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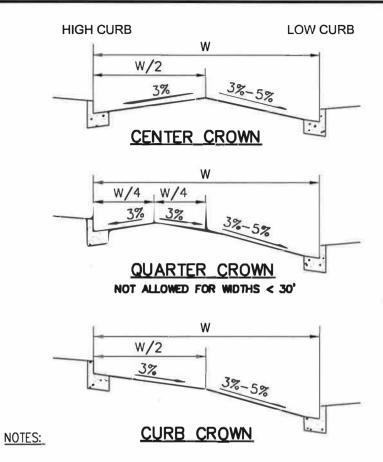
<u>CITY OF SPOKANE STANDARD PLANS – SECTION W</u>

X-### = Revised Standard Plan
***X-### = New Standard Plan

Back to Main TOC

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W-102	Roadway Excavation – Payment Limits	
W-103	Alley Section	4/12
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W-105	Alley Return – Separated Sidewalk	4/12
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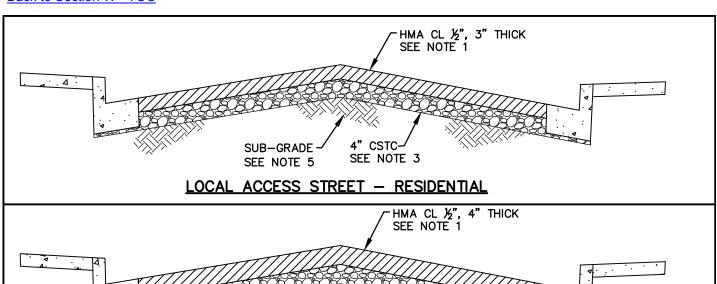
WIDTH	HIGH CURB TO		RB TO C			TO LOW ELEV DIFF	
(FT)	1/4 CROWN: ELEV DIFF (FT)	CF CTR	ROWN TYI	PE CURB	CF CTR	ROWN TYP	E CURB
30	-0.275	-0.050	-0.50	-0.950	-0.300	-0.750	-1.200
32	-0.260	-0.020	-0.50	-0.980	-0.320	-0.800	-1.280
36	-0.230	+0.040	-0.50	-1.040	-0.360	-0.900	-1.440
40	-0.200	+0.100	-0.50	-1.100	-0.400	-1.000	-1.600
44	-0.170	+0.160	-0.50	-1.160	-0.440	-1.100	-1.760
48	-0.140	+0.220	-0.50	-1.220	-0.480	-1.200	-1.920
54	-0.095	+0.310	-0.50	-1.310	-0.540	-1.350	-2.160
58	-0.065	+0.370	-0.50	-1.370	-0.580	-1.450	-2.320
60	-0.050	+0.400	-0.50	-1.400	-0.600	-1.500	-2.400
70	-0.025	+0.550	-0.50	-1.550	-0.700	-1.750	-2.800
75	-0.0625	+0.625	-0.50	-1.625	-0.75	-1.875	-3.000



- 1. SEE STD PLAN W-101A FOR PAVEMENT SECTION REQ'MTS.
- 2. SEE STD PLAN F-102B FOR SIDEWALK SECTION REQ'MTS.
- 3. THE CURB/GUTTER SECTION SHALL BE ROTATED TO MATCH THE ROADWAY TRANSVERSE SLOPE. SEE STD PLAN F-106.
- 4. TABLE VALUES MAY BE INTERPOLATED FOR ADD'NL ROADWAY WIDTHS.
- 5. TABLE VALUES REPRESENT A 0.5 FT CURB EXPOSURE.

APPROVED BY	ADOPTED: 12/19
	REVISED: 01/20
1-34. 2-	SUPERSEDES: 1/20
BIRECTUR, ENGINEERING SERVICES PERRY M. TAYLOR, P.E.	CHECKED BY:J
	SCALE:N
PRINCIPAL ENGINEER, DESIGN GARY S. NELSON, P.E.	DWG/REV. BY: DGB/S

DOPTED: 12/1998 IVISED: 01/2009 UPERSEDES: 1/2008	ROADWAY CROWNS	
HECKED BY:JAG CALE:NTS VG/REV. BY: <u>DGB/SRM</u>	0.T. 0. 0.0	STANDARD PLAN No. W -101



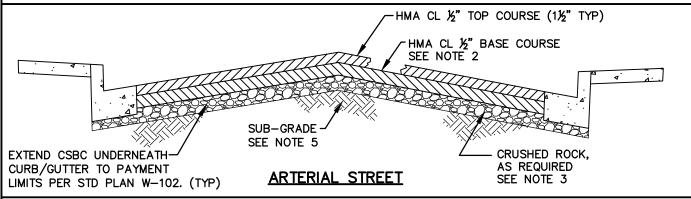
<u>LOCAL ACCESS STREET — COMMERCIAL</u>

4" CSTC-

SEE NOTE 3

SUB-GRADE

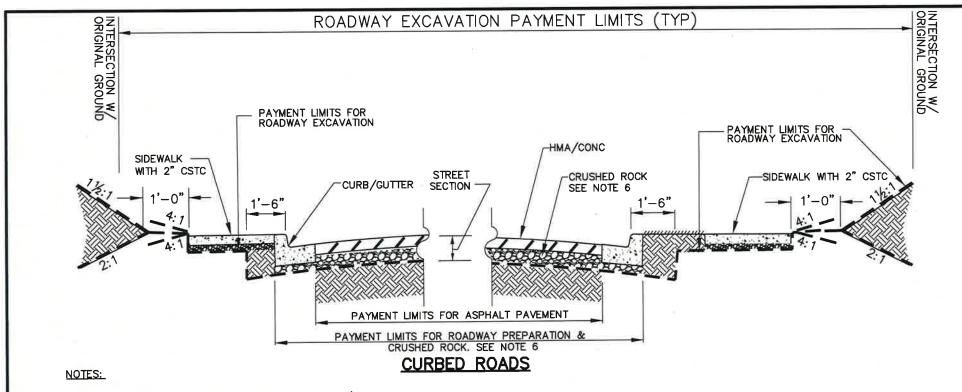
SEE NOTE 5



NOTES:

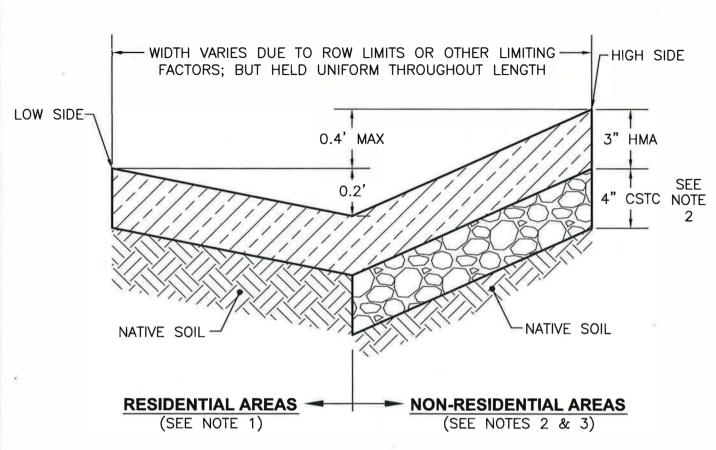
- 1. THE CITY ENGINEERING SERVICES DEPT MAY REQUIRE A PAVEMENT DESIGN FOR LOCAL ACCESS STREETS PER DESIGN STANDARD 3.3-22.
- 2. ARTERIAL STREETS REQUIRE A PAVEMENT DESIGN PER DESIGN STD 3.3-21. THE TOTAL MINIMUM ALLOWABLE MATERIAL THICKNESS WILL BE 5" OF HMA AND 7" OF CSBC EVEN WHEN PAVEMENT DESIGN CALCULATIONS YIELD LESSER VALUES OF HMA OR CSBC.
- 3. PROVIDE 6" MIN CRUSHED ROCK ATOP A SOLID ROCK SUB-GRADE. CSTC MAY BE SUBSTITUTED FOR CSBC, BUT NO ADDITIONAL PAYMENT WILL BE MADE FOR SUBSTITUTION, AS FOLLOWS:
- IF CRUSHED SECTION DEPTH IS GREATER THAN 6" OR MORE, THE ALLOWABLE CSTC THICKNESS IS THE TOP 50% OF SECTION.
- IF CRUSHED SECTION DEPTH IS LESS THAN 6", THE ALLOWABLE CSTC THICKNESS IS 100% OF SECTION.
- IF CRUSHED SECTION DEPTH IS OVER ASPHALT GRINDINGS, THE ALLOWABLE CSTC THICKNESS IS THE TOP 50% OF SECTION OR A 2" MIN, WHICHEVER IS GREATER.
- 4. FOR LOCAL ACCESS STREETS USE HMA CL ½", 3" THICK WHICH MAY BE PLACED IN ONE LIFT. A 4" THICKNESS SHALL BE PLACED IN TWO 2-INCH LIFTS.
- 5. IF UNSUITABLE SUB-GRADE IS PRESENT REFER TO COS DESIGN STANDARDS SECTION 3.3-22.

APPROVED BY	ADOPTED: 04/2004 REVISED: 02/2018 SUPERSEDES: 04/2012	PAVEMENT SECTIONS	
ENGINEER DANIEL ALBERT BULLER, P.E.	CHECKED BY: JAG STOKENE SCALE: NTS REVISED BY: RLB/MLD	ENGINEERING SERVICES STANE PLAN PLAN W-10	No.



- 1. SEE STD PLAN F-102B FOR SIDEWALK SECTION REQ'MTS.
- 2. SEE STD PLAN F-106 FOR CURB/GUTTER REQ'MTS. PROVIDE COMPACTED CRUSHED ROCK UNDERNEATH CURB/GUTTER TO THE PAYMENT LIMITS AS SHOWN. CRUSHED ROCK THICKNESS UNDERNEATH CURB/GUTTER IS DEPENDENT UPON THE STREET SECTION THICKNESS.
- 3. SEE STD PLAN W-101 FOR ROADWAY CROWN REQ'MTS.
- 4. SEE STD PLAN W-101A FOR PAVEMENT SECTION REQ'MTS.
- 5. 4:1 MAX SLOPES ARE DESIRABLE WHEN ADJACENT TO A DEVELOPED LOT.
- 6. PROVIDE 6" MIN OF CRUSHED ROCK ATOP A SOLID ROCK SUB-GRADE. CSTC MAY BE SUBSTITUTED FOR CSBC, BUT NO ADDITIONAL PAYMENT WILL BE MADE FOR SUBSTITUTION, AS FOLLOWS:
- IF CRUSHED SECTION DEPTH IS 6" OR MORE, THE ALLOWABLE CSTC THICKNESS IS THE TOP 50% OF SECTION.
- IF CRUSHED SECTION DEPTH IS LESS THAN 6", THE ALLOWABLE CSTC THICKNESS IS 100% OF SECTION.
- IF CRUSHED SECTION DEPTH IS OVER ASPHALT GRINDINGS, THE ALLOWABLE CSTC THICKNESS IS THE TOP 50% OF SECTION OR A 2" MIN, WHICHEVER
 IS GREATER.

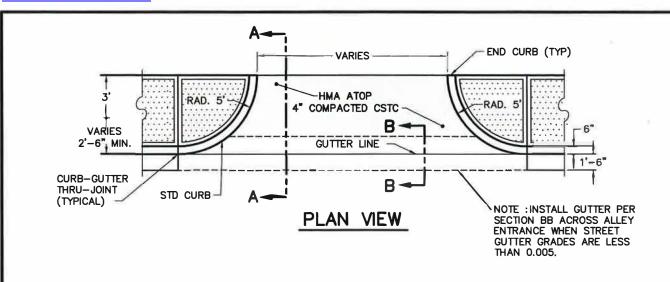
APPROVED BY	ADOPTED: 09/1993 REVISED: 04/2012 SUPERSEDES: 01/2008	ROADWAY EXCAVATION PAYMENT LIMITS	N
19 Nelson	CHECKED BY: JAG SCALE: NTS DWG/REV. BY: SRM	ENGINEERING SERVICES CITY OF SPOKANE, WASHINGTON	STANDARD PLAN No. W-102

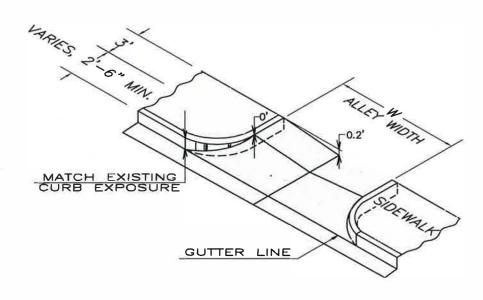


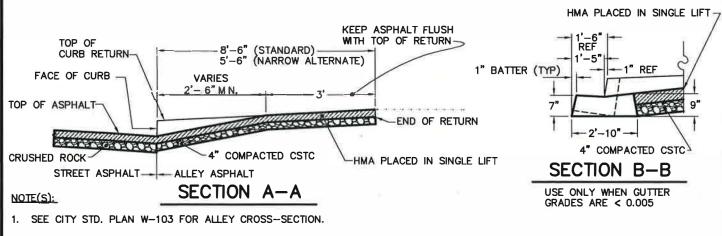
NOTES:

- 1. ALLEY SECTION FOR RESIDENTIAL AREAS: 3" HOT MIX ASPHALT (HMA), CLASS 1/2", OVER NATIVE SOIL.
- 2. ALLEY SECTION FOR NON-RESIDENTIAL AREAS: 3" HOT MIX ASPHALT (HMA), CLASS ½", OVER 4" COMPACTED CRUSHED SURFACING TOP COURSE.
- 3. PROVIDE 6" MIN CRUSHED ROCK ATOP A SOLID ROCK SUB-GRADE. CSTC MAY BE SUBSTITUTED FOR CSBC PER RESTRICTIONS BELOW, BUT NO ADDITIONAL PAYMENT WILL BE MADE FOR SUBSTITUTION:
 - IF CRUSHED SECTION DEPTH IS 6" OR MORE, THE ALLOWABLE CSTC THICKNESS IS THE TOP 50% OF SECTION.
 - IF CRUSHED SECTION DEPTH IS LESS THAN 6", THE ALLOWABLE CSTC THICKNESS IS 100% OF SECTION.
 - IF CRUSHED SECTION DEPTH IS OVER ASPHALT GRINDINGS, THE ALLOWABLE CSTC THICKNESS IS THE TOP 50% OF SECTION OR A 2" MIN, WHICHEVER IS GREATER.

APPROVED BY	ADOPTED: 02/1986 REVISED: 04/2012 SUPERSEDES: 09/2010	ALLEY SECTION	
PRINCIPAL ENGINEER, DESIGN GARY S. NELSON, P.E.	CHECKED BY: JAG SCALE: NTS DWG/REV. BY: RLB/SRM	ENGINEERING SERVICES CITY OF SPOKANE, WASHINGTON	STANDARD PLAN No. W-103







2. SEE CITY STD. PLAN W-102 FOR CRUSHED ROCK REQ'MTS FOR STREETS.

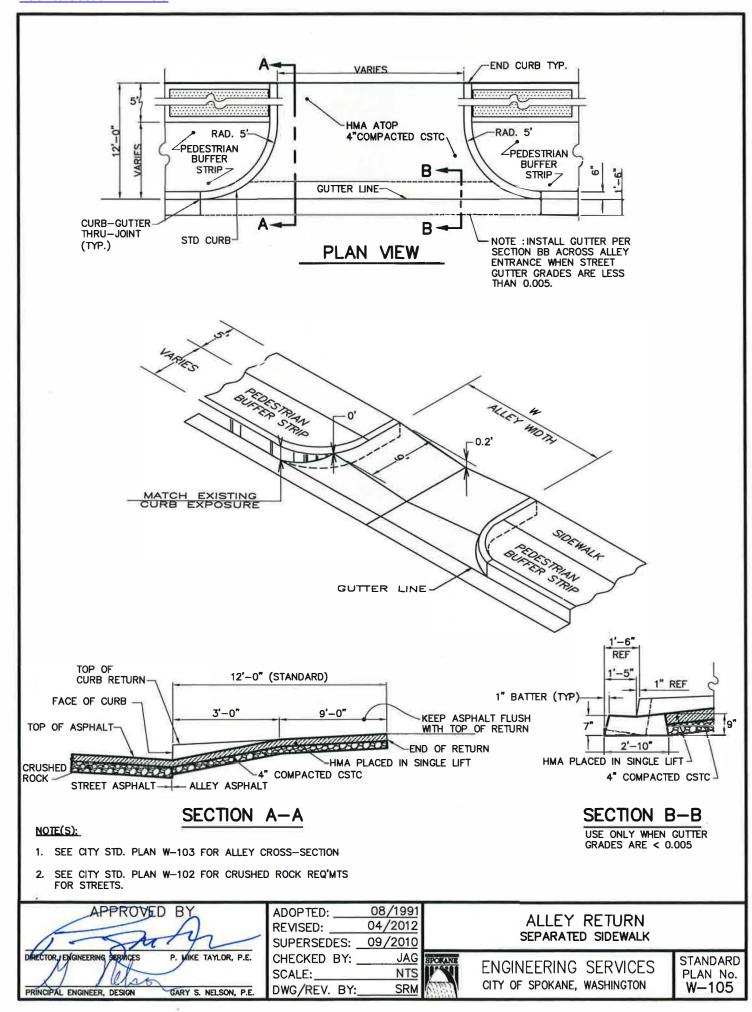
APPROVI	TO BY
15- Va	the
DIRECTOR, ENGINEERING SERVICES	P. MIKE TAYLOR, P.E.
A Kellow	
PRINCIPAL ENGINEER, DESIGN	GARY S. NELSON, P.E.

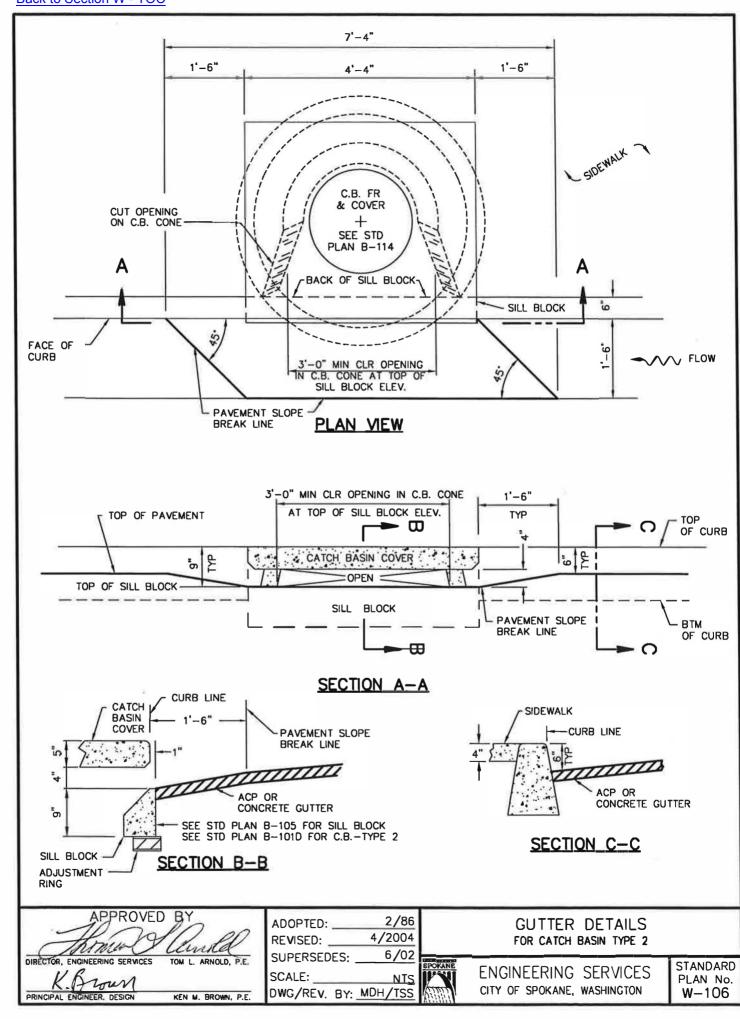
BX	ADOPTED:	08/1991
41	REVISED:	04/2012
747	SUPERSEDES:	09/2010
P. MIKE TAYLOR, P.E.	CHECKED BY:	JAG
	SCALE:	NTS
GARY S. NELSON, P.E.	DWG/REV. BY:	DGB/SRM

ALLEY RETURN ADJACENT SIDEWALK

ENGINEERING SERVICES CITY OF SPOKANE, WASHINGTON

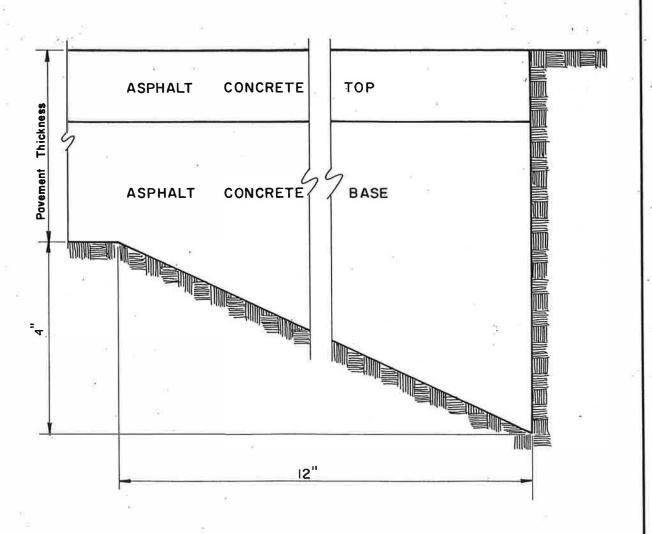
STANDARD PLAN No. W-104



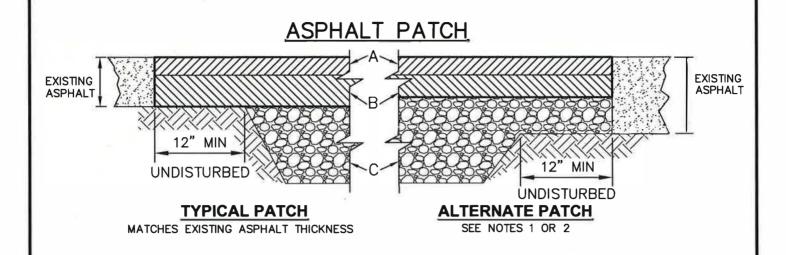


NOTE:

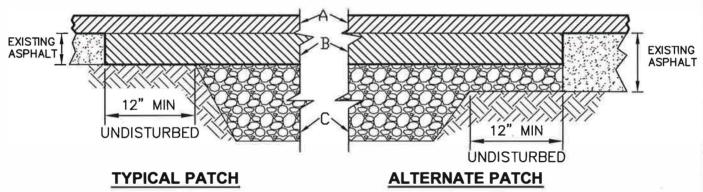
THICKENED EDGE TO BE TURNED UP WHERE UNDERCUTTING OF FENCES AND BUILDINGS OCCUR, WHERE CALLED FOR ON PLANS OR AS DIRECTED BY THE ENGINEER.



	SCALE _ NONE ADOPTED _2-86	ASPHALT CONCRETE THICKENED EDGE	
CH. DES. ENGR. Jany May	REVISED	DEPT. OF PUBLIC WORKS ENGR. DIVISION SPOKANE, WN.	STANDARD PLAN No. W-107



ASPHALT PATCH W/ OVERLAY



MATCHES EXISTING ASPHALT THICKNESS

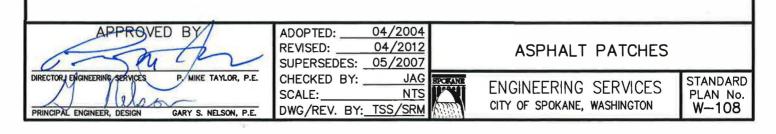
SEE NOTES 1 OR 2

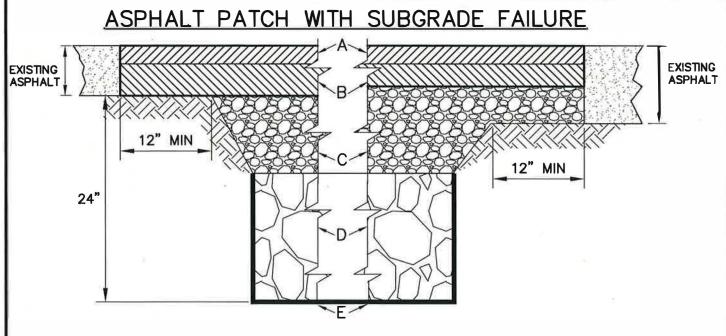
PATCH SECTION:

- A. TOP COURSE:
- 1.5" MIN TO 2" MAX THICKNESS. SEE STD PLAN W-101A FOR ASPHALT CLASS & THICKNESS REQ'MTS.
- B. BASE COURSE:
- SEE STD PLAN W-101A FOR ASPHALT CLASS & THICKNESS REQ'MTS.
- C. AGGREGATE:
- MATCH EXISTING AGGREGATE THICKNESS OR USE A MIN 4" THICKNESS, WHICHEVER IS GREATER. PROVIDE 6" MIN CRUSHED ROCK ATOP A SOLID ROCK SUB-GRADE. SEE CITY STD. PLAN W-102 FOR CRUSHED ROCK REQ'MTS.

NOTES:

- 1. ARTERIAL STREETS: PATCH SHALL MATCH EXISTING PAVEMENT THICKNESS WHEN PAVEMENT IS 8" OR LESS. WHEN EXISTING PAVEMENT THICKNESS EXCEEDS 8", A REDUCTION OF THE PATCH THICKNESS MAY BE ALLOWED TO AN 8" MIN, IF A PAVEMENT DESIGN IS PERFORMED BY A LICENSED ENGINEER & APPROVED BY THE CITY ENGINEER.
- 2. LOCAL ACCESS STREETS: PATCH SHALL MATCH EXISTING PAVEMENT THICKNESS WHEN PAVEMENT IS 4" OR LESS. WHEN EXISTING PAVEMENT THICKNESS EXCEEDS 4", A REDUCTION OF THE PATCH THICKNESS MAY BE ALLOWED TO A 4" MIN, IF A PAVEMENT DESIGN IS PERFORMED BY A LICENSED ENGINEER & APPROVED BY THE CITY ENGINEER.
- 3. SEE CITY OF SPOKANE PAVEMENT CUT POLICY FOR ADD'NL REQ'MTS.





TYPICAL PATCH

MATCHES EXISTING ASPHALT THICKNESS

ALTERNATE PATCH

SEE NOTES 1 OR 2

PATCH SECTION:

A. HMA CL 1/2" TOP COURSE:

1.5" MIN TO 3" MAX THICKNESS. SEE STD PLAN W-101A FOR THICKNESS

REQUIREMENTS.

B. HMA CL 1/2" BASE COURSE:

SEE STD PLAN W-101A FOR THICKNESS REQUIREMENTS.

C. AGGREGATE:

MATCH EXISTING AGGREGATE THICKNESS OR USE A MIN 4" THICKNESS, WHICHEVER IS GREATER. PROVIDE 6" CRUSHED ROCK ATOP A SOLID ROCK SUB-GRADE. SEE

CITY STD. PLAN W-102 FOR CRUSHED ROCK REQ'MTS.

D. STRUCTURAL FILL:

GRAVEL BORROW MEETING THE REQUIREMENTS OF WSDOT 9-03.14(1) OR WELL GRADED 6" MINUS CRUSHED ROCK, PARTIALLY CRUSHED ROCK, SHOT ROCK OR NATURALLY OCCURING GRANULAR MATERIAL IF APPROVED BY THE ENGINEER.

E. GEOTEXTILE:

GEOTEXTILE FABRIC CONFORMING TO WSDOT 9-33 SHALL BE USED TO PROVIDE SEPARATION BETWEEN UNSUITABLE SOIL AND BALLAST (SEE NOTE 3).

NOTES:

1. ARTERIAL STREETS:

PATCH SHALL MATCH EXISTING PAVEMENT THICKNESS WHEN PAVEMENT IS 8" OR LESS.WHEN EXISTING PAVEMENT THICKNESS EXCEEDS 8", A REDUCTION OF THE PATCH THICKNESS MAY BE ALLOWED TO AN 8" MIN, IF A PAVEMENT DESIGN IS PERFORMED BY A LICENSED ENGINEER & APPROVED BY THE CITY ENGINEER.

2. LOCAL ACCESS STREETS:

PATCH SHALL MATCH EXISTING PAVEMENT THICKNESS WHEN PAVEMENT IS 4" OR LESS. WHEN EXISTING PAVEMENT THICKNESS EXCEEDS 4", A REDUCTION OF THE PATCH THICKNESS MAY BE ALLOWED TO A 4" MIN, IF A PAVEMENT DESIGN IS PERFORMED BY A LICENSED ENGINEER & APPROVED BY THE CITY ENGINEER.

- 3. WHERE SETTLEMENT HAS OCCURED, SOIL SHALL BE OVEREXCAVATED TO FIRM BEARING OR TO A DEPTH OF 2 FEET, WHICHEVER IS LESS & BE REPLACED WITH STRUCTURAL FILL COMPACTED TO 95 PERCENT OF THE MAXIMUM DRY DENSITY BASED ON AASHTO T-180 OR AS PER WSDOT 2-03.3(14). FABRIC MAY BE REQUIRED BETWEEN THE BALLAST & THE CRUSHED ROCK AS DIRECTED BY THE ENGINEER.
- 4. SEE CITY OF SPOKANE PAVEMENT CUT POLICY FOR ADD'NL REQ'MTS.
- 5. IF UNSUITABLE SUB-GRADE IS PRESENT REFER TO COS DESIGN STANDARDS SECTION 3.3-22.

APPRQV	ED BY
1-34	1kg
DIRECTOR, ENGINEEDING SERVICE	S P. MIKE TAYLOR, P.E.
MILLE	6-
PRINCIPAL ENGINEER, DESIGN	GARY S. NELSON, P.E.

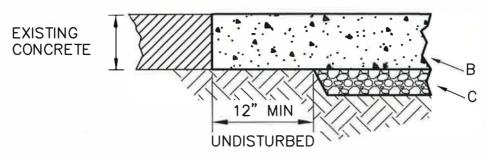
D BY)	ADOPTED:	01/2008
1/2-	REVISED:	04/2012
100	SUPERSEDES:	09/2010
P. MIKE TAYLOR, P.E.	CHECKED BY:	JAG
	SCALE:	NTS
GARY S. NELSON, P.E.	DWG/REV. BY:	GAH/SRM

ASPHALT PATCHES WITH SUBGRADE FAILURE



STANDARD PLAN No. W-108A

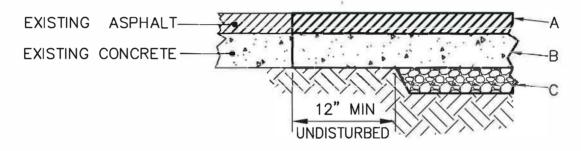
CONCRETE PATCH



TYPICAL PATCH

MATCHES EXISTING CONCRETE THICKNESS

CONCRETE PATCH W/ OVERLAY



TYPICAL PATCH

MATCHES EXISTING HMA/CONCRETE THICKNESS

PATCH SECTION:

A. ASPHALT COURSE:

HOT MIX ASPHALT (HMA) CLASS 1/2", MATCH EXISTING THICKNESS.

B. CONCRETE COURSE:

SEE SEC 5-01.3.

C. AGGREGATE:

MATCH EXISTING AGGREGATE THICKNESS OR USE A MIN 2" THICKNESS, WHICHEVER IS GREATER. PROVIDE 6" MIN CRUSHED ROCK ATOP A SOLID ROCK SUB-GRADE. SEE CITY STD. PLAN W-102 FOR CRUSHED

ROCK REQ'MTS.

NOTES:

- 1. PATCH SHALL MATCH EXISTING PAVEMENT THICKNESS. WHEN EXISTING PAVEMENT THICKNESS IS EXCESSIVE AS DETERMINED BY THE CITY ENGINEER, A REDUCTION OF THE PATCH THICKNESS MAY BE ALLOWED, IF A PAVEMENT DESIGN IS PERFORMED BY A LICENSED ENGINEER & APPROVED BY THE PRINCIPAL DESIGN ENGINEER.
- 2. SEE CITY OF SPOKANE PAVEMENT CUT POLICY FOR ADD'NL REQ'MTS.

APPROVED BY P. MIKE TAYLOR, P.E. GARY S. NELSON, P.E. PRINCIPAL ENGINEER, DESIGN

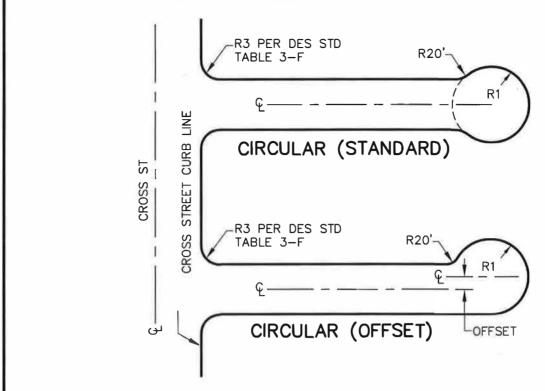
04/2004 ADOPTED: . 04/2012 REVISED: SUPERSEDES: _05/2007 CHECKED BY: JAG NTS SCALE:

DWG/REV. BY: TSS/RLB

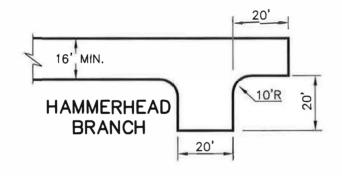
CONCRETE PATCHES

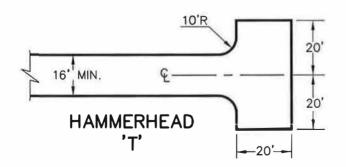
ENGINEERING SERVICES CITY OF SPOKANE, WASHINGTON

STANDARD PLAN No. W - 109



LOCAL ACCESS DEAD END STREETS





NOTES:

- R1 = 50' MINIMUM FOR CURB RADIUS PLUS THE RADIUS OF A CENTER ISLAND, IF USED.
- 2. MINIMUM ROW RADIUS FOR THE BULB SHALL BE 56' PLUS THE RADIUS OF A CENTER ISLAND, IF USED.
- MINIMUM ROW RADIUS FOR THE BULB SHALL BE 51' IF THE SIDEWALK IS LOCATED ON AN EASEMENT.
- LOCAL ACCESS STANDARDS APPLY FOR ALL CUL-DE-SACS.
- 5. CUL—DE—SACS SHALL BE DESIGNED TO DRAIN OUT TO THE ADJACENT STREET. TWO PERCENT MINIMUM GRADES SHALL BE PROVIDED AT ALL PLACES ALONG THE GUTTER LINES.

RESIDENTIAL DEAD END ALLEYS

SRM

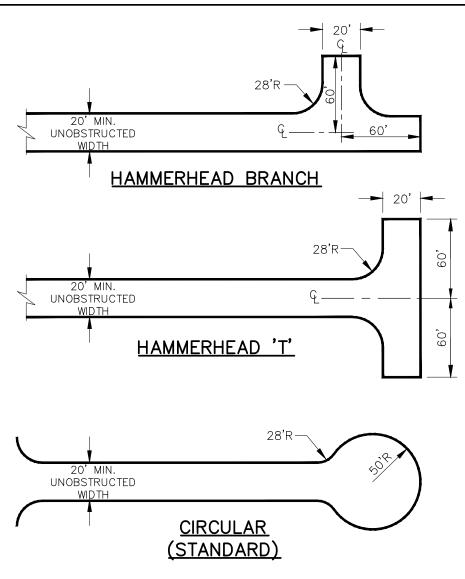
DIRECTOR, ENGINEER, DESIGN GARY S. NELSON, P.E.

DWG/REV. BY:

CUL-DE-SACS
PUBLI CSTREETS AND ALLEYS

ENGINEERING SERVICES CITY OF SPOKANE, WASHINGTON

STANDARD PLAN No. W-114



NOTES:

- 1. STREETS 28' WIDE OR LESS REQUIRE "NO PARKING" ON BOTH SIDES. STREETS GREATER THAN 28' & LESS THAN 36' WIDE REQUIRE "NO PARKING" ON ONE SIDE. STREETS 36' WIDE OR GREATER ARE ALLOWED PARKING ON BOTH SIDES.
- 2. MAXIMUM STREET SLOPE IS 10%.
- 3. MAXIMUM DEAD END LENGTH WITHOUT A TURN AROUND IS 150'.
- 4. FIRE TRUCKS MUST BE CAPABLE OF ACCESSING WITHIN 150' OF ANY POINT AROUND THE FIRST FLOOR OF ANY BUILDING.
- 5. ACCESS STREETS SHALL BE OF ALL-WEATHER SURFACE.

FIRE UTILITY/WASTE WATER MAINTENANCE ACCESS FOR PUBLIC AND PRIVATE STREETS

