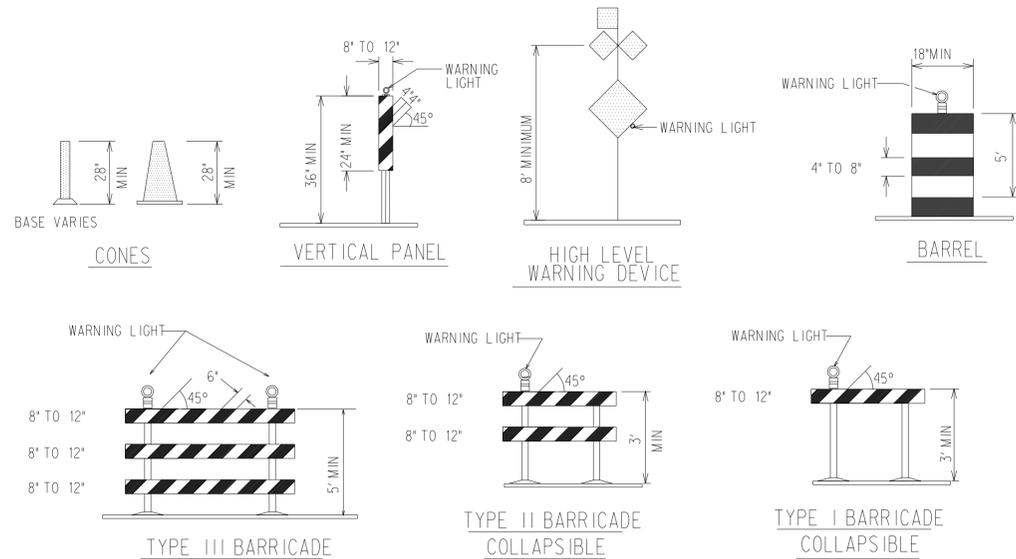
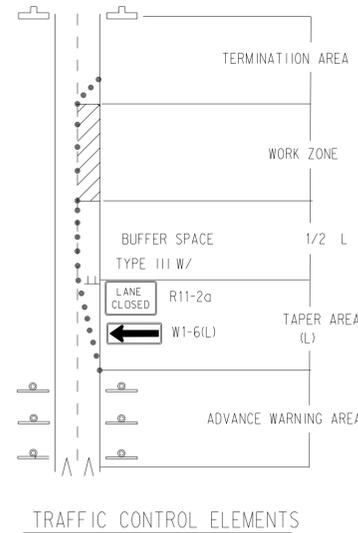


TRAFFIC CONTROL GENERAL NOTES

- THE CONTRACTOR SHALL PREPARE AND SUBMIT SITE SPECIFIC TRAFFIC CONTROL PLANS FOR EACH WORK ZONE IF A DIFFERENT APPROACH IS PROPOSED. TRAFFIC CONTROL PLANS SHALL ADDRESS BOTH PEDESTRIAN AND VEHICULAR TRAFFIC. TRAFFIC CONTROL PLANS SHALL BE SUBMITTED TO THE SANDIA TRAFFIC ENGINEER FOR APPROVAL, AT LEAST 14 CALENDAR DAYS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES, AND CONSTRUCTION SIGNING IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD, LATEST EDITION) DURING THE CONSTRUCTION PERIOD (WORKING AND NONWORKING HOURS). ANY DEVIATION FROM THE APPROVED PLAN SHALL HAVE PRIOR APPROVAL OF THE SANDIA TRAFFIC ENGINEER. THE CONTRACTOR SHALL SUBMIT A COPY OF PROPOSED CHANGES TO THE PLAN 48 HOURS PRIOR TO THE START OF CONSTRUCTION. THE PLAN SHALL SATISFY THE PUBLIC SAFETY AND TRAVELING PUBLIC AS WELL AS THE REQUIREMENTS OF THE MUTCD AND SHALL BE REVISED AS NECESSARY TO MEET THE REQUIREMENTS DURING THE CONSTRUCTION PERIOD. THE SECTIONS OF ROADWAY WHICH ARE OPEN TO TRAFFIC SHALL BE KEPT IN RIDING CONDITION AND CLEAR OF HAZARDS TO TRAFFIC, THE SAFETY AND COMFORT OF THE TRAVELING PUBLIC AND ACCESS TO BUILDINGS AND OTHER TURNOUTS SHALL BE OF PRIMARY CONSIDERATION.
- ACCESS TO ALL BUILDINGS AND LOADING DOCKS MUST BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION PERIOD DURING WORKING AND NONWORKING HOURS. STOCKPILING OF MATERIALS OR EARTHWORK SHALL NOT INTERFERE WITH THE ACCESS OF EMERGENCY VEHICLES DURING THE CONSTRUCTION PHASE NOR SHALL IT IMPEDE SIGHT TRIANGLES AT INTERSECTIONS, UNLESS A FLAG PERSON IS PRESENT.
- ACCESS TO ALL LOCAL FACILITIES INCLUDING ALL DELIVERIES AND DOORWAYS SHALL BE KEPT OPEN AT ALL TIMES UNLESS OTHERWISE NOTED. ANY ACCESS CLOSURE MUST BE SCHEDULED WITH THE BUILDING USERS AT LEAST FIVE WORKING DAYS IN ADVANCE AND APPROVED BY THE SNL INSPECTOR.
- THE CONTRACTOR SHALL MAKE PROVISIONS FOR ACCESS OF ALL PEDESTRIAN TRAFFIC TO BUILDINGS IN THE CONSTRUCTION AREA. ALL PEDESTRIAN DETOURS MUST BE PAVED WITH ASPHALT MATERIAL AND SHALL BE ADA COMPLIANT.
- EZ-GO CART TRAILS AND PEDESTRIAN WALKS SHALL REMAIN IN SERVICE AS LONG AS POSSIBLE UNTIL A DETOUR IS IDENTIFIED BY CONTRACTOR AND APPROVED IN ADVANCE BY SNL TRAFFIC ENGINEER. TEMPORARY PATHS SHALL BE 3" THICK ASPHALT. ALL TEMPORARY PATHS SHALL BE LIGHTED FROM DUSK TO DAWN IF THERE IS NOT SUFFICIENT STREET, PATH, BUILDING, OR PERIMETER FENCE LIGHTING.
- ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD, LATEST EDITION). IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF THE SDR, PER SECTION 1A-07 OF THE MUTCD, LATEST EDITION.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND SERVICING ALL TRAFFIC.
- THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORK SITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORK SITE TRAFFIC SUPERVISOR OR EQUIVALENT.
- ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE CONSTRUCTION DESIGN SPEED (15 MPH). NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 1A-07.
- CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION.
- EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELED TRAFFIC LANE WITHOUT ADEQUATE PROTECTION DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF THE SNL INSPECTOR.
- CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND ALL TEMPORARY DETOUR STRIPING.
- 14 DAYS PRIOR TO OCCUPYING OR CLOSING A ROADWAY OR PEDESTRIAN PATH, THE CONTRACTOR SHALL NOTIFY THE SDR.
- EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING TO TRAFFIC. A MINIMUM OF 14 FEET SHALL BE PROVIDED FOR EMERGENCY VEHICLE TRAFFIC. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.
- CONTRACTOR SHALL COMPLY WITH THE FOLLOWING:
 - STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED CONDITIONS WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY THE SDR.
- ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TO ITS PLACEMENT AND MAINTENANCE.
- ADVANCE WARNING SIGNS SHALL BE 36"x36" MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGHT AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE MUTCD.
- CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. ALL GRAFFITI SHALL BE PROMPTLY REMOVED FROM ALL EQUIPMENT, BOTH PERMANENT AND TEMPORARY.
- CONTRACTOR MUST OBTAIN A DIGGING PERMIT BEFORE BEGINNING ANY CONSTRUCTION OR MAINTENANCE WORK.
- PHASING SHOWN IN TRAFFIC CONTROL PLANS REPRESENT PHASING RESTRICTIONS PLACED ON THE CONTRACTOR. THIS INFORMATION IS INTENDED TO REPRESENT THE PEDESTRIAN AND VEHICULAR ACCESS ISSUES WITHIN THE PROJECT LIMITS. THE CONTRACTOR MAY WORK ON DIFFERENT PHASES SIMULTANEOUSLY WITH THE APPROVAL OF THE SDR. THESE PHASES SHALL NOT CONTAIN CONFLICTING TRAFFIC CONTROL MEASURES AND SHALL NOT CREATE SECURITY OR SAFETY ISSUES WITHIN THE PROJECT LIMITS. ALL WORK SHALL BE COORDINATED WITH OTHER PROJECTS TO AVOID CONFLICTS AND DELAYS.



LEGEND

- WORK AREA
- BARRICADE - TYPE I, TYPE II, OR BARREL
- BARRICADE - TYPE III
- VERTICAL PANEL
- WARNING SIGN
- DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
- FLAGMAN POSITION
- SPACING BETWEEN BARRICADES - A DISTANCE MEASURED IN FEET EQUAL TO THE STREET LIMIT OF THE STREET
- TAPER LENGTH - SEE CHART BELOW

THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

TAPER REQUIREMENT

SPEED LIMIT (MPH)	TAPER LENGTH (FEET)			MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET	
	10' LANE	11' LANE	12' LANE		ALONG TAPER	AFTER TAPER
15	40	45	50	4	15	15
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35

SIGN FACE DETAILS

TAPER CRITERIA

TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT 40 MPH OR LESS

$$L = \frac{WS^2}{60}$$

L = TAPER LENGTH
 W = WIDTH OF OFFSET IN FEET
 S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH

RECOMMENDED SIGN SPACING (D) FOR

ADVANCE WARNING SIGN SERIES

SPEED PER HOUR	MINIMUM DISTANCE IN FEET	
	BETWEEN SIGNS	FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT

- ALL WORKZONES WITHIN THIS PROJECT WILL BE SIGNED WITH A CONSTRUCTION DESIGN SPEED OF 15 MPH. ALL WORK ZONES SHOULD CONTAIN 'WORK ZONE AHEAD' AND SPEED LIMIT SIGNING AT ALL ENTRANCES INTO THE WORKZONE.
- ALL TEMPORARY PEDESTRIAN PATHS CONSTRUCTED FOR THIS PROJECT SHALL ADHERE TO ALL APPLICABLE ADA GUIDELINES. CONTRACTOR TO VERIFY THE EXISTING CONDITIONS NEAR THE REQUIRED RAMP. CONTRACTOR SHALL CONSTRUCT THE RAMP PER DETAILS SHOWN ON CP5003WATR USING THE APPROPRIATE DETAILS FOR THE EXISTING CONDITIONS.
- ALL SIGNS SHALL BE LOCATED SUCH THAT THEY ARE VISIBLE TO MOTORISTS AND PEDESTRIANS AND WILL BE LOCATED IN ADVANCE TO ENSURE RESPONSE TIME IS AVAILABLE.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING FEATURES WITHIN THE PROJECT LIMITS PRIOR TO CONSTRUCTION WITHIN EACH PHASE. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ALL FEATURES (SIDEWALKS, ADA RAMPS, LANDSCAPING, PAVEMENT, ETC.) REMOVED DURING SUBSEQUENT CONSTRUCTION PHASES. RECONSTRUCTION OF THESE FEATURES MAY BE REQUIRED FOR THE TRAFFIC CONTROL PLAN TO PROPERLY FUNCTION.

ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.
 * RED LETTERS ON WHITE REFLECTIVE BACKGROUND.

P.O.	REV	DATE	DESCRIPTION	OWN	CKD	APP

U.S. DEPARTMENT OF ENERGY
 NNSA/SANDIA SITE OFFICE ALBUQUERQUE, NEW MEXICO

SANDIA NATIONAL LABORATORIES

TRAFFIC CONTROL DEVICES - SIGNS	P.O.	
	PROJECT NO.	
	DRAWN BY	PS
	CHECKED BY	TR
	SNL ENGR	
DISCP: C	SUB-DISCP: -	STD
	DATE	05/11/2007
OLD FILENAME: C-5007STD	SIZE	DRAWING NO.
FILENAME: C-5007STD.dgn	D+	C-5007STD