Community Board 2 Traffic and Transportation Committee Geometric Review

September 11, 2012



Reconstruction of 9TH AVENUE / GANSEVOORT AREA

Borough of Manhattan

Project: HWMP2020 PIN: 8502011HW0029



ROGERS MARVEL ARCHITECTS, PLLC





Historic Districts



Gansevoort Market Historic District Greenwich Village Historic District





West Side Elevated Railway, ca 1869



West Side Elevated Railway, ca 1869















ISSUES_ JULIAN Pline Ogmail com proto type plaza . EUROPEAN PLAZA BIZREPE & CHEAP EVENENT/ CORPERILY PPECEDENTS. PLACEMENT/APPROPPIATENESS OF ELEMENTS · DELINEATION OF PLAZA PERIMETER SEATING SANT OF SOMETHIRS CONTENSIVENESS AT ENGE. ENCOMPAGE USE OF SARACES · COULD INTERFETO O STPEET VEWPORG, FUPLICI b/ VIPULAL CLUTTER LITTER. PLANTERS : too HIGH. · TRASH SECTORALITS (APINGTON) - TRASH SECTORUM/NOT SET OF PUBLIC USING PLAZAS: THINK ABOUT HORIZONTAUTT · THE COPPIDOR US GANSEVODIT GRATMI SIMPLE, HOPIZONAN, OF GETON, TPATS IN GRIANGLE · VEHICULAR/PORTERPIAN SAFETS. & DOG. WALKING HISTORICAL CHAPACTER/FEEL. SAT WI NOT TOO HIGH PLANTING NOT MALL INPUTE "DE-BMPHASIS" ON PLANTING MATERIALITY · LINCOLN POLD, MIANY PEACH. CUPPENT DESIGN DOES NOT CONFUN · LEEP OP EN. • PEPESIFIAN USE " ONS SPACE / CONTINUES. DEVICE TO DEVINEATE EDCO · WOOD (BENCHER, WOOD WAE DIG) · BRICK (COLOP/NATERIAL) LIGHT, USURL, SIMPLE, CONSILION No thanks of polle Seterna mobile Limited handle CUPB TO CUPB · Stonit / in Duspine / Moniton AVOUNDE! LOW PLANTERS / PLANTINGS 115 TP\$ 5-0.4. FUPNISHN POPTABLE CIGHT NO PLANTS VN ROILARPS: PUMIS (In. MO A LOT OF GANY. NO TPHESS EFTHESHELT hack CUSTOM





VERSION 01 : EXISTING CONDITIONS

VERSION 02 : CURRENT PLAZA INSTALLATION















Traffic Study Area







Total Vehicle Crashes - April 2008 to December 2010



Traffic Pedestrian Crashes - April 2008 to December 2010



Time Lapse Video from Gansevoort Street





Analyze Conditions

- Analyze Existing Conditions
 - Traffic Operations (Weekday AM, Weekday PM, Friday Overnight, Saturday Midday)
 - Vehicle Crashes and Pedestrian Crashes
- No Build Conditions (2015, 2035)
 - Apply Growth Factor
 - Incorporate Future Developments
 - St. Vincent's Campus Redevelopment
 - Whitney Museum
 - Hudson Yards
- Build Conditions (2015, 2035)
 - Ongoing Analysis

Level of Service

The Average control delay per vehicle is estimated for each lane group and aggregated for each approach and for the intersection as a whole. LOS is directly related to the control delay value.

LOS CRITERIA FOR SIGNALIZED INTERSECTIONS

LOS	Control Delay per Vehicle (s/veh)
A	≤ 10
В	> 10-20
С	> 20-35
D	> 35-55
E	> 55-80
F	> 80



Phase A – Southbound Traffic

Existing Signal Operations



Phase B – Northbound Traffic

Existing Signal Operations

Phase C – Eastbound/Westbound Traffic

Existing Signal Operations

Southbound/ Northbound Traffic

Eastbound/Westbound Traffic

Existing Signal Operations – Weekday PM Peak

Southbound/ Northbound Traffic

Eastbound/Westbound Traffic

Existing Signal Operations – Friday PM Peak

Southbound/ Northbound Traffic

Eastbound/Westbound Traffic

Southbound/ Northbound Traffic

Eastbound/Westbound Traffic

Southbound/ Northbound Traffic

Eastbound/Westbound Traffic

Southbound/ Northbound Traffic

Eastbound/Westbound Traffic

Southbound/ Northbound Traffic

Eastbound/Westbound Traffic

Preferred Design Option

East Asymmetrical Plan

Utilities

Combined Sewer Water

