NOTES:

1) THE HOLE FOR THE MONUMENT SHALL BE CUT AFTER THE NEW PAVEMENT HAS BEEN CONSTRUCTED. THE UPPER 6" OF THE MONUMENT ENCASEMENT SHALL BE SHAPED TO A TRUE DIAMETER OF 8". THE BRASS DISC WILL SET DURING THE PLACEMENT OF THE CONCRETE.

2) MONUMENT CORE MATERIAL SHALL MEET OR EXCEED "RAPID SET NON-SHRINK, NON-METALLIC GROUT" OR APPROVED EQUAL MEETING ASTM 621. THE HOLE SHALL BE CORED TO 19" MIN. DEPTH. ALL LOOSE MATERIAL SHALL BE REMOVED FROM THE BOTTOM OF THE HOLE. THE CONCRETE SHALL BE PLACED ON A 1" (NOMINAL) LAYER OF 1/4 INCH CRUSHED ROCK OVER FIRM UNDISTURBED EARTH. THE TOP OF THE CONCRETE SHALL BE TROWELED SMOOTH AND THE BRASS DISC SHALL BE CENTERED AND SLIGHTLY BELOW GRADE TO PREVENT DAMAGE. THE REBAR SHALL BE CENTERED BENEATH THE BRASS DISC USING THE STRADDLES. APPROVED MAGNETIZED MATERIALS MAY BE EPOXYED TO THE UNDERSIDE OF THE BRASS DISC.

3) BRASS DISC SHALL BE MARKED BY AN "X" AT THE INTERSECTION LOCATION, AND IDENTIFIED, AS REQUIRED BY RCW 58.09.120.

4) THE REQUIREMENT OF WAC 332-120 SHALL BE MET FOR THE REMOVAL OR DESTRUCTION OF A SURVEY MONUMENT.

(NOT TO SCALE)
CHANNELIZATION TAPER FORMULA, $T_1$

$T_1 = \frac{W}{S} \left(45 \text{ MPH or more}\right)$
$T_1 = \frac{W}{S^2} \left(0 \text{ to } 40 \text{ MPH}\right)$

$T_1 = $ OFFSET FROM NORMAL CENTER LINE (FT.)

$T_1 = $ LENGTH OF TAPER (FT.)

NOTES:

$T_1$ SHALL BE 50% LARGER WHEN LOCATED IN A CURVE

$T_1$ SHALL BE A MINIMUM LENGTH OF 90 FEET

TURN LANE STORAGE LENGTH, $P$

TO BE DETERMINED BY AN ENGINEERING STUDY

MIN. $\vdots$ 100 FEET

DESIRABLE $\vdots$ 125 FEET TO 150+ FEET

POCKET LENGTHS SHORTER THAN MINIMUM BY APPROVAL OF COUNTY ENGINEER

* ARROW SPACING FOR LEFT- / RIGHT-TURN POCKETS

<table>
<thead>
<tr>
<th>POCKET LENGTH (P)</th>
<th>MORE THAN</th>
<th>UP TO</th>
<th>USE</th>
<th>SPACING AS MEASURED TO TAIL OF ARROW</th>
</tr>
</thead>
<tbody>
<tr>
<td>130 FEET</td>
<td>130 FEET</td>
<td>1 ARROW**</td>
<td>1ST ARROW AT START OF POCKET</td>
<td></td>
</tr>
<tr>
<td>255 FEET</td>
<td>255 FEET</td>
<td>2 ARROWS**</td>
<td>2ND ARROW AT 50 FEET FROM STOP BAR</td>
<td></td>
</tr>
<tr>
<td>**ONLY(S) REQUIRED FOR DROP LANES (SEE CASE C) AND FOR &quot;TEE&quot; INTERSECTIONS (SEE CASE E) - SEE SHEET 2 OF 9.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CASE "A" LEFT-TURN POCKET FROM TWO-WAY LEFT-TURN CENTER LINE

WIDE LANE LINE

120 FEET

TW/L.L

TAPER-VARIES

120 FT. MINIMUM

NO-PASS LINE OR DOUBLE CENTER LINE APPROACHING CHANNELIZATION

CASE "B" LEFT TURN POCKET FROM TAPER SECTION

WIDE LANE LINE

80 FEET

20% $T_1$

80% $T_1$

NO CENTER LINE IN LAST 20% OF APPROACH TAPER

DOUBLE CENTER LINE

NO-PASS LINE OR DOUBLE CENTER LINE APPROACHING CHANNELIZATION

SEE STANDARD DRAWINGS PC.H2.4, PC.H2.5, AND PC.H2.6 FOR RPM LAYOUT

SEE STANDARD DRAWING PC.H2.9 FOR NOTES AND STRIPOING PATTERNS

(NOT TO SCALE)
CASE "C" LEFT- OR RIGHT-TURN DROP LANE FROM TWO THROUGH LANES

240 FT. FOR ≤ 35 MPH,
300 FT. FOR > 40 MPH

WIDE LANE LINE

WIDE DOTTED LANE LINE **

** INSTALL ONE ARROW AT BEGINNING OF WIDE DOTTED LANE LINE;
INSTALL SECOND ARROW AT 135 FT. WHEN LENGTH OF WIDE
DOTTED LANE LINE IS 300 FT.

LANE LINE

SEE SHEET 8 OF 9 FOR ARROW/ONLY PLACEMENT, TYP.

30 FT.

ARROW AT 135 FT. IF WIDE DOTTED
LANE LINE IS 300 FT IN LENGTH

CASE "D" RIGHT-TURN ADD LANE

p

80 FEET

T2

EDGE OF PAVEMENT

WIDE LANE LINE

CENTER LINE OR LANE LINE

RIGHT TURN LANE TAPER FORMULA, T2

T2 = 0.15 WS (40 MPH AND GREATER)
T2 = 60 FT. (0 TO 35 MPH)
S = SPEED LIMIT (MPH)
W = ADD LANE WIDTH (FEET)
T2 = LENGTH OF TAPER (FEET)

* FOR NUMBER AND SPACING OF ARROW MARKINGS FOR
LEFT/RIGHT TURN POCKETS, SEE SHEET 1 OF 9

CASE "E" TEE INTERSECTIONS WITH A LEFT- AND RIGHT-TURN LANE

p

WIDE LANE LINE

SEE SHEET 8 OF 9 FOR ARROW/ONLY PLACEMENT

30 FT.

SEE STANDARD DRAWINGS PC.H2.4, PC.H2.5, AND PC.H2.6 FOR RPM LAYOUT
SEE STANDARD DRAWING PC.H2.9 FOR NOTES AND STRIPING PATTERNS

(PART TO SCALE)

Pierce County
Public Works
Office of the County Engineer
Tacoma Mall Office Building
4301 South Pine Street, Suite 628
Tacoma, Washington 98409
An APWA Accredited Agency

BRIAN D. STACY, P.E.
COUNTY ENGINEER

PAVEMENT MARKINGS

SHEET 2 OF 9

PC.H2.2
**TWO-WAY LEFT-TURN LANE ARROW PLACEMENT**

<table>
<thead>
<tr>
<th>SEGMENT LENGTH, D</th>
<th># OF ARROW SETS</th>
<th>LOCATION OF CENTER OF ARROW SET</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 FT. - 100 FT.</td>
<td>0</td>
<td>NONE</td>
</tr>
<tr>
<td>101 FT. - 300 FT.</td>
<td>1</td>
<td>0.5L</td>
</tr>
<tr>
<td>301 FT. - 500 FT.</td>
<td>2</td>
<td>75 FT. 75 FT.</td>
</tr>
<tr>
<td>501 FT. - 850 FT.</td>
<td>3</td>
<td>75 FT. 0.5L 75 FT.</td>
</tr>
<tr>
<td>851 FT. - 1200 FT.</td>
<td>4</td>
<td>75 FT. ** 75 FT.</td>
</tr>
<tr>
<td>1201 FT. - 1550 FT.</td>
<td>5</td>
<td>** SPACE BALANCE OF SETS EVENLY OVER THE REMAINDER OF THE SEGMENT.</td>
</tr>
<tr>
<td>OVER 1550 FT.</td>
<td>D+200/350</td>
<td>ROUND UP TO THE NEAREST WHOLE NUMBER</td>
</tr>
</tbody>
</table>

**CASE "E" TWO-WAY LEFT-TURN LANE AT DRIVEWAY OR ROADWAY**

CASE "E" TWO-WAY LEFT-TURN LANE AT DRIVEWAY OR ROADWAY

**NOTES:**
- MINIMUM SEGMENT LENGTHS SHOWN
- BREAK STRIPING FOR PUBLIC ROADS

* WHEN CONSTRUCTING NEW TWTL NEAR EXISTING TWTL OR LEFT-TURN LANE, WIDEN ROAD AND CONNECT THE TWTLs WHEN THE DISTANCE FROM THE END OF ONE CENTER LINE TAPER TO THE BEGINNING OF THE NEXT CENTER LINE TAPER IS 125 FEET OR LESS. SEE STANDARD DRAWING PC.H2.1 FOR TAPER LENGTH (T1) INFORMATION.

**MEASUREMENT OF SEGMENT LENGTH AND END TREATMENT EXAMPLES:**

SEGMENT LENGTH, D

**SEE STANDARD DRAWINGS PC.H2.4, PC.H2.5, AND PC.H2.6 FOR RPM LAYOUT**

**SEE STANDARD DRAWING PC.H2.9 FOR NOTES AND STRIPING PATTERNS**

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Office of the County Engineer

**PAVEMENT MARKINGS**

**SHEET 3 OF 9**

PC.H2.3
**RPM Layout for Two-Lane Roads (Narrow and Wide Pattern)**

- 4 in. Yellow Line
- 4 in. Gap
- 4 in. 2y RPM
- 4 in. Yellow Line
- 4 in. Gap, 2y RPM
- 4 in. Yellow Line
- 4 in. Gap
- 4 in. Yellow Line

One type 2y RPM centered between double center lines at 80 ft. intervals on tangents/curves and 40 ft. intervals on horizontal curves with a radius less than 5000 ft.

**RPM Layout for Wide Lane Line**

- 8 in. Wide lane line, two type 1 (white) RPMs
- 4 in. Gap
- 4 in. Type 2w RPM

Two type 1 (white) RPMs at 10 ft. intervals and one type 2w RPM at 20 ft. intervals.

**RPM Layout for Wide Dotted Lane Line**

- 6 in.
- 2 ft.

Wide dotted lane line with two double rows of type 1 (white) RPMs equally spaced. Centered between every second wide dotted lane line install double row of type 2w RPMs.

**RPM Layout for Multi-Lane Roads (Narrow Pattern)**

- 4 in. Yellow line with type 1 (yellow) RPMs
- 4 in. Gap with type 2y RPMs
- 4 in. Yellow line with type 1 (yellow) RPMs

Install type 1 (yellow) RPMs one on each line with a type 2y RPM centered between both lines and type 1 sets. RPMs shall be spaced at 80 ft. intervals on tangents/curves and 40 ft. intervals on horizontal curves with radii less than 5000 ft.

**RPM Layout for Painted Lane Lines**

- 6 in.
- 3 ft.
- 3 ft.

Space type 2w RPMs at 80 ft. intervals on tangents/curves and 40 ft. intervals on horizontal curves with a radius less than 5000 ft.

*Omit type 1 RPMs on type D striping.

**Type 2w RPM goes in the turn lane. In the case of side-by-side turn lanes, both lanes shall have type 2w RPMs.

---

**See Standard Drawing PC.H2.9 for Notes and Striping Patterns**

*Not to scale*
RPM LAYOUT FOR TURN LANES

LEFT-TURN LANE FROM TAPER OR TWO-WAY LEFT-TURN LANE

SEE WIDE LANE LINE RPM DETAIL, SHEET 4 OF 9

DOUBLE CENTER LINE WITH DOUBLE ROW OF TYPE 1 (YELLOW) RPMs AT 3 FT. INTERVALS (ONE ON EACH LINE). REPLACE THE THIRD SET OF RPMs WITH ONE TYPE 2yy RPM CENTERED BETWEEN DOUBLE CENTER LINE.*

DOUBLE CENTER LINE WITH DOUBLE ROW OF TYPE 1 (YELLOW) RPMs AT 10 FT. INTERVALS (ONE ON EACH LINE). FOR FIRST SET AND EVERY FOURTH SET INSTALL ONE TYPE 2yy RPM CENTERED BETWEEN DOUBLE CENTER LINE.*

TEE INTERSECTIONS WITH A LEFT- AND RIGHT-TURN LANE

SEE WIDE LANE LINE RPM DETAIL, SHEET 4 OF 9

SEE RPM DETAIL ABOVE

DROP LANE FROM TWO THROUGH LANES

SEE WIDE LANE LINE RPM DETAIL, SHEET 4 OF 9

SEE WIDE DOTTED LANE LINE RPM DETAIL, SHEET 4 OF 9

SEE WIDE LANE LINE RPM DETAIL, SHEET 4 OF 9

SEE RPM DETAIL ABOVE

SEE MULTI-LANE LINE RPM DETAIL, SHEET 4 OF 9

(Not to scale)

SEE STANDARD DRAWING PC.H2.9 FOR NOTES AND STRIPING PATTERNS

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Brian D. Stacy, P.E.
County Engineer

Pavement Markings
Sheet 5 of 9

PC.H2.5
**RPM Layout for Two-Way Left-Turn Lane**

- **Double Row Type 1 (Yellow)** RPMs centered on every broken center line, typ. *
- **Type 2yy RPM at 80 ft. intervals on tangents/courses and 40 ft. intervals on horizontal curves with a radius less than 5000 ft.**
- **Type 2yy Alternate gap from opposite side**

**Bullet Treatment for End of Taper**

- **Double center line with double row of type 1 (yellow) RPMs at 3 ft. intervals. Replace type 1 (yellow) RPMs at 15 ft. with one type 2yy RPM centered between double center line.** *
- **Double center line with alternating type 1 (yellow) RPMs (one on each line) and type 2yy RPMs centered at 20 ft. intervals.** *
- **Mark end of taper with a type 2yy RPM centered between double center line.**
- **Double row of type 1 (yellow) RPMs at 3 ft. intervals. Replace type 1 (yellow) RPMs at 3 ft., 15 ft., and 27 ft. with type 2yy RPMs as shown (double center line).** *

**RPM Layout for End of Taper / Beginning of Two-Way Left-Turn Lane**

- **Double center line with alternating type 1 (yellow) RPMs (one on each line) and type 2yy RPMs centered at 20 ft. intervals.** *
- **Mark end of taper with a type 2yy RPM centered between double center line.**
- **Double row of type 1 (yellow) RPMs and type 2yy RPMs equally spaced as shown (13 sets total end treatment).** *

**Raised Pavement Markers (RPMs)**

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>Non-reflective</td>
<td>Yellow or white</td>
</tr>
<tr>
<td>Type 2yy</td>
<td>Reflective face both sides</td>
<td>Yellow and white</td>
</tr>
<tr>
<td>Type 2w</td>
<td>Reflective face one side, approach direction</td>
<td>White</td>
</tr>
</tbody>
</table>

*Omit type 1 RPMs on type d striping.

**See Standard Drawing PC.H2.9 for Notes and Striping Patterns**

(Not to scale)

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**COUNTY ENGINEER**

**PAVEMENT MARKINGS**
**SHEET 6 OF 9**

PC.H2.6
MARKED CROSSWALKS

SEE STANDARD DRAWING PC.H2.9 FOR NOTES

NOT TO SCALE

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COUNTY ENGINEER

PAVEMENT MARKINGS
SHEET 7 OF 9
PC.H2.7
**NOTES:**

1) CENTERED IN LANE, TYPICAL.
2) USE TYPE B PREFORMED FUSED THERMOPLASTIC, SEE SHEET 9 OF 9.
3) IF PAINTED MARKINGS ARE SPECIFIED FOR USE, CONTACT PIERCE COUNTY TRAFFIC OPERATIONS AT (253) 798-8000 FOR TEMPLATES.

**TRAFFIC ARROW AND ONLY DETAILS**

* "ONLY" TO BE USED IN CASE "C" CONDITION (SEE PAVEMENT MARKINGS SHEET 2 OF 9) AND CASE "E" CONDITION.

PATTERN OF ARROW/ONLY COMBINATIONS STARTING AT THE ENTRANCE INTO THE POCKET IS AS FOLLOWS:

ONE ARROW = ARROW/ONLY
TWO ARROWS = ARROW/ONLY/ARROW
THREE ARROWS = ARROW/ONLY/ARROW/ONLY/ARROW

SPACE ARROWS IN THE POCKET AS SHOWN ON SHEET 1 OF 9.

**ARROW / ONLY PLACEMENT**

SEE STANDARD DRAWINGS PC.H2.4, PC.H2.5, AND PC.H2.6 FOR RPM LAYOUT
SEE STANDARD DRAWING PC.H2.9 FOR NOTES AND STRIPING PATTERNS

(POT NOT TO SCALE)
1) GENERAL - ALL PAVEMENT MARKINGS SHALL CONFORM TO THE REQUIREMENTS OF THE MANUAL ON
UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AND TO THE WASHINGTON STATE DEPARTMENT OF
TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION,
AS ADOPTED BY THE COUNTY. ALL STRIPING SHALL BE PAINTED USING WATER-BASED MATERIAL
UNLESS OTHERWISE SPECIFIED IN THE PLANS. ALL ARROWS, ONLYS, CROSSWALK LINES, STOP LINES,
AND OTHER MARKINGS SHALL BE TYPE B PREFORMED THERMOPLASTIC AS APPROVED BY THE
COUNTY TRAFFIC ENGINEER. ALL TYPE B PAVEMENT MARKING MATERIAL SHALL HAVE FACTORY
APPLIED REFLECTIVE BEADS AND HEATING INDENT INDICATORS. THESE HEATING INDENTS SHALL ACT
AS INDICATOR SYSTEM FOR THE OPERATOR TO PROPERLY GAUGE THE CORRECT AMOUNT OF HEAT
TO APPLY DURING INSTALLATION. WHEN SPECIFIED ON THE PLANS, ALL LONG LINES SHALL BE
PLASTIC TYPE D-3 OR D-4.

2) CENTER LINES - CENTER LINES, NO PASS LINES, AND DOUBLE CENTER LINES, AS WARRANTED, SHALL
BE USED ON ALL ARTERIALS AND ON ALL UNDIVIDED PAVEMENTS OF THREE OR MORE LANES.
DOUBLE CENTER LINE SHALL HAVE 4 INCHES BETWEEN LINES FOR MULTI-LANE ROADWAYS,
COLLECTOR ARTERIAL, WHERE LEFT-TURN CHANNELIZATION IS PRESENT, AND ON NARROWER
ROADWAYS WITH 10 FOOT WIDE LANES OR LESS. DOUBLE CENTER LINE SHALL HAVE 12 INCHES
BETWEEN LINES ON MAJOR AND SECONDARY ARTERIALS, WHERE NON OF THE ABOVE LISTED
CONDITIONS ARE PRESENT.
INSTALL CENTER LINE RPMs IN ACCORDANCE WITH SHEETS 4, 5, AND 6 OF 9.

3) LANE LINE - LANE LINES SHALL BE USED ON MULTI-LANE ROADS. INSTALL RPMs IN ACCORDANCE
WITH SHEETS 4, 5, AND 6 OF 9.

4) EDGE LINE - EDGE LINES SHALL BE USED UNDER THE FOLLOWING CIRCUMSTANCES, AND SHALL BE
CARRIED THROUGH PRIVATE DRIVEWAYS AND PRIVATE ROAD APPROACHES:
A) ON ALL MAJOR ARTERIALS, WHEN MINIMUM 10 FOOT LANE WIDTHS CAN BE PROVIDED, AND NO
CONTINUOUS CURBING EXISTS ALONG THE ARTERRIAL.
B) ON ALL URBAN SECONDARY ARTERIALS, AND ALL RURAL SECONDARY ARTERIALS WHICH HAVE A
POSTED SPEED LIMIT OF 40 MPH OR GREATER OR AN AADT > 3,000, WHEN MINIMUM 10 FOOT
LANE WIDTHS CAN BE PROVIDED, AND NO CONTINUOUS CURBING EXISTS ALONG THE ARTERRIAL.
C) ON ALL COLLECTOR ARTERIALS WHICH HAVE AN AADT > 3,000, WHEN MINIMUM 10 FOOT LANE
WIDTHS CAN BE PROVIDED, AND NO CONTINUOUS CURBING EXISTS ALONG THE ARTERRIAL.
D) ON ALL PAVEMENT WIDTH TRANSITIONS, OMIT IF ADJACENT TO CURBING.
E) ON ALL ARTERIALS WHERE IT IS DESIRABLE TO REDUCE DRIVING ON PAVED SHOULDERS.

5) STOP LINE - STOP LINES SHALL BE USED UNDER THE FOLLOWING CIRCUMSTANCES AND SHALL BE
CARRIED ACROSS ALL APPROACH LANES WHICH ARE REQUIRED TO STOP:
A) ON ALL APPROACHES TO SIGNALIZED INTERSECTIONS.
B) ON ALL APPROACHES TO MULTI-WAY STOP INTERSECTIONS WHERE MARKED CROSSWALKS DO NOT
EXIST.
C) ON ALL APPROACHES WHERE CHANNELIZATION EXISTS AND MARKED CROSSWALKS DO NOT EXIST.
D) CROSSWALK LINES - CROSSWALK LINES SHALL HAVE A SLIP-RESISTANT TREATMENT. THEY SHALL BE
USED AT STOP-CONTROLLED INTERSECTIONS, WHEN APPROVED BY THE COUNTY ENGINEER, AT ALL
SIGNALIZED INTERSECTIONS, AND AT COUNTY ENGINEER-APPROVED MID-BLOCK CROSSINGS AND
UNCONTROLLED CROSSINGS.

6) REMOVAL - ALL EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH NEW PAVEMENT
MARKINGS SHALL BE REMOVED.

7) DEFINITIONS - (NOTE - PROFILED PLASTIC LINES (TYPE D) SHALL CONFORM TO WS DOT STANDARD
PLAN M-20.20-XX UNLESS OTHERWISE NOTED)
A) CENTER LINE - 4-INCH BROKEN YELLOW, 10-FOOT LINE, 30-FOOT GAP (NOT PROFILED IF TYPE D)
B) NO-PASS LINE - 4-INCH SOLID YELLOW / 4-INCH GAP / 4-INCH BROKEN YELLOW, 10-FOOT LINE,
20-FOOT GAP (NOT PROFILED IF TYPE D)
C) DOUBLE CENTER LINE - 4-INCH SOLID YELLOW / 4-INCH OR 12-INCH GAP / 4-INCH SOLID YELLOW
(NOT PROFILED IF TYPE D)
D) TWO-WAY LEFT-TURN CENTER LINE - 4-INCH SOLID YELLOW / 4-INCH GAP / 4-INCH BROKEN
YELLOW, 10-FOOT LINE, 30-FOOT GAP (NOT PROFILED IF TYPE D)
E) LANE LINE - 4-INCH BROKEN WHITE, 10-FOOT LINE, 30-FOOT GAP (PROFILED IF TYPE D)
F) EDGE LINE - 4-INCH SOLID YELLOW OR WHITE (NOT PROFILED IF TYPE D)
G) WIDE LANE LINE - 8-INCH SOLID (WHITE PROFILED IF TYPE D)
H) WIDE DOTTED LANE LINE - 8-INCH DOTTED WHITE, 3-FOOT LINE, 9-FOOT GAP (PROFILED IF TYPE D)
I) DOTTED EXTENSION LINE - 4-INCH DOTTED WHITE OR YELLOW, 2-FOOT LINE, 6-FOOT GAP (NOT
PROFILED IF TYPE D)
J) STOP LINE - 18-INCH WHITE, PLASTIC
K) CROSSWALK LINES - 24-INCH WIDE, 9-FEET LONG, UNLESS OTHERWISE NOTED, PLASTIC
NOTES
1) TEMPORARY TAPE FOR LANE LINES AND DOUBLE CENTER LINES SHALL BE BASED ON A 40-FOOT UNIT CONSISTING OF A 4-FOOT LINE WITH A 36-FOOT GAP.

2) TEMPORARY TAPE FOR WIDE LANE LINES SHALL BE BASED ON A 20-FOOT UNIT CONSISTING OF A 4-FOOT WHITE LINE WITH A 16-FOOT GAP AND 8 INCHES WIDE.

3) ALL TEMPORARY STOP LINES SHALL BE CONTINUOUS ACROSS THE APPROACH LANES OF TRAFFIC WHERE THEY CURRENTLY EXISTED PRIOR TO WORK. STOP LINES SHALL CONSIST OF 2 ROWS OF 4-INCH WIDE TAPE.

4) TURN ARROWS SHALL BE A MINIMUM OF 6 FEET IN LENGTH.

5) TAPER AS REQUIRED BASED ON SPEED AND WIDTH OF WIDENING FROM CENTER LINE.

6) FOR TWO-WAY LEFT-TURN LANES, USE DOUBLE TEMPORARY CENTER LINE.

7) IF EDGE LINE IS REQUIRED, TEMPORARY TAPE SHALL BE A SOLID 4-INCH WHITE UNBROKEN LINE.

(NOT TO SCALE)
NOTE:
4:1 Tapers may be eliminated provided 4' minimum clearance from back of walk to back of mailbox is provided.

ALT. PLAN VIEW

CEMENT CONCRETE SIDEWALK

4" x 4" TREATED WOOD POST (TYP)

4:1 MIN.

1' - 1.4' MIN.

1" x 6" RUNNER

2" x 6" RUNNER

2" x 6" RUNNER

5' MAXIMUM

CEMENT CONCRETE CURB AND GUTTER

ALT. SECTION

MAILBOX

Cement Concrete Curb and Gutter

ALTERNATE Supports

3.5" - 5" TO 3.9"

7" - 9"

EDGE OF PAVEMENT

3.5" - 6" TO 3.9"

6" (TYPICAL)

CEMENT CONCRETE SIDEWALK

2' MIN.

6" x 8" 1' - 7"

FACE OF CURB

2" x 4" Runner

CEMENT CONCRETE CURB AND GUTTER

4" x 4" TREATED WOOD POST (TYP)

CEMENT CONCRETE CURB AND GUTTER

ALTERNATE Supports

3.5" - 5" TO 3.9"

7" - 9"

EDGE OF PAVEMENT

3.5" - 6" TO 3.9"

Cement Concrete Curb

6" (TYPICAL)

CEMENT CONCRETE SIDEWALK

ALTERNATE Supports

3.5" - 5" TO 3.9"

7" - 9"

EDGE OF PAVEMENT

3.5" - 6" TO 3.9"

GRANULAR SHOULDER

Cement Concrete Curb

6" (TYPICAL)

CEMENT CONCRETE SIDEWALK

SECTION A - A

ALTERNATE Supports

3.5" - 5" TO 3.9"

7" - 9"

EDGE OF PAVEMENT

3.5" - 6" TO 3.9"

GRANULAR SHOULDER

Cement Concrete Curb

6" (TYPICAL)

CEMENT CONCRETE SIDEWALK

ALTERNATE Supports

3.5" - 5" TO 3.9"

7" - 9"

EDGE OF PAVEMENT

3.5" - 6" TO 3.9"

GRANULAR SHOULDER

Cement Concrete Curb

6" (TYPICAL)

CEMENT CONCRETE SIDEWALK

ALTERNATE Supports

3.5" - 5" TO 3.9"

7" - 9"

EDGE OF PAVEMENT

3.5" - 6" TO 3.9"

GRANULAR SHOULDER

Cement Concrete Curb

6" (TYPICAL)

CEMENT CONCRETE SIDEWALK

ALTERNATE Supports

3.5" - 5" TO 3.9"

7" - 9"

EDGE OF PAVEMENT

3.5" - 6" TO 3.9"

GRANULAR SHOULDER

Cement Concrete Curb

6" (TYPICAL)

CEMENT CONCRETE SIDEWALK

ALTERNATE Supports

3.5" - 5" TO 3.9"

7" - 9"

EDGE OF PAVEMENT

3.5" - 6" TO 3.9"

GRANULAR SHOULDER

Cement Concrete Curb

6" (TYPICAL)

CEMENT CONCRETE SIDEWALK

ALTERNATE Supports

3.5" - 5" TO 3.9"

7" - 9"

EDGE OF PAVEMENT

3.5" - 6" TO 3.9"

GRANULAR SHOULDER

Cement Concrete Curb

6" (TYPICAL)

CEMENT CONCRETE SIDEWALK

ALTERNATE Supports

3.5" - 5" TO 3.9"

7" - 9"

EDGE OF PAVEMENT

3.5" - 6" TO 3.9"

GRANULAR SHOULDER

Cement Concrete Curb

6" (TYPICAL)
PLAN VIEW

TRANSITION TO MATCH EXISTING

SECTION A-A

PARABOLIC CROWN

SECTION B-B

EXISTING ASPHALT CONC. RAISED EDGE

SEAL ALL JOINTS WITH AR4000. SEE STANDARD DRAWING PC.XX.2 FOR CONSTRUCTION NOTES

ACTUAL DIMENSIONS SHALL BE DESIGNED BASED ON THE ROADWAY CROSS SECTION AT EACH PROPOSED SPEED HUMP LOCATION.

(PARTIAL SCALE)

SPEED HUMP

SHEET 1 OF 2

STANDARD DRAWING PC.H4.1

APPROVED BY:
COUNTY ENGINEER

DATE

4-1-19

Pierce County
Planning & Public Works
Office of the County Engineer
NOTES:

1) EACH SPEED HUMP SHALL BE CONSTRUCTED AT A RIGHT ANGLE TO THE CENTERLINE ALIGNMENT OF THE ROADWAY.

2) FOR EXISTING PAVEMENT SURFACE PREPARATION SEE WSDOT STANDARD SPECIFICATIONS, 5-04.3(5).A.

3) ASPHALT USED FOR SPEED HUMP CONSTRUCTION SHALL BE COMMERCIAL GRADE HOT MIX ASPHALT (HMA). FOR ADDITIONAL INFORMATION ON ASPHALT AND CONSTRUCTION SEE WSDOT STANDARD SPECIFICATIONS 5-04.

4) CONTRACTOR MAY PROVIDE AS AN OPTION AN ALTERNATE CONSTRUCTION Technique (e.g. BUTT GRIND 1.5-FOOT WIDTH ACROSS LEADING EDGE OF SPEED HUMP TO PREVENT UNRAVELING). ALTERNATE CONSTRUCTION TECHNIQUE SHALL BE DISCUSSED AT PRE-CONSTRUCTION MEETING AND BE APPROVED BY THE PROJECT ENGINEER PRIOR TO IMPLEMENTATION. NO ADJUSTMENT TO UNIT BID PRICE SHALL BE MADE. ALL OTHER CONSTRUCTION ITEMS SHALL BE REQUIRED AS SPECIFIED IN CONTRACT DOCUMENTS.

5) CONTRACTOR SHALL PROVIDE TEMPORARY SPEED HUMP MARKINGS PRIOR TO LEAVING WORKSITE THE DAY OF CONSTRUCTION. CONTRACTOR SHALL MAINTAIN TEMPORARY MARKINGS FOR A MAXIMUM OF SEVEN WORKING DAYS, AT WHICH TIME COUNTY FORCES SHALL HAVE INSTALLED PERMANENT MARKINGS. CONTRACTOR TO NOTIFY RICK BUTNER, TRAFFIC OPERATIONS CENTER AT (253) 798-8000, 3 DAYS IN ADVANCE OF TEMPORARY MARKINGS AND INSTALLATION.

6) CONTRACTOR SHALL SEAL ALL ASPHALT SPEED HUMP JOINTS WITH AR4000 CIL APPROVED OR APPROVED EQUAL PER WSDOT STANDARD SPECIFICATIONS 5-04.2.

(NOT TO SCALE)