Cricket Valley Energy

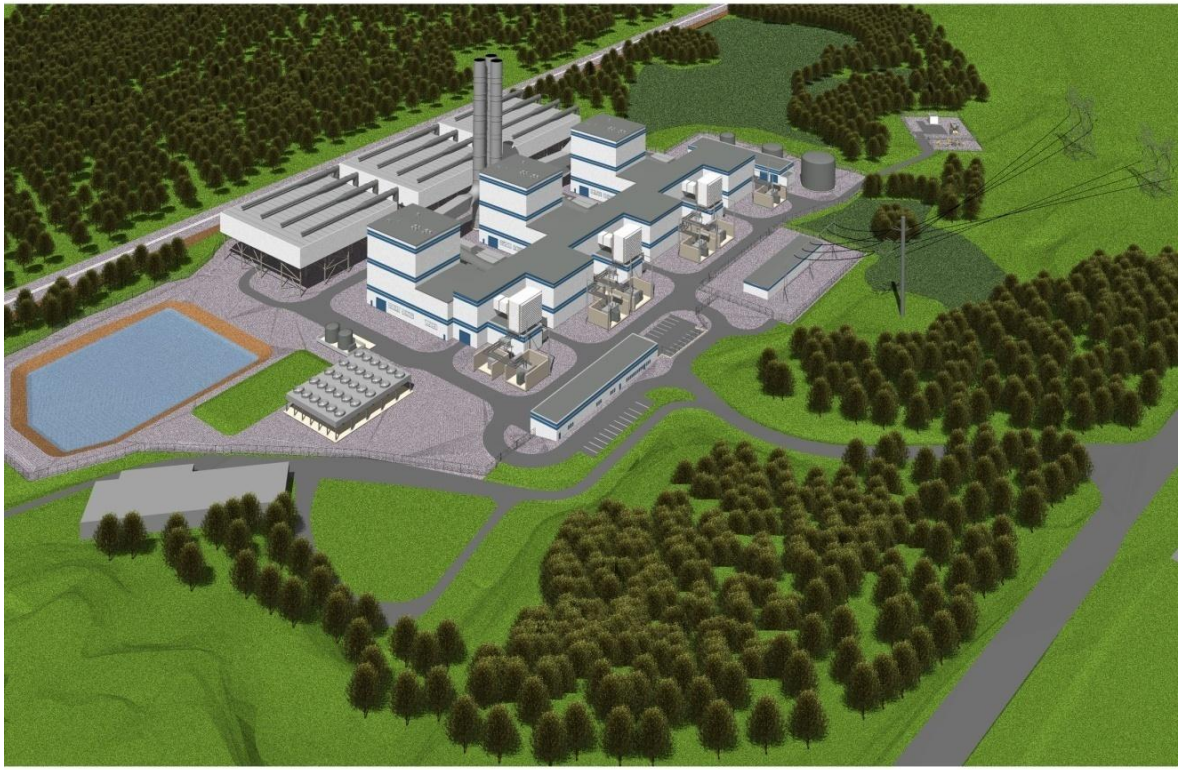
Advisory Working Group

Traffic & Safety

March 10, 2011

Agenda

- Introductions
- Project Update
  - Air Permit
  - DEIS
  - Public review
- Traffic Analysis
- Q&A
- Next Meeting



Project Update

- **Air Permit Application**

  Comments submitted to DEC and EPA on February 4, 2011

  Subject of discussion at April 7th AWG on Air Quality

- **Wetland Restoration Plan**

  Draft plan to restore and revitalize existing wetlands submitted to DEC

  Subject of discussion at March 24th AWG on Water, Wetlands & Wildlife

- **Draft Environmental Impact Statement (DEIS)**

  DEIS submitted to DEC in late February – currently under DEC review

  Expected to be released to public in late March

  Will be available at Town Hall, Library, CVE office & online

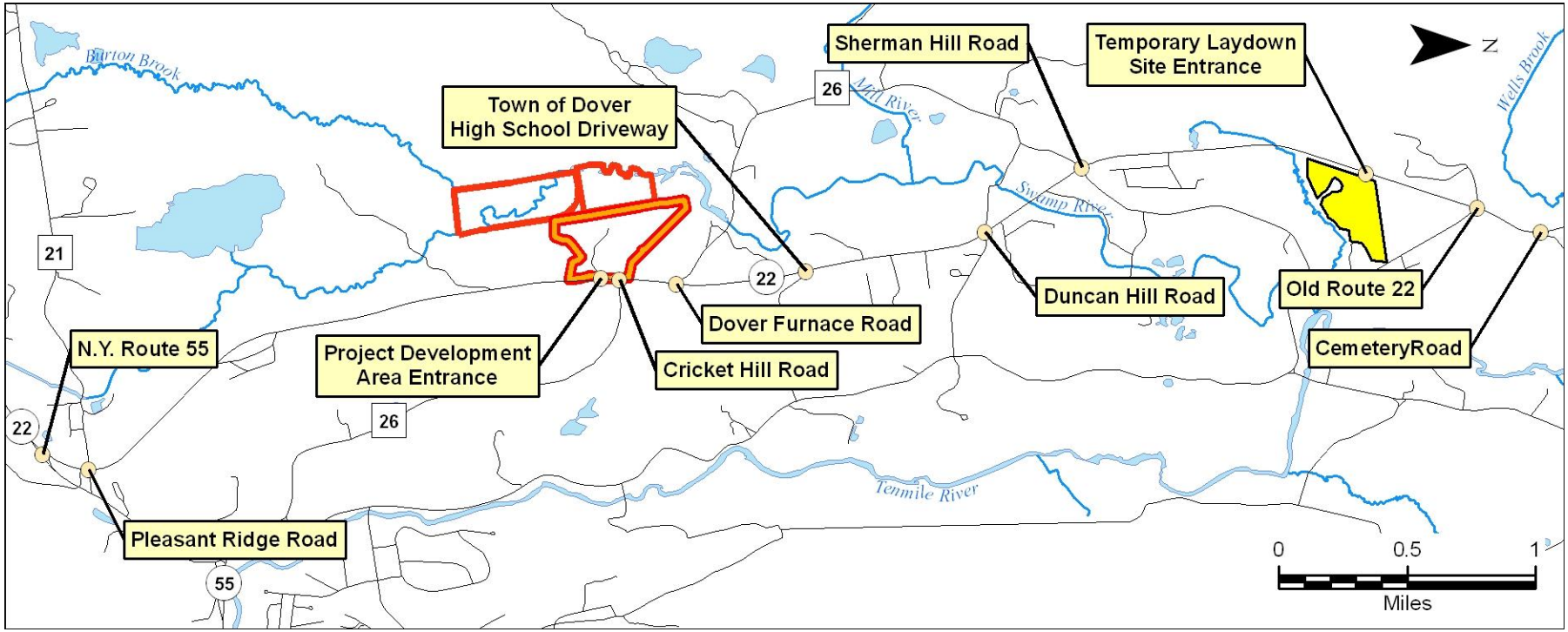
  Public hearing: Anticipated in May at Dover Middle School Auditorium

Traffic Impact Study Updated

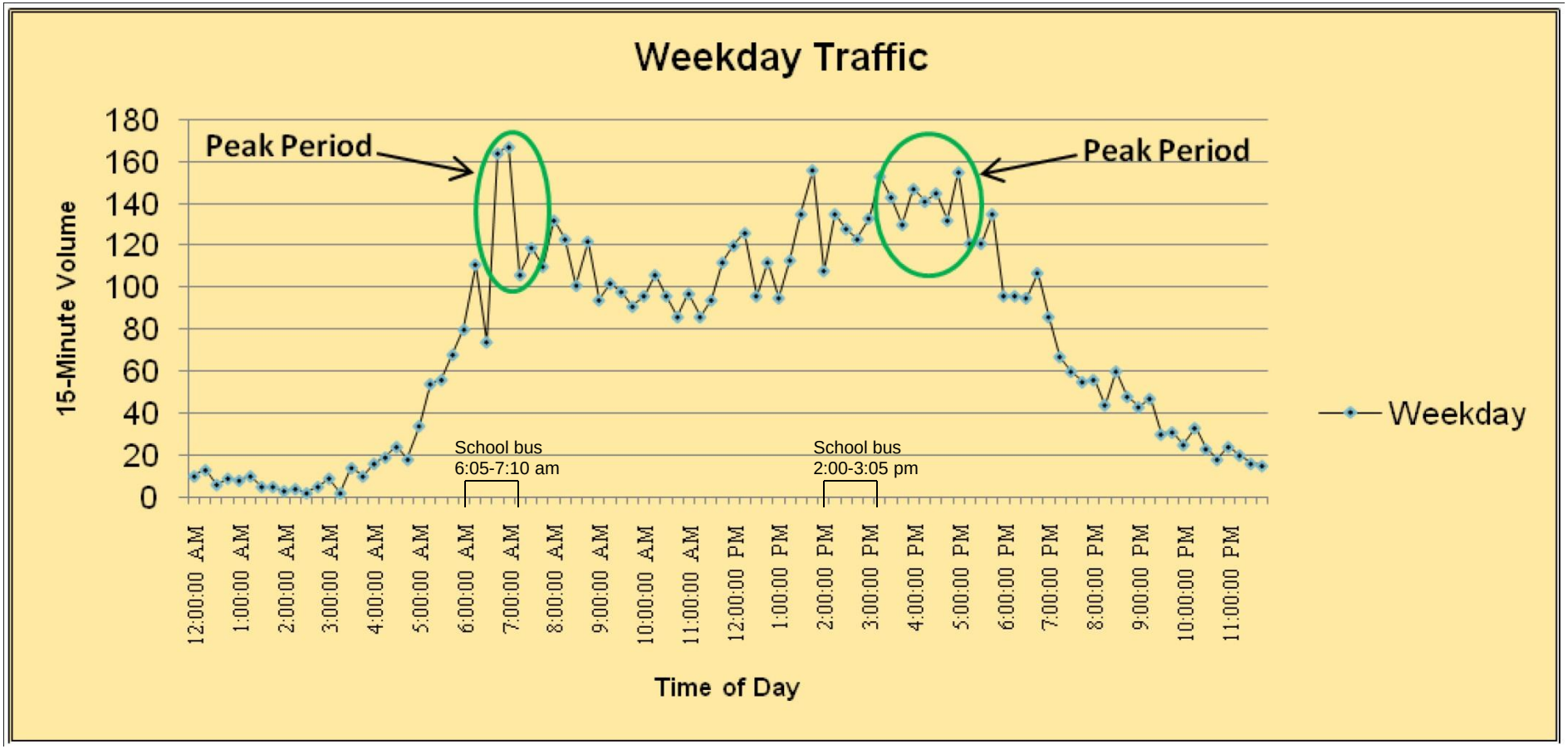
- Original CVE Traffic Study (Spring 2010)
  - Identify Traffic Study Area
  - Conduct Traffic Count
  - Analyze Traffic Patterns
  - Analyze Crash Analysis Data
  - Conduct Traffic Projection/Methodology
  - Traffic Impact Study Conclusion
- What's Different About the Updated Study? (Winter 2011)
  - Two additional intersections added to the count
  - Turning lane for southbound traffic at Temporary Parking Area
  - School bus schedules added to the analysis

Site and Traffic Count Location

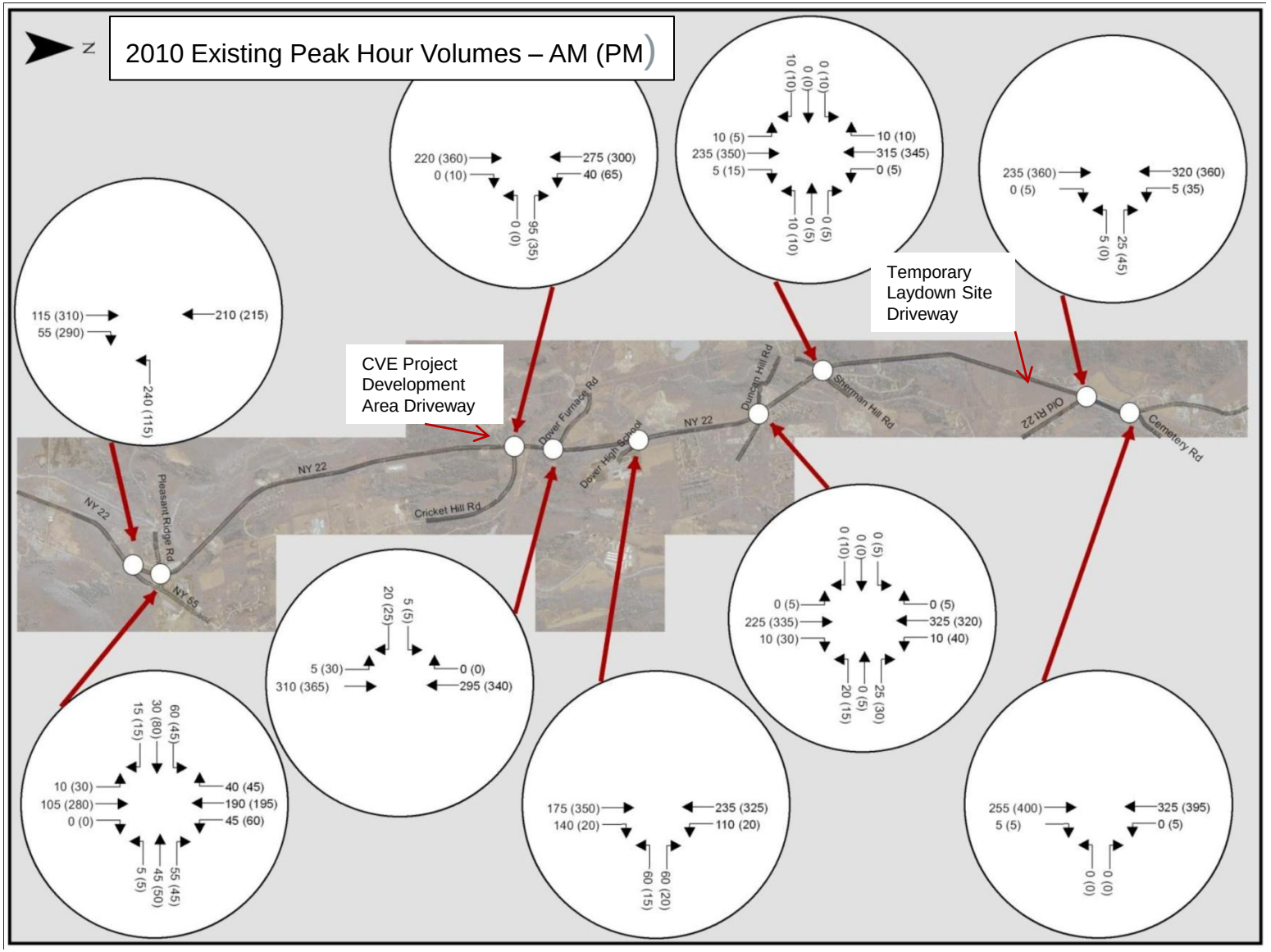
- AM/PM peak traffic data collected (weekday & weekend)
- Truck/bus percentages along the corridor range between 10% and 12%
- Background traffic growth rate: 1.5%



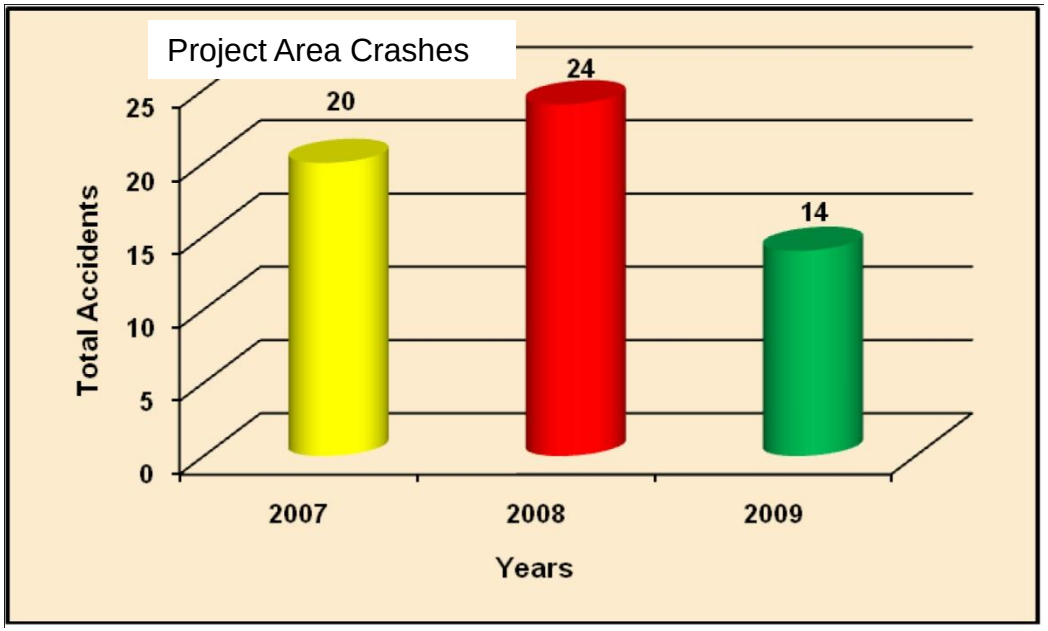
Traffic Pattern – NY Route 22 (Weekday)



Existing Traffic Counts



Crash Data Analysis Summary



Crash Types	Years		
	2007	2008	2009
Angle	5	3	2
Head On	0	0	0
Not a Collision with a Motor Vehicle	8	9	5
Rear End	2	5	4
Sideswipe – Same Direction	2	0	2
Sideswipe – Opposite Direction	1	1	0
Unknown	2	6	1
Total	**20**	**24**	**14**

- **On average, 20 crashes occur annually within the project area**
- **Predominant crash types are not with motor vehicles—mainly due to collision with deer.**
- **Total number of injuries reduced from 10 and 9 in 2007 and 2008 to 2 in 2009**

Severity Types	Years		
	2007	2008	2009
Fatalities	0	0	0
Injuries	10	9	2

What Does the Traffic Study Consider?

- Anticipated traffic generation from planned projects in the project vicinity

  Knolls of Dover Project

- Other projects that were considered (timeline and traffic information for these projects are not available – as reported by the Dutchess County, covered by general growth rate)

22 West Properties	Lands of Furnia
Plum Hill	Sherman Hills
Stony Brook Estates	Rasco Materials

- Included trip generation estimates for peak construction year (2013)

  750 workers will access the site/temporary parking lot (20% will carpool)

  Each shuttle will carry 40 workers (19 shuttle trips per peak hour)

  6 delivery trucks will access the parking lot from North (per peak hour)

  4 delivery truck will access from South (per peak hour)

- Included trip generation estimates for operational year (2015)

What is Level of Service (LOS)?

- Level of Service is one of the measures used to assess operational conditions at intersections
- Six designations represented by letters “A” through “F”*
- Differences associated with Signalized vs. Unsignalized Intersections

LOS Criteria for Signalized Intersection

LOS	Average Control Delay per Vehicle (seconds)
A	≤10
B	>10–20
C	>20–35
D	>35–55
E	>55–80
F	>80

LOS Criteria for Unsignalized Intersection

LOS	Average Control Delay per Vehicle (seconds)
A	0–10
B	>10–15
C	>15–25
D	>25–35
E	>35–50
F	>50

**Per Transportation Research Board ‘s Highway Capacity Manual, 2000*

Traffic Analysis Conclusions

- Existing Conditions: All intersections operate at acceptable level of service (LOS)
- Construction Year (2013)
  - Without Project: All intersections operate at acceptable LOS
  - With Project/Without Improvements: All intersections operate at acceptable LOS except Project Development Area driveway, Temporary Laydown Site driveway, and Duncan Hill Road
  - With manual traffic controls at these three intersections and the addition of a 400-foot “passing lane” at the Temporary Laydown Site, acceptable levels of service can be maintained
- Operation Year (2015)
  - With and Without Project: All intersections operate at acceptable LOS

Temporary Passing Lane

Recommendations

Intersection Location	Constrained Approaches	Peak Hours Impacted	Recommended Improvements	Improved LOS
CVE Temporary Laydown Site Driveway	Southbound Left Movement	2013 AM	Manual control this intersection during both peak hours. Provide dual entrance and exit lanes on the westbound approach. Provide a 400-foot left-turn pocket on SB approach.	B
	Westbound Approach	2013 AM & PM		C/D
Duncan Hill Rd	Westbound Approach	2013 PM	Consider installing a temporary signal at this intersection, if feasible, or providing manual control. Traffic should be coordinated with the CVE Laydown Site driveway and high school driveway intersections.	C
CVE Project Development Area Entrance Driveway	Eastbound Approach	2013 AM & PM	To avoid any delay in construction activity and to provide safety and sufficient time for maneuvering of heavy trucks manual control this intersection.	C/C

What Does This Mean for Dover Schools?

- First Student bus company operates 30 bus routes
- Existing high school bus schedule

  Departure: 6:05 – 6:30AM

  Arrival: 7:05 – 7:10AM
- CVE shuttles are presumed to arrive at project site *before* 7:00AM
- CVE will work with First Student & Dover schools to ensure safe and timely flow of school bus traffic – adjusting CVE schedule as needed

Questions & Contacts

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