.46	3.83	3.84	3.84
	390.00	400.00	81.56	67.21	3.96	4.21	4.08
	400.00	410.00	34.12	76.81	3.96	4.15	4.05
	410.00	420.00	78.55	74.39	4.01	4.07	4.04
	420.00	430.00	89.58	26.15	3.94	3.85	3.89
	430.00	440.00	75.13	127.72	3.62	3.56	3.59

440.00	450.00	70.61	106.82	3.86	3.94	3.90
450.00	460.00	106.83	107.66	3.77	3.79	3.78
460.00	470.00	130.36	167.69	3.80	4.03	3.90
470.00	480.00	49.39	98.48	4.16	4.01	4.09
480.00	490.00	132.48	148.69	4.06	3.96	4.01
490.00	500.00	83.78	87.31	3.90	4.04	3.97
500.00	510.00	54.12	89.76	3.96	4.01	3.99
510.00	520.00	47.91	59.69	3.96	4.15	4.05

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR231NB1.ERD							
	.00	480.04	271.15	278.09	.92	1.01	.97
	.00	10.00	140.71	150.97	2.94	2.96	2.95
	10.00	20.00	112.59	151.47	2.99	3.14	3.06
	20.00	30.00	151.45	120.78	2.73	2.82	2.78
	30.00	40.00	120.72	147.24	3.19	2.73	2.94
	40.00	50.00	278.94	123.79	1.65	2.09	1.85
	50.00	60.00	159.82	119.93	2.38	2.88	2.60
	60.00	70.00	133.77	49.36	2.69	3.55	3.03
	70.00	80.00	61.74	67.36	3.52	3.44	3.48
	80.00	90.00	252.43	195.19	1.53	1.79	1.65
	90.00	100.00	135.71	73.78	3.30	3.34	3.32
	100.00	110.00	221.77	125.14	2.24	1.61	1.87
	110.00	120.00	435.42	187.78	1.64	1.54	1.59
	120.00	130.00	205.87	161.45	3.29	2.86	3.05
	130.00	140.00	225.27	258.79	2.08	1.34	1.64
	140.00	150.00	46.83	71.25	3.43	2.85	3.10
	150.00	160.00	57.19	61.04	2.57	2.87	2.71
	160.00	170.00	183.83	145.62	2.83	2.16	2.44
	170.00	180.00	75.47	121.41	3.45	1.46	2.02
	180.00	190.00	73.25	42.01	3.22	2.97	3.09
	190.00	200.00	25.90	59.09	3.35	2.72	2.98
	200.00	210.00	61.77	80.25	3.66	1.80	2.35
	210.00	220.00	66.64	110.47	3.29	1.43	1.97
	220.00	230.00	107.46	87.79	3.53	2.60	2.97
	230.00	240.00	69.14	131.17	3.47	3.05	3.24
	240.00	250.00	104.46	72.02	3.07	3.45	3.24
	250.00	260.00	116.68	150.17	3.40	2.89	3.11
	260.00	270.00	597.72	565.77	.40	.65	.51
	270.00	280.00	316.27	255.73	1.19	1.74	1.42
	280.00	290.00	231.07	176.80	2.56	1.65	2.00
	290.00	300.00	438.11	528.50	1.48	1.25	1.36
	300.00	310.00	421.12	457.18	1.97	1.78	1.87
	310.00	320.00	723.03	643.34	.00	.00	.00
	320.00	330.00	2143.69	1797.94	.00	.01	.01
	330.00	340.00	384.29	537.50	.78	.99	.87
	340.00	350.00	565.24	579.31	2.39	1.76	2.03
	350.00	360.00	744.29	1050.25	1.70	1.15	1.38
	360.00	370.00	495.79	740.71	2.31	2.17	2.24
	370.00	380.00	784.35	910.96	.34	.39	.37
	380.00	390.00	147.85	335.47	1.38	1.21	1.29
	390.00	400.00	414.43	499.12	3.08	2.41	2.69
	400.00	410.00	189.07	353.01	3.21	1.85	2.32
	410.00	420.00	250.29	280.18	3.60	3.24	3.40
	420.00	430.00	109.74	141.07	3.71	3.24	3.45
	430.00	440.00	63.05	71.75	3.78	2.75	3.13

440.00	450.00	42.15	114.09	3.46	3.23	3.34
450.00	460.00	119.46	135.66	3.45	2.08	2.55
460.00	470.00	89.47	60.43	2.82	3.41	3.07
470.00	480.00	77.03	29.36	3.35	2.94	3.12

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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR231SB1.ERD							
	.00	480.04	206.49	271.16	1.85	1.65	1.75
	.00	10.00	117.40	130.17	2.78	1.64	2.05
	10.00	20.00	118.18	204.15	2.04	1.69	1.85
	20.00	30.00	79.76	92.58	3.31	2.67	2.94
	30.00	40.00	122.47	202.90	2.34	1.48	1.82
	40.00	50.00	79.81	80.83	3.19	2.66	2.89
	50.00	60.00	58.95	47.47	3.23	2.49	2.79
	60.00	70.00	110.63	144.25	2.83	1.52	1.96
	70.00	80.00	112.30	71.69	3.57	3.10	3.30
	80.00	90.00	95.22	64.49	3.02	3.94	3.37
	90.00	100.00	108.99	184.52	2.27	1.60	1.88
	100.00	110.00	88.81	75.15	3.57	2.77	3.09
	110.00	120.00	144.30	219.62	2.53	1.48	1.87
	120.00	130.00	243.72	265.13	2.37	1.04	1.46
	130.00	140.00	77.62	226.98	2.95	1.79	2.21
	140.00	150.00	207.28	311.25	2.05	1.63	1.81
	150.00	160.00	74.26	74.70	2.43	3.45	2.82
	160.00	170.00	143.97	73.63	3.26	3.76	3.48
	170.00	180.00	72.37	106.53	3.39	3.10	3.23
	180.00	190.00	564.65	492.37	.71	.84	.77
	190.00	200.00	279.95	442.76	1.06	1.18	1.11
	200.00	210.00	428.08	205.35	1.75	2.44	2.04
	210.00	220.00	183.91	164.95	1.79	2.50	2.08
	220.00	230.00	300.57	449.29	1.59	1.83	1.70
	230.00	240.00	321.64	511.07	.44	.14	.24
	240.00	250.00	1237.43	1228.71	.47	.30	.37
	250.00	260.00	631.00	584.01	.60	.94	.74
	260.00	270.00	828.96	1283.36	1.55	2.26	1.84
	270.00	280.00	254.24	508.60	2.53	2.70	2.61
	280.00	290.00	357.54	930.42	1.40	1.17	1.28
	290.00	300.00	580.56	551.68	.28	.72	.43
	300.00	310.00	287.91	427.23	1.84	2.61	2.15
	310.00	320.00	143.09	237.25	2.90	2.80	2.85
	320.00	330.00	105.38	228.00	2.86	3.17	3.01
	330.00	340.00	83.73	64.95	2.88	3.04	2.96
	340.00	350.00	90.60	59.57	3.06	2.98	3.02
	350.00	360.00	103.62	178.85	2.98	2.96	2.97
	360.00	370.00	111.30	117.95	2.93	3.49	3.17
	370.00	380.00	83.09	105.95	3.76	3.64	3.70
	380.00	390.00	91.09	176.46	3.10	3.59	3.32
	390.00	400.00	60.08	110.28	3.24	2.21	2.60
	400.00	410.00	172.30	338.59	1.87	1.87	1.87
	410.00	420.00	99.01	141.68	3.17	2.76	2.94
	420.00	430.00	77.55	168.22	3.71	3.70	3.70
	430.00	440.00	68.78	216.55	3.89	1.64	2.23

440.00	450.00	108.33	51.55	3.36	3.16	3.25
450.00	460.00	49.79	105.54	3.37	3.32	3.35
460.00	470.00	71.90	174.09	2.65	1.82	2.15
470.00	480.00	48.33	154.00	3.91	.62	1.13

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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR218EB1.ERD							
	.00	519.80	173.05	248.32	2.82	2.15	2.43
	.00	10.00	204.71	144.80	2.17	1.59	1.84
	10.00	20.00	127.06	334.60	3.29	2.02	2.47
	20.00	30.00	268.53	286.70	3.36	3.05	3.19
	30.00	40.00	158.53	69.40	3.65	2.79	3.13
	40.00	50.00	78.48	105.70	3.33	3.02	3.16
	50.00	60.00	231.09	248.34	3.20	2.99	3.09
	60.00	70.00	109.46	269.04	3.42	2.52	2.87
	70.00	80.00	138.67	254.92	3.12	2.41	2.71
	80.00	90.00	161.56	343.92	3.14	1.59	2.08
	90.00	100.00	135.01	520.68	3.27	1.36	1.90
	100.00	110.00	250.26	374.86	3.17	2.69	2.91
	110.00	120.00	132.47	268.95	3.17	2.21	2.58
	120.00	130.00	85.03	204.29	3.50	3.03	3.24
	130.00	140.00	38.73	94.93	3.69	3.30	3.48
	140.00	150.00	94.98	109.62	3.51	3.32	3.41
	150.00	160.00	55.77	73.66	3.81	3.28	3.50
	160.00	170.00	71.64	60.97	3.27	3.43	3.35
	170.00	180.00	127.15	26.97	3.22	3.67	3.42
	180.00	190.00	102.84	249.25	2.53	1.97	2.21
	190.00	200.00	282.55	188.30	2.37	2.10	2.23
	200.00	210.00	117.79	202.79	3.58	3.42	3.50
	210.00	220.00	224.44	150.32	3.31	3.06	3.18
	220.00	230.00	209.35	259.55	3.07	2.68	2.86
	230.00	240.00	231.02	164.91	2.62	2.58	2.60
	240.00	250.00	197.91	377.56	2.64	2.82	2.73
	250.00	260.00	270.99	631.09	3.12	.37	.77
	260.00	270.00	472.31	1087.05	1.08	.25	.46
	270.00	280.00	677.43	754.58	1.01	1.89	1.33
	280.00	290.00	720.34	775.09	1.95	2.25	2.09
	290.00	300.00	305.40	417.07	2.80	2.65	2.72
	300.00	310.00	582.58	919.88	1.52	.79	1.06
	310.00	320.00	451.08	867.45	1.68	.79	1.10
	320.00	330.00	220.31	142.39	3.12	2.11	2.50
	330.00	340.00	148.54	301.64	3.36	3.17	3.26
	340.00	350.00	113.45	266.21	3.51	3.19	3.34
	350.00	360.00	95.36	247.16	3.58	2.86	3.15
	360.00	370.00	84.15	147.31	3.43	3.29	3.36
	370.00	380.00	68.28	50.71	3.97	3.28	3.56
	380.00	390.00	55.50	83.54	3.85	3.52	3.67
	390.00	400.00	56.58	69.37	3.63	3.67	3.65
	400.00	410.00	47.24	54.29	3.98	3.68	3.82
	410.00	420.00	103.11	113.34	3.56	3.85	3.69
	420.00	430.00	108.71	71.04	3.37	3.80	3.56
	430.00	440.00	70.71	14.86	3.56	3.82	3.68

440.00	450.00	71.57	69.33	3.84	3.76	3.80
450.00	460.00	109.40	69.55	3.52	3.74	3.62
460.00	470.00	47.99	50.68	3.83	3.72	3.77
470.00	480.00	60.36	47.44	3.93	3.59	3.74
480.00	490.00	29.52	48.93	3.68	3.85	3.76
490.00	500.00	46.80	73.88	3.78	3.71	3.74
500.00	510.00	61.09	31.44	3.61	3.76	3.68
510.00	519.80	30.51	26.42	3.65	4.00	3.81

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\SR218EB1.ERD							
	.00	519.54	173.22	255.31	2.76	2.20	2.45
	.00	10.00	226.72	185.51	2.00	1.84	1.92
	10.00	20.00	110.90	388.41	2.99	1.75	2.19
	20.00	30.00	289.53	314.44	3.35	2.51	2.84
	30.00	40.00	131.54	76.09	3.59	2.75	3.08
	40.00	50.00	97.69	106.64	3.33	3.14	3.23
	50.00	60.00	221.53	267.03	3.27	2.83	3.03
	60.00	70.00	83.29	287.39	3.33	2.75	3.00
	70.00	80.00	140.48	240.73	3.16	2.54	2.81
	80.00	90.00	170.48	413.99	3.25	1.24	1.78
	90.00	100.00	136.89	608.22	2.91	1.16	1.66
	100.00	110.00	243.15	295.04	3.27	3.19	3.23
	110.00	120.00	148.80	274.76	3.04	3.36	3.19
	120.00	130.00	64.80	181.72	3.61	3.21	3.39
	130.00	140.00	41.73	112.82	3.52	3.38	3.45
	140.00	150.00	72.39	100.67	3.56	3.59	3.58
	150.00	160.00	47.61	66.86	3.59	3.38	3.47
	160.00	170.00	77.82	66.53	3.55	3.57	3.56
	170.00	180.00	109.60	43.47	3.29	3.61	3.44
	180.00	190.00	98.10	251.09	2.74	2.18	2.42
	190.00	200.00	288.03	180.87	2.40	2.28	2.34
	200.00	210.00	98.99	234.34	3.43	3.37	3.40
	210.00	220.00	202.56	157.75	3.38	3.22	3.30
	220.00	230.00	205.23	257.42	3.01	2.77	2.88
	230.00	240.00	255.90	160.36	2.66	3.03	2.83
	240.00	250.00	202.68	384.64	2.78	2.47	2.62
	250.00	260.00	321.77	655.05	1.60	.58	.89
	260.00	270.00	488.16	1079.52	.97	.46	.65
	270.00	280.00	708.42	816.52	1.03	1.89	1.35
	280.00	290.00	723.30	817.71	1.90	2.02	1.96
	290.00	300.00	293.18	434.29	2.92	2.52	2.70
	300.00	310.00	587.70	943.08	1.53	.75	1.03
	310.00	320.00	450.20	893.54	1.57	.81	1.09
	320.00	330.00	209.45	131.64	2.92	2.13	2.45
	330.00	340.00	150.44	319.79	3.39	3.13	3.25
	340.00	350.00	111.00	273.08	3.61	3.32	3.45
	350.00	360.00	98.21	234.18	3.70	2.79	3.15
	360.00	370.00	101.37	151.42	3.38	3.27	3.32
	370.00	380.00	58.38	40.37	3.80	3.60	3.69
	380.00	390.00	45.23	96.15	3.87	3.46	3.64
	390.00	400.00	50.26	75.04	3.87	3.84	3.86
	400.00	410.00	61.15	37.59	3.63	3.57	3.60
	410.00	420.00	80.83	113.22	3.44	3.63	3.53
	420.00	430.00	112.28	62.38	3.66	3.87	3.76
	430.00	440.00	66.85	44.74	3.71	3.71	3.71

440.00	450.00	72.16	53.90	3.67	3.36	3.50
450.00	460.00	80.72	70.09	3.60	3.51	3.55
460.00	470.00	47.94	23.35	3.66	3.97	3.80
470.00	480.00	73.26	32.37	3.96	3.70	3.82
480.00	490.00	45.35	37.17	3.67	3.99	3.82
490.00	500.00	53.76	39.51	3.65	3.83	3.74
500.00	510.00	76.91	28.48	3.85	4.10	3.96
510.00	519.54	23.12	25.28	3.58	3.83	3.69

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR218WB1.ERD							
	.00	519.80	160.50	207.37	2.58	2.03	2.26
	.00	10.00	67.54	64.61	3.01	2.60	2.79
	10.00	20.00	41.14	81.30	3.92	3.58	3.73
	20.00	30.00	37.84	73.44	3.30	3.71	3.48
	30.00	40.00	108.08	88.53	3.16	3.61	3.36
	40.00	50.00	70.28	55.91	3.77	3.52	3.64
	50.00	60.00	42.97	55.34	3.81	3.79	3.80
	60.00	70.00	38.74	36.94	3.88	3.56	3.71
	70.00	80.00	46.99	132.96	3.65	2.97	3.25
	80.00	90.00	47.52	58.55	3.55	3.68	3.62
	90.00	100.00	52.60	105.37	3.88	3.61	3.73
	100.00	110.00	64.29	60.42	3.60	3.58	3.59
	110.00	120.00	72.80	74.78	3.69	2.65	3.04
	120.00	130.00	79.29	135.89	3.58	3.06	3.28
	130.00	140.00	85.23	187.29	3.37	3.05	3.20
	140.00	150.00	84.98	133.43	3.49	3.12	3.29
	150.00	160.00	82.55	153.26	3.47	3.41	3.44
	160.00	170.00	116.79	102.40	3.53	3.24	3.37
	170.00	180.00	84.14	95.96	3.56	3.56	3.56
	180.00	190.00	41.92	146.06	3.60	3.26	3.41
	190.00	200.00	120.82	130.47	3.61	3.38	3.49
	200.00	210.00	125.66	218.33	1.73	1.74	1.74
	210.00	220.00	133.87	470.49	1.34	.14	.34
	220.00	230.00	296.07	465.23	2.90	1.84	2.24
	230.00	240.00	258.73	496.98	1.78	1.10	1.37
	240.00	250.00	234.16	156.24	2.36	2.24	2.30
	250.00	260.00	262.07	658.31	.74	.26	.41
	260.00	270.00	393.84	424.17	1.15	.62	.82
	270.00	280.00	286.03	355.85	2.77	2.95	2.85
	280.00	290.00	400.32	574.00	3.09	2.98	3.04
	290.00	300.00	224.04	461.98	3.26	2.78	3.00
	300.00	310.00	233.40	303.20	2.85	3.39	3.08
	310.00	320.00	465.95	666.42	3.36	3.02	3.18
	320.00	330.00	204.67	280.34	2.78	2.53	2.64
	330.00	340.00	386.43	406.85	2.32	2.34	2.33
	340.00	350.00	157.77	129.08	3.69	3.51	3.60
	350.00	360.00	141.29	67.30	3.16	3.48	3.31
	360.00	370.00	53.13	60.87	3.54	3.49	3.52
	370.00	380.00	115.43	67.41	3.70	3.73	3.71
	380.00	390.00	200.68	52.86	3.80	3.29	3.51
	390.00	400.00	86.02	32.32	3.95	2.96	3.33
	400.00	410.00	126.49	83.31	3.50	2.79	3.08
	410.00	420.00	158.45	82.41	3.33	3.23	3.28
	420.00	430.00	74.21	169.96	3.34	3.21	3.27
	430.00	440.00	341.32	211.14	1.22	1.49	1.34

440.00	450.00	407.47	497.55	.89	.92	.91
450.00	460.00	312.67	353.93	2.11	1.43	1.70
460.00	470.00	214.23	261.75	2.00	2.23	2.11
470.00	480.00	238.57	248.76	2.48	3.16	2.76
480.00	490.00	226.69	214.32	2.85	3.25	3.03
490.00	500.00	57.50	180.08	3.64	3.18	3.38
500.00	510.00	87.80	92.06	3.76	2.69	3.08
510.00	519.80	66.42	80.96	4.05	3.22	3.54

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\SR218WB1.ERD							
	.00	519.54	160.18	217.32	2.03	1.89	1.96
	.00	10.00	86.69	96.60	3.29	2.42	2.76
	10.00	20.00	45.64	83.46	3.73	3.64	3.68
	20.00	30.00	38.97	74.99	3.14	3.71	3.38
	30.00	40.00	104.60	83.91	2.79	3.44	3.06
	40.00	50.00	67.61	61.42	3.70	3.22	3.43
	50.00	60.00	46.94	46.25	3.80	3.74	3.77
	60.00	70.00	43.34	33.92	3.91	3.86	3.89
	70.00	80.00	50.80	125.49	3.38	2.67	2.96
	80.00	90.00	55.86	70.99	3.16	3.57	3.34
	90.00	100.00	41.91	115.40	3.98	3.15	3.48
	100.00	110.00	59.51	69.36	3.61	3.54	3.57
	110.00	120.00	65.10	80.79	3.50	2.42	2.82
	120.00	130.00	61.36	147.32	3.75	3.23	3.45
	130.00	140.00	85.49	157.54	3.54	3.11	3.30
	140.00	150.00	96.14	131.80	3.23	3.27	3.25
	150.00	160.00	62.24	140.56	3.22	3.64	3.41
	160.00	170.00	131.42	93.71	3.48	3.68	3.58
	170.00	180.00	70.05	115.71	3.83	3.12	3.41
	180.00	190.00	32.39	139.73	3.75	3.45	3.59
	190.00	200.00	126.89	116.85	3.47	3.46	3.46
	200.00	210.00	138.29	191.62	1.98	2.97	2.36
	210.00	220.00	141.00	452.38	.97	.23	.43
	220.00	230.00	321.66	437.96	2.55	2.00	2.24
	230.00	240.00	203.26	485.39	2.07	1.07	1.42
	240.00	250.00	231.12	163.92	2.19	2.46	2.31
	250.00	260.00	192.36	635.32	.25	.77	.42
	260.00	270.00	506.85	454.31	.39	.81	.54
	270.00	280.00	261.16	381.35	2.82	2.34	2.56
	280.00	290.00	413.16	618.54	3.27	2.79	3.00
	290.00	300.00	240.78	484.55	3.40	2.46	2.83
	300.00	310.00	227.93	304.90	2.66	2.96	2.80
	310.00	320.00	478.33	681.45	3.22	3.07	3.14
	320.00	330.00	212.49	292.44	3.02	2.73	2.86
	330.00	340.00	379.10	420.95	2.49	2.30	2.39
	340.00	350.00	166.73	141.71	3.45	3.38	3.41
	350.00	360.00	145.29	58.95	3.21	3.15	3.18
	360.00	370.00	40.38	74.76	3.54	3.38	3.46
	370.00	380.00	100.38	58.52	3.49	3.46	3.47
	380.00	390.00	220.81	58.35	3.87	3.12	3.42
	390.00	400.00	100.57	63.12	3.65	2.83	3.16
	400.00	410.00	133.46	72.34	3.44	3.19	3.31
	410.00	420.00	152.42	53.95	3.05	3.64	3.30
	420.00	430.00	142.20	131.51	.37	3.45	.77
	430.00	440.00	227.55	218.07	1.11	.87	.98

440.00	450.00	479.87	1214.38	1.07	.09	.24
450.00	460.00	282.94	223.24	2.09	1.60	1.81
460.00	470.00	113.47	297.39	2.34	2.93	2.59
470.00	480.00	220.42	157.42	2.06	3.07	2.45
480.00	490.00	236.98	202.04	1.42	3.57	1.99
490.00	500.00	83.47	139.20	3.66	3.61	3.63
500.00	510.00	113.58	70.73	3.59	3.38	3.48
510.00	519.54	69.54	40.17	3.72	3.42	3.56

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR218EB2.ERD							
	.00	519.80	174.12	213.26	1.10	.45	.67
	.00	10.00	70.79	113.34	3.08	2.85	2.96
	10.00	20.00	95.07	128.86	3.65	3.52	3.58
	20.00	30.00	90.50	36.11	2.86	3.08	2.96
	30.00	40.00	89.07	27.70	3.52	3.39	3.45
	40.00	50.00	22.74	56.60	3.58	2.91	3.19
	50.00	60.00	110.83	114.09	2.87	3.52	3.14
	60.00	70.00	74.29	94.39	3.33	2.94	3.12
	70.00	80.00	108.95	125.65	3.49	3.67	3.57
	80.00	90.00	47.18	78.27	3.57	3.14	3.33
	90.00	100.00	46.23	40.54	3.34	3.33	3.34
	100.00	110.00	51.73	125.04	2.95	2.81	2.88
	110.00	120.00	76.86	78.58	3.48	3.01	3.22
	120.00	130.00	55.88	83.79	3.48	3.23	3.35
	130.00	140.00	126.37	80.11	2.97	3.10	3.03
	140.00	150.00	84.44	79.50	3.12	3.33	3.22
	150.00	160.00	176.75	94.71	2.92	3.12	3.02
	160.00	170.00	81.96	64.86	3.09	2.93	3.01
	170.00	180.00	96.54	173.39	2.97	2.68	2.81
	180.00	190.00	216.74	251.14	2.72	2.71	2.72
	190.00	200.00	88.78	99.67	3.01	3.53	3.23
	200.00	210.00	157.37	139.94	3.53	3.71	3.62
	210.00	220.00	128.56	138.03	2.75	3.20	2.95
	220.00	230.00	160.62	197.25	2.96	2.45	2.68
	230.00	240.00	134.14	199.92	2.80	2.29	2.51
	240.00	250.00	63.36	484.56	2.64	1.09	1.55
	250.00	260.00	709.50	1492.12	.00	.00	.00
	260.00	270.00	1661.96	2329.04	.00	.00	.00
	270.00	280.00	1172.35	781.04	.54	.54	.54
	280.00	290.00	210.53	336.03	.85	1.99	1.22
	290.00	300.00	486.74	393.09	2.27	2.71	2.47
	300.00	310.00	223.60	200.86	2.74	3.33	2.99
	310.00	320.00	229.09	221.79	3.39	3.39	3.39
	320.00	330.00	141.50	172.37	3.32	3.38	3.35
	330.00	340.00	105.46	122.85	3.66	3.39	3.51
	340.00	350.00	135.41	128.06	2.87	3.45	3.12
	350.00	360.00	110.07	81.45	3.49	3.13	3.30
	360.00	370.00	93.83	83.63	3.58	3.27	3.42
	370.00	380.00	52.76	70.41	3.38	3.40	3.39
	380.00	390.00	79.91	121.14	3.42	2.11	2.57
	390.00	400.00	109.03	72.98	3.72	3.21	3.43
	400.00	410.00	104.94	106.17	3.30	3.11	3.20
	410.00	420.00	82.52	72.74	3.49	3.48	3.48
	420.00	430.00	64.22	91.93	3.57	3.30	3.43
	430.00	440.00	89.86	147.33	3.17	3.16	3.16

440.00	450.00	153.29	149.92	1.78	2.14	1.94
450.00	460.00	40.28	115.10	3.58	2.42	2.84
460.00	470.00	114.37	181.68	2.89	2.63	2.75
470.00	480.00	89.24	87.83	3.16	3.39	3.27
480.00	490.00	55.53	104.31	3.28	2.57	2.86
490.00	500.00	53.03	63.71	3.00	3.48	3.21
500.00	510.00	80.77	113.62	3.07	1.75	2.21
510.00	519.80	123.94	155.48	3.17	3.17	3.17

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\SR218EB2.ERD							
	.00	519.54	157.54	204.23	1.32	.60	.85
	.00	10.00	62.79	129.78	3.12	2.83	2.97
	10.00	20.00	91.50	113.60	3.15	3.14	3.15
	20.00	30.00	57.35	70.31	3.01	3.45	3.21
	30.00	40.00	50.75	33.65	3.39	3.32	3.35
	40.00	50.00	19.93	66.46	3.22	2.80	2.99
	50.00	60.00	66.61	105.74	3.18	3.61	3.37
	60.00	70.00	83.50	86.31	3.19	3.09	3.14
	70.00	80.00	66.04	117.49	3.06	3.73	3.34
	80.00	90.00	28.00	46.25	3.40	3.39	3.40
	90.00	100.00	34.59	34.61	3.16	3.29	3.22
	100.00	110.00	72.94	99.11	3.39	3.14	3.26
	110.00	120.00	68.81	53.54	3.56	3.09	3.30
	120.00	130.00	50.93	65.86	3.60	3.57	3.59
	130.00	140.00	55.09	39.29	2.67	3.33	2.94
	140.00	150.00	51.18	70.34	3.01	3.24	3.12
	150.00	160.00	69.94	99.98	3.33	3.24	3.28
	160.00	170.00	59.12	54.60	3.23	3.18	3.21
	170.00	180.00	92.84	190.98	2.81	2.55	2.67
	180.00	190.00	201.67	253.23	2.66	2.56	2.61
	190.00	200.00	70.82	80.27	3.36	3.53	3.44
	200.00	210.00	161.17	139.28	3.60	3.98	3.77
	210.00	220.00	126.34	166.93	2.75	2.96	2.85
	220.00	230.00	151.90	246.02	3.17	2.19	2.57
	230.00	240.00	158.72	178.92	2.62	2.57	2.60
	240.00	250.00	68.00	471.81	2.96	1.30	1.80
	250.00	260.00	509.65	1525.43	.00	.00	.00
	260.00	270.00	1627.02	1992.44	.02	.01	.02
	270.00	280.00	1198.56	728.43	.46	.57	.51
	280.00	290.00	119.78	362.67	.90	2.07	1.28
	290.00	300.00	478.47	409.65	2.75	2.49	2.61
	300.00	310.00	247.90	182.26	2.99	3.34	3.15
	310.00	320.00	183.60	230.73	3.42	3.64	3.53
	320.00	330.00	147.96	197.26	3.42	3.58	3.50
	330.00	340.00	94.27	132.12	3.44	3.19	3.31
	340.00	350.00	108.98	137.71	2.87	3.40	3.10
	350.00	360.00	94.15	104.05	3.16	3.05	3.10
	360.00	370.00	68.40	81.76	3.69	3.16	3.39
	370.00	380.00	35.67	55.97	3.75	3.93	3.84
	380.00	390.00	97.65	134.75	3.37	2.34	2.73
	390.00	400.00	79.13	49.09	3.78	3.60	3.68
	400.00	410.00	62.43	100.24	3.99	2.85	3.26
	410.00	420.00	76.01	68.14	3.48	3.71	3.59
	420.00	430.00	39.32	91.89	3.70	3.36	3.52
	430.00	440.00	109.05	135.24	2.96	3.41	3.16

440.00	450.00	154.62	153.21	1.81	1.95	1.87
450.00	460.00	55.24	123.67	3.08	2.48	2.73
460.00	470.00	126.71	186.50	2.85	2.67	2.75
470.00	480.00	97.02	87.40	2.80	3.38	3.05
480.00	490.00	58.17	78.12	2.62	2.84	2.72
490.00	500.00	73.63	59.28	3.15	3.04	3.09
500.00	510.00	74.52	111.52	2.85	1.73	2.14
510.00	519.54	119.14	141.02	3.18	3.27	3.23

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR218WB2.ERD							
	.00	519.80	205.33	213.14	.76	.68	.72
	.00	10.00	271.12	182.52	1.69	2.11	1.88
	10.00	20.00	229.46	133.54	2.42	2.62	2.51
	20.00	30.00	201.56	159.41	3.22	2.98	3.09
	30.00	40.00	61.40	61.94	3.26	2.97	3.11
	40.00	50.00	126.64	111.17	2.77	2.11	2.39
	50.00	60.00	148.56	140.28	3.12	2.89	3.00
	60.00	70.00	57.67	53.24	3.57	3.41	3.49
	70.00	80.00	56.81	30.54	3.03	2.81	2.91
	80.00	90.00	45.86	107.65	3.09	2.82	2.94
	90.00	100.00	122.89	255.05	2.98	1.43	1.91
	100.00	110.00	82.66	119.00	3.38	3.26	3.32
	110.00	120.00	105.45	156.27	3.65	3.16	3.37
	120.00	130.00	100.35	167.28	3.53	3.39	3.46
	130.00	140.00	63.06	82.31	3.73	3.66	3.69
	140.00	150.00	90.90	51.78	3.51	3.70	3.60
	150.00	160.00	64.27	91.62	3.69	3.67	3.68
	160.00	170.00	59.40	90.73	3.41	3.07	3.22
	170.00	180.00	57.76	82.97	3.54	3.72	3.62
	180.00	190.00	77.54	85.68	3.80	3.76	3.78
	190.00	200.00	64.80	70.29	3.48	3.43	3.45
	200.00	210.00	77.28	34.42	3.43	3.35	3.39
	210.00	220.00	86.38	258.46	2.83	2.12	2.41
	220.00	230.00	120.19	201.34	3.20	2.65	2.89
	230.00	240.00	126.17	190.72	2.45	2.01	2.21
	240.00	250.00	712.26	1048.92	.92	.17	.35
	250.00	260.00	1049.51	1686.72	.00	.00	.00
	260.00	270.00	2350.70	1441.47	.00	.00	.00
	270.00	280.00	825.21	366.42	.80	.90	.85
	280.00	290.00	181.73	168.46	1.93	3.02	2.33
	290.00	300.00	286.55	326.25	2.79	2.92	2.85
	300.00	310.00	492.77	210.35	2.54	2.11	2.30
	310.00	320.00	174.52	205.83	2.84	3.40	3.08
	320.00	330.00	246.40	362.85	3.41	3.32	3.36
	330.00	340.00	74.33	165.80	3.62	3.44	3.53
	340.00	350.00	84.86	147.86	3.67	3.04	3.30
	350.00	360.00	164.44	199.34	2.39	3.07	2.67
	360.00	370.00	123.50	96.68	3.51	3.37	3.44
	370.00	380.00	133.59	142.01	3.09	3.02	3.06
	380.00	390.00	139.55	170.50	3.56	2.96	3.21
	390.00	400.00	95.29	105.84	2.88	3.24	3.05
	400.00	410.00	141.52	169.52	2.88	2.98	2.93
	410.00	420.00	64.36	140.36	3.25	3.03	3.13
	420.00	430.00	106.49	193.26	3.18	2.54	2.81
	430.00	440.00	103.28	121.84	3.08	3.15	3.11

440.00	450.00	49.43	62.20	3.11	3.34	3.22
450.00	460.00	90.10	48.24	2.81	3.09	2.94
460.00	470.00	79.52	128.59	3.42	2.99	3.19
470.00	480.00	130.92	212.42	2.88	2.23	2.51
480.00	490.00	70.61	70.52	3.12	2.91	3.01
490.00	500.00	70.41	64.30	3.19	2.82	2.99
500.00	510.00	85.01	41.30	3.60	3.43	3.51
510.00	519.80	53.32	84.06	3.24	2.93	3.08

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\SR218WB2.ERD							
	.00	519.54	207.47	213.84	.51	.68	.58
	.00	10.00	292.36	162.38	1.71	2.23	1.94
	10.00	20.00	223.09	111.20	2.36	2.68	2.50
	20.00	30.00	209.84	168.40	3.02	3.05	3.04
	30.00	40.00	58.32	65.15	3.21	2.89	3.04
	40.00	50.00	150.63	110.36	2.51	2.31	2.40
	50.00	60.00	136.34	139.25	3.09	2.62	2.83
	60.00	70.00	57.68	35.81	3.41	3.45	3.43
	70.00	80.00	46.64	30.26	3.32	3.00	3.15
	80.00	90.00	48.21	110.33	3.11	2.44	2.72
	90.00	100.00	131.11	250.05	2.92	1.65	2.09
	100.00	110.00	83.64	109.44	3.66	3.36	3.50
	110.00	120.00	114.56	164.46	3.51	3.41	3.45
	120.00	130.00	86.09	148.10	3.62	3.44	3.52
	130.00	140.00	52.44	80.15	3.66	3.69	3.68
	140.00	150.00	97.44	64.46	3.75	3.40	3.56
	150.00	160.00	36.70	81.44	3.53	3.11	3.30
	160.00	170.00	36.33	67.70	3.63	3.38	3.50
	170.00	180.00	62.17	69.68	3.69	3.50	3.59
	180.00	190.00	71.46	87.35	3.73	3.56	3.64
	190.00	200.00	59.48	82.68	3.71	3.58	3.65
	200.00	210.00	68.23	36.24	3.42	3.49	3.46
	210.00	220.00	110.16	276.36	2.63	2.31	2.46
	220.00	230.00	94.16	160.70	3.31	2.64	2.92
	230.00	240.00	182.74	214.52	2.12	1.48	1.75
	240.00	250.00	614.12	1192.24	1.41	.27	.53
	250.00	260.00	1164.35	1569.24	.00	.00	.00
	260.00	270.00	2275.33	1641.96	.00	.02	.00
	270.00	280.00	805.72	403.90	.77	.82	.80
	280.00	290.00	181.76	158.63	2.32	2.65	2.47
	290.00	300.00	337.04	360.01	3.09	2.54	2.78
	300.00	310.00	530.13	210.17	1.78	2.27	1.99
	310.00	320.00	228.50	258.43	3.10	3.32	3.20
	320.00	330.00	240.12	341.35	3.29	3.42	3.35
	330.00	340.00	81.62	146.10	3.52	3.10	3.29
	340.00	350.00	113.39	164.30	2.54	2.77	2.65
	350.00	360.00	223.94	150.57	2.60	3.02	2.79
	360.00	370.00	126.49	108.82	3.12	3.33	3.22
	370.00	380.00	147.00	159.93	3.32	3.32	3.32
	380.00	390.00	102.32	155.88	3.06	2.64	2.83
	390.00	400.00	85.72	101.25	2.83	2.85	2.84
	400.00	410.00	157.17	169.70	3.02	2.72	2.86
	410.00	420.00	83.52	125.64	3.22	3.13	3.17
	420.00	430.00	115.46	169.32	3.06	2.68	2.85
	430.00	440.00	76.01	93.19	2.88	2.66	2.77

440.00	450.00	40.72	42.87	3.52	3.06	3.26
450.00	460.00	73.14	50.45	3.13	3.16	3.15
460.00	470.00	62.84	147.57	3.37	3.28	3.33
470.00	480.00	126.59	189.68	2.96	1.97	2.35
480.00	490.00	94.66	74.45	3.30	3.00	3.14
490.00	500.00	78.53	43.51	3.49	3.35	3.42
500.00	510.00	99.89	44.30	3.33	3.42	3.37
510.00	519.54	72.96	103.60	3.29	3.00	3.13

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR47NB.ERD							
	.00	520.06	134.76	138.99	1.90	2.56	2.18
	.00	10.00	114.17	145.77	3.11	2.90	3.00
	10.00	20.00	148.60	140.16	3.12	3.10	3.11
	20.00	30.00	107.05	88.36	3.50	3.37	3.43
	30.00	40.00	40.22	22.71	3.66	3.65	3.66
	40.00	50.00	54.93	63.44	3.86	3.61	3.72
	50.00	60.00	50.21	59.03	3.74	3.89	3.81
	60.00	70.00	13.88	50.08	3.60	3.83	3.71
	70.00	80.00	40.36	55.36	3.64	3.22	3.40
	80.00	90.00	28.07	58.37	3.45	2.82	3.08
	90.00	100.00	36.61	39.29	3.54	3.53	3.54
	100.00	110.00	18.53	82.67	3.84	3.40	3.59
	110.00	120.00	45.05	49.83	3.62	3.50	3.56
	120.00	130.00	61.84	77.38	3.63	2.96	3.24
	130.00	140.00	40.44	69.32	3.59	3.48	3.53
	140.00	150.00	78.32	63.17	3.31	3.41	3.36
	150.00	160.00	144.27	148.25	3.35	3.65	3.49
	160.00	170.00	83.95	70.29	3.39	3.34	3.36
	170.00	180.00	71.54	102.71	3.60	3.18	3.37
	180.00	190.00	41.06	91.39	3.41	3.09	3.24
	190.00	200.00	28.83	105.20	3.68	3.33	3.49
	200.00	210.00	59.15	183.45	3.51	3.13	3.30
	210.00	220.00	65.39	101.48	3.69	3.52	3.60
	220.00	230.00	74.09	98.15	3.51	3.71	3.60
	230.00	240.00	215.56	292.89	2.16	1.96	2.05
	240.00	250.00	161.20	155.57	3.47	3.17	3.30
	250.00	260.00	201.76	189.74	.12	1.22	.30
	260.00	270.00	1592.06	906.66	.01	.15	.03
	270.00	280.00	303.75	164.38	1.61	2.03	1.80
	280.00	290.00	74.87	100.54	2.95	3.68	3.25
	290.00	300.00	229.03	170.75	3.44	3.01	3.20
	300.00	310.00	294.23	253.48	2.79	2.83	2.81
	310.00	320.00	100.34	126.46	3.40	3.54	3.47
	320.00	330.00	250.05	208.92	3.46	3.50	3.48
	330.00	340.00	186.30	300.10	3.48	3.57	3.52
	340.00	350.00	32.52	130.01	3.48	3.62	3.55
	350.00	360.00	147.71	115.52	3.52	3.40	3.46
	360.00	370.00	159.17	267.86	3.26	3.43	3.34
	370.00	380.00	73.72	151.25	3.44	3.23	3.33
	380.00	390.00	91.06	122.80	3.48	3.26	3.36
	390.00	400.00	158.19	163.19	3.69	3.59	3.64
	400.00	410.00	67.86	101.19	3.33	3.35	3.34
	410.00	420.00	70.93	52.87	3.54	3.40	3.47
	420.00	430.00	75.02	58.68	3.82	3.35	3.55
	430.00	440.00	39.11	77.23	3.70	3.39	3.53

440.00	450.00	116.76	130.45	3.73	3.50	3.61
450.00	460.00	61.13	86.84	3.70	3.90	3.79
460.00	470.00	123.34	142.77	3.65	3.52	3.59
470.00	480.00	53.53	55.60	3.75	3.30	3.50
480.00	490.00	145.78	170.21	3.54	3.45	3.49
490.00	500.00	93.72	135.34	3.29	3.25	3.27
500.00	510.00	245.55	265.65	3.33	3.19	3.25
510.00	520.00	111.03	125.07	3.33	3.25	3.29

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR47SB.ERD							
	.00	519.80	125.66	151.09	2.53	2.15	2.32
	.00	10.00	120.39	112.31	2.69	2.85	2.77
	10.00	20.00	81.59	55.31	3.09	3.52	3.28
	20.00	30.00	54.76	31.43	3.36	3.49	3.42
	30.00	40.00	192.20	94.06	3.64	3.69	3.67
	40.00	50.00	89.60	60.77	2.97	3.88	3.32
	50.00	60.00	87.59	63.46	3.89	3.78	3.84
	60.00	70.00	136.91	188.13	3.24	3.18	3.21
	70.00	80.00	114.63	127.00	3.50	3.36	3.43
	80.00	90.00	152.02	170.31	3.30	3.31	3.30
	90.00	100.00	54.46	116.21	3.72	3.57	3.64
	100.00	110.00	119.07	151.22	3.62	3.26	3.42
	110.00	120.00	42.55	109.37	3.46	3.53	3.50
	120.00	130.00	50.71	64.90	3.47	3.64	3.55
	130.00	140.00	14.37	87.58	3.50	3.01	3.23
	140.00	150.00	58.67	91.49	3.43	3.59	3.51
	150.00	160.00	64.88	67.99	3.37	3.28	3.32
	160.00	170.00	70.00	160.04	3.55	2.99	3.23
	170.00	180.00	145.33	142.44	3.54	3.11	3.30
	180.00	190.00	65.26	51.95	3.43	3.67	3.54
	190.00	200.00	100.72	99.28	3.70	3.59	3.65
	200.00	210.00	159.99	204.02	3.76	3.53	3.64
	210.00	220.00	86.93	165.09	2.76	2.05	2.35
	220.00	230.00	60.90	115.94	3.59	3.36	3.47
	230.00	240.00	258.98	273.31	2.42	2.06	2.22
	240.00	250.00	287.32	199.57	2.25	2.70	2.45
	250.00	260.00	260.98	201.33	.35	.36	.35
	260.00	270.00	827.10	1351.18	.30	.07	.14
	270.00	280.00	186.01	239.27	2.19	2.29	2.24
	280.00	290.00	162.52	198.93	2.49	2.74	2.61
	290.00	300.00	205.47	233.81	2.10	3.02	2.46
	300.00	310.00	272.57	241.83	2.81	2.82	2.81
	310.00	320.00	106.77	170.85	2.83	3.33	3.05
	320.00	330.00	273.20	234.95	2.23	3.06	2.56
	330.00	340.00	148.02	233.62	2.23	2.71	2.44
	340.00	350.00	188.50	97.84	2.07	3.04	2.44
	350.00	360.00	178.49	157.50	2.95	3.00	2.98
	360.00	370.00	68.83	163.79	2.45	3.01	2.69
	370.00	380.00	77.10	122.02	3.12	2.99	3.05
	380.00	390.00	71.97	87.12	3.51	2.10	2.58
	390.00	400.00	94.77	53.11	3.37	2.36	2.75
	400.00	410.00	58.10	46.94	3.55	2.72	3.05
	410.00	420.00	113.58	285.34	3.43	2.73	3.02
	420.00	430.00	32.39	58.36	3.59	2.81	3.12
	430.00	440.00	70.52	132.18	3.53	2.91	3.17

440.00	450.00	35.70	113.64	3.62	3.43	3.52
450.00	460.00	59.62	79.83	3.47	3.24	3.35
460.00	470.00	68.39	76.93	3.90	2.83	3.22
470.00	480.00	54.84	64.63	3.01	3.00	3.01
480.00	490.00	76.81	56.20	2.80	3.46	3.08
490.00	500.00	59.78	41.39	3.54	3.37	3.45
500.00	510.00	51.49	46.72	3.46	3.00	3.20
510.00	519.80	27.52	22.69	3.64	2.95	3.24

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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR267NB.ERD	.00	519.80	192.94	219.97	.90	.98	.94
	.00	10.00	182.29	150.69	2.49	2.50	2.50
	10.00	20.00	109.91	139.71	3.75	2.78	3.15
	20.00	30.00	121.36	121.16	3.05	3.29	3.16
	30.00	40.00	142.21	136.05	3.02	3.04	3.03
	40.00	50.00	61.31	84.93	3.22	3.45	3.33
	50.00	60.00	100.66	156.18	3.32	3.05	3.18
	60.00	70.00	138.73	142.06	3.38	3.05	3.20
	70.00	80.00	90.40	127.02	3.75	3.32	3.51
	80.00	90.00	92.33	88.01	3.27	3.05	3.15
	90.00	100.00	134.32	67.49	2.73	3.72	3.10
	100.00	110.00	114.05	109.36	3.20	3.19	3.20
	110.00	120.00	94.80	91.07	3.65	3.16	3.37
	120.00	130.00	104.13	194.58	3.42	3.18	3.29
	130.00	140.00	120.06	151.99	3.51	3.03	3.24
	140.00	150.00	123.90	148.01	3.59	3.36	3.47
	150.00	160.00	133.73	266.30	2.32	1.89	2.08
	160.00	170.00	297.74	288.28	2.24	2.00	2.11
	170.00	180.00	117.48	198.67	2.63	2.78	2.70
	180.00	190.00	228.95	316.65	2.78	1.62	2.03
	190.00	200.00	342.86	383.60	1.61	1.75	1.68
	200.00	210.00	469.17	278.39	1.61	1.94	1.76
	210.00	220.00	561.86	240.44	2.19	2.94	2.50
	220.00	230.00	230.06	503.75	1.59	.66	.96
	230.00	240.00	341.67	436.82	2.91	2.10	2.42
	240.00	250.00	205.87	282.24	2.15	1.42	1.71
	250.00	260.00	371.68	578.99	.04	.00	.00
	260.00	270.00	1039.99	1067.47	.00	.14	.00
	270.00	280.00	260.45	410.45	2.18	.80	1.21
	280.00	290.00	211.09	161.35	3.25	2.13	2.54
	290.00	300.00	186.74	243.27	3.35	1.74	2.25
	300.00	310.00	84.94	83.03	3.59	3.54	3.56
	310.00	320.00	154.74	271.16	2.69	1.61	2.00
	320.00	330.00	102.36	84.28	3.58	3.05	3.28
	330.00	340.00	184.81	197.29	2.94	3.08	3.01
	340.00	350.00	151.78	124.50	2.95	3.07	3.01
	350.00	360.00	209.98	163.35	2.71	2.13	2.38
	360.00	370.00	140.81	362.25	3.41	.37	.77
	370.00	380.00	170.20	182.66	2.38	1.90	2.11
	380.00	390.00	254.45	224.95	3.01	3.20	3.10
	390.00	400.00	279.79	358.45	3.36	3.22	3.29
	400.00	410.00	228.98	214.45	3.01	3.11	3.06
	410.00	420.00	318.38	421.88	2.91	3.52	3.17
	420.00	430.00	153.51	160.78	3.19	3.42	3.30
	430.00	440.00	86.66	99.08	3.82	3.54	3.67

440.00	450.00	115.21	191.04	3.30	3.57	3.42
450.00	460.00	79.58	79.99	3.43	3.50	3.47
460.00	470.00	65.17	126.81	2.89	3.23	3.04
470.00	480.00	183.53	98.71	3.04	2.79	2.91
480.00	490.00	82.62	101.23	2.55	3.02	2.76
490.00	500.00	84.97	59.67	3.59	3.49	3.54
500.00	510.00	67.65	109.69	3.55	3.42	3.48
510.00	519.80	90.00	126.42	3.57	3.75	3.66

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR267SB.ERD							
	.00	519.80	171.93	187.12	.80	.82	.81
	.00	10.00	81.01	71.95	3.30	3.54	3.41
	10.00	20.00	94.62	124.18	3.36	3.07	3.21
	20.00	30.00	52.74	76.33	3.92	3.51	3.69
	30.00	40.00	45.49	56.07	3.90	3.34	3.58
	40.00	50.00	100.72	125.13	3.56	3.36	3.46
	50.00	60.00	143.65	116.14	3.21	3.12	3.16
	60.00	70.00	84.30	160.70	3.60	3.49	3.54
	70.00	80.00	162.10	135.48	3.52	3.48	3.49
	80.00	90.00	199.21	163.65	3.77	3.74	3.75
	90.00	100.00	90.30	117.73	3.51	3.43	3.47
	100.00	110.00	79.48	81.50	3.35	3.51	3.42
	110.00	120.00	38.21	76.92	3.59	3.23	3.39
	120.00	130.00	68.02	92.41	3.81	3.51	3.65
	130.00	140.00	18.21	116.87	3.72	3.20	3.43
	140.00	150.00	83.21	65.93	3.60	3.80	3.69
	150.00	160.00	46.68	94.34	3.42	3.23	3.32
	160.00	170.00	50.07	132.38	3.34	3.28	3.31
	170.00	180.00	204.16	108.23	3.18	3.17	3.17
	180.00	190.00	129.05	98.73	2.99	3.30	3.13
	190.00	200.00	341.10	217.92	1.08	3.09	1.61
	200.00	210.00	149.72	110.62	2.70	3.49	3.02
	210.00	220.00	258.06	355.66	2.63	1.85	2.16
	220.00	230.00	164.52	95.20	2.50	3.05	2.74
	230.00	240.00	226.25	255.81	2.39	2.11	2.24
	240.00	250.00	138.72	408.52	2.27	.75	1.17
	250.00	260.00	468.82	689.15	.00	.00	.00
	260.00	270.00	1632.96	952.33	.00	.08	.00
	270.00	280.00	234.51	542.29	2.55	1.10	1.55
	280.00	290.00	103.05	511.50	3.07	1.25	1.77
	290.00	300.00	153.59	230.46	2.95	1.86	2.26
	300.00	310.00	114.62	203.06	2.72	2.34	2.51
	310.00	320.00	84.11	240.13	2.89	2.68	2.78
	320.00	330.00	122.11	180.95	2.71	2.73	2.72
	330.00	340.00	145.24	178.13	2.99	2.90	2.94
	340.00	350.00	328.89	204.31	1.49	2.53	1.87
	350.00	360.00	200.62	104.41	3.14	3.14	3.14
	360.00	370.00	219.18	166.59	3.67	3.32	3.48
	370.00	380.00	62.07	118.44	3.97	3.58	3.75
	380.00	390.00	213.78	44.86	3.32	3.86	3.55
	390.00	400.00	99.73	149.14	3.60	3.61	3.60
	400.00	410.00	103.83	93.54	3.45	3.53	3.49
	410.00	420.00	169.16	35.08	3.57	3.64	3.61
	420.00	430.00	54.93	60.77	3.79	3.62	3.70
	430.00	440.00	57.29	169.27	3.06	3.53	3.27

440.00	450.00	213.17	152.60	2.49	3.18	2.78
450.00	460.00	129.06	158.35	3.45	2.85	3.11
460.00	470.00	167.79	172.19	3.72	3.40	3.55
470.00	480.00	117.31	117.08	3.41	3.47	3.44
480.00	490.00	184.68	163.78	2.82	3.28	3.02
490.00	500.00	84.22	133.99	3.13	3.10	3.12
500.00	510.00	116.63	155.17	3.30	3.03	3.15
510.00	519.80	277.76	300.60	3.02	2.64	2.81

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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR136WB1.ERD							
	.00	519.80	265.80	325.88	.76	.42	.55
	.00	10.00	178.20	164.36	1.52	1.93	1.70
	10.00	20.00	174.31	169.14	1.46	1.75	1.59
	20.00	30.00	789.91	793.67	.39	.50	.44
	30.00	40.00	258.46	325.93	1.58	.89	1.15
	40.00	50.00	268.36	310.34	2.59	2.15	2.35
	50.00	60.00	167.81	232.21	2.10	2.25	2.18
	60.00	70.00	58.33	66.10	3.34	2.99	3.15
	70.00	80.00	145.15	177.00	2.46	1.56	1.91
	80.00	90.00	86.07	378.80	2.57	1.12	1.57
	90.00	100.00	127.76	255.30	2.06	2.07	2.06
	100.00	110.00	193.42	192.11	2.12	1.21	1.54
	110.00	120.00	113.03	212.97	2.61	2.68	2.65
	120.00	130.00	94.70	167.27	2.30	2.34	2.32
	130.00	140.00	170.43	206.81	2.73	2.39	2.55
	140.00	150.00	115.39	289.16	1.43	1.08	1.23
	150.00	160.00	140.82	257.41	2.53	1.12	1.56
	160.00	170.00	287.66	400.62	1.68	1.45	1.55
	170.00	180.00	133.86	223.80	2.31	1.69	1.95
	180.00	190.00	173.86	254.42	2.72	2.41	2.56
	190.00	200.00	57.33	90.25	1.82	2.29	2.03
	200.00	210.00	111.62	193.22	.71	2.18	1.12
	210.00	220.00	628.78	558.30	.25	.54	.35
	220.00	230.00	430.90	497.14	1.08	.99	1.03
	230.00	240.00	181.11	330.42	2.61	1.85	2.16
	240.00	250.00	418.15	331.04	.73	.74	.74
	250.00	260.00	756.01	1888.35	.00	.00	.00
	260.00	270.00	2075.63	2744.96	.00	.00	.00
	270.00	280.00	432.79	412.40	.67	.87	.76
	280.00	290.00	845.10	290.54	.04	2.04	.16
	290.00	300.00	448.31	315.92	1.75	.71	1.04
	300.00	310.00	267.59	336.17	2.25	1.27	1.63
	310.00	320.00	388.52	350.19	2.66	1.55	1.95
	320.00	330.00	332.04	445.76	2.33	.52	.92
	330.00	340.00	252.66	213.71	2.41	.82	1.26
	340.00	350.00	209.33	292.79	2.57	3.05	2.78
	350.00	360.00	184.83	233.35	3.15	.53	.99
	360.00	370.00	91.70	368.03	2.94	.94	1.45
	370.00	380.00	188.26	214.91	2.45	2.78	2.60
	380.00	390.00	133.83	182.15	3.16	1.86	2.31
	390.00	400.00	91.50	137.89	2.72	2.34	2.51
	400.00	410.00	71.00	146.32	2.19	2.72	2.42
	410.00	420.00	188.05	133.81	2.13	2.57	2.33
	420.00	430.00	90.53	35.93	3.21	2.99	3.10
	430.00	440.00	110.37	94.73	2.38	2.92	2.62

440.00	450.00	173.31	147.06	3.18	2.89	3.02
450.00	460.00	116.28	129.20	2.74	2.72	2.73
460.00	470.00	127.42	124.02	2.27	2.96	2.56
470.00	480.00	155.72	161.93	2.14	2.21	2.18
480.00	490.00	56.85	78.22	3.17	3.13	3.15
490.00	500.00	234.34	240.82	1.91	1.57	1.73
500.00	510.00	85.15	62.78	2.82	2.56	2.68
510.00	519.80	132.62	69.55	2.49	3.05	2.73

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR136EB1.ERD							
	.00	519.80	231.38	256.31	1.12	.63	.82
	.00	10.00	192.63	136.04	1.94	1.74	1.84
	10.00	20.00	136.50	180.54	2.72	1.88	2.21
	20.00	30.00	163.39	135.88	2.08	2.46	2.25
	30.00	40.00	187.11	152.36	1.71	1.89	1.80
	40.00	50.00	55.77	141.08	1.85	2.61	2.16
	50.00	60.00	182.86	158.04	1.50	2.88	1.96
	60.00	70.00	193.72	132.63	2.03	2.90	2.37
	70.00	80.00	280.12	152.92	2.17	2.74	2.42
	80.00	90.00	99.06	61.80	2.25	2.16	2.20
	90.00	100.00	126.61	112.26	2.23	2.63	2.41
	100.00	110.00	84.89	103.60	2.57	2.66	2.61
	110.00	120.00	80.95	105.74	2.75	2.82	2.78
	120.00	130.00	107.96	28.12	2.54	2.76	2.64
	130.00	140.00	60.90	238.24	2.94	.44	.86
	140.00	150.00	72.52	110.09	3.18	3.00	3.09
	150.00	160.00	131.30	202.25	2.22	1.22	1.58
	160.00	170.00	193.44	212.58	3.05	.92	1.43
	170.00	180.00	85.08	92.63	2.37	2.37	2.37
	180.00	190.00	107.77	216.21	2.57	1.41	1.82
	190.00	200.00	201.87	332.39	1.44	2.11	1.71
	200.00	210.00	224.51	153.98	2.32	2.56	2.43
	210.00	220.00	147.50	192.46	2.04	2.81	2.35
	220.00	230.00	231.57	332.73	2.38	1.18	1.59
	230.00	240.00	119.20	116.86	2.36	2.37	2.37
	240.00	250.00	202.78	320.46	1.52	.85	1.10
	250.00	260.00	1056.33	1218.32	.01	.00	.00
	260.00	270.00	2404.19	1615.41	.00	.01	.01
	270.00	280.00	583.03	218.96	.86	1.87	1.20
	280.00	290.00	368.91	389.43	2.21	.01	.04
	290.00	300.00	263.16	550.28	2.09	.97	1.34
	300.00	310.00	266.09	286.18	2.42	2.08	2.23
	310.00	320.00	527.76	658.14	1.26	.71	.92
	320.00	330.00	309.33	187.24	1.08	2.32	1.48
	330.00	340.00	146.72	75.93	2.03	2.69	2.31
	340.00	350.00	83.41	182.88	2.90	2.50	2.68
	350.00	360.00	72.49	199.00	2.54	2.12	2.31
	360.00	370.00	182.27	234.64	2.09	1.84	1.96
	370.00	380.00	78.92	158.24	2.30	2.19	2.24
	380.00	390.00	152.81	172.82	1.85	1.33	1.55
	390.00	400.00	113.81	189.17	3.14	1.52	2.02
	400.00	410.00	113.12	164.95	2.44	2.03	2.22
	410.00	420.00	129.46	127.44	2.21	2.16	2.19
	420.00	430.00	115.21	374.01	2.78	1.77	2.15
	430.00	440.00	78.55	281.03	3.06	1.47	1.97

440.00	450.00	125.28	208.48	2.49	1.78	2.07
450.00	460.00	120.18	257.02	2.89	2.01	2.36
460.00	470.00	72.44	220.17	2.05	2.31	2.17
470.00	480.00	150.35	263.30	2.46	1.56	1.90
480.00	490.00	96.54	243.99	2.80	1.89	2.24
490.00	500.00	192.03	101.40	2.53	1.81	2.11
500.00	510.00	271.82	381.77	1.11	1.78	1.38
510.00	519.80	182.58	219.86	1.36	1.31	1.33

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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR136EB2.ERD							
	.00	519.80	241.48	219.90	1.59	1.79	1.69
	.00	10.00	299.44	344.81	1.96	1.66	1.80
	10.00	20.00	198.67	241.06	2.26	.48	.86
	20.00	30.00	465.22	601.76	2.57	1.85	2.14
	30.00	40.00	408.20	384.06	2.07	1.72	1.88
	40.00	50.00	371.23	327.65	2.98	3.27	3.12
	50.00	60.00	500.91	540.49	2.34	2.80	2.55
	60.00	70.00	371.54	425.86	.91	.21	.39
	70.00	80.00	949.05	484.43	.17	.16	.16
	80.00	90.00	530.12	672.13	.78	1.24	.97
	90.00	100.00	1051.49	794.76	.13	.60	.25
	100.00	110.00	420.82	395.91	1.72	1.99	1.85
	110.00	120.00	801.36	434.86	2.05	2.78	2.35
	120.00	130.00	528.37	284.45	1.12	2.59	1.57
	130.00	140.00	293.20	178.12	2.02	3.28	2.46
	140.00	150.00	204.73	251.75	2.68	3.87	3.10
	150.00	160.00	327.80	274.64	3.02	3.86	3.35
	160.00	170.00	240.80	118.35	3.35	3.22	3.28
	170.00	180.00	172.61	159.72	3.41	2.37	2.76
	180.00	190.00	173.24	252.89	2.36	2.18	2.27
	190.00	200.00	142.59	182.52	2.49	2.47	2.48
	200.00	210.00	59.81	105.24	3.43	3.48	3.45
	210.00	220.00	47.25	40.08	4.11	3.59	3.80
	220.00	230.00	95.26	161.30	3.80	3.07	3.37
	230.00	240.00	92.63	145.18	3.77	3.76	3.77
	240.00	250.00	94.84	77.83	3.62	3.59	3.61
	250.00	260.00	228.37	347.08	.68	1.08	.84
	260.00	270.00	90.12	135.84	3.46	3.53	3.50
	270.00	280.00	43.65	77.45	3.50	3.25	3.37
	280.00	290.00	107.74	100.18	3.53	3.82	3.66
	290.00	300.00	100.75	97.27	3.58	3.59	3.58
	300.00	310.00	67.10	54.45	3.47	3.93	3.67
	310.00	320.00	97.19	120.55	2.91	3.20	3.04
	320.00	330.00	182.80	145.00	1.24	3.25	1.79
	330.00	340.00	168.33	105.86	1.03	3.24	1.57
	340.00	350.00	179.33	130.37	1.65	3.64	2.21
	350.00	360.00	90.35	65.57	2.93	3.64	3.22
	360.00	370.00	72.02	42.42	2.79	3.50	3.09
	370.00	380.00	71.59	170.69	2.00	1.80	1.89
	380.00	390.00	56.29	45.19	3.32	3.49	3.41
	390.00	400.00	79.53	84.69	3.08	3.49	3.26
	400.00	410.00	188.72	40.91	2.20	3.63	2.68
	410.00	420.00	67.09	70.65	3.62	3.85	3.73
	420.00	430.00	109.39	89.18	3.88	3.52	3.68
	430.00	440.00	59.91	58.88	3.96	3.35	3.60

440.00	450.00	51.48	45.52	3.90	3.86	3.88
450.00	460.00	68.17	83.55	2.91	2.95	2.93
460.00	470.00	88.09	60.38	2.26	3.63	2.73
470.00	480.00	70.69	166.66	3.55	1.97	2.48
480.00	490.00	88.59	165.42	3.36	2.68	2.96
490.00	500.00	404.34	515.32	.34	.65	.46
500.00	510.00	698.24	357.97	.87	1.54	1.13
510.00	519.80	188.17	202.55	2.43	3.22	2.75

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\SR136EB2.ERD							
	.00	519.54	218.87	223.96	1.80	2.09	1.94
	.00	10.00	316.47	308.09	.60	1.13	.80
	10.00	20.00	319.50	337.10	2.96	2.55	2.74
	20.00	30.00	403.57	406.62	2.15	2.25	2.20
	30.00	40.00	308.70	374.84	2.33	1.89	2.09
	40.00	50.00	394.12	333.75	2.76	2.98	2.86
	50.00	60.00	435.98	482.40	2.63	2.51	2.57
	60.00	70.00	292.95	490.95	.49	.33	.39
	70.00	80.00	585.23	573.06	.35	.95	.55
	80.00	90.00	512.10	950.10	1.18	1.11	1.14
	90.00	100.00	806.89	765.00	.79	.71	.75
	100.00	110.00	457.12	503.37	1.90	1.76	1.82
	110.00	120.00	642.90	426.62	2.12	1.99	2.05
	120.00	130.00	444.61	358.86	1.82	2.13	1.96
	130.00	140.00	230.58	83.23	2.80	3.18	2.97
	140.00	150.00	203.35	234.37	3.58	3.56	3.57
	150.00	160.00	392.65	231.41	3.82	3.59	3.70
	160.00	170.00	120.64	129.50	3.95	2.96	3.33
	170.00	180.00	177.22	207.95	2.44	1.97	2.18
	180.00	190.00	186.26	144.90	2.36	2.44	2.40
	190.00	200.00	145.60	181.21	1.83	2.56	2.13
	200.00	210.00	62.76	99.56	3.66	3.51	3.58
	210.00	220.00	54.71	106.16	3.82	3.64	3.73
	220.00	230.00	85.73	167.96	3.84	3.17	3.44
	230.00	240.00	103.22	130.57	3.71	3.56	3.63
	240.00	250.00	67.61	68.22	3.29	3.45	3.37
	250.00	260.00	232.02	350.61	.85	1.09	.96
	260.00	270.00	117.05	132.84	3.51	3.38	3.44
	270.00	280.00	51.14	87.82	3.39	2.89	3.11
	280.00	290.00	91.83	82.48	3.64	3.60	3.62
	290.00	300.00	86.86	100.92	3.55	3.57	3.56
	300.00	310.00	59.15	49.14	3.63	3.90	3.76
	310.00	320.00	76.05	117.19	3.94	3.34	3.59
	320.00	330.00	141.49	154.64	1.95	3.18	2.39
	330.00	340.00	102.37	113.10	3.05	3.10	3.08
	340.00	350.00	65.08	136.25	2.91	3.51	3.16
	350.00	360.00	81.44	75.89	1.44	3.50	2.00
	360.00	370.00	149.49	61.21	1.92	2.57	2.19
	370.00	380.00	88.56	154.66	1.49	1.85	1.66
	380.00	390.00	72.78	50.77	3.27	3.31	3.29
	390.00	400.00	110.66	94.00	3.26	3.56	3.40
	400.00	410.00	189.87	36.73	1.67	3.54	2.22
	410.00	420.00	59.29	68.88	3.69	3.74	3.72
	420.00	430.00	97.34	91.47	3.65	3.42	3.53
	430.00	440.00	59.46	37.79	3.86	3.66	3.75

440.00	450.00	44.74	42.75	3.90	4.03	3.96
450.00	460.00	72.60	79.76	2.55	3.27	2.85
460.00	470.00	78.95	58.30	2.11	3.86	2.64
470.00	480.00	75.85	151.80	3.49	2.18	2.63
480.00	490.00	72.21	168.51	3.33	2.68	2.95
490.00	500.00	460.83	539.64	.28	.75	.43
500.00	510.00	735.04	334.73	.77	1.71	1.09
510.00	519.54	179.34	186.19	2.19	3.22	2.58

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR136WB2.ERD							
	.00	519.80	211.18	235.28	1.99	1.96	1.98
	.00	10.00	100.40	110.57	2.55	2.92	2.72
	10.00	20.00	274.90	106.51	1.74	3.84	2.32
	20.00	30.00	67.17	132.15	3.86	3.60	3.72
	30.00	40.00	70.18	77.76	3.75	3.63	3.69
	40.00	50.00	49.49	90.24	3.96	3.58	3.75
	50.00	60.00	146.12	180.87	3.66	3.68	3.67
	60.00	70.00	87.01	86.71	4.01	3.13	3.47
	70.00	80.00	79.39	128.28	4.04	3.73	3.87
	80.00	90.00	145.00	108.27	3.84	3.71	3.77
	90.00	100.00	149.41	152.51	1.22	2.52	1.64
	100.00	110.00	66.77	176.75	2.96	2.88	2.92
	110.00	120.00	374.55	495.21	.53	.64	.58
	120.00	130.00	214.43	343.85	2.29	.65	1.07
	130.00	140.00	109.83	109.05	3.84	3.06	3.37
	140.00	150.00	157.22	347.81	2.34	1.20	1.60
	150.00	160.00	270.76	324.33	1.52	1.33	1.42
	160.00	170.00	159.18	293.02	3.78	1.40	1.98
	170.00	180.00	193.10	354.75	2.00	.95	1.31
	180.00	190.00	69.44	177.64	3.94	2.47	2.95
	190.00	200.00	52.00	83.88	3.90	3.79	3.85
	200.00	210.00	72.71	79.92	3.69	3.71	3.70
	210.00	220.00	37.29	66.98	3.89	3.49	3.67
	220.00	230.00	324.64	110.46	1.00	2.94	1.51
	230.00	240.00	279.43	138.89	2.31	3.20	2.66
	240.00	250.00	132.11	206.37	3.40	2.09	2.55
	250.00	260.00	50.05	93.46	3.71	3.09	3.35
	260.00	270.00	68.03	112.16	3.51	3.57	3.54
	270.00	280.00	68.96	121.77	2.25	2.65	2.43
	280.00	290.00	300.59	93.23	1.90	2.89	2.27
	290.00	300.00	57.63	116.48	3.43	3.13	3.27
	300.00	310.00	64.88	55.00	3.34	3.85	3.56
	310.00	320.00	71.40	55.87	3.35	3.61	3.47
	320.00	330.00	64.51	58.15	4.00	2.90	3.30
	330.00	340.00	66.95	123.27	3.48	2.76	3.06
	340.00	350.00	129.05	85.15	3.13	3.31	3.22
	350.00	360.00	59.39	50.08	3.00	3.44	3.20
	360.00	370.00	433.31	550.53	1.08	1.07	1.07
	370.00	380.00	153.17	74.54	2.53	3.08	2.77
	380.00	390.00	561.75	287.25	.37	.50	.43
	390.00	400.00	586.81	552.34	.76	.98	.86
	400.00	410.00	477.23	468.40	.67	.63	.65
	410.00	420.00	558.55	562.87	.66	.92	.78
	420.00	430.00	315.03	359.44	1.56	1.94	1.73
	430.00	440.00	444.44	127.95	2.73	2.79	2.76

440.00	450.00	382.04	367.65	2.30	3.04	2.60
450.00	460.00	594.15	681.48	3.49	2.27	2.70
460.00	470.00	249.96	401.32	3.35	1.94	2.42
470.00	480.00	529.49	1001.51	3.46	2.73	3.03
480.00	490.00	462.57	486.51	3.19	2.61	2.86
490.00	500.00	148.89	222.11	3.65	3.11	3.34
500.00	510.00	220.97	513.78	2.76	2.75	2.76
510.00	519.80	153.20	78.60	3.06	2.99	3.03

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\MM\ERD\SR136WB2.ERD							
	.00	519.54	209.25	240.57	1.97	1.88	1.92
	.00	10.00	92.58	128.14	3.17	2.70	2.91
	10.00	20.00	295.54	126.94	1.24	3.53	1.81
	20.00	30.00	67.03	144.99	3.88	3.92	3.90
	30.00	40.00	64.76	84.34	3.90	3.46	3.65
	40.00	50.00	37.33	96.85	3.87	3.19	3.47
	50.00	60.00	137.61	195.07	4.10	3.52	3.76
	60.00	70.00	82.07	71.32	4.07	3.54	3.76
	70.00	80.00	62.75	150.97	3.72	3.66	3.69
	80.00	90.00	155.39	108.28	3.92	3.58	3.73
	90.00	100.00	143.40	146.46	1.89	2.53	2.16
	100.00	110.00	52.44	179.11	3.10	2.95	3.02
	110.00	120.00	407.48	460.89	.42	.63	.51
	120.00	130.00	186.67	372.71	2.45	.37	.74
	130.00	140.00	107.75	164.77	3.72	3.10	3.36
	140.00	150.00	167.88	338.55	1.67	1.13	1.36
	150.00	160.00	250.16	348.57	1.52	1.39	1.45
	160.00	170.00	158.75	286.02	3.75	1.45	2.04
	170.00	180.00	197.25	349.67	1.99	.99	1.34
	180.00	190.00	69.32	178.73	3.84	2.54	2.99
	190.00	200.00	47.31	95.37	3.91	3.80	3.85
	200.00	210.00	78.29	79.97	3.42	3.46	3.44
	210.00	220.00	47.28	63.75	3.72	3.48	3.59
	220.00	230.00	269.55	102.12	1.12	2.92	1.62
	230.00	240.00	316.21	138.99	2.21	3.04	2.54
	240.00	250.00	128.72	196.56	3.36	2.11	2.55
	250.00	260.00	64.13	91.50	3.63	3.02	3.28
	260.00	270.00	65.55	120.90	3.68	3.50	3.59
	270.00	280.00	48.73	108.55	2.85	3.26	3.04
	280.00	290.00	292.14	88.03	1.39	2.84	1.86
	290.00	300.00	81.03	124.46	3.34	2.95	3.12
	300.00	310.00	74.90	54.70	3.48	3.60	3.54
	310.00	320.00	70.19	73.01	3.58	3.42	3.50
	320.00	330.00	52.26	99.30	3.64	2.04	2.55
	330.00	340.00	52.71	134.66	3.35	2.27	2.67
	340.00	350.00	126.85	80.47	3.07	3.31	3.19
	350.00	360.00	88.21	42.56	3.32	3.49	3.40
	360.00	370.00	406.21	564.23	1.10	1.09	1.10
	370.00	380.00	146.22	92.82	2.51	2.89	2.68
	380.00	390.00	554.71	290.42	.40	.38	.39
	390.00	400.00	573.07	556.93	.75	.98	.85
	400.00	410.00	484.00	495.71	.59	.76	.67
	410.00	420.00	490.03	548.91	.78	1.02	.88
	420.00	430.00	341.05	377.60	1.55	2.01	1.75
	430.00	440.00	465.03	132.38	2.77	2.72	2.75

440.00	450.00	381.87	416.19	2.24	2.83	2.49
450.00	460.00	618.86	650.54	3.75	2.48	2.93
460.00	470.00	258.22	387.85	2.97	1.88	2.29
470.00	480.00	520.40	986.22	3.46	2.72	3.02
480.00	490.00	455.35	506.61	3.38	2.48	2.84
490.00	500.00	152.58	237.37	3.73	3.28	3.48
500.00	510.00	186.59	499.86	3.09	2.39	2.68
510.00	519.54	178.17	110.21	3.19	3.10	3.15

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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR3247EB.ERD							
	.00	519.80	150.12	166.41	2.18	1.09	1.46
	.00	10.00	197.07	221.78	2.20	2.11	2.15
	10.00	20.00	232.78	274.02	1.80	1.24	1.48
	20.00	30.00	188.73	222.47	3.61	3.47	3.54
	30.00	40.00	52.43	51.73	3.68	3.76	3.72
	40.00	50.00	180.53	186.36	3.49	3.51	3.50
	50.00	60.00	166.73	142.89	3.57	3.80	3.68
	60.00	70.00	44.83	61.47	3.84	3.77	3.80
	70.00	80.00	94.95	106.69	2.54	2.83	2.67
	80.00	90.00	111.12	148.83	3.06	2.85	2.95
	90.00	100.00	90.41	106.00	3.34	3.35	3.34
	100.00	110.00	46.62	31.53	3.38	3.66	3.51
	110.00	120.00	67.87	60.75	3.56	3.40	3.48
	120.00	130.00	137.74	174.85	3.20	3.63	3.39
	130.00	140.00	113.93	106.85	2.53	3.02	2.75
	140.00	150.00	151.06	174.67	3.69	3.04	3.31
	150.00	160.00	158.63	163.37	2.34	1.78	2.02
	160.00	170.00	84.05	102.61	3.44	3.57	3.50
	170.00	180.00	202.08	206.36	2.68	2.29	2.47
	180.00	190.00	321.45	653.93	1.54	.00	.01
	190.00	200.00	913.44	1318.49	.08	.29	.15
	200.00	210.00	297.75	519.31	.97	.77	.86
	210.00	220.00	496.11	134.43	3.11	3.35	3.22
	220.00	230.00	187.95	270.09	3.01	2.63	2.81
	230.00	240.00	320.67	338.82	3.66	3.61	3.63
	240.00	250.00	208.30	85.03	3.34	3.43	3.38
	250.00	260.00	123.74	125.70	3.64	3.42	3.53
	260.00	270.00	26.42	50.70	3.71	3.69	3.70
	270.00	280.00	37.92	36.36	3.75	3.78	3.76
	280.00	290.00	98.55	122.31	3.47	2.68	3.00
	290.00	300.00	136.71	83.36	3.82	3.74	3.78
	300.00	310.00	82.23	94.51	2.92	3.17	3.04
	310.00	320.00	109.58	107.84	2.87	3.57	3.16
	320.00	330.00	253.13	305.31	1.83	1.64	1.73
	330.00	340.00	110.06	107.61	2.83	3.76	3.18
	340.00	350.00	88.17	44.85	3.01	3.87	3.34
	350.00	360.00	52.26	49.77	3.59	3.73	3.66
	360.00	370.00	166.01	154.58	2.19	2.10	2.14
	370.00	380.00	43.22	48.04	3.22	3.47	3.34
	380.00	390.00	62.66	76.13	2.85	3.31	3.06
	390.00	400.00	49.16	76.83	3.67	3.90	3.78
	400.00	410.00	58.72	28.97	3.55	3.42	3.48
	410.00	420.00	83.73	95.44	3.51	3.89	3.68
	420.00	430.00	45.01	42.37	3.86	3.72	3.79
	430.00	440.00	91.34	140.05	3.37	2.01	2.48

440.00	450.00	72.72	148.82	2.39	1.40	1.76
450.00	460.00	44.65	40.36	3.79	3.44	3.60
460.00	470.00	51.43	69.26	3.74	3.23	3.45
470.00	480.00	113.55	66.94	1.65	1.75	1.70
480.00	490.00	300.86	185.10	1.37	2.24	1.70
490.00	500.00	113.35	77.88	3.21	3.94	3.51
500.00	510.00	161.21	207.84	2.25	2.25	2.25
510.00	519.80	124.61	200.93	2.63	2.24	2.42

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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR3247WB.ERD							
	.00	519.80	188.48	186.08	1.27	1.27	1.27
	.00	10.00	111.49	129.44	3.26	3.33	3.29
	10.00	20.00	145.89	210.00	3.15	2.59	2.83
	20.00	30.00	202.24	294.22	2.95	2.09	2.43
	30.00	40.00	82.71	109.94	3.54	3.58	3.56
	40.00	50.00	107.59	143.32	3.26	3.37	3.31
	50.00	60.00	174.17	87.24	2.96	3.93	3.32
	60.00	70.00	253.98	164.49	1.78	1.53	1.64
	70.00	80.00	224.95	187.18	3.00	3.55	3.23
	80.00	90.00	222.40	133.42	2.58	3.16	2.83
	90.00	100.00	109.83	65.94	3.09	3.55	3.29
	100.00	110.00	210.58	288.29	2.23	2.09	2.16
	110.00	120.00	195.50	167.26	3.25	3.45	3.35
	120.00	130.00	137.58	157.47	3.62	3.77	3.69
	130.00	140.00	112.10	84.52	3.40	3.36	3.38
	140.00	150.00	135.92	83.71	3.07	3.72	3.34
	150.00	160.00	133.16	42.07	3.19	3.85	3.46
	160.00	170.00	54.80	38.12	2.14	2.92	2.46
	170.00	180.00	73.12	54.36	3.31	3.78	3.52
	180.00	190.00	153.30	104.71	2.68	3.15	2.89
	190.00	200.00	79.37	52.88	3.90	4.06	3.98
	200.00	210.00	79.16	94.80	4.12	2.10	2.67
	210.00	220.00	40.52	63.52	3.79	3.73	3.76
	220.00	230.00	196.44	87.08	1.67	2.63	2.03
	230.00	240.00	137.23	57.02	3.72	3.68	3.70
	240.00	250.00	139.04	64.05	2.95	2.52	2.71
	250.00	260.00	63.72	46.61	3.54	3.72	3.63
	260.00	270.00	111.38	111.20	2.40	2.20	2.30
	270.00	280.00	64.97	78.43	3.57	3.74	3.65
	280.00	290.00	46.34	56.81	3.63	3.76	3.69
	290.00	300.00	78.76	61.02	3.71	3.64	3.68
	300.00	310.00	154.51	184.63	3.22	3.16	3.19
	310.00	320.00	135.09	140.82	3.53	3.08	3.28
	320.00	330.00	109.81	99.51	3.35	2.48	2.82
	330.00	340.00	433.48	381.72	.60	1.66	.92
	340.00	350.00	493.05	888.91	.00	.00	.00
	350.00	360.00	1413.23	1856.01	.01	.01	.01
	360.00	370.00	252.71	372.34	1.65	2.11	1.85
	370.00	380.00	642.90	234.78	3.30	3.16	3.23
	380.00	390.00	475.94	439.08	3.69	3.29	3.47
	390.00	400.00	142.90	189.55	2.75	2.79	2.77
	400.00	410.00	231.98	127.27	2.88	3.28	3.06
	410.00	420.00	340.60	267.11	3.76	4.02	3.88
	420.00	430.00	205.40	190.57	3.10	2.74	2.90
	430.00	440.00	116.93	91.16	3.29	3.81	3.52

440.00	450.00	192.53	158.59	3.71	3.55	3.63
450.00	460.00	81.24	147.68	3.68	3.63	3.66
460.00	470.00	93.75	88.11	2.88	2.38	2.60
470.00	480.00	81.76	103.17	3.73	3.78	3.76
480.00	490.00	63.37	149.45	3.54	3.88	3.69
490.00	500.00	56.64	44.36	3.89	3.83	3.86
500.00	510.00	58.56	89.91	3.88	3.34	3.57
510.00	519.80	111.64	133.56	3.97	3.87	3.92

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR231SB2.ERD							
	.00	519.80	216.29	235.28	1.81	1.78	1.79
	.00	10.00	98.82	91.01	3.01	3.20	3.10
	10.00	20.00	94.31	110.00	3.70	3.70	3.70
	20.00	30.00	83.36	102.30	4.09	3.67	3.85
	30.00	40.00	29.27	65.44	4.33	2.92	3.38
	40.00	50.00	20.42	90.89	4.14	3.49	3.76
	50.00	60.00	46.17	87.74	3.91	3.45	3.65
	60.00	70.00	51.37	41.41	4.01	3.61	3.79
	70.00	80.00	93.97	29.67	3.52	3.91	3.69
	80.00	90.00	88.71	42.17	3.78	3.65	3.71
	90.00	100.00	61.62	39.60	3.46	3.75	3.59
	100.00	110.00	39.30	37.85	3.73	3.96	3.84
	110.00	120.00	39.89	33.20	3.82	3.78	3.80
	120.00	130.00	44.03	75.02	3.84	3.59	3.70
	130.00	140.00	66.68	70.51	3.56	3.50	3.53
	140.00	150.00	53.71	73.98	3.75	3.97	3.85
	150.00	160.00	70.50	40.20	3.66	3.92	3.78
	160.00	170.00	148.42	82.85	3.72	3.80	3.76
	170.00	180.00	72.46	112.09	3.88	3.63	3.74
	180.00	190.00	137.42	103.36	3.49	3.12	3.28
	190.00	200.00	174.92	104.27	1.80	3.03	2.24
	200.00	210.00	537.11	145.37	1.14	2.37	1.55
	210.00	220.00	389.41	133.70	1.47	3.05	1.96
	220.00	230.00	170.83	226.84	2.50	2.09	2.27
	230.00	240.00	141.45	166.49	2.28	2.15	2.21
	240.00	250.00	336.76	309.61	1.52	2.59	1.91
	250.00	260.00	480.92	243.52	.08	.09	.08
	260.00	270.00	680.79	1264.09	.21	.04	.08
	270.00	280.00	242.53	361.51	2.35	2.44	2.40
	280.00	290.00	358.62	389.02	2.15	2.93	2.46
	290.00	300.00	41.26	311.90	3.04	3.25	3.14
	300.00	310.00	324.68	633.01	2.49	1.37	1.76
	310.00	320.00	269.36	609.20	2.76	2.07	2.36
	320.00	330.00	514.91	493.81	1.98	1.26	1.54
	330.00	340.00	624.61	1153.52	.72	.99	.84
	340.00	350.00	341.32	235.31	2.70	1.52	1.94
	350.00	360.00	822.09	956.81	3.60	3.81	3.70
	360.00	370.00	328.33	605.49	2.80	2.20	2.46
	370.00	380.00	129.85	161.87	3.57	3.27	3.41
	380.00	390.00	395.66	384.78	2.92	3.41	3.14
	390.00	400.00	253.91	431.24	1.22	3.17	1.76
	400.00	410.00	581.82	167.42	.46	2.07	.82
	410.00	420.00	354.03	195.58	.88	1.84	1.21
	420.00	430.00	119.78	127.96	1.98	1.83	1.90
	430.00	440.00	120.58	52.95	3.45	3.56	3.50

440.00	450.00	104.82	96.71	2.23	2.83	2.48
450.00	460.00	121.27	123.26	2.81	2.86	2.84
460.00	470.00	82.42	44.90	3.36	3.64	3.49
470.00	480.00	211.22	96.71	3.43	2.69	2.99
480.00	490.00	111.26	130.97	3.68	3.61	3.64
490.00	500.00	199.80	129.15	3.60	3.80	3.69
500.00	510.00	255.05	264.27	2.45	3.36	2.81
510.00	519.80	76.02	106.57	4.07	3.39	3.66

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start:	End:	IRI:	(in/mi)		RN: 0-5		Both
	ft	ft	LElev.	RElev.	LElev.	RElev.		
-----								
F:\METHOD2\WO_MM\ERD\SR231NB2.ERD								
	.00	519.80	230.00	315.32	1.59	1.00	1.24	
	.00	10.00	175.32	258.96	2.33	2.22	2.28	
	10.00	20.00	479.03	430.42	.76	.62	.68	
	20.00	30.00	550.39	737.20	.71	.68	.69	
	30.00	40.00	251.98	462.53	2.50	.90	1.35	
	40.00	50.00	228.08	845.13	2.48	.46	.86	
	50.00	60.00	199.80	182.51	2.22	1.92	2.06	
	60.00	70.00	111.09	189.64	3.53	1.37	1.94	
	70.00	80.00	320.96	179.76	.57	2.48	1.00	
	80.00	90.00	219.61	310.98	1.22	1.77	1.45	
	90.00	100.00	277.43	243.18	1.59	1.39	1.48	
	100.00	110.00	207.51	689.59	1.47	.40	.69	
	110.00	120.00	159.92	407.61	2.63	.19	.47	
	120.00	130.00	161.80	595.90	2.72	.26	.59	
	130.00	140.00	163.62	251.19	1.35	1.56	1.45	
	140.00	150.00	160.95	268.66	2.12	.60	.99	
	150.00	160.00	174.54	982.99	2.93	.23	.54	
	160.00	170.00	96.50	387.50	2.64	.11	.33	
	170.00	180.00	183.01	197.20	2.51	2.77	2.63	
	180.00	190.00	340.79	845.47	.79	.06	.17	
	190.00	200.00	276.21	265.19	2.43	2.23	2.32	
	200.00	210.00	631.20	702.79	2.48	2.12	2.29	
	210.00	220.00	545.08	532.10	3.44	2.87	3.12	
	220.00	230.00	178.84	214.39	3.36	3.51	3.43	
	230.00	240.00	504.15	447.44	2.64	2.36	2.49	
	240.00	250.00	242.60	315.66	1.73	1.84	1.79	
	250.00	260.00	195.67	404.59	.06	.19	.10	
	260.00	270.00	767.89	810.18	.09	.07	.08	
	270.00	280.00	387.28	268.84	2.24	2.77	2.47	
	280.00	290.00	335.29	401.65	2.72	1.59	2.00	
	290.00	300.00	544.99	353.18	1.33	1.51	1.42	
	300.00	310.00	334.94	540.75	1.34	1.97	1.60	
	310.00	320.00	359.66	353.42	1.59	2.04	1.79	
	320.00	330.00	385.55	412.66	2.17	2.36	2.26	
	330.00	340.00	155.92	312.06	3.10	3.46	3.26	
	340.00	350.00	175.58	112.12	3.30	3.72	3.49	
	350.00	360.00	114.28	87.92	3.61	3.76	3.68	
	360.00	370.00	44.64	67.54	3.95	3.82	3.88	
	370.00	380.00	159.08	92.85	3.91	3.78	3.85	
	380.00	390.00	140.19	157.29	3.73	3.91	3.82	
	390.00	400.00	97.94	90.58	3.73	3.99	3.85	
	400.00	410.00	83.00	128.89	4.08	3.87	3.97	
	410.00	420.00	138.71	180.06	3.98	3.86	3.92	
	420.00	430.00	64.42	72.29	2.95	2.97	2.96	
	430.00	440.00	27.00	92.70	4.07	3.83	3.94	

440.00	450.00	123.80	105.30	3.63	3.90	3.75
450.00	460.00	144.52	59.39	3.26	3.54	3.39
460.00	470.00	58.83	72.65	3.67	3.52	3.59
470.00	480.00	65.51	43.48	3.72	3.13	3.38
480.00	490.00	49.98	69.13	4.16	3.78	3.94
490.00	500.00	46.63	74.41	3.98	4.04	4.01
500.00	510.00	61.18	39.93	3.76	3.96	3.85
510.00	519.80	37.86	56.61	4.01	3.94	3.97

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR236EB.ERD							
	.00	519.80	265.69	304.38	1.01	.53	.71
	.00	10.00	144.42	179.91	2.39	2.64	2.51
	10.00	20.00	153.82	203.16	2.08	1.15	1.49
	20.00	30.00	230.10	295.47	2.20	1.68	1.91
	30.00	40.00	158.14	111.30	1.97	2.27	2.11
	40.00	50.00	134.55	178.48	2.00	1.32	1.59
	50.00	60.00	131.95	119.78	2.47	1.72	2.03
	60.00	70.00	179.84	170.51	1.60	1.23	1.39
	70.00	80.00	152.84	237.11	2.17	.33	.67
	80.00	90.00	126.42	235.88	1.89	.15	.38
	90.00	100.00	112.39	180.27	1.35	.27	.52
	100.00	110.00	199.46	323.01	2.22	.48	.87
	110.00	120.00	83.55	203.40	3.32	.25	.58
	120.00	130.00	114.59	195.13	2.38	.81	1.25
	130.00	140.00	141.30	163.43	2.58	1.31	1.74
	140.00	150.00	127.48	130.17	2.39	1.84	2.08
	150.00	160.00	51.60	71.01	2.35	2.34	2.35
	160.00	170.00	49.66	94.15	2.29	2.04	2.16
	170.00	180.00	72.48	140.34	2.14	1.10	1.46
	180.00	190.00	136.76	165.49	2.91	.44	.86
	190.00	200.00	64.98	149.86	2.98	.65	1.13
	200.00	210.00	33.46	265.94	2.18	.25	.55
	210.00	220.00	136.09	315.70	1.91	.16	.41
	220.00	230.00	280.88	463.17	1.58	.07	.21
	230.00	240.00	404.29	636.60	1.68	.35	.66
	240.00	250.00	738.92	809.63	.67	.85	.75
	250.00	260.00	1076.46	1100.27	.04	.03	.03
	260.00	270.00	1593.07	994.19	.00	.00	.00
	270.00	280.00	650.20	580.48	.60	.38	.47
	280.00	290.00	735.90	872.25	.40	.04	.11
	290.00	300.00	1072.95	1063.54	.40	.29	.34
	300.00	310.00	476.03	744.78	1.33	1.49	1.41
	310.00	320.00	140.90	365.21	2.46	2.75	2.60
	320.00	330.00	407.94	519.11	2.04	2.44	2.22
	330.00	340.00	289.92	297.42	2.26	1.03	1.43
	340.00	350.00	216.89	73.21	1.11	2.89	1.61
	350.00	360.00	336.64	197.68	1.22	.80	.97
	360.00	370.00	161.47	156.69	1.45	1.44	1.44
	370.00	380.00	208.43	130.48	2.51	3.03	2.74
	380.00	390.00	95.85	144.81	1.80	2.71	2.15
	390.00	400.00	118.87	226.10	1.16	1.16	1.16
	400.00	410.00	90.46	117.28	2.90	1.81	2.21
	410.00	420.00	128.24	170.05	2.55	1.57	1.94
	420.00	430.00	155.90	145.02	2.79	3.00	2.89
	430.00	440.00	188.59	209.22	.70	1.81	1.05

440.00	450.00	239.15	388.48	2.85	1.65	2.08
450.00	460.00	132.55	180.54	3.08	2.88	2.98
460.00	470.00	115.96	191.72	3.14	3.08	3.11
470.00	480.00	204.20	180.93	1.87	2.59	2.16
480.00	490.00	371.67	183.30	1.01	1.53	1.23
490.00	500.00	89.62	193.34	3.09	1.98	2.39
500.00	510.00	157.43	136.75	1.99	1.34	1.60
510.00	519.80	92.38	148.98	2.33	2.03	2.17

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR236WB.ERD							
	.00	519.80	348.53	367.88	.36	.38	.37
	.00	10.00	69.63	336.70	3.27	.49	.94
	10.00	20.00	245.18	401.00	1.20	1.34	1.27
	20.00	30.00	87.55	137.20	2.93	3.12	3.02
	30.00	40.00	271.48	186.20	1.20	1.03	1.11
	40.00	50.00	177.48	106.68	1.59	.71	1.01
	50.00	60.00	121.57	326.30	2.63	1.90	2.20
	60.00	70.00	86.43	225.21	2.08	.11	.32
	70.00	80.00	129.08	533.27	1.75	.01	.07
	80.00	90.00	395.36	272.65	.43	1.31	.69
	90.00	100.00	256.34	510.83	2.83	2.45	2.62
	100.00	110.00	132.96	190.83	2.66	2.71	2.69
	110.00	120.00	220.59	321.32	2.77	3.11	2.93
	120.00	130.00	119.47	225.02	.43	1.07	.64
	130.00	140.00	70.56	152.70	2.69	2.48	2.58
	140.00	150.00	98.86	120.60	3.06	2.75	2.89
	150.00	160.00	320.42	151.13	1.07	1.77	1.34
	160.00	170.00	156.90	186.13	2.32	1.74	1.98
	170.00	180.00	136.80	257.96	2.59	1.21	1.66
	180.00	190.00	129.47	52.88	1.03	1.78	1.32
	190.00	200.00	185.14	170.54	1.73	1.46	1.59
	200.00	210.00	175.40	359.88	2.99	2.07	2.43
	210.00	220.00	213.20	380.23	2.30	1.83	2.04
	220.00	230.00	343.63	679.25	.67	.38	.49
	230.00	240.00	1022.19	1020.80	.25	.28	.26
	240.00	250.00	538.65	445.13	.73	1.53	1.01
	250.00	260.00	1477.38	1337.30	.00	.00	.00
	260.00	270.00	2621.21	1805.48	.00	.00	.00
	270.00	280.00	825.62	740.02	1.20	.87	1.02
	280.00	290.00	1192.18	1170.15	.11	.23	.15
	290.00	300.00	759.12	585.72	.02	1.95	.10
	300.00	310.00	953.28	768.70	.13	2.44	.37
	310.00	320.00	1215.49	1186.86	2.55	2.88	2.70
	320.00	330.00	467.04	501.79	2.63	2.99	2.79
	330.00	340.00	348.71	274.39	2.53	2.68	2.60
	340.00	350.00	460.89	444.30	2.91	3.19	3.04
	350.00	360.00	219.95	273.24	1.96	1.80	1.88
	360.00	370.00	140.73	139.56	2.33	2.58	2.45
	370.00	380.00	206.41	179.86	2.11	2.17	2.14
	380.00	390.00	109.79	147.89	1.42	2.15	1.72
	390.00	400.00	84.22	84.80	2.57	2.79	2.67
	400.00	410.00	135.15	104.00	1.55	2.79	1.98
	410.00	420.00	217.11	103.43	.39	2.77	.78
	420.00	430.00	259.23	109.51	.32	1.85	.64
	430.00	440.00	97.32	189.79	2.00	2.40	2.18

440.00	450.00	35.21	85.72	2.54	2.58	2.56
450.00	460.00	87.10	138.38	2.95	2.89	2.92
460.00	470.00	46.25	216.32	3.02	2.41	2.67
470.00	480.00	115.47	125.27	1.51	2.08	1.75
480.00	490.00	99.23	76.33	1.70	2.66	2.07
490.00	500.00	63.78	160.31	1.85	1.40	1.60
500.00	510.00	45.35	105.30	3.14	1.75	2.22
510.00	519.80	50.33	280.57	1.78	1.06	1.34

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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR234EB.ERD							
	.00	520.06	255.91	299.97	1.59	1.45	1.52
	.00	10.00	365.30	435.80	1.61	.35	.65
	10.00	20.00	330.57	332.66	2.95	.89	1.40
	20.00	30.00	191.01	195.08	2.58	1.53	1.91
	30.00	40.00	127.55	94.96	2.61	2.22	2.40
	40.00	50.00	159.20	185.29	3.22	2.38	2.71
	50.00	60.00	298.57	267.67	1.34	1.58	1.45
	60.00	70.00	332.55	295.33	2.39	1.55	1.88
	70.00	80.00	451.68	259.54	1.45	1.67	1.55
	80.00	90.00	119.89	215.78	2.35	2.66	2.49
	90.00	100.00	121.35	76.03	2.95	2.92	2.94
	100.00	110.00	167.98	131.37	2.69	2.44	2.56
	110.00	120.00	60.53	196.11	3.23	2.01	2.44
	120.00	130.00	117.15	213.63	2.74	1.61	2.02
	130.00	140.00	201.16	215.96	3.40	2.37	2.76
	140.00	150.00	120.35	113.81	3.62	2.68	3.04
	150.00	160.00	81.94	223.70	3.47	1.93	2.43
	160.00	170.00	113.04	212.10	3.20	2.08	2.49
	170.00	180.00	186.90	195.17	2.42	2.32	2.37
	180.00	190.00	243.13	238.84	2.31	2.65	2.46
	190.00	200.00	127.56	421.75	3.26	1.74	2.24
	200.00	210.00	387.04	506.86	1.78	1.38	1.55
	210.00	220.00	412.31	800.67	1.70	.34	.64
	220.00	230.00	598.16	973.05	.66	.61	.64
	230.00	240.00	173.38	684.25	2.43	2.63	2.52
	240.00	250.00	215.37	432.66	2.32	1.79	2.02
	250.00	260.00	713.16	429.20	.25	.67	.39
	260.00	270.00	1214.55	858.06	.03	.10	.06
	270.00	280.00	328.23	413.80	1.27	1.17	1.22
	280.00	290.00	506.98	637.93	2.19	2.66	2.40
	290.00	300.00	608.24	876.31	.49	.55	.51
	300.00	310.00	609.11	448.57	.77	1.79	1.10
	310.00	320.00	139.59	421.85	2.65	2.66	2.65
	320.00	330.00	522.79	662.29	3.73	2.30	2.78
	330.00	340.00	242.23	291.51	2.88	2.33	2.57
	340.00	350.00	347.91	584.54	1.68	.89	1.18
	350.00	360.00	414.40	310.07	2.48	2.78	2.62
	360.00	370.00	165.66	46.00	2.23	2.21	2.22
	370.00	380.00	73.17	97.95	3.10	2.35	2.66
	380.00	390.00	128.52	89.82	2.92	3.01	2.97
	390.00	400.00	206.39	173.96	2.59	2.00	2.25
	400.00	410.00	179.86	85.02	2.70	3.01	2.84
	410.00	420.00	153.23	66.61	2.95	2.53	2.72
	420.00	430.00	182.41	88.30	2.57	2.52	2.55
	430.00	440.00	148.59	108.90	2.87	2.97	2.92

440.00	450.00	62.69	85.05	2.37	2.84	2.58
450.00	460.00	79.46	107.54	2.90	2.73	2.81
460.00	470.00	82.10	85.30	2.78	3.18	2.96
470.00	480.00	104.27	89.19	2.88	2.65	2.76
480.00	490.00	90.99	87.63	3.40	2.67	2.97
490.00	500.00	122.06	134.25	3.13	2.65	2.86
500.00	510.00	147.29	233.44	2.62	1.96	2.24
510.00	520.00	46.97	161.94	3.32	1.39	1.93

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR234WB.ERD							
	.00	519.80	294.08	278.01	1.27	1.38	1.32
	.00	10.00	128.82	134.85	2.45	2.65	2.54
	10.00	20.00	208.87	152.83	2.70	2.54	2.62
	20.00	30.00	84.81	187.33	3.45	2.55	2.91
	30.00	40.00	55.94	99.94	3.44	2.54	2.90
	40.00	50.00	78.53	115.52	3.34	3.26	3.30
	50.00	60.00	78.01	92.85	3.52	3.24	3.37
	60.00	70.00	45.89	88.85	3.70	3.14	3.38
	70.00	80.00	30.41	64.71	3.58	3.46	3.52
	80.00	90.00	53.57	34.18	3.53	3.57	3.55
	90.00	100.00	77.85	48.14	3.61	3.24	3.41
	100.00	110.00	223.19	119.84	2.82	3.42	3.07
	110.00	120.00	102.01	96.26	3.56	3.37	3.46
	120.00	130.00	199.52	171.62	2.21	1.38	1.70
	130.00	140.00	120.75	223.53	3.13	2.46	2.74
	140.00	150.00	127.04	130.26	3.29	3.09	3.18
	150.00	160.00	235.53	113.03	2.88	3.21	3.03
	160.00	170.00	130.16	151.84	1.37	2.81	1.83
	170.00	180.00	873.31	190.27	.11	1.55	.30
	180.00	190.00	763.82	247.32	.89	3.34	1.43
	190.00	200.00	241.48	108.45	3.13	3.44	3.27
	200.00	210.00	139.94	55.18	3.20	2.73	2.94
	210.00	220.00	170.10	48.84	3.10	3.45	3.26
	220.00	230.00	673.99	522.01	.87	1.10	.98
	230.00	240.00	228.34	192.36	2.67	2.65	2.66
	240.00	250.00	445.47	507.58	1.94	2.49	2.18
	250.00	260.00	437.38	320.33	.02	.01	.02
	260.00	270.00	1499.61	1536.15	.02	.02	.02
	270.00	280.00	544.58	374.83	1.16	.69	.88
	280.00	290.00	1267.89	1858.14	2.35	1.27	1.66
	290.00	300.00	543.80	1030.27	1.02	.57	.74
	300.00	310.00	584.20	760.40	1.69	.78	1.10
	310.00	320.00	526.56	590.08	3.29	2.45	2.78
	320.00	330.00	623.71	845.40	2.61	2.75	2.67
	330.00	340.00	163.34	263.12	1.70	2.56	2.04
	340.00	350.00	539.36	514.65	1.72	2.67	2.09
	350.00	360.00	198.09	393.52	3.06	3.66	3.31
	360.00	370.00	70.25	78.84	3.34	3.57	3.45
	370.00	380.00	197.93	75.96	2.79	3.38	3.05
	380.00	390.00	312.72	135.33	2.24	3.30	2.64
	390.00	400.00	148.50	154.19	2.47	2.13	2.29
	400.00	410.00	191.78	117.54	2.95	2.93	2.94
	410.00	420.00	202.58	57.23	2.49	2.90	2.67
	420.00	430.00	342.98	114.93	1.96	3.03	2.36
	430.00	440.00	150.91	112.84	2.36	3.23	2.70

440.00	450.00	244.80	286.34	1.67	1.64	1.66
450.00	460.00	356.55	299.98	1.46	2.29	1.78
460.00	470.00	167.69	95.97	3.01	3.15	3.08
470.00	480.00	25.33	91.10	3.52	3.28	3.39
480.00	490.00	109.59	134.10	3.29	3.01	3.14
490.00	500.00	90.85	83.55	3.79	3.04	3.34
500.00	510.00	120.58	134.24	3.17	3.44	3.29
510.00	519.80	83.40	86.72	3.34	3.24	3.29

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR36EB.ERD							
	.00	519.80	176.38	211.58	1.33	1.38	1.36
	.00	10.00	124.99	119.27	2.98	2.71	2.84
	10.00	20.00	136.27	138.67	3.28	3.03	3.15
	20.00	30.00	123.88	144.93	3.48	3.75	3.60
	30.00	40.00	67.82	51.90	3.70	2.77	3.13
	40.00	50.00	57.80	80.18	3.10	2.78	2.93
	50.00	60.00	99.96	48.97	3.45	3.55	3.50
	60.00	70.00	31.40	33.14	3.90	2.58	3.03
	70.00	80.00	49.47	31.32	4.14	3.91	4.02
	80.00	90.00	53.23	30.92	2.88	2.71	2.79
	90.00	100.00	78.04	40.19	3.39	3.80	3.58
	100.00	110.00	115.25	89.08	3.71	3.24	3.44
	110.00	120.00	107.40	152.36	3.58	3.51	3.54
	120.00	130.00	152.50	101.66	2.70	2.17	2.40
	130.00	140.00	56.44	63.40	3.47	3.08	3.26
	140.00	150.00	59.38	31.74	3.16	2.75	2.94
	150.00	160.00	86.15	80.81	3.30	3.83	3.53
	160.00	170.00	96.52	45.10	2.19	2.77	2.44
	170.00	180.00	103.95	101.67	2.73	2.69	2.71
	180.00	190.00	55.83	143.32	3.33	2.16	2.59
	190.00	200.00	74.79	94.83	2.53	2.56	2.55
	200.00	210.00	73.29	242.21	3.02	2.92	2.97
	210.00	220.00	162.33	175.49	2.74	2.32	2.51
	220.00	230.00	199.50	316.83	3.02	3.04	3.03
	230.00	240.00	258.76	284.46	2.84	2.84	2.84
	240.00	250.00	107.64	242.88	2.62	1.12	1.58
	250.00	260.00	455.41	603.44	.02	.22	.06
	260.00	270.00	1607.53	1600.38	.00	.01	.00
	270.00	280.00	968.36	1127.36	.38	.23	.29
	280.00	290.00	333.99	357.19	.91	.81	.86
	290.00	300.00	362.34	519.92	2.29	2.87	2.54
	300.00	310.00	329.09	575.41	2.87	3.25	3.04
	310.00	320.00	208.64	231.72	1.95	2.49	2.18
	320.00	330.00	149.87	427.17	3.39	3.17	3.27
	330.00	340.00	245.06	359.08	2.45	3.29	2.79
	340.00	350.00	167.56	56.14	3.04	3.12	3.08
	350.00	360.00	47.34	116.64	3.33	2.45	2.80
	360.00	370.00	170.82	208.41	2.58	2.38	2.47
	370.00	380.00	328.69	234.52	2.59	2.10	2.31
	380.00	390.00	213.89	111.77	2.82	3.37	3.05
	390.00	400.00	165.35	283.07	3.30	2.63	2.91
	400.00	410.00	70.09	137.80	3.62	3.55	3.58
	410.00	420.00	60.97	122.85	2.78	2.52	2.64
	420.00	430.00	69.15	82.53	3.38	3.51	3.44
	430.00	440.00	63.44	68.19	3.48	3.51	3.49

440.00	450.00	47.55	72.33	3.57	3.99	3.75
450.00	460.00	80.95	141.79	2.28	2.91	2.55
460.00	470.00	88.68	81.43	2.97	2.84	2.90
470.00	480.00	78.62	122.30	2.77	3.28	2.99
480.00	490.00	106.04	117.64	3.25	2.58	2.86
490.00	500.00	55.40	155.25	3.30	2.87	3.06
500.00	510.00	58.41	76.62	3.55	3.27	3.40
510.00	519.80	42.03	97.44	3.34	3.43	3.38

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\* IRI and Ride Number Calculation  
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Input files from directory "F:\METHOD2\WO\_MM\ERD"

Filename	Start: ft	End: ft	IRI: LElev.	(in/mi) RElev.	RN: 0-5 LElev.	RElev.	Both
-----							
F:\METHOD2\WO_MM\ERD\SR36WB.ERD	.00	519.80	174.06	208.16	1.29	.67	.90
	.00	10.00	133.95	147.51	2.83	2.63	2.73
	10.00	20.00	145.34	152.11	3.37	3.47	3.42
	20.00	30.00	157.91	180.84	3.46	3.79	3.61
	30.00	40.00	110.91	84.89	3.45	3.56	3.51
	40.00	50.00	85.77	124.36	4.03	3.92	3.97
	50.00	60.00	103.46	140.52	3.53	3.93	3.71
	60.00	70.00	62.51	73.24	2.91	2.93	2.92
	70.00	80.00	63.06	150.27	3.71	3.79	3.75
	80.00	90.00	47.46	111.06	3.63	3.52	3.57
	90.00	100.00	102.22	139.97	3.68	3.98	3.82
	100.00	110.00	86.78	133.60	3.48	3.37	3.42
	110.00	120.00	46.10	101.98	3.52	3.89	3.68
	120.00	130.00	42.38	53.61	2.77	3.68	3.12
	130.00	140.00	30.07	70.10	3.58	3.70	3.64
	140.00	150.00	79.85	27.16	3.52	3.90	3.69
	150.00	160.00	86.38	143.01	2.55	2.67	2.61
	160.00	170.00	106.66	133.61	2.82	3.21	3.00
	170.00	180.00	82.18	111.46	3.18	3.37	3.27
	180.00	190.00	58.69	67.82	3.44	3.72	3.57
	190.00	200.00	79.59	129.58	3.08	3.51	3.27
	200.00	210.00	114.06	100.53	2.28	2.37	2.32
	210.00	220.00	203.83	181.50	3.69	3.21	3.42
	220.00	230.00	202.72	216.35	3.05	3.20	3.12
	230.00	240.00	309.78	281.29	1.12	1.85	1.40
	240.00	250.00	419.12	467.19	1.16	1.11	1.13
	250.00	260.00	710.70	1063.60	.01	.00	.00
	260.00	270.00	2263.27	2958.24	.00	.00	.00
	270.00	280.00	525.97	860.17	1.08	.64	.81
	280.00	290.00	225.01	111.16	3.05	2.90	2.98
	290.00	300.00	249.65	142.16	2.58	3.43	2.92
	300.00	310.00	152.26	118.24	2.78	2.81	2.80
	310.00	320.00	218.42	332.23	3.06	2.97	3.01
	320.00	330.00	126.17	176.93	2.06	2.04	2.05
	330.00	340.00	219.36	208.88	3.33	3.19	3.26
	340.00	350.00	198.07	236.47	3.51	4.00	3.72
	350.00	360.00	69.27	63.15	3.14	3.39	3.26
	360.00	370.00	130.11	89.29	3.30	3.87	3.54
	370.00	380.00	61.10	59.83	3.37	3.42	3.39
	380.00	390.00	85.02	46.89	3.45	3.82	3.62
	390.00	400.00	107.11	58.19	3.25	2.51	2.81
	400.00	410.00	76.24	59.55	3.60	3.49	3.54
	410.00	420.00	65.30	32.20	3.51	3.45	3.48
	420.00	430.00	81.79	81.05	3.46	3.80	3.61
	430.00	440.00	58.24	65.54	3.53	3.41	3.46

440.00	450.00	40.75	41.88	3.69	3.87	3.78
450.00	460.00	56.80	67.99	3.09	3.64	3.32
460.00	470.00	55.92	57.71	3.26	2.91	3.07
470.00	480.00	81.20	56.51	3.32	3.26	3.29
480.00	490.00	35.62	38.81	2.93	3.43	3.15
490.00	500.00	48.17	37.14	3.81	3.35	3.55
500.00	510.00	49.15	48.16	3.15	2.32	2.65
510.00	519.80	37.22	33.47	3.81	3.84	3.83

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**Appendix D**  
**Statistical Analysis of**  
**RCI Data**

Obs	iri1	iri2	count	y
1	568.74	8.02	0	0
2	587.28	25.51	0	0
3	606.14	4.91	2	0
4	637.97	-0.76	0	0
5	639.19	23.20	0	0
6	653.24	-17.71	2	0
7	665.98	-8.29	0	0
8	679.68	24.18	0	0
9	692.22	7.65	1	0
10	695.32	-4.05	0	0
11	723.84	14.23	0	0
12	726.28	1.93	0	0
13	728.50	-14.32	2	0
14	730.48	5.88	0	0
15	762.84	13.31	1	0
16	765.05	18.42	0	0
17	765.18	28.01	0	0
18	777.13	9.74	3	0
19	779.56	13.52	0	0
20	789.51	5.45	0	0
21	804.11	24.04	0	0
22	819.70	13.78	0	0
23	858.24	13.79	0	0
24	859.61	13.34	0	0
25	880.20	29.73	0	0
26	921.57	12.72	3	0
27	926.91	11.63	1	0
28	937.40	13.28	1	0
29	958.53	-5.81	1	0
30	968.30	-6.00	1	0
31	968.89	3.56	3	0
32	1015.82	14.94	3	0
33	1016.73	6.94	0	0
34	1030.19	5.63	1	0
35	1045.14	43.18	3	0
36	1048.28	45.44	0	0
37	1052.32	-12.03	0	0
38	1098.99	19.12	0	0
39	1101.91	18.28	3	0
40	1133.98	64.40	4	0
41	1147.17	8.40	0	0
42	1185.44	14.16	0	0
43	1192.30	74.82	1	0
44	1200.60	67.44	4	0
45	1209.24	10.27	0	0
46	1227.45	-1.67	0	0
47	1230.00	11.63	3	0
48	1244.71	15.29	0	0
49	1324.54	26.30	0	0
50	1378.55	22.27	2	0
51	1384.04	6.37	1	0

Obs	iri1	iri2	count	y
52	1387.68	30.14	0	0
53	1397.82	28.45	1	0
54	1416.76	26.44	0	0
55	1434.99	23.01	2	0
56	1442.14	-34.97	3	0
57	1528.32	-0.92	2	0
58	1539.90	-0.68	2	0
59	1543.80	36.09	1	0
60	1543.97	37.09	1	0
61	1551.81	63.20	3	0
62	1566.61	162.55	3	0
63	1571.40	28.64	0	0
64	1588.15	6.18	4	0
65	1594.26	48.76	4	0
66	1613.34	26.96	2	0
67	1638.94	93.82	2	0
68	1645.32	-1.79	4	0
69	1882.17	161.68	3	0
70	1942.77	15.56	3	0
71	1960.46	32.71	4	0
72	2108.66	28.22	0	0
73	2197.14	35.03	0	0
74	2336.34	56.23	4	0
75	2999.17	3.56	4	0
76	3001.23	36.49	4	0
77	568.74	8.02	4	1
78	587.28	25.51	4	1
79	606.14	4.91	2	1
80	637.97	-0.76	4	1
81	639.19	23.20	4	1
82	653.24	-17.71	2	1
83	665.98	-8.29	4	1
84	679.68	24.18	4	1
85	692.22	7.65	3	1
86	695.32	-4.05	4	1
87	723.84	14.23	4	1
88	726.28	1.93	4	1
89	728.50	-14.32	2	1
90	730.48	5.88	4	1
91	762.84	13.31	3	1
92	765.05	18.42	4	1
93	765.18	28.01	4	1
94	777.13	9.74	1	1
95	779.56	13.52	4	1
96	789.51	5.45	4	1
97	804.11	24.04	4	1
98	819.70	13.78	4	1
99	858.24	13.79	4	1
100	859.61	13.34	4	1
101	880.20	29.73	4	1
102	921.57	12.72	1	1

Obs	iri1	iri2	count	y
103	926.91	11.63	3	1
104	937.40	13.28	3	1
105	958.53	-5.81	3	1
106	968.30	-6.00	3	1
107	968.89	3.56	1	1
108	1015.82	14.94	1	1
109	1016.73	6.94	4	1
110	1030.19	5.63	3	1
111	1045.14	43.18	1	1
112	1048.28	45.44	4	1
113	1052.32	-12.03	4	1
114	1098.99	19.12	4	1
115	1101.91	18.28	1	1
116	1133.98	64.40	0	1
117	1147.17	8.40	4	1
118	1185.44	14.16	4	1
119	1192.30	74.82	3	1
120	1200.60	67.44	0	1
121	1209.24	10.27	4	1
122	1227.45	-1.67	4	1
123	1230.00	11.63	1	1
124	1244.71	15.29	4	1
125	1324.54	26.30	4	1
126	1378.55	22.27	2	1
127	1384.04	6.37	3	1
128	1387.68	30.14	4	1
129	1397.82	28.45	3	1
130	1416.76	26.44	4	1
131	1434.99	23.01	2	1
132	1442.14	-34.97	1	1
133	1528.32	-0.92	2	1
134	1539.90	-0.68	2	1
135	1543.80	36.09	3	1
136	1543.97	37.09	3	1
137	1551.81	63.20	1	1
138	1566.61	162.55	1	1
139	1571.40	28.64	4	1
140	1588.15	6.18	0	1
141	1594.26	48.76	0	1
142	1613.34	26.96	2	1
143	1638.94	93.82	2	1
144	1645.32	-1.79	0	1
145	1882.17	161.68	1	1
146	1942.77	15.56	1	1
147	1960.46	32.71	0	1
148	2108.66	28.22	4	1
149	2197.14	35.03	4	1
150	2336.34	56.23	0	1
151	2999.17	3.56	0	1
152	3001.23	36.49	0	1

## The CATMOD Procedure

### Data Summary

Response	y	Response Levels	2
Weight Variable	count	Populations	76
Data Set	IRI	Total Frequency	304
Frequency Missing	0	Observations	109

The CATMOD Procedure

Population Profiles

Sample	iri1	Sample Size
1	568.74	4
2	587.28	4
3	606.14	4
4	637.97	4
5	639.19	4
6	653.24	4
7	665.98	4
8	679.68	4
9	692.22	4
10	695.32	4
11	723.84	4
12	726.28	4
13	728.5	4
14	730.48	4
15	762.84	4
16	765.05	4
17	765.18	4
18	777.13	4
19	779.56	4
20	789.51	4
21	804.11	4
22	819.7	4
23	858.24	4
24	859.61	4
25	880.2	4
26	921.57	4
27	926.91	4
28	937.4	4
29	958.53	4
30	968.3	4
31	968.89	4
32	1015.82	4
33	1016.73	4
34	1030.19	4
35	1045.14	4
36	1048.28	4
37	1052.32	4
38	1098.99	4
39	1101.91	4
40	1133.98	4
41	1147.17	4
42	1185.44	4
43	1192.3	4
44	1200.6	4
45	1209.24	4
46	1227.45	4
47	1230	4

The CATMOD Procedure

Population Profiles

Sample	iri1	Sample Size
48	1244.71	4
49	1324.54	4
50	1378.55	4
51	1384.04	4
52	1387.68	4
53	1397.82	4
54	1416.76	4
55	1434.99	4
56	1442.14	4
57	1528.32	4
58	1539.9	4
59	1543.8	4
60	1543.97	4
61	1551.81	4
62	1566.61	4
63	1571.4	4
64	1588.15	4
65	1594.26	4
66	1613.34	4
67	1638.94	4
68	1645.32	4
69	1882.17	4
70	1942.77	4
71	1960.46	4
72	2108.66	4
73	2197.14	4
74	2336.34	4
75	2999.17	4
76	3001.23	4

Response Profiles

Response	y
1	0
2	1

The CATMOD Procedure

Maximum Likelihood Analysis

Iteration	Sub Iteration	-2 Log Likelihood	Convergence Criterion	Parameter Estimates	
				1	2
0	0	421.43349	1.0000	0	0
1	0	340.98703	0.1909	-2.4355	0.001475
2	0	339.00412	0.005815	-2.9389	0.001821
3	0	338.99055	0.0000400	-2.9854	0.001855
4	0	338.99055	2.6587E-9	-2.9857	0.001855

Maximum likelihood computations converged.

Maximum Likelihood Analysis of Variance

Source	DF	Chi-Square	Pr > ChiSq
Intercept	1	54.75	<.0001
iri1	1	37.02	<.0001
Likelihood Ratio	74	181.12	<.0001

Analysis of Maximum Likelihood Estimates

Effect	Parameter	Estimate	Standard Error	Chi- Square	Pr > ChiSq
Intercept	1	-2.9857	0.4035	54.75	<.0001
iri1	2	0.00185	0.000305	37.02	<.0001

## The CATMOD Procedure

### Data Summary

Response	y	Response Levels	2
Weight Variable	count	Populations	74
Data Set	IRI	Total Frequency	304
Frequency Missing	0	Observations	109

The CATMOD Procedure

Population Profiles

Sample	iri2	Sample Size
1	-34.97	4
2	-17.71	4
3	-14.32	4
4	-12.03	4
5	-8.29	4
6	-6	4
7	-5.81	4
8	-4.05	4
9	-1.79	4
10	-1.67	4
11	-0.92	4
12	-0.76	4
13	-0.68	4
14	1.93	4
15	3.56	8
16	4.91	4
17	5.45	4
18	5.63	4
19	5.88	4
20	6.18	4
21	6.37	4
22	6.94	4
23	7.65	4
24	8.02	4
25	8.4	4
26	9.74	4
27	10.27	4
28	11.63	8
29	12.72	4
30	13.28	4
31	13.31	4
32	13.34	4
33	13.52	4
34	13.78	4
35	13.79	4
36	14.16	4
37	14.23	4
38	14.94	4
39	15.29	4
40	15.56	4
41	18.28	4
42	18.42	4
43	19.12	4
44	22.27	4
45	23.01	4
46	23.2	4
47	24.04	4

The CATMOD Procedure

Population Profiles

Sample	iri2	Sample Size
48	24.18	4
49	25.51	4
50	26.3	4
51	26.44	4
52	26.96	4
53	28.01	4
54	28.22	4
55	28.45	4
56	28.64	4
57	29.73	4
58	30.14	4
59	32.71	4
60	35.03	4
61	36.09	4
62	36.49	4
63	37.09	4
64	43.18	4
65	45.44	4
66	48.76	4
67	56.23	4
68	63.2	4
69	64.4	4
70	67.44	4
71	74.82	4
72	93.82	4
73	161.68	4
74	162.55	4

Response Profiles

Response	y
1	0
2	1

Maximum Likelihood Analysis

Iteration	Sub Iteration	-2 Log Likelihood	Convergence Criterion	Parameter Estimates	
				1	2
0	0	421.43349	1.0000	0	0
1	0	375.45582	0.1091	-0.9352	0.0125
2	0	375.24007	0.000575	-1.0059	0.0139
3	0	375.23999	2.1739E-7	-1.0071	0.0139
4	0	375.23999	8.059E-14	-1.0071	0.0139

The CATMOD Procedure

Maximum likelihood computations converged.

Maximum Likelihood Analysis of Variance

Source	DF	Chi-Square	Pr > ChiSq
Intercept	1	40.84	<.0001
iri2	1	11.15	0.0008
Likelihood Ratio	72	213.74	<.0001

Analysis of Maximum Likelihood Estimates

Effect	Parameter	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	-1.0071	0.1576	40.84	<.0001
iri2	2	0.0139	0.00416	11.15	0.0008

The LOGISTIC Procedure

Model Information

Data Set	WORK.IRI
Response Variable	y
Number of Response Levels	2
Number of Observations	109
Frequency Variable	count
Sum of Frequencies	304
Link Function	Logit
Optimization Technique	Fisher's scoring

Response Profile

Ordered Value	y	Total Frequency
1	0	102
2	1	202

NOTE: 43 observations having zero frequencies or weights were excluded since they do not contribute to the analysis.

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	389.918	342.991
SC	393.635	350.425
-2 Log L	387.918	338.991

R-Square 0.1487 Max-rescaled R-Square 0.2062

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	48.9277	1	<.0001
Score	47.7244	1	<.0001
Wald	37.0159	1	<.0001

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	-2.9857	0.4035	54.7441	<.0001
iri1	1	0.00185	0.000305	37.0159	<.0001

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
iri1	1.002	1.001	1.002

Association of Predicted Probabilities and Observed Responses

Percent Concordant	73.0	Somers' D	0.469
Percent Discordant	26.1	Gamma	0.474
Percent Tied	0.9	Tau-a	0.210
Pairs	20604	c	0.735

The LOGISTIC Procedure

Model Information

Data Set	WORK.IRI
Response Variable	y
Number of Response Levels	2
Number of Observations	109
Frequency Variable	count
Sum of Frequencies	304
Link Function	Logit
Optimization Technique	Fisher's scoring

Response Profile

Ordered Value	y	Total Frequency
1	0	102
2	1	202

NOTE: 43 observations having zero frequencies or weights were excluded since they do not contribute to the analysis.

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	389.918	379.240
SC	393.635	386.674
-2 Log L	387.918	375.240

R-Square 0.0408 Max-rescaled R-Square 0.0567

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	12.6782	1	0.0004
Score	13.1137	1	0.0003
Wald	11.1452	1	0.0008

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	-1.0071	0.1576	40.8361	<.0001
iri2	1	0.0139	0.00416	11.1452	0.0008

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
iri2	1.014	1.006	1.022

Association of Predicted Probabilities and Observed Responses

Percent Concordant	57.0	Somers' D	0.153
Percent Discordant	41.7	Gamma	0.155
Percent Tied	1.3	Tau-a	0.068
Pairs	20604	c	0.576

The GENMOD Procedure

Model Information

Data Set WORK. IRI  
 Distribution Binomial  
 Link Function Logit  
 Dependent Variable y  
 Observations Used 152  
 Probability Modeled Pr( y = 0 )

Response Profile

Ordered Level	Ordered Value	Count
1	0	76
2	1	76

Criteria For Assessing Goodness Of Fit

Criterion	DF	Value	Value/DF
Deviance	150	210.7167	1.4048
Scaled Deviance	150	210.7167	1.4048
Pearson Chi-Square	150	152.0000	1.0133
Scaled Pearson X2	150	152.0000	1.0133
Log Likelihood		-105.3584	

Algorithm converged.

Analysis Of Parameter Estimates

Parameter	DF	Estimate	Standard Error	Wald	95% Confidence Limits	Chi-Square	Pr > ChiSq
Intercept	1	0.0000	0.1987	-0.3894	0.3894	0.00	1.0000
iri2	1	-0.0000	0.0052	-0.0101	0.0101	0.00	1.0000
Scale	0	1.0000	0.0000	1.0000	1.0000		

NOTE: The scale parameter was held fixed.