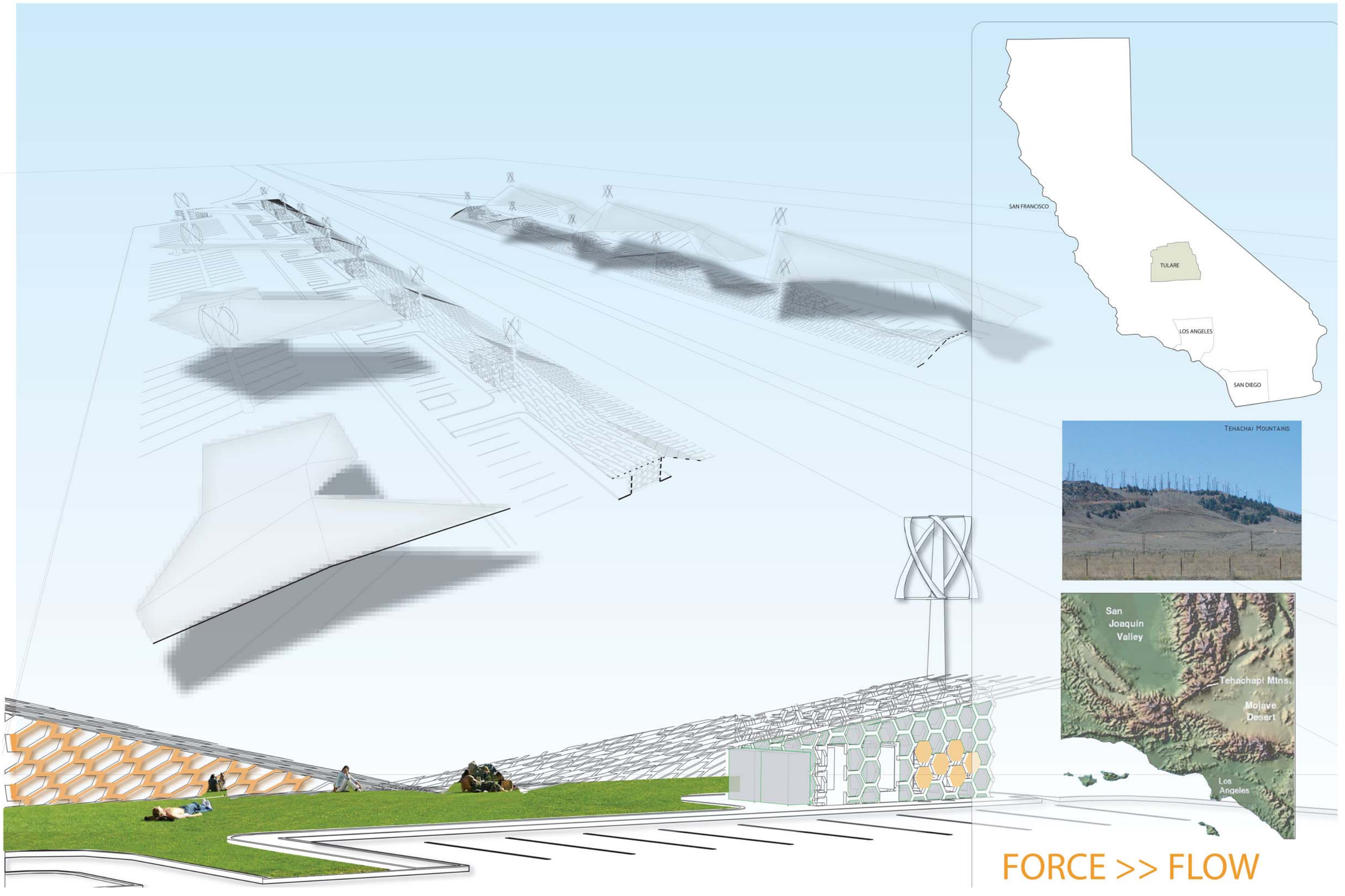
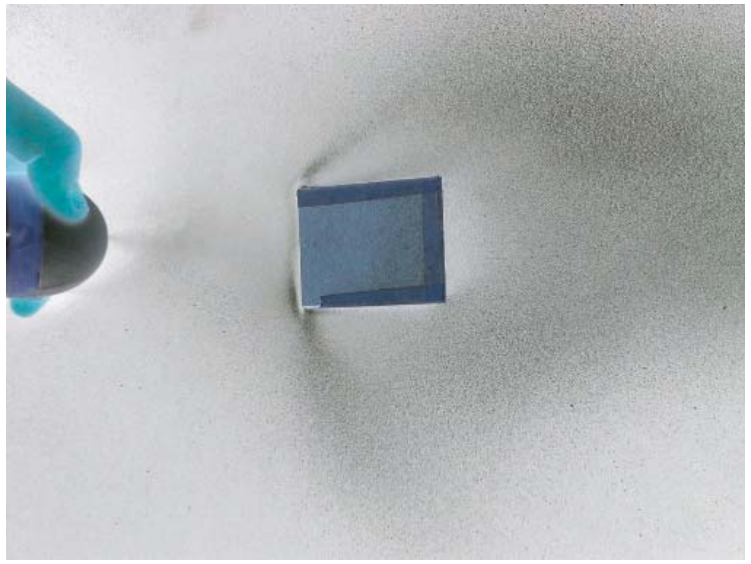
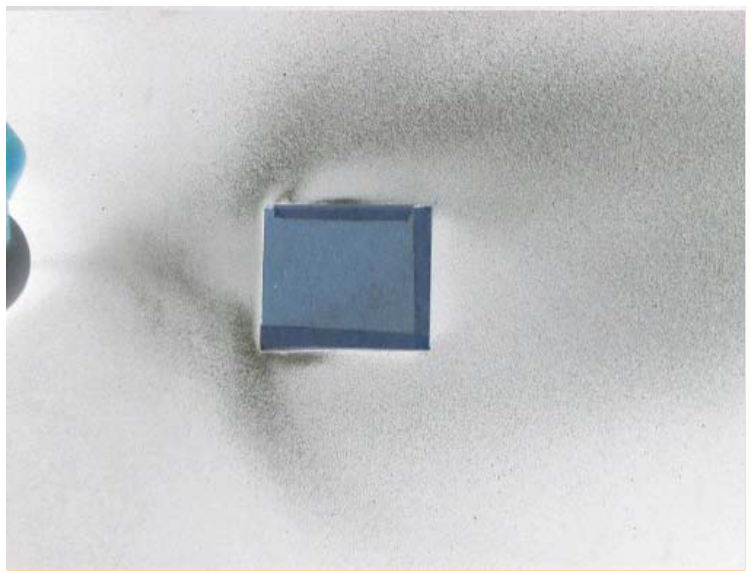

SAN FRANCISCO
TULARE
LOS ANGELES
SAN DIEGO
Tehachai Mountains
San
Joaquin
Valley
Tehachapi Mtns.
Mojave
Desert
Los
Angeles

FORCE >> FLOW



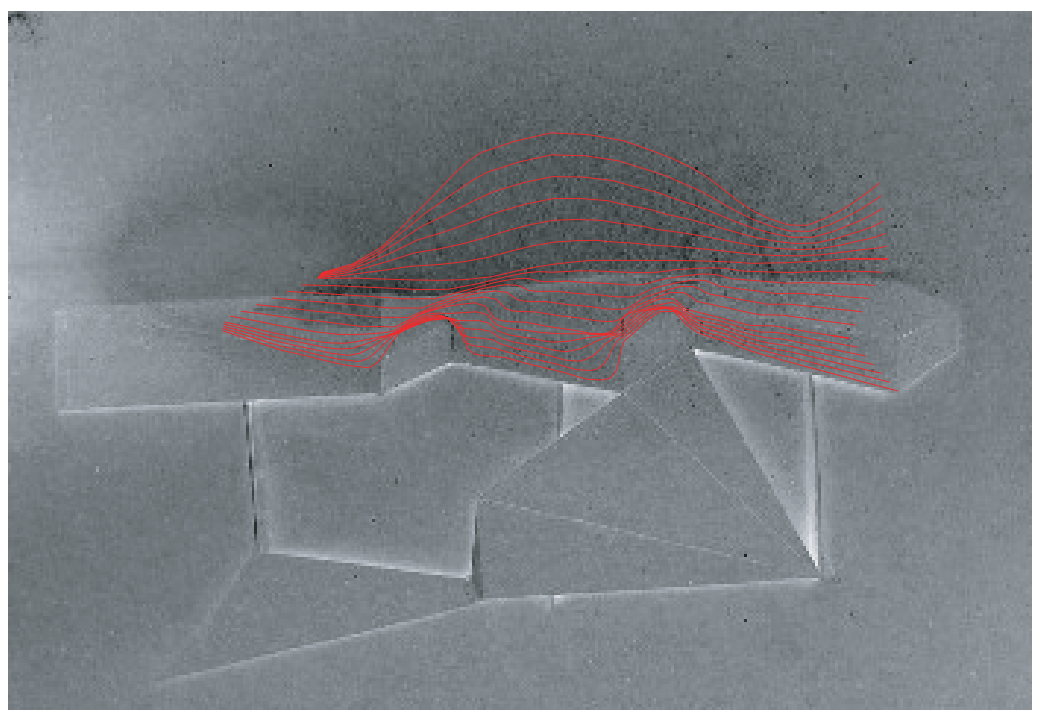
FLOW TESTING ON 10 DEG SLOPE
BUILD UP OF PARTICLES FROM
FLOW ALONG SIDES AND BACK
LESS BUILD UP IN FRONT OF SLOPE

PLAN OF 10 DEG SLOPE

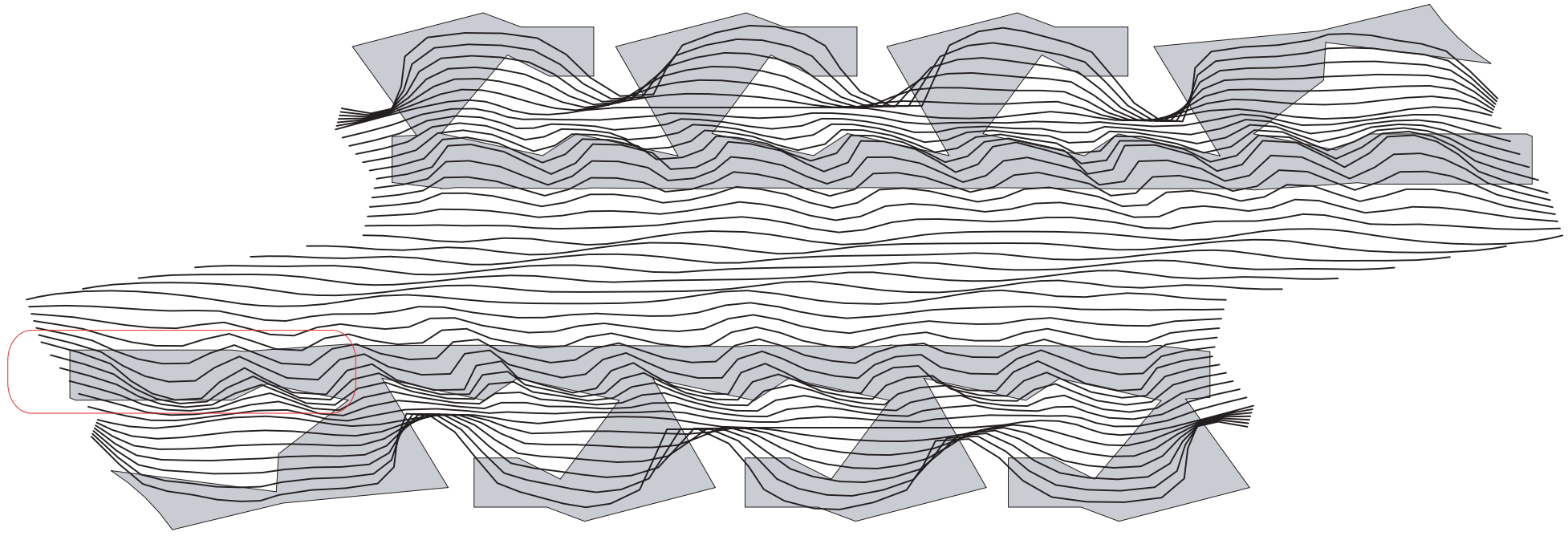


FLOW TESTING ON 45 DEG SLOPE
BUILD UP IN FRONT AND DIRECTLY
TO SIDES - CONCLUSION:
HIGHER THE SLOPE MORE
DISTURBANCE IN FLOW

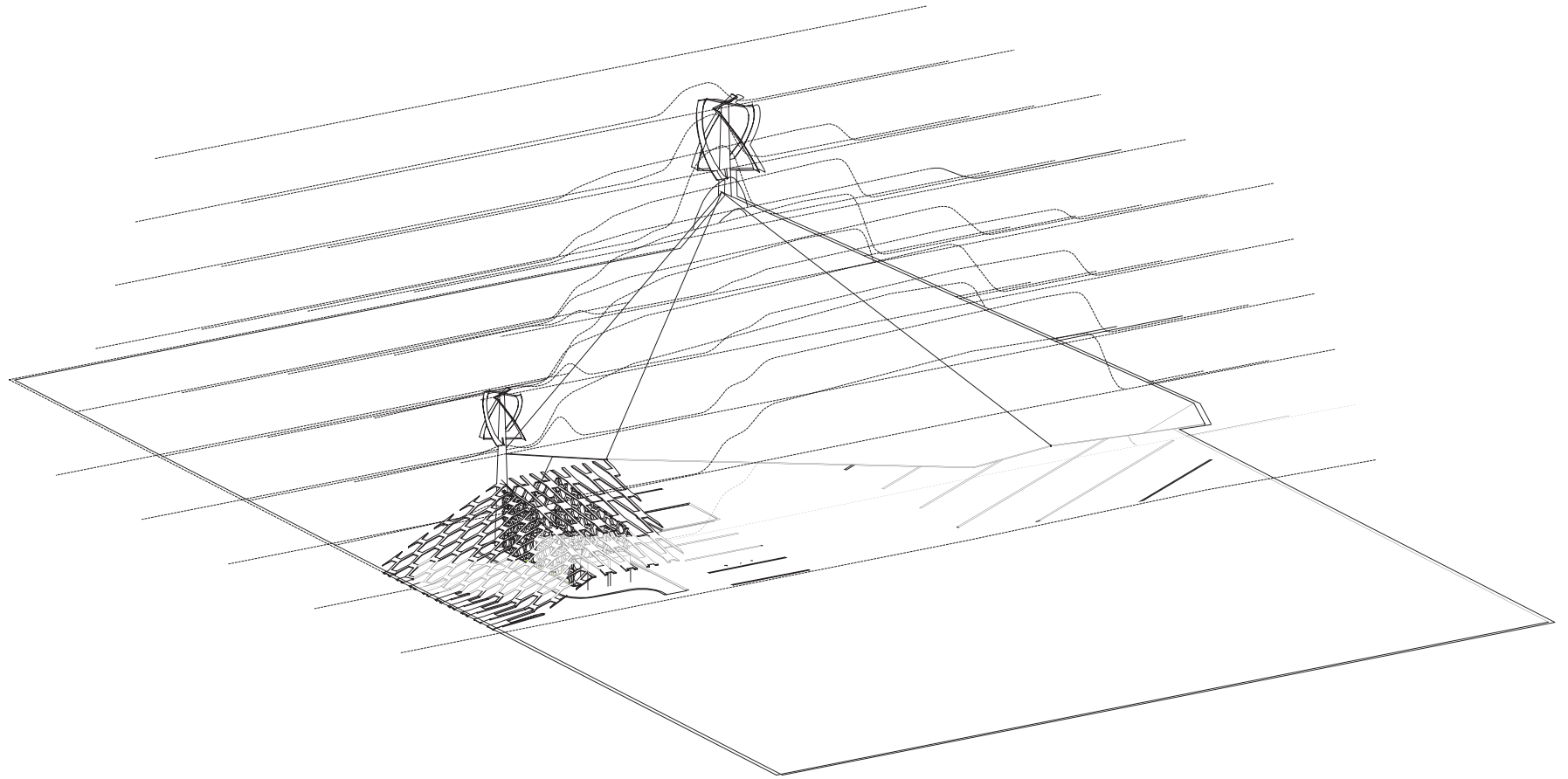
PLAN OF 45 DEG SLOPE



PLAN OF 1:40 MODEL WITH WINDS BEING TESTED

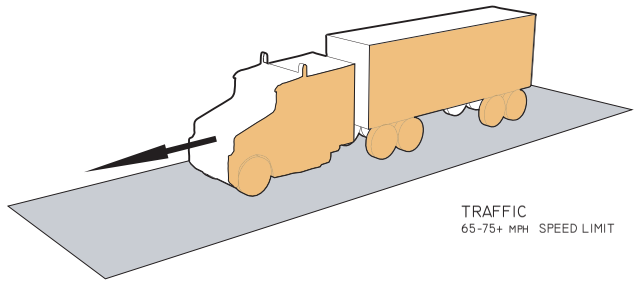


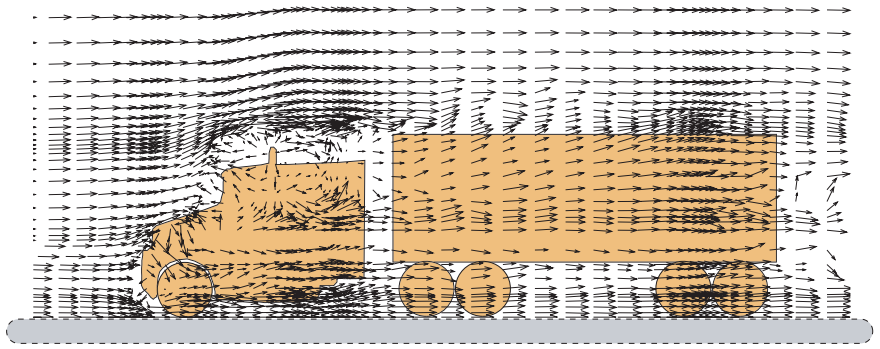
WIND FLOWS OVER SUGGESTED
PLAN GEOMETRIES



PERSPECTIVE OF FLOWS AND
INTERSECTIONS WITH TURBINES

CONDITIONS TRAFFIC WIND FLOW



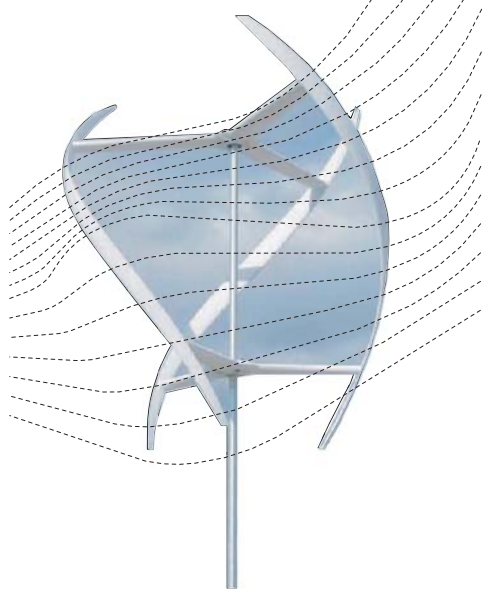


AERODYNAMIC FLOW OVER VEHICLE IN WIND TUNNEL.

TRAFFIC WIND

LES Simulation of Aerodynamic drag for heavy duty trailer trucks.
S. Nakamura, E.M. Hively, A.T. Conlisk,
Mechanical Engineering Department.
The Ohio State University, Columbus, OH 43210, USA

SITE PREVAILING WINDS
10 KM/H = 6.2 MPH (2.8 M/S)
YEAR ROUND FROM WEST



VERTICAL AXIS WIND TURBINES VAWTS

ROTATE ON VERTICAL AXIS AND DRIVES FAN. FAN TURNS FASTER PER REVOLUTION FROM AXIS EXAMPLE : A PEDAL ON Bycicle DRIVES WHEELS FASTER PER PEDAL PUSH

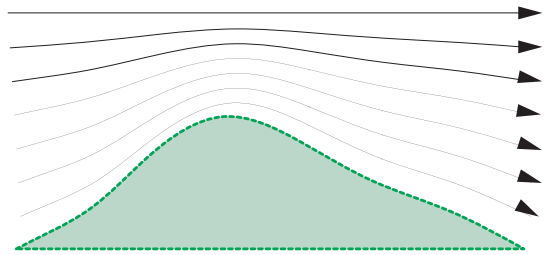
CAN COPE WITH CHANGING WIND CONDITIONS AND UPLIFT

EXAMPLE S OF VERTICAL WIND TURBINES (VAWTS)

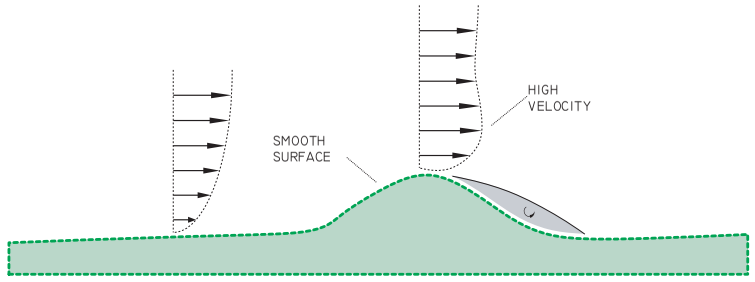
VAWTEX
3 MPH WINDS

QUIET REVOLUTION 8.9

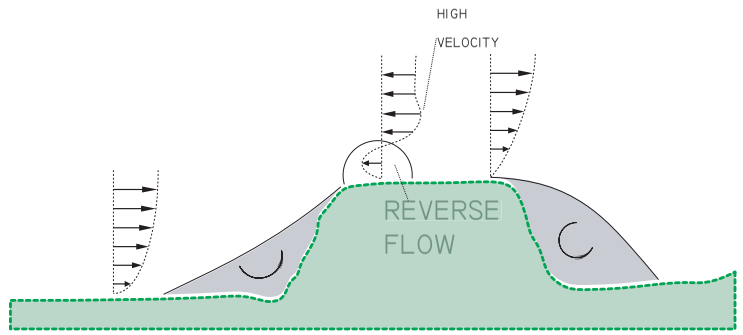
SITING ALTERATIONS TO IMPROVE WIND CONDITIONS



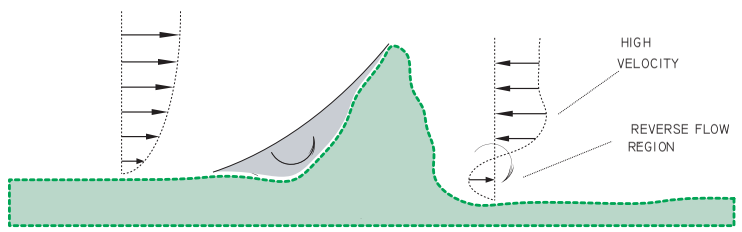
ACCELERATION OF WIND OVER HILL



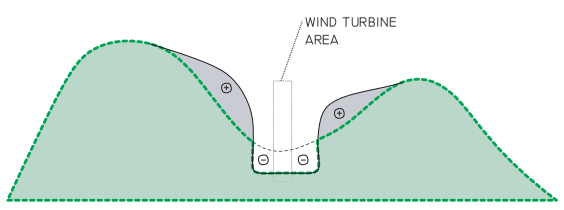
WELL ROUNDED HILL RIDGE
(SUITABLE SITE)



HILL OR RIDGE WITH ABRUPT SIDES
UNSUITABLE SITE



SHARP PEAK COULD BE
SUITABLE



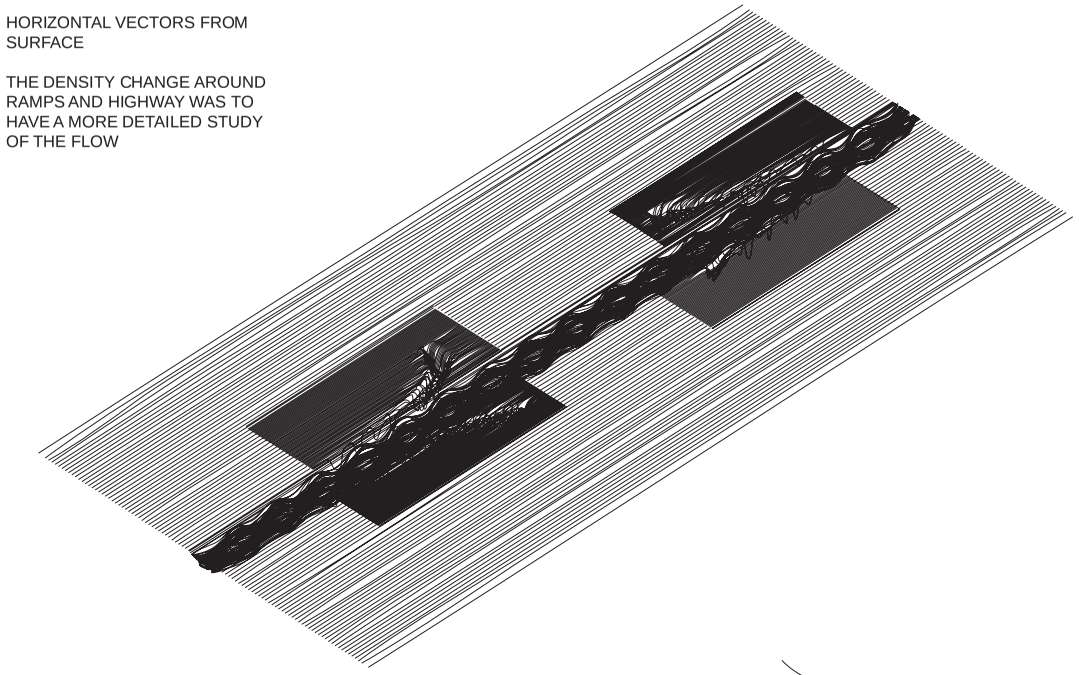
\+ FILL
\- EXCAVATION

PROPOSED TYPE OF TERRAIN MODIFICATION FOR THE PURPOSE OF AUGMENTING AVERAGE WIND SPEEDS

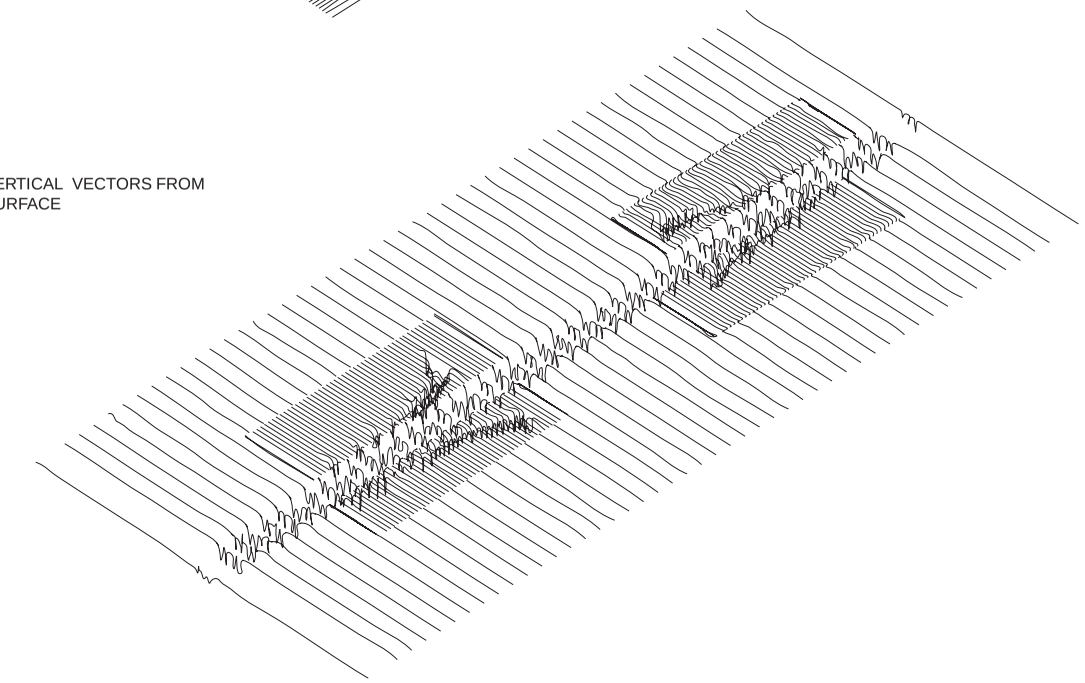
CONDITIONS OF TRAFFIC FLOW ON SITE

HORIZONTAL VECTORS FROM SURFACE

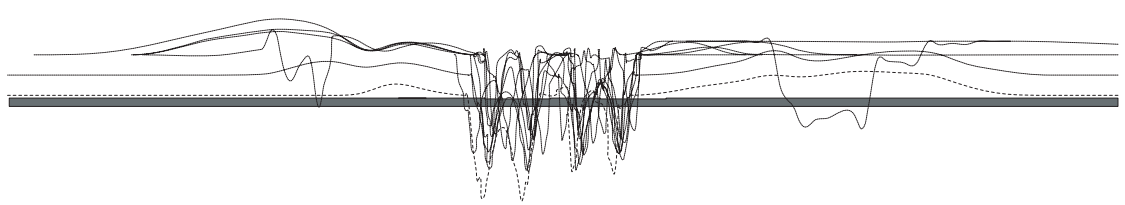
THE DENSITY CHANGE AROUND RAMPS AND HIGHWAY WAS TO HAVE A MORE DETAILED STUDY OF THE FLOW



VERTICAL VECTORS FROM SURFACE



CROSS SECTION THROUGH HIGHWAY TRAFFIC



WIND MACHINES
FRANK R ELDRIDGE
TJ825.E4 1979