

# Compass Rock

Open Space Residential Development



Sutton, Massachusetts

# Our Team

- Property Owner: Dave Lavallee & Chad Lavallee, Managers  
81 Purgatory, LLP  
Lavallee Family Irrevocable Trust
- Applicant: Dave Lavallee & Chad Lavallee, Managers  
81 Purgatory, LLP
- Civil Site Engineers  
Landscape Architects: Wayne Belec  
Land Design Collaborative



# Presentation Agenda

April 24, 2023

I Development Team Introductions  
Land Design Collaborative  
81 Purgatory, LLP

II Permitting History  
Land Design Collaborative

III Existing Site Conditions  
Land Design Collaborative

IV Proposed Site Conditions  
Land Design Collaborative

V Open Space  
Land Design Collaborative  
81 Purgatory, LLP

V Pre & Post Hydrology  
Land Design Collaborative

VII Resource Area Impacts &  
AURA Enhancement  
Land Design Collaborative  
81 Purgatory, LLP

VIII Q & A Session  
Land Design Collaborative  
81 Purgatory, LLP

IX Adjournment

# Permitting History

Date	Event
JANUARY 6, 2021	Conservation Commission issuance of an Order of Resource Area Delineation (ORAD) confirming the resource areas on the property.
JUNE 13, 2022	Planning Board endorsement of an Approval Not Required Plan (Form A application) creating Lot 1 at 81 Purgatory Road and removing the lot from the subject property.
SEPTEMBER 26, 2022	Planning Board approval of Compass Rock Preliminary Plan.
APRIL 5, 2023	Conservation Commission- Open Public Hearing (continued)

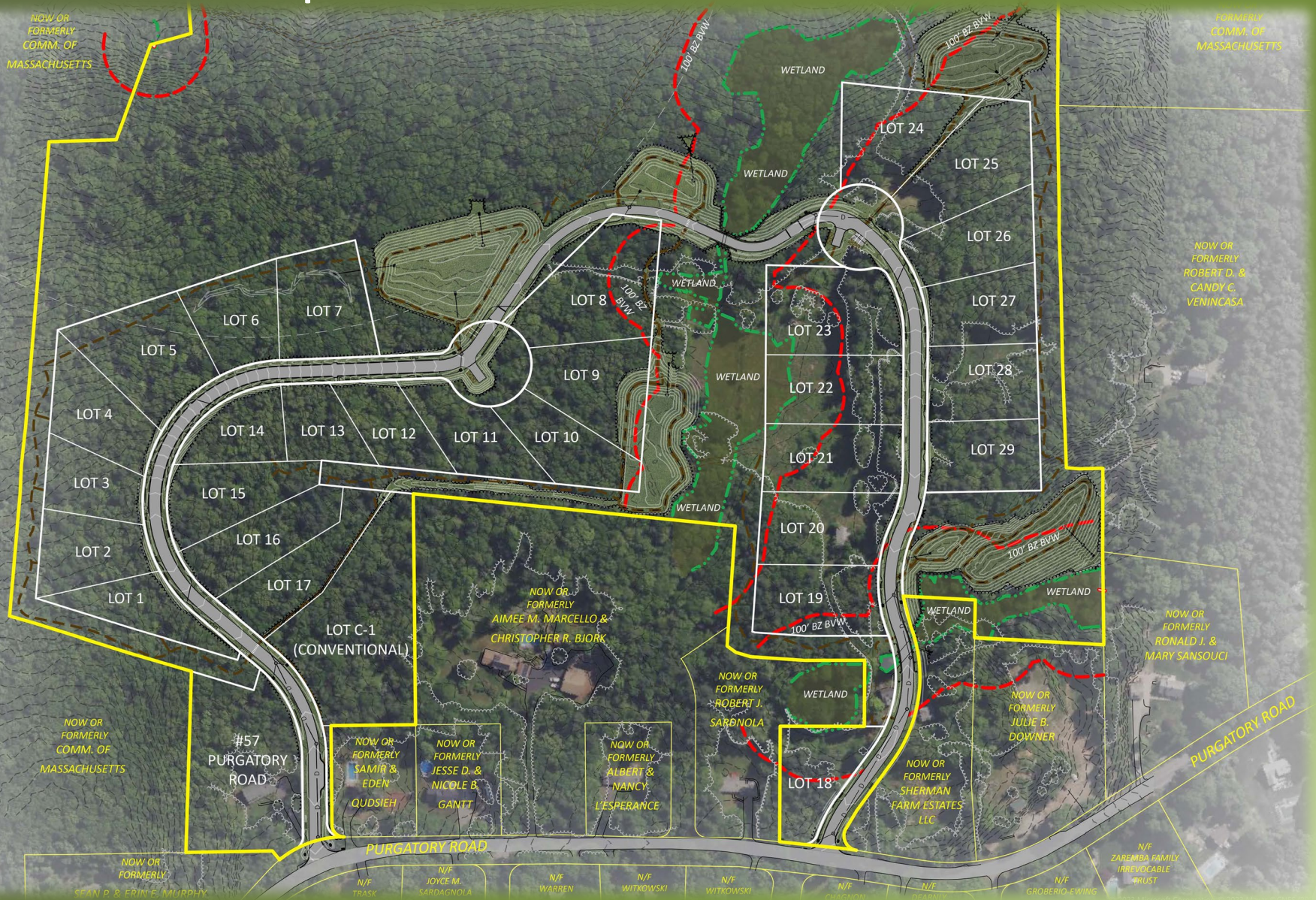


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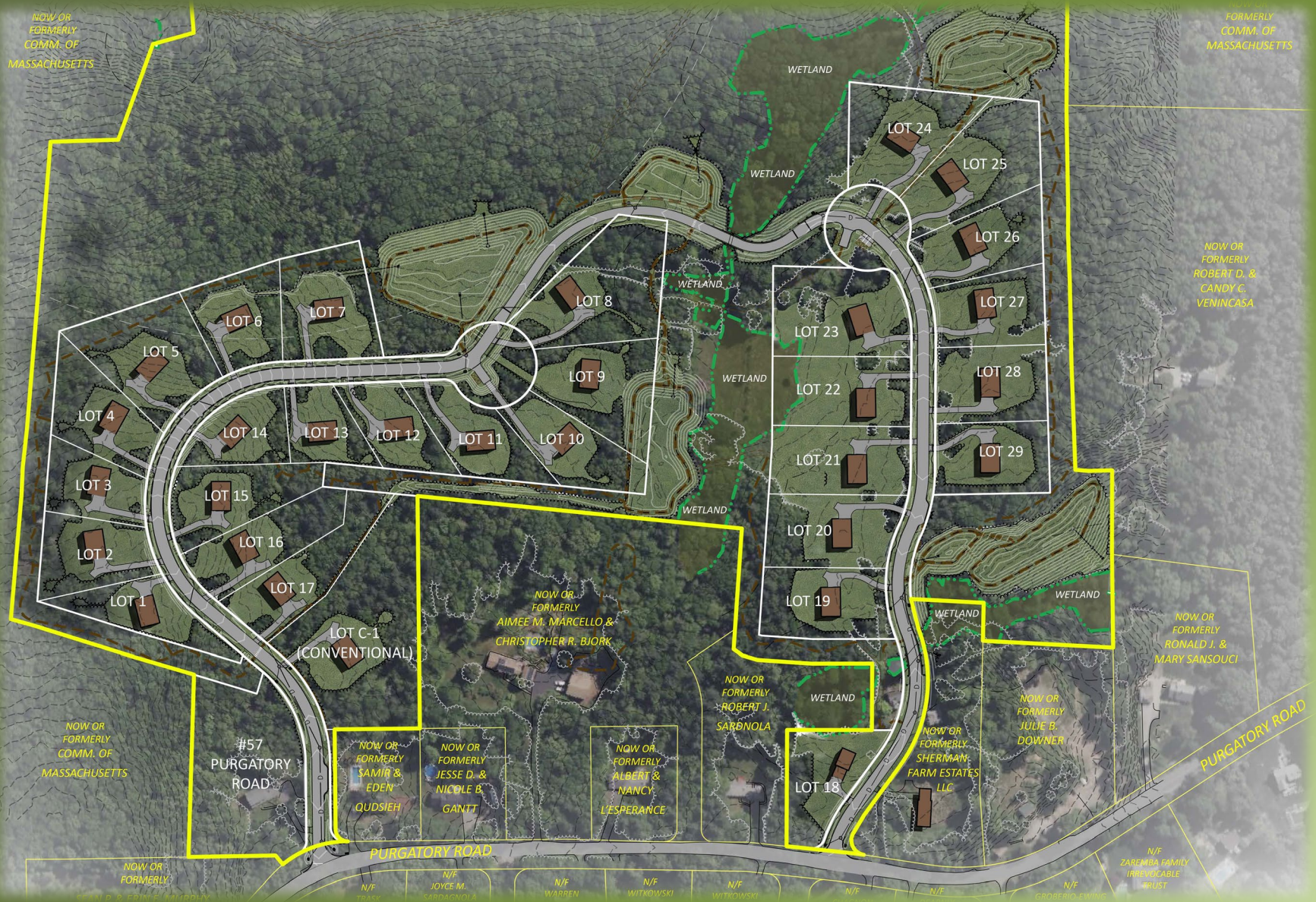
## Proposed Site Conditions - Roads





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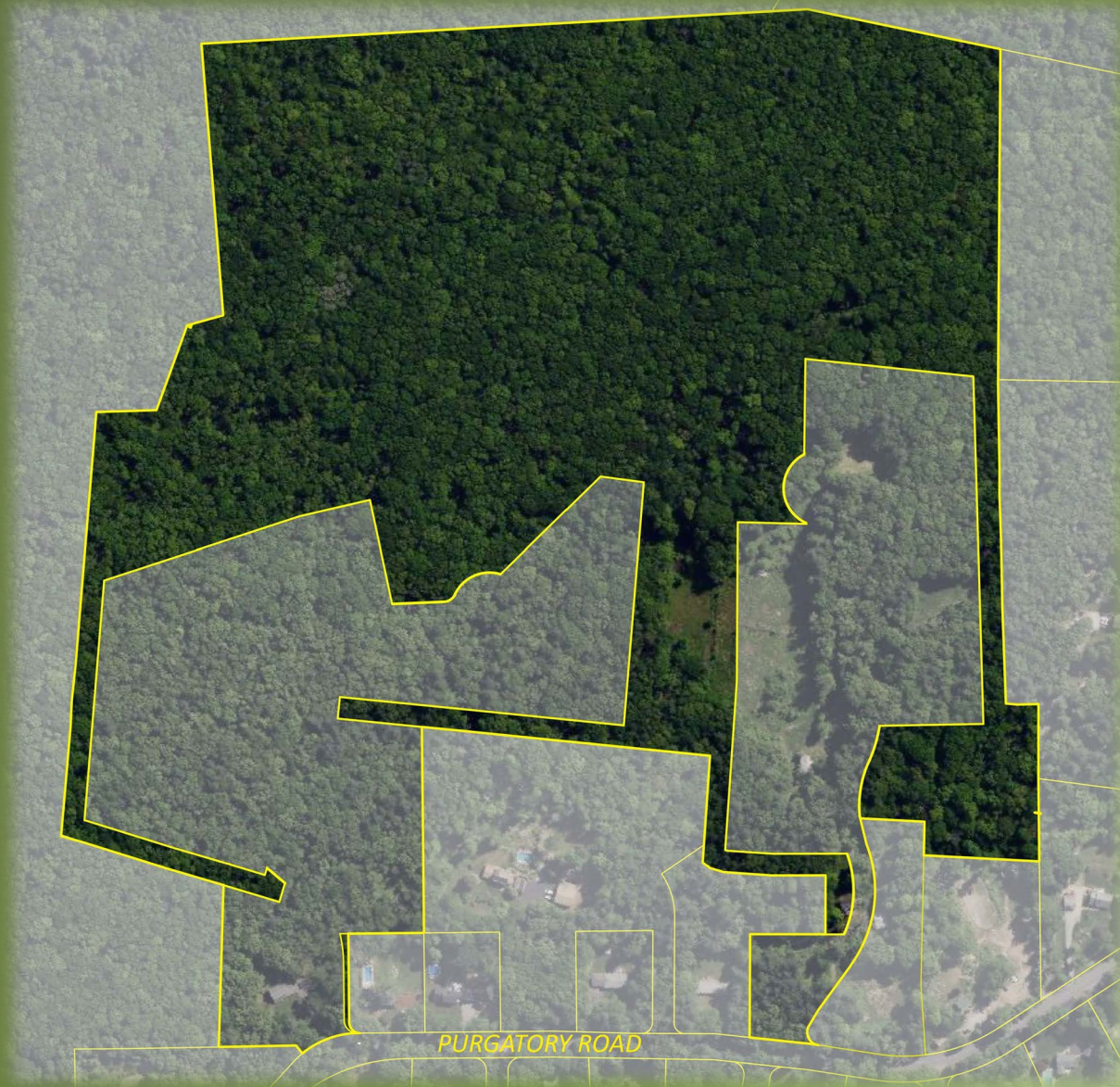
## Proposed Site Conditions – Full Build





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## Open Space





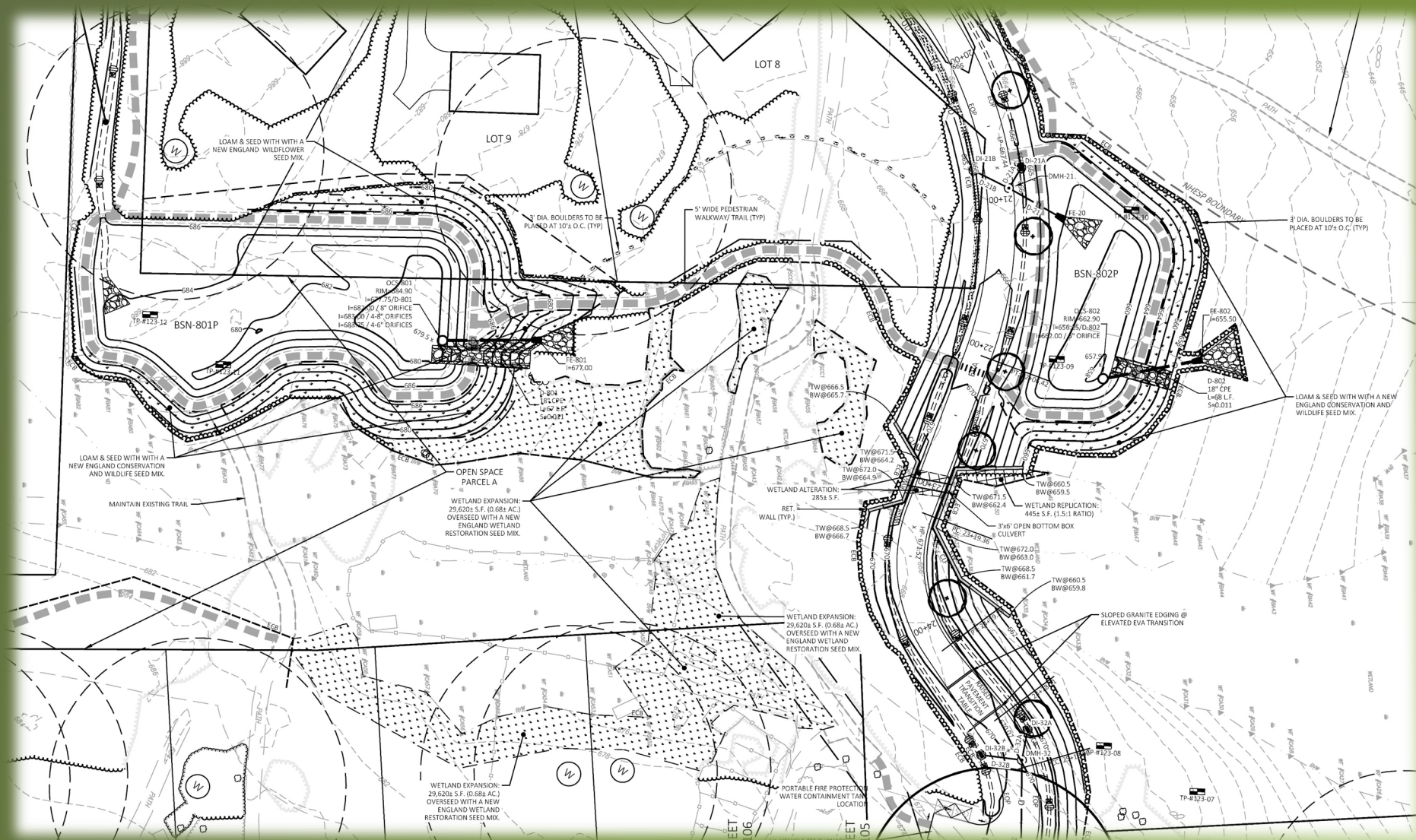
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## Existing Hydrology





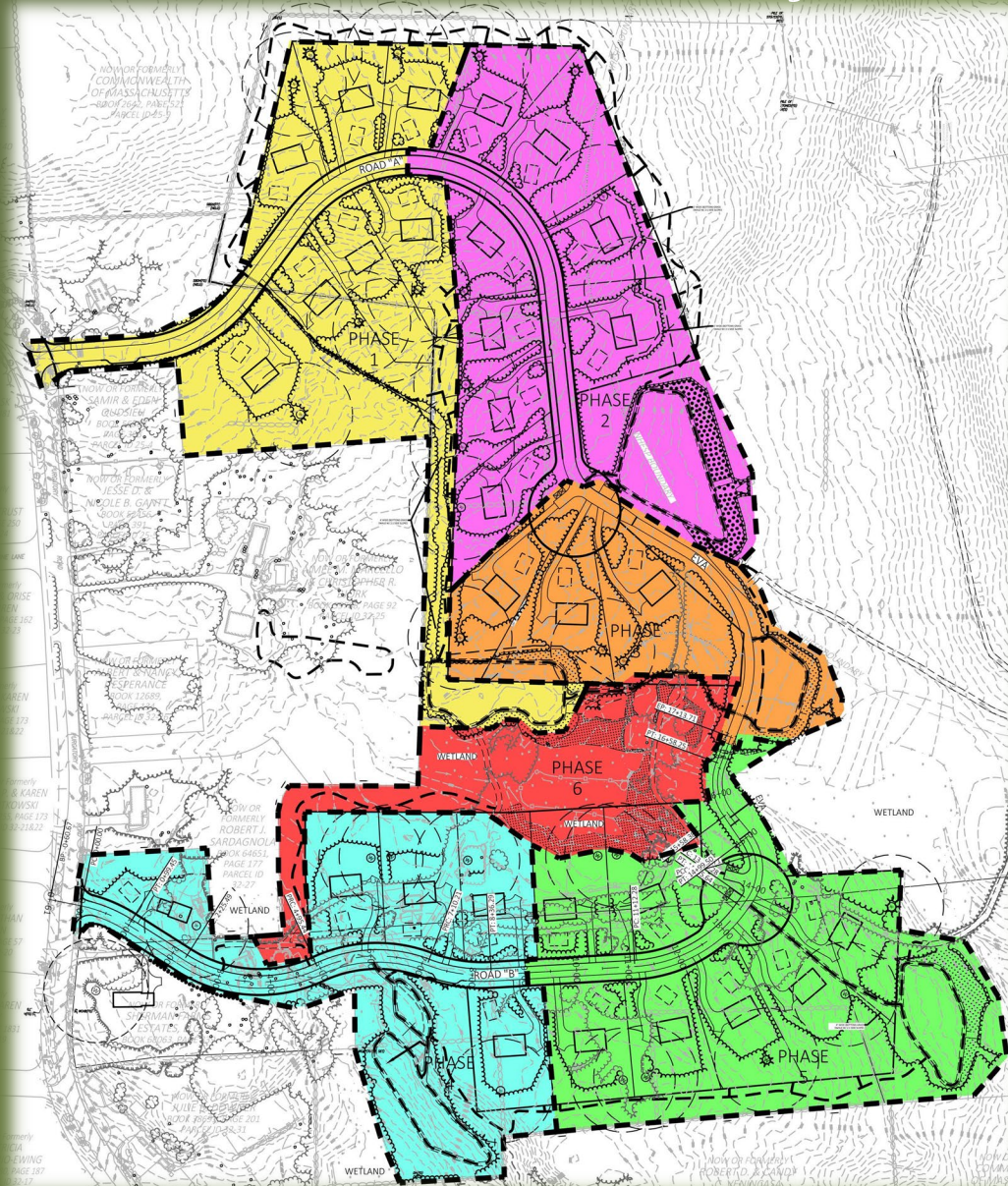


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## General Project Phasing



### GENERAL PHASING CONSTRUCTION SEQUENCE:

REFER TO CONSTRUCTION SEQUENCING NOTES ON SHEET C-002

#### PHASE 1

##### ROAD A AND ASSOCIATED INFRASTRUCTURE

1. INITIAL CONSTRUCTION ENTRANCE AT THE ENTRANCE OF THE PHASE.

2. INSTALL EROSION CONTROL, BARRIERS AND SEDIMENT CONTROL MEASURES AS WELL AS LIMIT OF WORK DEMARCATION (FLAGGING OR FENCING) AS SHOWN ON THE DRAWINGS OR REQUIRED BY PERMIT GRANTING AUTHORITIES.
3. CLEAR TREES WITHIN LIMIT OF WORK AREA ASSOCIATED WITH ROAD, SWALES AND STORMWATER MANAGEMENT BASINS, PROPERTY ADJACENT TO THE FELLED TREES.
4. GRUB WITHIN LIMIT OF WORK AREA ASSOCIATED WITH THE SWALE AND STORMWATER MANAGEMENT BASINS, EXCAVATING TO TO ONE FOOT ABOVE BOTTOM OF BASINS) FOR USE AS A SEDIMENTATION BASIN DURING CONSTRUCTION, PROPERLY SLOPED OF STUMPS AND BRUSH.
5. CONSTRUCT TEMPORARY SEDIMENTATION BASINS AND TEMPORARY DIVERSION SWALES TO DIRECT SEDIMENTATION RUNOFF TO BASINS BEGINNING WITH THE CONSTRUCTION OF BASINS, LOAM AND SEED STORMWATER BASINS AND SWALES TRIBUTARY THERE TO.
6. PERFORM SITE CUT AND FILL OPERATIONS AND ESTABLISH ROUGH SUB GRADES IN THOSE AREAS ASSOCIATED WITH THE ROAD AND ROADSIDE SWALES.
7. LOAM AND SEED TEMPORARY SEDIMENT BASINS AND TEMPORARY DIVERSION.
8. INSTALL STORMWATER MANAGEMENT SYSTEM WITHIN THE ROAD AREAS AND STORMWATER BASIN AS WELL AS THE ROADWAY UTILITIES LEAVING WITHIN SEEDS AT PHASE LIMITS.
9. POUR FOOTING FOR AND INSTALL COMMUNITY MAIL BOX.
10. INSTALL GRANITE CURBING, PAVE ROADWAYS AND SIDEWALKS TO BINDER COURSE, INSTALL CAPI COD BERM, FINAL GRADE ROADWAY SHOULDERS, INSTALL STREET TREES, OFF-GRADING AND STORMWATER BASINS, THEN LOAM AND SEED.

#### LOTS 1-3, 15-17 AND C-1

1. INITIAL CONSTRUCTION ENTRANCE AT EACH LOT.
2. FELL TREES WITHIN APPROVED LIMITS OF CLEARING.
3. INSTALL EROSION CONTROL, BARRIERS AND SEDIMENT CONTROL MEASURES (AS APPLICABLE) AS WELL AS LIMIT OF WORK DEMARCATION (FLAGGING OR FENCING) AS SHOWN ON THE DRAWINGS OR REQUIRED BY PERMIT GRANTING AUTHORITIES.
4. GRUB WITHIN LIMIT OF WORK AREA, AND PROPERLY DISPOSE OF STUMPS AND BRUSH. CLEAR AND GRUB ONLY AS NECESSARY FOR SAFE ACCESS TO SITE FOR THE REMOVAL EQUIPMENT AND MACHINERY AND THE INSTALLATION OF EROSION CONTROL, BARRIERS AND SEDIMENT CONTROL MEASURES AROUND THE INITIAL STAGING AREAS.
5. EXCAVATE TEMPORARY SEDIMENTATION BASINS AND CONSTRUCT TEMPORARY DIVERSION SWALES AS MAY BE NECESSARY TO DIRECT SEDIMENTATION RUNOFF TO BASINS.
6. ROUGH GRADE LOT DRIVEWAY, INSTALLING LOT UTILITIES, THEN DRILL AND TEST LOT WELL.
7. EXCAVATE AND POUR FOUNDATION AND CONSTRUCT HOME.
8. EXCAVATE AND INSTALL SEWAGE DISPOSAL SYSTEM, THEN FINAL GRADE SITE AND LOAM AND SEED.
9. PAVE DRIVEWAYS BINDER COURSE AND FINISH COURSE.

#### PHASE 2

##### ROAD A AND ASSOCIATED INFRASTRUCTURE

FOLLOW PROCEDURES 1-8 & 10 AS OUTLINED IN PHASE 1.

#### LOTS 4-7, 11-14

FOLLOW PROCEDURES 1-9 AS OUTLINED IN PHASE 1.

#### PHASE 3

##### ROAD A, PART OF EVA AND ASSOCIATED INFRASTRUCTURE TO NORTH SIDE OF WETLAND CROSSING

FOLLOW PROCEDURES 1-8 & 10 AS OUTLINED IN PHASE 1.

#### LOTS 8-10

FOLLOW PROCEDURES 1-9 AS OUTLINED IN PHASE 1.

#### PHASE 4

##### ROAD B AND ASSOCIATED INFRASTRUCTURE

1. FOLLOW PROCEDURES 1-4 AS OUTLINED IN PHASE 1.
2. DEMOLISH AND PROPERLY DISPOSE OF EXISTING STRUCTURES AND ASSOCIATED IMPROVEMENTS.
3. EXCAVATE AND POUR FOOTINGS FOR STREAM CROSSING CULVERT AND INSTALL CULVERT.
4. EXCAVATE AND INSTALL FORMS FOR FOOTINGS AND WALLS AT STREAM CROSSING.
5. POUR FOOTINGS FOR RETAINING WALLS THEN STRIP AND POUR FORMS, FOUR WALLS.
6. CONSTRUCT WETLAND REPLICATION AREAS.
7. FOLLOW PROCEDURES 5-10 AS OUTLINED IN PHASE 1.

#### LOTS 18-20 & 30

FOLLOW PROCEDURES 1-9 AS OUTLINED IN PHASE 1.

#### PHASE 5

##### ROAD B, REMAINDER OF EVA AND ASSOCIATED INFRASTRUCTURE TO PHASE 3 CONNECTION POINT

1. FOLLOW PROCEDURES 1-7 AS OUTLINED IN PHASE 1.
2. EXCAVATE AND POUR FOOTINGS FOR STREAM CROSSING CULVERT AND INSTALL CULVERT.
3. EXCAVATE AND INSTALL FORMS FOR FOOTINGS AND WALLS AT STREAM CROSSING.
4. POUR FOOTINGS FOR RETAINING WALLS THEN STRIP AND POUR FORMS, FOUR WALLS.
5. CONSTRUCT WETLAND REPLICATION AREAS.
6. FOLLOW PROCEDURES 8 & 10 AS OUTLINED IN PHASE 1.

#### LOTS 23-20

FOLLOW PROCEDURES 1-9 AS OUTLINED IN PHASE 1.

#### PHASE 6

##### BVW EXPANSION

1. WORK TO COMMENCE IN THE FALL WHEN EXISTING VEGETATION LAYS FLAT AND HAS EXPERIENCED DIBACK.
2. SEED THE AREA LOAM AND SEED WITH THE SEED MIX AND APPLICATION RATE SHOWN ON THE PLANS WITH A MIX OF SAWDUST OR STRAW CHIPPING.
3. FOLLOWING APPLICATION OF MIXTURE, ROLL THE AREA WITH HAND ROLLERS.

#### PHASE 7

##### PEDESTRIAN/ TRAIL SYSTEM

1. INITIAL EROSION CONTROL, BARRIERS AND SEDIMENT CONTROL MEASURES AS WELL AS LIMIT OF WORK DEMARCATION (FLAGGING OR FENCING) AS SHOWN ON THE DRAWINGS OR REQUIRED BY PERMIT GRANTING AUTHORITIES.
2. REMOVAL OF ROCKS 4" FROM THE PATH AND COMPACT WITH A VIBRATORY ROLLER.
3. PLACE 6" OF STONE DUST IN 3" LIFTS, COMPACTING AND WATER EACH LIFT.

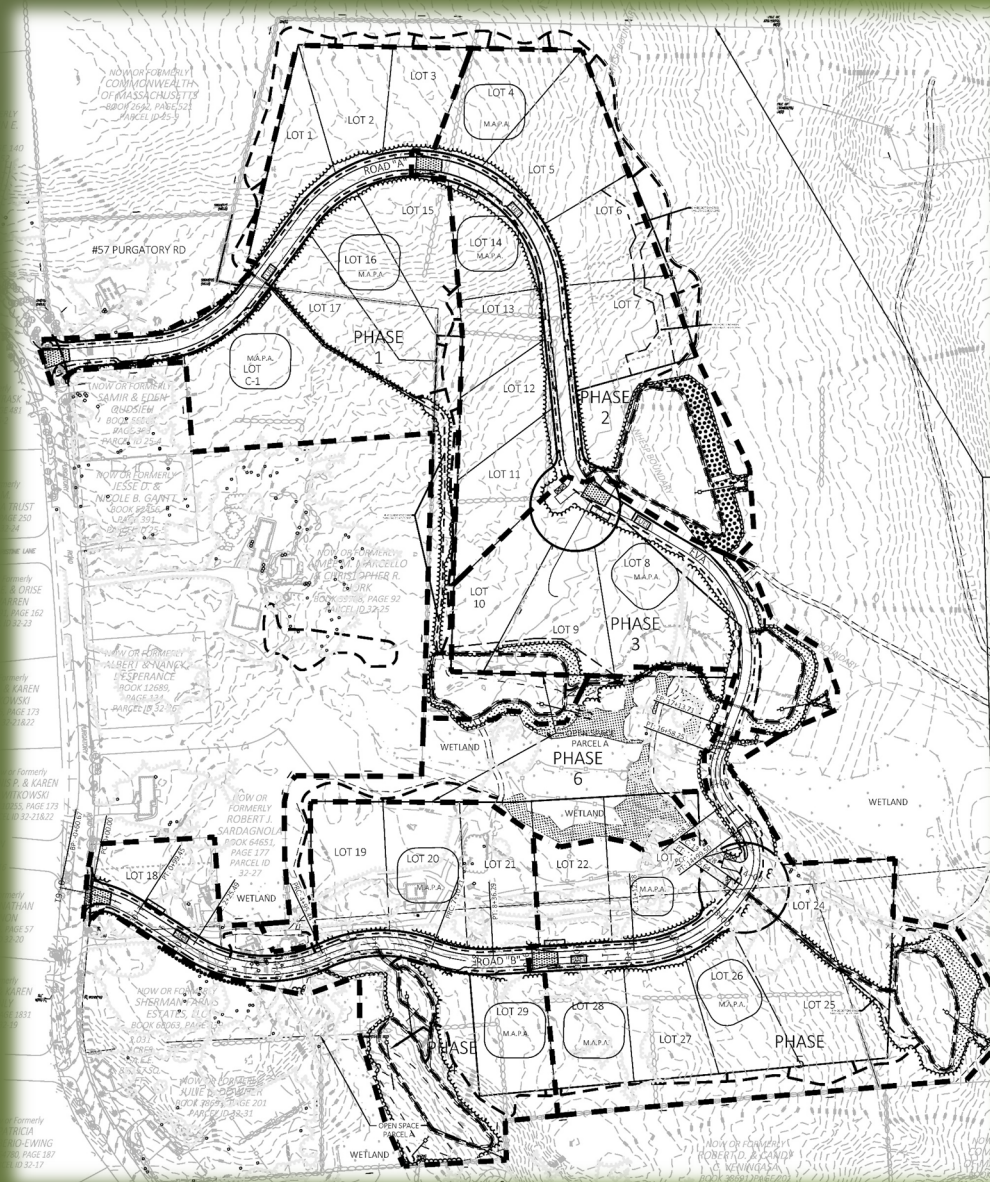
##### FINAL PAVING & SIGNAGE

1. SWEEP ROADS A & B AND PERFORM REPAIRS TO BINDER AS NECESSARY THEN PAVE WITH FINISH COURSE.
2. INSTALL SIGNAGE THROUGHOUT THE SITE AS SHOWN ON THE PLANS.



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## General Erosion & Sediment Control- Roads



### EROSION & SEDIMENT CONTROL KEY:

**SUEL**

CONSTRUCTION VEHICLE REFUELING LOCATION

**MAT. STOR.**

CONSTRUCTION ECB MATERIALS STORAGE AREA- SUPPLIES OF SILT FENCE, STRAW BALES, STRAW WATTLES, CRUSHED STONE, WOODCHIPS, ETC, PROTECTED FROM THE ELEMENTS.

CONSTRUCTION TRAILER

**LOAM/STOCKPILE AREA**

LOAM/STOCKPILE AREA

**DIVERSION SWALE**

DIVERSION SWALE

**TEMPORARY SEDIMENTATION BASIN**

TEMPORARY SEDIMENTATION BASIN

**TEMPORARY SEDIMENTATION BASIN - STORMWATER MANAGEMENT BASIN**

TEMPORARY SEDIMENTATION BASIN - STORMWATER MANAGEMENT BASIN

**CONSTRUCTION ENTRANCE TO EACH PHASE**

CONSTRUCTION ENTRANCE TO EACH PHASE

**EROSION & SEDIMENT CONTROL BARRIER**

EROSION & SEDIMENT CONTROL BARRIER

**TEMPORARY STANDPIPE- PIPE ENCASED IN CRUSHED STONE AND FILTER FABRIC**

TEMPORARY STANDPIPE- PIPE ENCASED IN CRUSHED STONE AND FILTER FABRIC

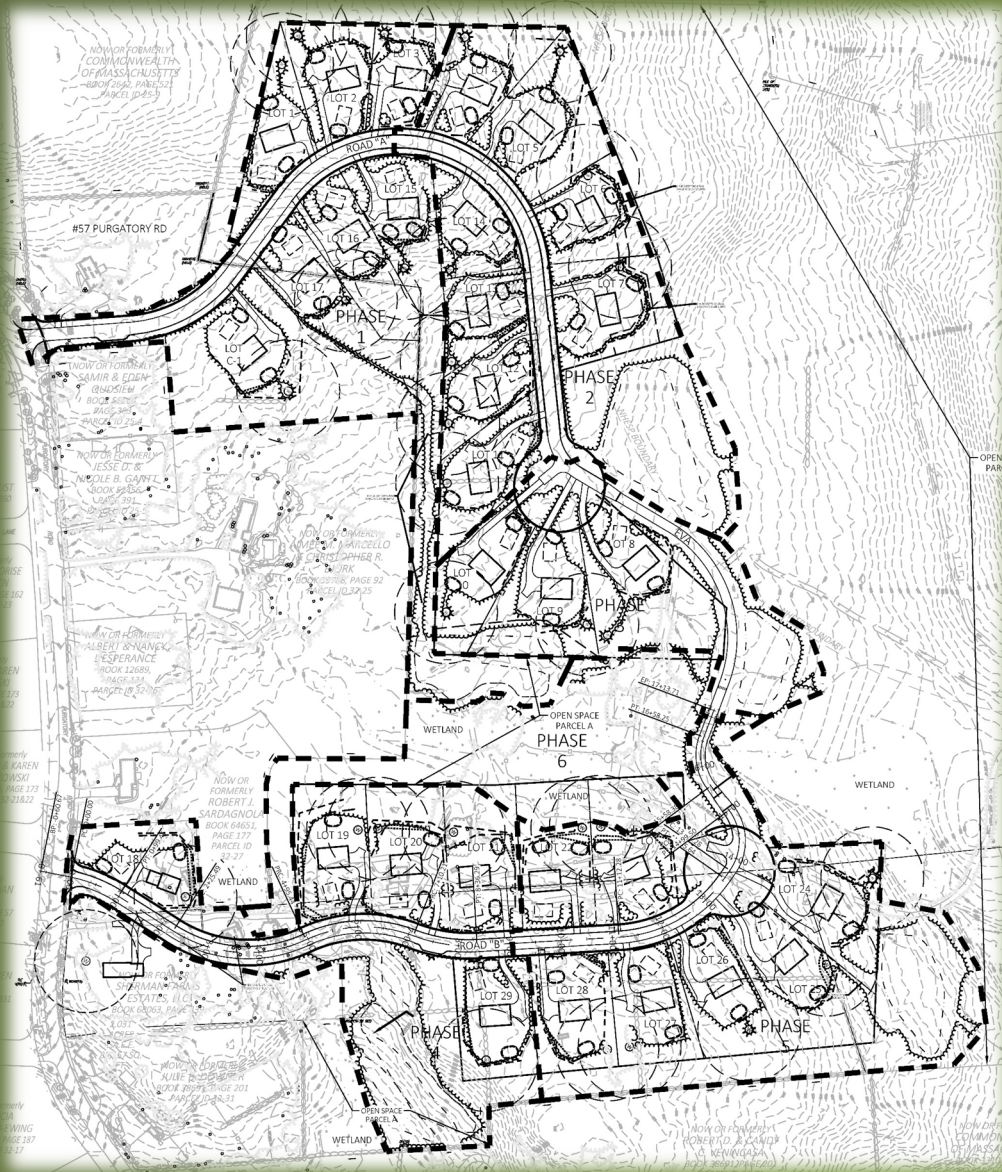
**M.A.P.A.**

MATERIAL AGGREGATE PROCESSING AREA



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## General Erosion & Sediment Control- Lots



### EROSION & SEDIMENT CONTROL KEY:



LOAM/SOIL STOCKPILE AREA



DIVERSION SWALE



TEMPORARY SEDIMENTATION BASIN



EROSION & SEDIMENT CONTROL BARRIER

# Post Presentation Dialogue

- Q & A Session:

...Thank You from Our Team