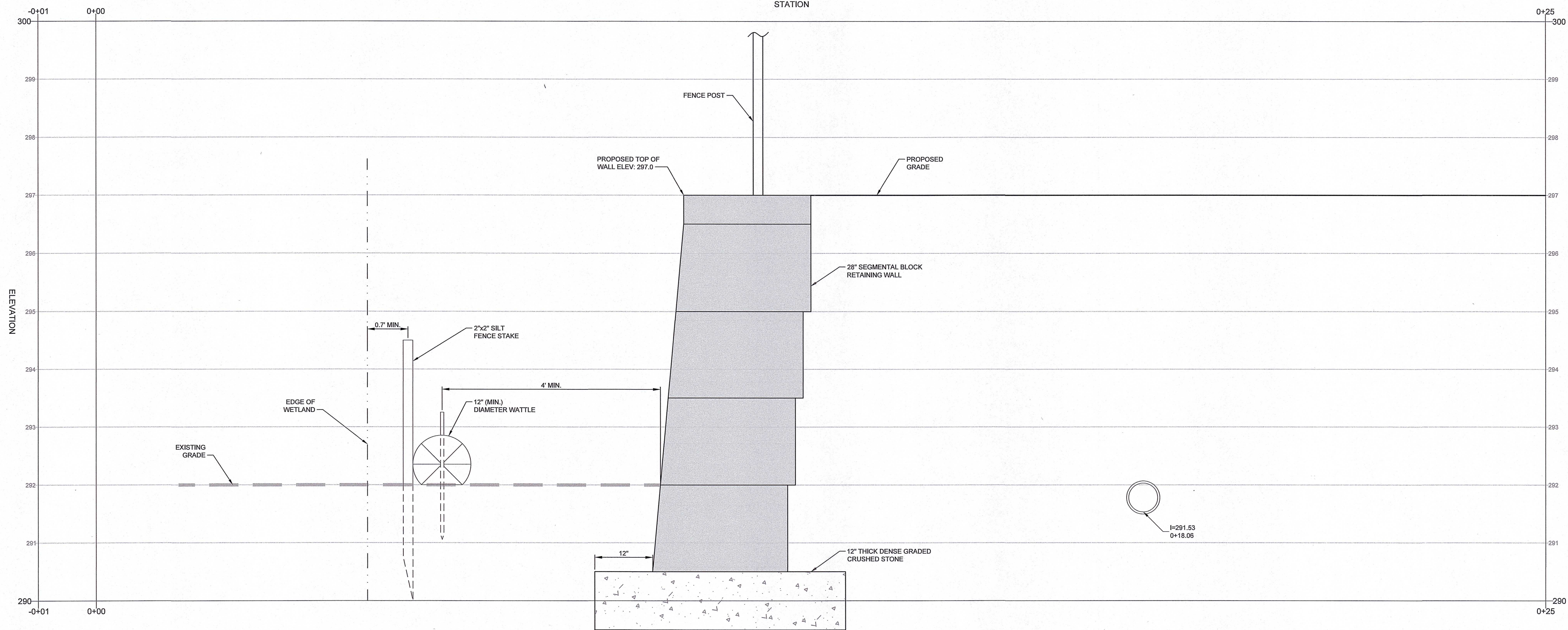
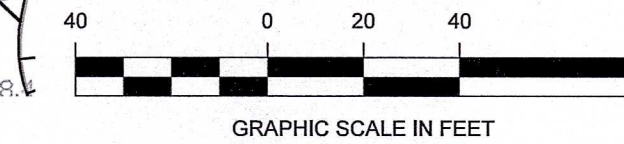


PLAN VIEW A-A
SCALE: 1" = 5'



PROPOSED CROSS SECTION A-A
HORIZONTAL SCALE: 1" = 1'
VERTICAL SCALE: 1" = 1'

NOT FOR CONSTRUCTION

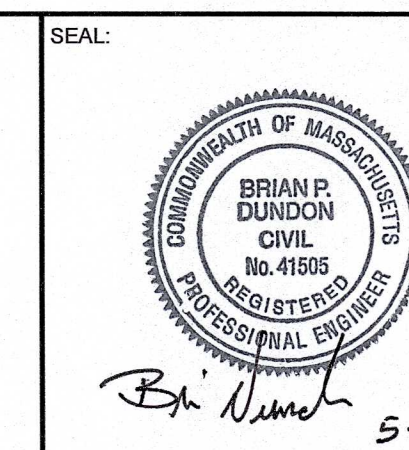


Copyright © 2021 R.J. O'Connell & Associates, Inc.

NO.	REVISION	DATE	NO.	REVISION	DATE
	REVISED PER CONCOM PEER REVIEW COMMENTS	05/10/2024			
	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024			

DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	AS NOTED

PREPARED FOR:
FAIRFIELD GROVE STREET LLC
30 BRAINTREE HILL OFFICE PARK
SUITE 105
BRAintree, MA 02184



Brian Dundon 5-10-2024

PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02186
PHONE: 781.279.0180 RJOCONNELL.COM

PROJECT NAME:
GROVE STREET RESIDENCES
FRANKLIN, MA

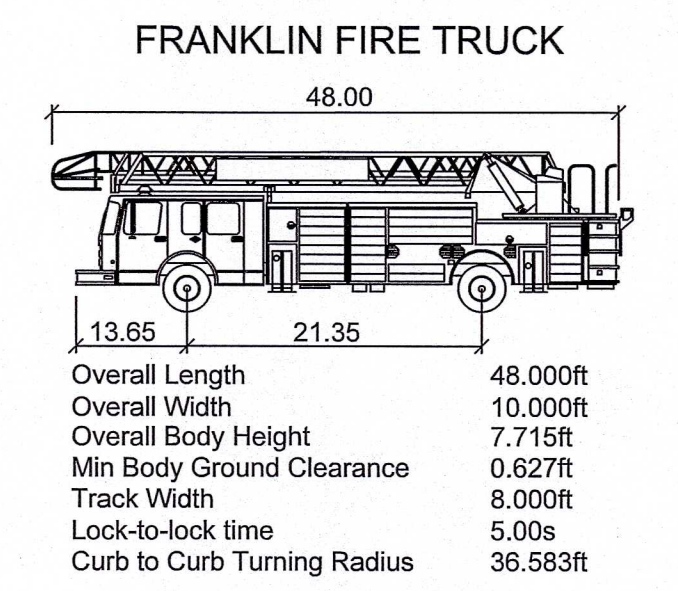
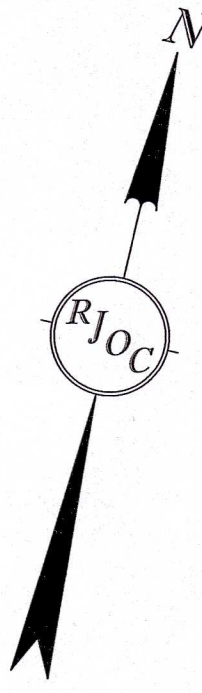
DRAWING NAME:
SEDIMENT & EROSION CONTROL AT CLOSEST WETLAND POINT PLAN

DRAWING NUMBER:
C-16

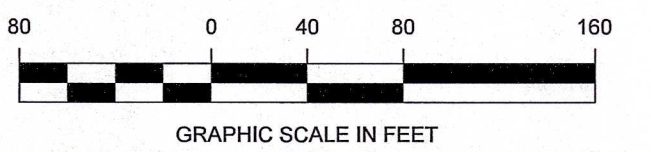
DATE: 03/28/2024 PROJECT NO.: 22016

Copyright © 2023 by R.J. O'Connell & Associates, Inc.

Drawing name: G:\MA\Franklin\Fairfield Residential\121 Grove Street\Main\2016_C-16 Sediment & Erosion Control at Closest Wetland Point.dwg
May 08, 2024 - 12:56pm



NOT FOR CONSTRUCTION



Drawing name: G:\MA\Franklin\Fairfield Residential\121 Grove Street\Main\22016_FT-1 Fire Truck Turning Plan.dwg
May 08, 2024 - 12:57 pm



Copyright © 2021 R.J. O'Connell & Associates, Inc.

NO.	REVISION	DATE	NO.	REVISION	DATE
5.	REVISED PER CONCOM PEER REVIEW COMMENTS	05/10/2024			
4.	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024			
3.	REVISED PER ZBA PEER REVIEW COMMENTS	02/12/2024			
2.	REVISED PER ZBA PEER REVIEW COMMENTS	02/02/2024			
1.	REVISED PER ONSITE SOIL TESTING RESULTS/NOI SUBMISSION	12/18/2023			

DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	MAC
SCALE:	1" = 80'

PREPARED FOR:
FAIRFIELD GROVE STREET LLC
 30 BRAINTREE HILL OFFICE PARK
 SUITE 105
 BRAINTREE, MA 02184



PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
 CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
 80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02186
 PHONE: 781.278.9180 RJOCONNELL.COM

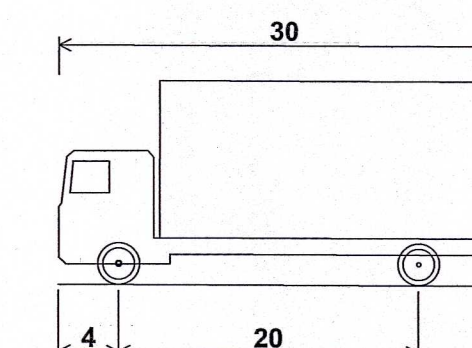
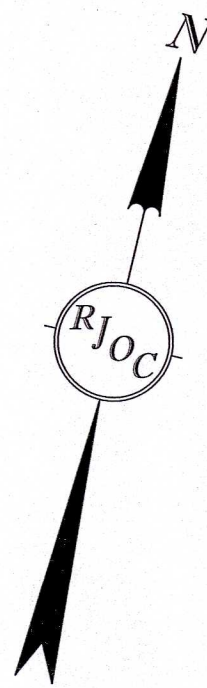
PROJECT NAME:
GROVE STREET RESIDENCES
 FRANKLIN, MA

DRAWING NAME:
FIRE TRUCK TURNING PLAN

DRAWING NUMBER:
FT-1

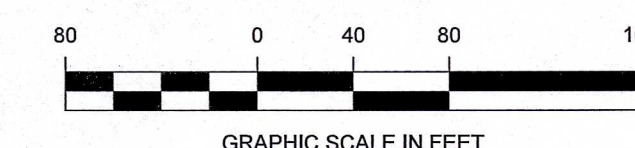
DATE: 10/30/2023 PROJECT NO.: 22016

Copyright © 2023 by R.J. O'Connell & Associates, Inc.



SU-30 - Single Unit Truck
 Overall Length 30.00ft
 Overall Width 8.00ft
 Overall Body Height 13.50ft
 Min Body Ground Clearance 1.367ft
 Track Width 8.00ft
 Lock-to-lock time 5.0s
 Max Steering Angle (Virtual) 31.80°

NOT FOR CONSTRUCTION



Drawing name: G:\MA\Franklin\Fairfield Residential\121 Grove Street\Main\2016_TT-1 Moving Truck Turning Plan.dwg
 May 08, 2024 - 12:59pm

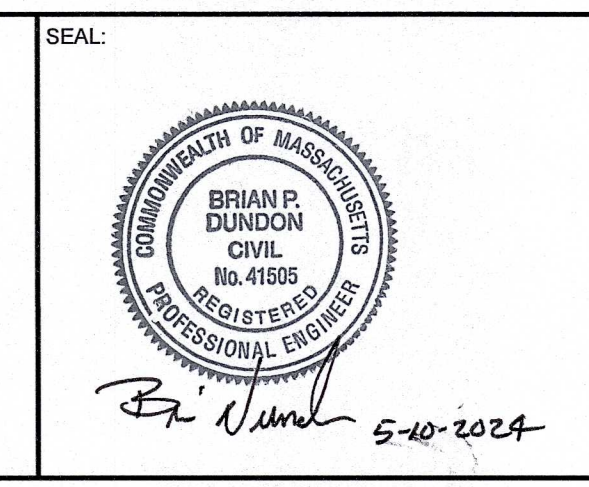


Copyright © 2021 R.J. O'Connell & Associates, Inc.

NO.	REVISION	DATE
4.	REVISED PER CONCOM PEER REVIEW COMMENTS	05/10/2024
3.	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024
2.	REVISED PER ZBA PEER REVIEW COMMENTS	02/12/2024
1.	REVISED PER ZBA PEER REVIEW COMMENTS	02/02/2024

DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	MAC
SCALE:	1" = 80'

PREPARED FOR:
FAIRFIELD GROVE STREET LLC
 30 BRAINTREE HILL OFFICE PARK
 SUITE 105
 BRAINTREE, MA 02184



PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
 CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
 80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02186
 PHONE: 781-279-0188 RJOCONNELL.COM

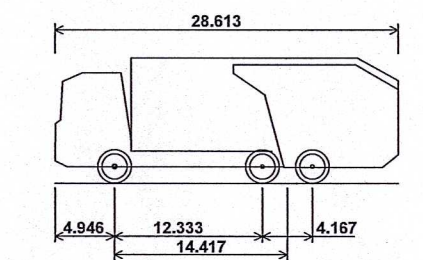
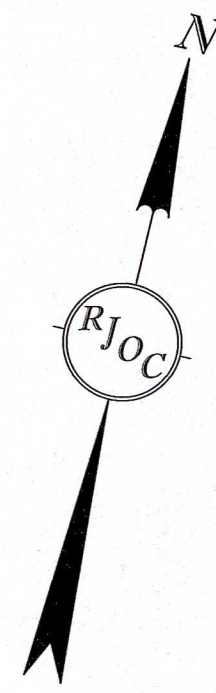
PROJECT NAME:
GROVE STREET RESIDENCES
 FRANKLIN, MA

DRAWING NAME:
MOVING TRUCK TURNING PLAN

DRAWING NUMBER:
TT-1

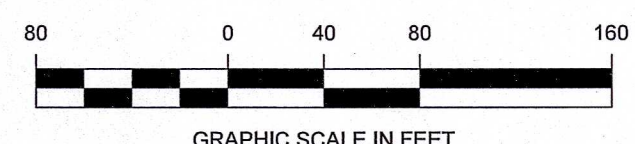
DATE: 02/02/2024 PROJECT NO.: 22016

Copyright © 2023 by R.J. O'Connell & Associates, Inc.



Trash/Recycle Truck
 Overall Length 28.613ft
 Overall Width 8.000ft
 Overall Body Height 10.481ft
 Min Body Ground Clearance 1.311ft
 Track Width 6.000ft
 Lock-to-lock time 6.00s
 Curb to Curb Turning Radius 33.500ft

NOT FOR CONSTRUCTION



Drawing name: C:\MA\Fairfield\Fairfield Residential\121 Grove Street\Main\2016_TT-2 Trash Recycle Truck Turning Plan.dwg
 May 08, 2024 - 13:01 pm

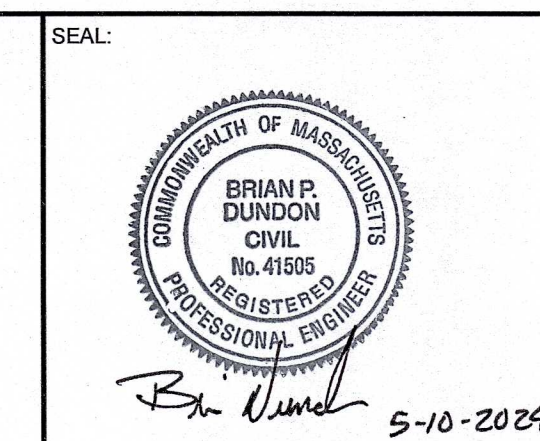


Copyright © 2021 R.J. O'Connell & Associates, Inc.

NO.	REVISION	DATE	NO.	REVISION	DATE
4.	REVISED PER CONCOM PEER REVIEW COMMENTS	05/10/2024			
3.	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024			
2.	REVISED PER ZBA PEER REVIEW COMMENTS	02/12/2024			
1.	REVISED PER ZBA PEER REVIEW COMMENTS	02/02/2024			

DESIGNED BY: MAC
 DRAWN BY: MCR
 REVIEWED BY: MAC
 SCALE: 1" = 80'

PREPARED FOR:
FAIRFIELD GROVE STREET LLC
 30 BRAINTREE HILL OFFICE PARK
 SUITE 105
 BRAINTREE, MA 02184



PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
 CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
 80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
 PHONE: 781-278-0180 RJOCONNELL.COM

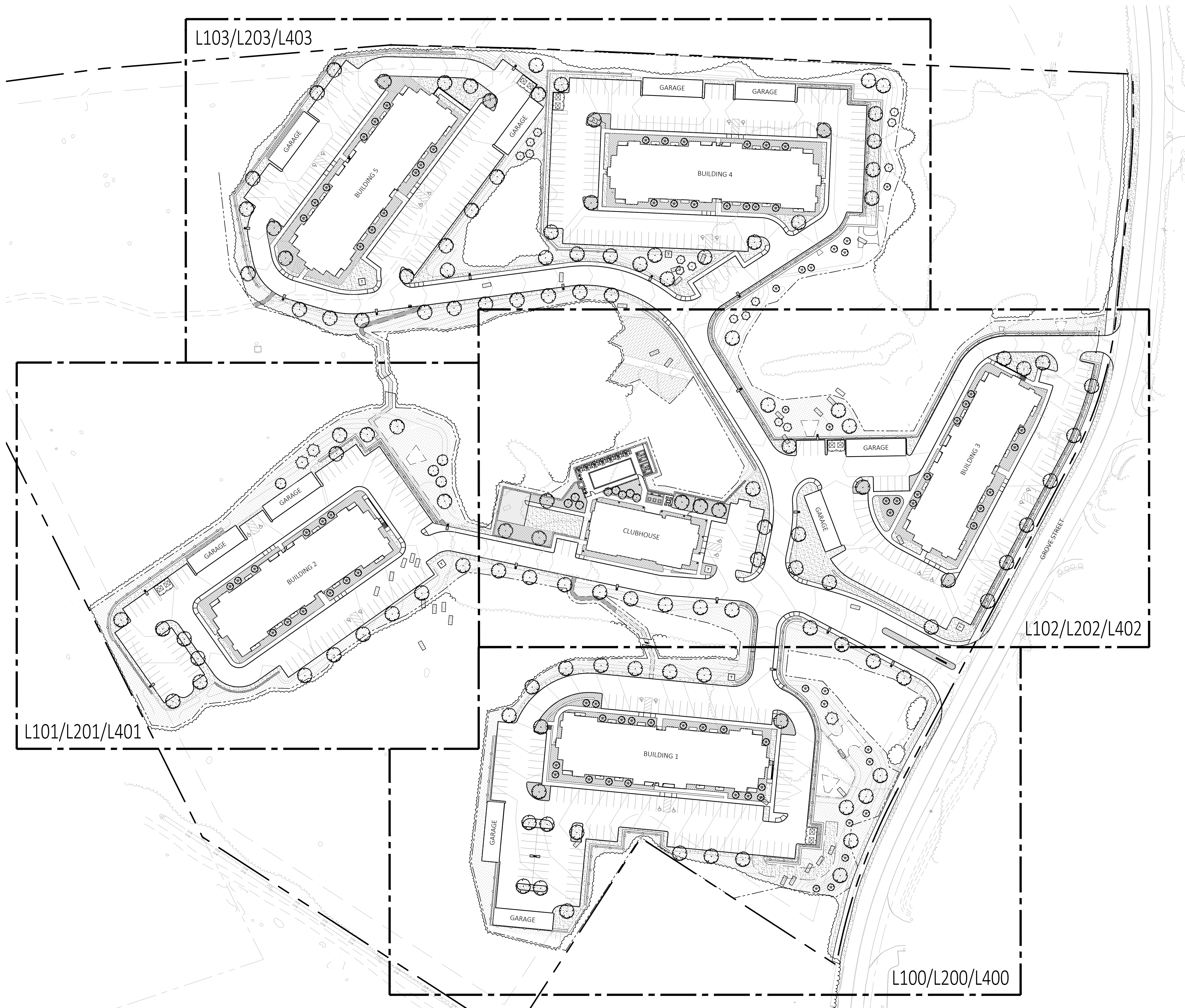
PROJECT NAME:
GROVE STREET RESIDENCES
 FRANKLIN, MA

DRAWING NAME:
TRASH/RECYCLE TRUCK TURNING PLAN

DRAWING NUMBER:
TT-2

DATE: 02/02/2024 PROJECT NO.: 22016

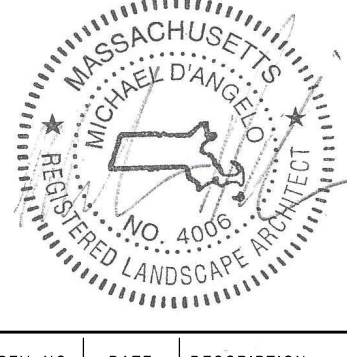
Copyright © 2023 by R.J. O'Connell & Associates, Inc.



LANDSCAPE SHEET LIST

- L000 - LANDSCAPE KEY PLAN
- L100 - LANDSCAPE PLANTING PLAN
- L101 - LANDSCAPE PLANTING PLAN
- L102 - LANDSCAPE PLANTING PLAN
- L103 - LANDSCAPE PLANTING PLAN
- L200 - LANDSCAPE LIGHTING PLAN
- L201 - LANDSCAPE LIGHTING PLAN
- L202 - LANDSCAPE LIGHTING PLAN
- L203 - LANDSCAPE LIGHTING PLAN
- L300 - LANDSCAPE DETAILS
- L400 - LANDSCAPE PHOTOMETRIC PLAN
- L401 - LANDSCAPE PHOTOMETRIC PLAN
- L402 - LANDSCAPE PHOTOMETRIC PLAN
- L403 - LANDSCAPE PHOTOMETRIC PLAN

STAMP



REV. NO.	DATE	DESCRIPTION
1	5/1/23	VE
2	9/23/23	REV 1
3	10/31/23	REV 2
4	12/18/23	REV PER OWNER AND TESTING CONSULTANT SUBMITTAL
5	2/5/24	REVISED PER CMA REVIEW COMMENTS
6	3/28/24	REVISED PER CONCORD PEER REVIEW
7	5/19/24	REVISED PER CONCORD PEER REVIEW

NOT FOR CONSTRUCTION

LANDSCAPE KEY PLAN

DRAWN: NC, AA
CHECKED: NC
SCALE: AS NOTED
DATE: 12/18/23

L000

1 LANDSCAPE KEY PLAN
SCALE: 1" = 60'-0"

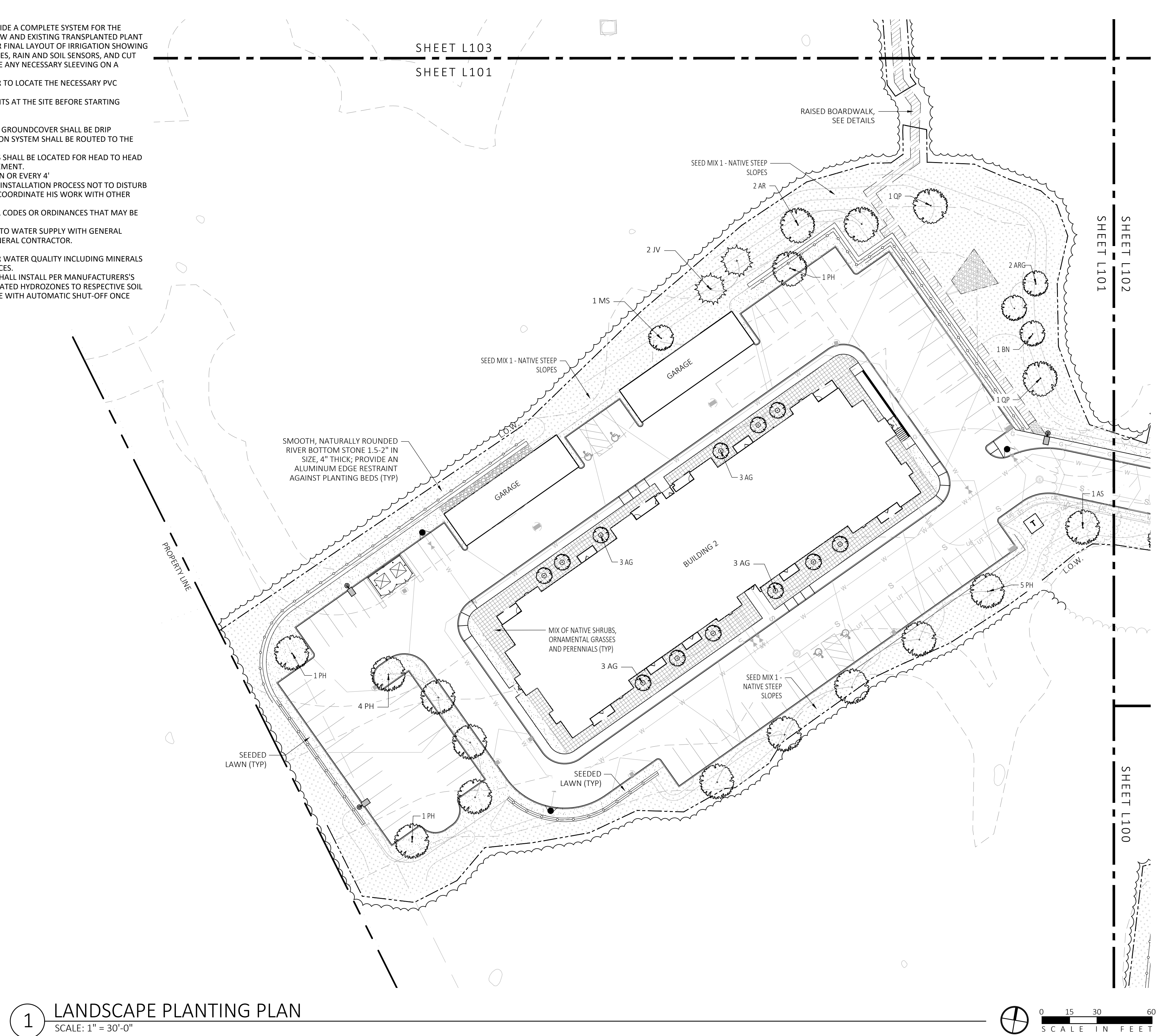


PLANTING NOTES:

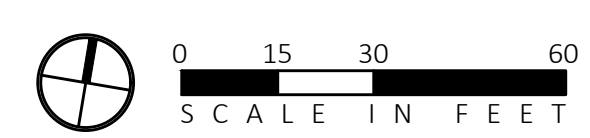
1. DURING CONSTRUCTION, PROTECT ALL EXISTING SITE FEATURES, STRUCTURES AND UTILITIES.
2. PLANTS SHALL BE TRUE TO SPECIES AND VARIETY SPECIFIED AND NURSERY GROWN IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. SUBSTITUTIONS WILL BE PERMITTED ONLY IF APPROVED BY THE LANDSCAPE ARCHITECT.
3. ALL EXPOSED BURLAP, WIRE BASKETS AND OTHER MATERIALS ATTACHED TO PLANTS SHALL BE REMOVED PRIOR TO PLANTING. CARE SHALL BE TAKEN NOT TO DISTURB THE ROOT BALL OF PLANTS.
4. THOROUGHLY WATER ALL PLANTS IMMEDIATELY AFTER PLANTING.
5. TRANSPLANTING SHALL BE DONE IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK.
6. LOAM USED IN PLANT BEDS SHALL BE UNIFORM IN COMPOSITION, FREE FROM SUBSOIL, STONES LARGER THAN 1", NOXIOUS SEEDS AND SUITABLE FOR THE SUPPORT OF VEGETATIVE GROWTH. THE PH VALUE SHALL BE BETWEEN 5.5 AND 6.5.
7. MULCH IN TREE AND SHRUB BEDS SHALL BE NATURAL, NATIVE HEMLOCK MULCH FREE OF GROWTH OR GERMINATION INHIBITING INGREDIENTS. SUBMIT SAMPLES FOR APPROVAL.
8. LOCATIONS FOR PLANTS AND/OR OUTLINE OF AREAS TO BE PLANTED ARE TO BE STAKED OUT AT THE SITE FOR APPROVAL BY THE LANDSCAPE ARCHITECT.
9. SOIL DEPTHS: a.) SHRUBS AND PERENNIAL BEDS: 18" MIN.; b.) GROUNDCOVER: 6" MIN.; c.) TREES: SEE DETAIL; d.) SOD/SEED: 6" MIN.
10. PROVIDE A SUBSURFACE ROOTBALL ANCHOR BY PLATIPUS EARTH ANCHORS OR EQUAL, SIZE FOR CALIPER

GENERAL IRRIGATION NOTES:

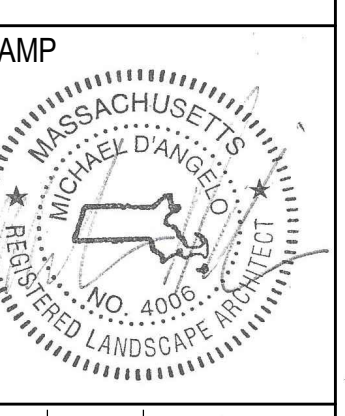
1. THE DESIGN/BUILD IRRIGATION SUB-CONTRACTOR SHALL PROVIDE A COMPLETE SYSTEM FOR THE IRRIGATION AREAS SHOWN ON THE PLAN, WHICH INCLUDES NEW AND EXISTING TRANSPLANTED PLANT MATERIALS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR FINAL LAYOUT OF IRRIGATION SHOWING LOCATIONS AND SIZES OF MAIN LINES AND LATERAL LINES, ZONES, RAIN AND SOIL SENSORS, AND CUT SHEETS FOR CONTROLLER SYSTEM AND COMPONENTS. INCLUDE ANY NECESSARY SLEEVING ON A DIAGRAM.
2. IRRIGATION TO BE COORDINATED WITH GENERAL CONTRACTOR TO LOCATE THE NECESSARY PVC SLEEVING TO COMPLETE IRRIGATION PROGRAM.
3. IRRIGATION CONTRACTOR SHALL VERIFY PSI/GPM REQUIREMENTS AT THE SITE BEFORE STARTING CONSTRUCTION.
4. TREES SHOULD BE ON A SEPARATE ZONE.
5. ALL TREES, SHRUBS, PERENNIALS, ORNAMENTAL GRASSES, AND GROUNDCOVER SHALL BE DRIP IRRIGATED. CONTRACTOR SHALL BE AWARE THAT THE IRRIGATION SYSTEM SHALL BE ROUTED TO THE PYLON SIGN PLANTER AND PLANTERS AT THE BUILDING.
6. ALL LAWN AREAS SHALL BE SPRAY HEAD IRRIGATED. THE HEADS SHALL BE LOCATED FOR HEAD TO HEAD COVERAGE WITH ABSOLUTELY NO OVER SPRAY ONTO THE PAVEMENT.
7. INSTALL DRIP TUBING, .6GPH, 12" CENTERS, STAKED EVERY TURN OR EVERY 4'
8. THE CONTRACTOR SHALL BE EXTREMELY CAREFUL DURING THE INSTALLATION PROCESS NOT TO DISTURB NEW OR EXISTING PLANT MATERIALS. THE CONTRACTOR IS TO COORDINATE HIS WORK WITH OTHER SUB-CONTRACTORS.
9. THE IRRIGATION CONTRACTOR SHALL CONFORM TO ANY LOCAL CODES OR ORDINANCES THAT MAY BE REQUIRED TO COMPLETE THE WORK.
10. WATER SUPPLY AND CONTROLLER: COORDINATE CONNECTION TO WATER SUPPLY WITH GENERAL CONTRACTOR. COORDINATE CONTROLLER LOCATION WITH GENERAL CONTRACTOR.
11. MEP CONTRACTOR TO PROVIDE BACK FLOW PREVENTION.
12. THE IRRIGATION CONTRACTOR SHALL TEST WATER SOURCE FOR WATER QUALITY INCLUDING MINERALS THAT MAY CAUSE STAINING OF CONCRETE AND PAVING SURFACES.
13. INSTALLER SHALL INSTALL MOISTURE SENSORS. CONTRACTOR SHALL INSTALL PER MANUFACTURER'S SPECIFICATIONS AND SHALL BE RESPONSIBLE TO PROGRAM RELATED HYDROZONES TO RESPECTIVE SOIL MOISTURE SENSORS. PROVIDE ONE FOR EACH IRRIGATION ZONE WITH AUTOMATIC SHUT-OFF ONCE MOISTURE REQUIREMENTS ARE MET.



1 LANDSCAPE PLANTING PLAN
SCALE: 1" = 30'-0"



SEE SHEET L300 FOR PLANTING SCHEDULE

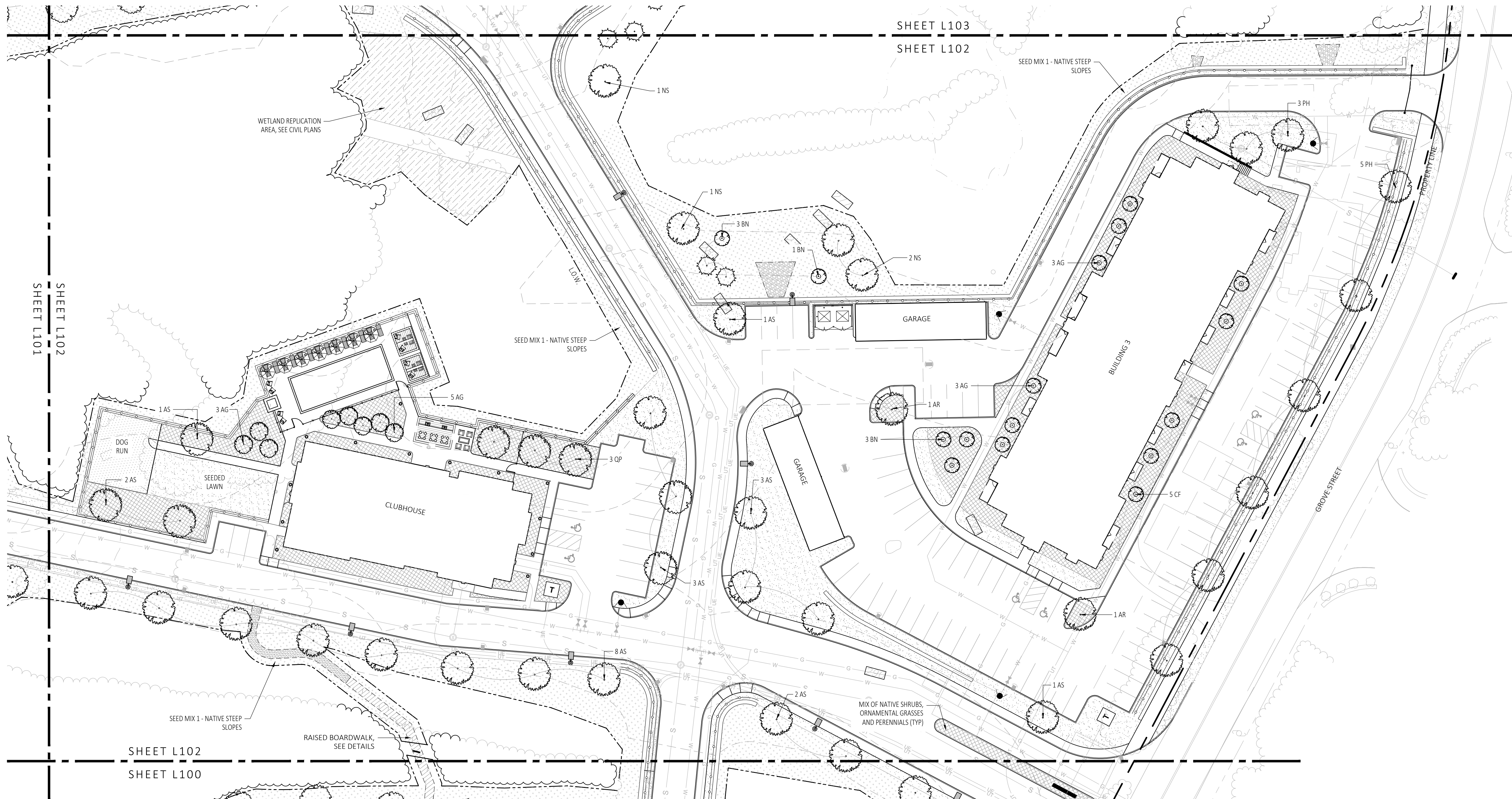


REV. NO.	DATE	DESCRIPTION
1	5/1/23	VE
2	9/23/23	REV 1
3	10/31/23	REV 2
4	12/18/23	REV PER OWNER SOIL TESTING RESULTS AND SUBMITTALS
5	2/8/24	REVISED PER DBA REVIEW COMMENTS
6	3/28/24	REVISED PER CONDOM PEER REVIEW
7	5/10/24	REVISED PER CONDOM PEER REVIEW

NOT FOR CONSTRUCTION

LANDSCAPE PLANTING PLAN

DRAWN: NC, AA	L101
CHECKED: NC	
SCALE:	
AS NOTED	
DATE: 12/18/23	

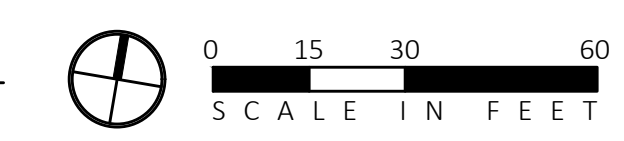


SHEET L103
SHEET L102

SHEET L102
SHEET L101

SHEET L102
SHEET L100

1 LANDSCAPE PLANTING PLAN
SCALE: 1" = 30'-0"



- PLANTING NOTES:**
- DURING CONSTRUCTION, PROTECT ALL EXISTING SITE FEATURES, STRUCTURES AND UTILITIES.
 - PLANTS SHALL BE TRUE TO SPECIES AND VARIETY SPECIFIED AND NURSERY GROWN IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. SUBSTITUTIONS WILL BE PERMITTED ONLY IF APPROVED BY THE LANDSCAPE ARCHITECT.
 - ALL EXPOSED BURLAP, WIRE BASKETS AND OTHER MATERIALS ATTACHED TO PLANTS SHALL BE REMOVED PRIOR TO PLANTING. CARE SHALL BE TAKEN NOT TO DISTURB THE ROOT BALL OF PLANTS.
 - THOROUGHLY WATER ALL PLANTS IMMEDIATELY AFTER PLANTING.
 - TRANSPLANTING SHALL BE DONE IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK.
 - LOAM USED IN PLANT BEDS SHALL BE UNIFORM IN COMPOSITION, FREE FROM SUBSOIL, STONES LARGER THAN 1", NOXIOUS SEEDS AND SUITABLE FOR THE SUPPORT OF VEGETATIVE GROWTH. THE pH VALUE SHALL BE BETWEEN 5.5 AND 6.5.
 - MULCH IN TREE AND SHRUB BEDS SHALL BE NATURAL, NATIVE HEMLOCK MULCH FREE OF GROWTH OR GERMINATION INHIBITING INGREDIENTS. SUBMIT SAMPLES FOR APPROVAL.
 - LOCATIONS FOR PLANTS AND/OR OUTLINE OF AREAS TO BE PLANTED ARE TO BE STAKED OUT AT THE SITE FOR APPROVAL BY THE LANDSCAPE ARCHITECT.
 - SOIL DEPTHS: a.) SHRUBS AND PERENNIAL BEDS: 18" MIN.; b.) GROUND COVER: 6" MIN.; c.) TREES: SEE DETAIL; d.) SOD/SEED: 6" MIN.
 - PROVIDE A SUBSURFACE ROOTBALL ANCHOR BY PLATIPUS EARTH ANCHORS OR EQUAL, SIZE FOR CALIPER

- GENERAL IRRIGATION NOTES:**
- THE DESIGN/BUILD IRRIGATION SUB-CONTRACTOR SHALL PROVIDE A COMPLETE SYSTEM FOR THE IRRIGATION AREAS SHOWN ON THE PLAN, WHICH INCLUDES NEW AND EXISTING TRANSPLANTED PLANT MATERIALS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR FINAL LAYOUT OF IRRIGATION SHOWING LOCATIONS AND SIZES OF MAIN LINES AND LATERAL LINES, ZONES, RAIN AND SOIL SENSORS, AND CUT SHEETS FOR CONTROLLER SYSTEM AND COMPONENTS. INCLUDE ANY NECESSARY SLEEVING ON A DIAGRAM.
 - IRRIGATION TO BE COORDINATED WITH GENERAL CONTRACTOR TO LOCATE THE NECESSARY PVC SLEEVING TO COMPLETE IRRIGATION PROGRAM.
 - IRRIGATION CONTRACTOR SHALL VERIFY PSI/GPM REQUIREMENTS AT THE SITE BEFORE STARTING CONSTRUCTION.
 - TREES SHOULD BE ON A SEPARATE ZONE.
 - ALL TREES, SHRUBS, PERENNIALS, ORNAMENTAL GRASSES, AND GROUND COVER SHALL BE DRIP IRRIGATED. CONTRACTOR SHALL BE AWARE THAT THE IRRIGATION SYSTEM SHALL BE ROUTED TO THE PYLON SIGN PLANTER AND PLANTERS AT THE BUILDING.
 - ALL LAWN AREAS SHALL BE SPRAY HEAD IRRIGATED. THE HEADS SHALL BE LOCATED FOR HEAD TO HEAD COVERAGE WITH ABSOLUTELY NO OVER SPRAY ONTO THE PAVEMENT.
 - INSTALL DRIP TUBING, .6GPH, 12" CENTERS, STAKED EVERY TURN OR EVERY 4'
 - THE CONTRACTOR SHALL BE EXTREMELY CAREFUL DURING THE INSTALLATION PROCESS NOT TO DISTURB NEW OR EXISTING PLANT MATERIALS. THE CONTRACTOR IS TO COORDINATE HIS WORK WITH OTHER SUB-CONTRACTORS.
 - THE IRRIGATION CONTRACTOR SHALL CONFORM TO ANY LOCAL CODES OR ORDINANCES THAT MAY BE REQUIRED TO COMPLETE THE WORK.
 - WATER SUPPLY AND CONTROLLER: COORDINATE CONNECTION TO WATER SUPPLY WITH GENERAL CONTRACTOR. COORDINATE CONTROLLER LOCATION WITH GENERAL CONTRACTOR.
 - MEP CONTRACTOR TO PROVIDE BACK FLOW PREVENTION.
 - THE IRRIGATION CONTRACTOR SHALL TEST WATER SOURCE FOR WATER QUALITY INCLUDING MINERALS THAT MAY CAUSE STAINING OF CONCRETE AND PAVING SURFACES.
 - INSTALLER SHALL INSTALL MOISTURE SENSORS. CONTRACTOR SHALL INSTALL PER MANUFACTURER'S SPECIFICATIONS AND SHALL BE RESPONSIBLE TO PROGRAM RELATED HYDROZONES TO RESPECTIVE SOIL MOISTURE SENSORS. PROVIDE ONE FOR EACH IRRIGATION ZONE WITH AUTOMATIC SHUT-OFF ONCE MOISTURE REQUIREMENTS ARE MET.

SEE SHEET L300 FOR
PLANTING SCHEDULE

MDLA
MICHAEL D'ANGELO landscape architecture

MICHAEL D'ANGELO
LANDSCAPE ARCHITECTURE LLC

840 SUMMER STREET
SUITE 203A
BOSTON, MA 02127
T. 203.592.4788
WWW.MD-LA.COM

**GROVE STREET RESIDENCES
FRANKLIN, MA**

STAMP

REV. NO.	DATE	DESCRIPTION
1	5/1/23	VE
2	9/23/23	REV 1
3	10/31/23	REV 2
4	12/18/23	REV PER OWNER AND TESTING CONSULTING SUBMITTAL
5	2/8/24	REVISED PER CDA REVIEW COMMENTS
6	3/28/24	REVISED PER CONDOMINIUM PEAR REVIEW
7	5/15/24	REVISED PER CONDOMINIUM PEAR REVIEW

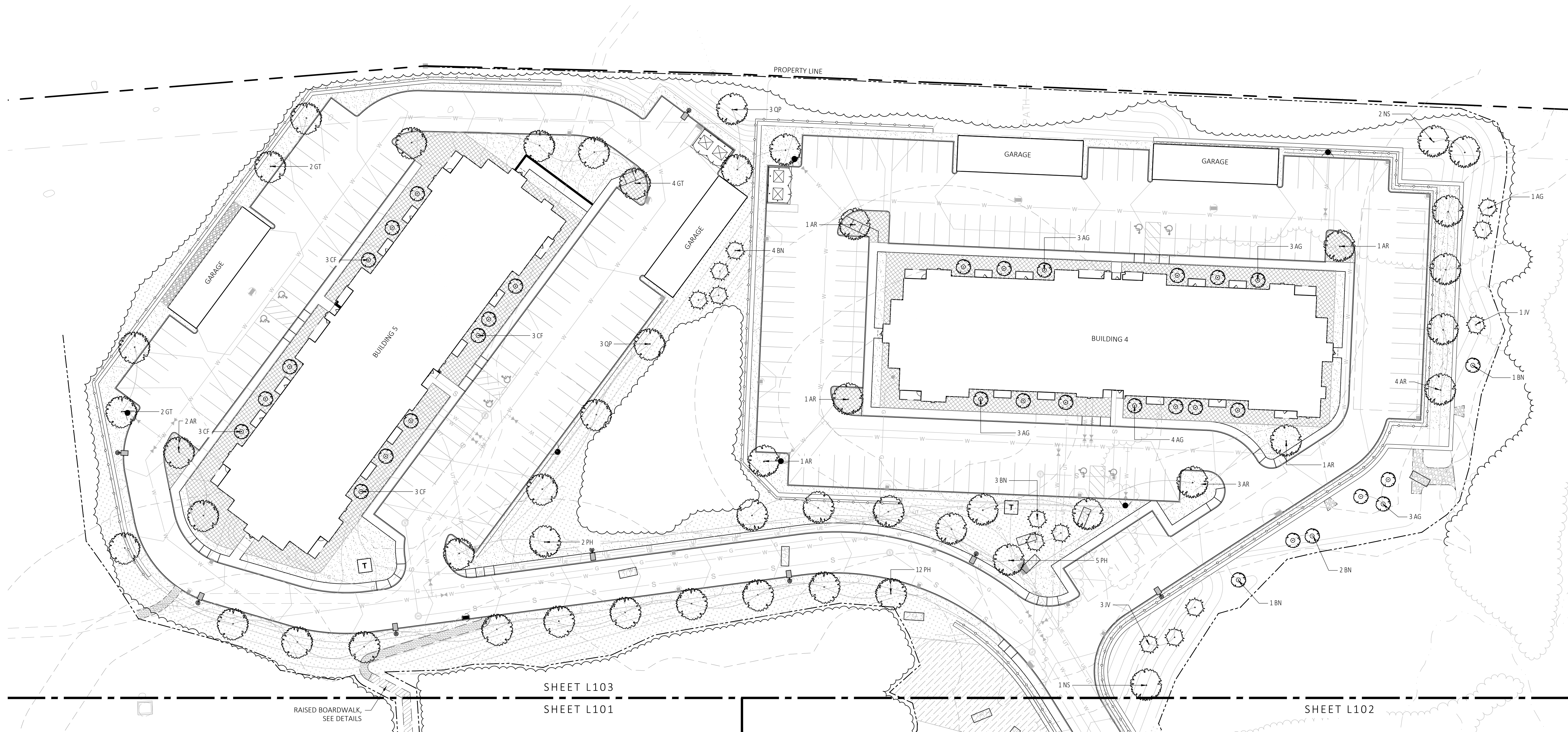
NOT FOR
CONSTRUCTION

LANDSCAPE
PLANTING
PLAN

DRAWN:
NC: AA
CHECKED:
NC
SCALE: **L102**
AS NOTED
DATE:
12/18/23

SHEET 4 OF 14

plot date: 5/8/2024



1 LANDSCAPE PLANTING PLAN
SCALE: 1" = 30'-0"



PLANTING NOTES:

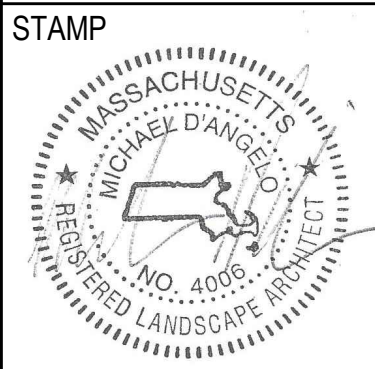
- DURING CONSTRUCTION, PROTECT ALL EXISTING SITE FEATURES, STRUCTURES AND UTILITIES.
- PLANTS SHALL BE TRUE TO SPECIES AND VARIETY SPECIFIED AND NURSERY GROWN IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. SUBSTITUTIONS WILL BE PERMITTED ONLY IF APPROVED BY THE LANDSCAPE ARCHITECT.
- ALL EXPOSED BURLAP, WIRE BASKETS AND OTHER MATERIALS ATTACHED TO PLANTS SHALL BE REMOVED PRIOR TO PLANTING. CARE SHALL BE TAKEN NOT TO DISTURB THE ROOT BALL OF PLANTS.
- THOROUGHLY WATER ALL PLANTS IMMEDIATELY AFTER PLANTING.
- TRANSPLANTING SHALL BE DONE IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK.
- LOAM USED IN PLANT BEDS SHALL BE UNIFORM IN COMPOSITION, FREE FROM SUBSOIL, STONES LARGER THAN 1", NOXIOUS SEEDS AND SUITABLE FOR THE SUPPORT OF VEGETATIVE GROWTH. THE pH VALUE SHALL BE BETWEEN 5.5 AND 6.5.
- MULCH IN TREE AND SHRUB BEDS SHALL BE NATURAL, NATIVE HEMLOCK MULCH FREE OF GROWTH OR GERMINATION INHIBITING INGREDIENTS. SUBMIT SAMPLES FOR APPROVAL.
- LOCATIONS FOR PLANTS AND/OR OUTLINE OF AREAS TO BE PLANTED ARE TO BE STAKED OUT AT THE SITE FOR APPROVAL BY THE LANDSCAPE ARCHITECT.
- SOIL DEPTHS: a) SHRUBS AND PERENNIAL BEDS: 18" MIN.; b) GROUND COVER: 6" MIN.; c) TREES: SEE DETAIL; d) SOD/SEED: 6" MIN.
- PROVIDE A SUBSURFACE ROOTBALL ANCHOR BY PLATIPUS EARTH ANCHORS OR EQUAL, SIZE FOR CALIPER

GENERAL IRRIGATION NOTES:

- THE DESIGN/BUILD IRRIGATION SUB-CONTRACTOR SHALL PROVIDE A COMPLETE SYSTEM FOR THE IRRIGATION AREAS SHOWN ON THE PLAN, WHICH INCLUDES NEW AND EXISTING TRANSPLANTED PLANT MATERIALS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR FINAL LAYOUT OF IRRIGATION SHOWING LOCATIONS AND SIZES OF MAIN LINES AND LATERAL LINES, ZONES, RAIN AND SOIL SENSORS, AND CUT SHEETS FOR CONTROLLER SYSTEM AND COMPONENTS. INCLUDE ANY NECESSARY SLEEVING ON A DIAGRAM.
- IRRIGATION TO BE COORDINATED WITH GENERAL CONTRACTOR TO LOCATE THE NECESSARY PVC SLEEVING TO COMPLETE IRRIGATION PROGRAM.
- IRRIGATION CONTRACTOR SHALL VERIFY PSI/GPM REQUIREMENTS AT THE SITE BEFORE STARTING CONSTRUCTION.
- TREES SHOULD BE ON A SEPARATE ZONE.
- ALL TREES, SHRUBS, PERENNIALS, ORNAMENTAL GRASSES, AND GROUND COVER SHALL BE DRIP IRRIGATED. CONTRACTOR SHALL BE AWARE THAT THE IRRIGATION SYSTEM SHALL BE ROUTED TO THE PYLON SIGN PLANTER AND PLANTERS AT THE BUILDING.
- ALL LAWN AREAS SHALL BE SPRAY HEAD IRRIGATED. THE HEADS SHALL BE LOCATED FOR HEAD TO HEAD COVERAGE WITH ABSOLUTELY NO OVER SPRAY ONTO THE PAVEMENT.
- INSTALL DRIP TUBING, .6GPH, 12" CENTERS, STAKED EVERY TURN OR EVERY 4'
- THE CONTRACTOR SHALL BE EXTREMELY CAREFUL DURING THE INSTALLATION PROCESS NOT TO DISTURB NEW OR EXISTING PLANT MATERIALS. THE CONTRACTOR IS TO COORDINATE HIS WORK WITH OTHER SUB-CONTRACTORS.
- THE IRRIGATION CONTRACTOR SHALL CONFORM TO ANY LOCAL CODES OR ORDINANCES THAT MAY BE REQUIRED TO COMPLETE THE WORK.
- WATER SUPPLY AND CONTROLLER: COORDINATE CONNECTION TO WATER SUPPLY WITH GENERAL CONTRACTOR. COORDINATE CONTROLLER LOCATION WITH GENERAL CONTRACTOR.
- MEP CONTRACTOR TO PROVIDE BACK FLOW PREVENTION.
- THE IRRIGATION CONTRACTOR SHALL TEST WATER SOURCE FOR WATER QUALITY INCLUDING MINERALS THAT MAY CAUSE STAINING OF CONCRETE AND PAVING SURFACES.
- INSTALLER SHALL INSTALL MOISTURE SENSORS. CONTRACTOR SHALL INSTALL PER MANUFACTURER'S SPECIFICATIONS AND SHALL BE RESPONSIBLE TO PROGRAM RELATED HYDROZONES TO RESPECTIVE SOIL MOISTURE SENSORS. PROVIDE ONE FOR EACH IRRIGATION ZONE WITH AUTOMATIC SHUT-OFF ONCE MOISTURE REQUIREMENTS ARE MET.

SEE SHEET L300 FOR PLANTING SCHEDULE

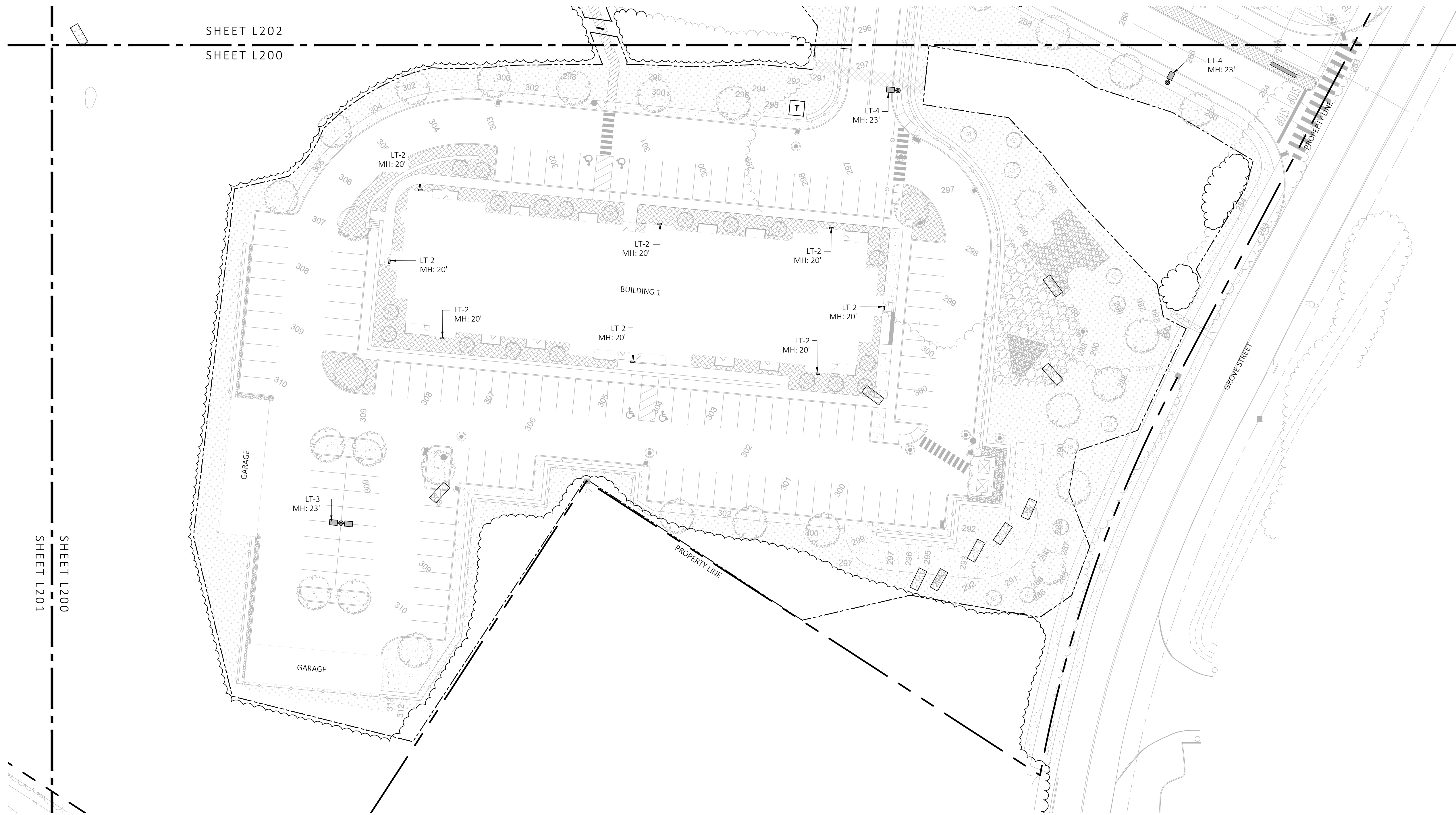
**GROVE STREET RESIDENCES
FRANKLIN, MA**



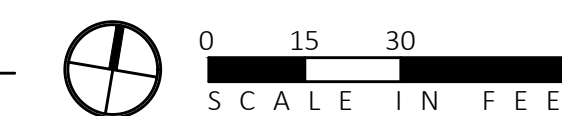
REV. NO.	DATE	DESCRIPTION
1	5/1/23	VE
2	9/23/23	REV 1
3	10/21/23	REV 2
4	12/18/23	REV PER OWNER DOLL TESTING AND FIRM SUBMISSION
5	2/5/24	REVISED PER CDA PER REVIEW
6	3/28/24	REVISED PER CONDOM PER REVIEW
7	5/19/24	REVISED PER CONDOM PER REVIEW

NOT FOR CONSTRUCTION
LANDSCAPE PLANTING PLAN

DRAWN: NC, AA	L103
CHECKED: NC	
SCALE: AS NOTED	
DATE: 12/18/23	
SHEET 5 OF 14	



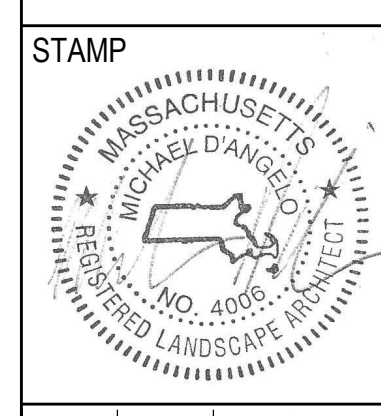
1 LANDSCAPE LIGHTING PLAN
SCALE: 1" = 30'-0"



LIGHT SCHEDULE					
SYMBOL	LABEL	DESCRIPTION	MOUNT	OPTIONS	REP
○	LT-1	BOLLARD LIGHT	CONCRETE FOOTING	COLOR: BLK	ILLUMINATE 617-947-8996 STEVE PRUDHOMME
▬	LT-2	BLDG LIGHT	BUILDING MOUNTED	COLOR: BLK	
⊕	LT-3	2-SIDED POLE LIGHT	POLE WITH CONCRETE FOOTING; KEEP 24" ABOVE GRADE IN ASPHALT KEEP 3" ABOVE GRADE IN PLANTING	COLOR: BLK	
⊙	LT-4	1-SIDED POLE LIGHT	POLE WITH CONCRETE FOOTING; KEEP 24" ABOVE GRADE IN ASPHALT KEEP 3" ABOVE GRADE IN PLANTING	COLOR: BLK	

NOTE: MH = MOUNTING HEIGHT

**GROVE STREET RESIDENCES
FRANKLIN, MA**



REV. NO.	DATE	DESCRIPTION
1	5/1/23	VE
2	9/23/23	REV 1
3	10/31/23	REV 2
4	12/18/23	REV PER OWNER AND TESTING RESULTS AND SUBMITTALS
5	2/8/24	REVISED PER DBA REVIEW COMMENTS
6	3/28/24	REVISED PER CONCORD PEER REVIEW
7	5/18/24	REVISED PER CONCORD PEER REVIEW

**NOT FOR
CONSTRUCTION**

**LANDSCAPE
LIGHTING
PLAN**

DRAWN: NC, AA	L200
CHECKED: NC	
SCALE:	
AS NOTED	
DATE: 12/18/23	

LIGHT SCHEDULE					
SYMBOL	LABEL	DESCRIPTION	MOUNT	OPTIONS	REP
●	LT-1	BOLLARD LIGHT	CONCRETE FOOTING	COLOR: BLK	ILLUMINATE 617-947-8996 STEVE PRUDHOMME
■	LT-2	BLDG LIGHT	BUILDING MOUNTED	COLOR: BLK	
⊕	LT-3	2-SIDED POLE LIGHT	POLE WITH CONCRETE FOOTING; KEEP 24" ABOVE GRADE IN ASPHALT KEEP 3" ABOVE GRADE IN PLANTING	COLOR: BLK	
⊙	LT-4	1-SIDED POLE LIGHT	POLE WITH CONCRETE FOOTING; KEEP 24" ABOVE GRADE IN ASPHALT KEEP 3" ABOVE GRADE IN PLANTING	COLOR: BLK	

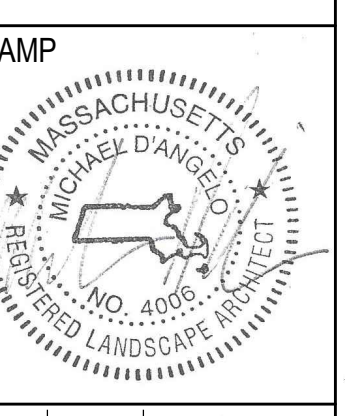
NOTE: MH = MOUNTING HEIGHT



1 LANDSCAPE LIGHTING PLAN
SCALE: 1" = 30'-0"



**GROVE STREET RESIDENCES
FRANKLIN, MA**

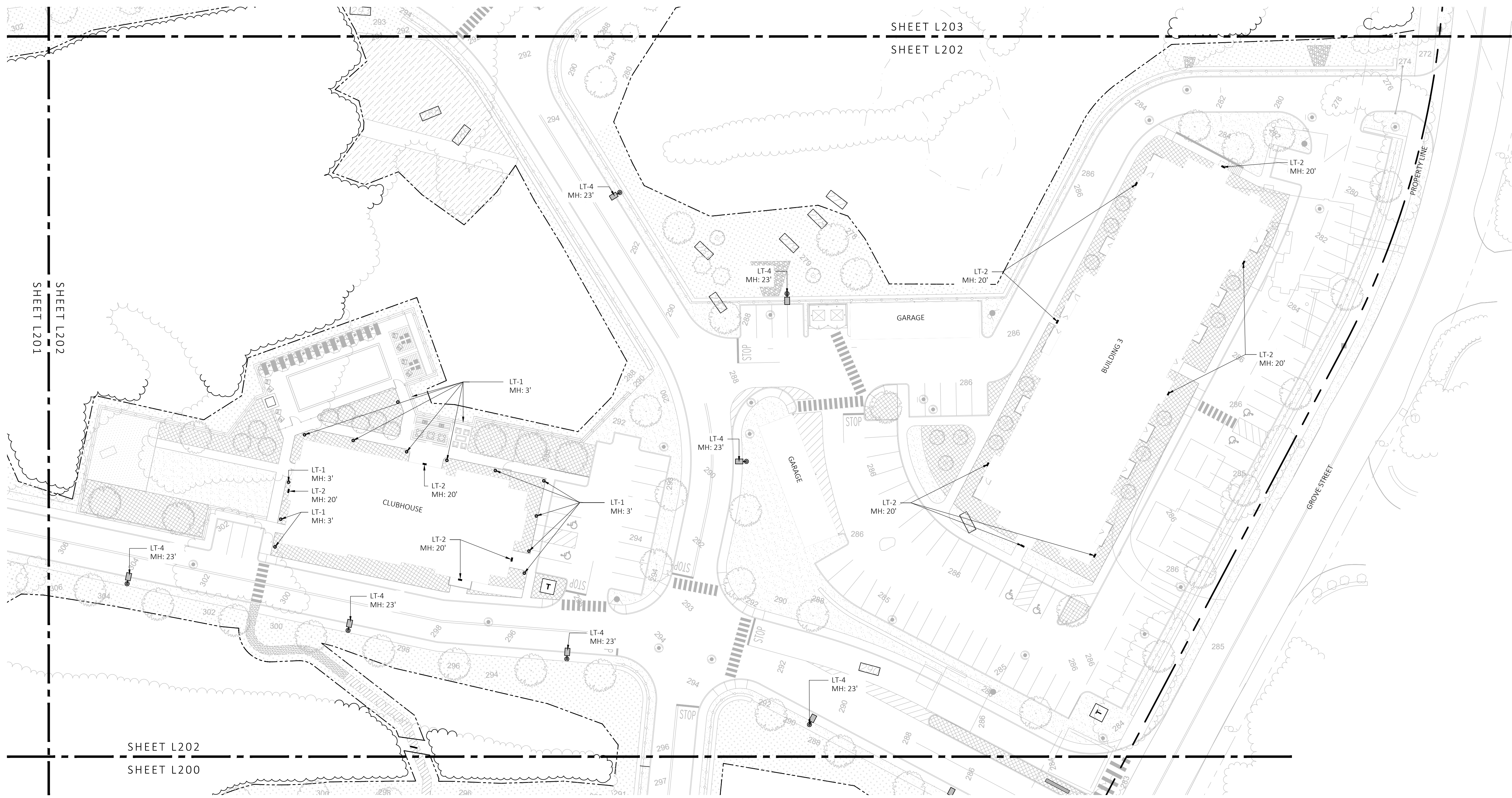


REV. NO.	DATE	DESCRIPTION
1	5/1/23	VE
2	9/23/23	REV 1
3	10/31/23	REV 2
4	12/18/23	REV PER OWNER AND TESTING CONSULTANT SUBMITTAL
5	2/5/24	REVISED PER DBA REVIEW COMMENTS
6	3/28/24	REVISED PER CONCORD PEER REVIEW
7	5/10/24	REVISED PER CONCORD PEER REVIEW

NOT FOR
CONSTRUCTION

**LANDSCAPE
LIGHTING
PLAN**

DRAWN: NC, AA	L201
CHECKED: NC	
SCALE: AS NOTED	
DATE: 12/18/23	
SHEET 7 OF 14	

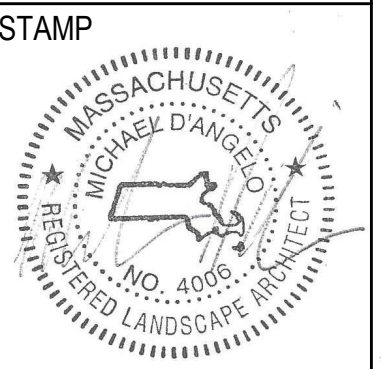


1 LANDSCAPE LIGHTING PLAN
SCALE: 1" = 30'-0"

LIGHT SCHEDULE					
SYMBOL	LABEL	DESCRIPTION	MOUNT	OPTIONS	REP
●	LT-1	BOLLARD LIGHT	CONCRETE FOOTING	COLOR: BLK	ILLUMINATE 617-947-8996 STEVE PRUDHOMME
■	LT-2	BLDG LIGHT	BUILDING MOUNTED	COLOR: BLK	
⊕	LT-3	2-SIDED POLE LIGHT	POLE WITH CONCRETE FOOTING; KEEP 24" ABOVE GRADE IN ASPHALT KEEP 3" ABOVE GRADE IN PLANTING	COLOR: BLK	
⊙	LT-4	1-SIDED POLE LIGHT	POLE WITH CONCRETE FOOTING; KEEP 24" ABOVE GRADE IN ASPHALT KEEP 3" ABOVE GRADE IN PLANTING	COLOR: BLK	

NOTE: MH = MOUNTING HEIGHT

GROVE STREET RESIDENCES
FRANKLIN, MA



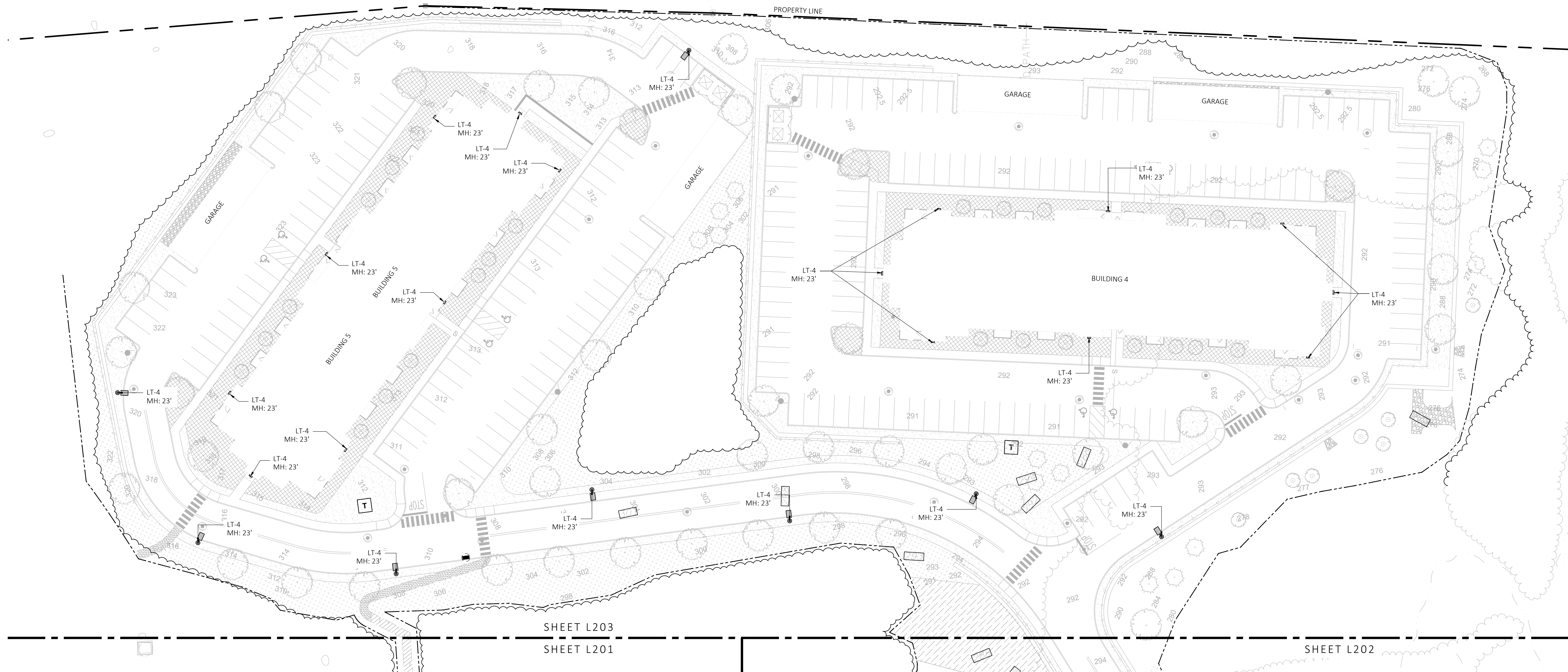
REV. NO.	DATE	DESCRIPTION
1	5/1/23	VE
2	9/23/23	REV 1
3	10/31/23	REV 2
4	12/18/23	REV PER OWNER SOL. TESTING PROVIDING SUBMITTALS
5	2/8/24	REVISED PER DBA REVISED COMMENTS
6	3/28/24	REVISED PER CONDOM PEER REVIEW
7	5/18/24	REVISED PER CONDOM PEER REVIEW

NOT FOR
CONSTRUCTION

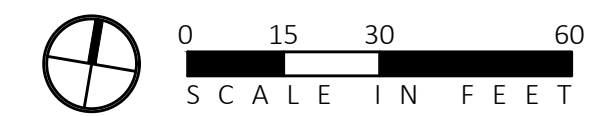
LANDSCAPE
LIGHTING
PLAN

DRAWN:
NC, AA
CHECKED:
NC
SCALE:
AS NOTED
DATE:
12/18/23

L202



1 LANDSCAPE LIGHTING PLAN
SCALE: 1" = 30'-0"

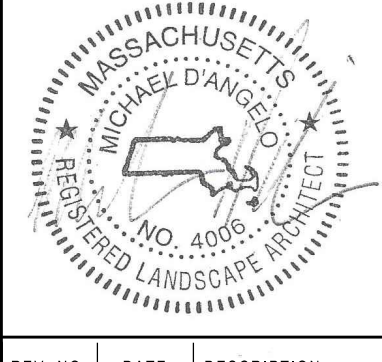


LIGHT SCHEDULE					
SYMBOL	LABEL	DESCRIPTION	MOUNT	OPTIONS	REP
●	LT-1	BOLLARD LIGHT	CONCRETE FOOTING	COLOR: BLK	
■	LT-2	BLDG LIGHT	BUILDING MOUNTED	COLOR: BLK	ILLUMINATE 617-947-8996 STEVE PRUDHOMME
□	LT-3	2-SIDED POLE LIGHT	POLE WITH CONCRETE FOOTING; KEEP 24" ABOVE GRADE IN ASPHALT KEEP 3" ABOVE GRADE IN PLANTING	COLOR: BLK	
○	LT-4	1-SIDED POLE LIGHT	POLE WITH CONCRETE FOOTING; KEEP 24" ABOVE GRADE IN ASPHALT KEEP 3" ABOVE GRADE IN PLANTING	COLOR: BLK	

NOTE: MH = MOUNTING HEIGHT

**GROVE STREET RESIDENCES
FRANKLIN, MA**

STAMP



REV. NO.	DATE	DESCRIPTION
1	5/1/23	VE
2	9/23/23	REV 1
3	10/31/23	REV 2
4	12/18/23	REV PER DATE DLS TESTING PROBLEMS CORRECTION
5	2/8/24	REVISED PER CBA REVIEW COMMENTS
6	3/28/24	REVISED PER CONCOM PEER REVIEW
7	5/18/24	REVISED PER CONCOM PEER REVIEW

NOT FOR CONSTRUCTION

LANDSCAPE LIGHTING PLAN

DRAWN:	
NC, AA	
CHECKED:	
NC	
SCALE:	L203
AS NOTED	
DATE:	
12/18/23	



Ernst Conservation Seeds
8884 Mercor Pike
Meadville, PA 16335
(800) 873-3321 Fax (814) 336-5191
www.ernstseed.com

Spring

Date: August 28, 2018

Native Steep Slope Mix w/Grain Oats - ERNMX-181-1

Botanical Name	Common Name	Price/lb
40.00 % <i>Avena sativa</i> , Variety Not Stated	Oats, Variety Not Stated	0.22
20.40 % <i>Sorghastrum nutans</i> , NY Ecotype	Indiangrass, NY Ecotype	13.90
8.10 % <i>Andropogon gerardii</i> , Niagara	Big Bluestem, Niagara	13.90
7.50 % <i>Elymus virginicus</i> , PA Ecotype	Virginia Wildrye, PA Ecotype	7.72
5.20 % <i>Elymus canadensis</i>	Canada Wildrye	12.87
4.50 % <i>Schizachyrium scoparium</i> , Fort Indiantown Gap-PA Ecotype	Little Bluestem, Fort Indiantown Gap-PA Ecotype	12.00
3.70 % <i>Trichloris flavas</i> , Fort Indiantown Gap-PA Ecotype	Purpletop, Fort Indiantown Gap-PA Ecotype	18.78
3.00 % <i>Agrilus serotinus</i> , Albany Pine Bush-NY Ecotype	Autumn Bentgrass, Albany Pine Bush-NY Ecotype	14.00
2.30 % <i>Panicum virgatum</i> , Shawnee	Switchgrass, Shawnee	7.51
1.10 % <i>Chamaecrista fasciculata</i> , PA Ecotype	Partridge Pea, PA Ecotype	10.00
1.00 % <i>Echinacea purpurea</i>	Purple Coneflower	36.00
0.80 % <i>Gaillardia aristata</i>	Perennial Gaillardia (Blanketflower)	32.00
0.80 % <i>Rudbeckia hirta</i>	Black-eyed Susan	20.00
0.70 % <i>Heliopsis helianthoides</i> , PA Ecotype	Oxeye Sunflower, PA Ecotype	42.00
0.40 % <i>Aster novae-angliae</i> , PA Ecotype	New England Aster, PA Ecotype	300.00
0.20 % <i>Astilbe spicata</i> , PA Ecotype	Common Milkweed, PA Ecotype	150.00
0.20 % <i>Liatris spicata</i>	Marsh (Dense) Blazing Star (Spiked Gayfeather)	210.00
0.10 % <i>Penstemon digitalis</i>	Tall White Beardtongue	160.00

100.00 % **Mix Price/lb Bulk: \$10.45**

Seeding Rate: 75 lb per acre
Erosion Control & Revegetation

Use this formula with grain oats as a cover crop in the spring and summer (until September 1st). Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.

Price quotes guaranteed for 30 days.
All prices are FOB Meadville, PA.
Please check our web site at www.ernstseed.com
for current pricing when placing orders.

7 SEED MIX 1 - NATIVE STEEP SLOPES (SPRING)
SCALE: N.T.S.



Ernst Conservation Seeds
8884 Mercor Pike
Meadville, PA 16335
(800) 873-3321 Fax (814) 336-5191
www.ernstseed.com

Fall

Date: August 28, 2018

Native Steep Slope Mix w/Grain Rye - ERNMX-181-2

Botanical Name	Common Name	Price/lb
40.00 % <i>Secale cereale</i> , Variety Not Stated	Grain Rye, Variety Not Stated	0.21
20.40 % <i>Sorghastrum nutans</i> , PA Ecotype	Indiangrass, PA Ecotype	10.60
8.10 % <i>Andropogon gerardii</i> , Niagara	Big Bluestem, Niagara	13.06
7.50 % <i>Elymus virginicus</i> , PA Ecotype	Virginia Wildrye, PA Ecotype	7.72
5.20 % <i>Elymus canadensis</i>	Canada Wildrye	12.87
4.50 % <i>Schizachyrium scoparium</i> , "Camper"	Little Bluestem, "Camper"	12.99
3.70 % <i>Trichloris flavas</i>	Purpletop	18.56
3.00 % <i>Agrilus serotinus</i> , Albany Pine Bush-NY Ecotype	Autumn Bentgrass, Albany Pine Bush-NY Ecotype	14.00
2.30 % <i>Panicum virgatum</i> , Shawnee	Switchgrass, Shawnee	7.51
1.10 % <i>Chamaecrista fasciculata</i> , PA Ecotype	Partridge Pea, PA Ecotype	10.00
1.00 % <i>Echinacea purpurea</i>	Purple Coneflower	36.00
0.80 % <i>Gaillardia aristata</i>	Perennial Gaillardia (Blanketflower)	32.00
0.80 % <i>Rudbeckia hirta</i>	Black-eyed Susan	20.00
0.70 % <i>Heliopsis helianthoides</i> , PA Ecotype	Oxeye Sunflower, PA Ecotype	42.00
0.40 % <i>Aster lateralis</i>	Callio Aster	300.00
0.30 % <i>Liatris spicata</i>	Marsh (Dense) Blazing Star (Spiked Gayfeather)	210.00
0.20 % <i>Astilbe spicata</i> , PA Ecotype	Common Milkweed, PA Ecotype	150.00

100.00 % **Mix Price/lb Bulk: \$9.88**

Seeding Rate: 75 lb per acre
Erosion Control & Revegetation

Use this formula with grain rye as a cover crop (from August 1st-February 15th). Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.

Price quotes guaranteed for 30 days.
All prices are FOB Meadville, PA.
Please check our web site at www.ernstseed.com
for current pricing when placing orders.

6 SEED MIX 1 - NATIVE STEEP SLOPES (FALL)
SCALE: N.T.S.



Ernst Conservation Seeds
8884 Mercor Pike
Meadville, PA 16335
(800) 873-3321 Fax (814) 336-5191
www.ernstseed.com

Date: August 28, 2018

Rain Garden Mix - ERNMX-180

Botanical Name	Common Name	Price/lb
31.50 % <i>Schizachyrium scoparium</i> , Albany Pine Bush-NY Ecotype	Little Bluestem, Albany Pine Bush-NY Ecotype	12.02
20.00 % <i>Elymus virginicus</i> , PA Ecotype	Virginia Wildrye, PA Ecotype	7.72
10.00 % <i>Carex vulpinoidea</i> , PA Ecotype	Fox Sedge, PA Ecotype	24.00
10.00 % <i>Panicum rigidulum</i> , Coastal Plain NC Ecotype	Redtop Panicgrass, Coastal Plain NC Ecotype	48.00
5.00 % <i>Eriogonum fasciculatum</i>	Purple Coneflower	36.00
3.00 % <i>Coreopsis lanceolata</i>	Lanceleaf Coreopsis	24.00
3.00 % <i>Rudbeckia hirta</i>	Black-eyed Susan	20.00
2.00 % <i>Carex scoparia</i> , PA Ecotype	Blunt Brawn Sedge, PA Ecotype	72.00
2.00 % <i>Chamaecrista fasciculata</i> , PA Ecotype	Partridge Pea, PA Ecotype	10.00
2.00 % <i>Agrostium coelestinum</i> , VA Ecotype	Heathflower, VA Ecotype	120.00
2.00 % <i>Heliopsis helianthoides</i> , PA Ecotype	Oxeye Sunflower, PA Ecotype	42.00
2.00 % <i>Penstemon digitalis</i> , PA Ecotype	Tall White Beardtongue, PA Ecotype	160.00
1.00 % <i>Astilbe spicata</i> , PA Ecotype	Swamp Milkweed, PA Ecotype	60.00
1.00 % <i>Juncus effusus</i>	Soft Rush	40.00
1.00 % <i>Juncus tenuis</i> , PA Ecotype	Path Rush, PA Ecotype	66.00
1.00 % <i>Liatris spicata</i>	Marsh (Dense) Blazing Star (Spiked Gayfeather)	210.00
0.80 % <i>Aster novae-angliae</i> , PA Ecotype	New England Aster, PA Ecotype	300.00
0.70 % <i>Aster laevis</i> , NY Ecotype	Smooth Blue Aster, NY Ecotype	300.00
0.50 % <i>Rudbeckia hirta</i> var. <i>rigida</i> , Northern VA Ecotype	Orange Coneflower, Northern VA Ecotype	300.00
0.50 % <i>Senna hebecarpa</i> , VA & WV Ecotype	Wild Senna, VA & WV Ecotype	24.00
0.40 % <i>Abrus rotundifolius</i> , Fort Indiantown Gap-PA Ecotype	Wild Bergamot, Fort Indiantown Gap-PA Ecotype	160.00
0.30 % <i>Physanthemum tenellum</i>	Barrenwort Mountainmint	140.00
0.30 % <i>Solidago juncea</i> , PA Ecotype	Early Goldenrod, PA Ecotype	280.00

100.00 % **Mix Price/lb Bulk: \$37.29**

Seeding Rate: 20 lb per acre with a cover crop of grain rye at 30 lb per acre
Uplands & Meadows

The native perennial forbs and grasses provide food and cover for rain garden biodiversity. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.

Price quotes guaranteed for 30 days.
All prices are FOB Meadville, PA.
Please check our web site at www.ernstseed.com
for current pricing when placing orders.

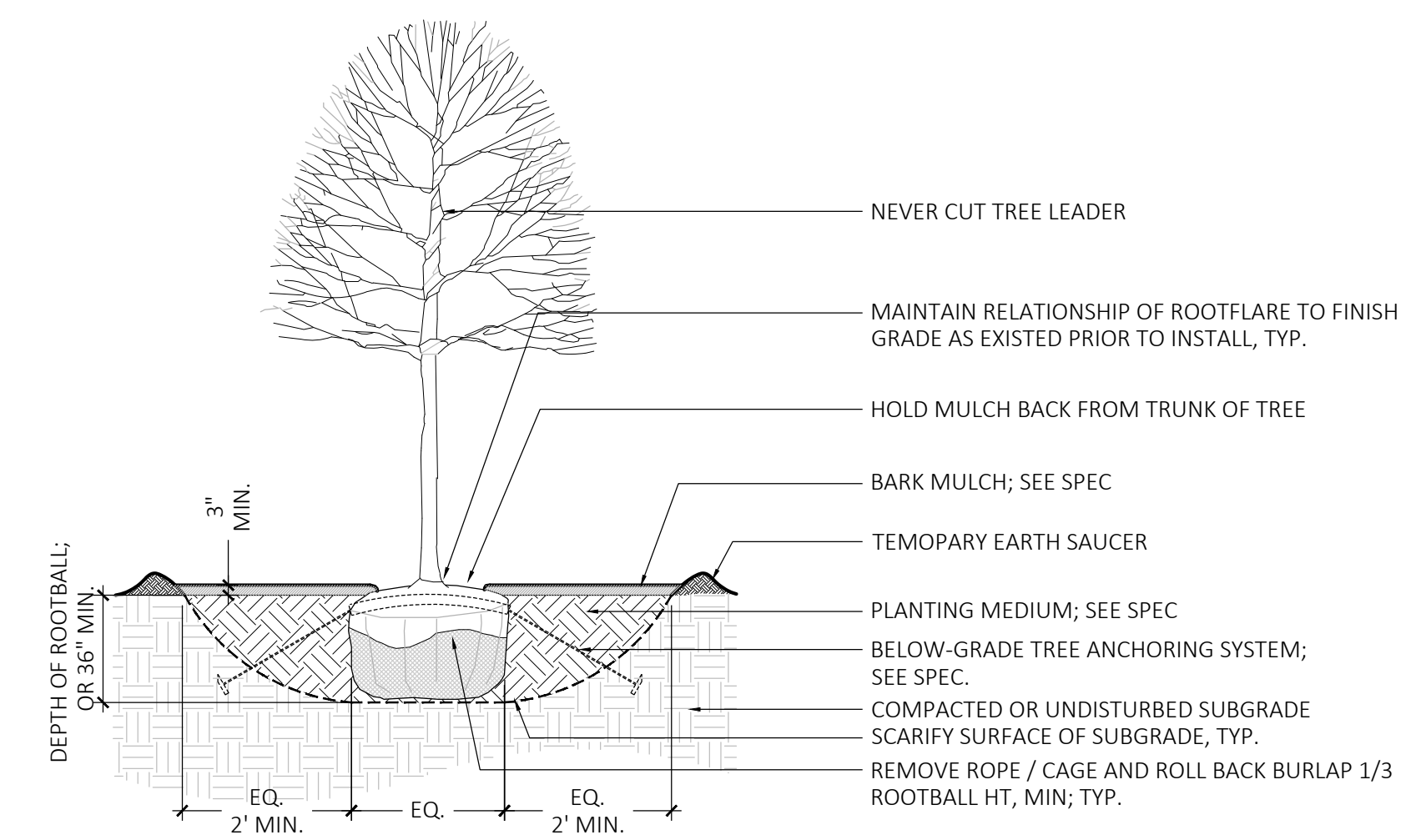
5 SEED MIX 2 - RAIN GARDEN MIX
SCALE: N.T.S.

SYM	LATIN NAME	COMMON NAME	SIZE	NOTES	GRAPHIC
SHADE TREES					
AR	ACER RUBRUM	RED MAPLE	3"-3.5" CAL.	B&B, 6' CLEAR BRANCHING	
AS	ACER SACCHARUM	SUGAR MAPLE	3"-3.5" CAL.	B&B, 6' CLEAR BRANCHING	
GT	GLEDTISIA TRIACANTHOS	HONEY LOCUST	3"-3.5" CAL.	B&B, 6' CLEAR BRANCHING	
QC	QUERCUS COCCINEA	SCARLET OAK	3"-3.5" CAL.	B&B, 6' CLEAR BRANCHING	
QP	QUERCUS PALUSTRIS	PIN OAK	3"-3.5" CAL.	B&B, 6' CLEAR BRANCHING	
NS	NYSSA SYLVATICA	BLACK TUPELO	3"-3.5" CAL.	B&B, 6' CLEAR BRANCHING	
PH	PLATANUS OCCIDENTALIS	SYCAMORE	3"-3.5" CAL.	B&B, 6' CLEAR BRANCHING	
ORNAMENTAL TREES					
AG	AMELANCHIER CANADENSIS	SHADBLOW SERVICEBERRY	7' TALL	B&B, MULTI-STEM	
BN	BETULA NIGRA	RIVER BIRCH	10' TALL	B&B, MULTI-STEM	
CF	CORNUS FLORIDA	FLOWERING DOGWOOD	6' TALL	B&B, SPECIMEN	
MS	MAGNOLIA STELLATA	STAR MAGNOLIA	6' TALL	B&B, SPECIMEN	
EVERGREEN TREES					
JV	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	8'-9' TALL	B&B	
AB	ABIES BALSAMEA	BALSAM FIR	8'-9' TALL	B&B	
PS	PINUS STROBUS	EASTERN WHITE PINE	8'-9' TALL	B&B	
SEED MIX					
	ERNST SEEDS 800-873-3321	ERNST MIX (ERNMX-181-1 & 181-2) SEED MIX 1- NATIVE STEEP SLOPE MIX	75 LB/ACRE	APPLY COVER CROP- FALL: GRAIN RYE, SPRING: OAT; SEE SPEC SHEET	
	ERNST SEEDS 800-873-3321	ERNST MIX (ERNMX-180) SEED MIX 2 - RAIN GARDEN MIX	20 LB/ACRE	APPLY COVER CROP OF GRAIN RYE; SEE SPEC SHEET	

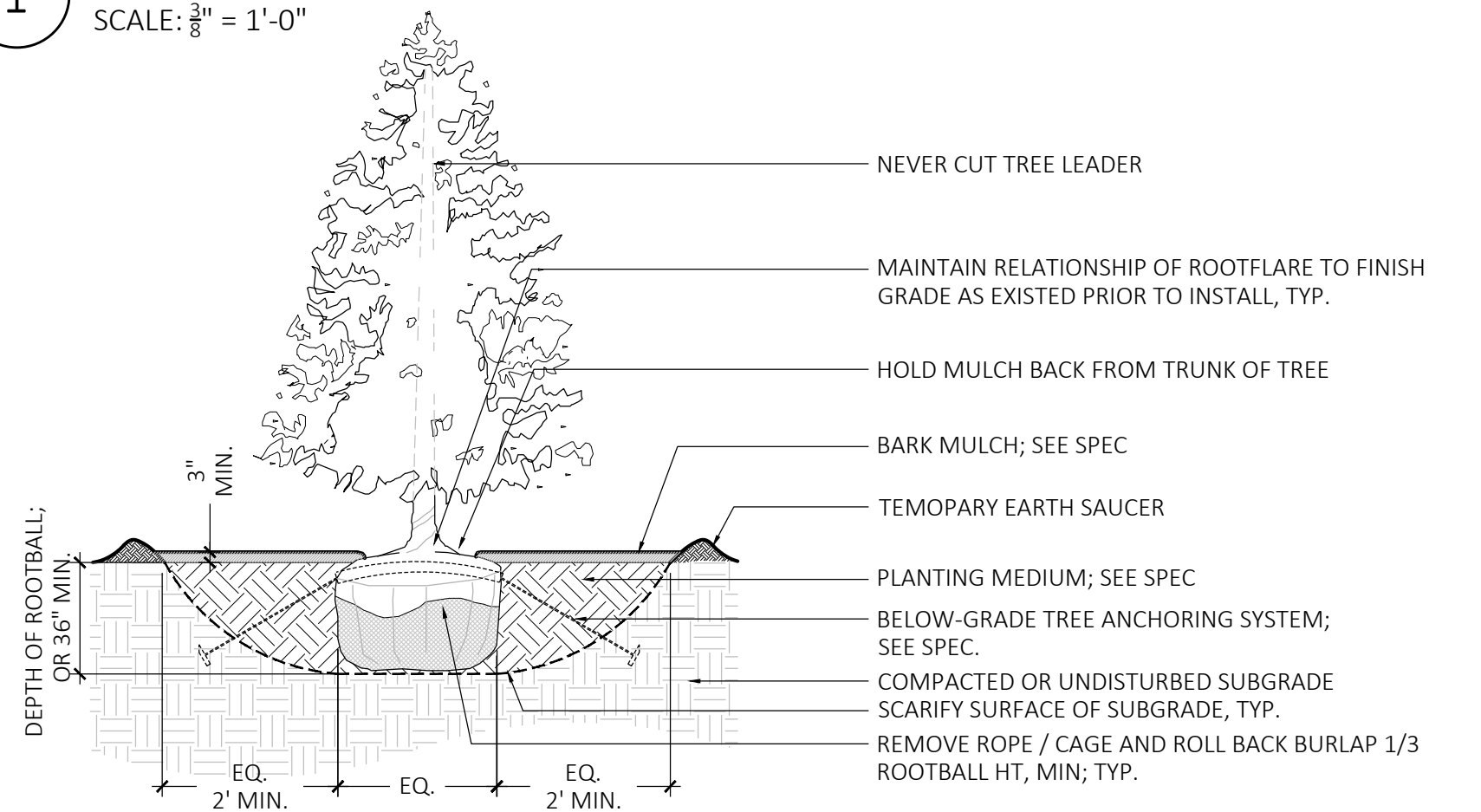
NOTE:
1. TREE LOCATIONS AND QUANTITIES AS SHOWN, MEET THE 1 TREE PER 10 PARKING SPACES RATIO REQUIREMENT FOR LOTS OVER 20 SPACES, AS OUTLINED IN THE FRANKLIN ZONING BYLAWS
2. ALL PROPOSED PLANTINGS ARE SELECTED FROM FRANKLIN'S BEST DEVELOPMENT PRACTICES GUIDEBOOK (§185-31.C.(K))

SYM	LATIN NAME	COMMON NAME	SIZE	NOTES	GRAPHIC
SHRUB PALETTE					
CA	CLETHRRA ALNIFOLIA	PEPPERBUSH	3 GALLON	48" O.C. B&B	
FG	FOTHERGILLA GARDENII	DWARF FOTHERGILLA	3 GALLON	48" O.C. B&B	
HQ	HYDRANGEA QUERCIFOLIA	OAKLEAF HYDRANGEA	3 GALLON	48" O.C. B&B	
IG	ILEX GLABRA	INKBERRY	3 GALLON	48" O.C. B&B	
IV	ILEX VERTICILLATA	WINTERBERRY	3 GALLON	48" O.C. B&B	
RG	RHUS AROMATICA	FRAGRANT SUMAC	3 GALLON	48" O.C. B&B	
PERENNIALS & ORNAMENTAL GRASSES					
EP	ECHINACEA PURPUREA	PURPLE CONEFLOWER	1 GAL	18" O.C. CONTAINER	
PA	PENNISSETUM ALOPECUROIDES	FOUNTAIN GRASS	1 GAL	24" O.C. CONTAINER	
PV	PANICUM VIRGATUM	SWITCH GRASS	1 GAL	30" O.C. CONTAINER	
RF	RUDBECKIA FULGIDA	ORANGE CONEFLOWER	1 GAL	18" O.C. CONTAINER	
SS	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	1 GAL	30" O.C. CONTAINER	

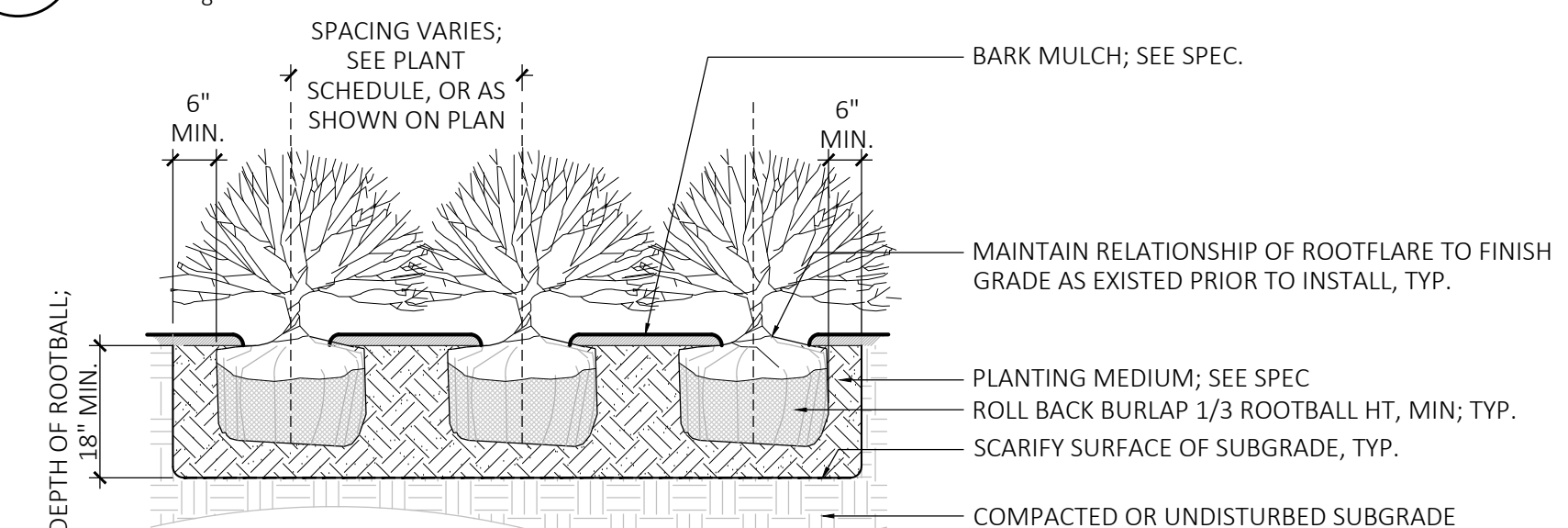
8 PLANT SCHEDULE
SCALE: N.T.S.



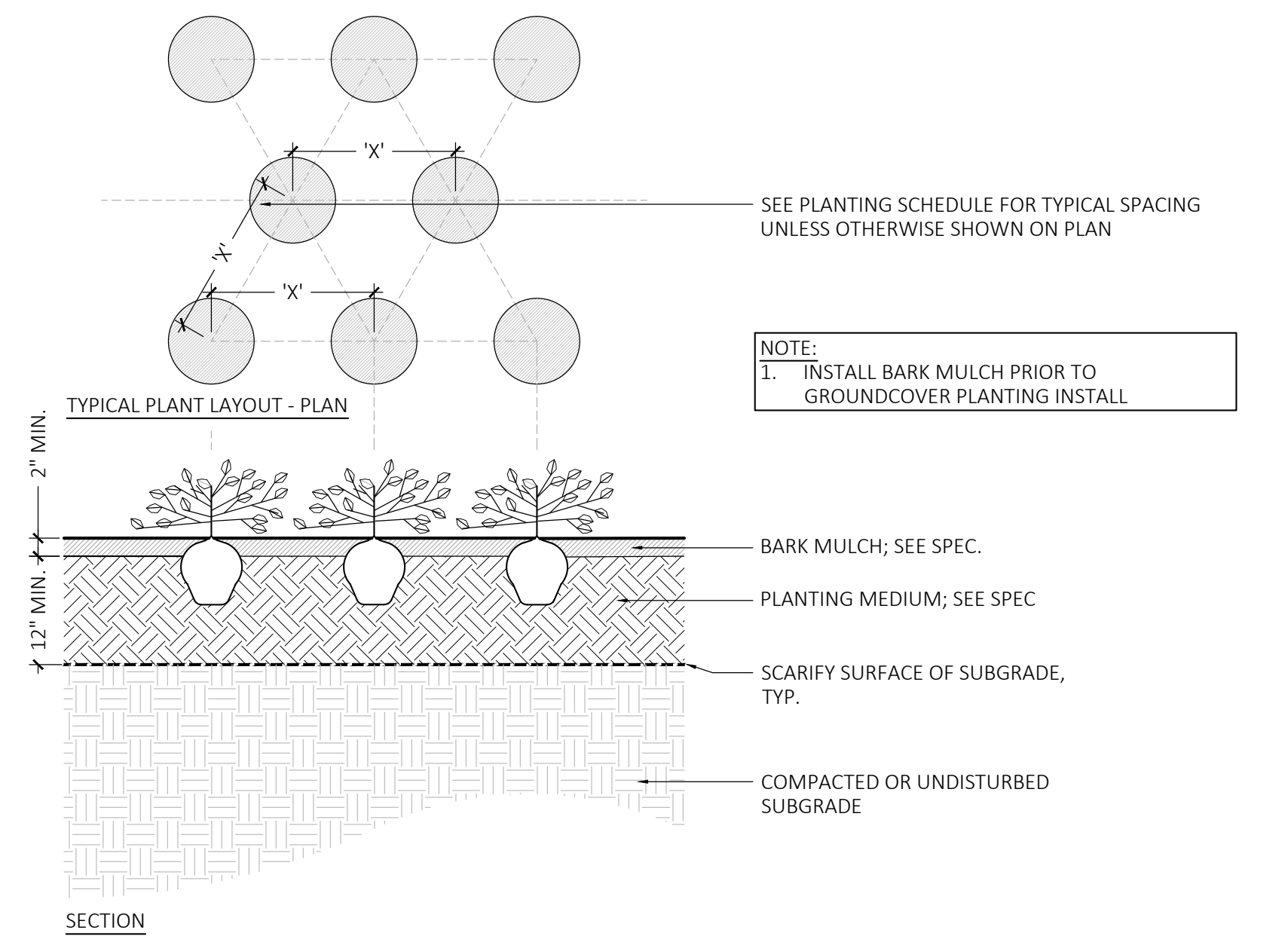
1 DECIDUOUS TREE PLANTING
SCALE: 3/8" = 1'-0"



2 EVERGREEN TREE PLANTING
SCALE: 3/8" = 1'-0"



3 SHRUB PLANTING
SCALE: 3/8" = 1'-0"

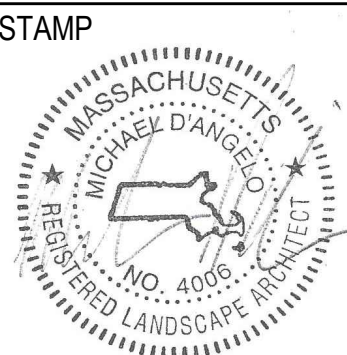


4 GROUNDCOVER PLANTING
SCALE: 3/4" = 1'-0"

MDLA
MICHAEL D'ANGELO landscape architecture

MICHAEL D'ANGELO
LANDSCAPE ARCHITECTURE LLC
840 SUMMER STREET
SUITE 203A
BOSTON, MA 02117
T. 203.592.4788
www.mdla.com

**GROVE STREET RESIDENCES
FRANKLIN, MA**

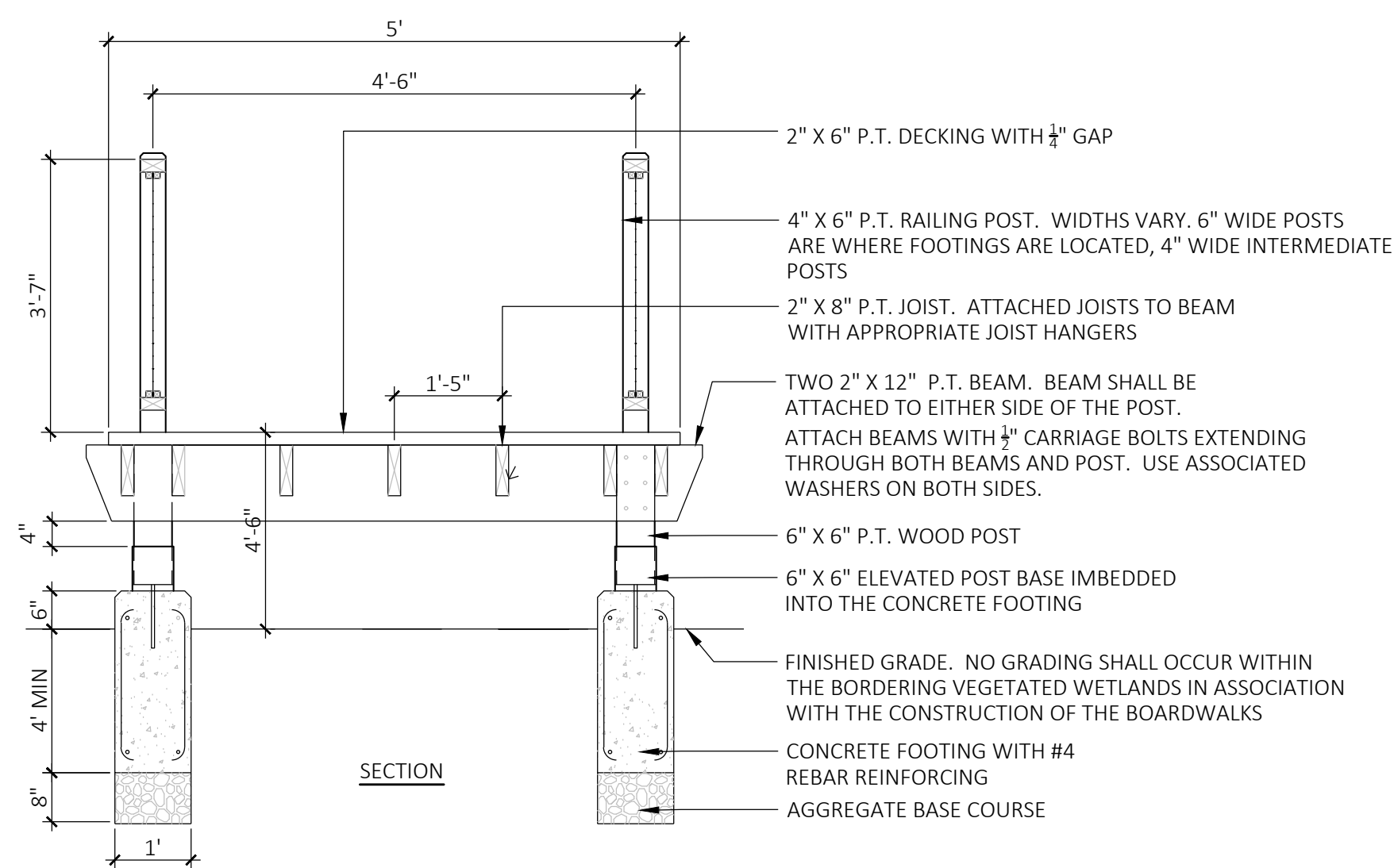


REV. NO.	DATE	DESCRIPTION
1	5/11/23	VE
2	9/23/23	REV 1
3	10/31/23	REV 2
4	12/18/23	REV PER OWNER DOLL TESTING PROPOSED SUBSTITUTION
5	2/8/24	REVISED PER DCA PERFORM COMMENTS
6	3/28/24	REVISED PER CONCORD PERFORM REVIEW
7	5/19/24	REVISED PER CONCORD PERFORM REVIEW

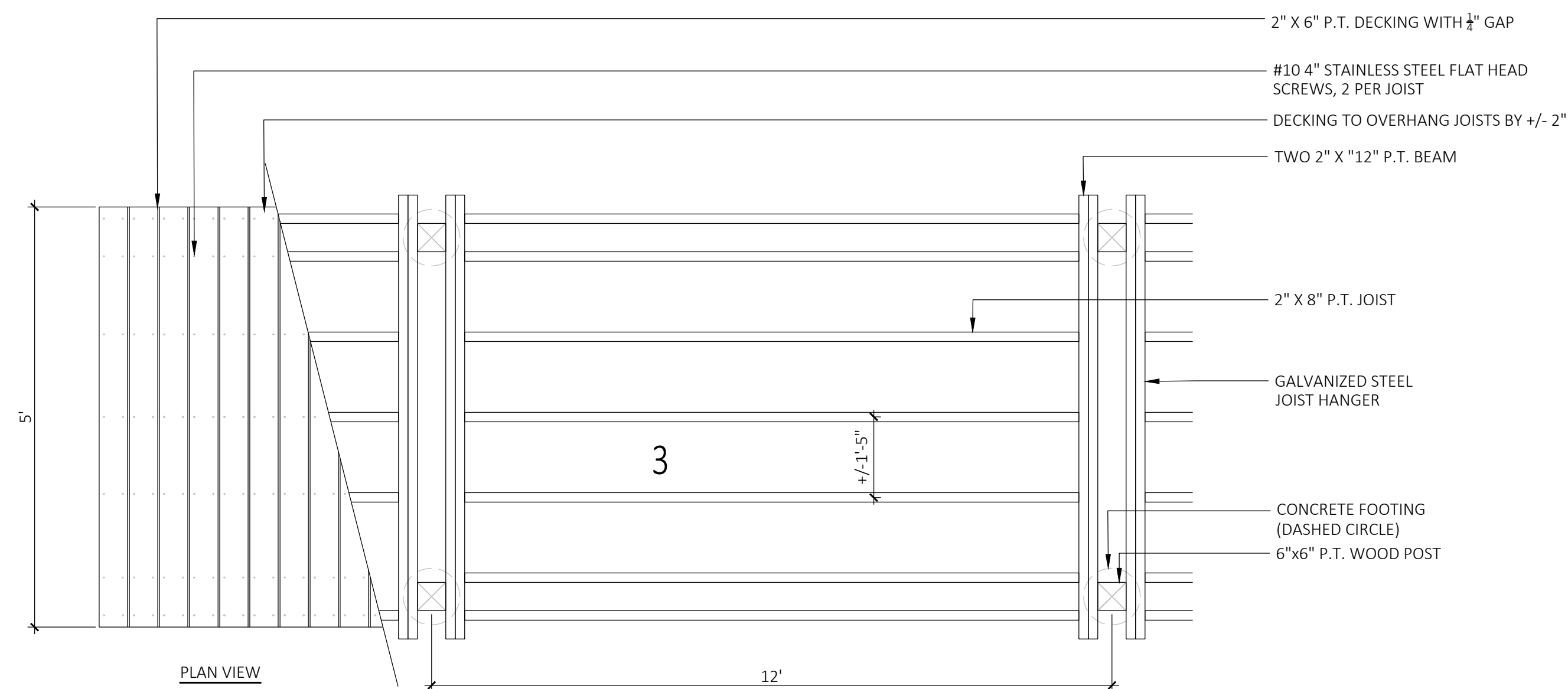
NOT FOR CONSTRUCTION
LANDSCAPE DETAILS

DRAWN: NC, AA
CHECKED: NC
SCALE: **L300**
AS NOTED
DATE: 12/18/23

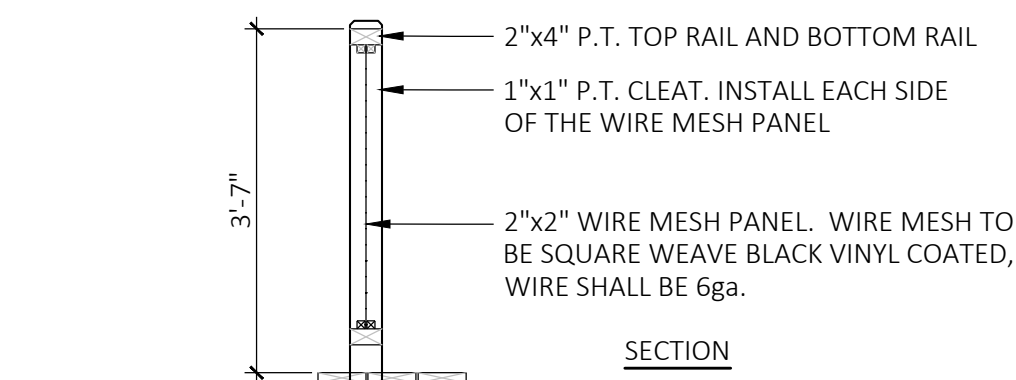
SHEET 10 OF 14



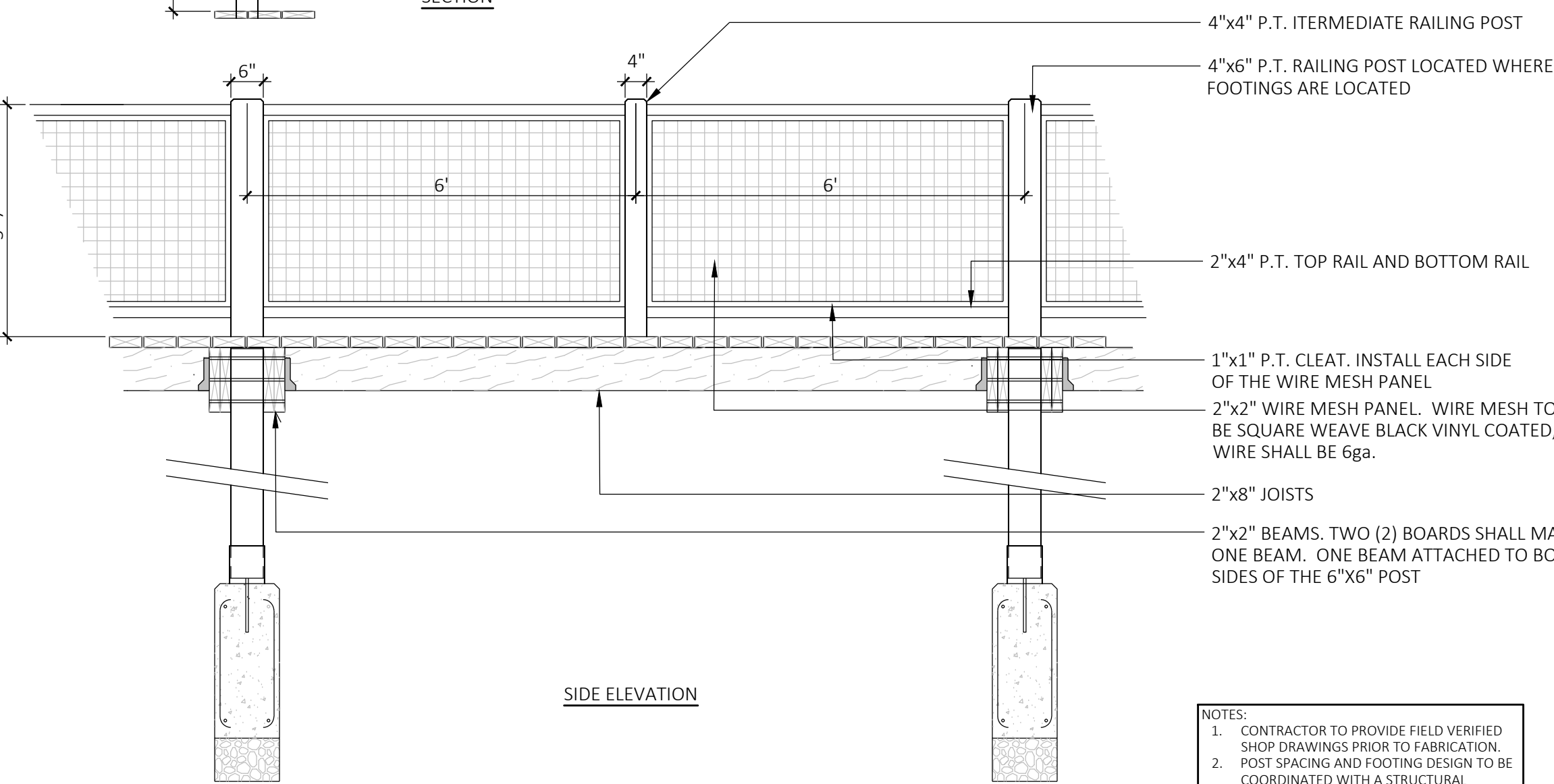
- 2" X 6" P.T. DECKING WITH 1/4" GAP
- 4" X 6" P.T. RAILING POST. WIDTHS VARY. 6" WIDE POSTS ARE WHERE FOOTINGS ARE LOCATED, 4" WIDE INTERMEDIATE POSTS
- 2" X 8" P.T. JOIST. ATTACHED JOISTS TO BEAM WITH APPROPRIATE JOIST HANGERS
- TWO 2" X 12" P.T. BEAM. BEAM SHALL BE ATTACHED TO EITHER SIDE OF THE POST. ATTACH BEAMS WITH 1/4" CARRIAGE BOLTS EXTENDING THROUGH BOTH BEAMS AND POST. USE ASSOCIATED WASHERS ON BOTH SIDES.
- 6" X 6" P.T. WOOD POST
- 6" X 6" ELEVATED POST BASE IMBEDDED INTO THE CONCRETE FOOTING
- FINISHED GRADE. NO GRADING SHALL OCCUR WITHIN THE BORDERING VEGETATED WETLANDS IN ASSOCIATION WITH THE CONSTRUCTION OF THE BOARDWALKS
- CONCRETE FOOTING WITH #4 REBAR REINFORCING
- AGGREGATE BASE COURSE



- 2" X 6" P.T. DECKING WITH 1/4" GAP
- #10 4" STAINLESS STEEL FLAT HEAD SCREWS, 2 PER JOIST
- DECKING TO OVERHANG JOISTS BY +/- 2"
- TWO 2" X 12" P.T. BEAM
- 2" X 8" P.T. JOIST
- GALVANIZED STEEL JOIST HANGER
- CONCRETE FOOTING (DASHED CIRCLE)
- 6" X 6" P.T. WOOD POST



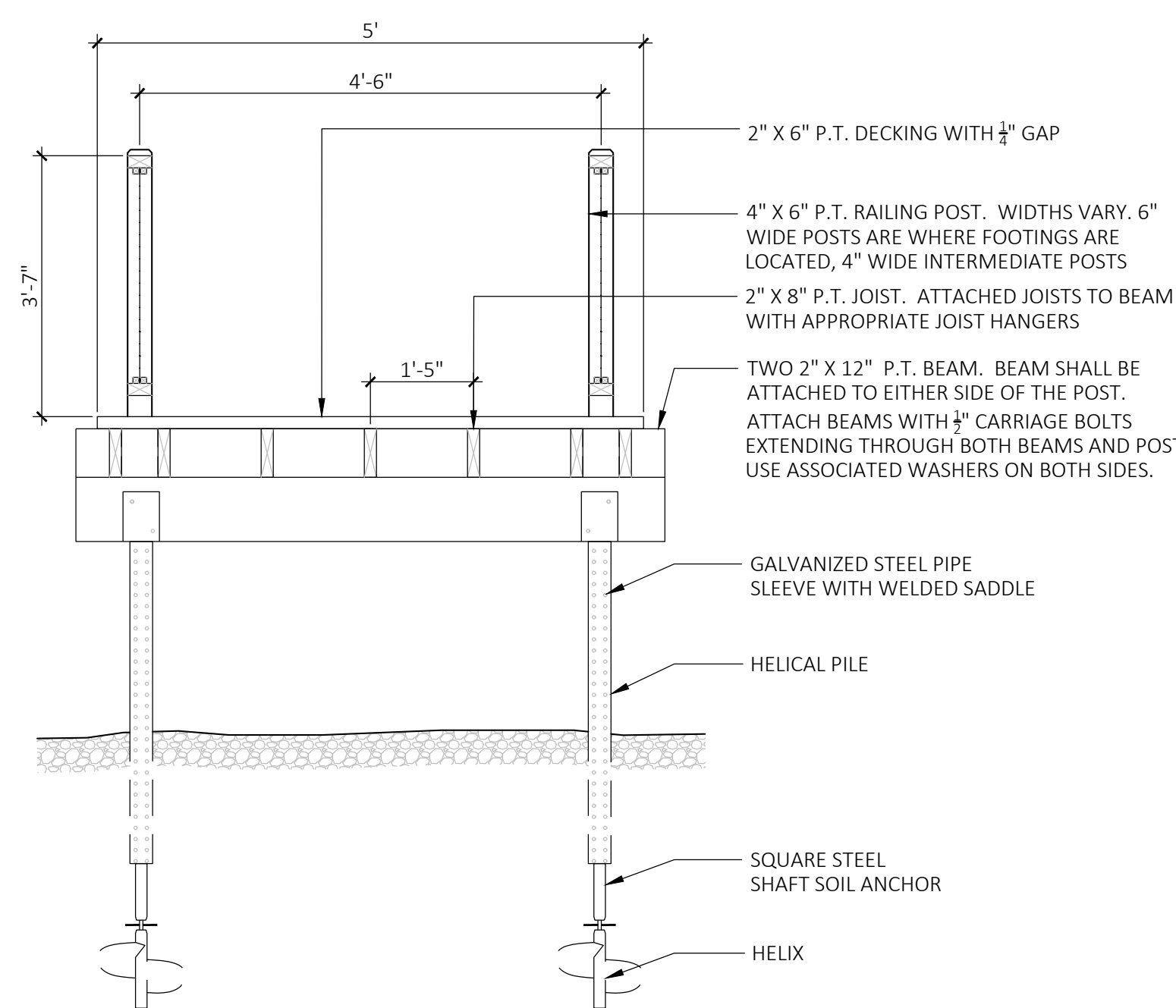
- 2"x4" P.T. TOP RAIL AND BOTTOM RAIL
- 1"x1" P.T. CLEAT. INSTALL EACH SIDE OF THE WIRE MESH PANEL
- 2"x2" WIRE MESH PANEL. WIRE MESH TO BE SQUARE WEAVE BLACK VINYL COATED, WIRE SHALL BE 6ga.



- 4"x4" P.T. INTERMEDIATE RAILING POST
- 4"x6" P.T. RAILING POST LOCATED WHERE FOOTINGS ARE LOCATED
- 2"x4" P.T. TOP RAIL AND BOTTOM RAIL
- 1"x1" P.T. CLEAT. INSTALL EACH SIDE OF THE WIRE MESH PANEL
- 2"x2" WIRE MESH PANEL. WIRE MESH TO BE SQUARE WEAVE BLACK VINYL COATED, WIRE SHALL BE 6ga.
- 2"x8" JOISTS
- 2"x2" BEAMS. TWO (2) BEAMS SHALL MAKE ONE BEAM. ONE BEAM ATTACHED TO BOTH SIDES OF THE 6"X6" POST

- NOTES:
- CONTRACTOR TO PROVIDE FIELD VERIFIED SHOP DRAWINGS PRIOR TO FABRICATION.
 - POST SPACING AND FOOTING DESIGN TO BE COORDINATED WITH A STRUCTURAL ENGINEER PRIOR TO FABRICATION.

4 RAISED BOARDWALK W/ CONCRETE FOOTINGS
SCALE: 1/2" = 1'-0"



- 2" X 6" P.T. DECKING WITH 1/4" GAP
- 4" X 6" P.T. RAILING POST. WIDTHS VARY. 6" WIDE POSTS ARE WHERE FOOTINGS ARE LOCATED, 4" WIDE INTERMEDIATE POSTS
- 2" X 8" P.T. JOIST. ATTACHED JOISTS TO BEAM WITH APPROPRIATE JOIST HANGERS
- TWO 2" X 12" P.T. BEAM. BEAM SHALL BE ATTACHED TO EITHER SIDE OF THE POST. ATTACH BEAMS WITH 1/4" CARRIAGE BOLTS EXTENDING THROUGH BOTH BEAMS AND POST. USE ASSOCIATED WASHERS ON BOTH SIDES.
- GALVANIZED STEEL PIPE SLEEVE WITH WELDED SADDLE
- HELICAL PILE
- SQUARE STEEL SHAFT SOIL ANCHOR
- HELIX

3 RAISED BOARDWALK W/ HELICAL PILES
SCALE: 1/2" = 1'-0"

Shielded bollard - asymmetric wide beam BEGA

Application
The fully shielded design of this bollard provides visual comfort while illuminating ground surfaces. Provided with mounting system that allows the luminaire to be adjusted independent of anchor bolt orientation.

Materials
Luminaire housing constructed of die-cast marine grade, copper free (0.3% copper content) A380.0 aluminum alloy
Clear safety glass
Reflector made of pure anodized aluminum
Silicone applied robotically to casting, plasma treated for increased adhesion
NRTL listed to North American Standards, suitable for wet locations
Protection class IP65
Weight: 12.8 lbs

Electrical
Operating voltage: 120-277V AC
Minimum start temperature: -30°C
LED module wattage: 11.0 W
System wattage: 15.0 W
Controlability: 0-10V, TRIAC, and ELV dimmable
Color rendering index: Ra > 90
Luminaire lumens: 1475 lumens (4000K)
LED service life (L70): 50,000 hours

LED color temperature
4000K - Product number + **K4**
3500K - Product number + **K35**
3000K - Product number + **K3**
2700K - Product number + **K27**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish
All BEGA standard finishes are matte, textured powder coat with minimum 3 mil thickness. BEGA Unidraw® finish, a fluoropolymer technology, provides superior fade protection in Black, Bronze, and Silver. BEGA Standard White, as well as optionally available RAL and custom colors, are a polyester powder.

Available colors
Black (BLK) White (WHT) RAL:
Bronze (BRZ) Silver (SLV) CLS:

Available options
70895 Direct burial anchorage

Shielded bollard - asymmetric wide beam

LED	A	B	Asphage
84220	11.5 W	0%	37%

BEGA 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 info@bega-us.com
Due to the dynamic nature of lighting products and the associated technologies, luminaire data on this sheet is subject to change at the discretion of BEGA North America. For the most current technical data, please refer to bega-us.com © copyright BEGA 2021

1 LT-1 BOLLARD LIGHT
SCALE: N.T.S.

BEACON
VIPER Area/Site
VIPER LUMINAIRE

DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

FEATURES

- Low profile LED area/site luminaire with a variety of IES distributions for lighting applications such as auto dealerships, retail, commercial, and campus parking lots
- Featuring two different optical technologies, Strike and Micro Strike Optics, which provide the best distribution patterns for retrofit or new construction
- Rated for high vibration applications including bridges and overpasses. All sizes are rated for 1.5G
- Control options including photo control, occupancy sensing, NK Lighting Controls™, LightGRID™ and 7-pin wireless controls
- New customizable lumen output feature allows for the wattage and lumen output to be customized in the factory to meet whatever specification requirements may entail
- Field interchangeable mounting provides additional flexibility after the fixture has shipped

CONTROL TECHNOLOGY
NK LIGHTGRID™

SERVICE PROGRAMS
STOCK QS10

SPECIFICATIONS

CONSTRUCTION

- Die-cast housing with hidden vertical heat fins are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with 3000-hour powder coat paint finish
- External hardware is corrosion resistant

OPTICS

- Micro Strike Optics (80, 320, 480, or 720 LED count) maintains uniformity in applications and come standard with micro power LEDs which evenly illuminate the entire luminous surface area to provide a low glare appearance. Catalog logic found on page 3
- Strike Optics (56, 72, 108, or 162 LED count) provide beam-like light distributions and maximum pole spacing in new applications with high powered LEDs. Strike optics are held in place with a polycarbonate bezel to mimic the appearance of the Micro Strike Optics so both solutions can be combined on the same application. Catalog logic found on page 3
- Both optics maximize target zone illumination with minimal spillage at the fixture side, reducing light trespass issues. Additional backlight control bezels and housing side shields can be added for further reduction of illumination behind the pole
- One-piece silicone gasket ensures a weatherproof seal
- Zero up-light 0 degrees of tilt
- Field rotatable optics

INSTALLATION

- Mounting systems for each arm can be found on page 11
- Optional universal mounting block for ease of installation during retrofit applications. Available as an option (AS24) or accessory for square and round poles
- All mounting hardware included
- Knuckle arm filler option available for 2-3/8" OD beam
- For products with EPA less than 1 mounted to a pole greater than 20ft, a vibration damper is recommended

ELECTRICAL

- Universal 120-277 VAC or 347-480 VAC input voltage, 50/60 Hz
- Ambient operating temperature: -40°C to 40°C
- Drivers have greater than 90% power factor and less than 20% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Field replaceable surge protection device provides 20kA protection meeting ANSI/IEEE C62.41.2 Category C High and Surge Location Category C3. Automatically saves fixture off-line for protection when device is compromised
- Dual Driver option provides 2 drivers within luminaire but only one set of leads exiting the luminaire where Dual Power Feed provides two drivers which can be wired independently as two sets of leads are extended from the luminaire. Both options cannot be combined

Program	IP65	IP67	IP68	IP69K	IP69K	IP69K	IP69K
Power	0.454	0.656	0.855	0.988	1.136	1.396	1.596
Temp. Rise	0.008	0.010	0.013	0.016	0.020	0.025	0.030
Temp. Rise	0.083	0.079	0.087	0.088	0.090	0.092	0.094
Temp. Rise	1.007	1.066	1.152	1.196	1.264	1.352	1.440
Temp. Rise	0.041	0.055	0.070	0.080	0.090	0.100	0.110
Temp. Rise	1.966	1.422	1.174	1.096	1.020	0.944	0.868

CERTIFICATIONS

- UL (DesignLights Consortium Qualified), with some Premium Qualified configurations. Not all product variations listed in this document are DC qualified. Refer to <http://www.designlights.org> for the most up-to-date list.
- Listed to UL1598 and CSA C22.2 250.0-24 for wet locations and AEC ambient temperatures
- 1.5 G rated for ANSI C136.31 high vibration applications
- Fixture is IP65 rated
- Meets IEC recommendations using 3K CCT configuration at 0 degrees of tilt
- This product meets federal procurement law requirements under the Buy American Act (BAR 52.226-26 and Trade Agreements Act (BAR 52.225-1)). See Buy American's Solutions Site to <http://www.buyamericansolutions.com/resources/american-solutions/>

WARRANTY

- 5 year warranty

Current
currentlighting.com/beacon
© 2023 H.I. Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

Page 1 of 14
Rev 10/05/23
BGA_VIPERBEG_007

2 LT-2, LT-3, LT-4 POLE/WALL MOUNTED LIGHT
SCALE: N.T.S.

MDLA
MICHAEL D'ANGELO landscape architecture

MICHAEL D'ANGELO
LANDSCAPE ARCHITECTURE LLC

840 SUMMER STREET
SUITE 203A
BOSTON, MA 02127
T. 203.592.4788
www.m-d-a.com

GROVE STREET RESIDENCES
FRANKLIN, MA

STAMP
MICHAEL D'ANGELO
REGISTERED LANDSCAPE ARCHITECT
NO. 4066
STATE OF MASSACHUSETTS

REV. NO. DATE DESCRIPTION

1	5/11/23	VE
2	9/23/23	REV 1
3	10/11/23	REV 2
4	12/18/23	REV PER DRAFTS BLDG TESTING CONSULTANT SUBMITTAL
5	2/16/24	REVISED PER DCA PERFORM COMMENTS
6	3/18/24	REVISED PER CONDOM PER REVIEW
7	5/15/24	REVISED PER CONDOM PER REVIEW

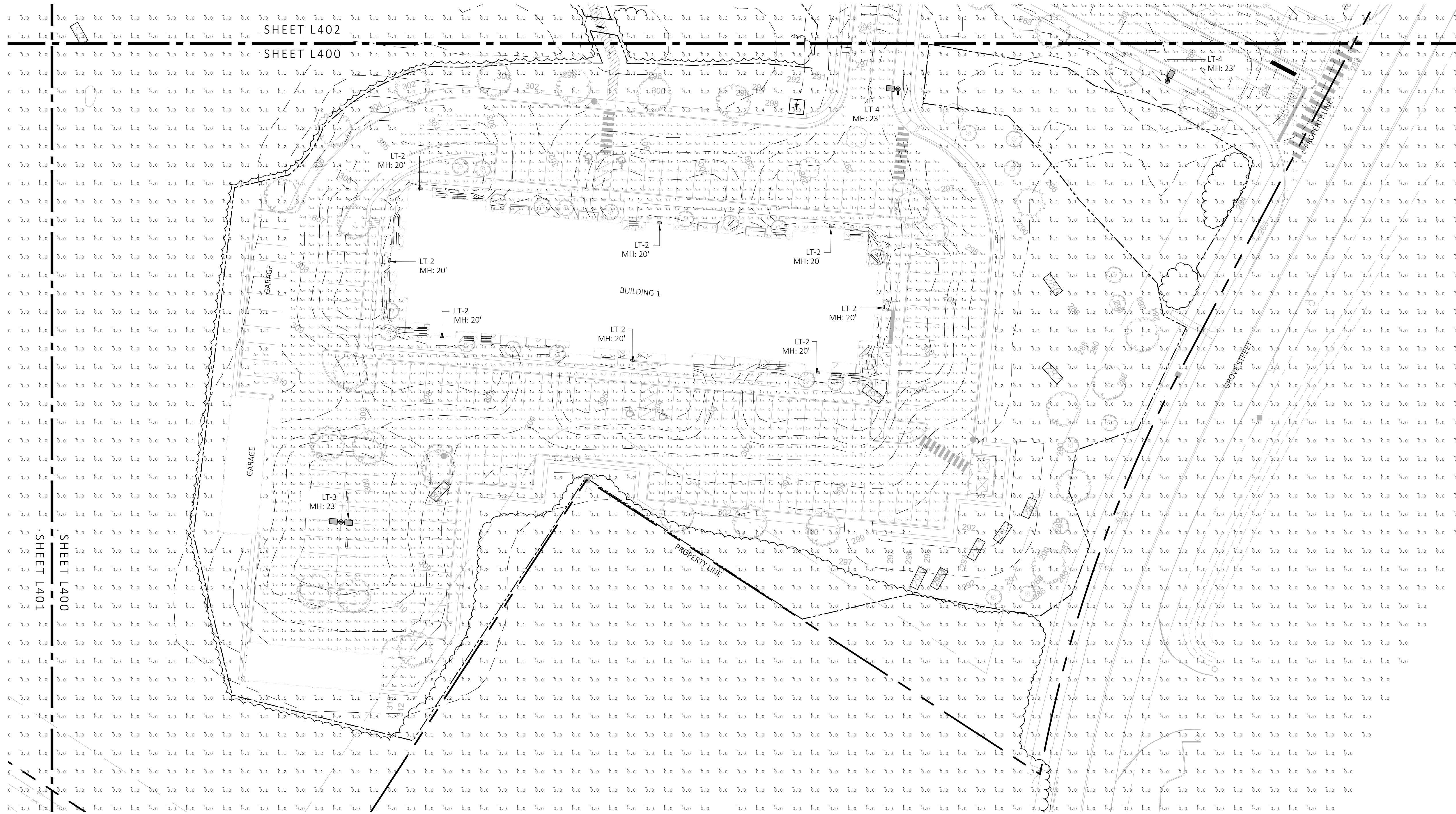
NOT FOR CONSTRUCTION

LANDSCAPE LIGHTING CUTSHEETS

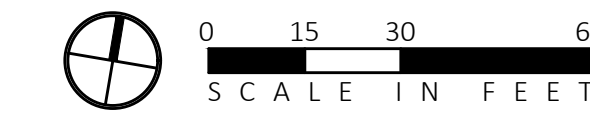
DRAWN: NC, AA
CHECKED: NC
SCALE: L301
AS NOTED
DATE: 12/18/23

SHEET 11 OF 14

plot date: 5/8/2024



1 LANDSCAPE PHOTOMETRIC PLAN
SCALE: 1" = 30'-0"

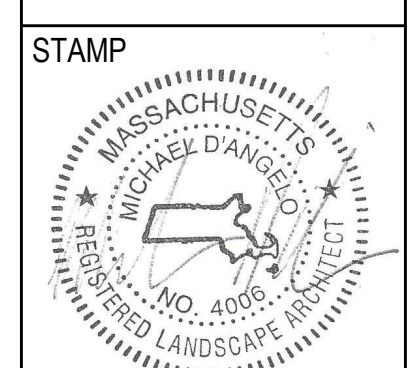


Luminaire Schedule					
Symbol	Qty	Label	Arrangement	LLF	Lum. Lumens
	11	LT-1	Single	0.900	1430
	44	LT-2	Single	1.000	15440
	1	LT-3	Back-Back	0.900	15440
	21	LT-4	Single	0.900	15440

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
LNADSCAPE AREA 1	Illuminance	Fc	2.99	5.4	0.0	N.A.	N.A.
LNADSCAPE AREA 2	Illuminance	Fc	2.47	4.9	0.0	N.A.	N.A.
LNADSCAPE AREA 3	Illuminance	Fc	2.74	5.4	0.0	N.A.	N.A.
LNADSCAPE AREA 4	Illuminance	Fc	2.61	4.9	0.0	N.A.	N.A.
LNADSCAPE AREA 5	Illuminance	Fc	3.15	6.9	0.0	N.A.	N.A.
PARKING AND ROADWAYS	Illuminance	Fc	1.82	9.5	0.0	N.A.	N.A.
SPILL LIGHT	Illuminance	Fc	0.16	32.6	0.0	N.A.	N.A.

NOTE: MH = MOUNTING HEIGHT

**GROVE STREET RESIDENCES
FRANKLIN, MA**



REV. NO.	DATE	DESCRIPTION
1	5/12/23	VE
2	9/23/23	REV 1
3	10/31/23	REV 2
4	12/18/23	REV PER OWNER AND TESTING CONSULTANT SUBMISSION
5	2/5/24	REVISED PER DCA REVIEW COMMENTS
6	3/28/24	REVISED PER CONCORD PEER REVIEW
7	5/19/24	REVISED PER CONCORD PEER REVIEW

NOT FOR CONSTRUCTION

LANDSCAPE PHOTOMETRIC PLAN

DRAWN:	NC, AA
CHECKED:	NC
SCALE:	L400
AS NOTED	
DATE:	12/18/23

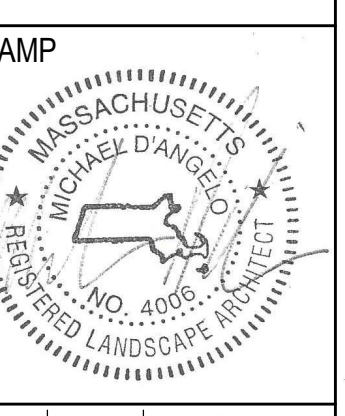
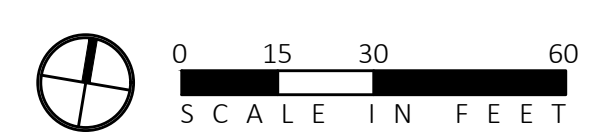
Symbol	Qty	Label	Arrangement	LLF	Lum. Lumens
	11	LT-1	Single	0.900	1430
	44	LT-2	Single	1.000	15440
	1	LT-3	Back-Back	0.900	15440
	21	LT-4	Single	0.900	15440

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
LNADSCAPE AREA 1	Illuminance	Fc	2.99	5.4	0.0	N.A.	N.A.
LNADSCAPE AREA 2	Illuminance	Fc	2.47	4.9	0.0	N.A.	N.A.
LNADSCAPE AREA 3	Illuminance	Fc	2.74	5.4	0.0	N.A.	N.A.
LNADSCAPE AREA 4	Illuminance	Fc	2.61	4.9	0.0	N.A.	N.A.
LNADSCAPE AREA 5	Illuminance	Fc	3.15	6.9	0.0	N.A.	N.A.
PARKING AND ROADWAYS	Illuminance	Fc	1.82	9.5	0.0	N.A.	N.A.
SPILL LIGHT	Illuminance	Fc	0.16	32.6	0.0	N.A.	N.A.

NOTE: MH = MOUNTING HEIGHT



1 LANDSCAPE PHOTOMETRIC PLAN
SCALE: 1" = 30'-0"

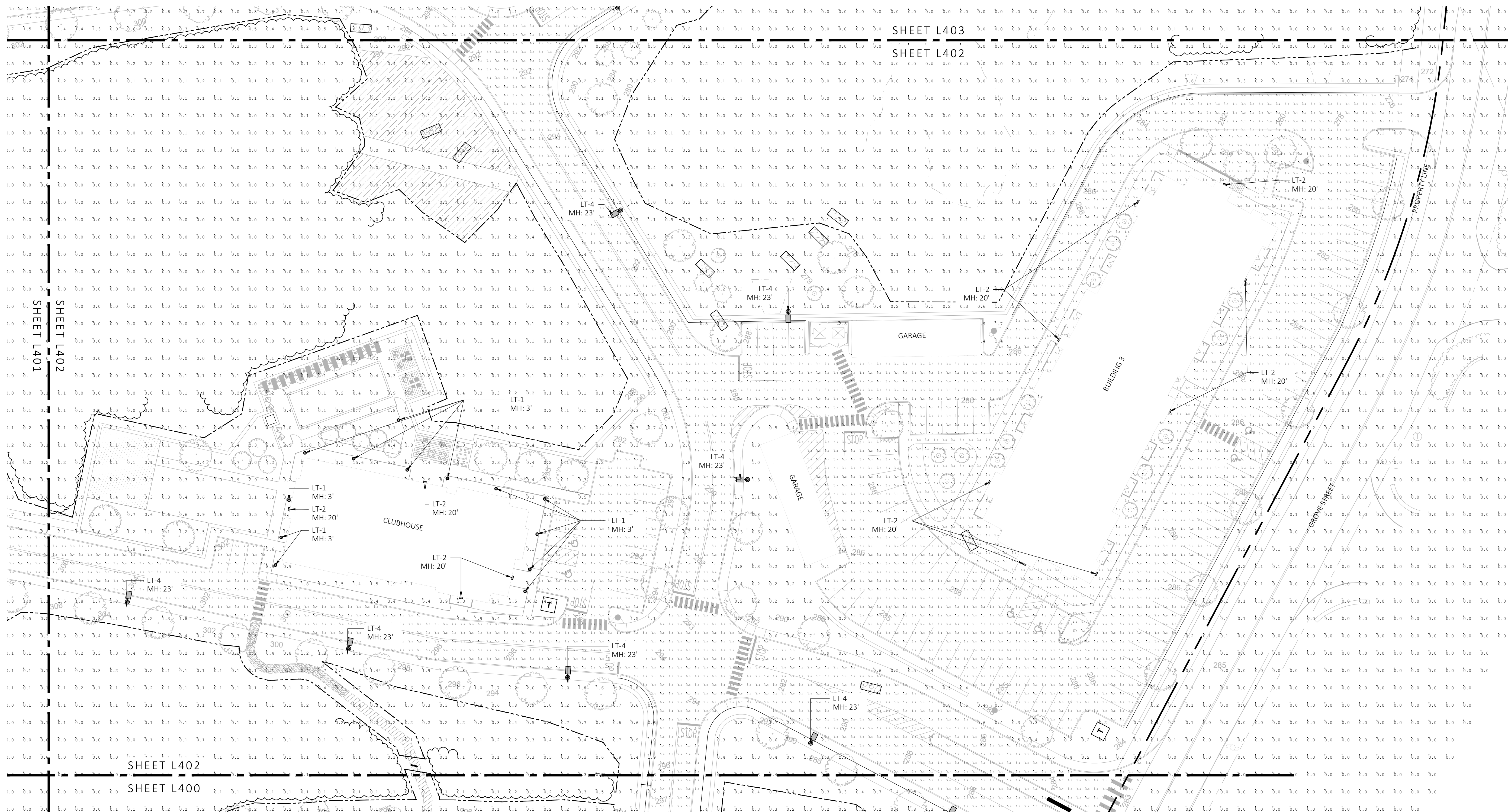


REV. NO.	DATE	DESCRIPTION
1	5/1/23	VE
2	9/23/23	REV 1
3	10/31/23	REV 2
4	12/18/23	REV PER OWNER AND TESTING CONSULTANT SUBMISSION
5	2/5/24	REVISED PER DCA REVIEW COMMENTS
6	3/28/24	REVISED PER CONCORD PEER REVIEW
7	5/19/24	REVISED PER CONCORD PEER REVIEW

NOT FOR CONSTRUCTION

LANDSCAPE PHOTOMETRIC PLAN

DRAWN:	NC, AA
CHECKED:	NC
SCALE:	L401
AS NOTED	
DATE:	12/18/23



1 LANDSCAPE PHOTOMETRIC PLAN
SCALE: 1" = 30'-0"



Symbol	Qty	Label	Arrangement	LLF	Lum. Lumens
	11	LT-1	Single	0.900	1430
	44	LT-2	Single	1.000	15440
	1	LT-3	Back-Back	0.900	15440
	21	LT-4	Single	0.900	15440

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
LNADSCAPE AREA 1	Illuminance	Fc	2.99	5.4	0.0	N.A.	N.A.
LNADSCAPE AREA 2	Illuminance	Fc	2.47	4.9	0.0	N.A.	N.A.
LNADSCAPE AREA 3	Illuminance	Fc	2.74	5.4	0.0	N.A.	N.A.
LNADSCAPE AREA 4	Illuminance	Fc	2.61	4.9	0.0	N.A.	N.A.
LNADSCAPE AREA 5	Illuminance	Fc	3.15	6.9	0.0	N.A.	N.A.
PARKING AND ROADWAYS	Illuminance	Fc	1.82	9.5	0.0	N.A.	N.A.
SPILL LIGHT	Illuminance	Fc	0.16	32.6	0.0	N.A.	N.A.

NOTE: MH = MOUNTING HEIGHT

MDLA
MICHAEL D'ANGELO landscape architecture

MICHAEL D'ANGELO
LANDSCAPE ARCHITECTURE LLC

840 SUMMER STREET
SUITE 203A
BOSTON, MA 02127
T. 203.592.4788
www.mdla.com

GROVE STREET RESIDENCES
FRANKLIN, MA

STAMP

REV. NO.	DATE	DESCRIPTION
1	5/12/23	VE
2	9/23/23	REV 1
3	10/31/23	REV 2
4	12/18/23	REV PER OWNER CONSULTING ENGINEER SUBMISSION
5	2/8/24	REVISED PER DBA REVIEW COMMENTS
6	3/28/24	REVISED PER CONDOMinium PERM REVIEW
7	5/19/24	REVISED PER CONDOMinium PERM REVIEW

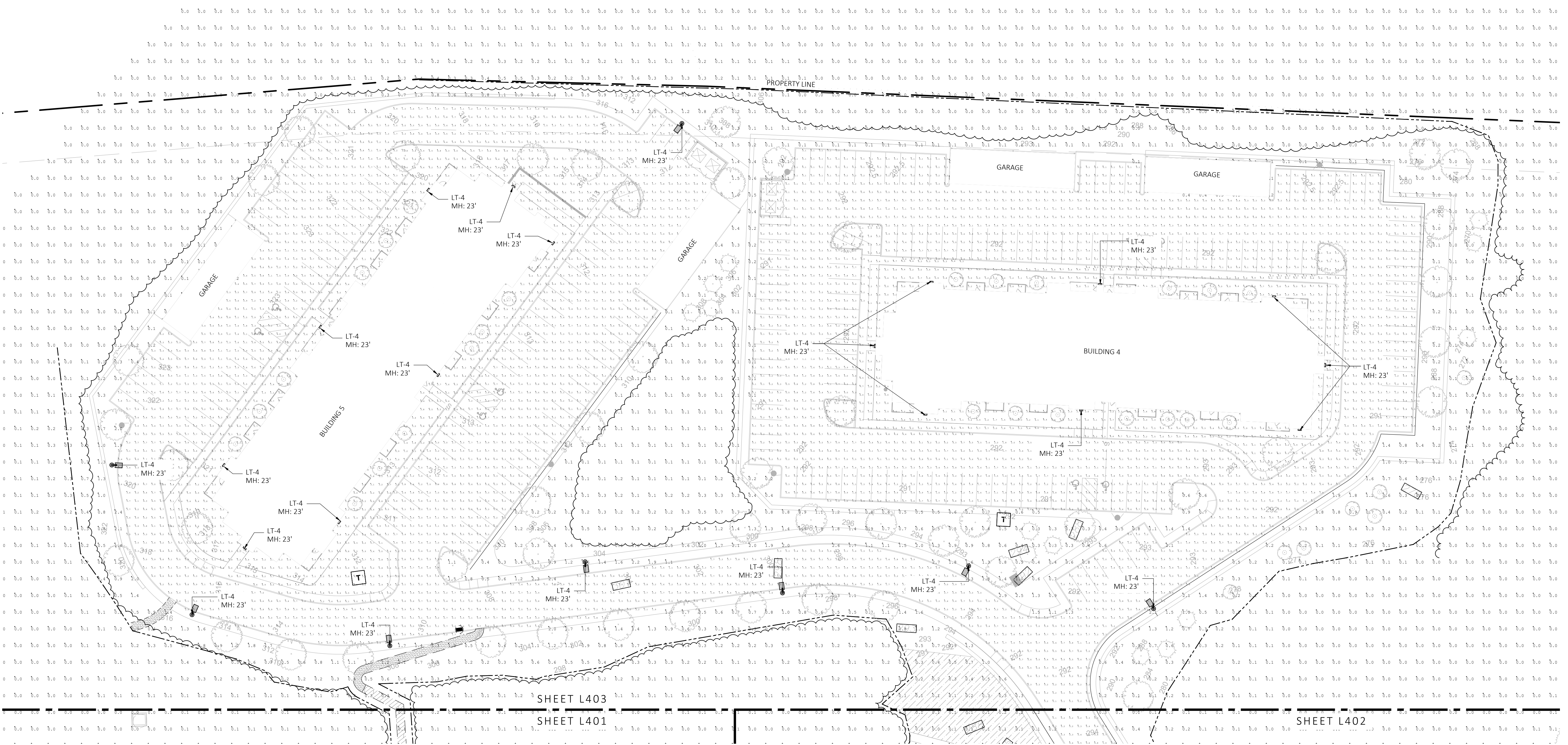
NOT FOR
CONSTRUCTION

LANDSCAPE
PHOTOMETRIC
PLAN

DRAWN:	L402
NC: AA	
CHECKED:	
NC	
SCALE:	
AS NOTED	
DATE:	12/18/23

SHEET 13 OF 14

plot date: 5/8/2024



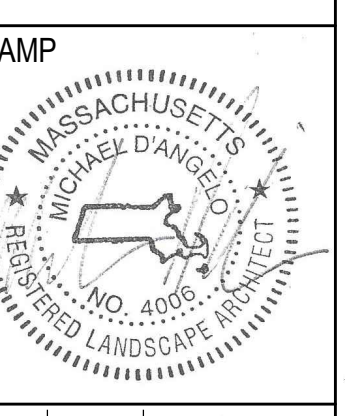
1 LANDSCAPE PHOTOMETRIC PLAN
SCALE: 1" = 30'-0"



Luminaire Schedule					
Symbol	Qty	Label	Arrangement	LLF	Lum. Lumens
	11	LT-1	Single	0.900	1430
	44	LT-2	Single	1.000	15440
	1	LT-3	Back-Back	0.900	15440
	21	LT-4	Single	0.900	15440

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	
LNADSCAPE AREA 1	Illuminance	Fc	2.99	5.4	0.0	N.A.	N.A.	
LNADSCAPE AREA 2	Illuminance	Fc	2.47	4.9	0.0	N.A.	N.A.	
LNADSCAPE AREA 3	Illuminance	Fc	2.74	5.4	0.0	N.A.	N.A.	
LNADSCAPE AREA 4	Illuminance	Fc	2.61	4.9	0.0	N.A.	N.A.	
LNADSCAPE AREA 5	Illuminance	Fc	3.15	6.9	0.0	N.A.	N.A.	
PARKING AND ROADWAYS	Illuminance	Fc	1.82	9.5	0.0	N.A.	N.A.	
SPILL LIGHT	Illuminance	Fc	0.16	32.6	0.0	N.A.	N.A.	

NOTE: MH = MOUNTING HEIGHT



REV. NO.	DATE	DESCRIPTION
1	5/12/23	VE
2	9/23/23	REV 1
3	10/31/23	REV 2
4	12/18/23	REV PER OWNER AND TESTING CONSULTANT CORRECTIONS
5	2/5/24	REVISED PER O&A REVIEW COMMENTS
6	3/28/24	REVISED PER O&A REVIEW COMMENTS
7	5/19/24	REVISED PER CONCORD PLAN REVIEW

NOT FOR CONSTRUCTION

LANDSCAPE PHOTOMETRIC PLAN

DRAWN:	NC, AA
CHECKED:	NC
SCALE:	L403
AS NOTED	
DATE:	12/18/23