

**APPENDIX F**  
**RETROFIT PLAN FOR LANIER POINTE II**

**Safe Harbors used to develop the retrofit scope:**

ADA – Evaluation of Items to Retrofit: 1991 ADAAG

Standard for Retrofit Work: 2010 ADA Standards

FHA – Evaluation of Items to Retrofit: FHA, FHA Regulations, Guidelines, ANSI A117.1 1986

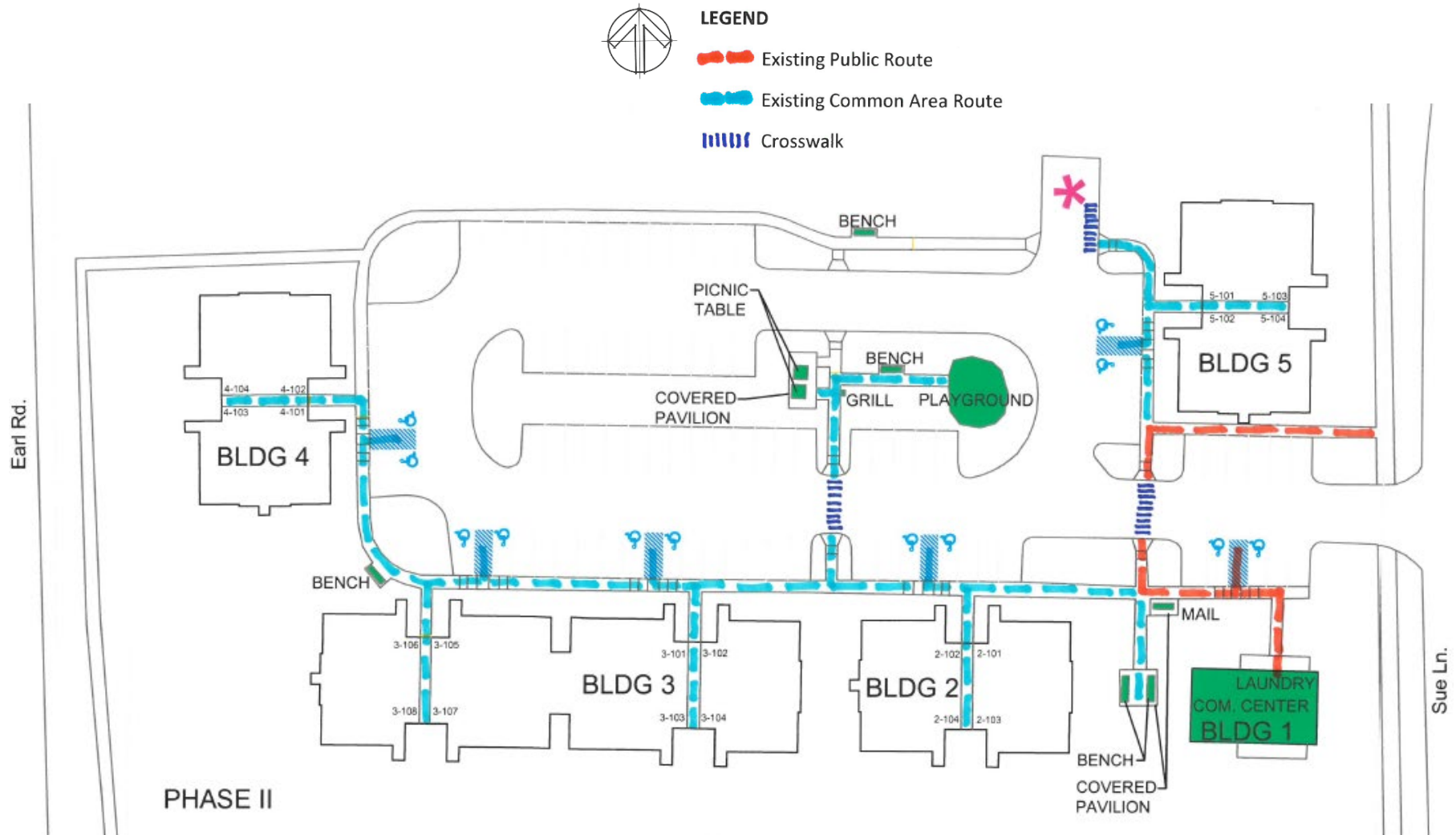
Standard for Retrofit Work: FHA, FHA Regulations, Guidelines, ANSI A117.1 1986

**Notes:**

Current NC Building Code will apply to all work requiring a building permit. Local code requirements for retrofits may be more stringent than the safe harbor listed above.



Alternate accessible routes may be considered. Routes identified in the approved retrofit plan may not be revised unless the change is approved by the DOJ. Survey all portions of the routes affected by concrete and asphalt work done on or after February 2018 to confirm scope of required work.

# ACCESSIBLE ROUTE DIAGRAM



Lanier Pointe II Retrofit Plan – 2

**A. PUBLIC AND COMMON AREA FEATURES (ADA & FHA)**


	<b>Inaccessible Restroom Features</b>		
1	 <p><i>Flush control at women's restroom.</i></p>	Toilet flush control in the women's restroom is located on the side opposite the side of approach (not allowed).	Replace tank.
	<b>Protruding Object</b>		
2	 <p><i>Drinking fountain in community center.</i></p>	The leasing office/community center drinking fountain protrudes 19 inches into the circulation path at a height of 27-1/2 inches at the low fountain and at a height of approximately 31 inches at the high fountain (maximum 4 inch protrusion allowed at heights between 27 inches and 80 inches above the floor).	Install shroud or other cane detectable barrier. Barrier may not obstruct required knee and toe space at lower unit.



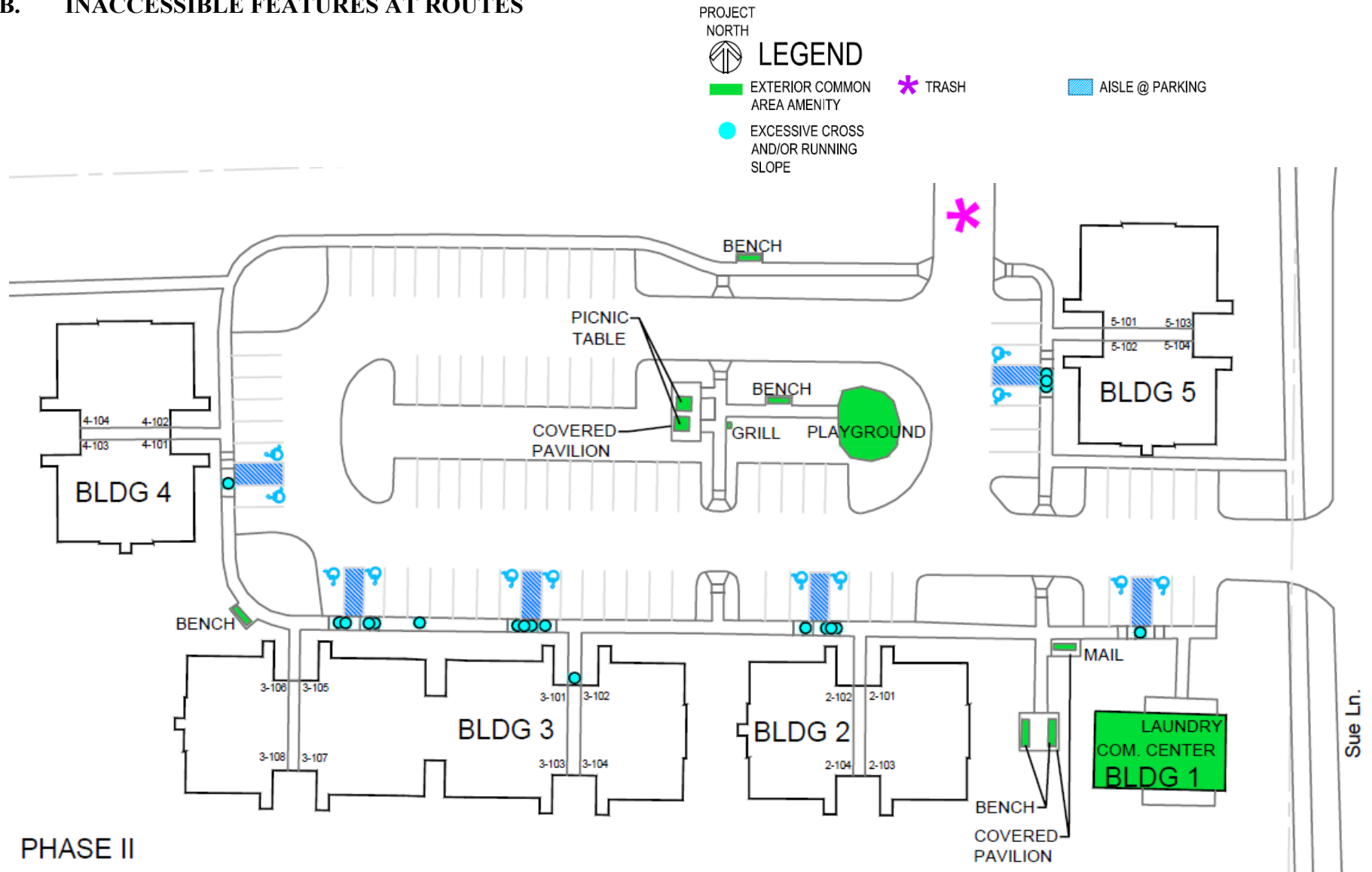
*Protruding height at low fountain.*




*Projection from the wall.*



	ADA						
3	 <p data-bbox="289 618 674 688"><i>Measurement of centerline of men's restroom sign.</i></p>	<p data-bbox="699 280 1262 423">The men's restroom signage is not centered on an 18 inch clear floor space (minimum 9 inches from door jamb to centerline of sign required).</p> <table data-bbox="699 464 1245 570"> <thead> <tr> <th data-bbox="699 500 919 529"><u>Location</u></th> <th data-bbox="1108 464 1245 529"><u>Centerline (inches)</u></th> </tr> </thead> <tbody> <tr> <td data-bbox="699 537 919 566">Men's Restroom</td> <td data-bbox="1108 537 1245 566">7-1/2</td> </tr> </tbody> </table>	<u>Location</u>	<u>Centerline (inches)</u>	Men's Restroom	7-1/2	Relocate sign.
<u>Location</u>	<u>Centerline (inches)</u>						
Men's Restroom	7-1/2						

**B. INACCESSIBLE FEATURES AT ROUTES**



Lanier Pointe II Retrofit Plan – 6

	<b>Lack of Accessible Route</b>		
4	 <p><i>Dumpster location at the end of a vehicular lane.</i></p>	There is no accessible route to the dumpsters (accessible route is required). Dumpster enclosure is at the end of a vehicular lane.	Stripe accessible route to dumpster from east curb ramp.
	<b>Crosswalks</b>		
5	<i>See Accessible Route Diagram.</i>	Crosswalks at vehicular drives are incorporated into the accessible route(s).	Stripe crosswalks.

	<b>Inaccessible Curb Ramp Features</b>														
6	 <p><i>West curb ramp north of Building 3.</i></p>  <p><i>Measurement of running slope.</i></p>	<p>Running slopes of curb ramps are more than 8.3% (maximum 8.3% allowed).</p> <table border="1"> <thead> <tr> <th><u>Location</u></th> <th><u>Slope</u></th> </tr> </thead> <tbody> <tr> <td>North of Building 2, top of east curb ramp</td> <td>9.7%</td> </tr> <tr> <td>North of Building 2, top of west curb ramp</td> <td>9.8%</td> </tr> <tr> <td>North of Building 3, east entry, top of east curb ramp</td> <td>9.4%</td> </tr> <tr> <td>North of Building 3, east entry, top of west curb ramp</td> <td>10.3%</td> </tr> <tr> <td>North of Building 3, west entry, top of west curb ramp</td> <td>9.2%</td> </tr> </tbody> </table>	<u>Location</u>	<u>Slope</u>	North of Building 2, top of east curb ramp	9.7%	North of Building 2, top of west curb ramp	9.8%	North of Building 3, east entry, top of east curb ramp	9.4%	North of Building 3, east entry, top of west curb ramp	10.3%	North of Building 3, west entry, top of west curb ramp	9.2%	<p>Replace curb ramps at accessible route(s) as required to retrofit sections with excessive running slope.</p>
<u>Location</u>	<u>Slope</u>														
North of Building 2, top of east curb ramp	9.7%														
North of Building 2, top of west curb ramp	9.8%														
North of Building 3, east entry, top of east curb ramp	9.4%														
North of Building 3, east entry, top of west curb ramp	10.3%														
North of Building 3, west entry, top of west curb ramp	9.2%														



7



*Curb ramp at the east entry of Building 3.*




*Measurement of cross slope.*

Cross slopes of curb ramps are more than 2.0% (maximum 2.0% allowed).

<u>Location</u>	<u>Slope</u>
Building 5, top of south curb ramp	3.2%
Building 2, top of east curb ramp	3.2%
Building 3, east entry, bottom of west curb ramp	3.6%
Building 3, west entry, top of east curb ramp	3.3%

Replace curb ramps at accessible route(s) as required to retrofit sections with excessive cross slope.

**C. COMMON USE AREAS**

	<b>Inaccessible Mail Center Features</b>																																		
8	 <p><i>Mailbox center.</i></p>	<p>Of 40 mailboxes at this location, 14 mailboxes that serve covered units are above reach range (maximum 54 inches allowed to lock). The top five rows of mailboxes are above reach range.</p> <table border="1"> <thead> <tr> <th data-bbox="701 646 869 678"><u>Location</u></th> <th data-bbox="1108 613 1213 678"><u>Height (inches)</u></th> </tr> </thead> <tbody> <tr> <td colspan="2" data-bbox="701 683 848 716">Building 2:</td> </tr> <tr> <td data-bbox="722 721 1052 753">Box 1020-2 Sue Ln./ 101</td> <td data-bbox="1108 721 1192 753">69-5/8</td> </tr> <tr> <td data-bbox="722 758 835 790">Box 102</td> <td data-bbox="1108 758 1192 790">66-3/4</td> </tr> <tr> <td data-bbox="722 795 835 828">Box 103</td> <td data-bbox="1108 795 1192 828">63-1/4</td> </tr> <tr> <td data-bbox="722 833 835 865">Box 104</td> <td data-bbox="1108 833 1192 865">59-3/4</td> </tr> <tr> <td colspan="2" data-bbox="701 902 848 935">Building 3:</td> </tr> <tr> <td data-bbox="722 940 835 972">Box 104</td> <td data-bbox="1108 940 1241 972">69-1/2 +/-</td> </tr> <tr> <td data-bbox="722 977 835 1010">Box 105</td> <td data-bbox="1108 977 1241 1010">66-3/4 +/-</td> </tr> <tr> <td data-bbox="722 1015 835 1047">Box 106</td> <td data-bbox="1108 1015 1192 1047">63-1/8</td> </tr> <tr> <td data-bbox="722 1052 835 1084">Box 107</td> <td data-bbox="1108 1052 1192 1084">59-3/8</td> </tr> <tr> <td data-bbox="722 1089 835 1122">Box 108</td> <td data-bbox="1108 1089 1192 1122">56-1/4</td> </tr> <tr> <td colspan="2" data-bbox="701 1159 848 1192">Building 4:</td> </tr> <tr> <td data-bbox="722 1196 1052 1229">Box 1020-4 Sue Ln./ 101</td> <td data-bbox="1108 1196 1192 1229">56 +/-</td> </tr> <tr> <td colspan="2" data-bbox="701 1266 848 1299">Building 5:</td> </tr> <tr> <td data-bbox="722 1304 1052 1336">Box 1020-5 Sue Ln./ 101</td> <td data-bbox="1108 1304 1241 1336">66-3/4 +/-</td> </tr> </tbody> </table>	<u>Location</u>	<u>Height (inches)</u>	Building 2:		Box 1020-2 Sue Ln./ 101	69-5/8	Box 102	66-3/4	Box 103	63-1/4	Box 104	59-3/4	Building 3:		Box 104	69-1/2 +/-	Box 105	66-3/4 +/-	Box 106	63-1/8	Box 107	59-3/8	Box 108	56-1/4	Building 4:		Box 1020-4 Sue Ln./ 101	56 +/-	Building 5:		Box 1020-5 Sue Ln./ 101	66-3/4 +/-	<p>Rearrange mail box frames or reassign boxes such that all covered dwelling units are assigned mail boxes that have locks within reach range.</p>
<u>Location</u>	<u>Height (inches)</u>																																		
Building 2:																																			
Box 1020-2 Sue Ln./ 101	69-5/8																																		
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Box 1020-4 Sue Ln./ 101	56 +/-																																		
Building 5:																																			
Box 1020-5 Sue Ln./ 101	66-3/4 +/-																																		



*Typical mailbox frame.*

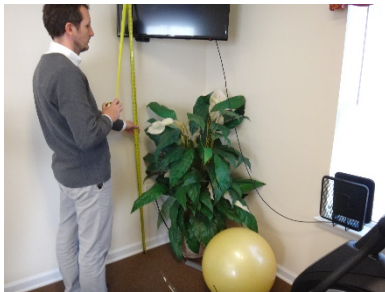


*Measurement to 1020-3 Sue Lane, Box 108.*

Box 102  
Box 103  
Box 104

63-1/4 +/-  
59-1/2 +/-  
56 +/-

9



*Television at Fitness Center.*



*Height of bottom edge.*

The television in the fitness center projects approximately 10 inches into the circulation path at 65 inches above the floor (maximum 4 inches allowed at heights greater than 27 inches and less than 80 inches).

Provide permanent cane detectable barrier under the TV.

#### **D. COVERED DWELLING UNITS**

Lanier Pointe Phase II has four 2-story residential buildings. Three buildings have four 2-bedroom units per floor and one building has four 2-bedroom units and four 3-bedroom units per floor. All 20 first-floor units are covered by FHA.

Unit counts:

Covered 2 Bedroom / 2 Bath Unit = 15 total

Covered 2 Bedroom / 2 Bath Unit (Type A) = 1 total

Covered 3 Bedroom / 2 Bath Unit = 3 total

Covered 3 Bedroom / 2 Bath Unit (Type A) = 1 total

Second Floor 2 Bedroom / 2 Bath Unit = 16 total

Second Floor 3 Bedroom / 2 Bath Unit = 4 total

40 total units (32 – 2 bedroom and 8 – 3 bedroom)

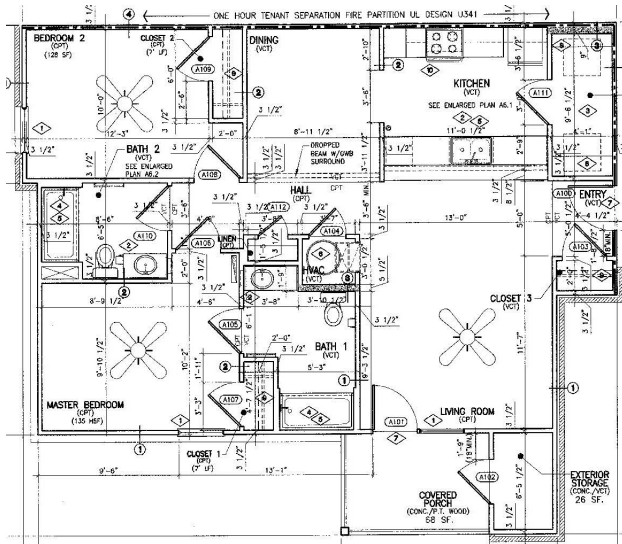
20 total covered units (2 designated accessible units)

#### **Typical Inaccessible Unit Features Common to All Residential Buildings/Units**

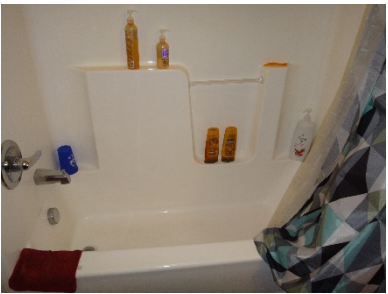
The extent of existing blocking in bathrooms cannot be determined without destructive testing. Additional blocking at unit toilets, tubs and showers may be required as part of unit retrofits.



**UNIT TYPE: 2 Bedroom, 2 Bathroom**



Surveyed Units 2-102 and 5-102 – Typical for 15 total units



Unit Plan. (PENDERGRAPH04197).

<p>10</p>	 <p><i>Bathtub/shower surround in Unit 2-102.</i></p>	<p>The shape of the bathtub surrounds precludes the installation of future grab bars with firm attachment to blocking (ability to install grab bars required).</p>	<p>Replace tub surround or install custom grab bars that can be mounted in the required locations at the existing surrounds. If not replacing the tub surround, fabricate at least two custom grab bars for the tub back walls. Maintain a stock of two such grab bars on site at all times. Install on request at no charge.</p>
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<p>11</p>	 <p><i>Dimension from side wall to centerline of lavatory in Unit 2-102.</i></p>	<p>Lavatory centerlines are less than 24 inches to the side wall (minimum 24 inches required) and the cabinets are not removable.</p> <table border="1" data-bbox="699 358 1220 578"> <thead> <tr> <th><u>Location</u></th> <th><u>Distance (inches)</u></th> </tr> </thead> <tbody> <tr> <td>Unit 2-102 master bath</td> <td>21-3/8</td> </tr> <tr> <td>Unit 2-102 hall bath</td> <td>18-3/4</td> </tr> <tr> <td>Unit 5-102 master bath</td> <td>21-1/4</td> </tr> <tr> <td>Unit 5-102 hall bath</td> <td>18-3/4</td> </tr> </tbody> </table>	<u>Location</u>	<u>Distance (inches)</u>	Unit 2-102 master bath	21-3/8	Unit 2-102 hall bath	18-3/4	Unit 5-102 master bath	21-1/4	Unit 5-102 hall bath	18-3/4	<p>Install removable base cabinet with 30 inch wide knee space in compliance with safe harbor knee and toe clearance requirements.</p> <p>Attach a durable-material placard stating: “THIS CABINET IS REMOVABLE FOR PERSONS WITH DISABILITIES. CONTACT MANAGEMENT.”</p>
<u>Location</u>	<u>Distance (inches)</u>												
Unit 2-102 master bath	21-3/8												
Unit 2-102 hall bath	18-3/4												
Unit 5-102 master bath	21-1/4												
Unit 5-102 hall bath	18-3/4												
<p>12</p>	<p><i>Dimension from toilet side wall to lavatory Unit 2-102.</i></p> 	<p>The clear width of the spaces at the wall behind the toilet are 29 inches to 29-1/2 inches wide (minimum 33 inches required).</p> <table border="1" data-bbox="699 792 1220 938"> <thead> <tr> <th><u>Location</u></th> <th><u>Width (inches)</u></th> </tr> </thead> <tbody> <tr> <td>Unit 2-102 hall bathroom</td> <td>29</td> </tr> <tr> <td>Unit 5-102 hall bathroom</td> <td>29-1/2</td> </tr> </tbody> </table>	<u>Location</u>	<u>Width (inches)</u>	Unit 2-102 hall bathroom	29	Unit 5-102 hall bathroom	29-1/2	<p>Reduce lavatory/vanity cabinet width to the maximum extent possible to widen the space.</p>				
<u>Location</u>	<u>Width (inches)</u>												
Unit 2-102 hall bathroom	29												
Unit 5-102 hall bathroom	29-1/2												

	<p><i>Dimension from toilet side wall to lavatory Unit 2-102.</i></p> 								
13	 <p><i>Dimension from side wall / bathtub to toilet centerline in Unit 2-102.</i></p>	<p>Toilet centerlines are less than 18 inches to the bathtub side wall (minimum 18 inches required).</p> <table data-bbox="699 979 1224 1125"> <thead> <tr> <th><u>Location</u></th> <th><u>Distance (inches)</u></th> </tr> </thead> <tbody> <tr> <td>Unit 2-102 hall bathroom</td> <td>15-3/8</td> </tr> <tr> <td>Unit 5-102 hall bathroom</td> <td>15-1/8</td> </tr> </tbody> </table>	<u>Location</u>	<u>Distance (inches)</u>	Unit 2-102 hall bathroom	15-3/8	Unit 5-102 hall bathroom	15-1/8	<p>Install offset flange to shift toilet centerline to a position as close to 18 inches from the tub as is possible.</p>
<u>Location</u>	<u>Distance (inches)</u>								
Unit 2-102 hall bathroom	15-3/8								
Unit 5-102 hall bathroom	15-1/8								



14



*Tape at edge of bathroom door leaf in open position at Unit 2-102.*



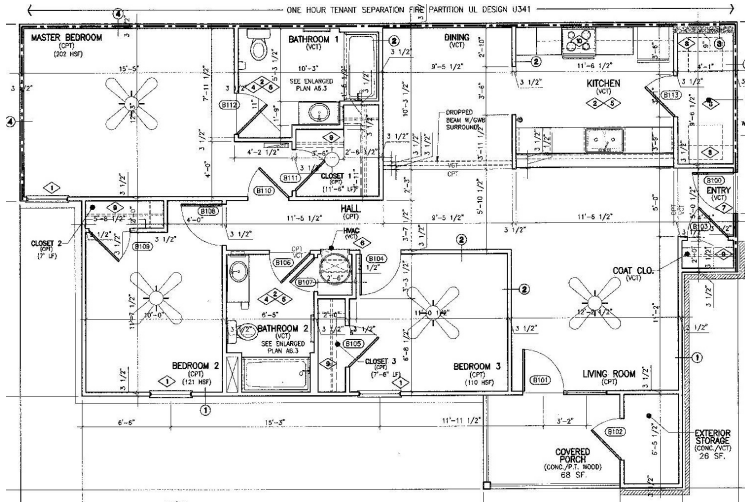
*Dimension from door leaf in open position to bathtub.*

The clear floor space in the bathroom is less than 48 inches long (minimum 48 inches required).

Dimension	Clear
<u>Location</u>	<u>(inches)</u>
Unit 2-102 hall bathroom	34-1/2
Unit 5-102 hall bathroom	33-5/8


Reverse the door so that it does not swing into the bathroom.

**UNIT TYPE: 3 Bedroom, 2 Bathroom**  
 Surveyed Unit 3-104 – Typical for 3 total units



Unit Plan. (PENDERGRAPH04198).

**Inaccessible Features:**

<p>15</p>	 <p>Bathtub/shower surround in Unit 3-104.</p>	<p>The shape of the bathtub surrounds precludes the installation of future grab bars with firm attachment to blocking (ability to install grab bars required).</p>	<p>Replace tub surround or install custom grab bars that can be mounted in the required locations at the existing surrounds. If not replacing the tub surround, fabricate at least two custom grab bars for the tub back walls. Maintain a stock of two such grab bars on site at all times. Install on request at no charge.</p>
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*Dimension from side wall to centerline of lavatory in Unit 3-104 hall bathroom.*



*Interior of vanity in Unit 3-104 hall bathroom.*

Lavatory centerlines are less than 24 inches to the side wall (minimum 24 inches required) and the cabinets are not removable.

<u>Location</u>	<u>Distance (inches)</u>
Unit 3-104 master bathroom	19

Install removable base cabinet with 30 inch wide knee space in compliance with safe harbor knee and toe clearance requirements.

Attach a durable-material placard stating: "THIS CABINET IS REMOVABLE FOR PERSONS WITH DISABILITIES. CONTACT MANAGEMENT."