

# THE LAND DEVELOPER'S ENGINEERED SOLUTION

a division of THE LAND DEVELOPER, Inc.

• BECAUSE RESULTS MATTER •

January 20, 2021

Paul Monsef  
Atera Homes, LLC  
451 Duvall Ave NE, Suite 115  
Renton, WA 98059

Re: Chen Residence Downstream Drainage Assessment  
Site Address: XXX West Mercer Way, Mercer Island, WA  
Tax Parcel No.: 1924059317

Dear Mr. Monsef:

## Qualitative Downstream Analysis

The existing lot appears to be located near the top of a steep slope area off of a private shared driveway. Stormwater will be collected in an onsite catch basin where it will flow in an 8 inch diameter pvc pipe to a catch basin located in the shared private drive where it will flow down the hill under the private drive from catch basin to catch basin where it changes to a 12" PVC midway down the hill. Once it reaches the bottom of the hill it exits the 12" pipe into an open ditch along the east side of West Mercer Way. It then enters another 12 inch culvert to travel under West Mercer Way where it discharges into an open channel where it travels down to a 24" diameter culvert to cross under SE 51<sup>st</sup> street. Where it connects to a catch basin and then flows into a 30 pipe prior to discharging into Lake Washington. GIS drainage basin maps are attached for reference. There are no known capacity issues along this drainage route. The drainage route appears to function adequately and has capacity for this project.

Once again, thank you for the opportunity to work with you on this project. Please feel free to give me a call if you have any questions.

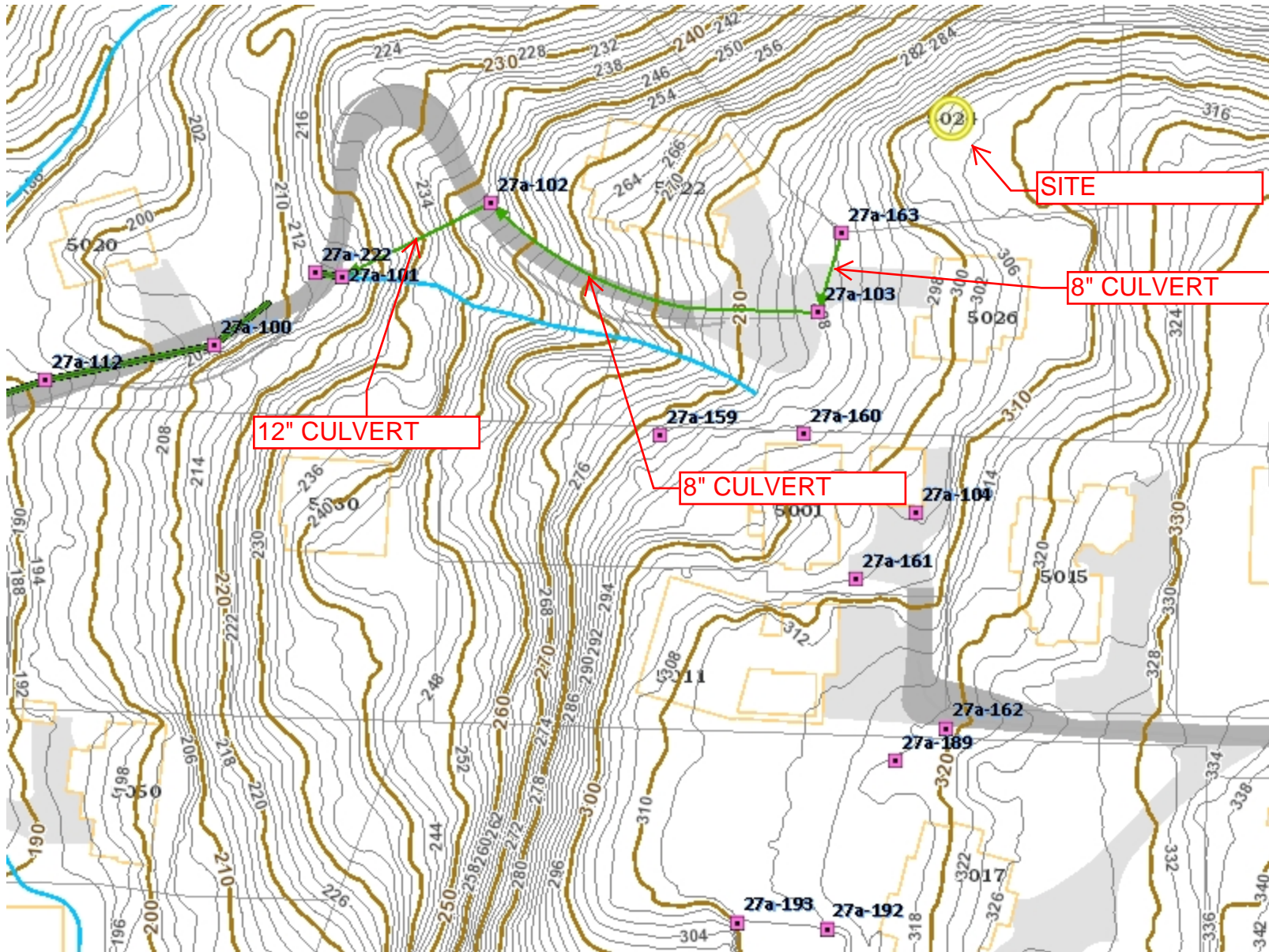
Sincerely,

**The Land Developer, Inc.**

Erik B. Ainsworth, PE  
President

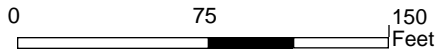


Attachments:  
Drainage Basin Maps



### Legend

- Storm Catch Basin**
  - CB, City Owned
  - CB, Private
  - CB, Unknown
  - Type 2, City Owned
  - Type 2, Private
  - Type 2, Unknown
- Storm Main**
  - Pipe
  - Open Watercourse
  - Piped Watercourse
  - Ditch
  - Culvert
  - Other
- Storm Main - Private
- Storm Discharge Point
- 10ft Lidar Contours (2016)
- 2ft Lidar Contours (2016)
- Address
- Building
- Property Line
- Docks
- Freeway
- Major Street
- Street
- Paved Driveway
- Paved Road
- Paved Parking Area
- Parks
- Lake Washington

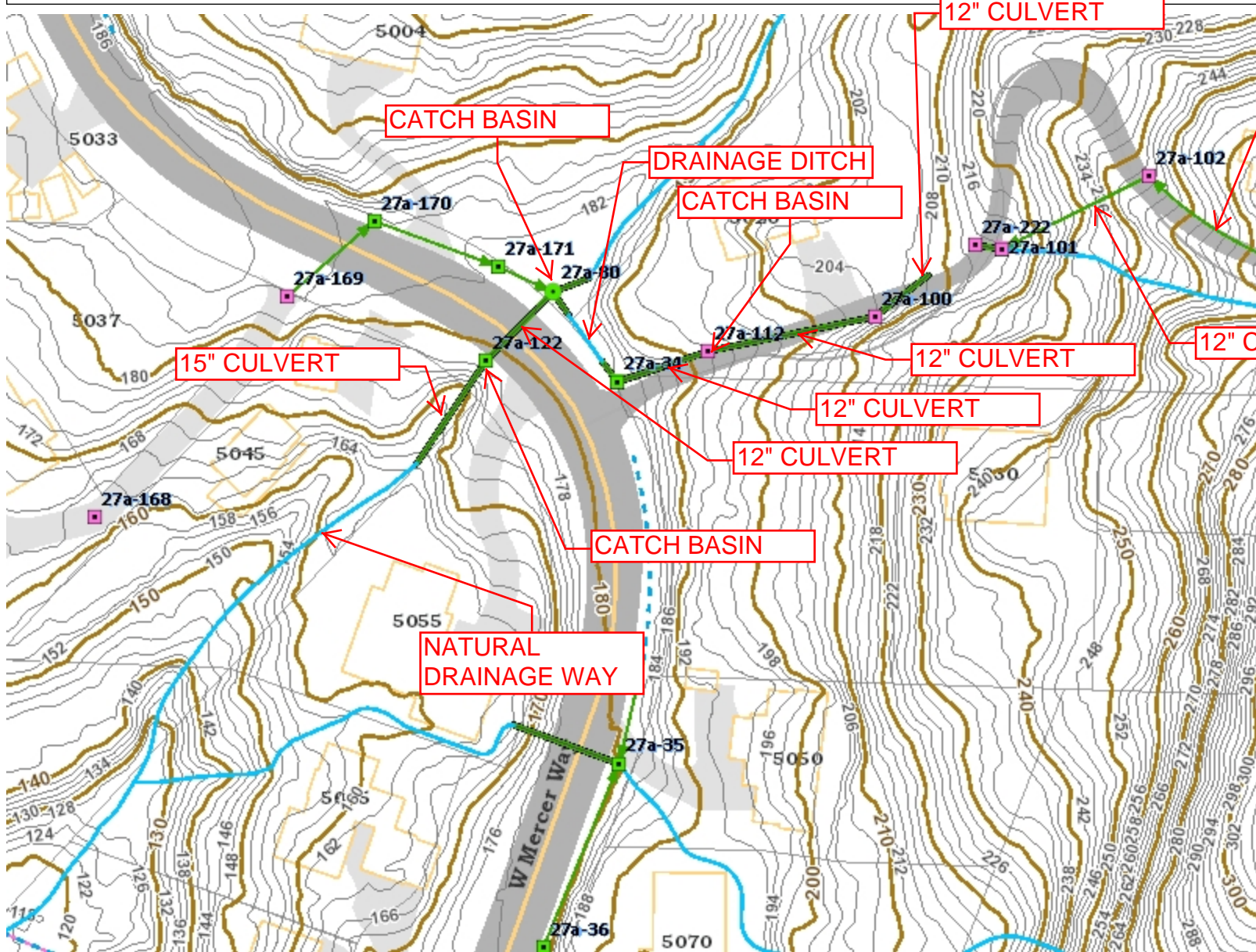


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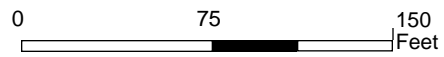
Disclaimer: These maps were developed by the City of Mercer Island and are intended to be a general purpose digital reference tool. These maps are not an accepted legal instrument for describing, establishing, recording or maintaining descriptions for property concerns or boundaries. The City makes no representation or warranty with respect to the accuracy or currency of these data sets, especially in regard to labeling of surveyed dimensions, or agreement with official sources such as records of survey, or mapped locations of features.

**Notes**



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  - CB, Unknown
  - Type 2, City Owned
  - Type 2, Private
  - Type 2, Unknown
- Pipe
- Open Watercourse
- Piped Watercourse
- - - Ditch
- - - Culvert
- - - Other
- Storm Main - Private
- ⊠ Storm Discharge Point
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- Address
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- Property Line
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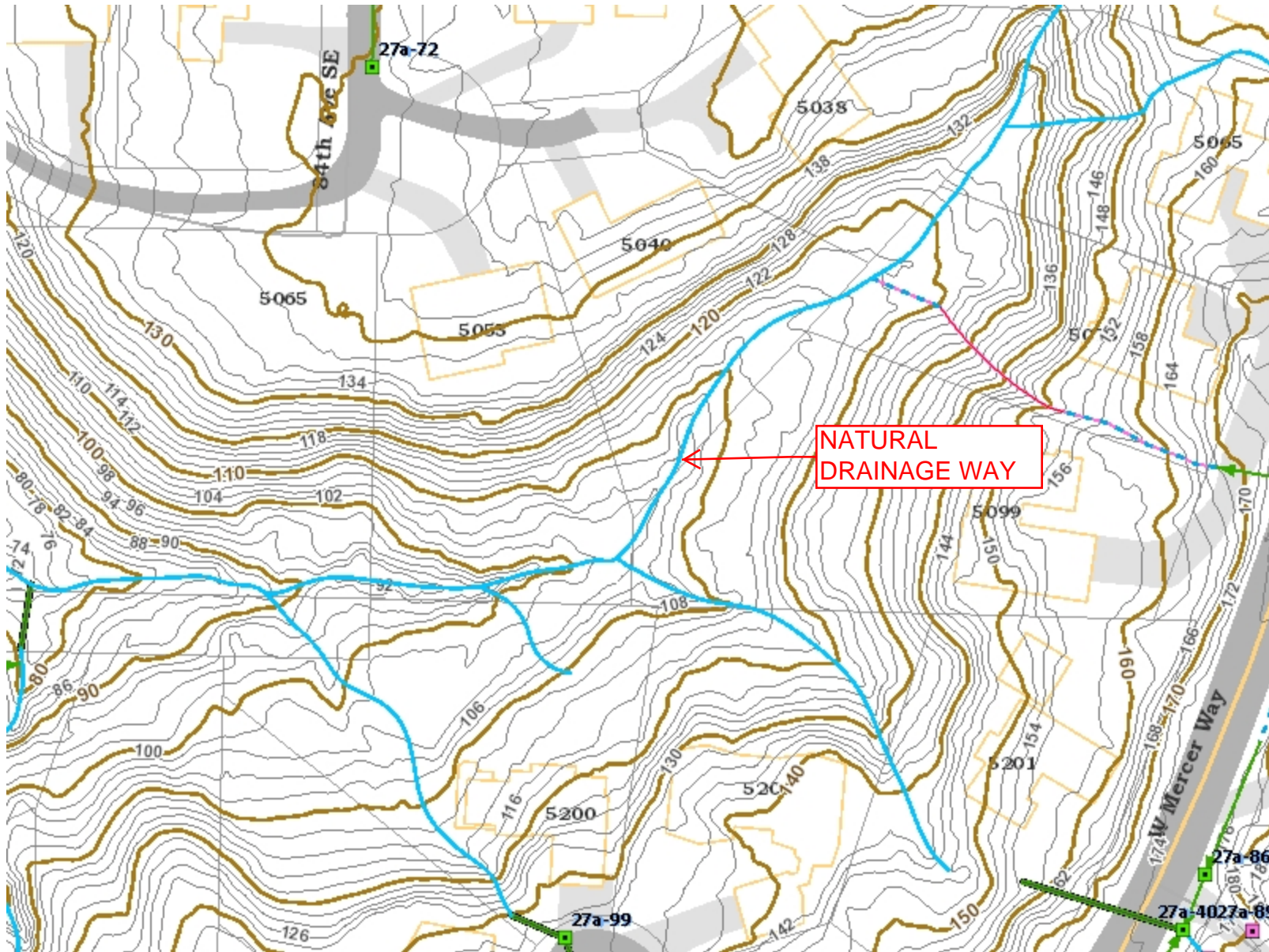
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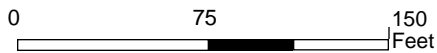
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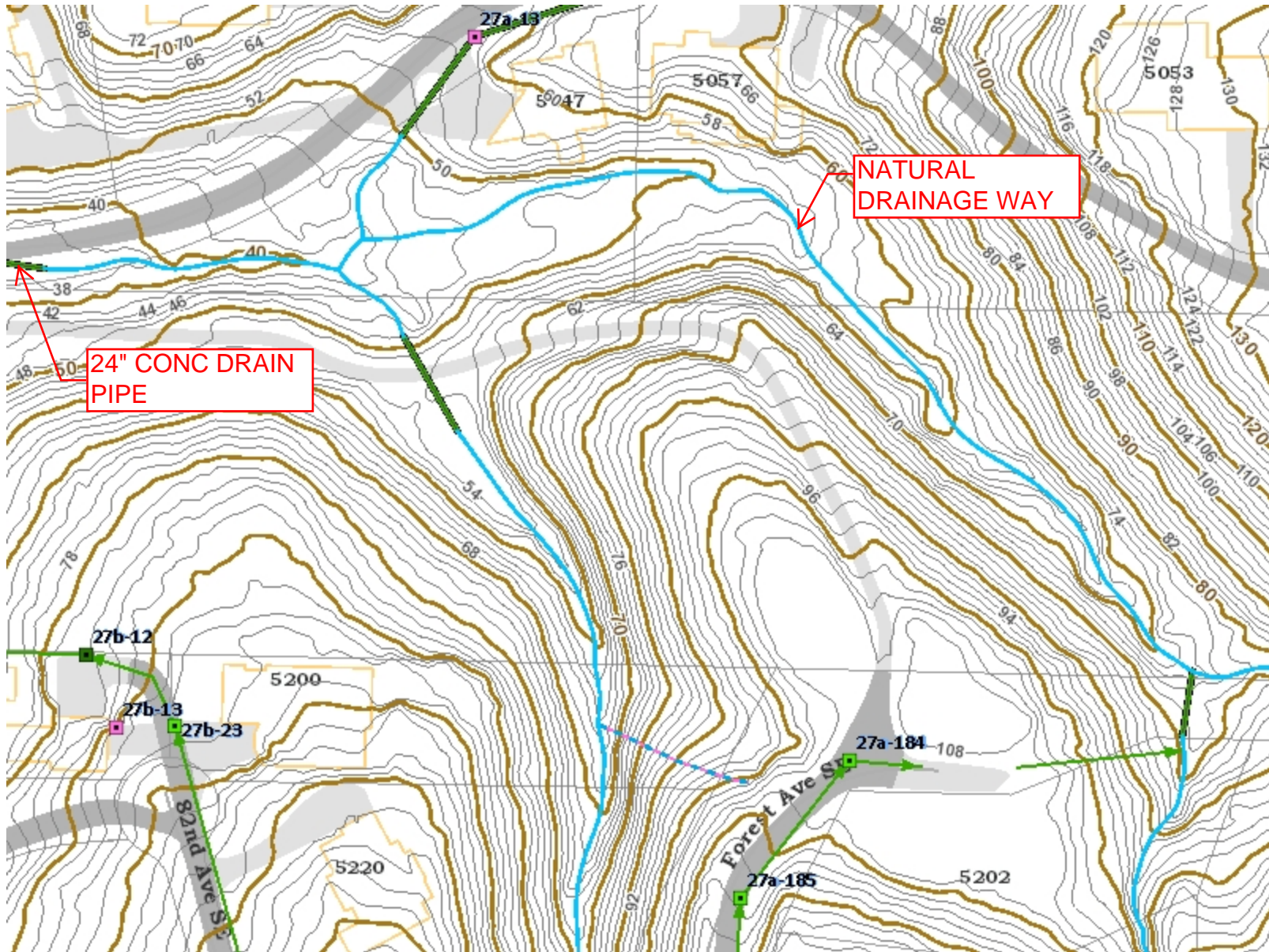


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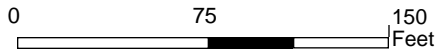
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**Notes**



### Legend

- Storm Catch Basin**
  - CB, City Owned (Green square)
  - CB, Private (Pink square)
  - CB, Unknown (Dark green square)
  - Type 2, City Owned (Green circle)
  - Type 2, Private (Pink circle)
  - Type 2, Unknown (Dark green circle)
- Storm Main**
  - Pipe (Green line with arrow)
  - Open Watercourse (Blue line)
  - Piped Watercourse (Dark green line)
  - Ditch (Dashed blue line)
  - Culvert (Dashed pink line)
  - Other (Red line)
- Storm Main - Private (Pink line)
- Storm Discharge Point (Square with X)
- 10ft Lidar Contours (2016) (Thick brown line)
- 2ft Lidar Contours (2016) (Thin brown line)
- Address (Thin grey line)
- Building (Yellow outline)
- Property Line (Thin grey line)
- Docks (Brown rectangle)
- Freeway (Grey shaded area)
- Major Street (Thick grey line)
- Street (Thin grey line)
- Paved Driveway (Light grey shaded area)
- Paved Road (Dark grey shaded area)
- Paved Parking Area (Medium grey shaded area)
- Parks (Light green shaded area)
- Lake Washington (Blue shaded area)



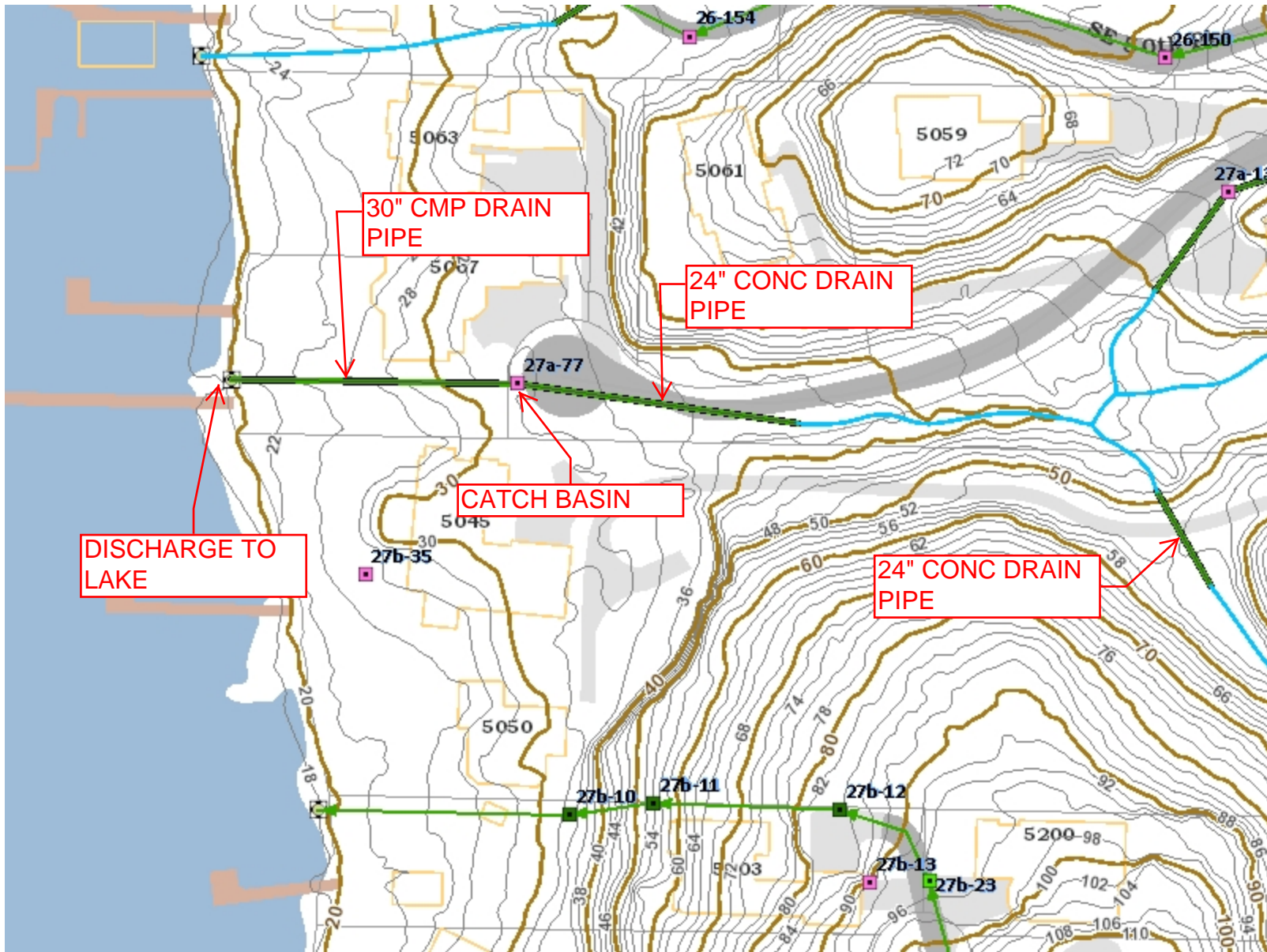
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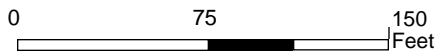
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