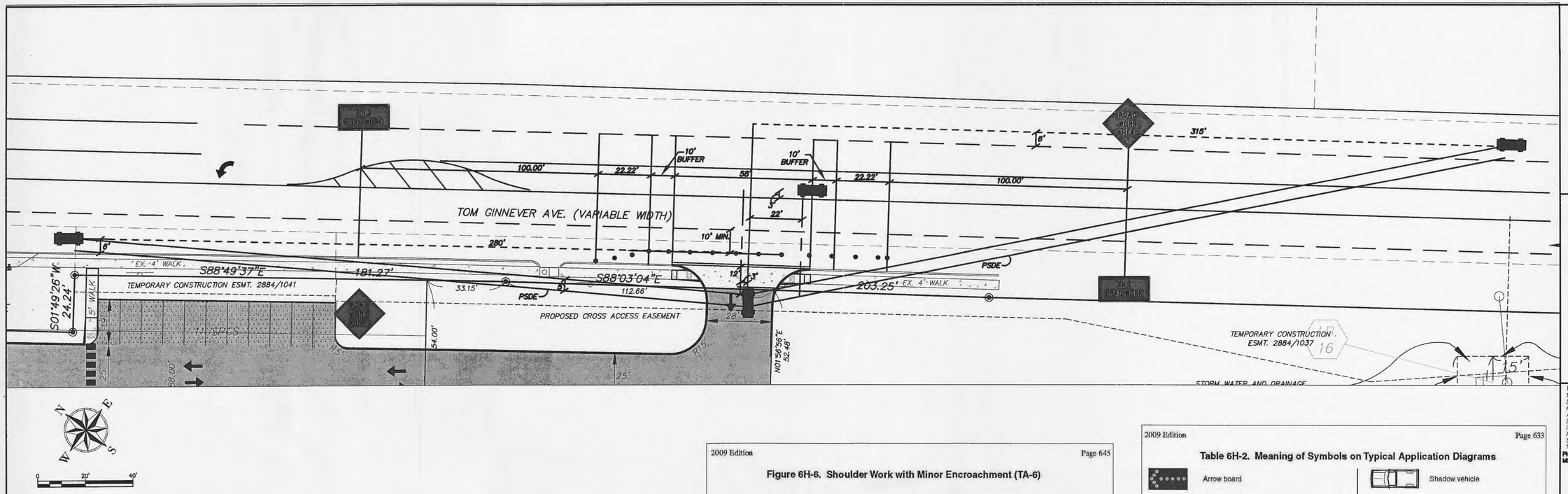
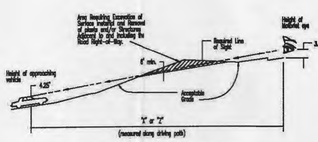


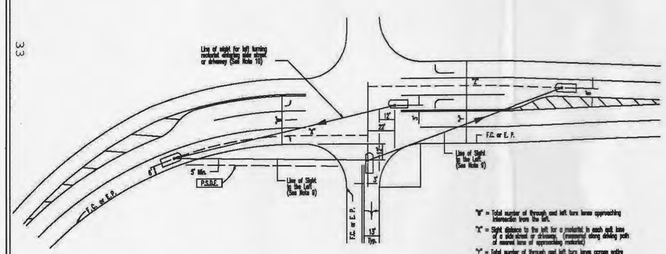
SIGHT DISTANCE FOR VEHICLE ENTERING ROADWAY FROM STOPPED POSITION ASSOCIATED WITH NEW DEVELOPMENT							
Design Speed of Road (MPH)	Sight Distance to the Left ("X")			Sight Distance to the Right ("Z")			
	"X" = 1 Lane	"X" = 2 Lanes	"X" = 3 Lanes	"Y" = 2 Lanes	"Y" = 3 Lanes	"Y" = 4 Lanes	"Y" = 5 Lanes
15	150'	155'	165'	155'	165'	180'	190'
20	200'	210'	225'	210'	225'	235'	250'
25	250'	265'	285'	265'	285'	295'	315'
30	300'	320'	335'	320'	335'	355'	375'
35	350'	380'	390'	380'	390'	415'	440'
40	400'	415'	445'	415'	445'	470'	500'
45	450'	485'	500'	485'	500'	530'	565'
50	500'	515'	555'	515'	555'	590'	625'
55	550'	570'	610'	570'	610'	650'	690'
60	600'	650'	665'	620'	665'	710'	750'
65	650'	670'	725'	670'	725'	765'	815'
70	700'	750'	775'	720'	775'	825'	875'



TYPICAL PROFILE ALONG LINE OF SIGHT TO THE LEFT

GENERAL NOTES

1. Do not scale drawing. Follow dimensions.
2. Sight distance design criteria shall be based upon the number of lanes of the ultimate roadway.
3. On existing roadways the design speed shall be the 85th percentile speed of vehicles on the roadway as established by radar studies, or 5 m.p.h. greater than the posted speed limit, whichever is greater.
4. On new roadways the design speed shall be 5 m.p.h. greater than the anticipated posted speed limit.
5. For residential and non-residential roadways, either existing or new, with a posted speed of 35M, or less, the design speed shall be the anticipated posted speed limit.
6. If "X" is greater than 3 lanes or "Y" is greater than 4 lanes sight distance data shall be increased by extrapolating from values in the chart.
7. If "X" or "Y" include a median, sight distance data shall be increased by interpolating between values shown on the chart.
8. Height of motorist eye is stipped vehicle = 3.50ft. Height of approaching vehicle = 4.25ft.
9. Sight distance requirements shall be satisfied looking left and right by a motorist in each exit lane of a side street or driveway.
10. Sight distance requirement for left turning motorist on the forward moving roadway to enter a side street or driveway shall be the same as that required for "Y", if a 3 phase and time plan is established at end of sight distance.



"X" = total number of through and left turn lanes approaching intersection from the left.

"X" = Sight distance to the left for a motorist in each exit lane of a side street or driveway. (measured along driving path of nearest lane of approaching roadway)

"Y" = total number of through and left turn lanes across entire pavement leading to the right.

"Z" = Sight distance to the right for a motorist in each exit lane of a side street or driveway. (measured along driving path of nearest lane approaching roadway)

P.S.D.E. = Permanent Sight Distance Easement. If required, must extend a minimum of 5 feet beyond the line of sight.

SAINT CHARLES COUNTY
HIGHWAY DEPARTMENT
ST. CHARLES, MISSOURI

SIGHT-DISTANCE AT INTERSECTIONS

DATE: JUNE, 2005

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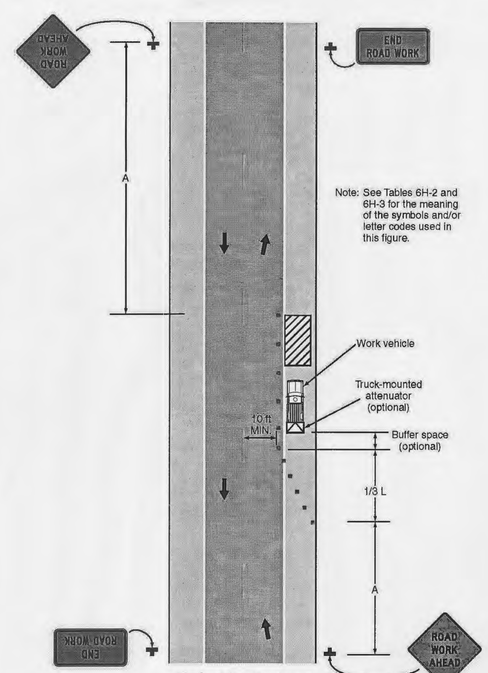
Figure 6H-6. Shoulder Work with Minor Encroachment (TA-6)



Typical Application 6

Table 6H-2. Meaning of Symbols on Typical Application Diagrams

Arrow board	Shadow vehicle
Arrow board support or trailer (shown facing down)	Sign (shown facing left)
Changeable message sign or support trailer	Surveyor
Channelizing device	Temporary barrier
Crash cushion	Temporary barrier with warning light
Direction of temporary traffic detour	Traffic or pedestrian signal
Direction of traffic	Truck-mounted attenuator
Flagger	Type 3 barricade
High-level warning device (Flag tree)	Warning light
Longitudinal channelizing device	Work space
Luminaire	Work vehicle
Pavement markings that should be removed for a long-term project	

Table 6H-3. Meaning of Letter Codes on Typical Application Diagrams

Road Type	Distance Between Signs**		
	A	B	C
Urban (low speed)*	100 feet	100 feet	100 feet
Urban (high speed)*	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

* Speed category to be determined by highway agency

** The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)

Table 6H-4. Formulas for Determining Taper Length

Speed (S)	Taper Length (L) in feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	$L = WS$

TAPER LENGTH

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

W = WIDTH OF OFFSET (10')
S = SPEED LIMIT (20 MPH)

L = 66.67'
L/3 = 22.22'

Where: L = taper length in feet
W = width of offset in feet
S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

ITG EYECARE OFFICE
11138 TOM GINNEVER AVE.
O'FALLON, MISSOURI 63376

PRS PROJECT # 01212.COMS.01R
DRAWN: C.L. 11/11/13
CHECKED: D.T. 11/11/13

PICKETT, RAY & SILVER INC.
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Branson: 3027 W. Hwy 76, Suite B Branson, Mo 65616
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STATE OF MISSOURI
CHRISTINE ANN LOCK
NUMBER
PE-2000150037
REGISTERED PROFESSIONAL ENGINEER
12-24-14

CHRISTINE A. LOCK
PROFESSIONAL ENGINEER LICENSE 2000150037

Developer / Owner Information
ITG EYECARE OFFICE
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TRAFFIC CONTROL AND SIGHT DISTANCE

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City No.

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