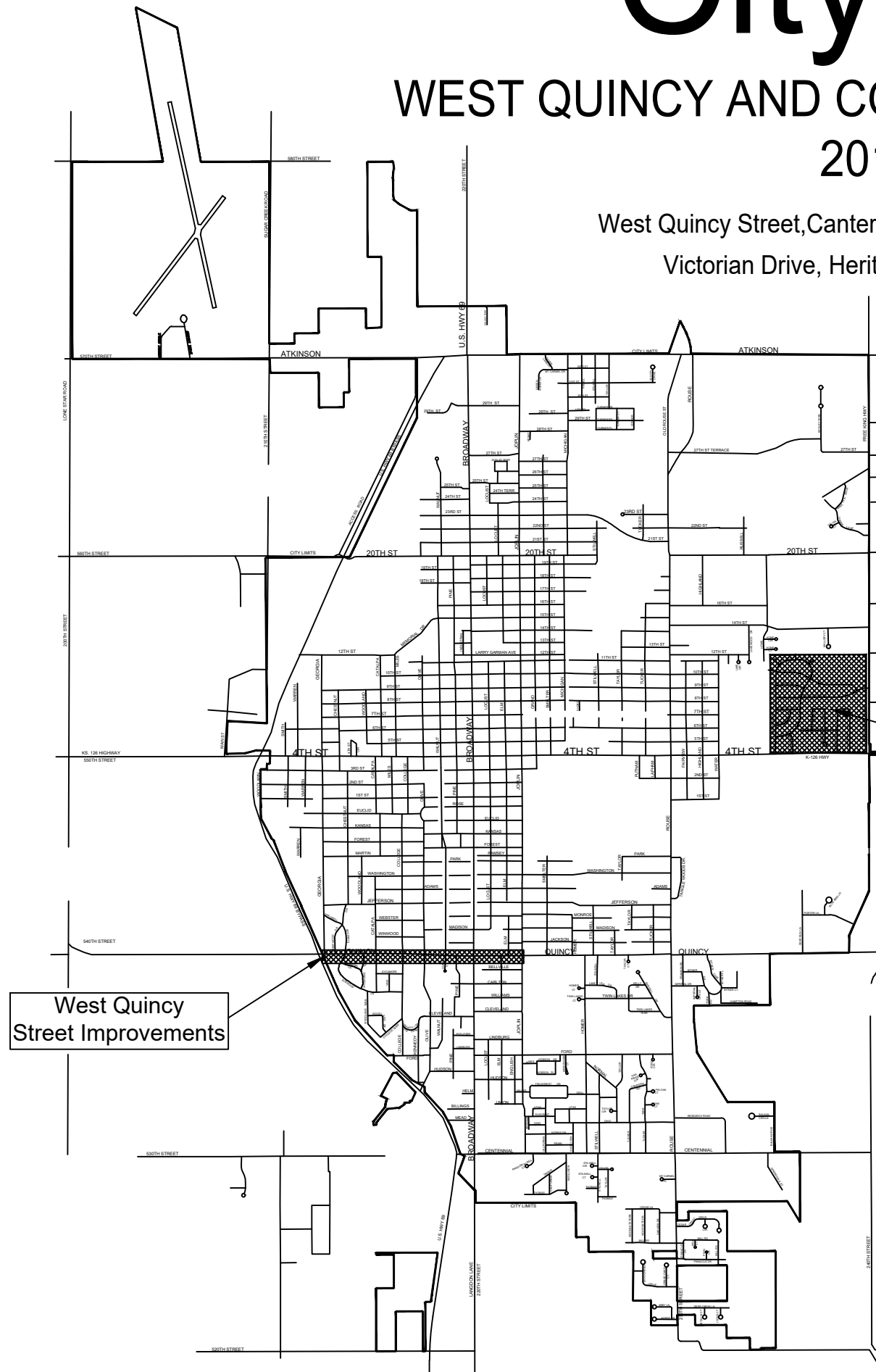


# City of Pittsburg

## WEST QUINCY AND COUNTRYSIDE ADDITION STREET IMPROVEMENTS

### 2018 Street Improvements Program

West Quincy Street, Canterbury Road, Village Drive, Heritage Lane, Windsor Circle, Windsor Court, Villa Drive,  
Victorian Drive, Heritage Road, Countryside Drive, Cambridge Lane, Colonial Drive, Windsor Drive,



#### INDEX OF SHEETS

<u>NO.</u>	<u>TITLE</u>
1.	Title Sheet
2.	General Notes and Material Quantities
3.	Typical Sections
4.	Quincy Street Mill and Overlay Plan
5.	Countryside Addition Mill and Overlay Plan
6.	Concrete Valley Gutters Plan
7.	Concrete Water Valve Blockouts
8.-14.	General Traffic Control



#### PUBLIC OFFICIALS

MAYOR	Jeremy Johnson
PRESIDENT OF THE BOARD	Patrick O'Bryan
CITY COUNSEL MEMBERS	Sarah Chenoweth
	Dawn McNay
	Chuck Munsell
CITY MANAGER	Daron Hall
CITY CLERK	Tammy Nagel
CITY ATTORNEY	Henry Menghini
DIRECTOR OF PUBLIC WORKS	Cameron Alden

GENERAL NOTES

1.

All adjacent buildings, structures, parking lots, drives, street pavements, utility lines, utility structures and appurtenances other than shown for replacement, shall be protected from damage during construction of the project. Items damaged beyond the limits shown on the drawings shall be removed and replaced by the contractor at no additional expense to the owner.
2.

The contractor shall promptly, and before such conditions are disturbed, notify the engineer if conditions on the site differ from those shown on the plans.
3.

The contractor will be required to provide a minimum of seventy-two (72) hours advanced notice to each of the utility owners listed in the table at right prior to the beginning of construction and request that any existing lines be located and flagged. Any utility damaged by the contractor or their subcontractors shall be repaired or replaced at no cost to the owner. The contractor shall coordinate work with contractors or utility companies and other agencies to minimize inconvenience to the public. Kansas One-Call: (800) 344-7233 OR 811

EMERGENCY (POLICE, FIRE, AMBULANCE): 911

4.

Full depth saw cuts of existing pavement shall be provided at locations where proposed construction abuts an existing pavement for which partial removal of that pavement is required. Sawed joints to facilitate removal within three (3) feet of existing joints will not be permitted and for such instances the limits of removal shall extend to the existing joint. Such saw cuts will not be paid for directly, but will be considered subsidiary.
5.

All dowel bars shall be epoxy coated for use within type III concrete.
6.

All disposal sites shall be approved of by The City of Pittsburg and Kansas Dept. of Health and Environment. Material either stockpiled or disposed of within a flood plain will require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps of Engineers permitting regulations.
7.

The contractor shall comply with all applicable safety regulations. Insuring the safety of the public shall be the contractor's responsibility. Any workers present within street right of ways of the City of Pittsburg will be required to wear a safety vest meeting ANSI Class II requirements.
8.

The contractor shall obtain all necessary permits.

UTILITY TYPE	COMPANY NAME	ADDRESS	CITY AND STATE	PHONE NUMBER
Water, Sewer, Communications	City of Pittsburg	303 Memorial Drive	Pittsburg, KS	(620) 240-5126
Gas	Kansas Gas Service	3008 N. Joplin Street	Pittsburg, KS	(620) 230-8113
Electric	Westar Energy	1909 S. Olive Street	Pittsburg, KS	(620) 235-2516
Telephone	AT&T	23 W. First Street	Ft. Scott, KS	(620) 223-9942
Communications	Cox Communications	2802 N. Joplin Street	Pittsburg, KS	(620) 231-3360
Communications	Craw-Kan Telephone	200 N. Ozark Street	Girard, KS	(620) 724-8235
Communications	Optic Communications	224 S. Kansas Avenue	Columbus, KS	(620) 429-3132

8" CONCRETE STREET APPROACH	Length	Width	Depth	Area	Volume
Location	(Ft)	(Ft) (AVG)	(Ft)	(SYDS)	(CuYds)
Quincy Street at Oak Street	9	28	0.667	28	6.2

SUMMARY OF CONCRETE QUANTITIES- WATER VALVE BLOCKOUTS (Quincy Street Only)	
Street or Intersection	Quantity
	Each
Quincy and Crestwood Lane	1
Quincy and Elmwood Drive	3
Quincy and Woodland Terrace	2
Quincy and Catalpa Street	2
Quincy and Walnut Street	1
Quincy and Pine Street	1
TOTAL	10

See Sheet 7 For Additional Details

SUMMARY OF CONCRETE QUANTITIES- 8" VALLEY GUTTERS					
Street or Intersection	Length	Width	Depth	Area	Volume **
	(Ft)	(Ft)	Depth (Ft)	(SqYds)	(CuYds)
Cantebury Road and Cambridge Lane	42	10	0.667	46.7	10.4
Cantebury Road and Colonial Drive	52	10	0.667	57.8	12.8
Colonial Drive and Village Drive	50	10	0.667	55.6	12.4
Windsor Drive and Villa Drive	51	10	0.667	56.7	12.6
Quincy at Walnut Street	48	10	0.667	53.3	11.9
TOTALS				270	60.0

\*\*Concrete Volume given for information only, see sheet 6 for location map

SUMMARY OF ASPHALT QUANTITIES FOR COUNTRYSIDE ADDITION										
Street or Intersection	From	To	Length	Width	Milling		** HMA Commercial Grade Class A	*Aggregate for Bituminous Surface Course	*Asphalt Cement (PG 64-22)	*Emulsified Asphalt (SS-1H or CSS-1H) (Tack)
			(Feet)	(Avg) (Ft)	Depth (Ft)	(SqYds)	(Tons)	(Tons)	(Tons)	(Gallons)
Cantebury Road	Fourth Street	Village Drive	3121	26	0.167	9016.2	982.5	928.4	54.0	450.8
Village Drive	Cantebury Road	Colonial Drive	1250	26	0.167	3611.1	393.5	371.9	21.6	180.6
Intersection	Village Drive	Colonial Drive	73	44	0.167	356.9	38.9	36.8	2.1	17.8
Village Drive	Colonial Drive	Countryside Drive	486	26	0.167	1404.0	153.0	144.6	8.4	70.2
Colonial Drive	Cantebury Road	Village Drive	887	26	0.167	2562.4	279.2	263.9	15.4	128.1
Cambridge Lane	Cantebury Road	Village Drive	766	26	0.167	2212.9	241.1	227.9	13.3	110.6
Countryside Drive	Cantebury Road	Village Drive	610	26	0.167	1762.2	192.0	181.5	10.6	88.1
Heritage Road	Cantebury Road	Village Drive	619	26	0.167	1788.2	194.9	184.1	10.7	89.4
Heritage Lane	Heritage Road	Cantebury Road	637	26	0.167	1840.2	200.5	189.5	11.0	92.0
Village Drive	Cantebury Road	Village Drive South	370	26	0.167	1068.9	116.5	110.1	6.4	53.4
Windsor Circle	Windsor Drive	Windsor Drive	1403	21	0.167	3273.7	356.7	337.1	19.6	163.7
Windsor Drive	Windsor Drive	NW Circle	42	62	0.167	289.3	31.5	29.8	1.7	14.5
Windsor Drive	Windsor Drive	NE Circle	45	60	0.167	301.0	32.7	30.9	1.8	15.1
Victorian Drive	Fourth Street	Fourth Street	2717	21	0.167	6339.7	690.8	652.8	38.0	317.0
Windsor Court	Windsor Drive	Dead End	448	21	0.167	1045.3	113.9	107.6	6.3	52.3
Windsor Drive	Windsor Circle	Windsor Court	228	21	0.167	532.0	58.0	54.8	3.2	26.6
Windsor Court	Windsor Drive	Intersection	78	42	0.167	364.0	39.7			
TOTALS						37,768.1	4,115.4	41,883.5	224.2	1,870.2

SUMMARY OF ASPHALT QUANTITIES FOR WEST QUINCY										
Street or Intersection	From	To	Length	Width	Milling		** HMA Commercial Grade Class A	*Aggregate for Bituminous Surface Course	*Asphalt Cement (PG 64-22)	*Emulsified Asphalt (SS- 1H or CSS-1H) (Tack)
			(Feet)	(Avg) (Ft)	Depth (Ft)	(SqYds)	(Tons)	(Tons)	(Tons)	(Gallons)
West Quincy	Georgia	Elmwood Lane	525	26	0.167	1516.7	165.3	156.2	9.1	75.8
West Quincy	Elmwood Lane	Intersection	96	62	0.167	661.3	72.1	68.1	4.0	33.1
West Quincy	Elmwood Lane	Catalpa	752	38	0.167	3175.1	346.0	327.0	19.0	158.8
West Quincy	Catalpa	Intersection	87	46	0.167	444.7	48.5	45.8	2.7	22.2
West Quincy	Catalpa	College	624	24	0.167	1664.0	181.3	171.3	10.0	83.2
West Quincy	College	Intersection	74	45	0.167	370.0	40.3	38.1	2.2	18.5
West Quincy	College	Olive	512	29	0.167	1649.8	179.8	169.9	9.9	82.5
West Quincy	Olive	Intersection	57	45	0.167	285.0	31.1	29.3	1.7	14.3
West Quincy	Olive	Quincy Court	505	30	0.167	1683.3	183.4	173.3	10.1	84.2
West Quincy	Quincy Court	Intersection	45	63	0.167	315.0	34.3	32.4	1.9	15.8
West Quincy	Quincy Court	Broadway	456	30	0.167	1520.0	165.6	156.5	9.1	76.0
			Total for West Quincy			13,284.9	1,447.6	14,732.5	79.6	664.2
			Milling Total for Quincy and Countryside			51,053				
			Total for Quincy and Countryside				5563	56,616.0	303.8	2,534.5
			ADD 10% for Variations in Thickness				556			
			JOB Grand Total (TONS)				6119			

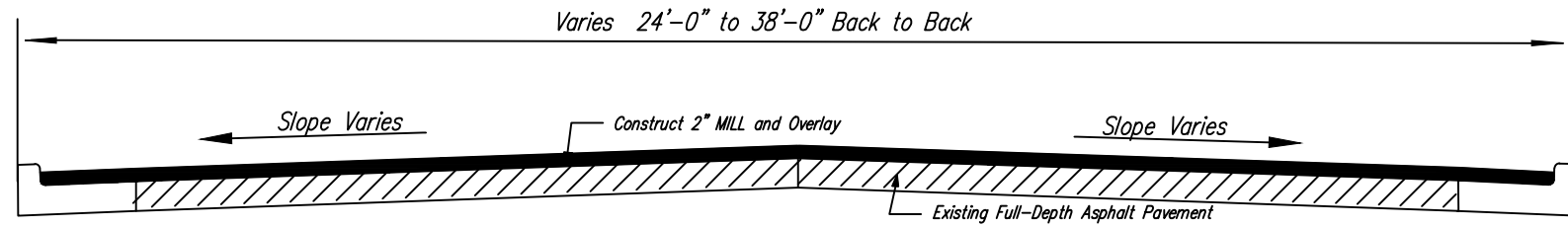
\*\* Includes 10% contingency for variations in thickness

\*For information only

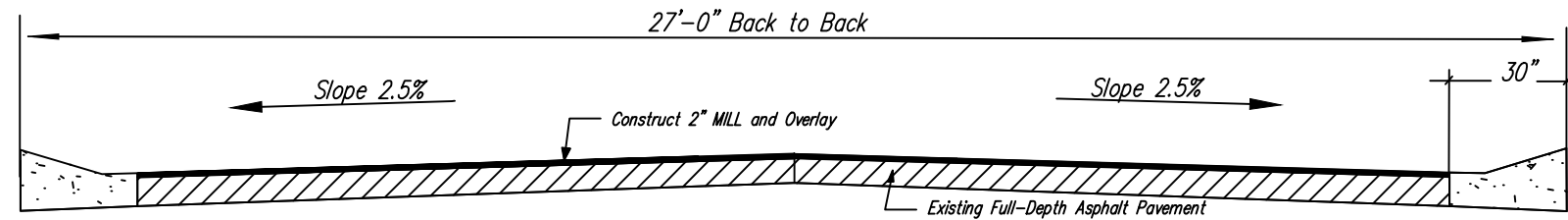
RATES OF APPLICATION		
RATE	UNIT	ITEM
146.6	Lbs/ CuFt	HMA Commercial Grade (Class A) (Aggregate and Asphalt)
5.5	%	Asphalt Cement (PG 64-22) by Weight Aggregate Dry
0.05	Gal/ Syd	Emulsified Asphalt (SS-1H) or (CSS1-H) (Tack)



No.	Revision	By	Date
GENERAL NOTES AND MATERIAL QUANTITIES			
2018 STREET IMPROVEMENTS PROGRAM CITY OF PITTSBURG, KANSAS			
Designed by: JJR		Sht. 2 of 14	



*West Quincy Street (Georgia to Pine Streets)*



*Cantebury Road (Fourth Street to Village Drive)*

*Windsor Drive (Windsor Circle to Villa Drive)*

*Village Drive (Cantebury Road to Village Road)*

*Windsor Circle (All)*

*Heritage Lane (Cantebury Road to Heritage Road)*

*Villa Drive (All)*

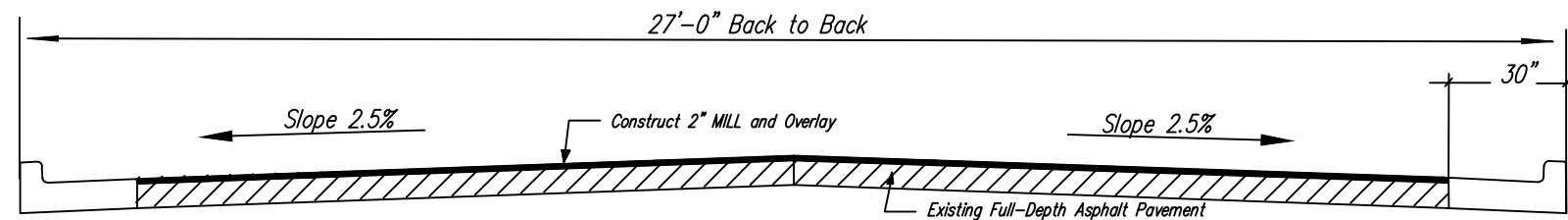
*Heritage Road (Cantebury Road to Village Drive)*

*Victorian Drive (All)*

*Countryside Drive (Cantebury Road to Village Drive)*

*Windsor Court (All)*

*Cambridge Lane (Cantebury Road to Village Drive)*



*Village Road (Fourth Street to Village Drive)*

*Village Drive (Colonial Drive to Village Road)*

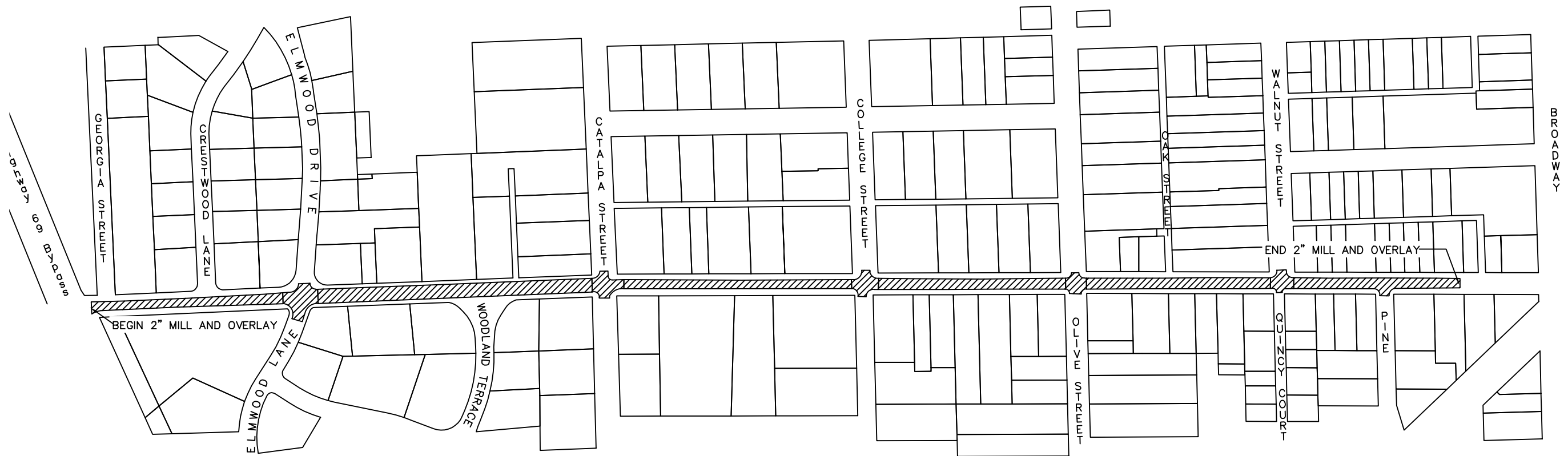
*Windsor Drive (Village Drive to Windsor Circle)*

*Colonial Drive (Village Drive to Countryside Drive)*

*Countryside Drive (Village Drive to Free King Hwy)*




No.	Revision	By	Date
TYPICAL SECTIONS			
2018 STREET IMPROVEMENTS PROGRAM CITY OF PITTSBURG, KANSAS			
Designed by: JJR		Sht. 3 of 14	



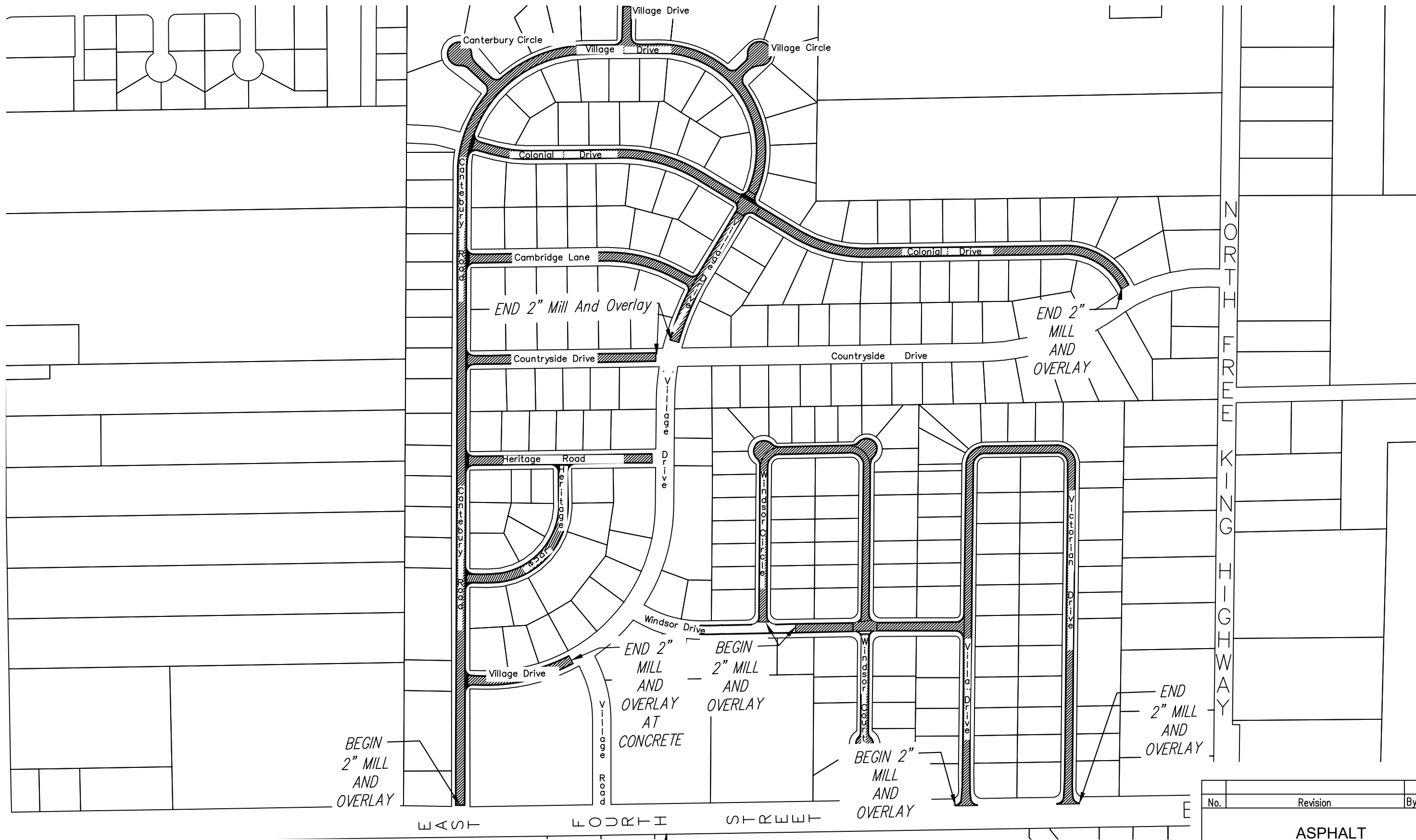
BEGIN 2" MILL AND OVERLAY

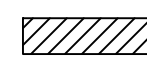
END 2" MILL AND OVERLAY

 2" Mill and Overlay Area



No.	Revision	By	Date
<b>ASPHALT MILL AND OVERLAY PLAN</b>			
2018 STREET IMPROVEMENTS PROGRAM CITY OF PITTSBURG, KANSAS			
Designed by: JJR		Sht. 4 of 14	

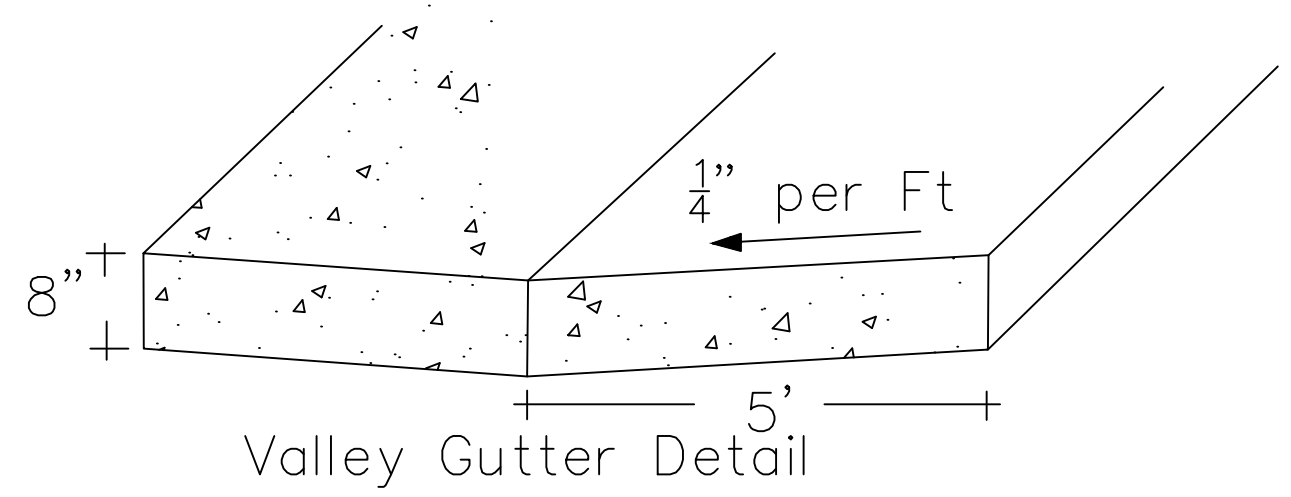
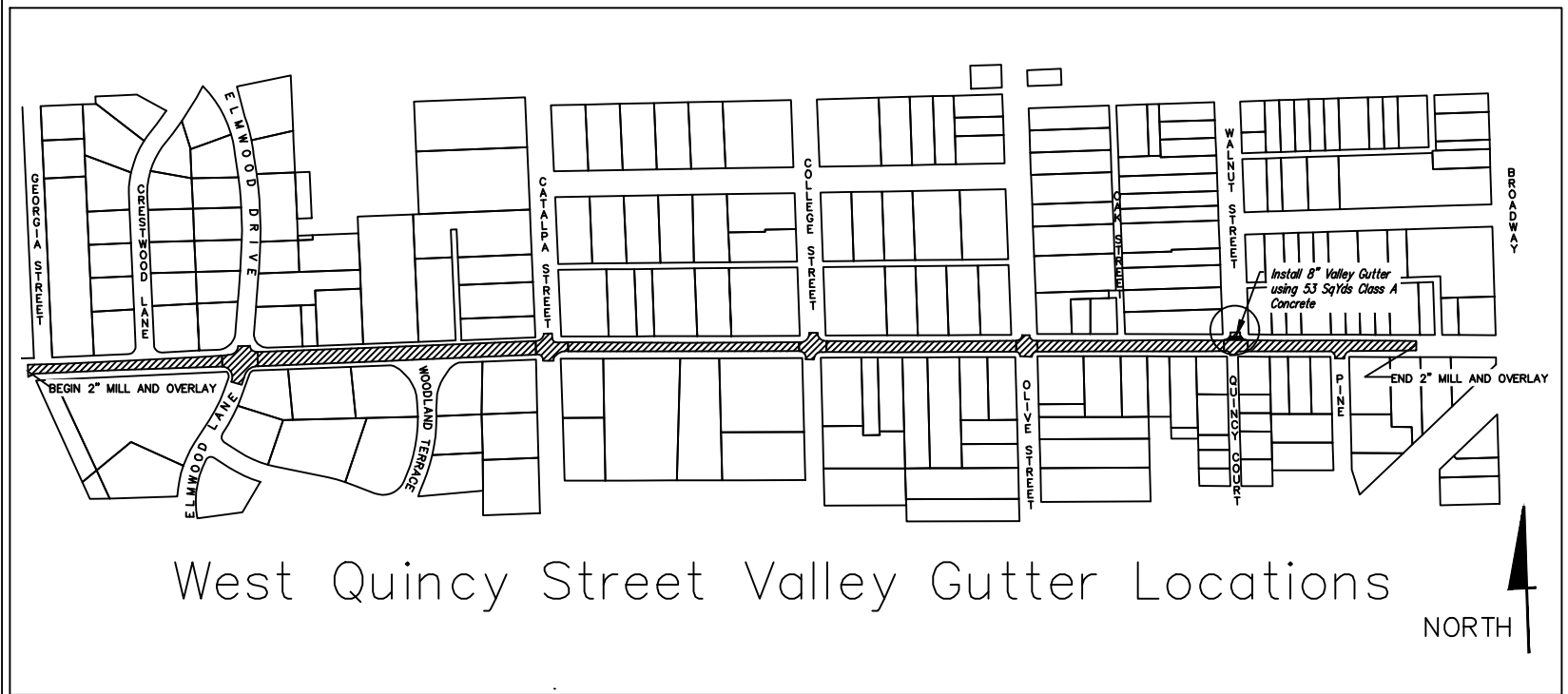


 2" Mill and Overlay Area

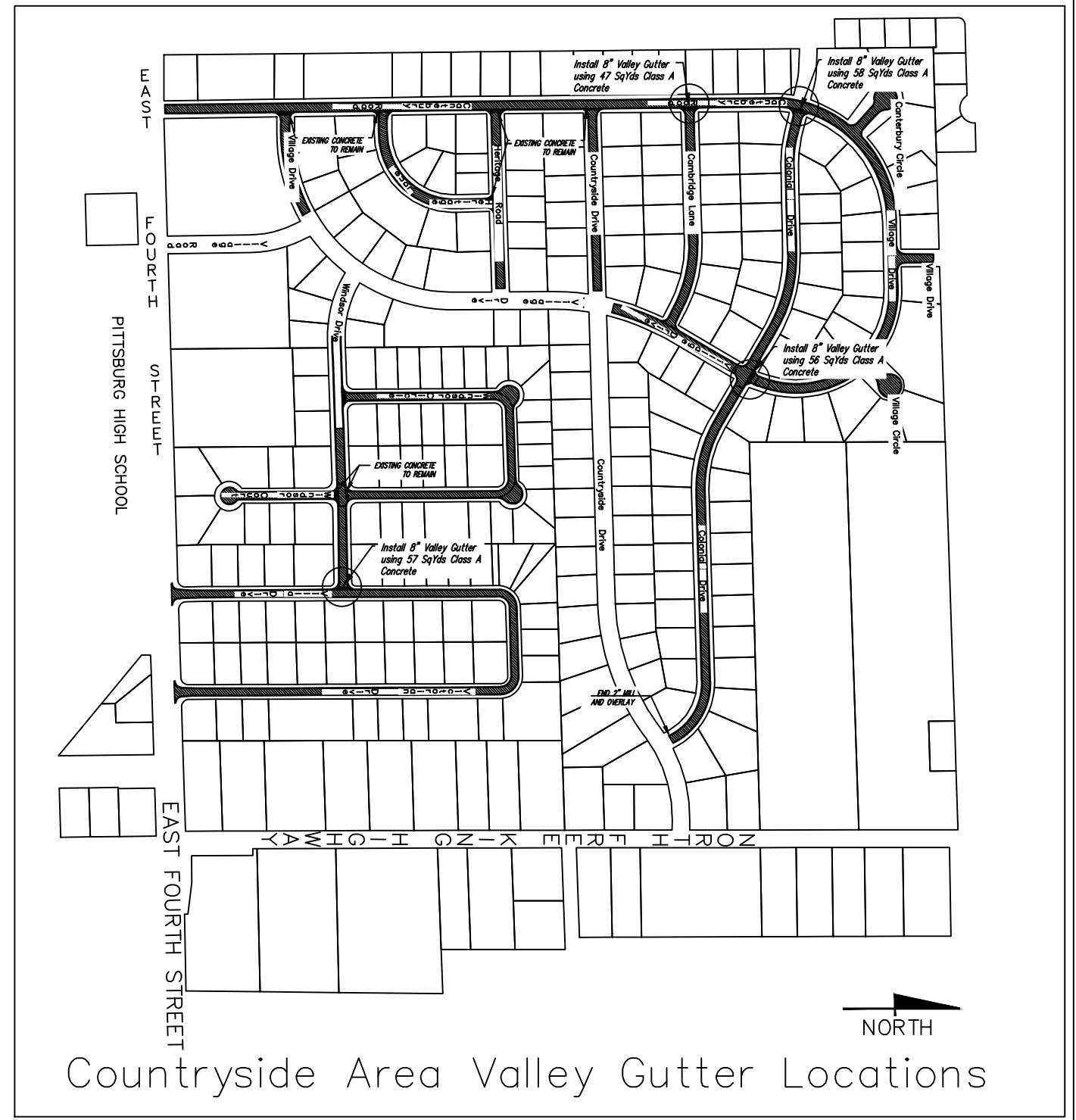


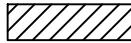
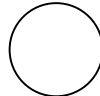
No.	Revision	By	Date
<b>ASPHALT MILL AND OVERLAY PLAN</b>			
2018 STREET IMPROVEMENTS PROGRAM CITY OF PITTSBURG, KANSAS			
Designed by: JJR		Sht. 5 of 14	





Scarify and compact area below valley gutter.  
 Use Class A High-Early Concrete Utilizing 658 lbs of Type III  
 Cement and 2% Calcium Chloride By Dry Weight of Cement.  
 Allow a Minimum of 4 hours between Concrete placement and  
 Opening to Traffic Unless Otherwise Approved by Engineer.



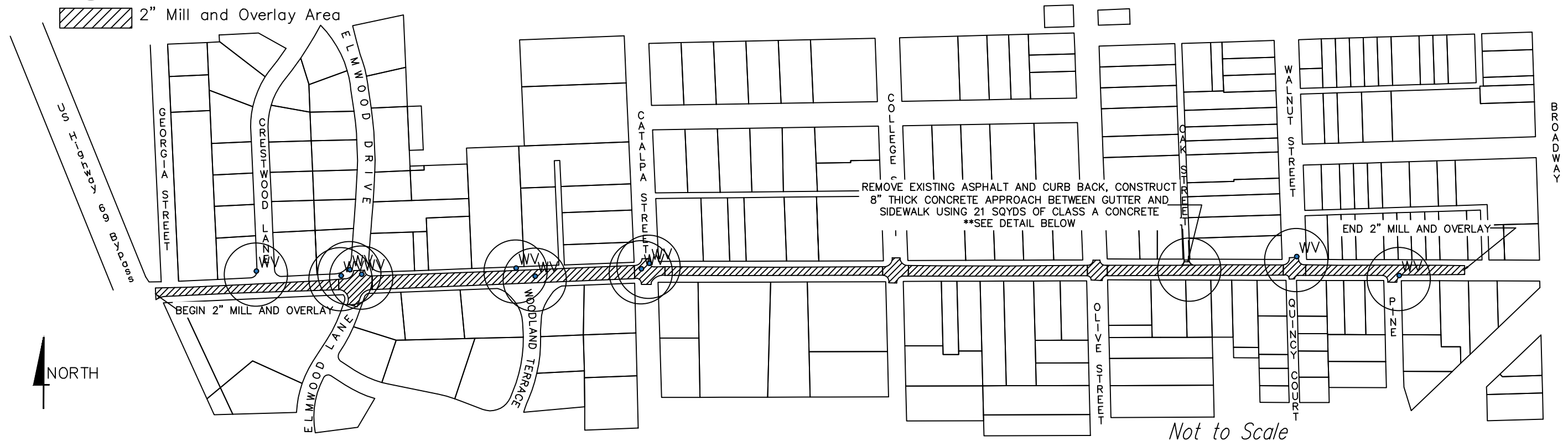
-  2" Mill and Overlay Area
-  Proposed Valley Gutter Locations



No.	Revision	By	Date
8" CONCRETE VALLEY GUTTERS			
2018 STREET IMPROVEMENTS PROGRAM CITY OF PITTSBURG, KANSAS			
Designed by: JJR		Sht. 6 of 14	

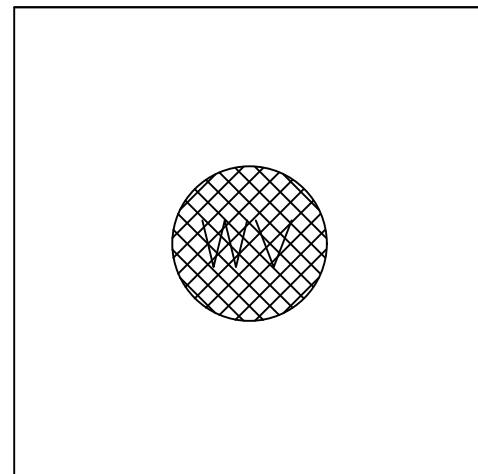
WV Water Valve Blockout Locations

2" Mill and Overlay Area

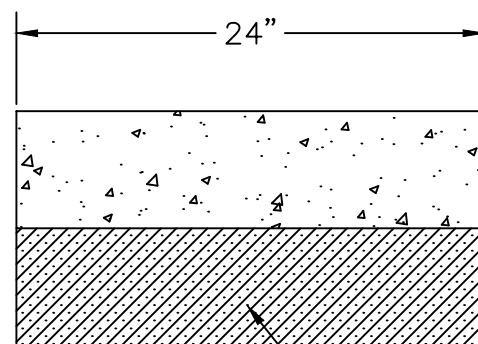


Not to Scale

### TYPICAL WATER VALVE BLOCKOUT CONCRETE 24"X24"



Use Class A High-Early Concrete Utilizing 658 lbs of Type III Cement and 2% Calcium Chloride By Dry Weight of Cement. Allow a Minimum of 4 hours between Concrete placement and Opening to Traffic Unless Otherwise Approved by Engineer.

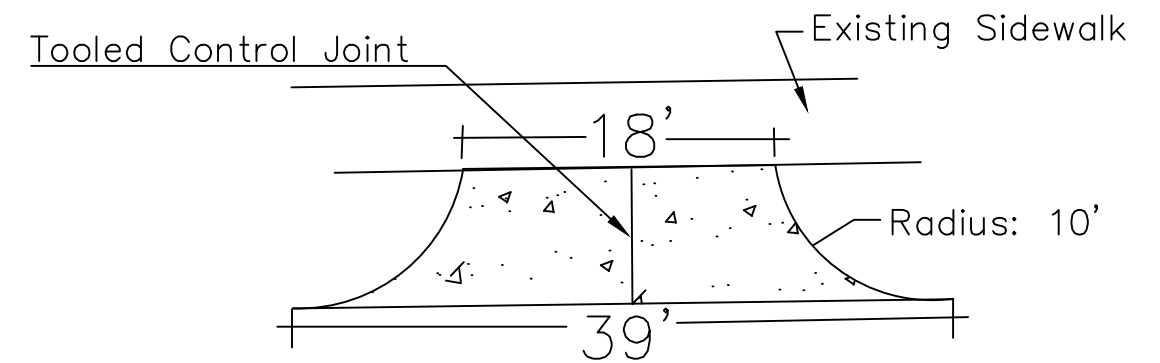


8" Min. Depth,  
Saw Cut Neat Lines

Scarify and re-compact  
sub grade to 95% of  
standard density

Not to Scale

### OAK STREET APPROACH DETAIL



Use Class A High-Early Concrete Utilizing 658 lbs of Type III Cement and 2% Calcium Chloride By Dry Weight of Cement. Allow a Minimum of 4 hours between Concrete placement and Opening to Traffic Unless Otherwise Approved by Engineer.

Not to Scale

No.	Revision	By	Date
MISC. CONCRETE WATER VALVE BLOCKOUTS/ OAK STREET APPROACH			
2018 STREET IMPROVEMENTS PROGRAM CITY OF PITTSBURG, KANSAS			
Designed by: JJR			Sht. 7 of 14

1) Design Speed: Those items delegated to temporary traffic control should be designed and installed using the posted/legal speed of the roadway prior to work starting.

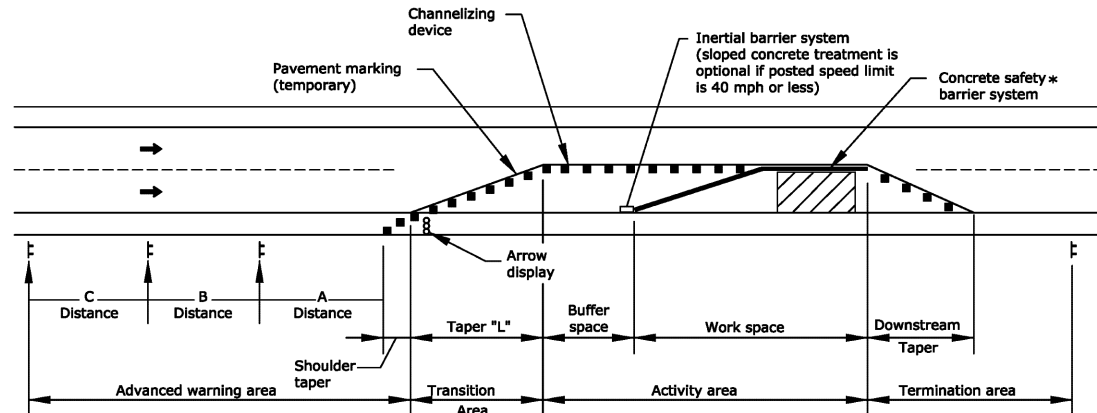
2) Minimum lane width: Lane widths shall be a minimum of 11' (measured between centerlines of pavement markings) or as shown on the plans, or as directed by the engineer. A lane width less than 11' may require restricted roadway width signing.

3) Consideration should be made to seperate pedestrian and, if needed, bicycle movements from both work site activity and vehicular traffic. Unless a reasonable safe route that does not involve crossing the roadway can be provided, pedestrians should be appropriately directed with advance signing that encourages them to cross to the opposite side of the roadway. In urban and suburban areas with high vehicular traffic volumes, these signs should be placed at intersections (rather than midblock locations) so that pedestrians are not confronted with midblock work sites that will induce them to attempt skirting the work site or making a midblock crossing.

4) When existing pedestrian facilities are disrupted, closed, or relocated, the temporary facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility.

5) When the driving surface open to traffic is milled, is a temporary surface made of loose material, or when directed by the engineer use the W8-15 (Grooved Pavement) or W8-7(Loose Gravel) a "C" distance after the W20-1 (Road Work Ahead) on mainline approaches. Signs may be used with the W8-15p motorcycle plaque as directed by the engineer. Display signs in advance of the condition as long as the condition is present.

6) Alternative temporary rumble strip options may be available. Please contact the Temporary Traffic Control Unit for more information at 785-296-0355 or 785-296-1183.



TYPICAL WORK ZONE COMPONENTS

\* When concrete barrier system is used, portable channelizing devices are not needed along the tangent barrier section.

Minimum advance warning sign spacing (in feet):

SPEED (MPH) *	A	B	C
URBAN (40 MPH OR LOWER)	100	100	100
URBAN (45 MPH OR HIGHER)	350	350	350
RURAL (55 MPH OR LOWER)	500	500	500
RURAL (60 MPH OR HIGHER)	750	750	750
EXPRESSWAY/FREEWAY	1000	1500	2640

\* Posted speed prior to work starting

The minimum spacing between signs shall be no less than 100', unless directed by the engineer.

The spacing between any signs may be increased beyond the minimum values in the table above as approved by the engineer in order to maximize visibility.

Taper Formulas:

L = WS for speeds of 45 MPH or more

L = WS<sup>2</sup>/60 for speeds of 40 MPH or less

Where: L =Minimum length of taper in feet  
S =Numerical value of posted speed prior to work starting in MPH  
W =Width in offset feet

Shifting taper=1/2 L

Shoulder taper=1/3 L

Channelizer placement:

(1) The spacing between devices in transition area (taper) should not exceed a distance in feet equal to 1/2 the posted speed limit in mph prior to work starting.

(2) The spacing between devices in the advanced warning area and the activity area should not exceed a distance in feet equal to two times the posted speed limit in mph prior to work starting.

(3) Channelizing devices shall be placed for optimum visibility, normally at right angles to the traffic flow.

(4) Place directional indicator barricades in series to direct traffic onto the new path. The arrow sign should not be visible to opposing traffic.

(5) Alternating diagonal orange and white striping must slope downward in the direction traffic is expected to pass.

Buffer Space

SPEED (MPH) *	20	25	30	35	40	45	50	55	60	65	70	75
LENGTH (ft)	115	155	200	250	305	360	425	495	570	645	730	820

\* Posted speed prior to work starting

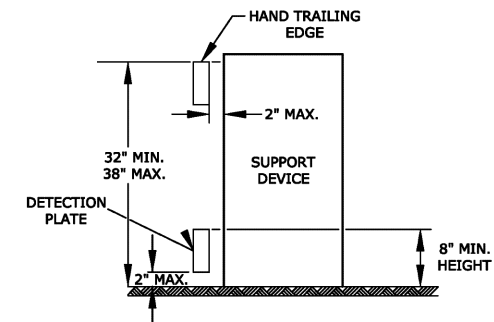
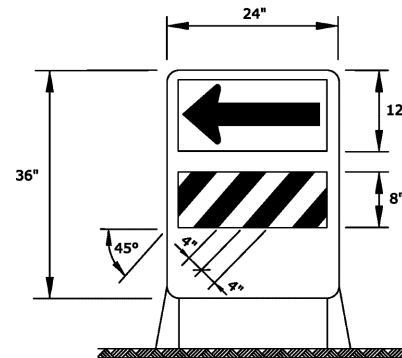
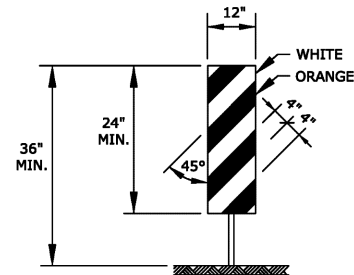
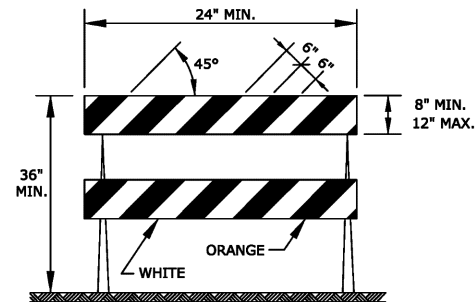
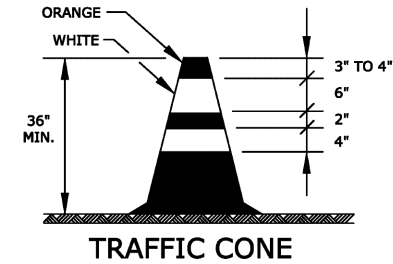
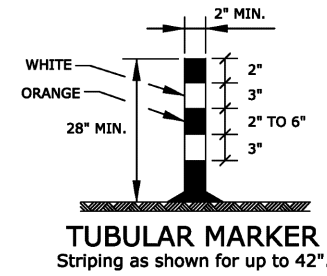
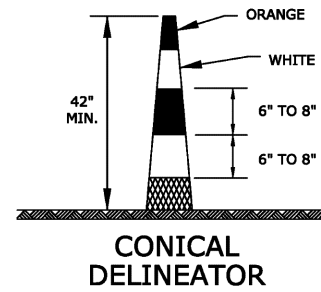
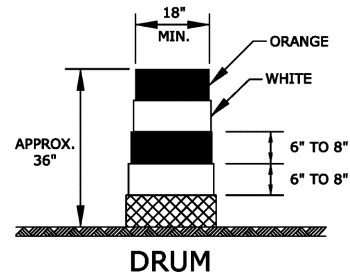
Neither work activity nor storage of equipment, vehicles, or material should occur in the buffer space. When a protection vehicle is placed in advance of the work space, only the space upstream of the vehicle constitutes the buffer space.

If temporary concrete safety barrier system is used to seperate approaching traffic from the work space, the barrier system shall be considered part of the activity area. A full lane width should be available throughout the length of the buffer space. See typical work zone components above.



No.	Revision	By	Date
TRAFFIC CONTROL GENERAL NOTES			
2018 STREET IMPROVEMENTS PROGRAM CITY OF PITTSBURG, KANSAS			
Designed by: JJR		Sht. 8 of 14	





**TYPE 2 BARRICADE**  
For rails less than 36" long, 4" wide stripes may be used. All stripes shall slope downward to the traffic side for channelization.

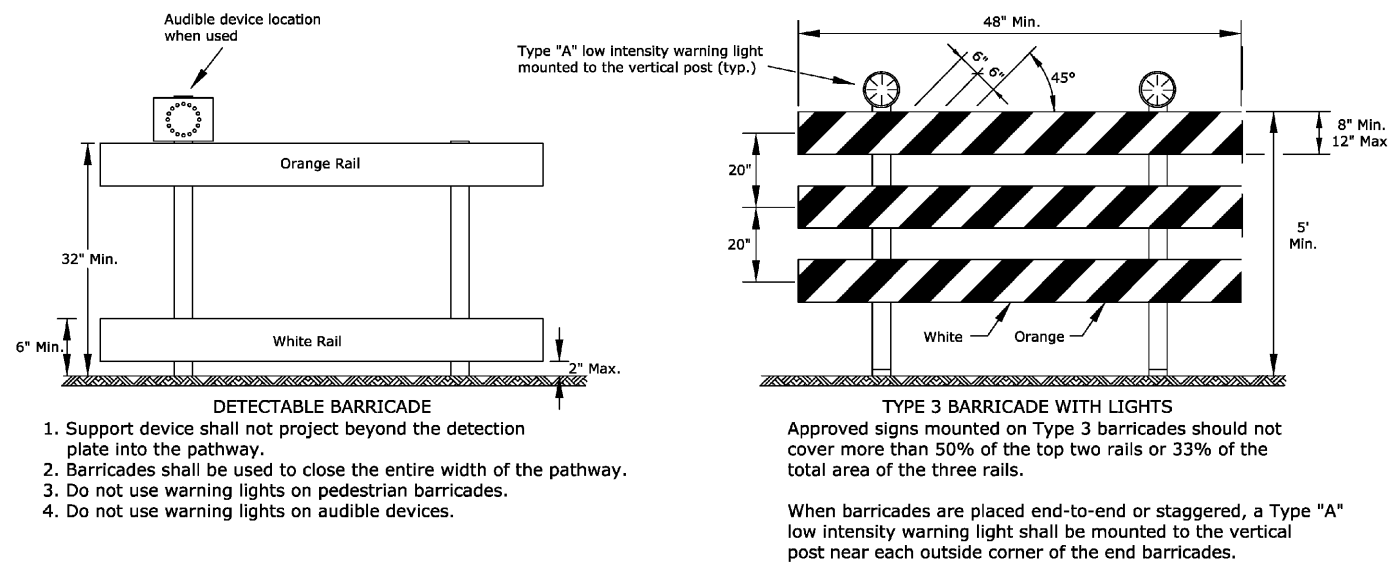
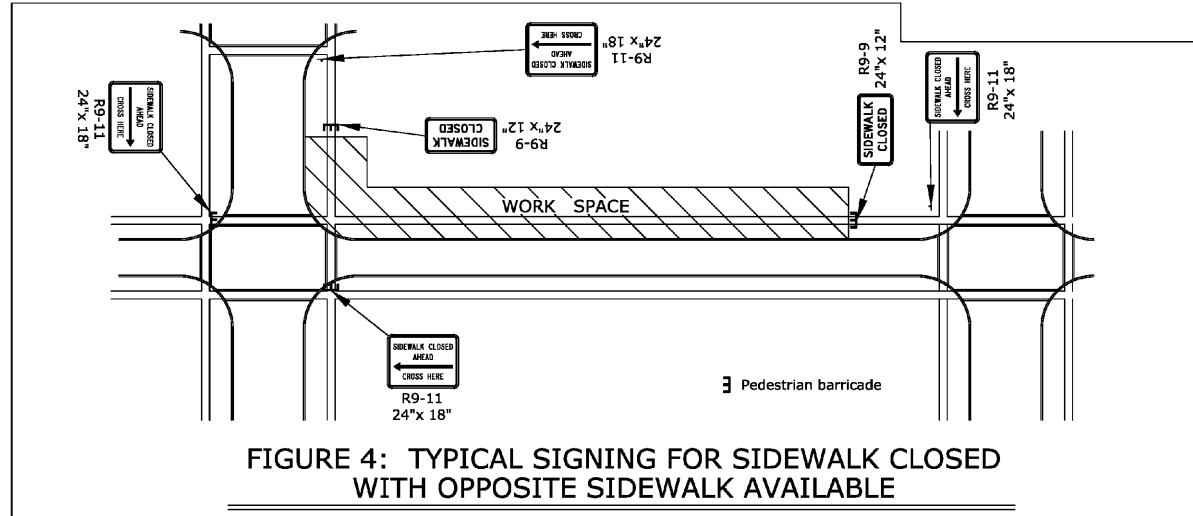
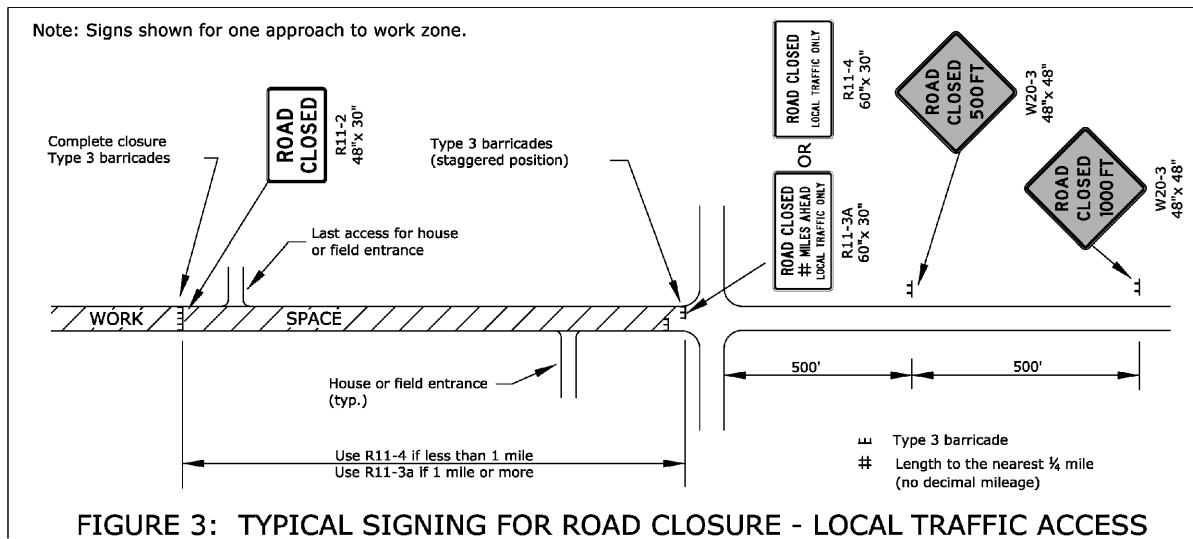
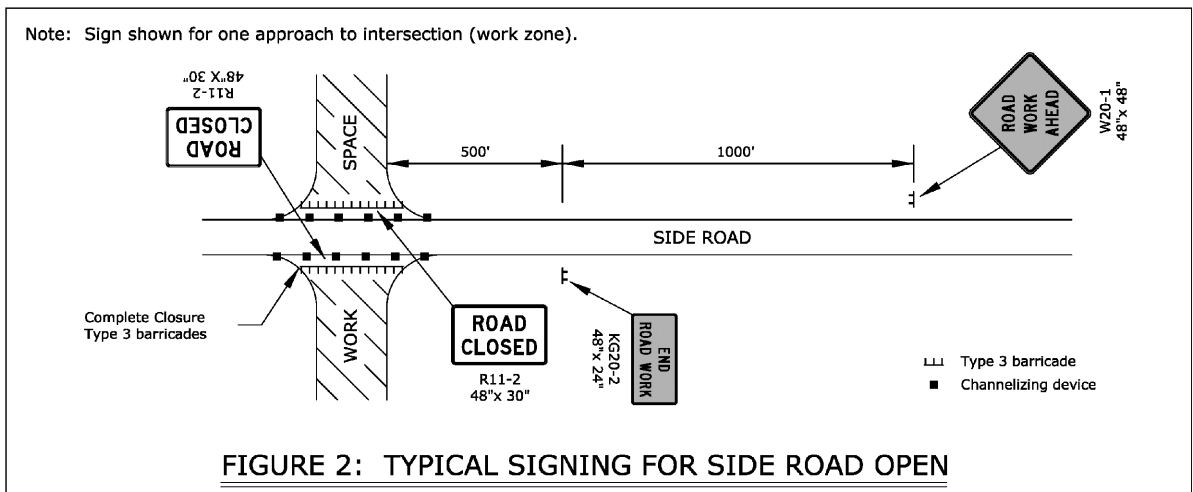
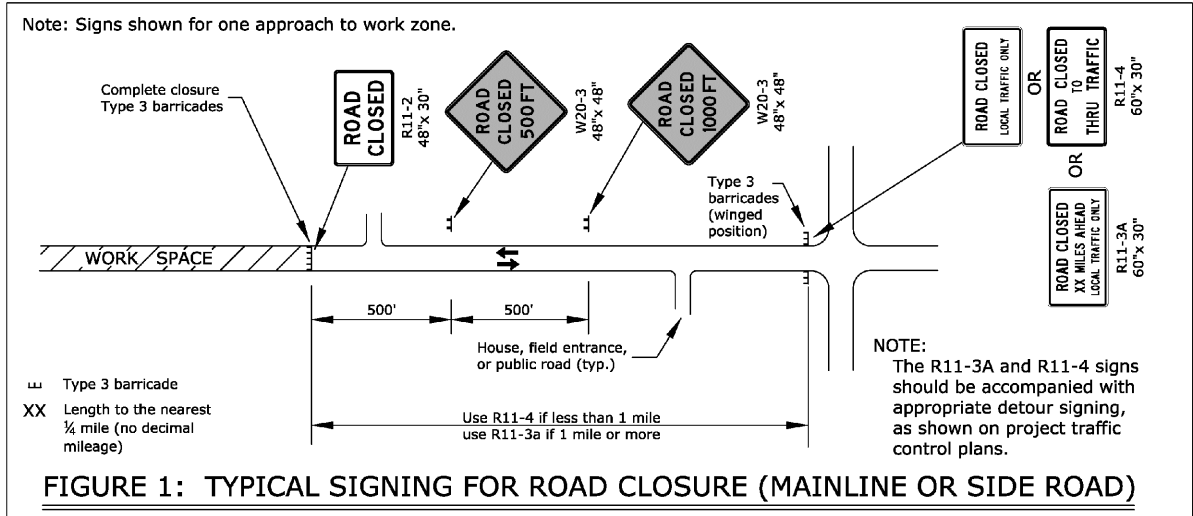
**VERTICAL PANEL**  
The stripes shall slope downward to the traffic side for channelization.

**DIRECTION INDICATOR BARRICADE**  
The stripes shall slope downward in the direction traffic is to pass. The direction indicator barricade shall be used in series to direct the motorist into the intended lane of travel.

**PEDESTRIAN CHANNELIZER**  
1. Support device shall not project beyond the detection plate into the pathway.  
2. Hand trailing edges and detection plates are optional for continuous walls.  
3. Interconnect pedestrian channelizers to prevent displacement and to provide continuous guidance through or around work.  
4. Alternate pathways shall be firm, stable, and slip resistant.  
5. Treat height differentials > 1/2" in the surfaces of alternate paths with a firm, stable, and slip resistant temporary ramp having a slope of 12:1 or flatter and having a width equal to the alternate path.  
6. Use alternating orange/white on interconnected devices.

ITEM		LOCATION									
		Cross-overs	Shoofly Divisions	Tangents	Tapers	Ramps	Head to Head	Object Identifier	Lead-in Devices	Gores	
PORTABLE	Drums	Yes	Yes	Yes	Yes	Yes	(1)	Yes	Yes	Yes	
	Conical Delineators	Yes	Yes	Yes	Yes	Yes	(1)	Yes	Yes	Yes	
	Vertical Panels	(2)	(2)	(2)	(2)	(2)	(1,2)	YES	(2)	(2)	
	Direction Indicator Barricade	NO	NO	NO	Yes	NO	NO	NO	NO	NO	
	Type 2 Barricade	(2)	(2)	(2)	(2)	NO	NO	Yes	NO	NO	
	Traffic Cones	NO	NO	(4)	(4)	(4)	NO	(4)	(4)	(4)	
FIXED	Tubular Markers	(3)	(3)	(3)	NO	(3)	Yes	NO	Yes	Yes	
	Vertical Panels	(3)	(3)	(3)	(3)	(3)	(3)	Yes	(2,3)	(2)	

- (1) Not allowed on centerline delineation along freeways or expressways.  
(2) The stripes shall slope downward to the traffic side for channelization.  
(3) May be used upon the approval of the engineer.  
(4) Daytime operations only.



#### ROAD CLOSED GENERAL NOTES

As shown in Figure 1, at the point where thru traffic must detour and local traffic can proceed to the location where the roadway is completely closed, the R11-3a (ROAD CLOSED # MILES AHEAD LOCAL TRAFFIC ONLY) or R11-4 (ROAD CLOSED LOCAL TRAFFIC ONLY or ROAD CLOSED TO THRU TRAFFIC) sign shall be used with Type 3 barricades (winged position), placed on the shoulders of roadway.

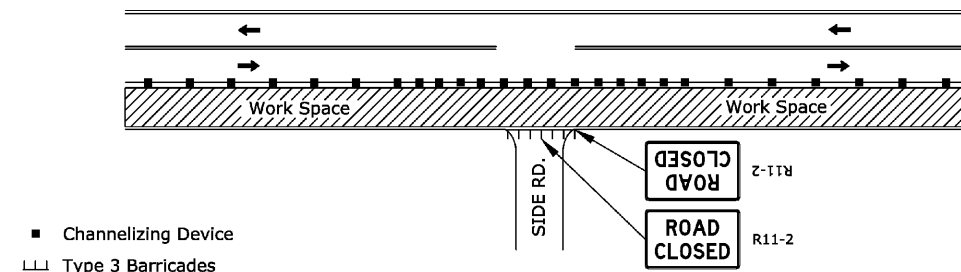
As shown in Figure 3, when local traffic must be allowed access into the work zone, Type 3 barricades shall be longitudinally staggered to maintain the appearance of a closed roadway. A second line of end-to-end Type 3 barricades shall be placed just beyond the last access point in the work zone, to completely close the roadway.

The R11-4 (ROAD CLOSED TO THRU TRAFFIC or ROAD CLOSED LOCAL TRAFFIC ONLY) sign shall be used when the distance to the point of complete closure of the roadway is less than 1 mile.

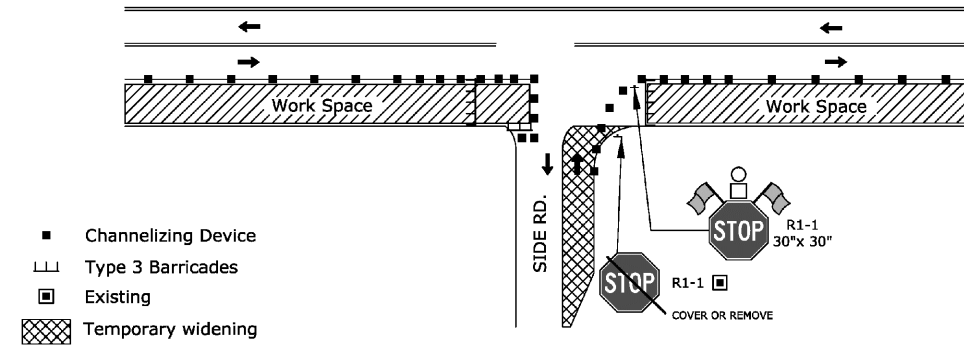
The R11-3a (ROAD CLOSED # MILES AHEAD LOCAL TRAFFIC ONLY) sign shall be used when the distance to the point of complete closure of the roadway is 1 mile or greater.

The words "BRIDGE OUT" (or BRIDGE CLOSED) may be substituted for the words "ROAD CLOSED" on the R11-3a or R11-4 sign where applicable.

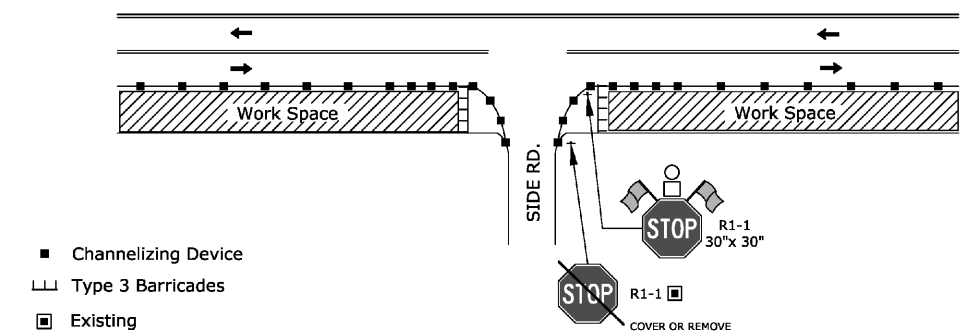
No.	Revision	By	Date
TRAFFIC CONTROL CLOSURES			
Countryside Mill and Overlay			
2018 STREET IMPROVEMENTS PROGRAM			
CITY OF PITTSBURG, KANSAS			
Designed by: JJR		Sht. 10 of 14	



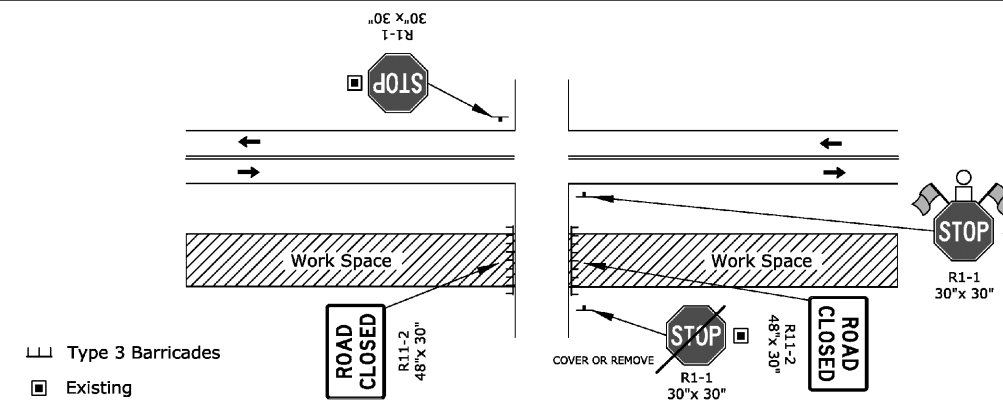
**FIGURE 1: SIDE ROAD OR ENTRANCE CLOSED THROUGH WORK AREA**



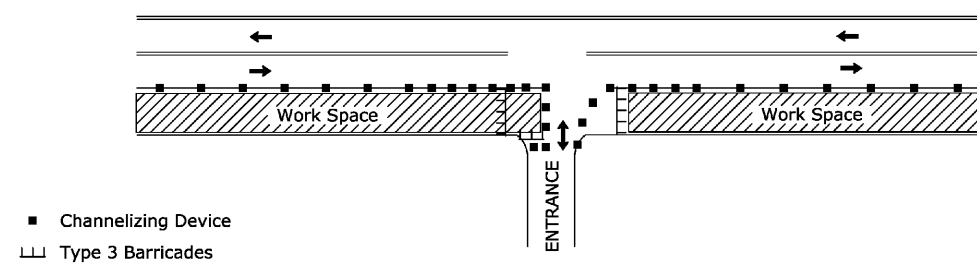
**FIGURE 4: SIDE ROAD OR ENTRANCE CONSTRUCTED HALF AT A TIME: TWO WAY TRAFFIC REQUIRED**



**FIGURE 2: SIDE ROAD OR ENTRANCE OPEN THROUGH WORK AREA**



**FIGURE 5: SIDE ROAD OPEN THROUGH WORK AREA ON DIVIDED ROADWAY**



**FIGURE 3: LOW VOLUME ENTRANCE CONSTRUCTED HALF AT A TIME**

Note: Consider large vehicles making right turns into and out of entrance and use figure 4 as needed

No.	Revision	By	Date
TRAFFIC CONTROL ACCESS THROUGH THE WORK AREA			
2018 STREET IMPROVEMENTS PROGRAM CITY OF PITTSBURG, KANSAS			
Designed by: JJR			Sht. 11 of 14

SIGN LAYOUT INFORMATION

END ROAD WORK

KG20-2

STD. SIZE EXPWY/FREEWAY

6" C

48"x 24"

WAIT FOR PILOT CAR

KG20-5

STD. SIZE EXPWY/FREEWAY

6" C

48"x 24"

WORK ZONE

KM4-20

STD. SIZE EXPWY/FREEWAY

3" C

24"x 6"


6" C

48"x 12"

NEXT X MILES

W7-3a

Mileage to be determined by the engineer.



W8-17

STD. SIZE EXPWY/FREEWAY

48"x 48"

SHOULDER DROP-OFF

W8-17P (OPTIONAL)

STD. SIZE EXPWY/FREEWAY

30"x 24"

GROOVED PAVEMENT

W8-15

STD. SIZE EXPWY/FREEWAY

8" D

48"x 48"


LOOSE GRAVEL

W8-7

STD. SIZE EXPWY/FREEWAY

8" D

48"x 48"



W8-15p

STD. SIZE EXPWY/FREEWAY

30"x 24"

UNEVEN LANES

W8-11

STD. SIZE EXPWY/FREEWAY

8" D

48"x 48"

NB US-75 CLOSED FOLLOW DETOUR

SP-01 (SPECIAL SIGN)

STD. SIZE EXPWY/FREEWAY

6" C

10" D

US-75 CLOSED NORTH OF Topeka FOLLOW DETOUR

SP-02 (SPECIAL SIGN)

STD. SIZE EXPWY/FREEWAY

UPPERCASE: 6" C

UPPERCASE: 10" D

LOWERCASE: 4.5" C

LOWERCASE: 8" D

ALL CITY NAMES AND STREET NAMES ON SPECIAL SIGNS AND DESTINATION SIGNS MUST HAVE UPPER AND LOWER CASE LETTERS.

Rural

- Ground-mounted signs shall be mounted at a minimum height of 5' measured from the bottom of sign to the near edge of the pavement.
- Large signs having an area exceeding 50 square feet installed on multiple breakaway posts shall be mounted a minimum of 7' above the ground.
- The height of the secondary sign mounted below another sign may be 4' measured from the bottom of the sign to the near edge of the pavement. Signs shall not overlap each other.

Urban

- Signs shall be mounted at a minimum height of 7' measured from the bottom of sign to the near edge of the pavement.
- Neither portable nor permanent sign supports should be located on sidewalks or areas designated for pedestrian or bicycle traffic.
- Signs mounted lower than 7' should not project more than 4" into pedestrian facilities.
- The height from of the secondary sign mounted below another sign may be 6' measured from the bottom of sign to the near edge of the pavement. Signs shall not overlap each other.
- Large signs having an area exceeding 50 square feet installed on multiple breakaway posts shall be mounted a minimum of 7' above the ground.
- \* 6) Pedestrian detour signing shall be a minimum of 2' measured from the top of the pedestrian pathway to the bottom of the sign and shall not protrude into the walkway nor shall it project beyond the back of curb.

When the sign width is equal to or greater than 9', three or more wood posts may be used with a minimum of 4' between the centerline of each post. All signs less than 9' in width shall use a maximum of two wood posts.

In the case of hitting rock when driving posts

- Shift the sign location. Do not violate minimum sign spacing.
- With the engineer's approval, use acceptable alternative sign stands.

KI-104a

KI-105a

SIGN NUMBER	GIVE EM A BRAKE
WIDTH x HEIGHT	4'-0" x 4'-0"
BORDER WIDTH	1.0"
CORNER RADIUS	4.0"
STRIPE WIDTH	3.0"
MOUNTING	GROUND
BACKGROUND	TYPE: NON-REFLECTIVE COLOR: BLACK
LEGEND/BORDER	TYPE: REFLECTIVE COLOR: WHITE
LEGEND FONT	DUTCH 801 ROMAN SWC 25 DEGREE SLANT
STRIPES	TYPE: REFLECTIVE COLOR: ORANGE

SIGN NUMBER	FINES DOUBLE
WIDTH x HEIGHT	4'-0" x 3'-0"
BORDER WIDTH	0.9"
CORNER RADIUS	3.0"
MOUNTING	GROUND
BACKGROUND	TYPE: REFLECTIVE COLOR: WHITE
LEGEND/BORDER	TYPE: NON-REFLECTIVE COLOR: BLACK

DIMENSIONS IN INCHES

SPACINGS ARE TO START OF NEXT LETTER

Y FONT	LETTER SPACINGS																HT LEN
23.0 D	9.7	6.4	3.2	7.3	6.4	5.4	9.7										8.0
11.0 D	3.9	6.9	7.5	7.3	7.3	6.4	4.9	3.9									28.6
4.0 D	3.1	1.6	2.7	3.2	4.3	3.8	3.6	2.8	3.2	3.4	3.8	3.6	3.2	2.7	3.1		40.3
																	4.0
																	41.8

Notes:

Typically, there are two sets of informational signs installed per project: one for each direction of traffic.

Install signs a minimum of 500' in advance of the road work ahead sign. The engineer may designate a more appropriate location if conditions dictate.

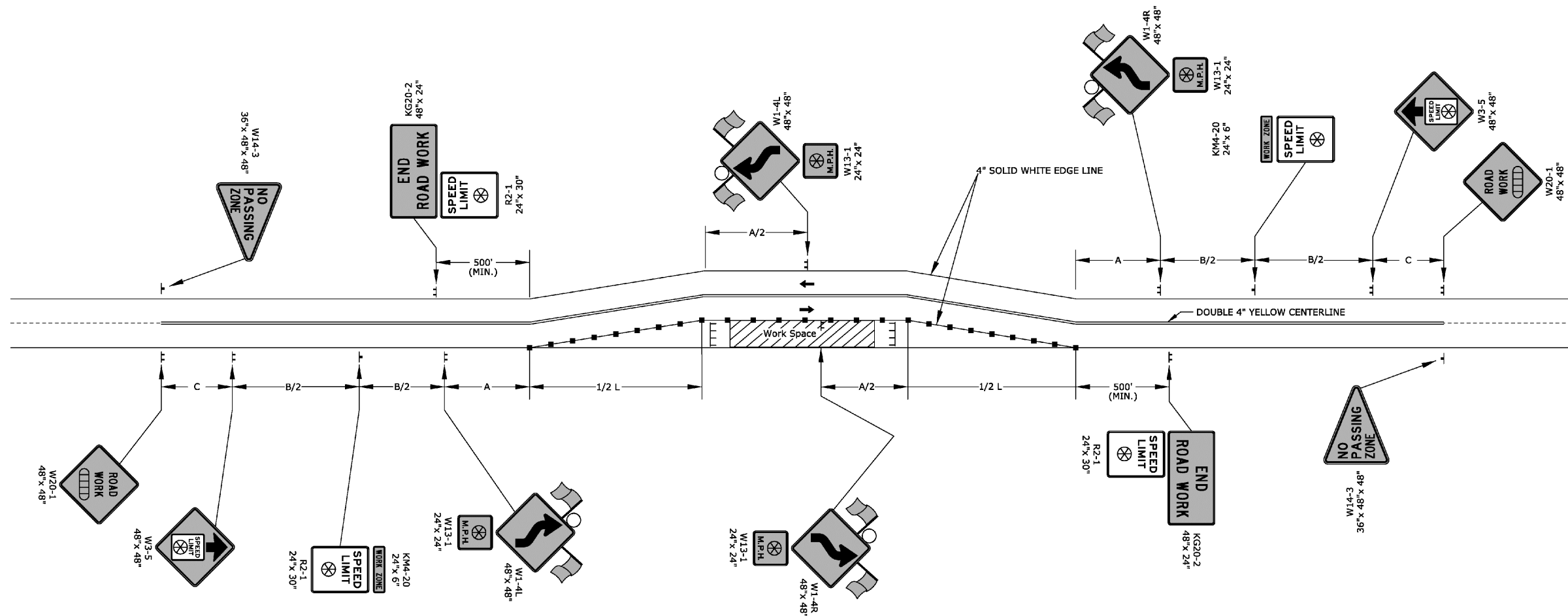
The informational signs are not to interfere with the traffic control signs for the project.

City of  
Pittsburg  
Forward Together.

No.	Revision	By	Date
TRAFFIC CONTROL WORK ZONE SIGNS			
2018 STREET IMPROVEMENTS PROGRAM CITY OF PITTSBURG, KANSAS			
Designed by: JJR		Sht. 12 of 14	



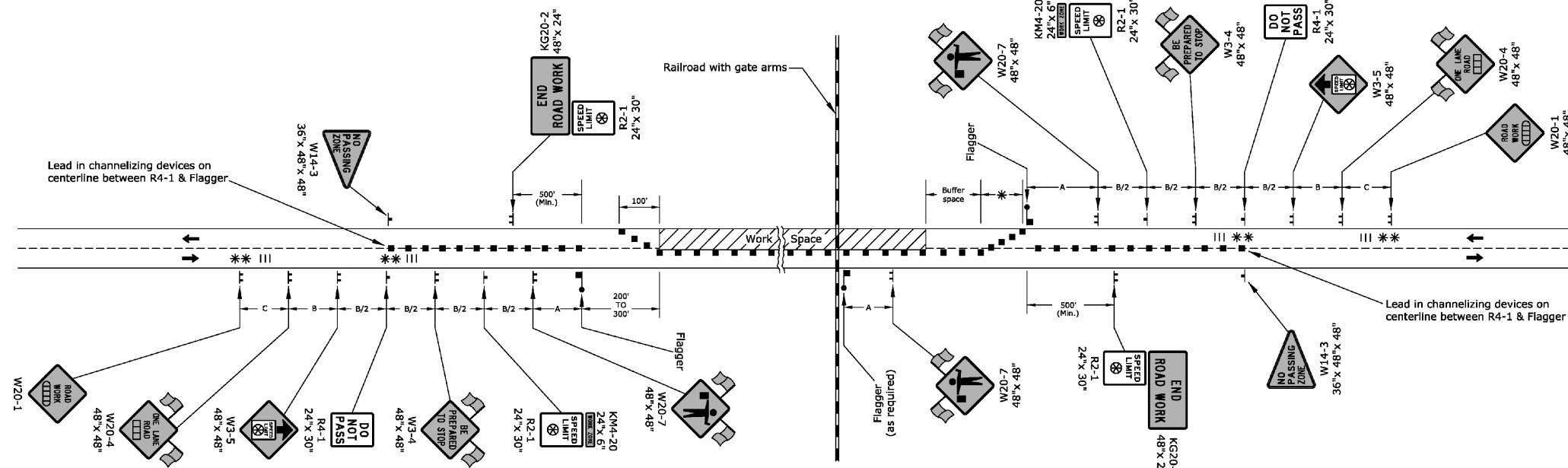
One W24-1 may be used per approach where the tangent distance between two reverse curves is less than 600 ft. If used, use in place of the first W1-4 and eliminate the second.



- Channelizing device
- ||| Type 3 barricades
- ⏏ Ahead, 1500 ft, or 1 mile
- ⊗ Speed to be determined by the Engineer
- Type "A" low intensity warning light

No.	Revision	By Date
<p align="center"><b>TRAFFIC CONTROL LANE CLOSURE DETAIL</b></p>		
<p align="center">2018 STREET IMPROVEMENTS PROGRAM CITY OF PITTSBURG, KANSAS</p>		
Designed by: JJR		Sht. 13 of 14

FLAGGER



USE TE731 FOR FLAGGER OR PILOT CAR ON ROADWAYS WITH CONCRETE SHOULDERS GREATER THAN 8 FT.

Notes:

Trucks hauling material to the project should STOP at the Flagger. After stopping, upon approval of the Engineer, trucks may be allowed to move around the Flagger.

Place a Flagger at all highway and major collector intersections and at-grade railroad intersections with lights and gates in the work space to control traffic crossing the tracks to the left of the gate arm. The need for a Flagger at minor side road intersections shall be determined by the Engineer. Place a W20-7 (Flagger symbol) sign on each side road that is controlled by a Flagger.

Existing signs shall not be covered or removed between Flagger stations.

Temporary rumble strips may be used in lieu of lead in channelizing devices when the roadway is less than or equal to 30' including paved shoulders. When extenuating circumstances exist, the Area Engineer may elect to eliminate both the lead in channelizers and the rumble strips.

\* Minimum six (6) channelizers spaced at 20' intervals.

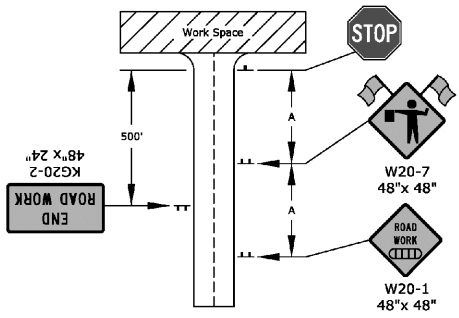
\*\* Optional rumble strips may be placed: One set between the W20-1 and W20-4, and one set between the R4-1 and W3-4, on each approach.

△ Not required on substantial maintenance projects (1R).

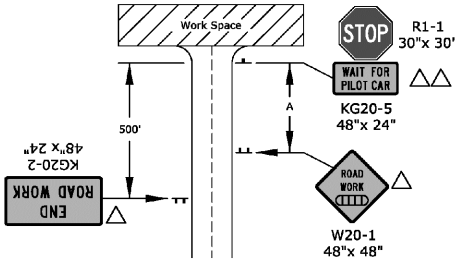
△△ The KG20-5 (WAIT FOR PILOT CAR) sign shall be mounted on an approved portable support and not attached to the existing stop sign post.

The KG20-5 sign shall be placed immediately in front of the existing stop sign, a minimum of 6" below the bottom of the stop sign. The sign should be removed or covered when there is no pilot car.

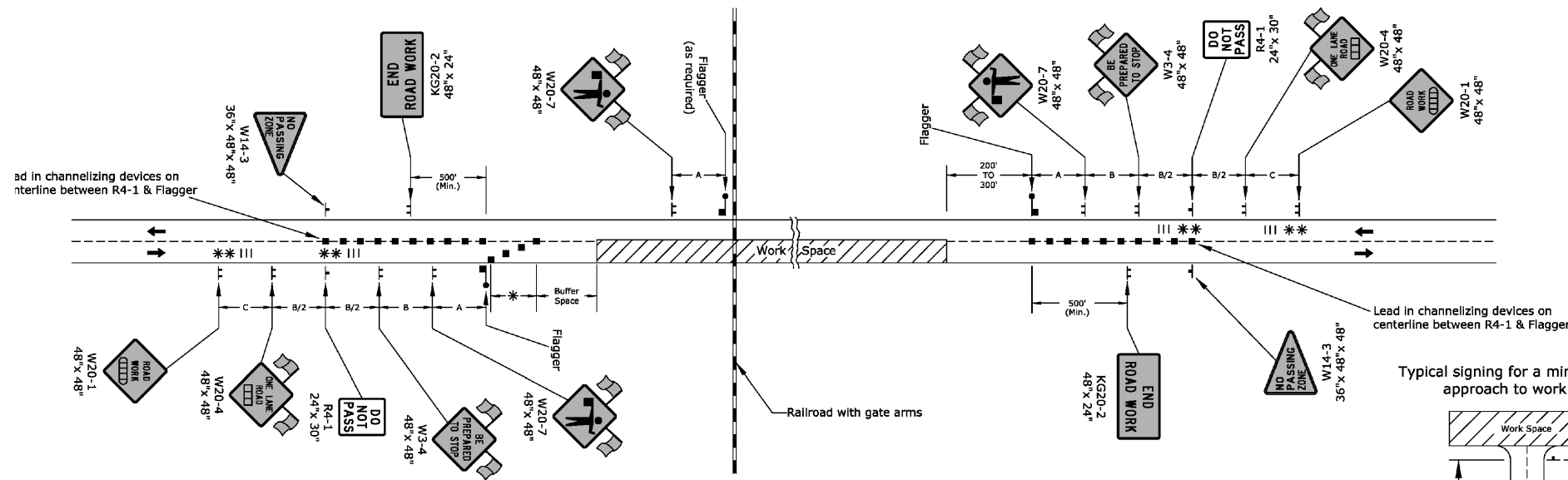
Typical signing for highway or major collector approach to work space



Typical signing for a minor side road approach to work space



FLAGGER AND PILOT CAR



- Channelizing device
- Ahead, 1500 ft, or 1 mile
- Ahead, 1000 ft, 1500 ft, or 1/2 mile
- ⊗ Speed to be determined by the Engineer
- Type "A" low intensity warning light
- ||| Temporary portable rumble strips

No.	Revision	By	Date
TRAFFIC CONTROL FLAGGER AND PILOT CAR DETAIL			
2018 STREET IMPROVEMENTS PROGRAM CITY OF PITTSBURG, KANSAS			
Designed by: JJR		Sht. 14 of 14	