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**Algorithm 1:** Road Generation Process

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**Input:** The set of delaunay Triangles  $T$ , the set of entry points  $P$

**Output:** The set of road segments generated  $R$

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1: initialize set  $R$ 
2:  $visited\_all\_triangles = FALSE$ 
3: while  $visited\_all\_triangles == FALSE$  do
4:   for  $p$  in  $P$  do
5:     find the  $triangle\_A$  containing  $p$ 
6:      $triangle\_A\_visited = TRUE$ 
7:      $previous\_mid\_point = p$ 
8:     while there exists a  $triangle\_B$  touching  $triangle\_A$  and  $triangle\_B$ 
        hasn't been visited and sharing edge doesn't belong to a same
        building cluster do
9:        $triangle\_B\_visited = TRUE$ 
10:       $next\_mid\_point = sharing\_edge.mid\_point$ 
11:      generate road segment  $r$  connecting  $previous\_mid\_point$  and
         $next\_mid\_point$ 
12:      add  $r$  to  $R$ 
13:       $triangle\_A = triangle\_B$ 
14:       $previous\_mid\_point = next\_mid\_point$ 
15:    end while
16:  end for
17: end while
18: return  $R$ 
```

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