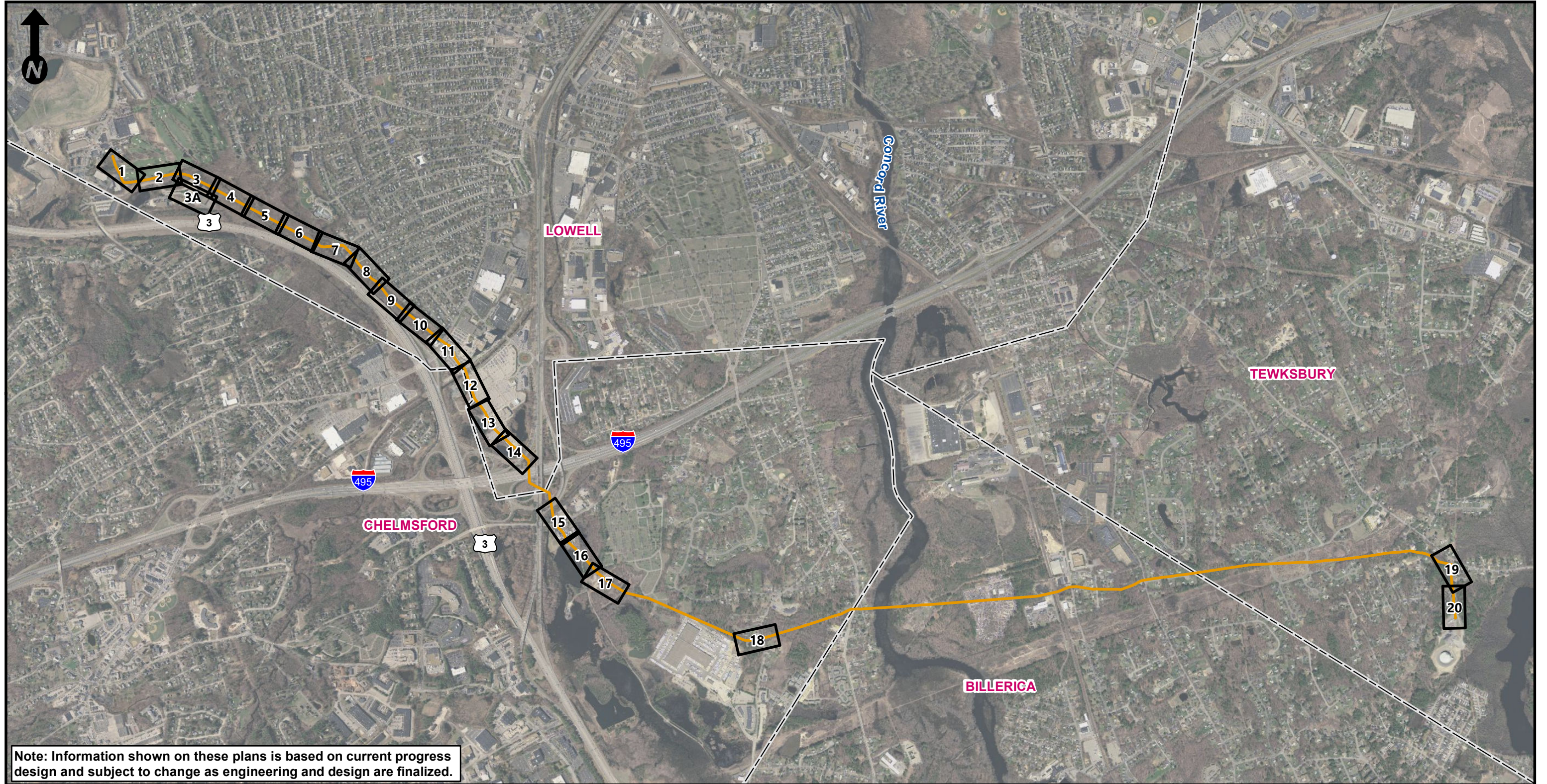


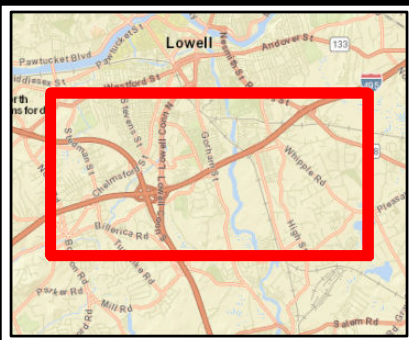
## Figure 5-4 – Project Plans



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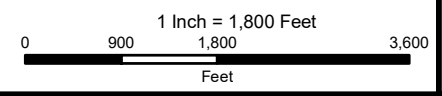




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-  Town Boundary



### Lowell Area Gas Modernization Project

Figure 5-4 - Project Plans

Lowell, Chelmsford and Tewksbury, MA

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Date: 3/14/2018

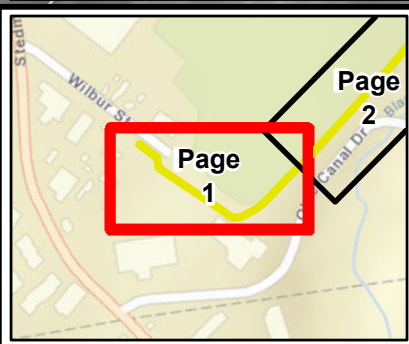
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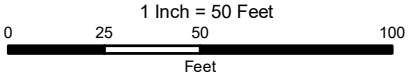




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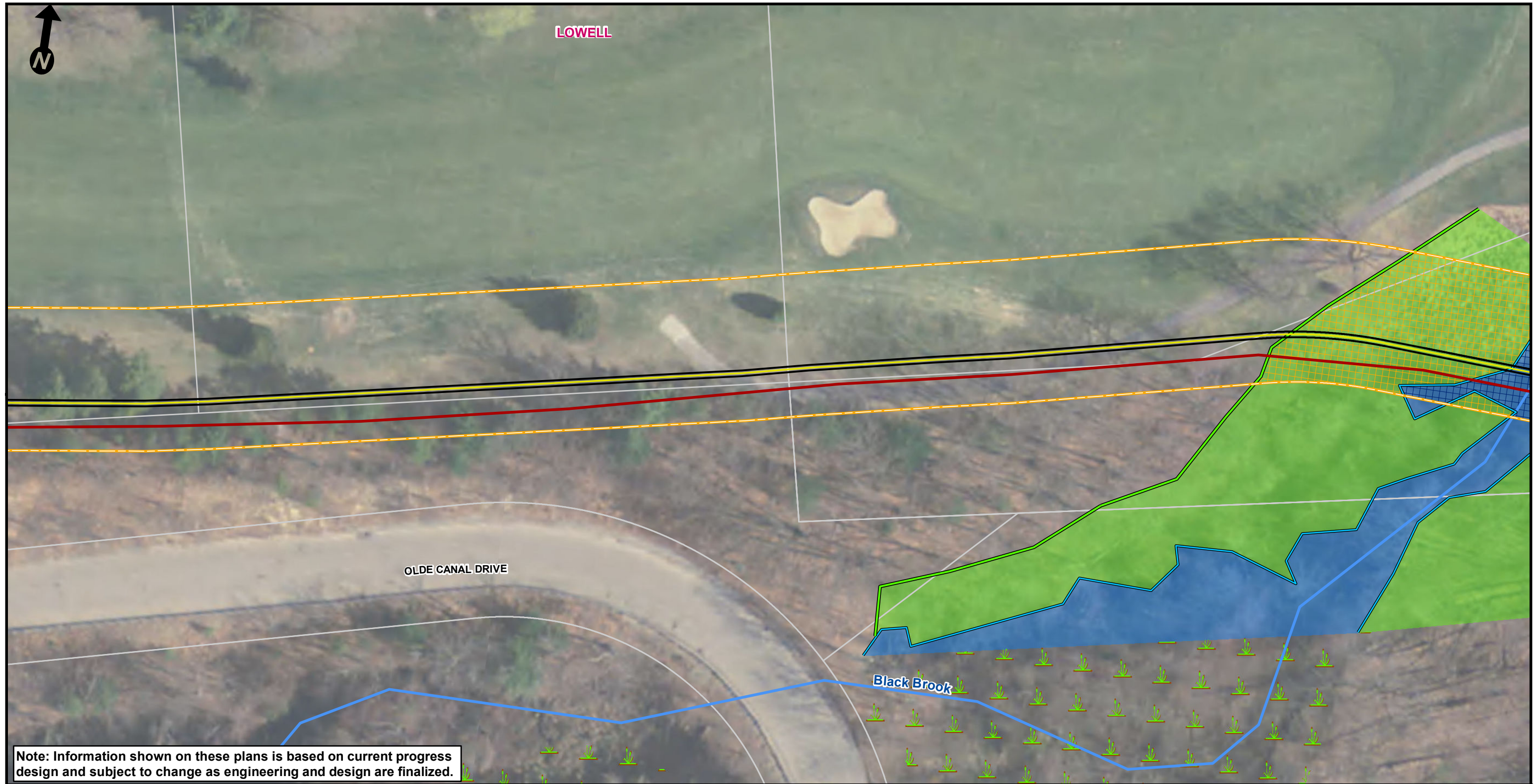
**Lowell Area Gas Modernization Project**

Figure 5-4 Project Plans

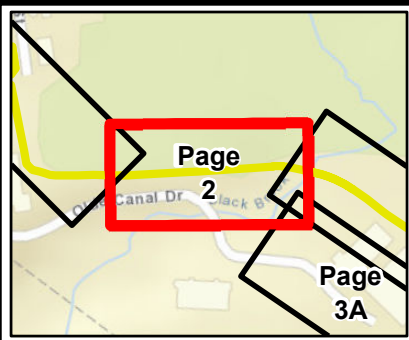
Lowell, Chelmsford and Tewksbury, MA



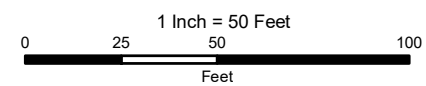




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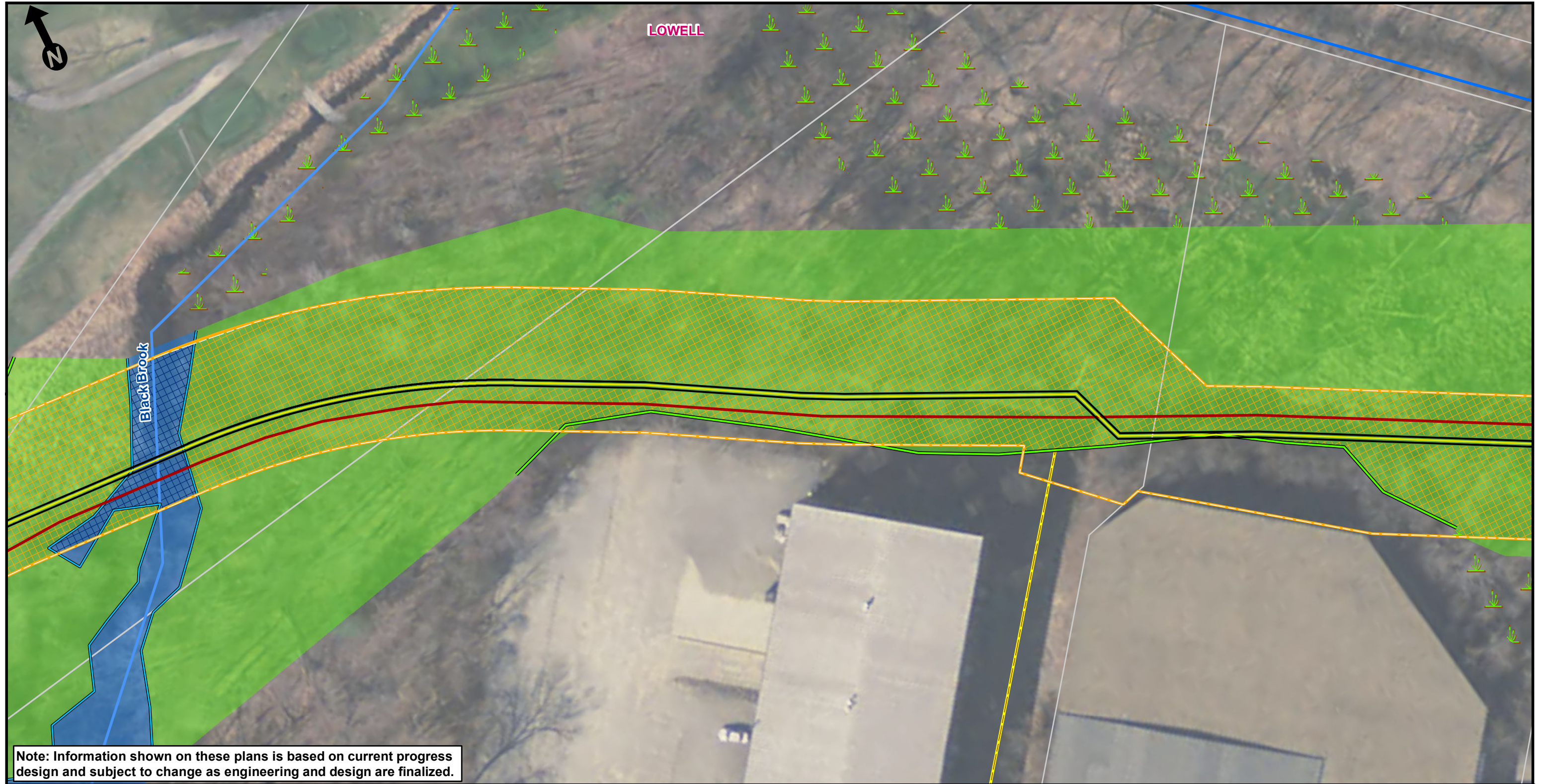
### Lowell Area Gas Modernization Project

Figure 5-4 Project Plans

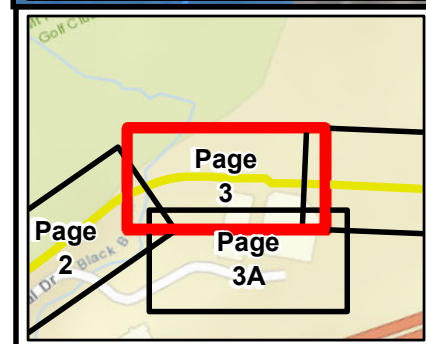
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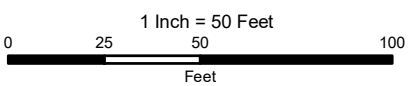




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### Lowell Area Gas Modernization Project

Figure 5-4 Project Plans

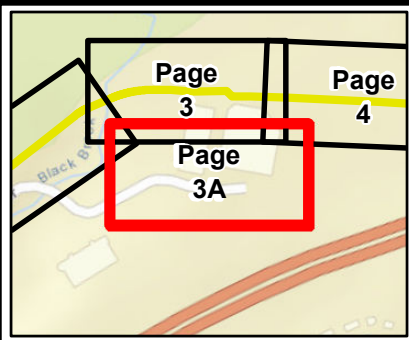
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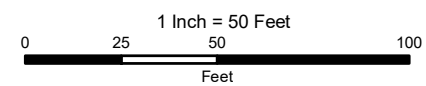




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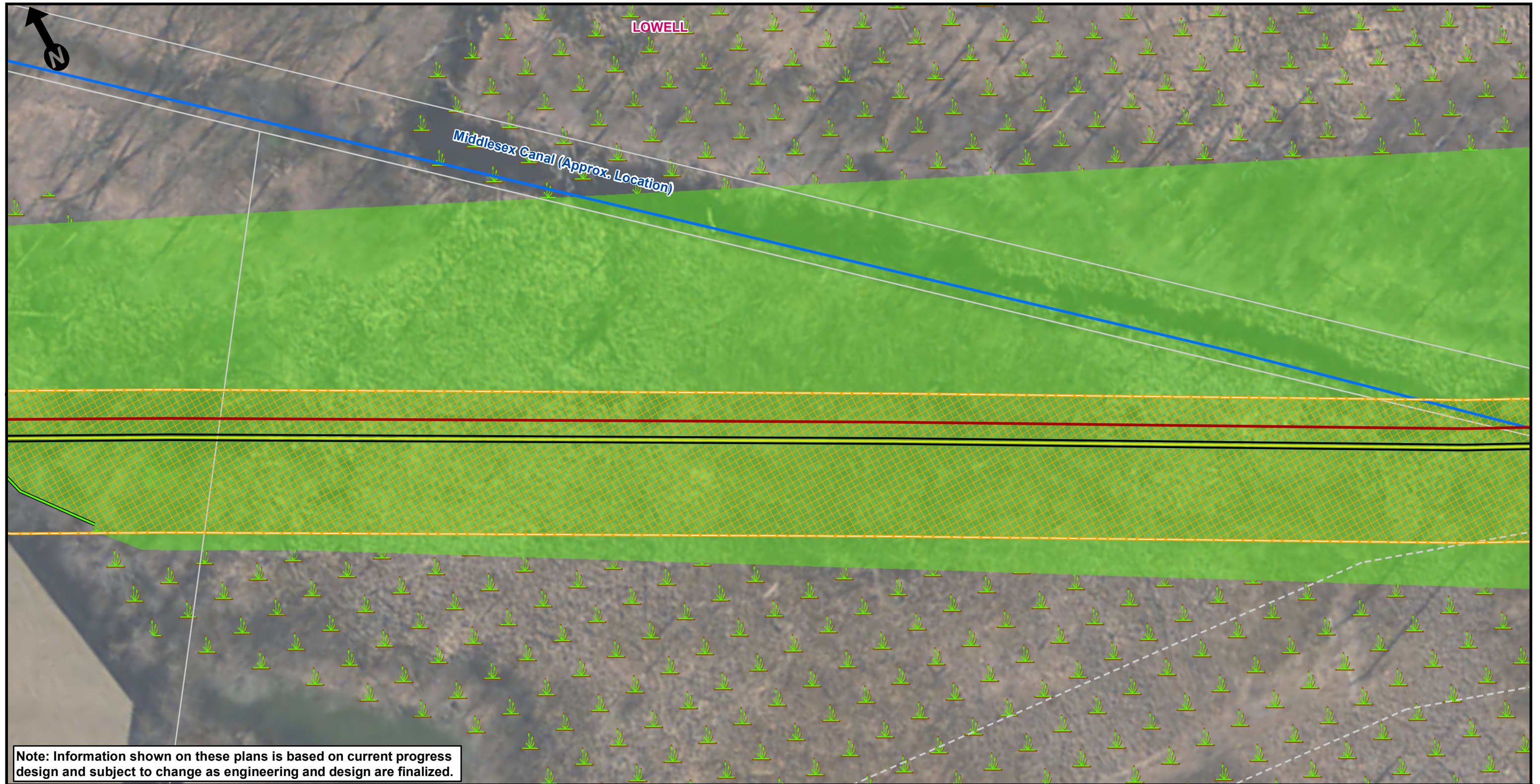
**Lowell Area Gas Modernization Project**

Figure 5-4 Project Plans

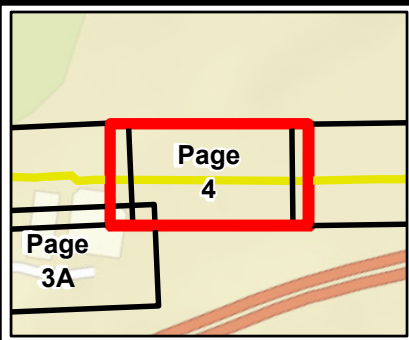
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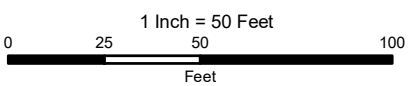




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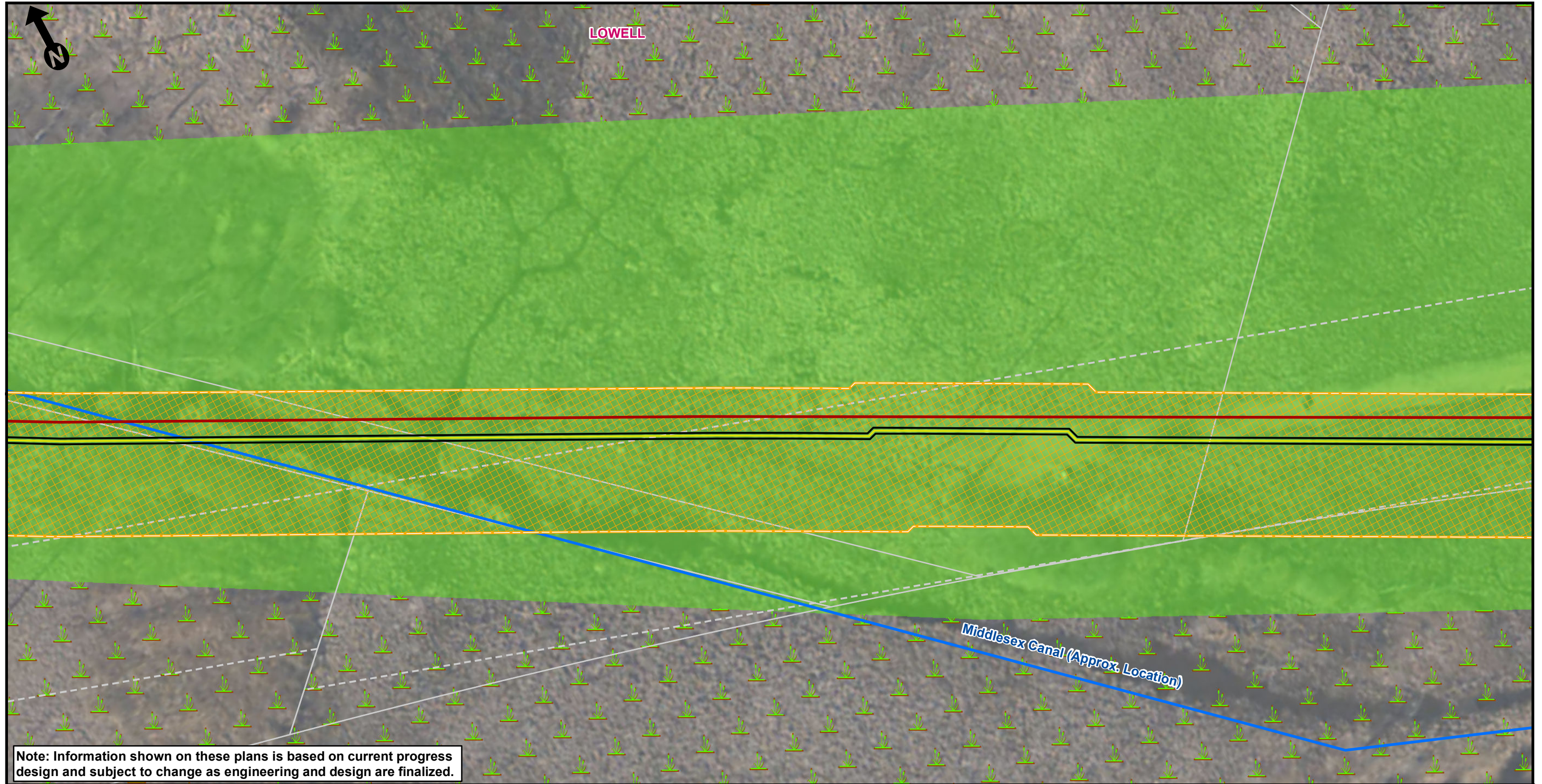
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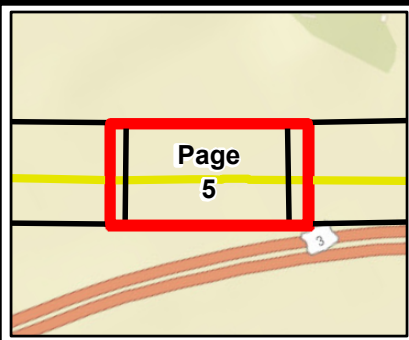
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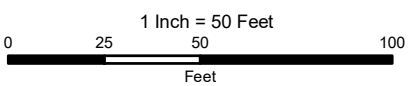




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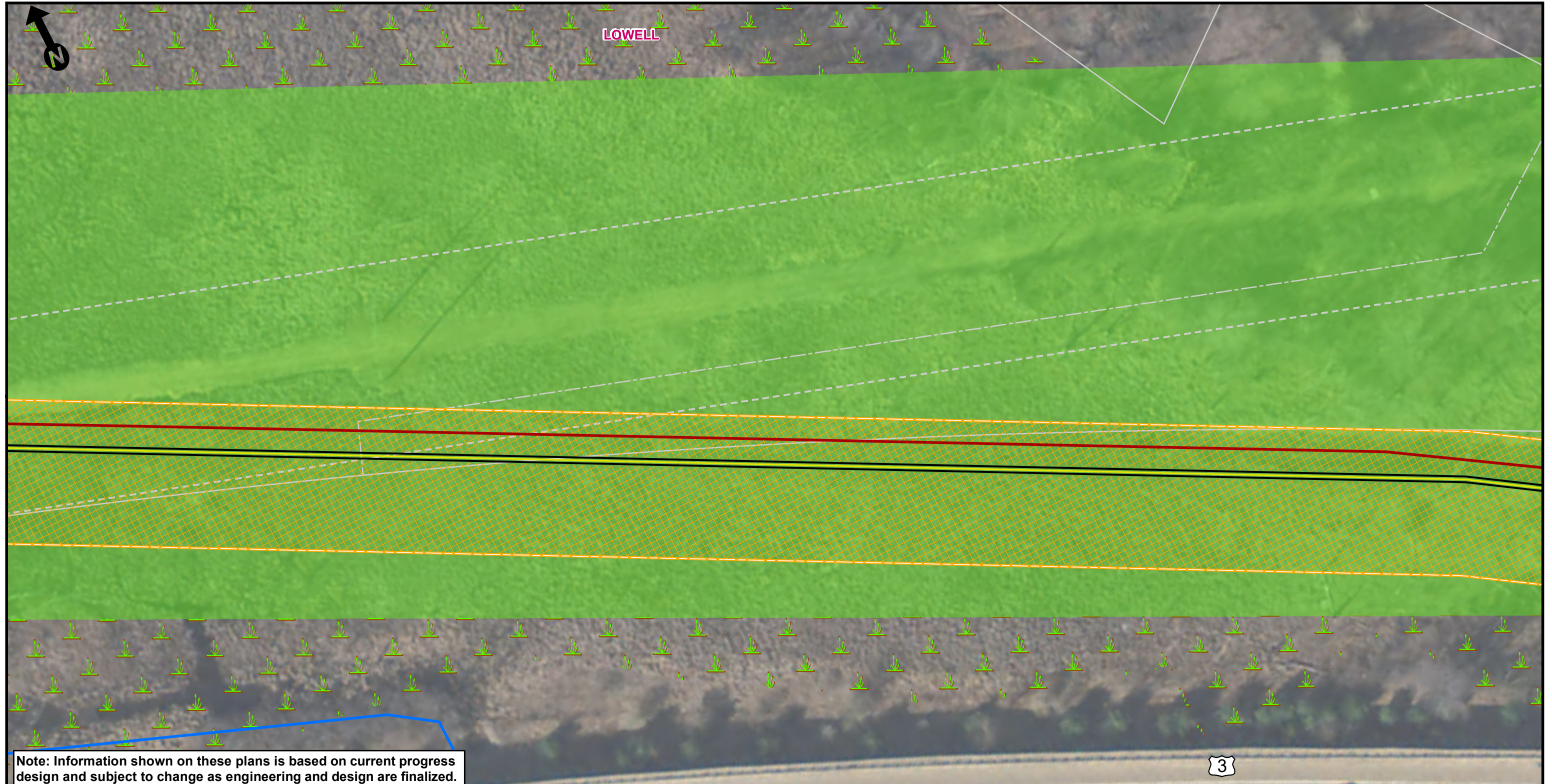
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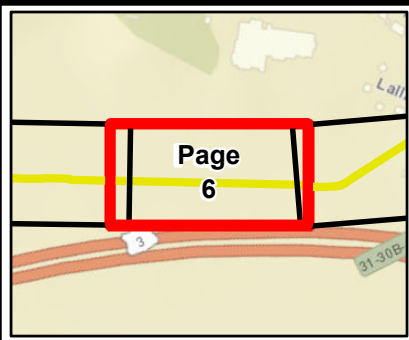
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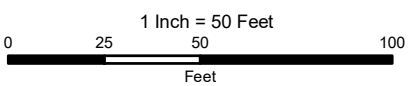




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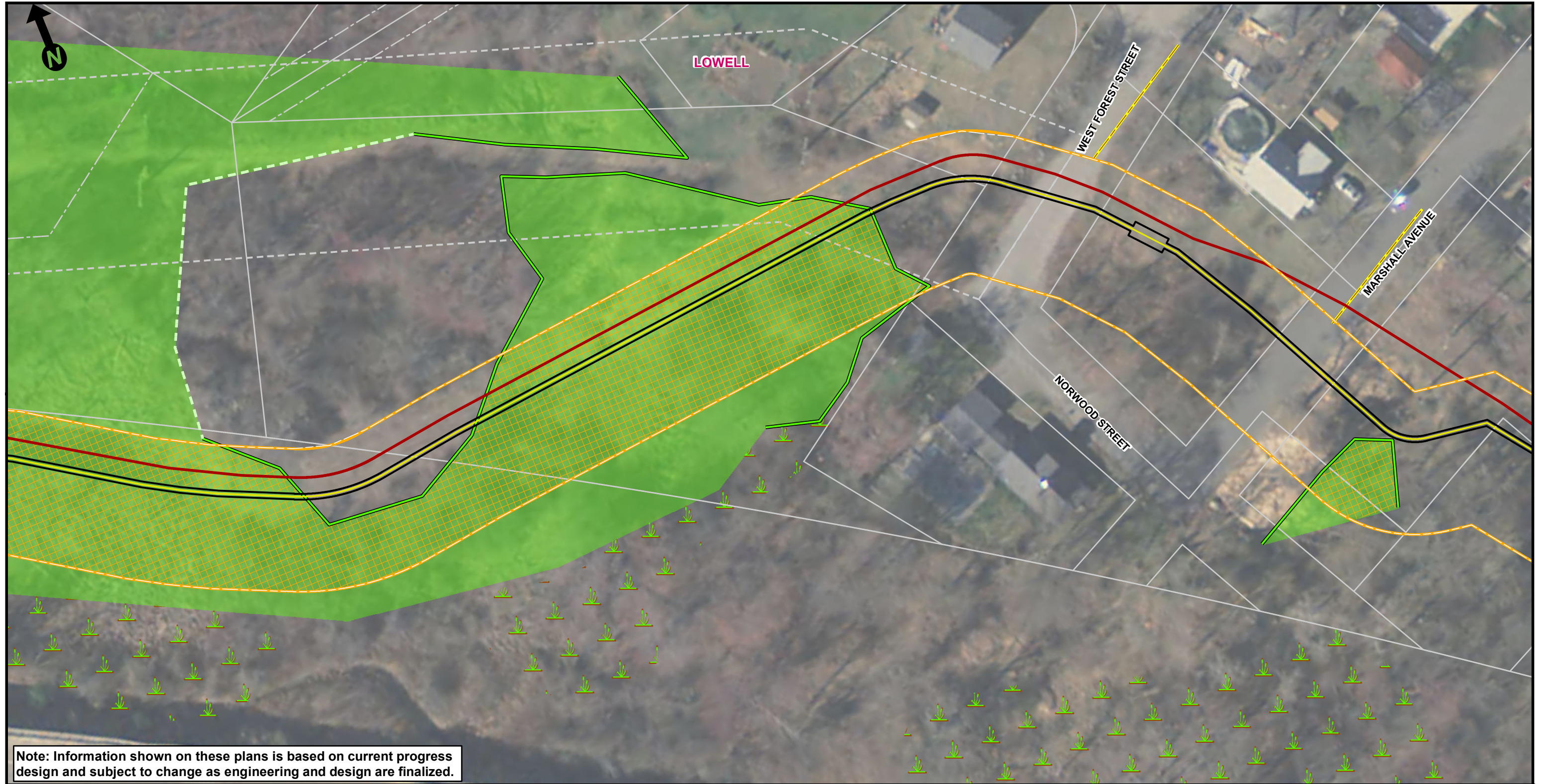
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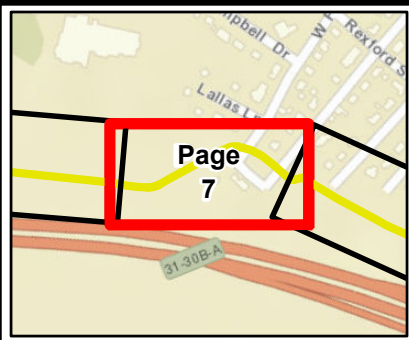
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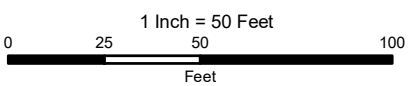




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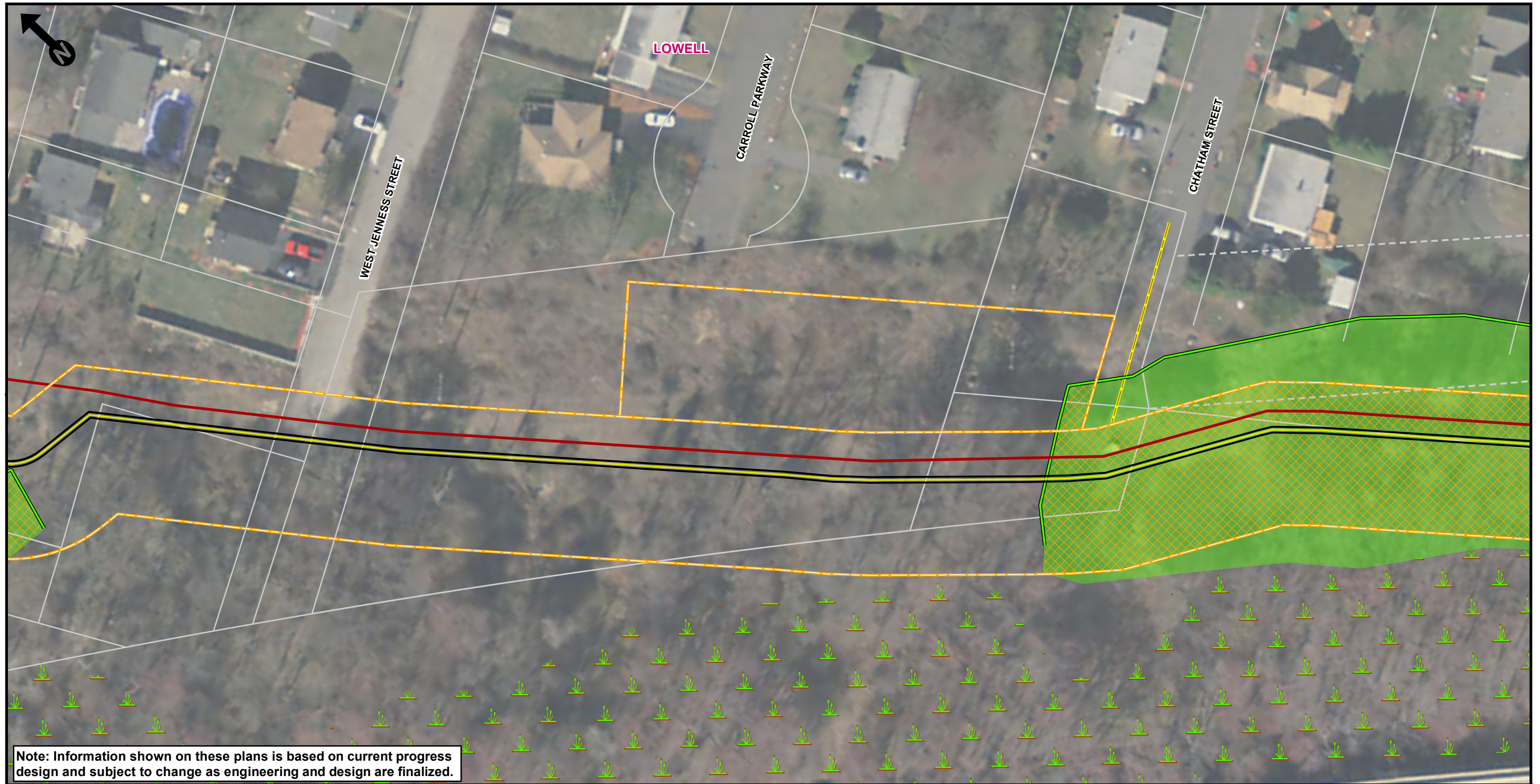
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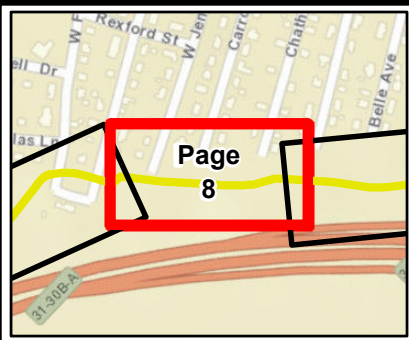
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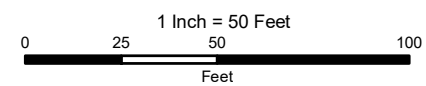




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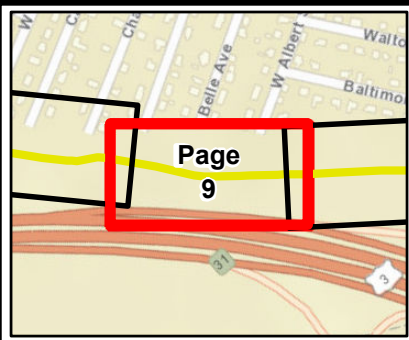
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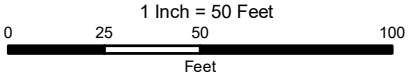




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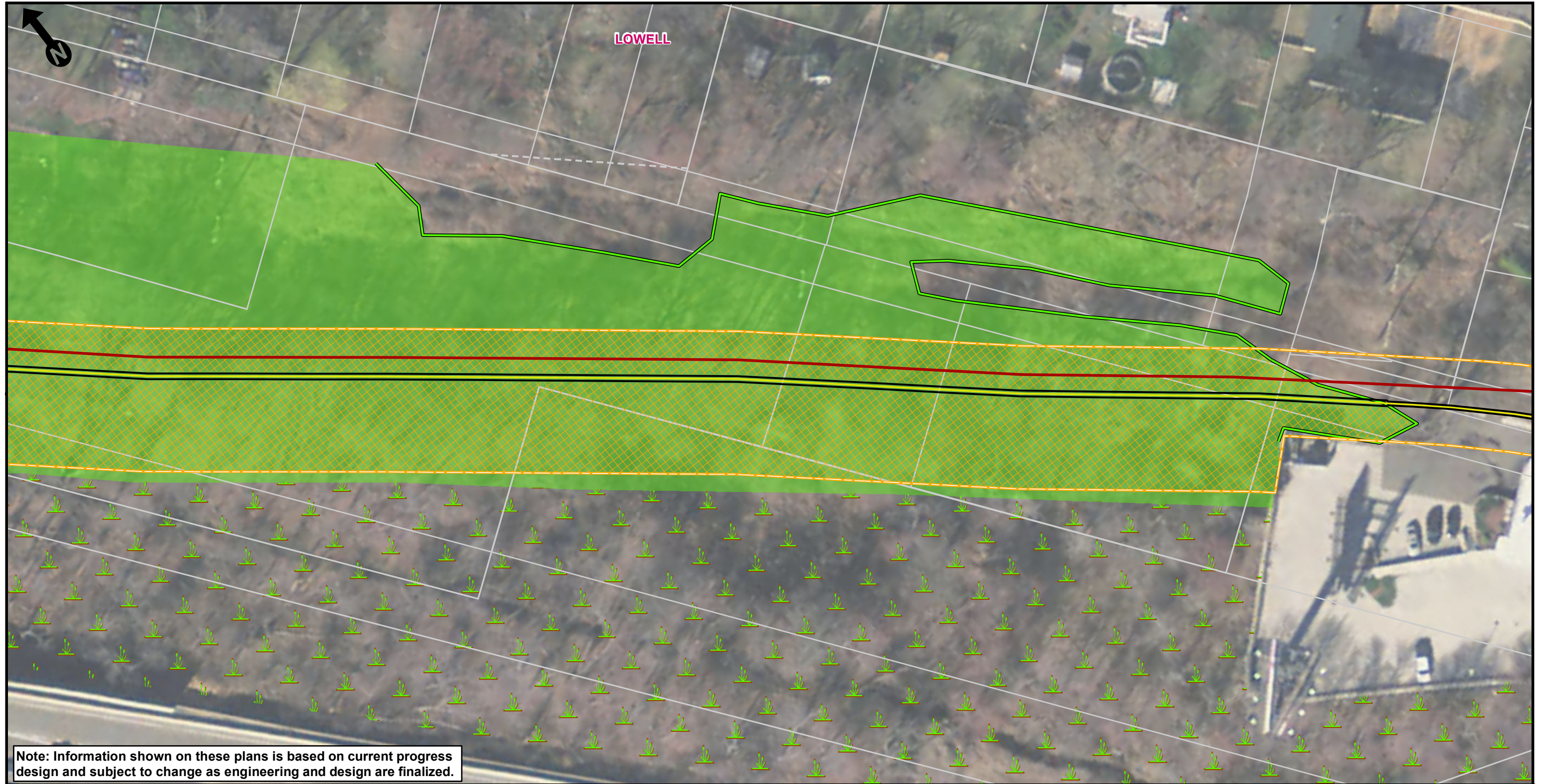
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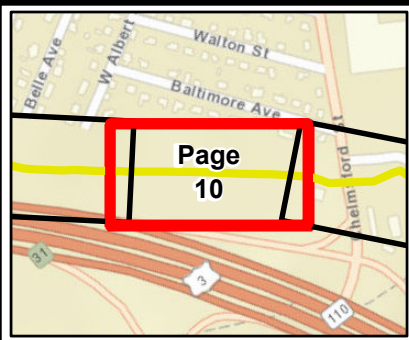
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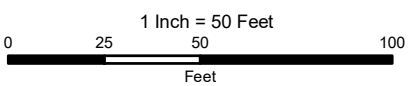




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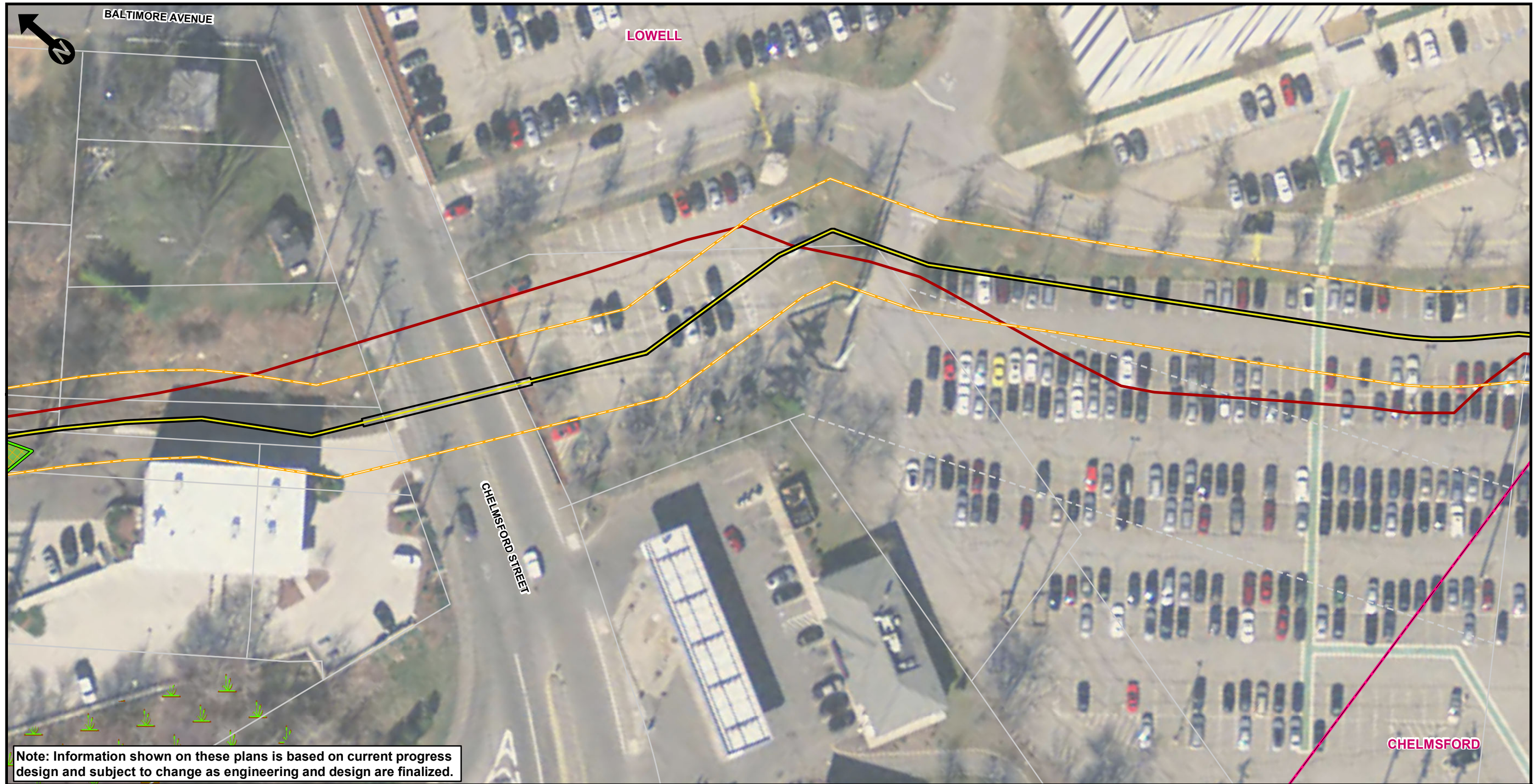
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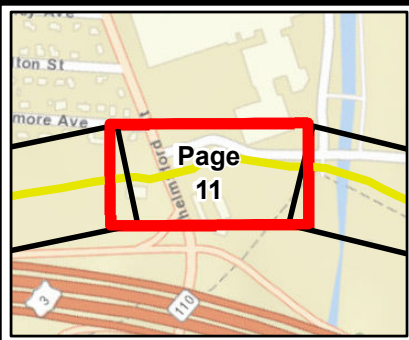
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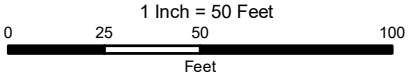




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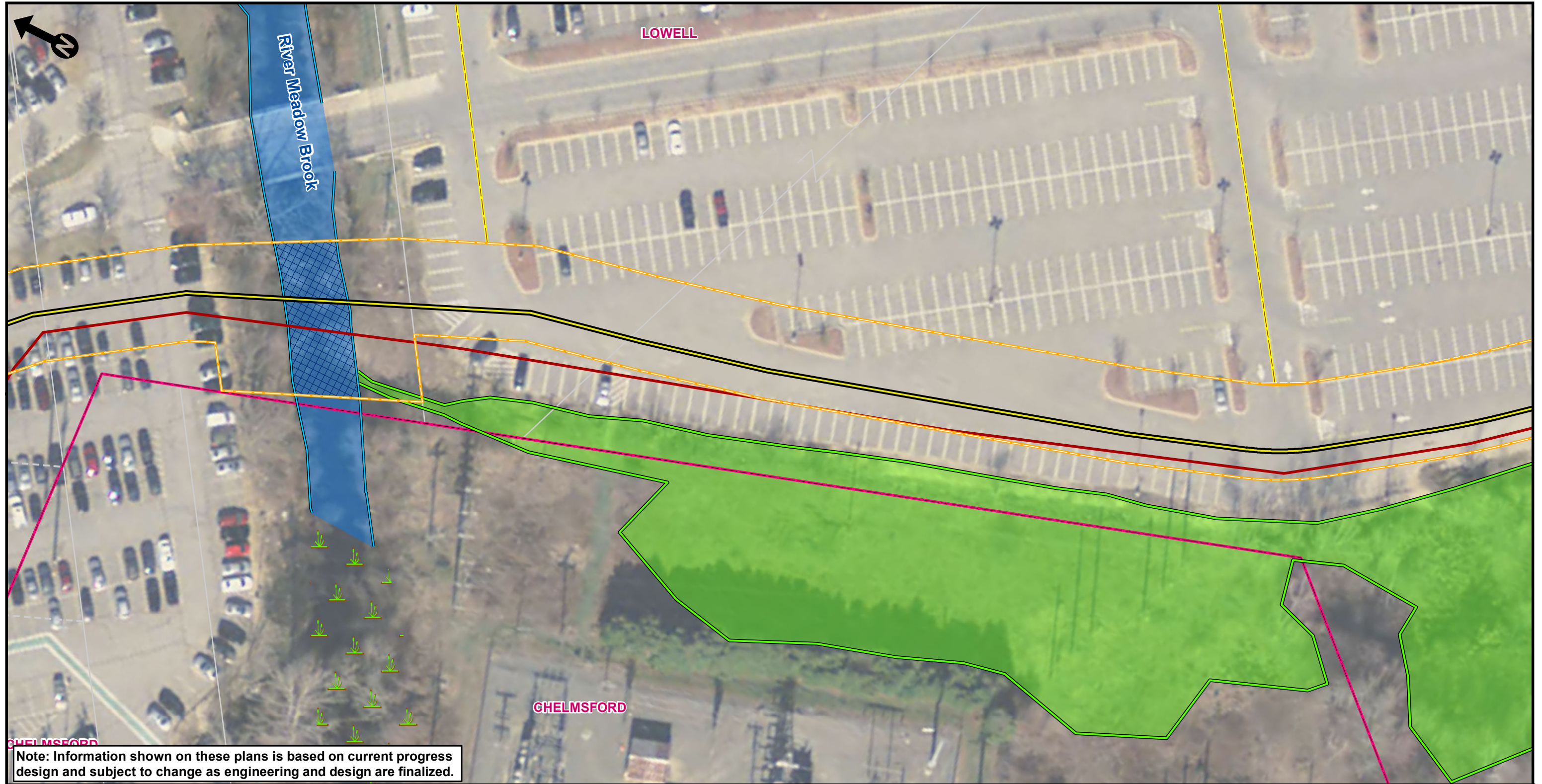
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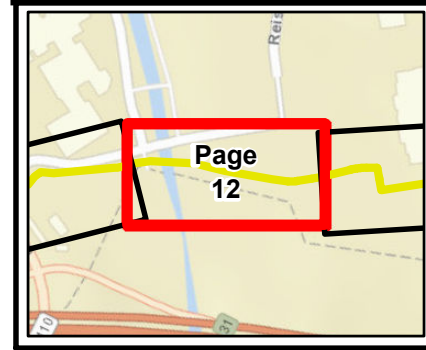
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1 Inch = 50 Feet

0      25      50      100  
Feet

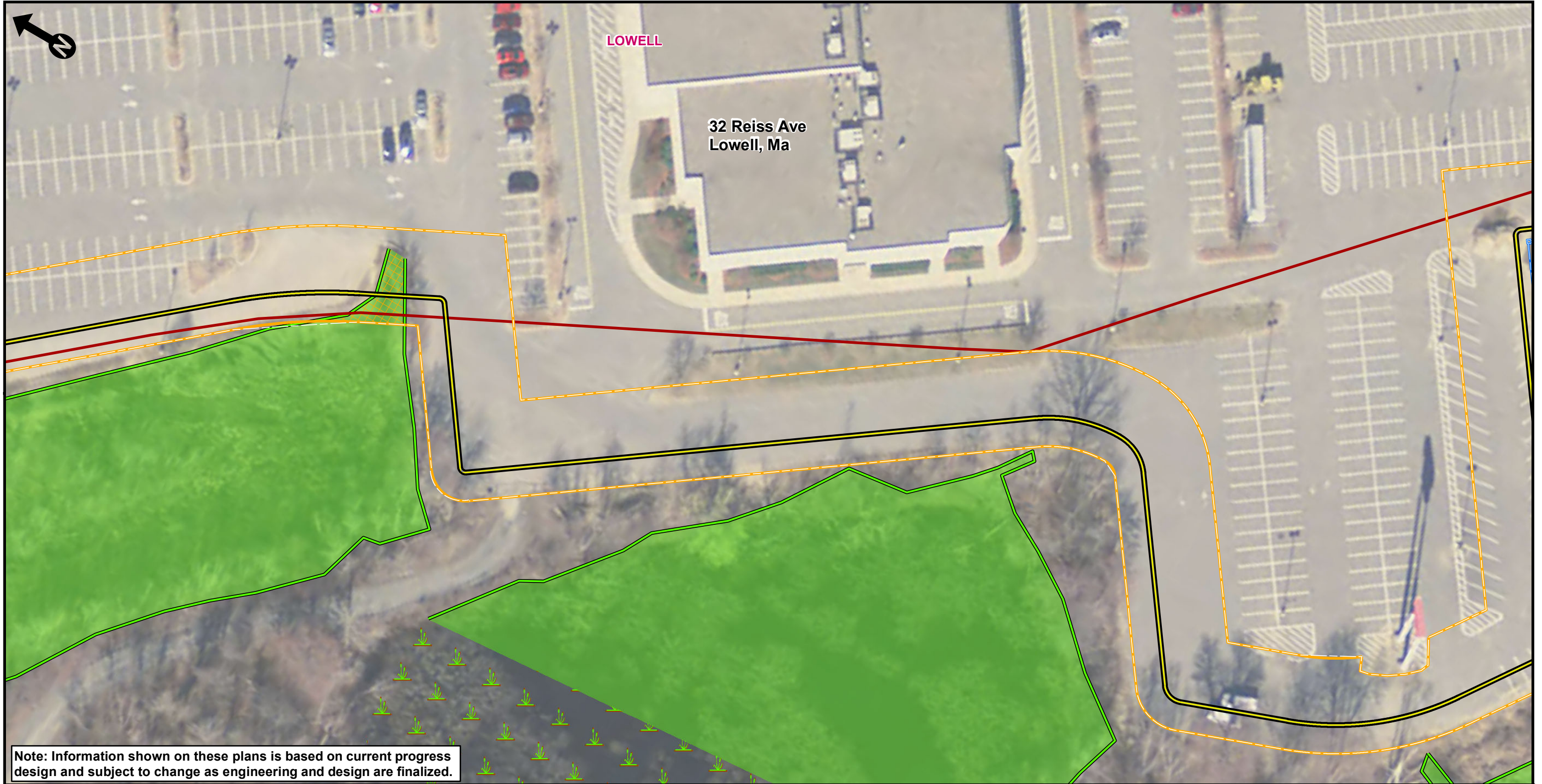
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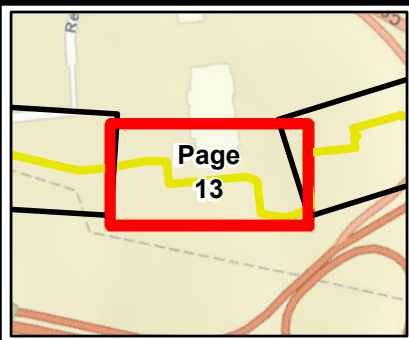
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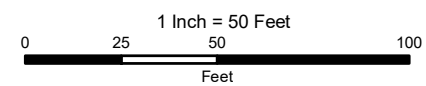




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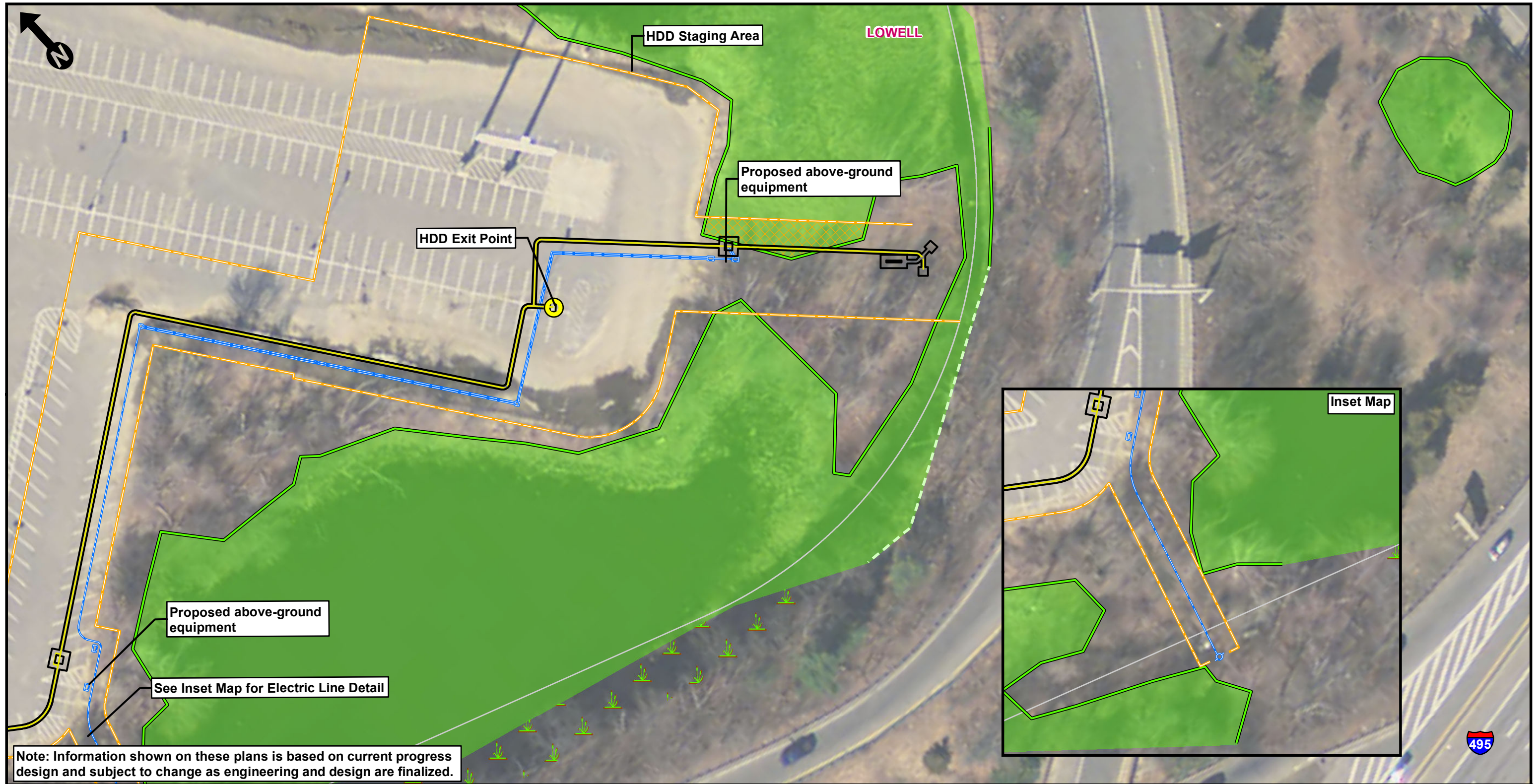
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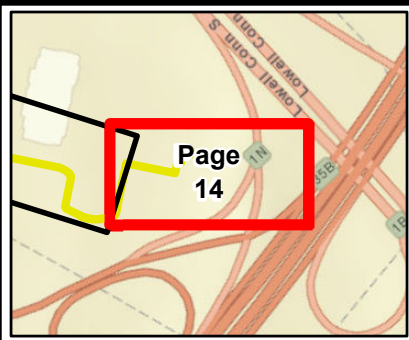
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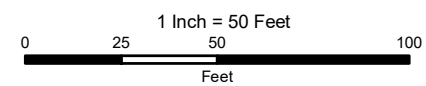




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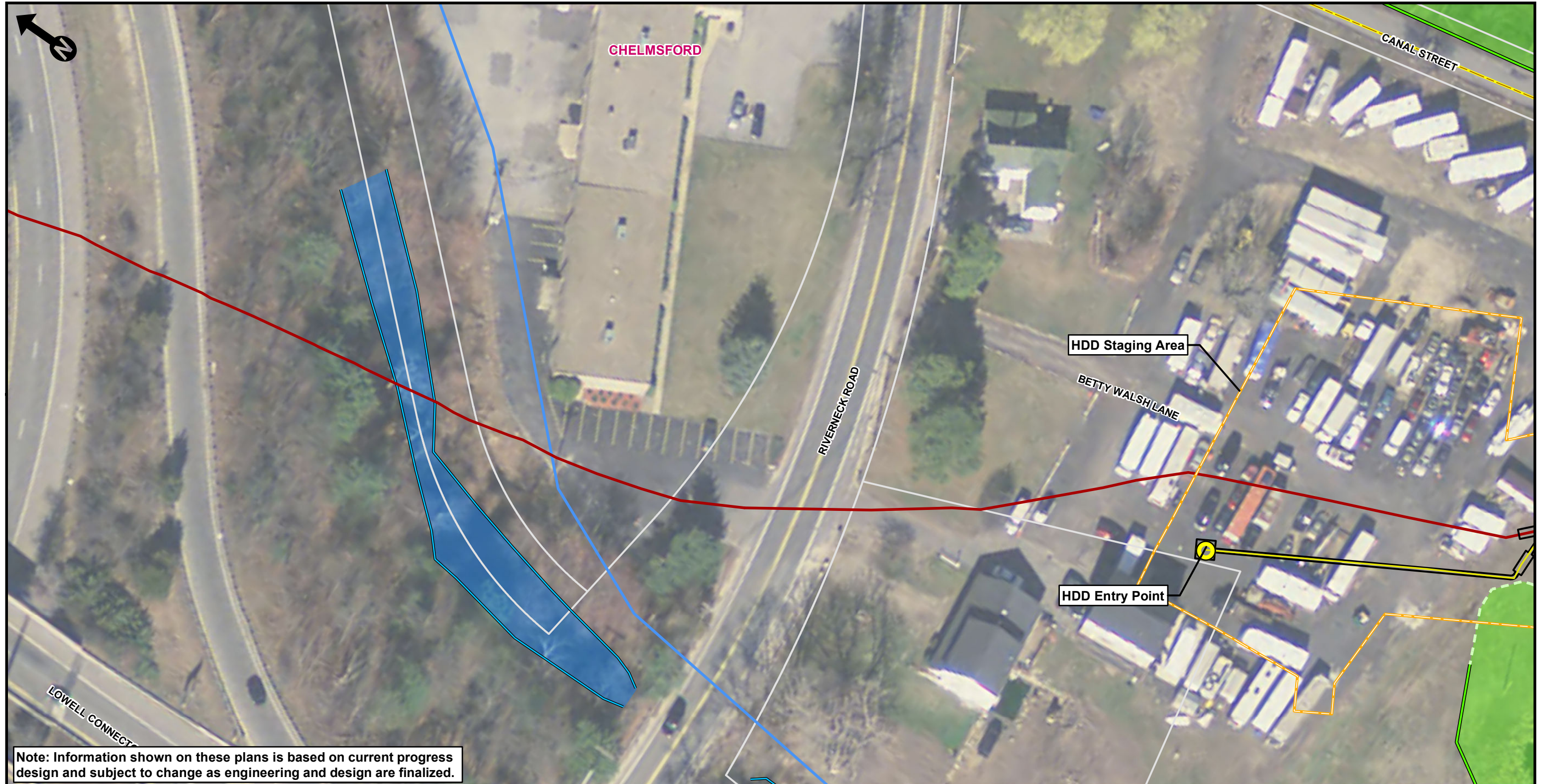
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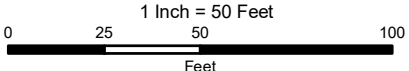
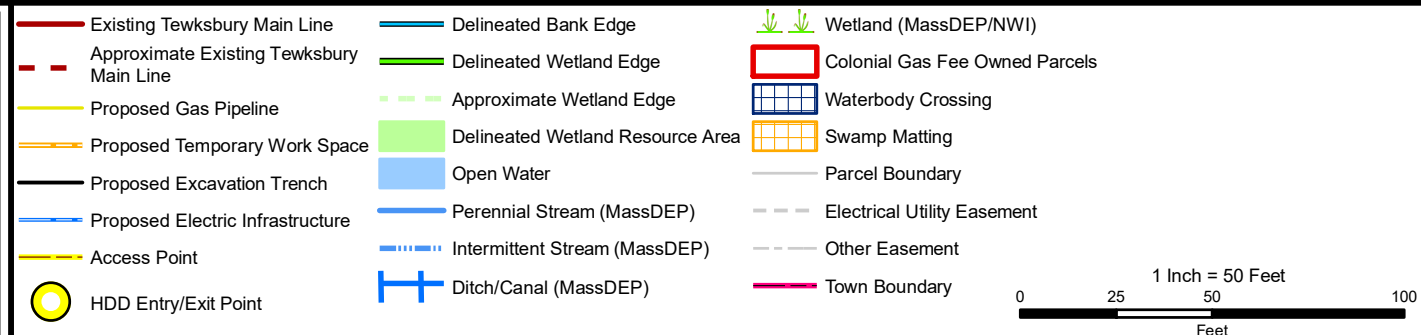
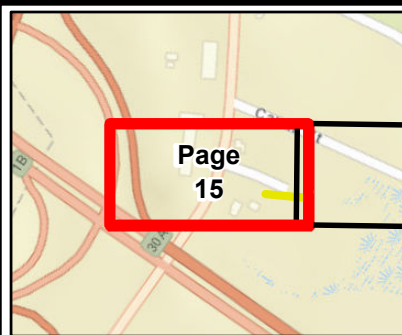
Lowell, Chelmsford and Tewksbury, MA







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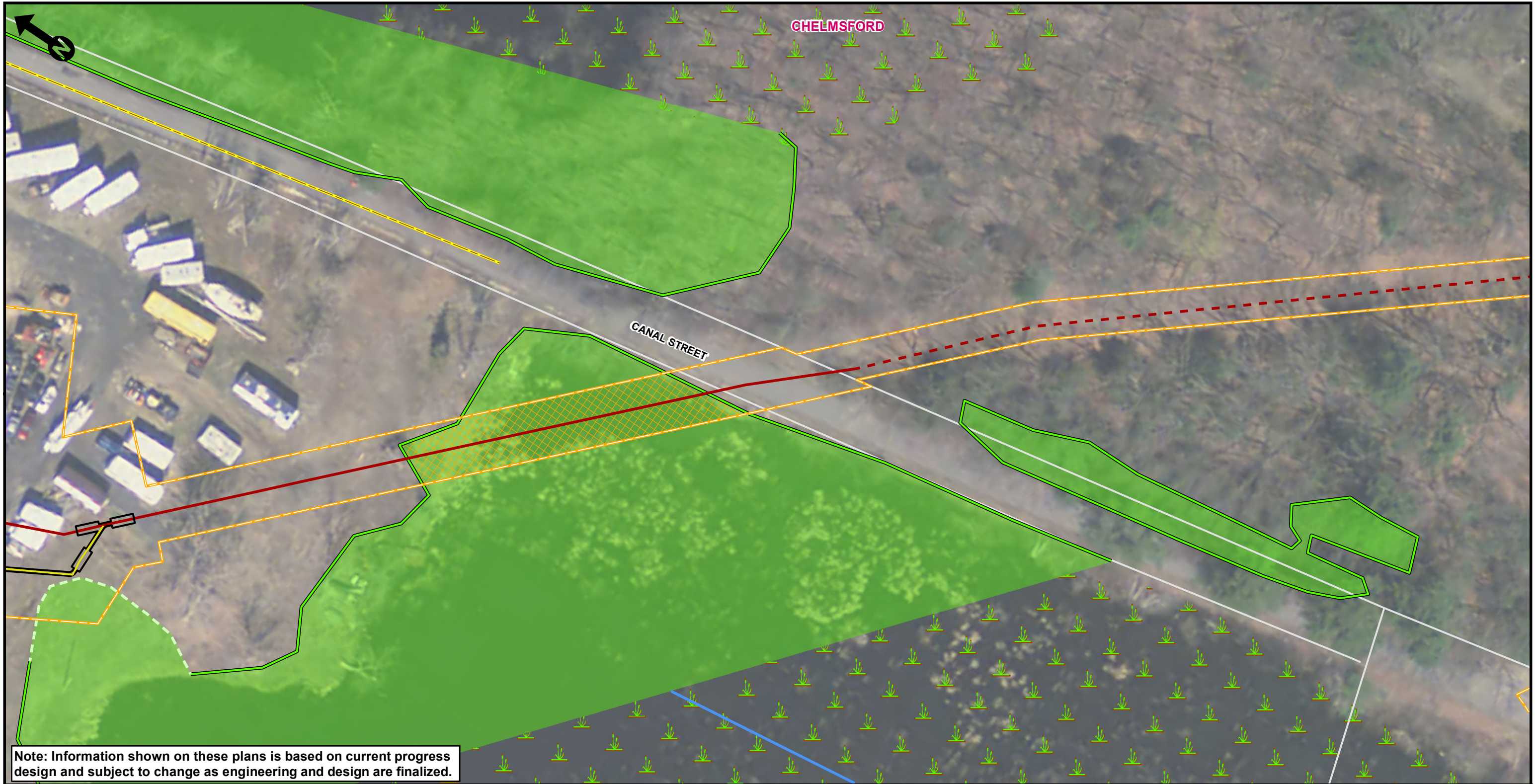
### Lowell Area Gas Modernization Project

Figure 5-4 Project Plans

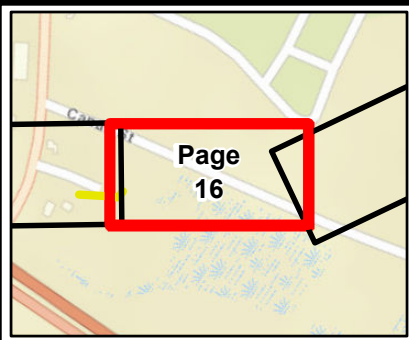
Lowell, Chelmsford and Tewksbury, MA



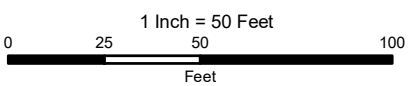




Note: Information shown on these plans is based on current progress design and subject to change as engineering and design are finalized.



Existing Tewksbury Main Line	Delineated Bank Edge	Wetland (MassDEP/NWI)
Approximate Existing Tewksbury Main Line	Delineated Wetland Edge	Colonial Gas Fee Owned Parcels
Proposed Gas Pipeline	Approximate Wetland Edge	Waterbody Crossing
Proposed Temporary Work Space	Delineated Wetland Resource Area	Swamp Matting
Proposed Excavation Trench	Open Water	Parcel Boundary
Proposed Electric Infrastructure	Perennial Stream (MassDEP)	Electrical Utility Easement
Access Point	Intermittent Stream (MassDEP)	Other Easement
HDD Entry/Exit Point	Ditch/Canal (MassDEP)	Town Boundary



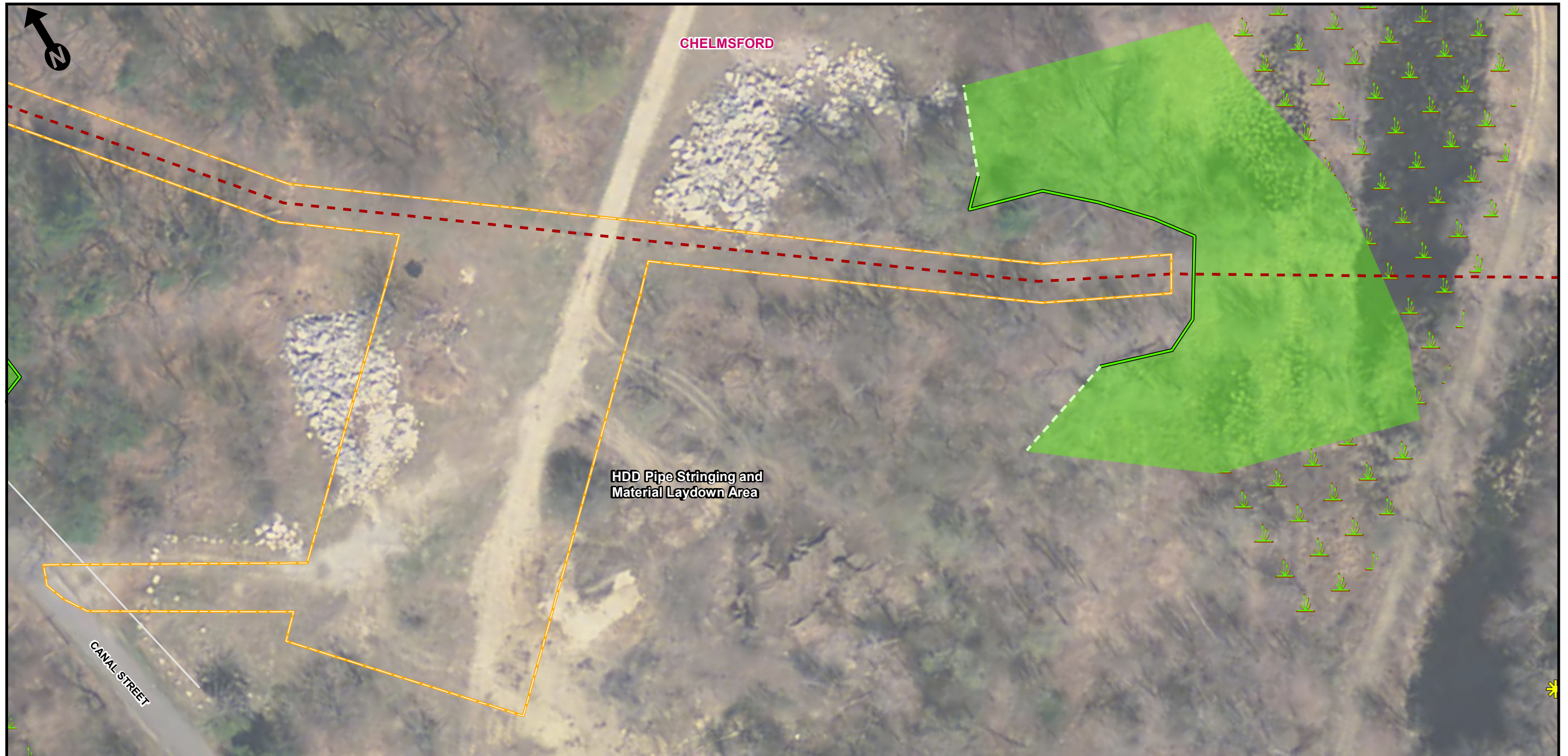
**Lowell Area Gas Modernization Project**

Figure 5-4 Project Plans

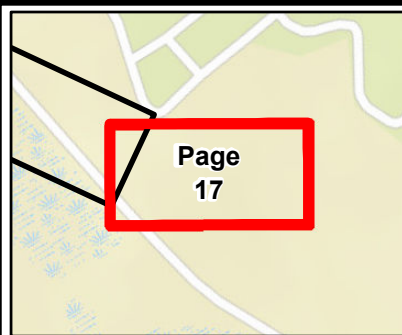
Lowell, Chelmsford and Tewksbury, MA



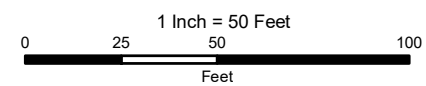




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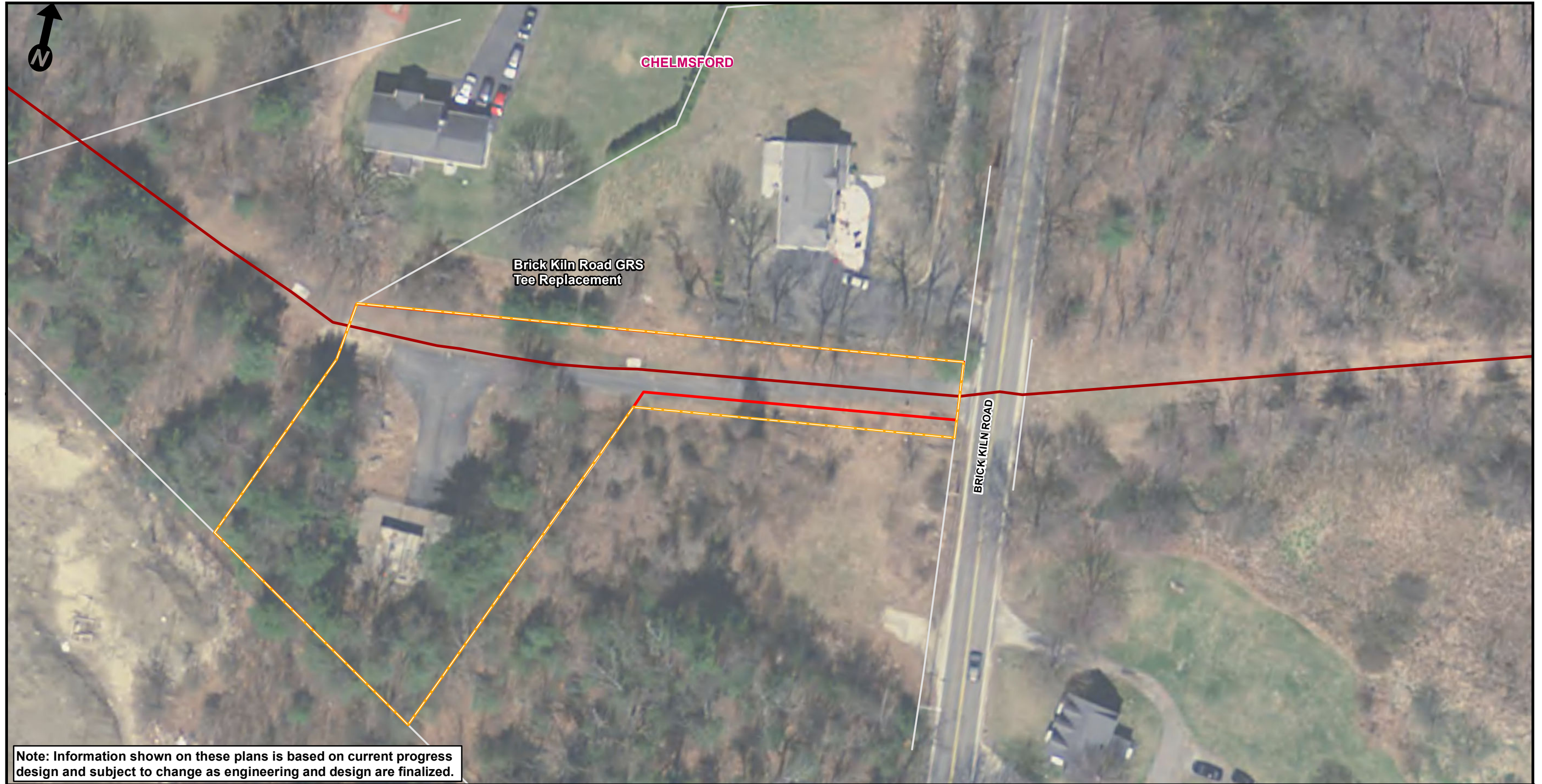
**Lowell Area Gas Modernization Project**

Figure 5-4 Project Plans

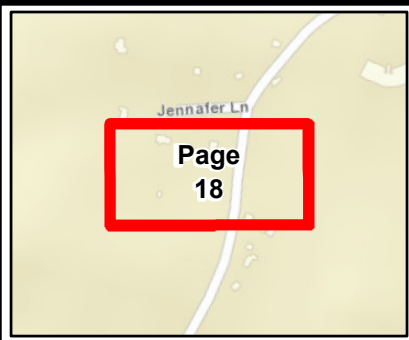
Lowell, Chelmsford and Tewksbury, MA



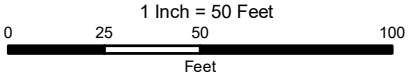




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**Lowell Area Gas Modernization Project**

Figure 5-4 Project Plans

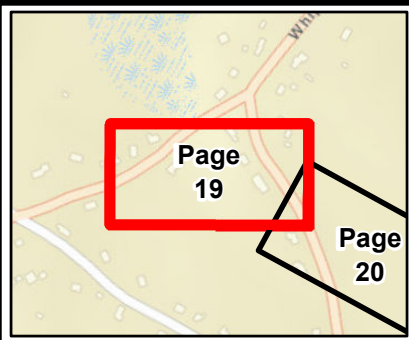
Lowell, Chelmsford and Tewksbury, MA



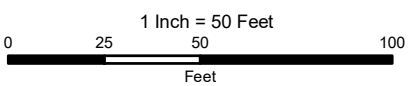




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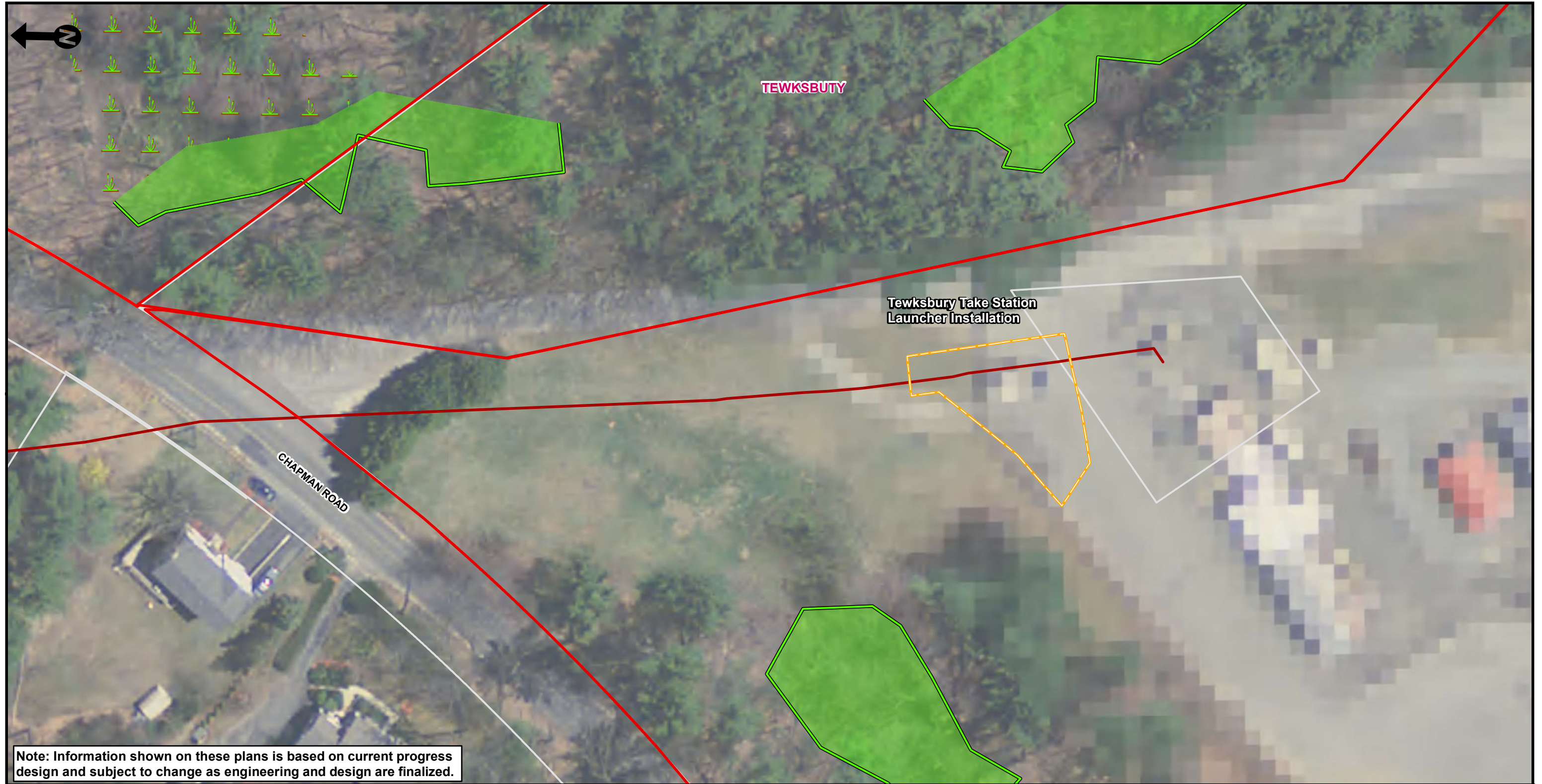
**Lowell Area Gas Modernization Project**

Figure 5-4 Project Plans

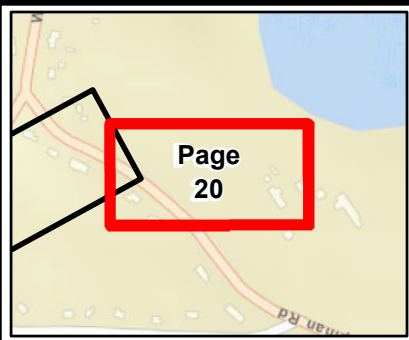
Lowell, Chelmsford and Tewksbury, MA



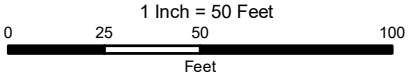




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HDD Entry/Exit Point	Ditch/Canal (MassDEP)	Town Boundary



**Lowell Area Gas Modernization Project**

Figure 5-4 Project Plans

Lowell, Chelmsford and Tewksbury, MA





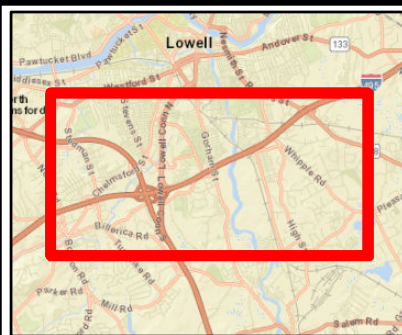
**Figure 5-5 – Land Use Map Book**

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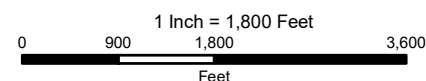




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- Page Index
- Town Boundary



### Lowell Area Gas Modernization Project

Figure 5-5 - Project Land Use

Lowell, Chelmsford and Tewksbury, MA

Index Sheet

Date: 3/14/2018

Source: MassGIS, National Grid, VHB

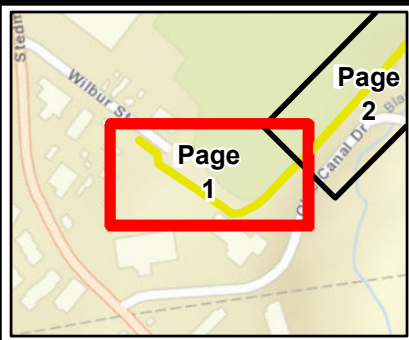
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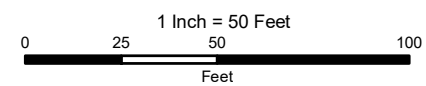




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Existing Tewksbury Main Line	Land Use Category	Government
Approximate Existing Tewksbury Main Line	Agricultural	Industrial
Proposed Gas Pipeline	Cemetary	Medical/Care
Approximate Temporary Work Space	Charitable	Religious
Proposed Excavation Trench	Commercial	Residential
Proposed Electric Infrastructure	Commercial Mixed Use	Transportation ROW/ Other
Town Boundary	Conservation/Recreation	Vacant Land
HDD Entry/Exit Point	Educational	



**Lowell Area Gas Modernization Project**

Figure 5-5 Project Land Use

Lowell, Chelmsford and Tewksbury, MA

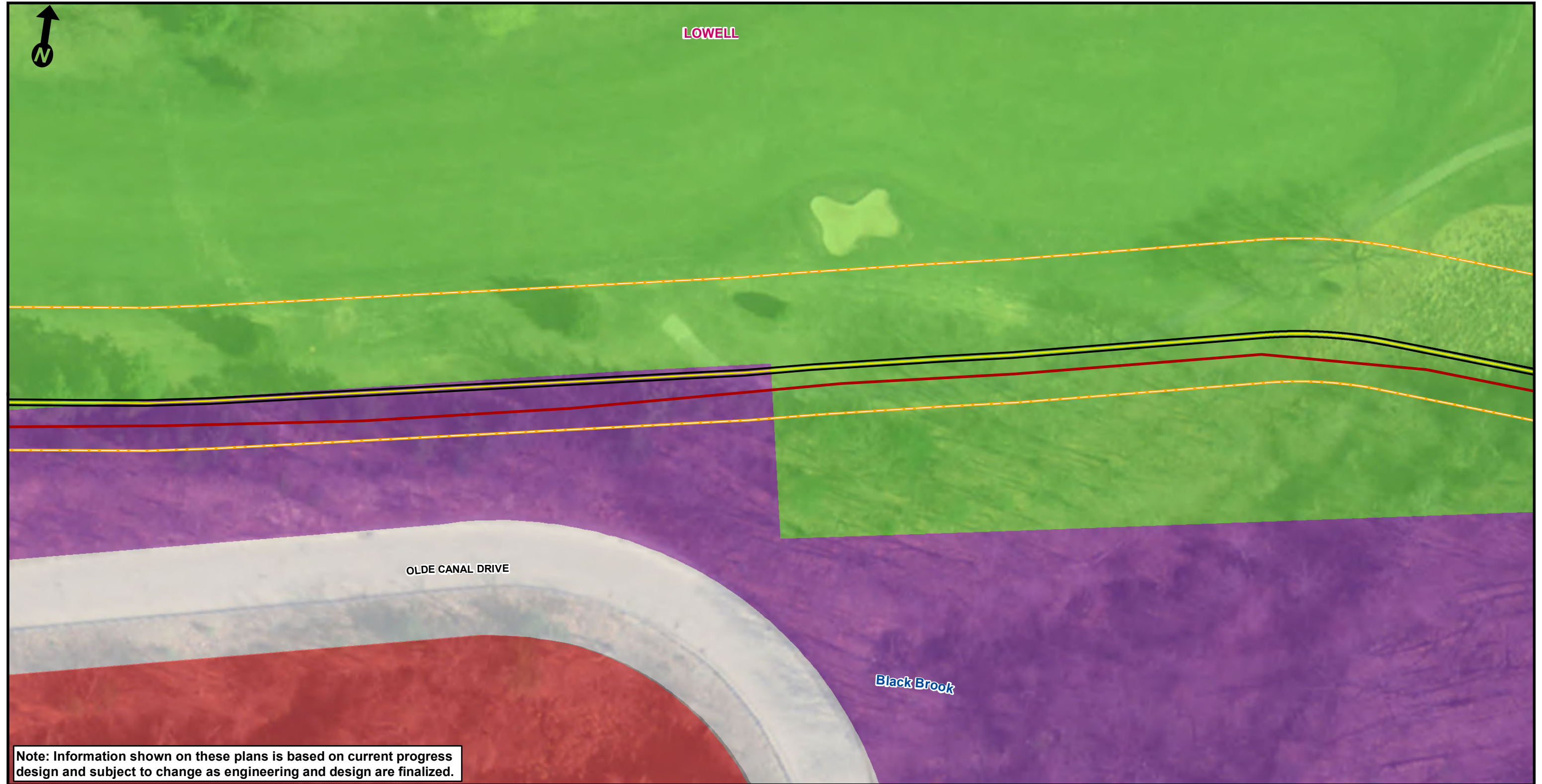
Page 1 of 20

Source: MassGIS, National Grid, VHB

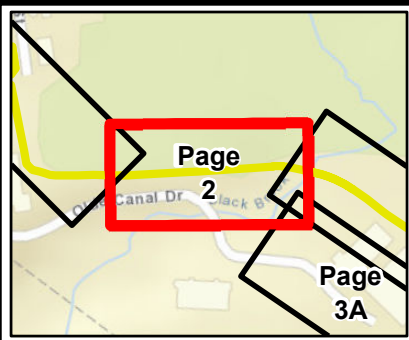
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1 Inch = 50 Feet

0      25      50      100  
Feet

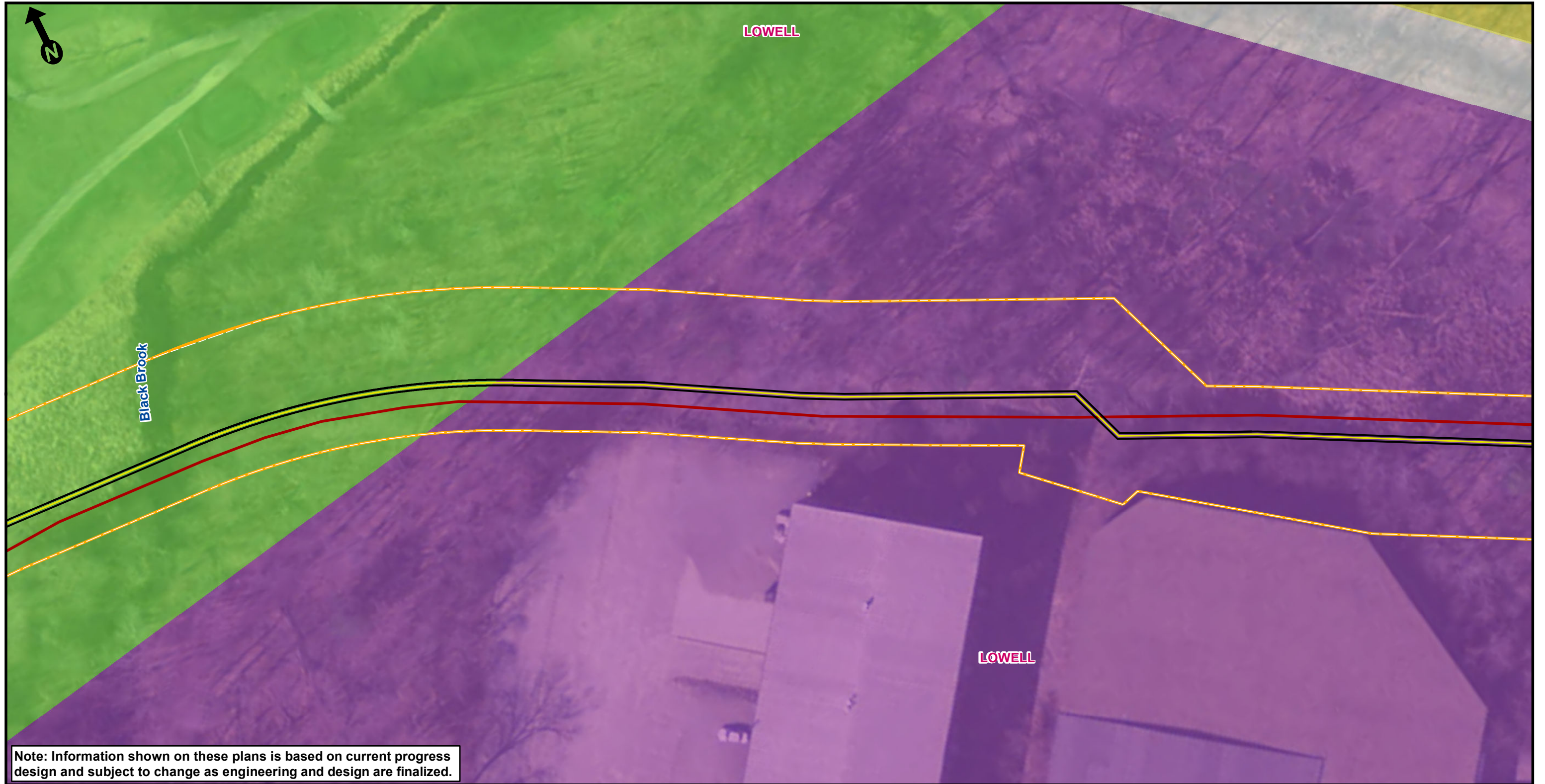
**Lowell Area Gas Modernization Project**

Figure 5-5 Project Land Use

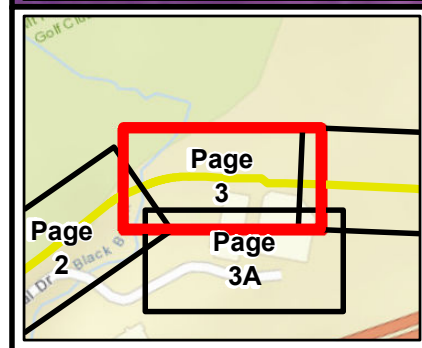
Lowell, Chelmsford and Tewksbury, MA



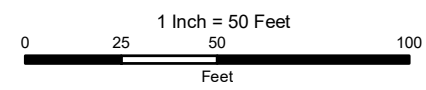




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**Lowell Area Gas Modernization Project**

Figure 5-5 Project Land Use

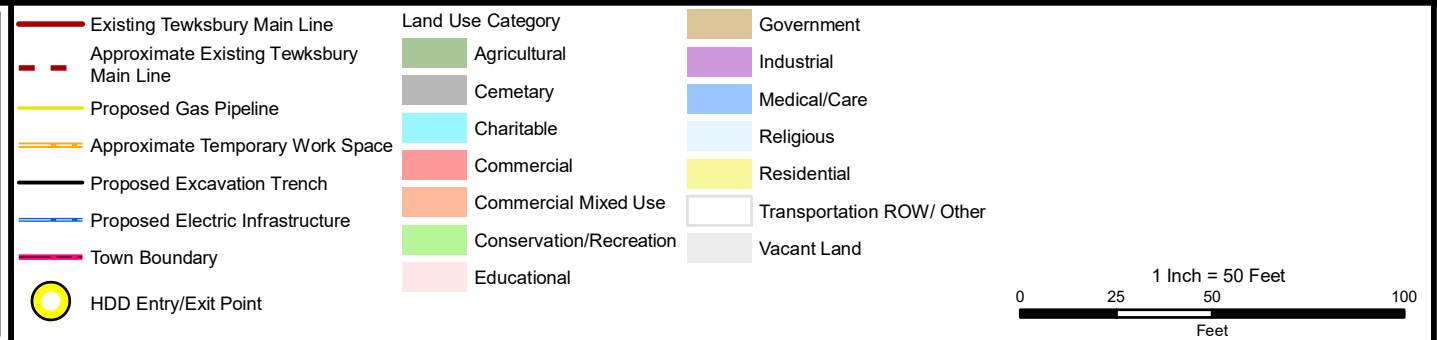
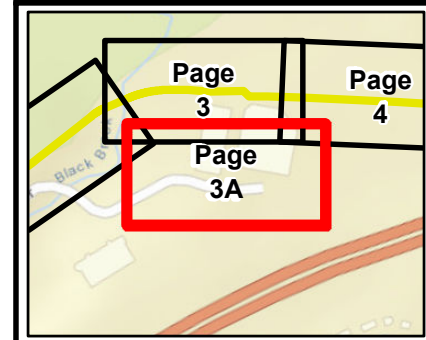
Lowell, Chelmsford and Tewksbury, MA







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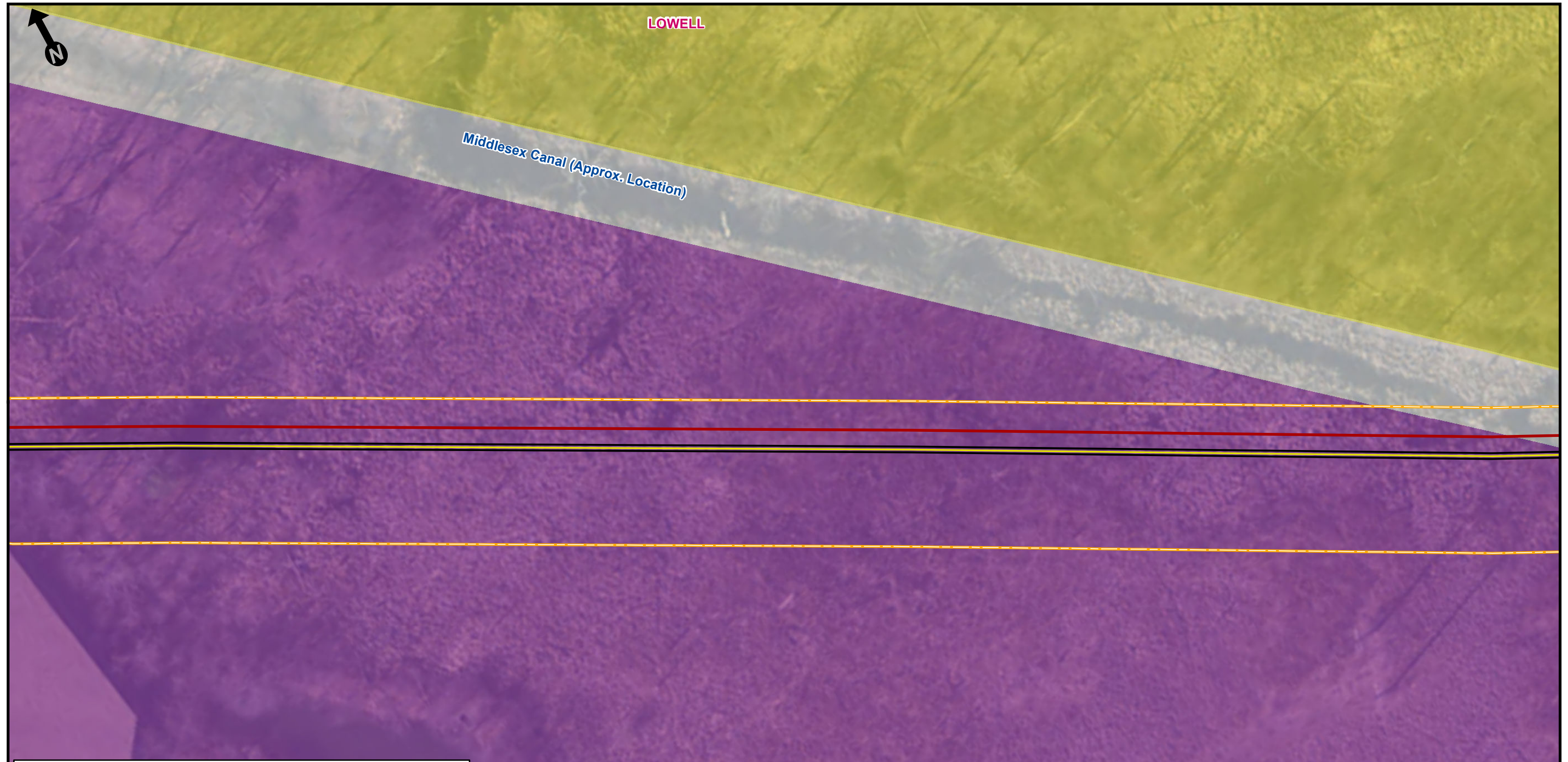
**Lowell Area Gas Modernization Project**

Figure 5-5 Project Land Use

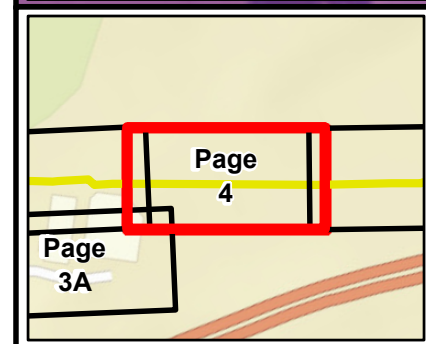
Lowell, Chelmsford and Tewksbury, MA







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<ul style="list-style-type: none"> <li> Existing Tewksbury Main Line</li> <li> Approximate Existing Tewksbury Main Line</li> <li> Proposed Gas Pipeline</li> <li> Approximate Temporary Work Space</li> <li> Proposed Excavation Trench</li> <li> Proposed Electric Infrastructure</li> <li> Town Boundary</li> <li> HDD Entry/Exit Point</li> </ul>	<p><b>Land Use Category</b></p> <ul style="list-style-type: none"> <li> Agricultural</li> <li> Cemetary</li> <li> Charitable</li> <li> Commercial</li> <li> Commercial Mixed Use</li> <li> Conservation/Recreation</li> <li> Educational</li> </ul>	<ul style="list-style-type: none"> <li> Government</li> <li> Industrial</li> <li> Medical/Care</li> <li> Religious</li> <li> Residential</li> <li> Transportation ROW/ Other</li> <li> Vacant Land</li> </ul>
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1 Inch = 50 Feet

0 25 50 100  
Feet

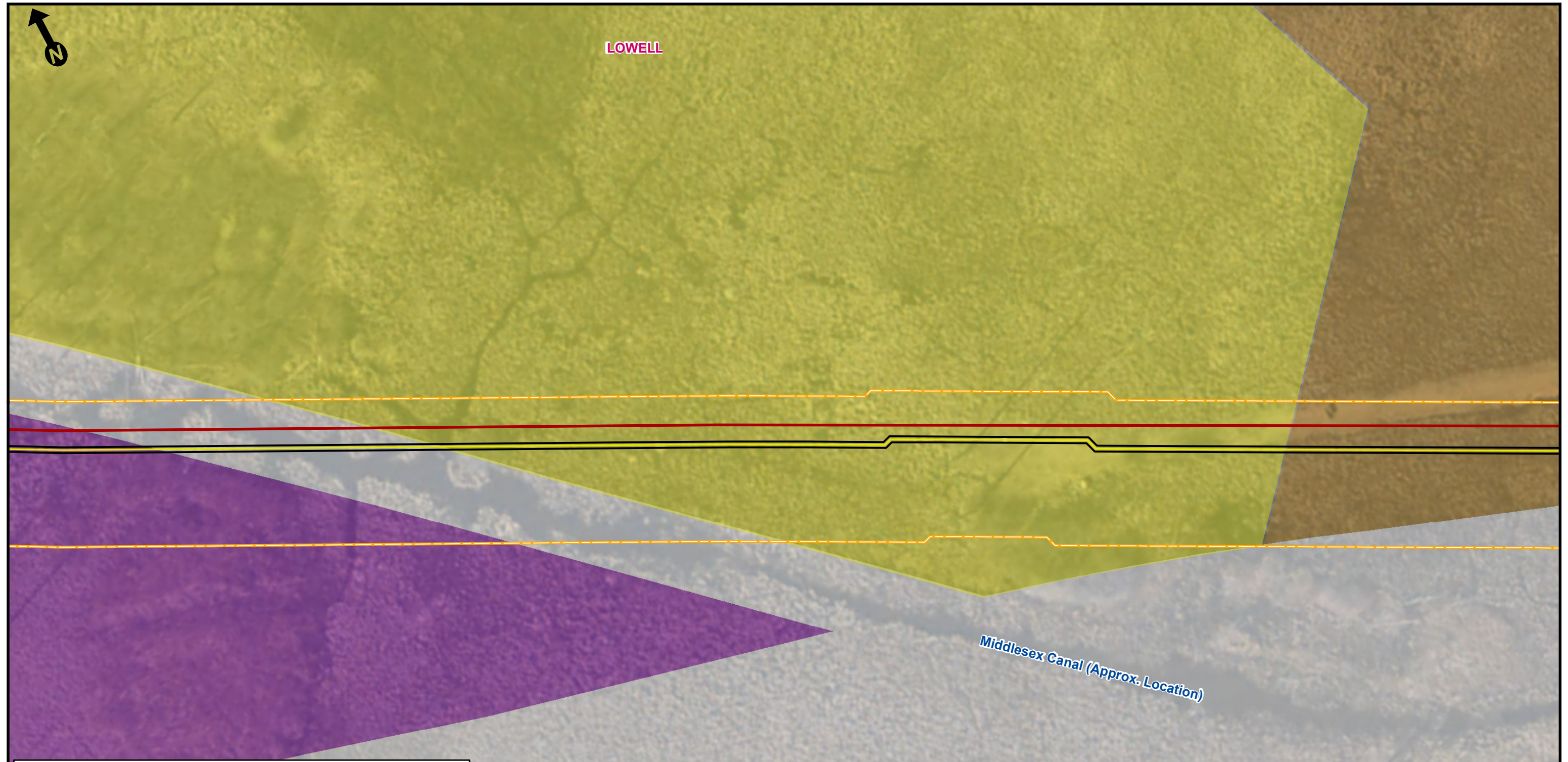
**Lowell Area Gas Modernization Project**

Figure 5-5 Project Land Use

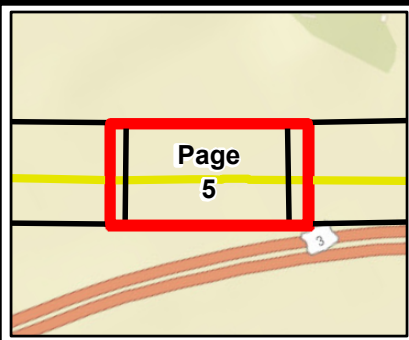
Lowell, Chelmsford and Tewksbury, MA



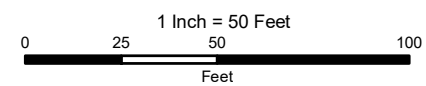




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**Lowell Area Gas Modernization Project**

Figure 5-5 Project Land Use

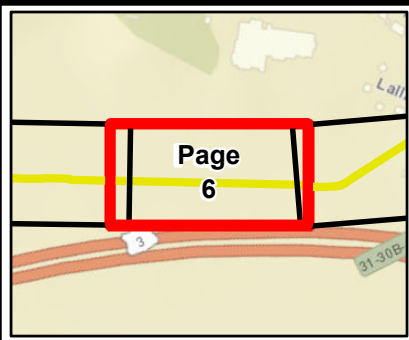
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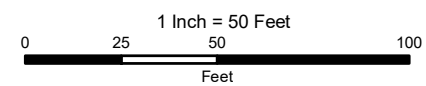




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**Lowell Area Gas Modernization Project**

Figure 5-5 Project Land Use

Lowell, Chelmsford and Tewksbury, MA

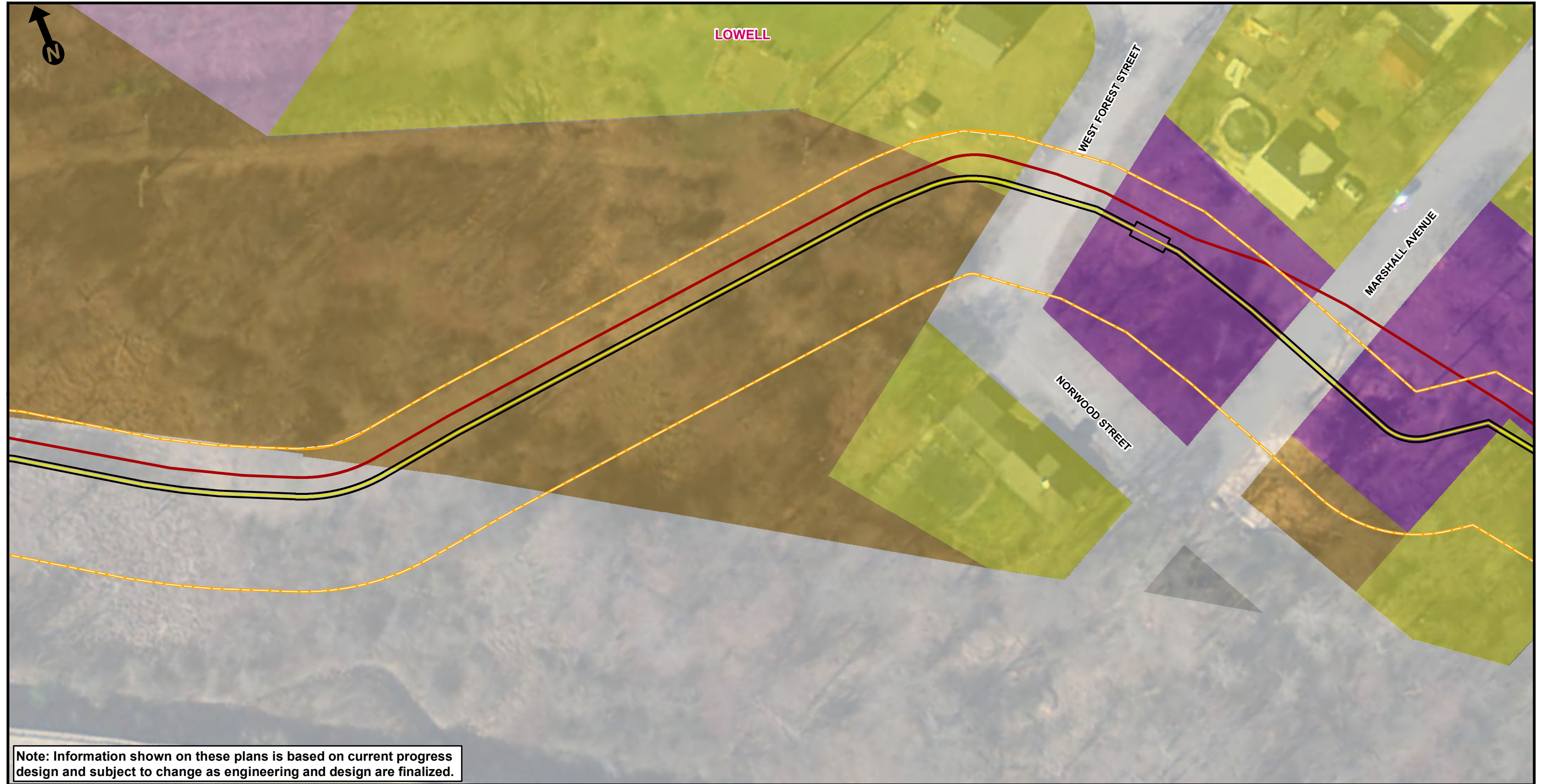
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Date: 3/28/2018

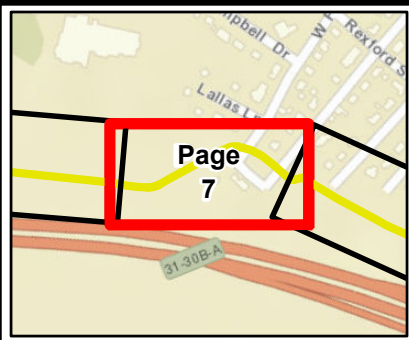
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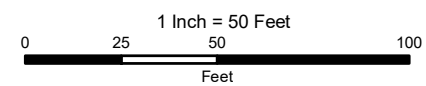




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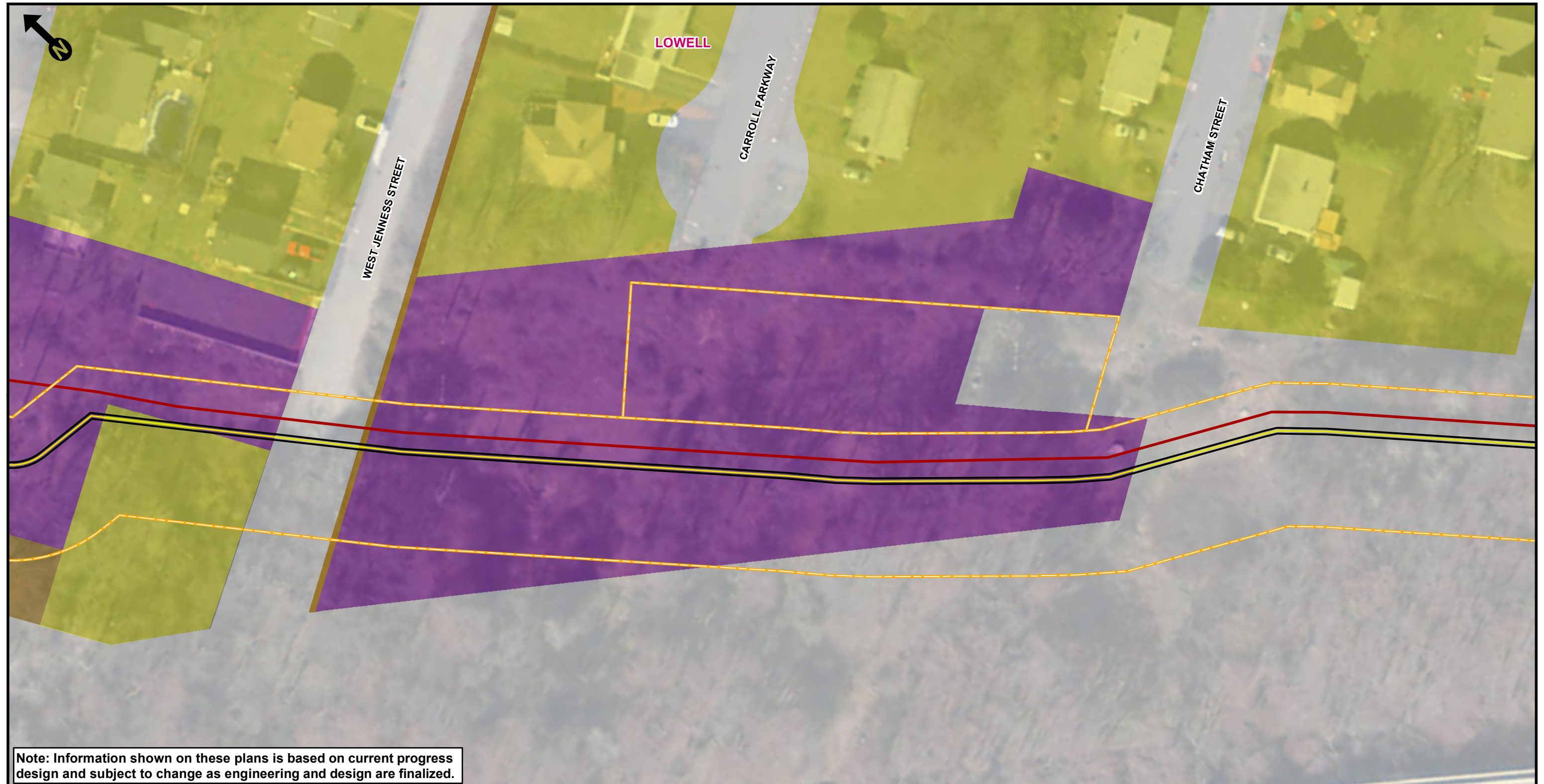
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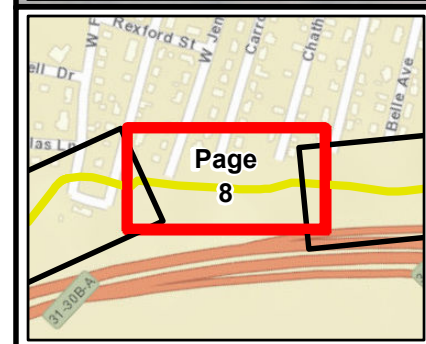
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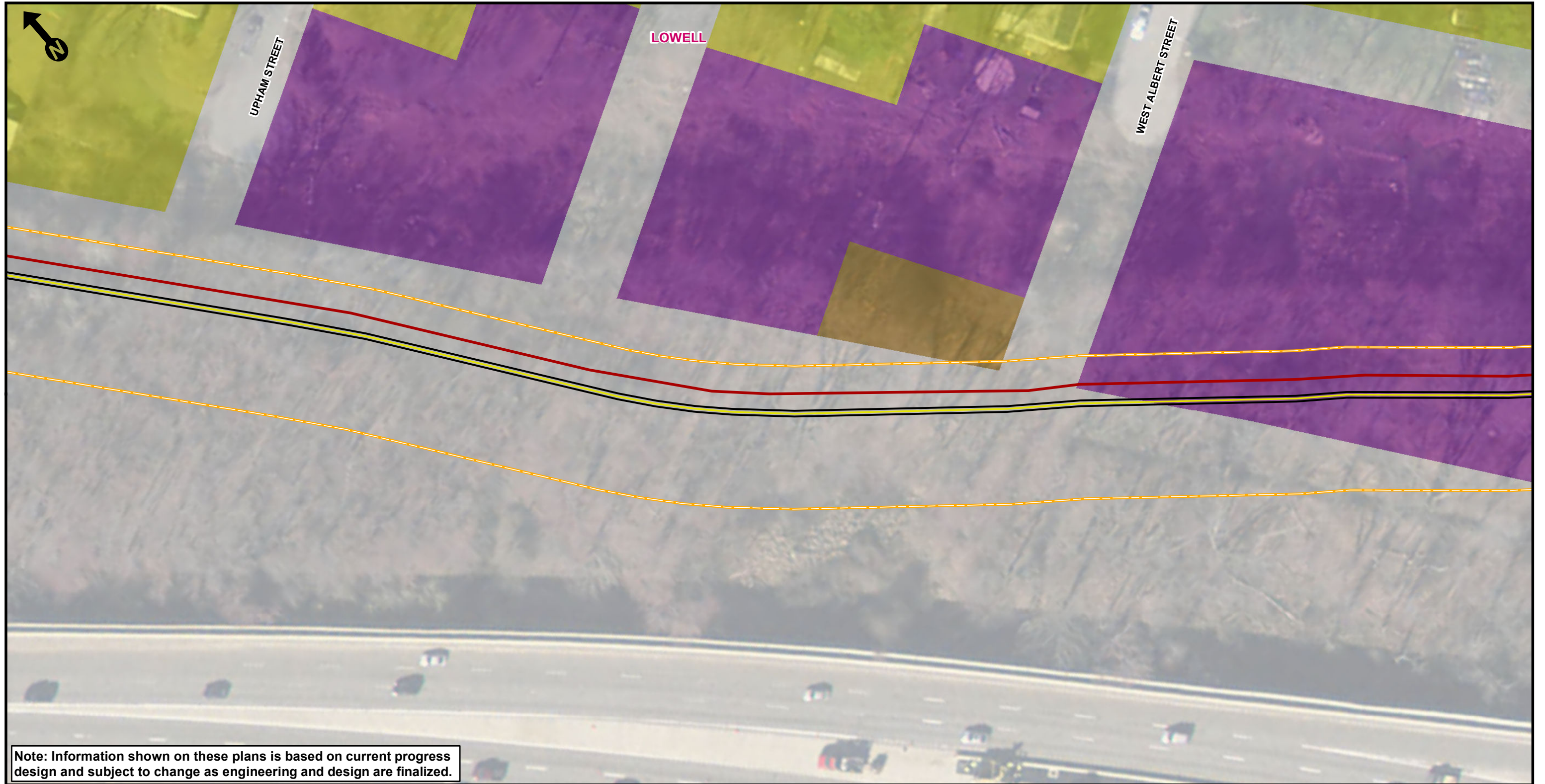
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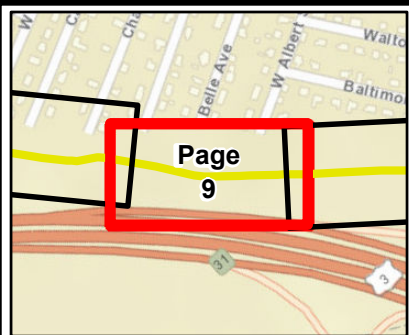
Lowell, Chelmsford and Tewksbury, MA



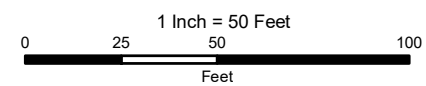




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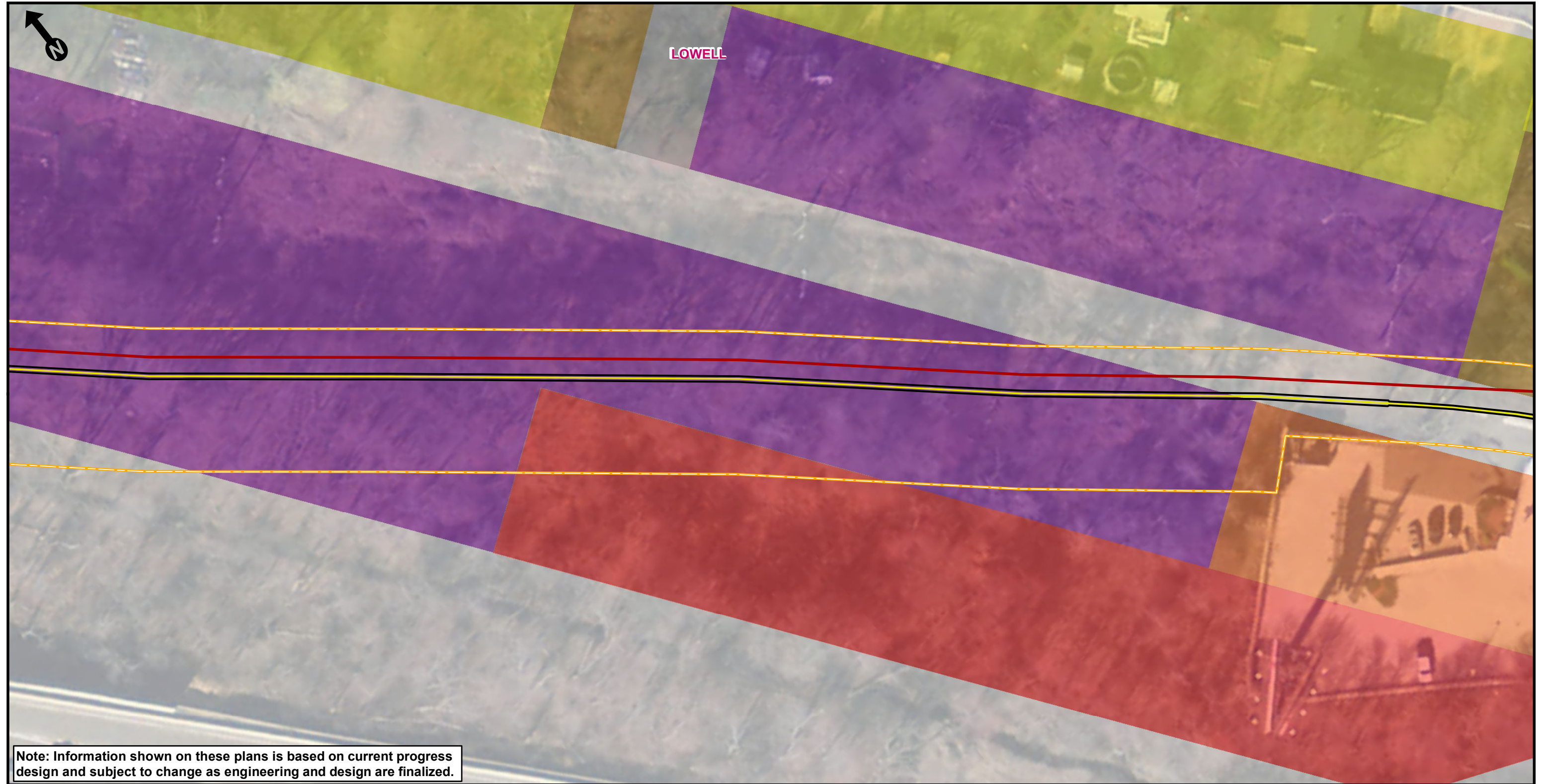
**Lowell Area Gas Modernization Project**

Figure 5-5 Project Land Use

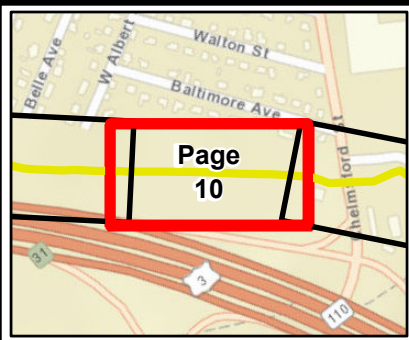
Lowell, Chelmsford and Tewksbury, MA



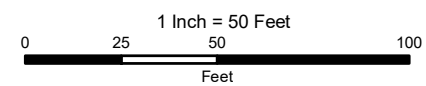




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| <ul style="list-style-type: none"> <li><span style="color: red;">—</span> Existing Tewksbury Main Line</li> <li><span style="color: red;">- - -</span> Approximate Existing Tewksbury Main Line</li> <li><span style="color: yellow;">—</span> Proposed Gas Pipeline</li> <li><span style="color: yellow;">- - -</span> Approximate Temporary Work Space</li> <li><span style="color: black;">—</span> Proposed Excavation Trench</li> <li><span style="color: blue;">—</span> Proposed Electric Infrastructure</li> <li><span style="color: magenta;">—</span> Town Boundary</li> <li><span style="color: yellow;">●</span> HDD Entry/Exit Point</li> </ul> | <p><b>Land Use Category</b></p> <ul style="list-style-type: none"> <li><span style="color: green;">■</span> Agricultural</li> <li><span style="color: grey;">■</span> Cemetary</li> <li><span style="color: cyan;">■</span> Charitable</li> <li><span style="color: red;">■</span> Commercial</li> <li><span style="color: orange;">■</span> Commercial Mixed Use</li> <li><span style="color: lightgreen;">■</span> Conservation/Recreation</li> <li><span style="color: pink;">■</span> Educational</li> </ul> | <ul style="list-style-type: none"> <li><span style="color: brown;">■</span> Government</li> <li><span style="color: purple;">■</span> Industrial</li> <li><span style="color: blue;">■</span> Medical/Care</li> <li><span style="color: lightblue;">■</span> Religious</li> <li><span style="color: yellow;">■</span> Residential</li> <li><span style="color: white;">■</span> Transportation ROW/ Other</li> <li><span style="color: lightgrey;">■</span> Vacant Land</li> </ul> |
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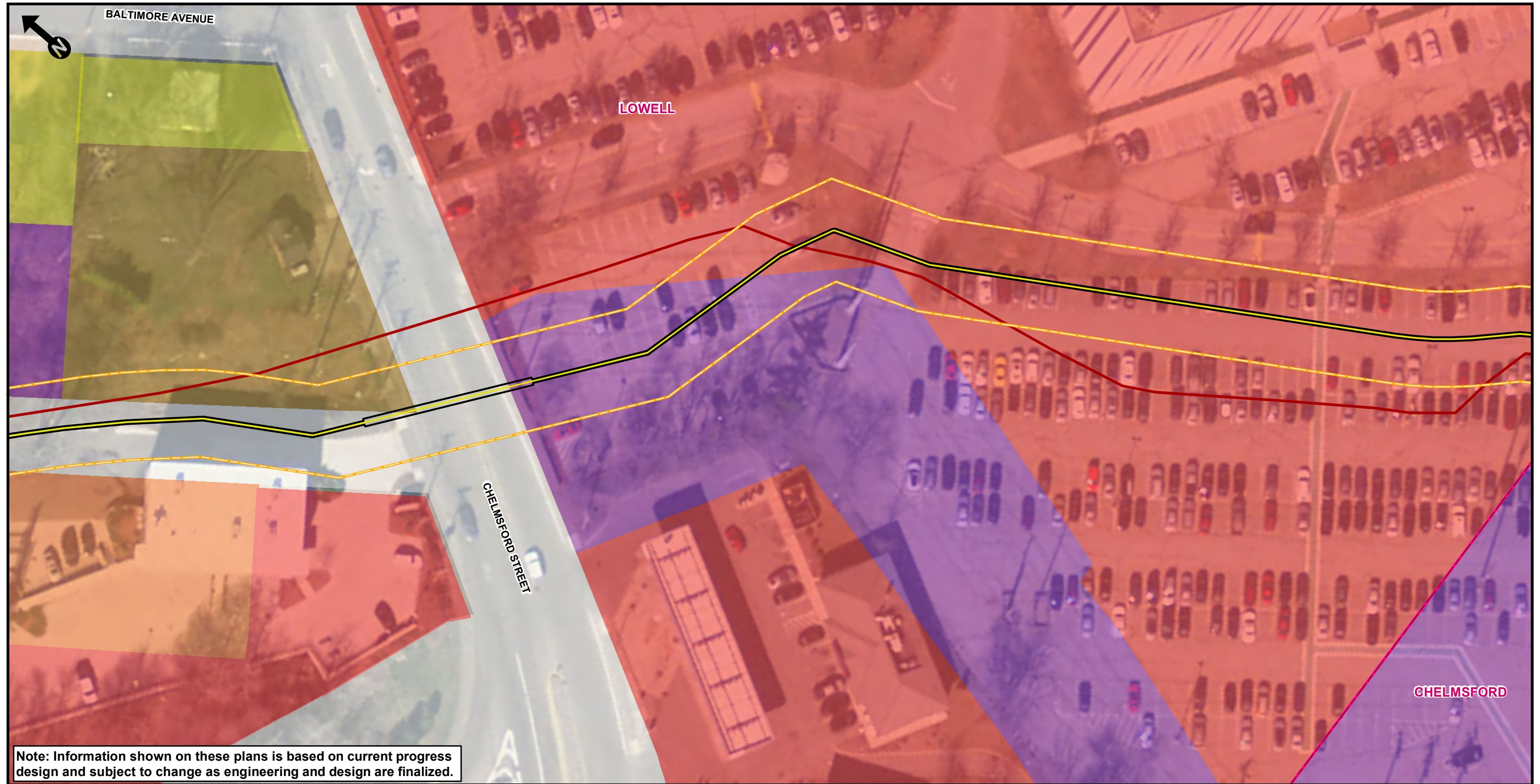
**Lowell Area Gas Modernization Project**

Figure 5-5 Project Land Use

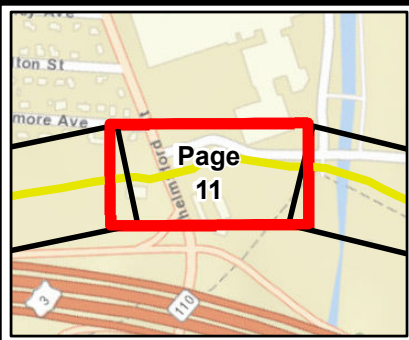
Lowell, Chelmsford and Tewksbury, MA



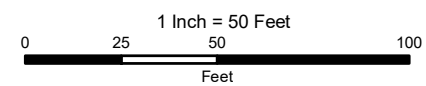




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Town Boundary	Conservation/Recreation	Vacant Land
HDD Entry/Exit Point	Educational	



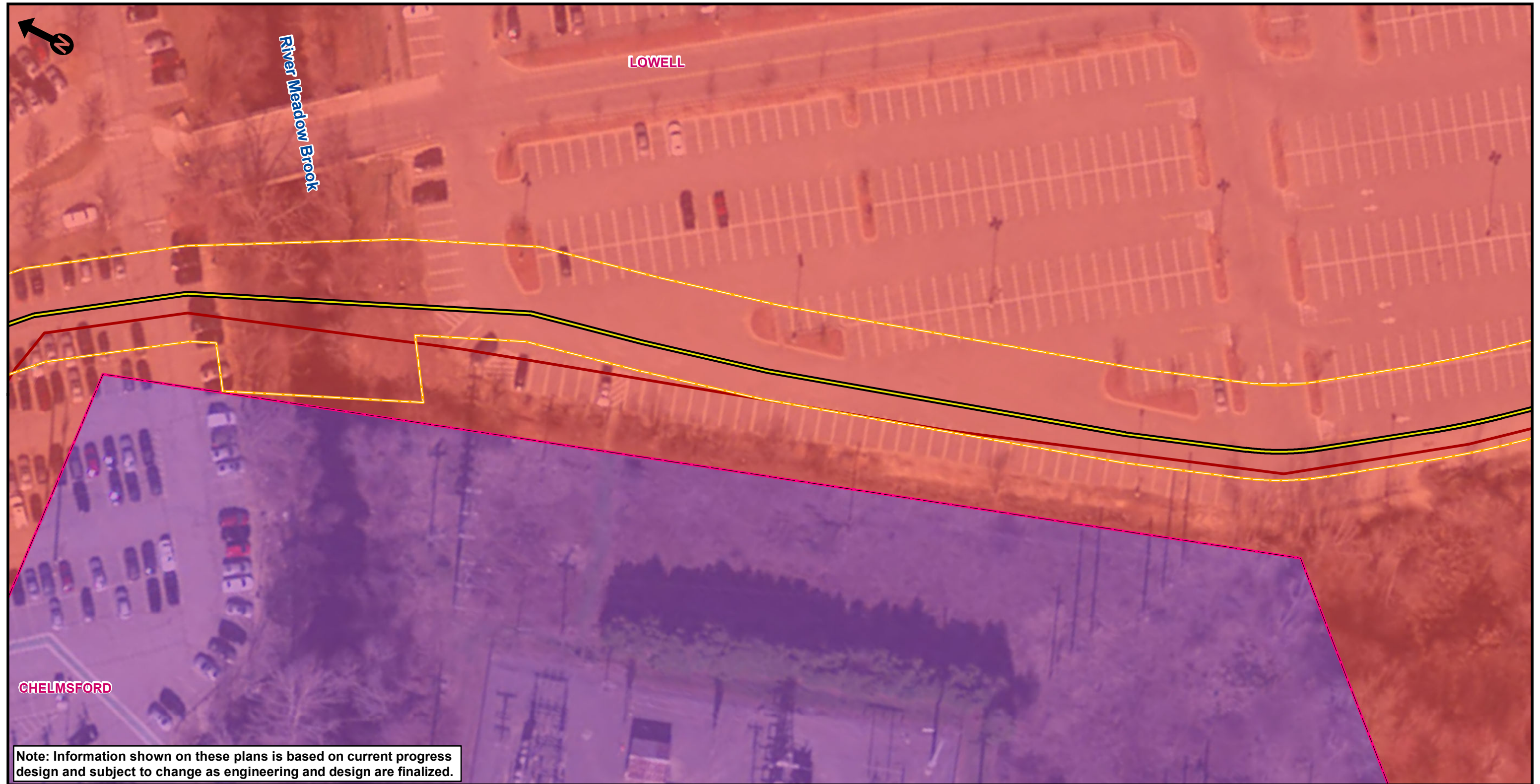
**Lowell Area Gas Modernization Project**

Figure 5-5 Project Land Use

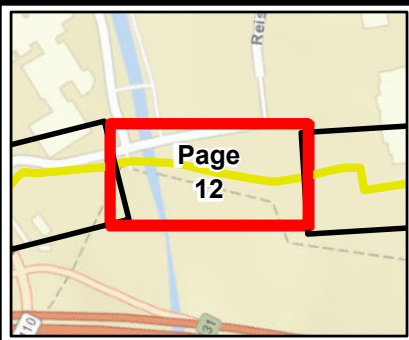
Lowell, Chelmsford and Tewksbury, MA







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1 Inch = 50 Feet

0      25      50      100  
Feet

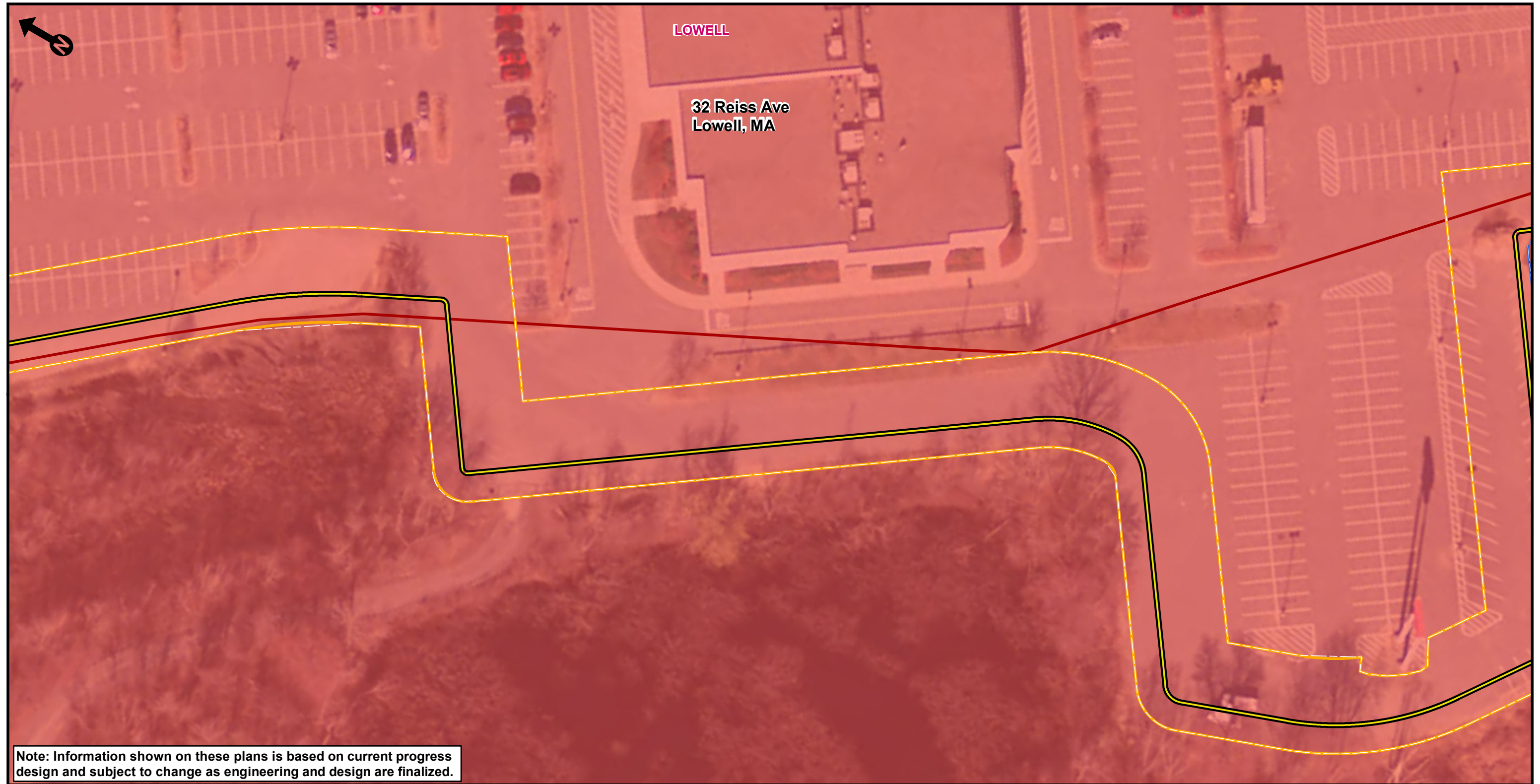
**Lowell Area Gas Modernization Project**

Figure 5-5 Project Land Use

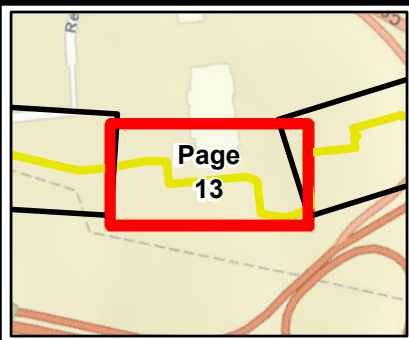
Lowell, Chelmsford and Tewksbury, MA



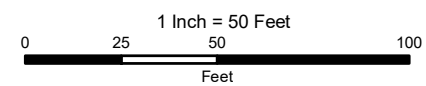




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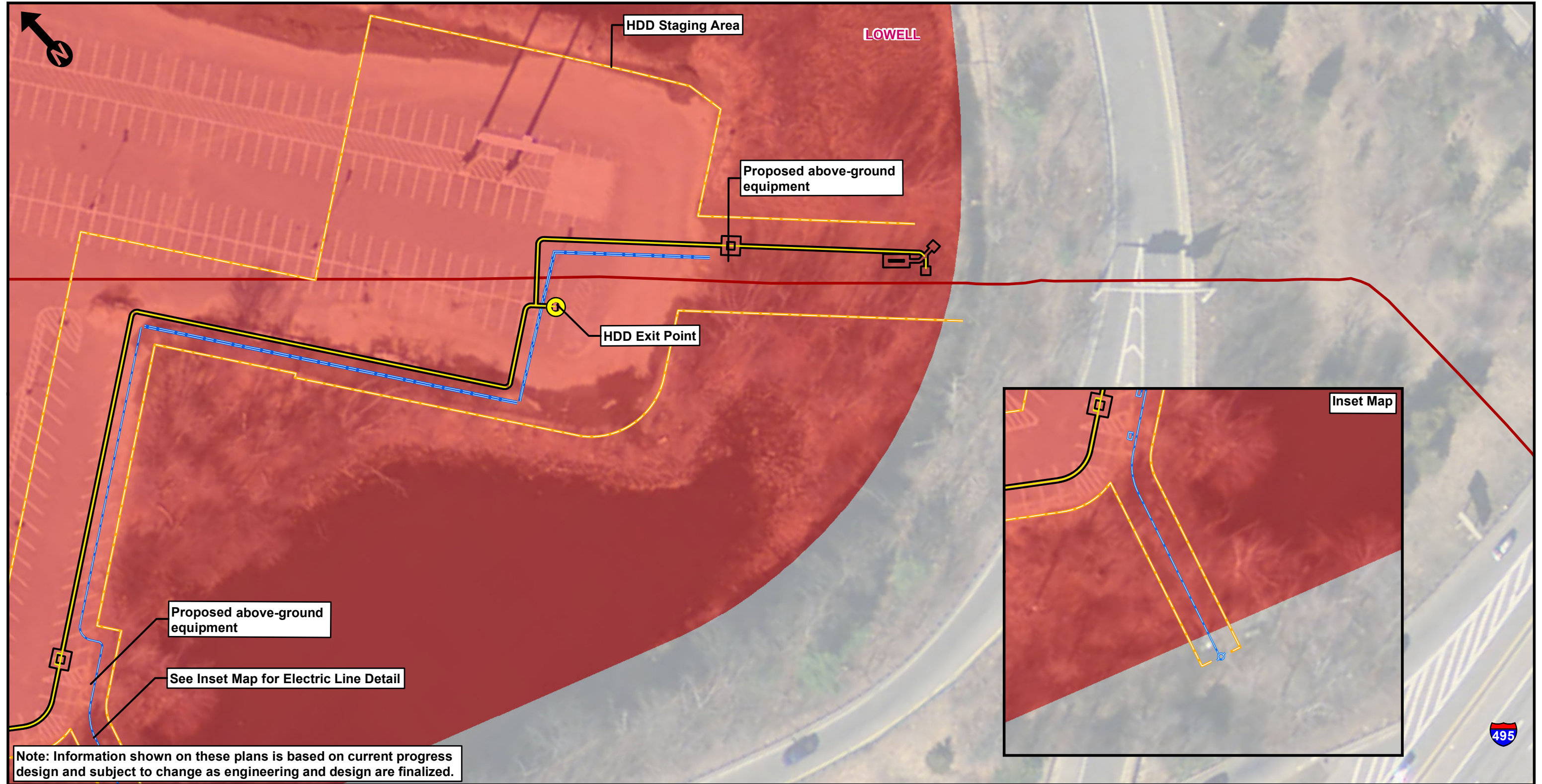
**Lowell Area Gas Modernization Project**

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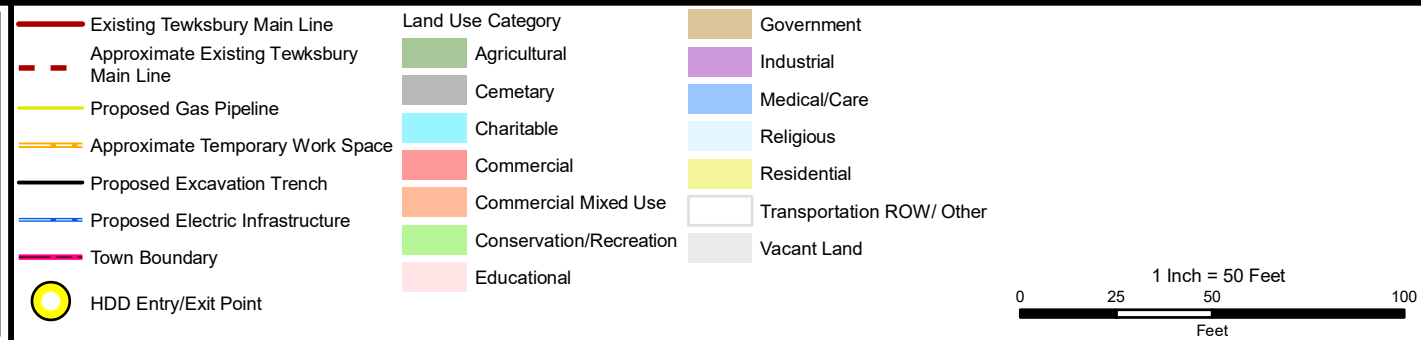
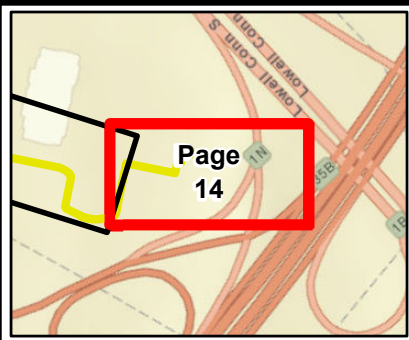
Lowell, Chelmsford and Tewksbury, MA







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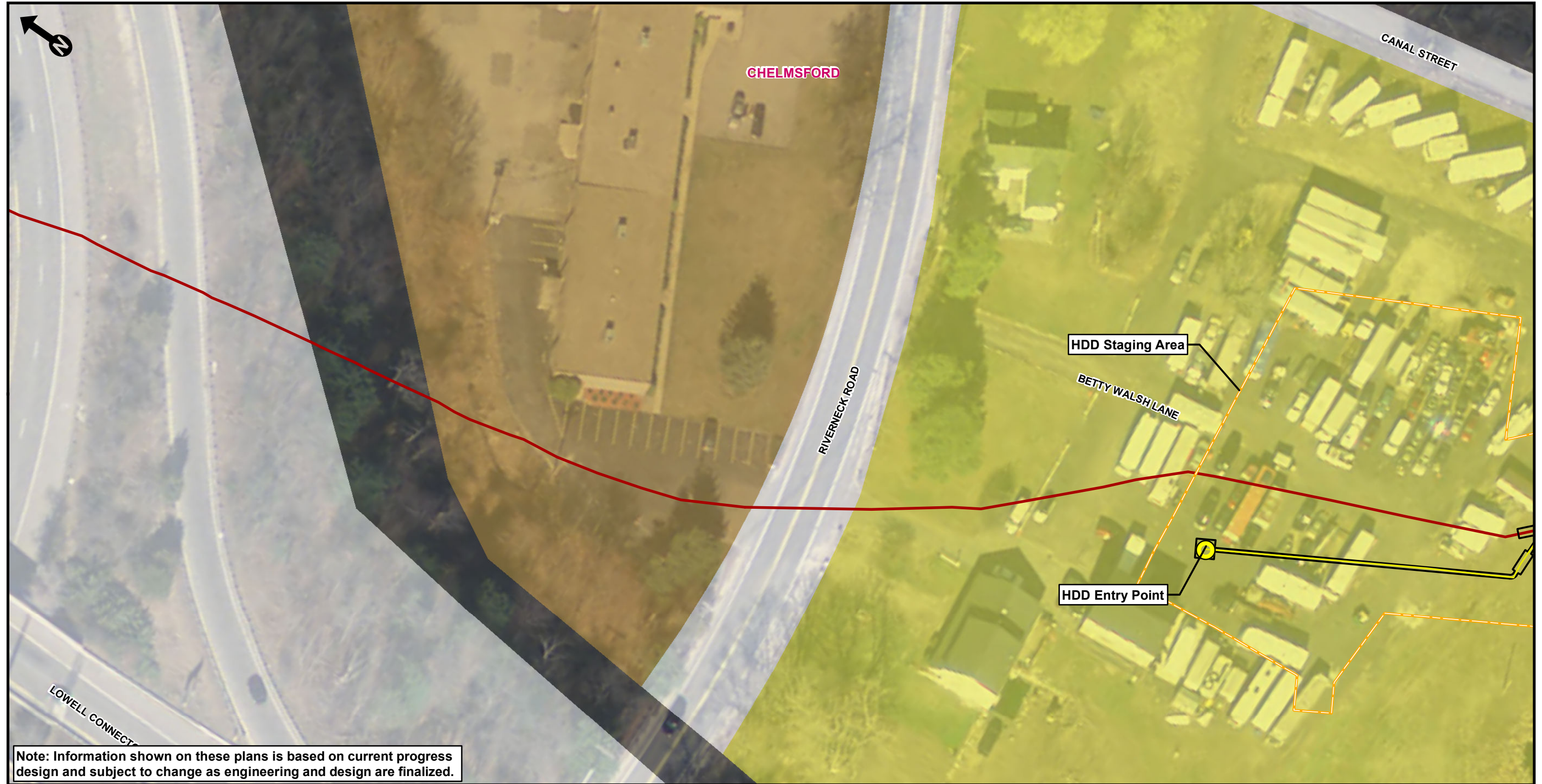
**Lowell Area Gas Modernization Project**

Figure 5-5 Project Land Use

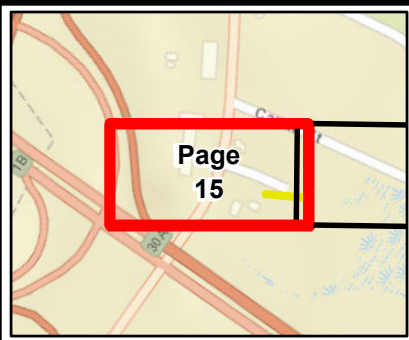
Lowell, Chelmsford and Tewksbury, MA







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1 Inch = 50 Feet

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Feet

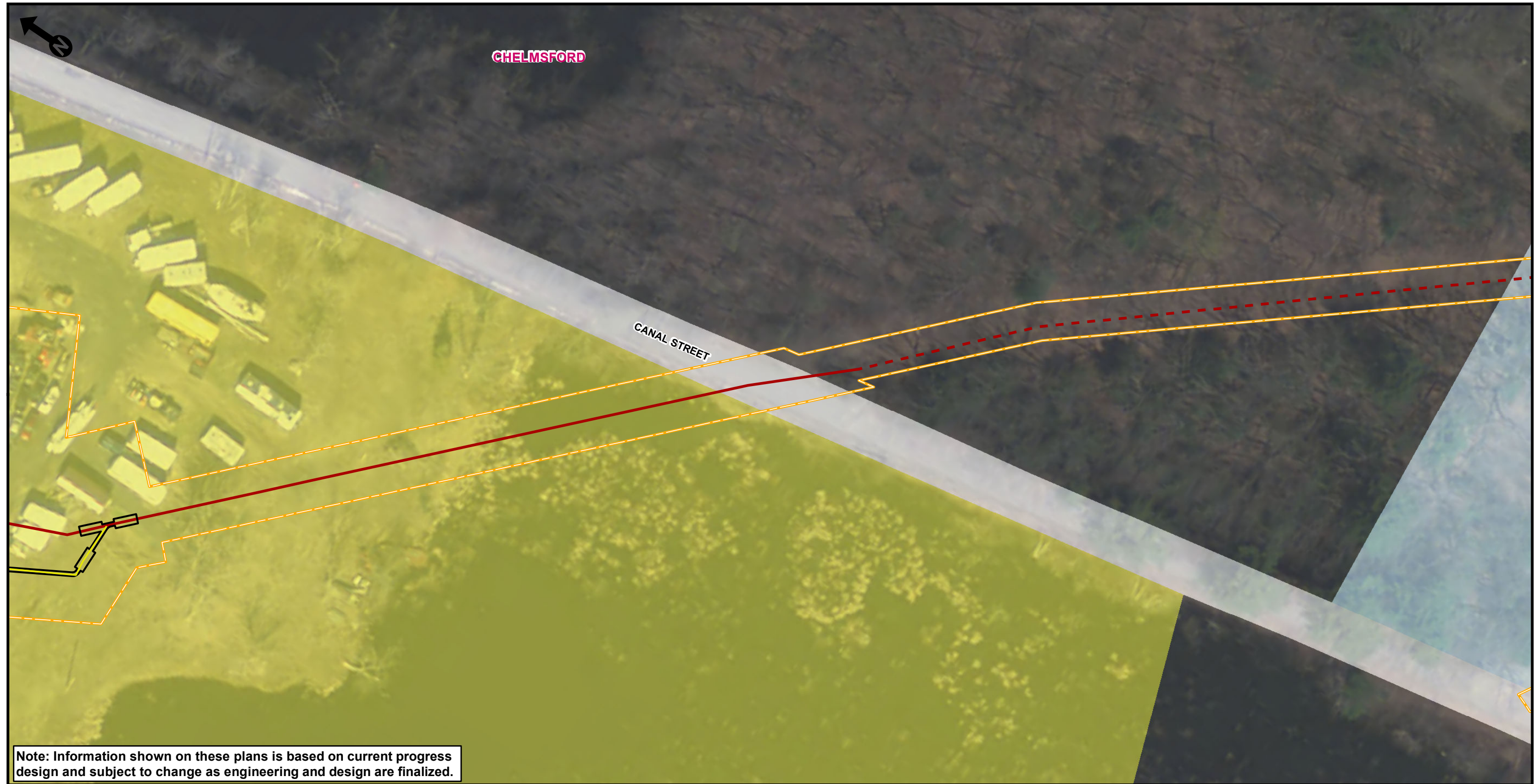
### Lowell Area Gas Modernization Project

Figure 5-5 Project Land Use

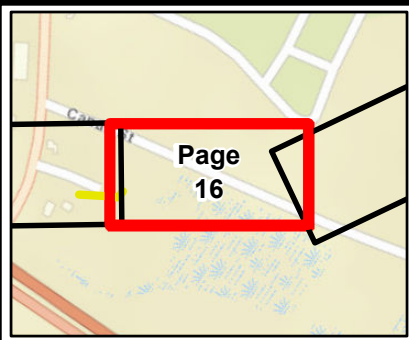
Lowell, Chelmsford and Tewksbury, MA







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**Lowell Area Gas Modernization Project**

Figure 5-5 Project Land Use

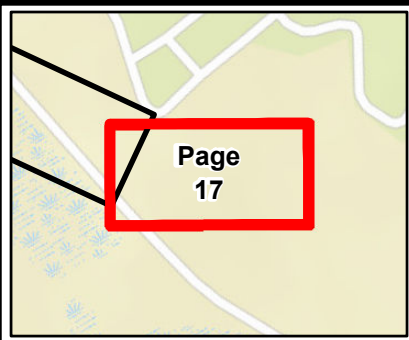
Lowell, Chelmsford and Tewksbury, MA



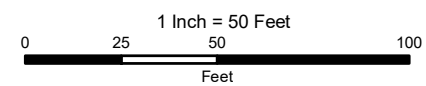




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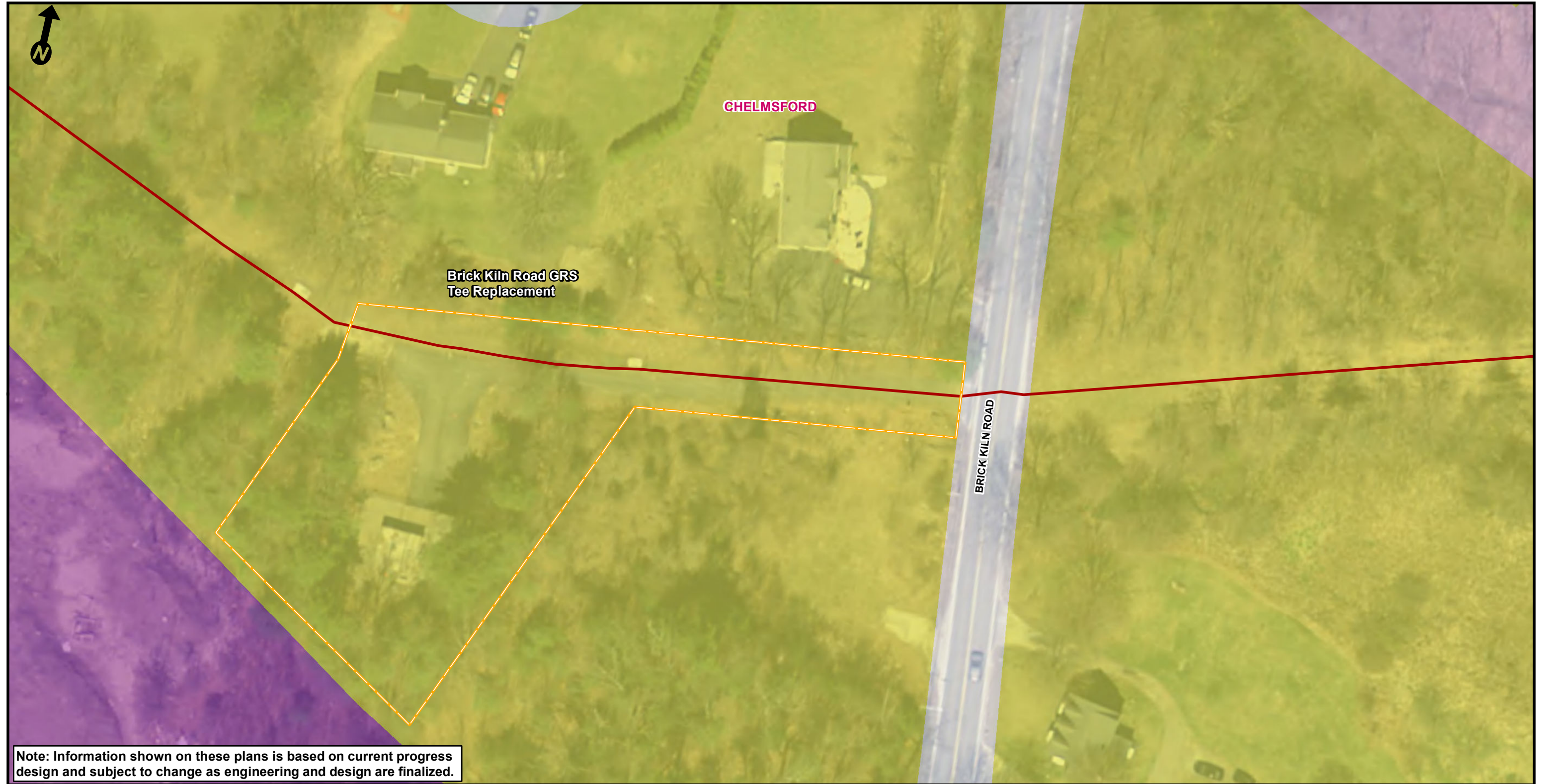
**Lowell Area Gas Modernization Project**

Figure 5-5 Project Land Use

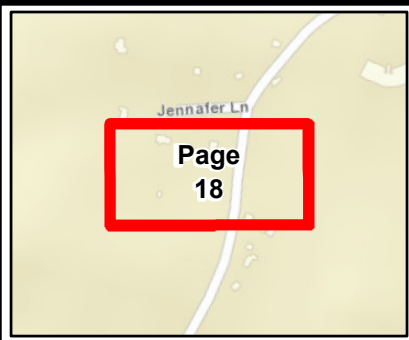
Lowell, Chelmsford and Tewksbury, MA



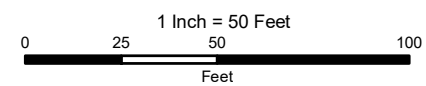




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**Lowell Area Gas Modernization Project**

Figure 5-5 Project Land Use

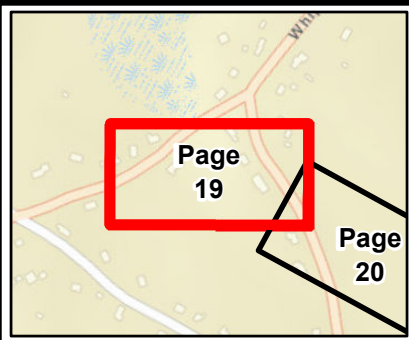
Lowell, Chelmsford and Tewksbury, MA



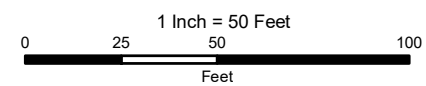




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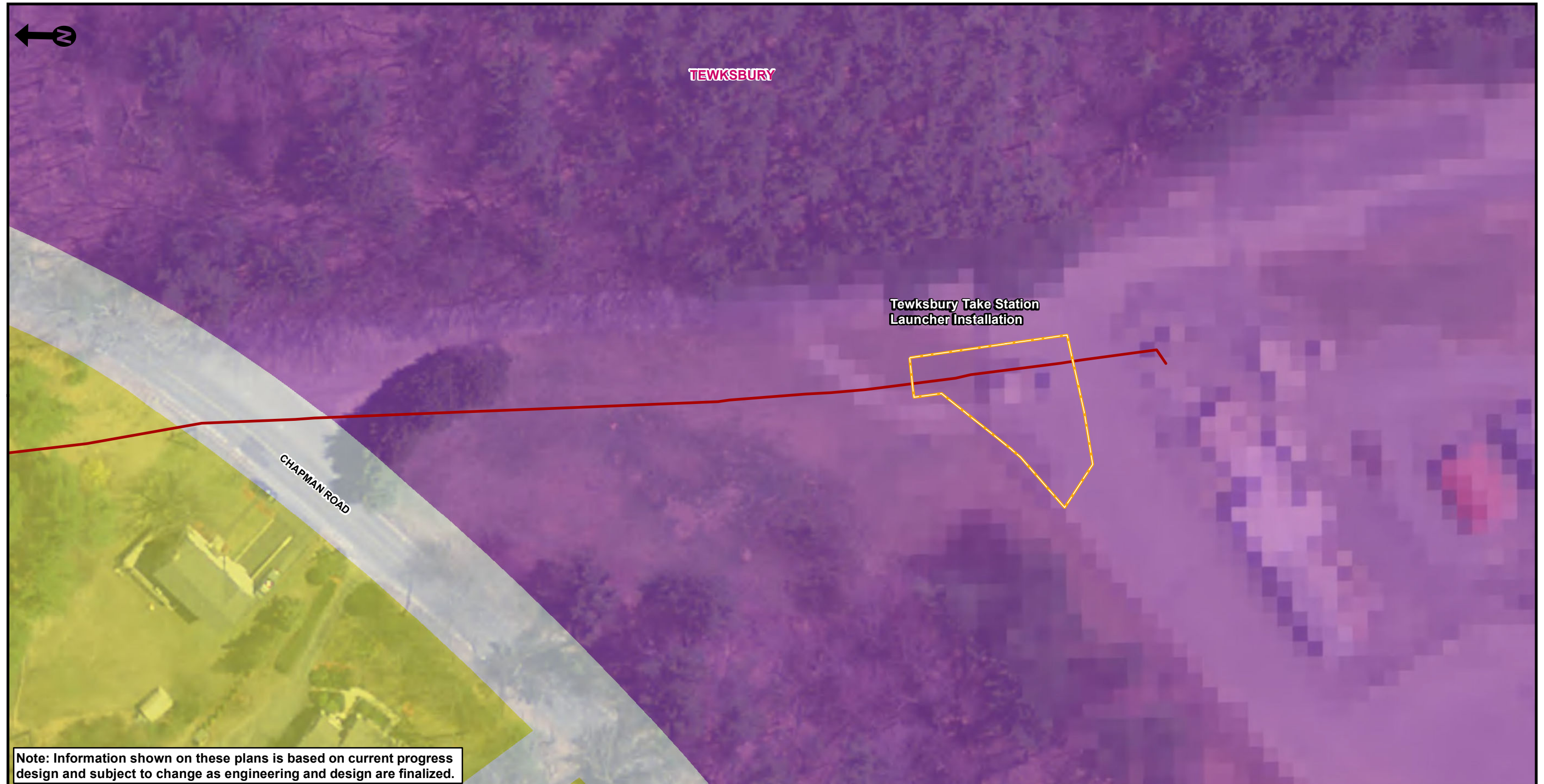
**Lowell Area Gas Modernization Project**

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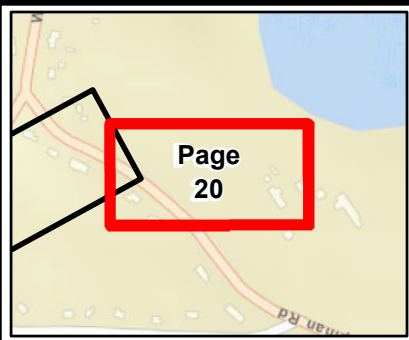
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Lowell, Chelmsford and Tewksbury, MA

