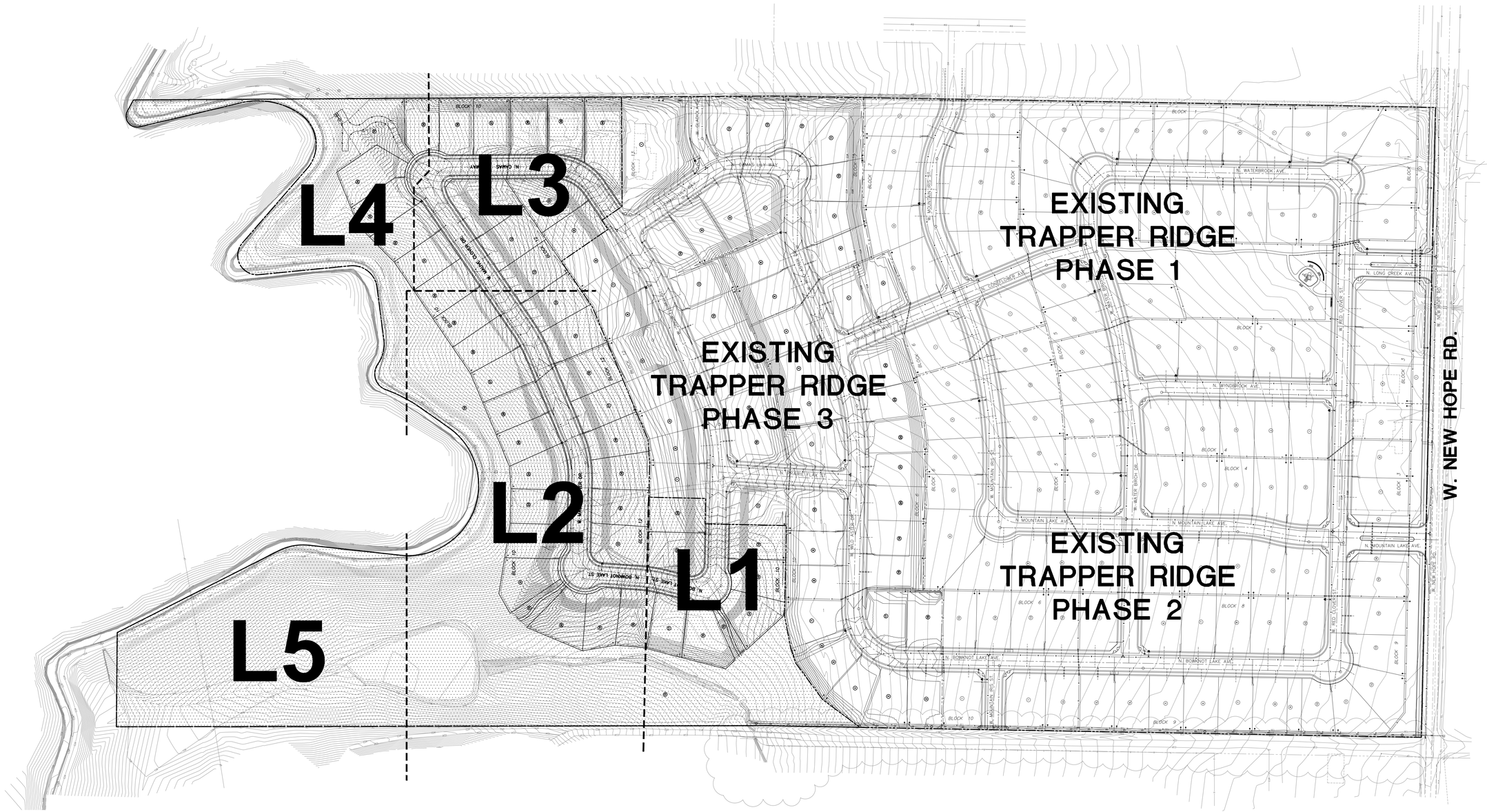
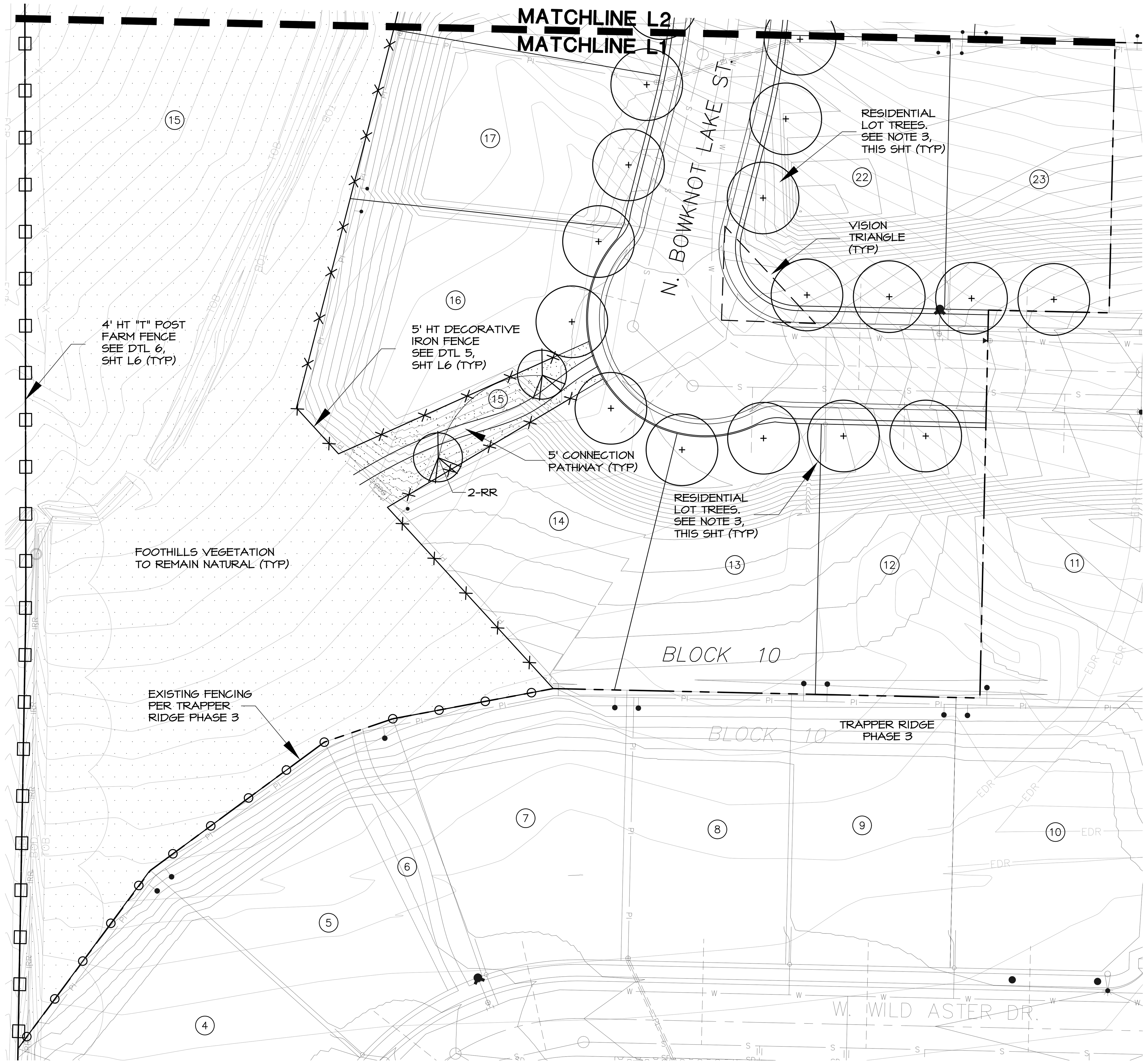

L4
L3
L2
L1
L5
EXISTING
TRAPPER RIDGE
PHASE 1
EXISTING
TRAPPER RIDGE
PHASE 3
EXISTING
TRAPPER RIDGE
PHASE 2
W. NEW HOPE RD.
N. WATERBROOK AVE.
N. LONG CREEK AVE.
N. WYNDBROOK AVE.
N. MOUNTAIN LAKE AVE.
N. BOWNOT LAKE AVE.
N. MOUNTAIN LAKE CIR.
N. MOUNTAIN LAKE DR.
N. MOUNTAIN RIDGE ST.
N. MOUNTAIN RIDGE DR.
N. MOUNTAIN RIDGE CT.
N. MOUNTAIN RIDGE PL.
N. MOUNTAIN RIDGE WAY
N. MOUNTAIN RIDGE LOOP
N. MOUNTAIN RIDGE AVE.
N. MOUNTAIN RIDGE LANE
N. MOUNTAIN RIDGE CIR.
N. MOUNTAIN RIDGE PLACE



PLANT SCHEDULE
(REFERENCE SHEET L6)

SYM	COMMON NAME
EVERGREEN TREES	
BH	BLACK HILLS SPRUCE
MJ	MOONGLOW JUNIPER
SHADE TREES (CLASS III)	
RO	RED OAK
SHADE/STREET TREES (CLASS II)	
TT	TULIP TREE
ORNAMENTAL TREES (CLASS I)	
AM	FLAME AMUR MAPLE
RR	ROYAL RAINDROPS CRABAPPLE
SHRUBS/ORNAMENTAL GRASSES/PERENNIALS	
BL	DARK PURPLE BLOOMERANG LILAC
BO	BLUE OAT GRASS
CR	RED FLOWER CARPET ROSE
GF	GOLDFLAME SPIREA
IH	IVORY HALO DOGWOOD
SN	SUMMERWINE NINEBARK
SW	SPILLED WINE WEIGELA

LAWN

FOOTHILL VEGETATION TO REMAIN NATURAL

6' VINYL FENCE ALONG EAST & WEST PERIMETER BACK OF LOT LINES & COMMON AREAS (TYP) SEE DTL 4, SHT L6

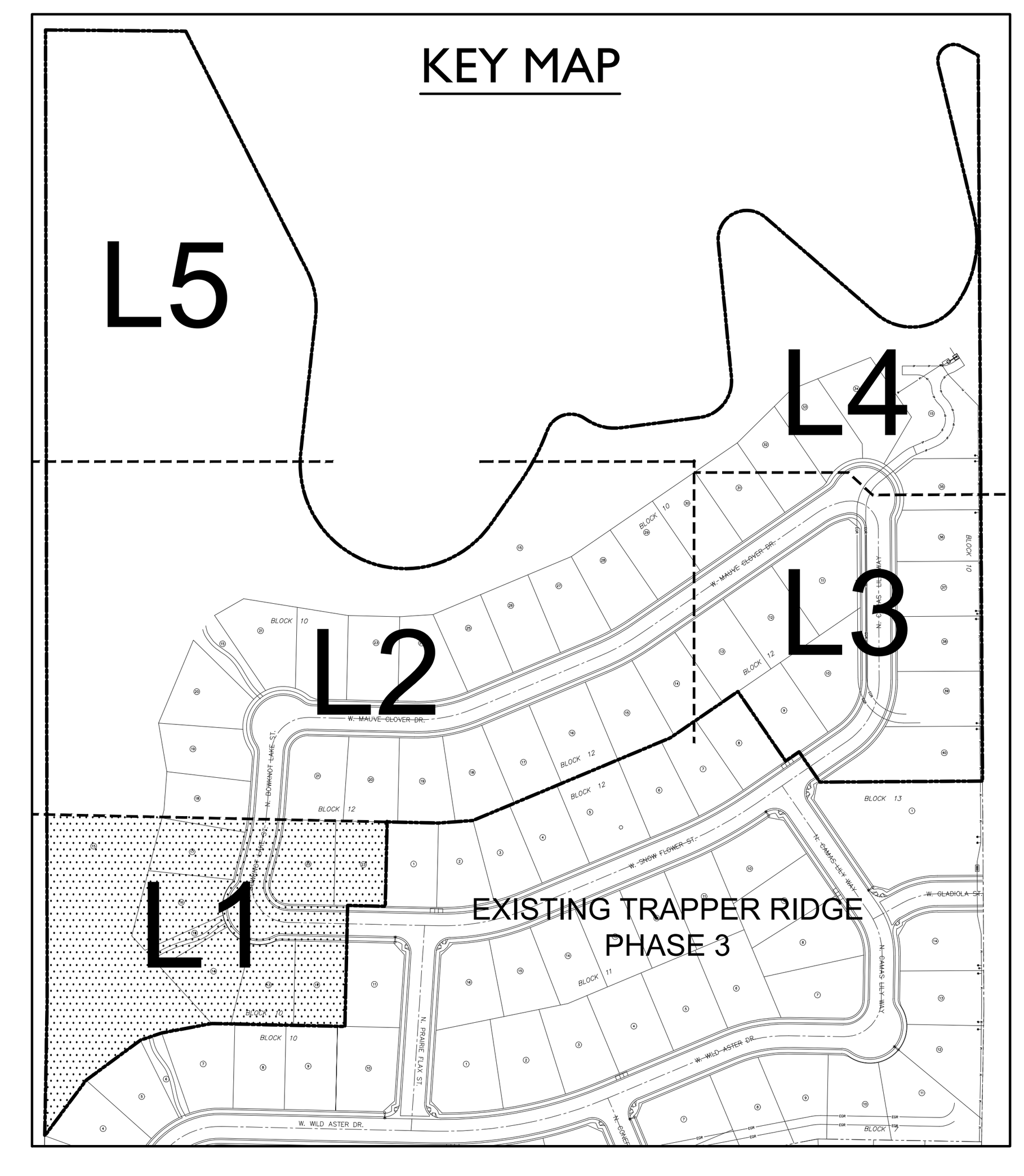
5' DECORATIVE IRON FENCE ALONG NORTH BACK OF LOTS (TYP) SEE DTL 5, SHT L6

4' "T" POST FARM FENCE W/ 14 GAUGE WELDED WIRE MESH ALONG WESTERN OPEN SPACE (TYP) SEE DTL 6, SHT L6

EXISTING FENCE (TYP)

NOTES

1. REFERENCE SHEET L6 FOR PLANT SCHEDULE, FENCING DETAILS, LANDSCAPE NOTES & DETAILS, AND LANDSCAPE CALCULATIONS.
2. REFERENCE SHEET L7 FOR LANDSCAPE AND IRRIGATION (PERFORMANCE) SPECIFICATIONS.
3. BUILDER SHALL BE REQUIRED TO INSTALL STREET TREES 5' FROM BACK OF SIDEWALKS EVERY 35' ADJACENT TO ALL BUILDABLE HOME LOTS PRIOR TO OCCUPANCY. FLEXIBILITY IN TREE PLACEMENT AND QUANTITIES TO BE GIVEN FOR DRIVEWAY AND UTILITY CONFLICTS. TREES TO BE SELECTED FROM THE SHADE/STREET TREES (CLASS II) LIST IN THE PLANT SCHEDULE AS SHOWN ON SHT L6.



NORTH

SCALE 1" = 30'

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STATE OF IDAHO — LICENSED LANDSCAPE ARCHITECT — LA-16535

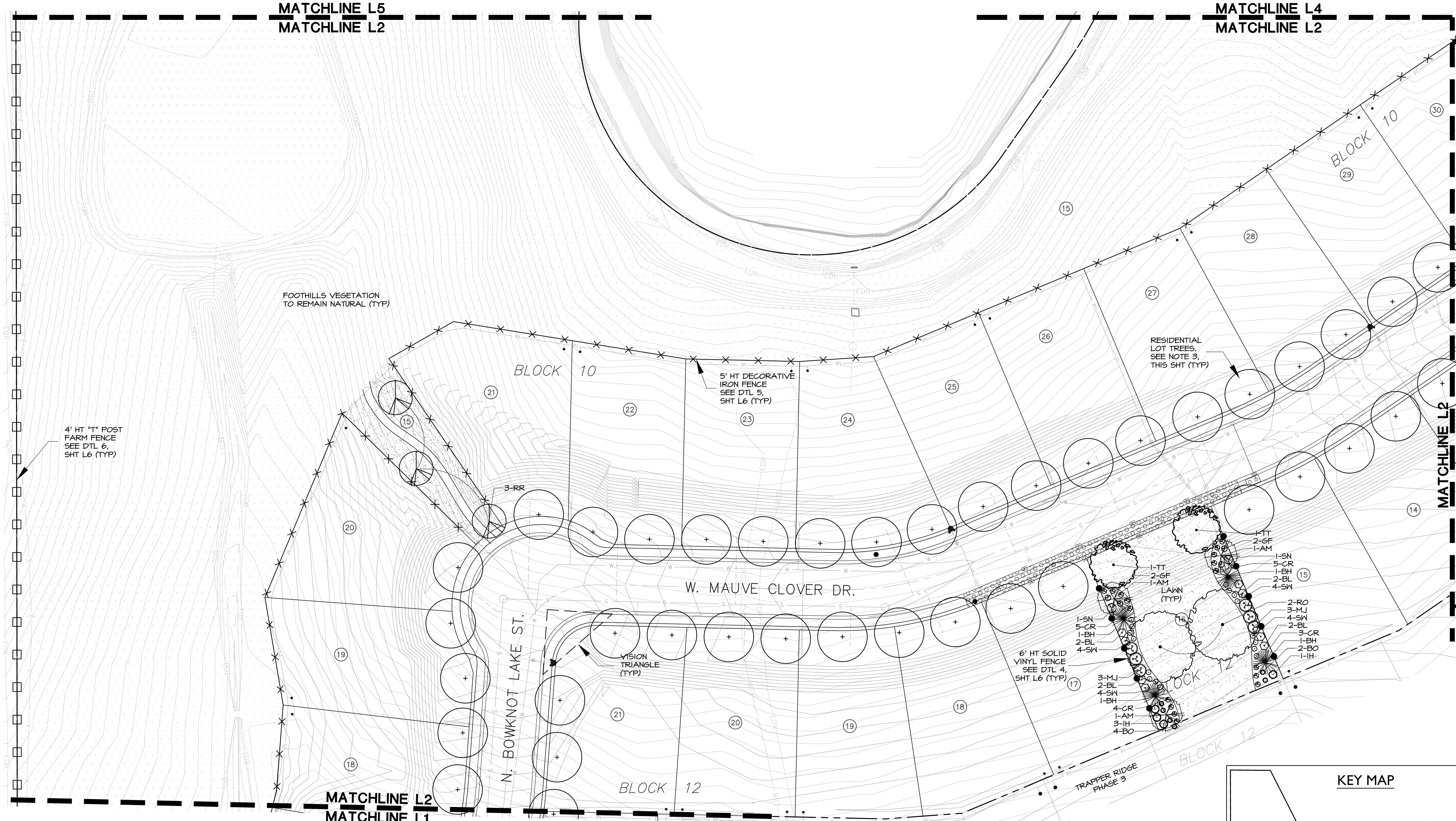
CHECKED BY: KCS
DRAWN BY: JJN

REVISED

NO.	DATE	DESCRIPTION
1	5/2/20	STREET TREES

FINAL PLAT LANDSCAPE PLAN
TRAPPER RIDGE SUBDIVISION NO. 4
TRILOGY DEVELOPMENT, INC.

DATE: 04-04-20
PROJECT: JBA-2040
SHEET L1



PLANT SCHEDULE

(REFERENCE SHEET L6)

SYM	COMMON NAME
EVERGREEN TREES	
BH	BLACK HILLS SPRUCE
MJ	MOONGLOW JUNIPER
SHADE TREES (CLASS III)	
RO	RED OAK
SHADE/STREET TREES (CLASS II)	
TT	TULIP TREE
ORNAMENTAL TREES (CLASS I)	
AM	FLAME AMUR MAPLE
RR	ROYAL RAINDROPS CRABAPPLE

SYM	COMMON NAME
SHRUBS/ORNAMENTAL GRASSES/PERENNIALS	
BL	DARK PURPLE BLOOMERANG LILAC
BO	BLUE OAT GRASS
CR	RED FLOWER CARPET ROSE
GF	GOLDFLAME SPIREA
IH	IVORY HALO DOGWOOD
SN	SUMMERWINE NINEBARK
SW	SPILLED WINE WEIGELA

SYM

- LAWN
- FOOTHILL VEGETATION TO REMAIN NATURAL
- 6' VINYL FENCE ALONG EAST & WEST PERIMETER BACK OF LOT LINES & COMMON AREAS (TYP) SEE DTL 4, SHT L6
- 5' DECORATIVE IRON FENCE ALONG NORTH BACK OF LOTS (TYP) SEE DTL 5, SHT L6
- 4' "T" POST FARM FENCE W/ 14 GAUGE WELDED WIRE MESH ALONG WESTERN OPEN SPACE (TYP) SEE DTL 6, SHT L6
- EXISTING FENCE (TYP)

NOTES

1. REFERENCE SHEET L6 FOR PLANT SCHEDULE, FENCING DETAILS, LANDSCAPE NOTES & DETAILS, AND LANDSCAPE CALCULATIONS.
2. REFERENCE SHEET L7 FOR LANDSCAPE AND IRRIGATION (PERFORMANCE) SPECIFICATIONS.
3. BUILDER SHALL BE REQUIRED TO INSTALL STREET TREES 5' FROM BACK OF SIDEWALKS EVERY 35' ADJACENT TO ALL BUILDABLE HOME LOTS PRIOR TO OCCUPANCY. FLEXIBILITY IN TREE PLACEMENT AND QUANTITIES TO BE GIVEN FOR DRIVEWAY AND UTILITY CONFLICTS. TREES TO BE SELECTED FROM THE SHADE/STREET TREES (CLASS II) LIST IN THE PLANT SCHEDULE AS SHOWN ON SHT L6.

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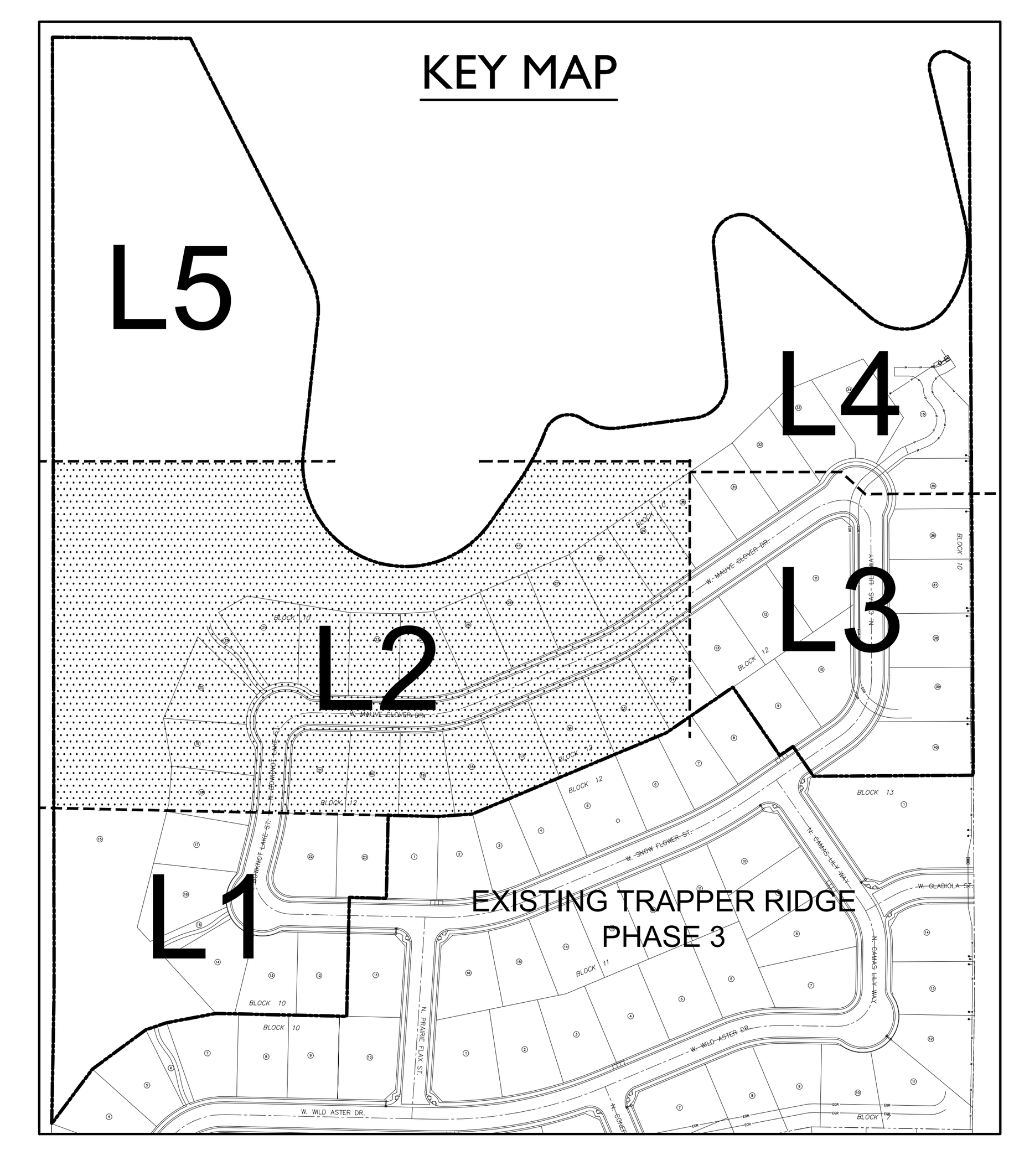
NORTH

0' 30' 60' 90'

SCALE 1" = 30'



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STATE OF IDAHO — KIMBERLY C. SIEGENTHALER — LICENSED LANDSCAPE ARCHITECT — LA 16535

CHECKED BY: KCS

DRAWN BY: JJN

REVISED

NO.	DATE	DESCRIPTION
1	5/2/20	STREET TREES

FINAL PLAT LANDSCAPE PLAN

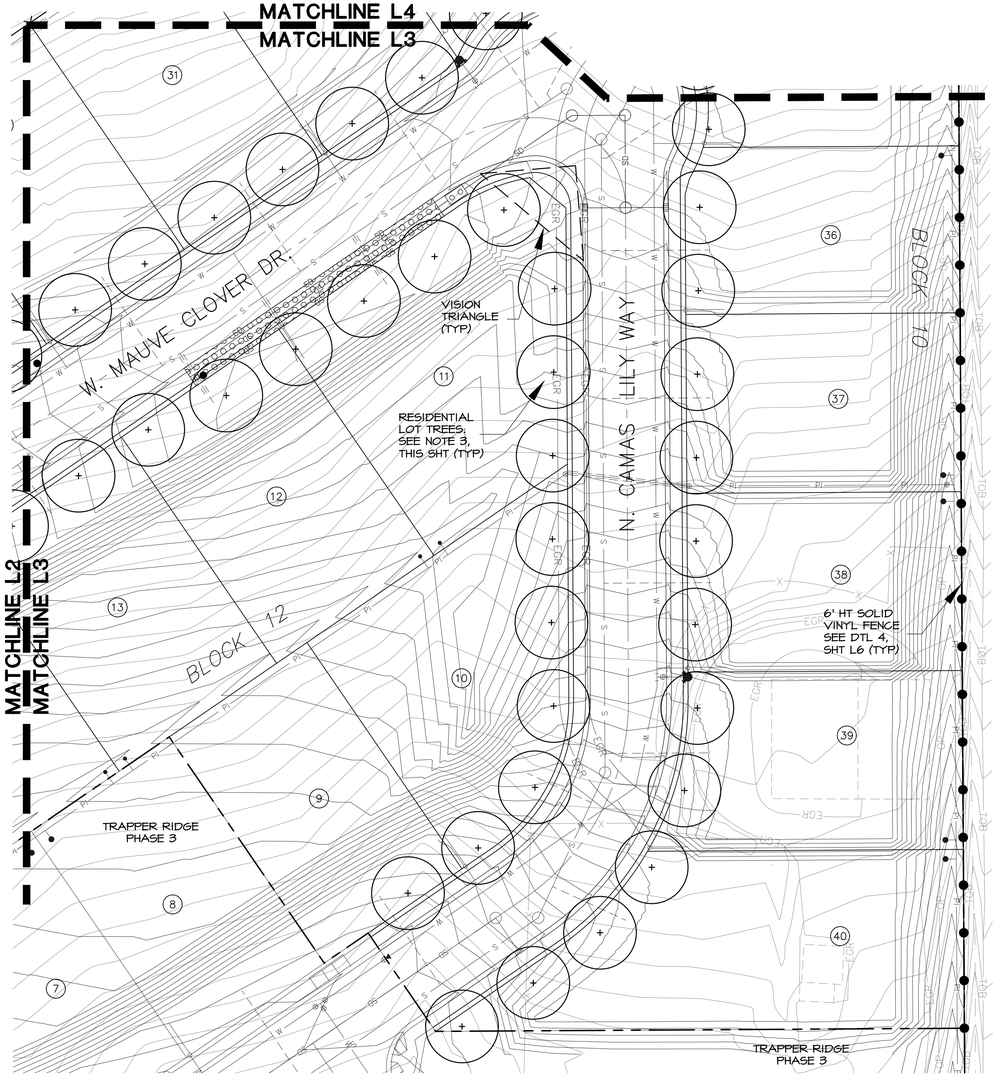
TRAPPER RIDGE SUBDIVISION NO. 4

TRILOGY DEVELOPMENT, INC.

DATE: 04-04-20

PROJECT: JBA-2040

SHEET L2



PLANT SCHEDULE

(REFERENCE SHEET L6)

SYM	COMMON NAME
EVERGREEN TREES	
BH	BLACK HILLS SPRUCE
MJ	MOONGLOW JUNIPER
SHADE TREES (CLASS III)	
RO	RED OAK
SHADE/STREET TREES (CLASS II)	
TT	TULIP TREE
ORNAMENTAL TREES (CLASS I)	
AM	FLAME AMUR MAPLE
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SHRUBS/ORNAMENTAL GRASSES/PERENNIALS	
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BO	BLUE OAT GRASS
CR	RED FLOWER CARPET ROSE
GF	GOLDFLAME SPIREA
IH	IVORY HALO DOGWOOD
SN	SUMMERWINE NINEBARK
SW	SPILLED WINE WEIGELA

LAWN

FOOTHILL VEGETATION TO REMAIN NATURAL

6' VINYL FENCE ALONG EAST & WEST PERIMETER BACK OF LOT LINES & COMMON AREAS (TYP) SEE DTL 4, SHT L6

5' DECORATIVE IRON FENCE ALONG NORTH BACK OF LOTS (TYP) SEE DTL 5, SHT L6

4' "T" POST FARM FENCE W/ 14 GAUGE WELDED WIRE MESH ALONG WESTERN OPEN SPACE (TYP) SEE DTL 6, SHT L6

EXISTING FENCE (TYP)

NOTES

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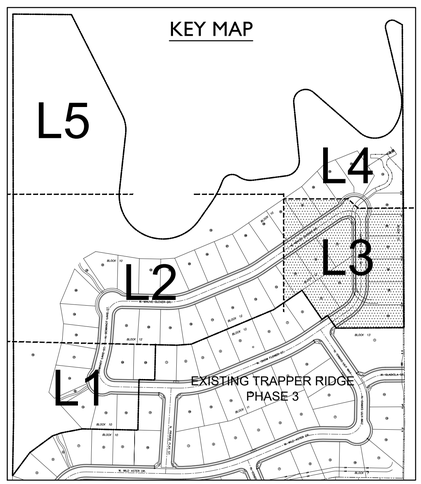

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Ph. (208) 345-7775 www.jensenbelts.com

NORTH

0' 30' 60' 90'

SCALE 1" = 30'

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STATE OF IDAHO — KYLE C. SECRIST — 16535 — REGISTERED LANDSCAPE ARCHITECT

CHECKED BY: KCS

DRAWN BY: JJN

REVISED

NO.	DATE	DESCRIPTION
1	5/2/20	STREET TREES

FINAL PLAT LANDSCAPE PLAN

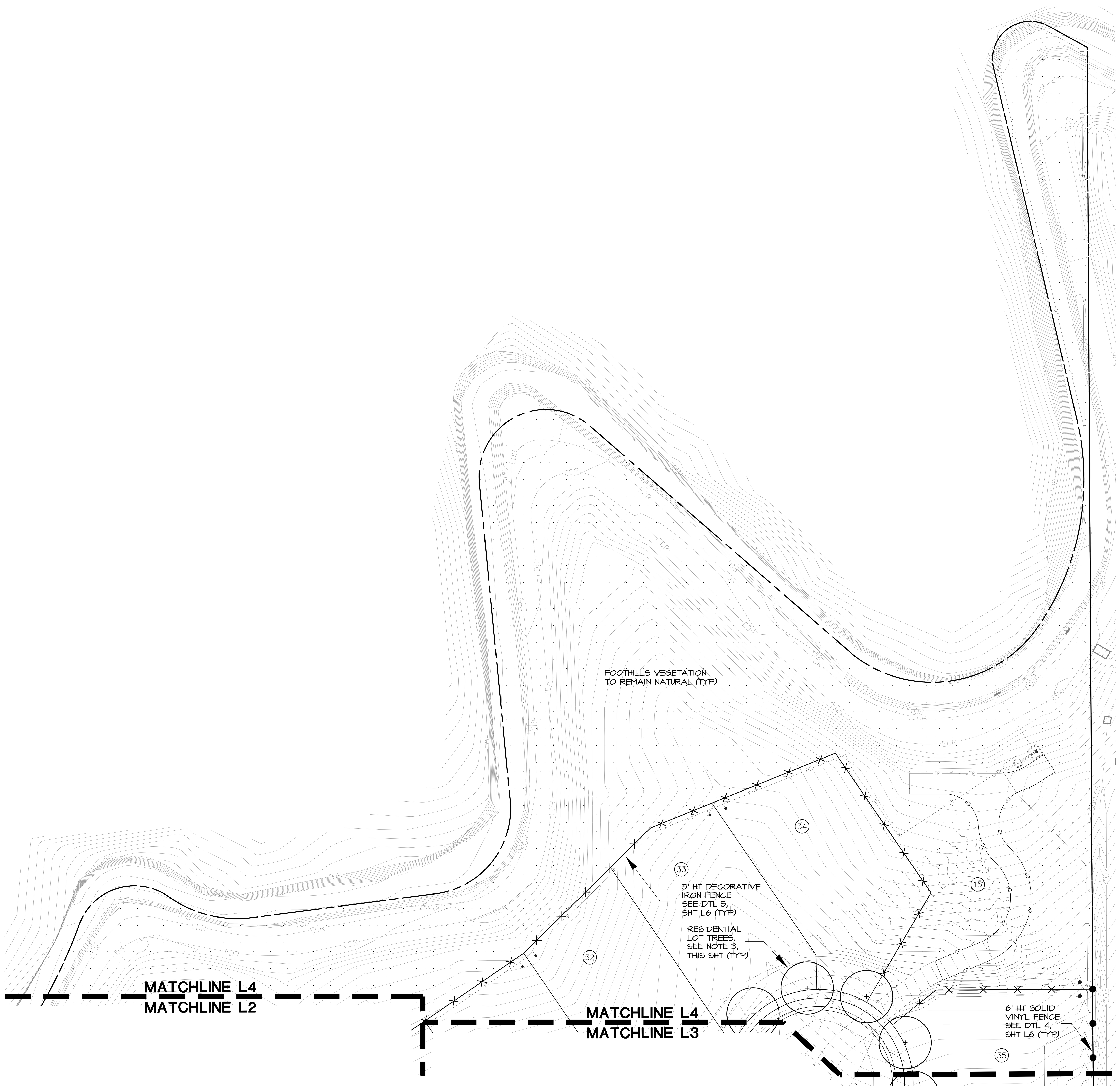
TRAPPER RIDGE SUBDIVISION NO. 4

TRILOGY DEVELOPMENT, INC.

DATE: 04-04-20

PROJECT: JBA-2040

SHEET L3



PLANT SCHEDULE

(REFERENCE SHEET L6)

SYM	COMMON NAME
EVERGREEN TREES	
BH	BLACK HILLS SPRUCE
MJ	MOONGLOW JUNIPER
SHADE TREES (CLASS III)	
RO	RED OAK
SHADE/STREET TREES (CLASS II)	
TT	TULIP TREE
ORNAMENTAL TREES (CLASS I)	
AM	FLAME AMUR MAPLE
RR	ROYAL RAINDROPS CRABAPPLE
SHRUBS/ORNAMENTAL GRASSES/PERENNIALS	
BL	DARK PURPLE BLOOMERANG LILAC
BO	BLUE OAT GRASS
CR	RED FLOWER CARPET ROSE
GF	GOLDFLAME SPIREA
IH	IVORY HALO DOGWOOD
SN	SUMMERWINE NINEBARK
SW	SPILLED WINE WEIGELA

LAWN

FOOTHILL VEGETATION TO REMAIN NATURAL

6' VINYL FENCE ALONG EAST & WEST PERIMETER BACK OF LOT LINES & COMMON AREAS (TYP) SEE DTL 4, SHT L6

5' DECORATIVE IRON FENCE ALONG NORTH BACK OF LOTS (TYP) SEE DTL 5, SHT L6

4' "T" POST FARM FENCE W/ 14 GAUGE WELDED WIRE MESH ALONG WESTERN OPEN SPACE (TYP) SEE DTL 6, SHT L6

EXISTING FENCE (TYP)

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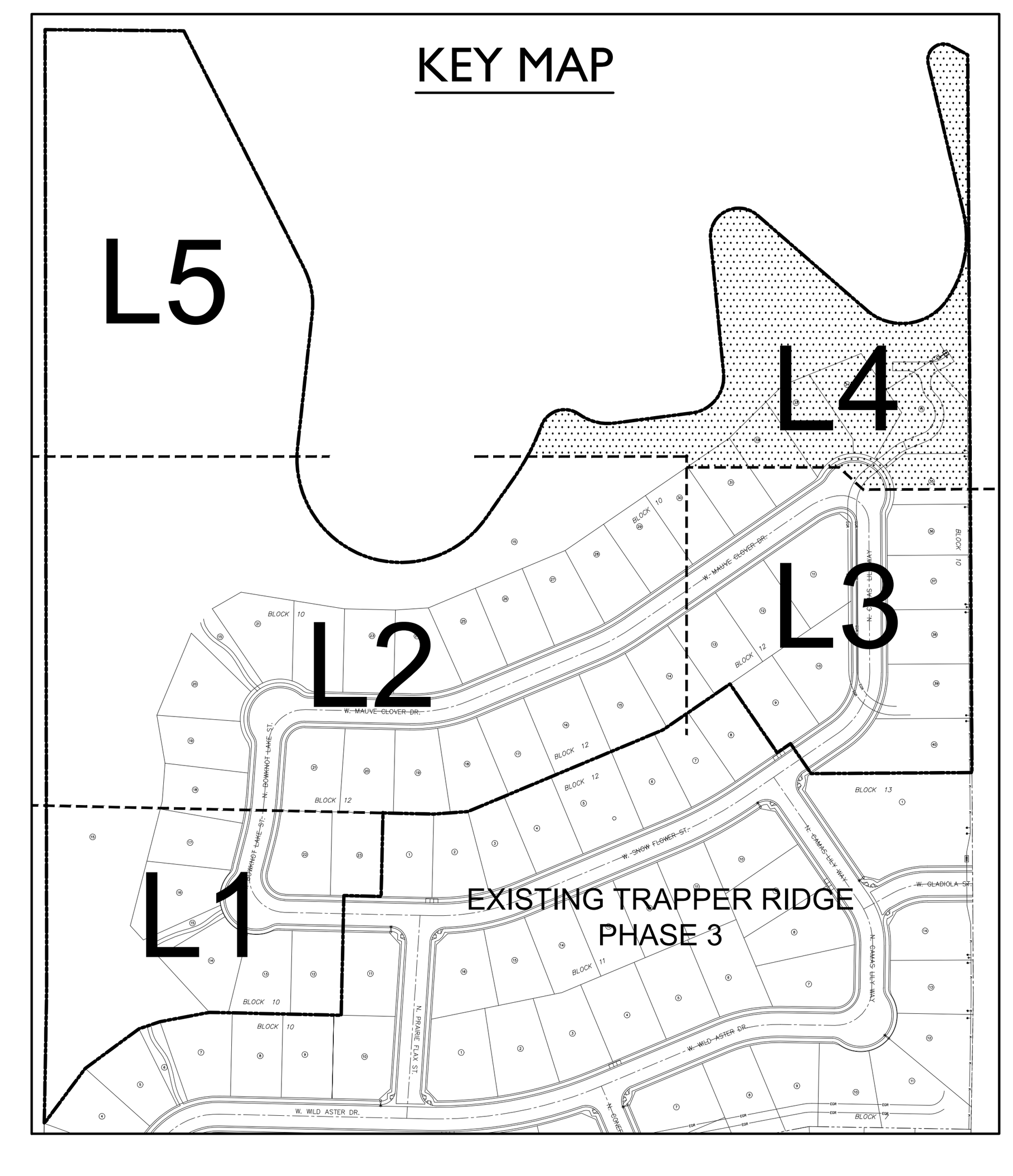
KEY MAP



NORTH

0' 30' 60' 90'

SCALE 1" = 30'

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CHECKED BY: KCS

DRAWN BY: JJN

REVISED

NO.	DATE	DESCRIPTION
1	5/2/20	STREET TREES

FINAL PLAT LANDSCAPE PLAN

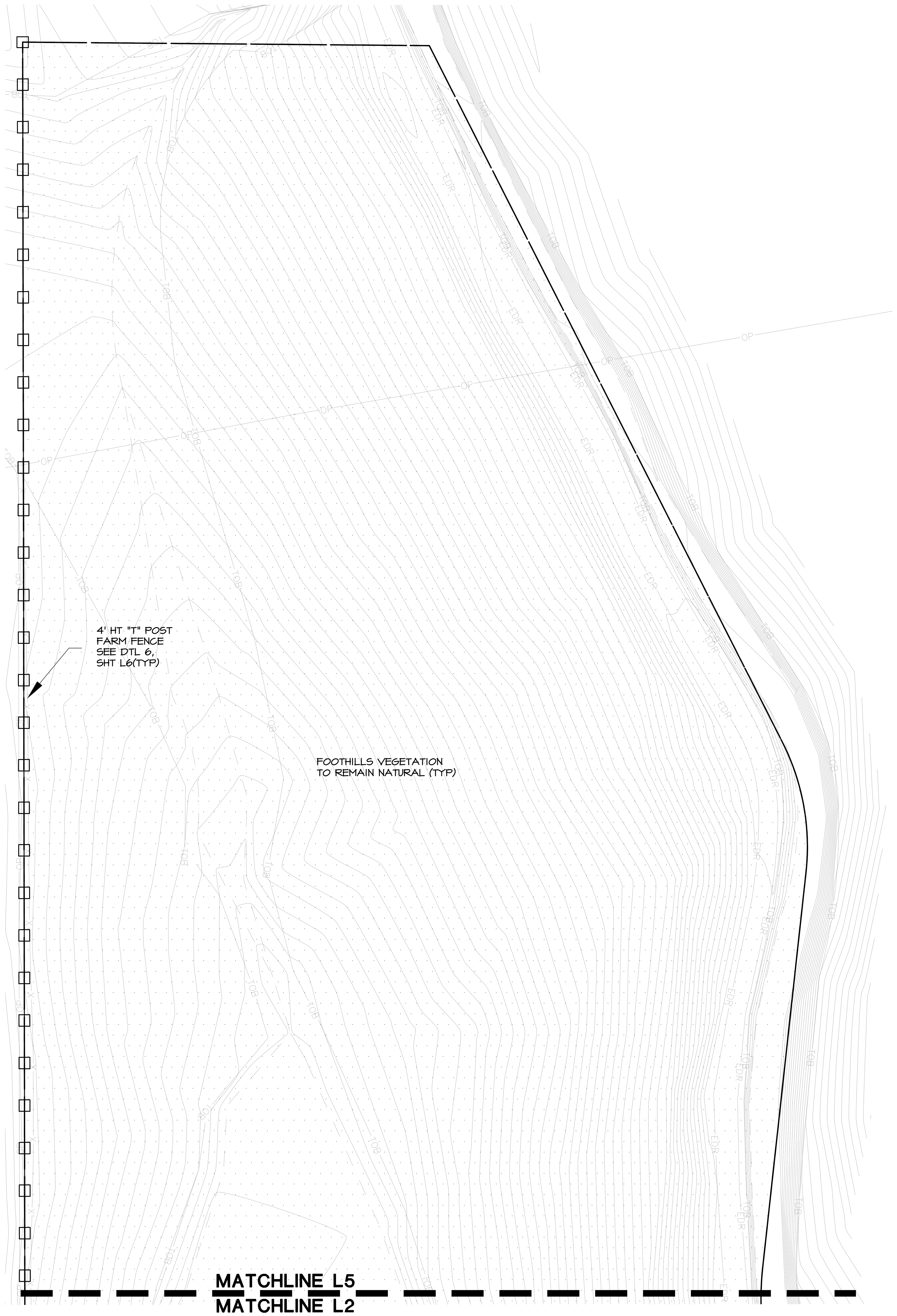
TRAPPER RIDGE SUBDIVISION NO. 4

TRILOGY DEVELOPMENT, INC.

DATE: 04-04-20

PROJECT: JBA-2040

SHEET L4



PLANT SCHEDULE

(REFERENCE SHEET L6)

SYM	COMMON NAME
EVERGREEN TREES	
BH	BLACK HILLS SPRUCE
MJ	MOONGLOW JUNIPER
SHADE TREES (CLASS III)	
RO	RED OAK
SHADE/STREET TREES (CLASS II)	
TT	TULIP TREE
ORNAMENTAL TREES (CLASS I)	
AM	FLAME AMUR MAPLE
RR	ROYAL RAINDROPS CRABAPPLE
SHRUBS/ORNAMENTAL GRASSES/PERENNIALS	
BL	DARK PURPLE BLOOMERANG LILAC
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CR	RED FLOWER CARPET ROSE
GF	GOLDFLAME SPIREA
IH	IVORY HALO DOGWOOD
SN	SUMMERWINE NINEBARK
SW	SPILLED WINE WEIGELA

LAWN

FOOTHILL VEGETATION TO REMAIN NATURAL

6' VINYL FENCE ALONG EAST & WEST PERIMETER BACK OF LOT LINES & COMMON AREAS (TYP) SEE DTL 4, SHT L6

5' DECORATIVE IRON FENCE ALONG NORTH BACK OF LOTS (TYP) SEE DTL 5, SHT L6

4' "T" POST FARM FENCE W/ 14 GAUGE WELDED WIRE MESH ALONG WESTERN OPEN SPACE (TYP) SEE DTL 6, SHT L6

EXISTING FENCE (TYP)

NOTES

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NORTH

0' 30' 60' 90'

SCALE 1" = 30'

JENSENBELTS ASSOCIATES

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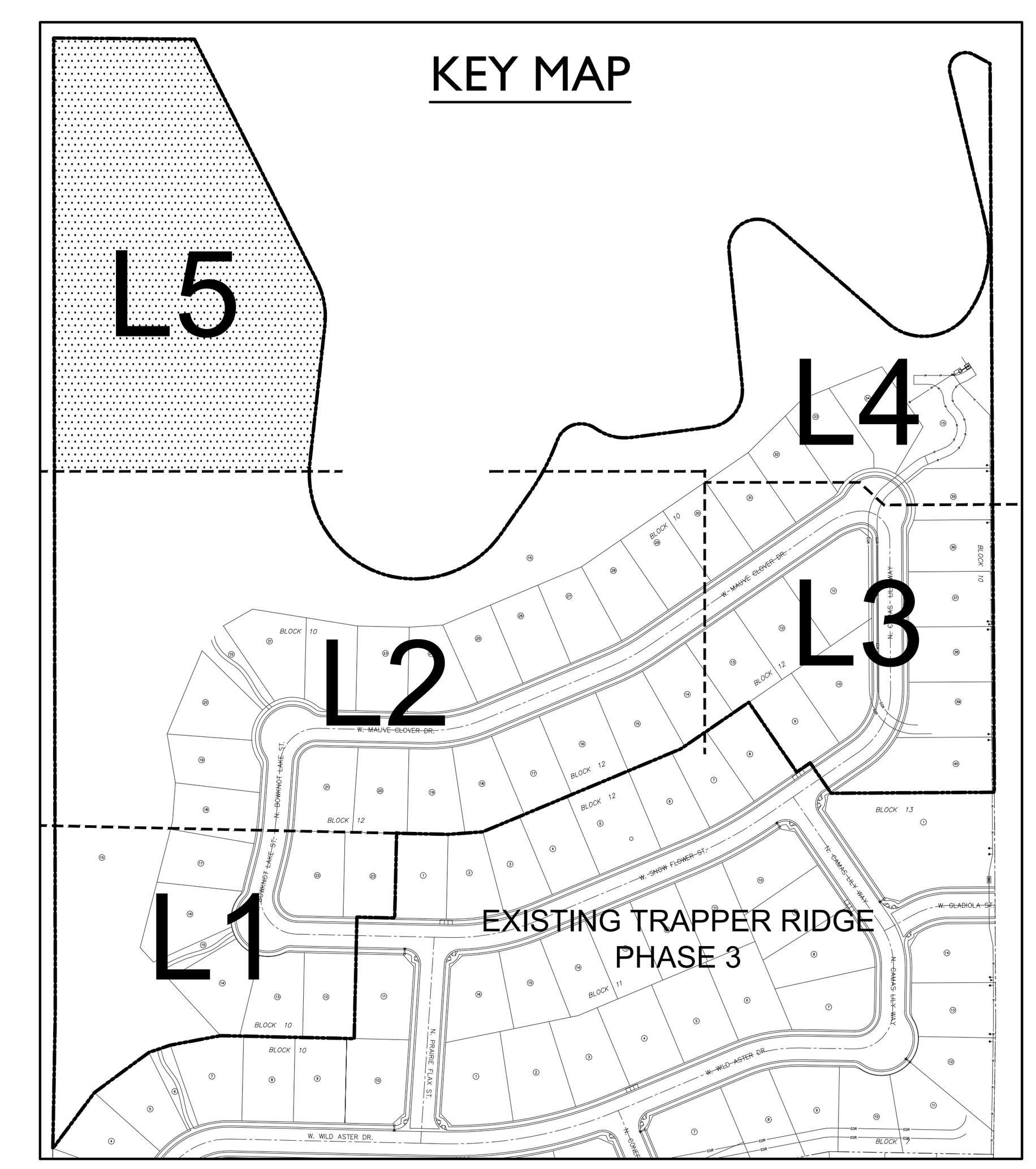

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CHECKED BY: KCS

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REVISED		
NO.	DATE	DESCRIPTION
1	5/2/20	STREET TREES

FINAL PLAT LANDSCAPE PLAN

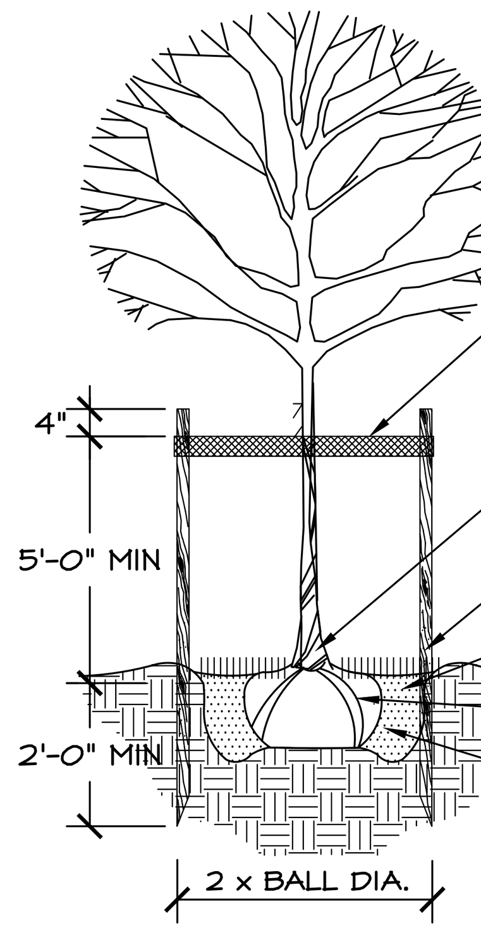
TRAPPER RIDGE SUBDIVISION NO. 4

TRILOGY DEVELOPMENT, INC.

DATE: 04-04-20

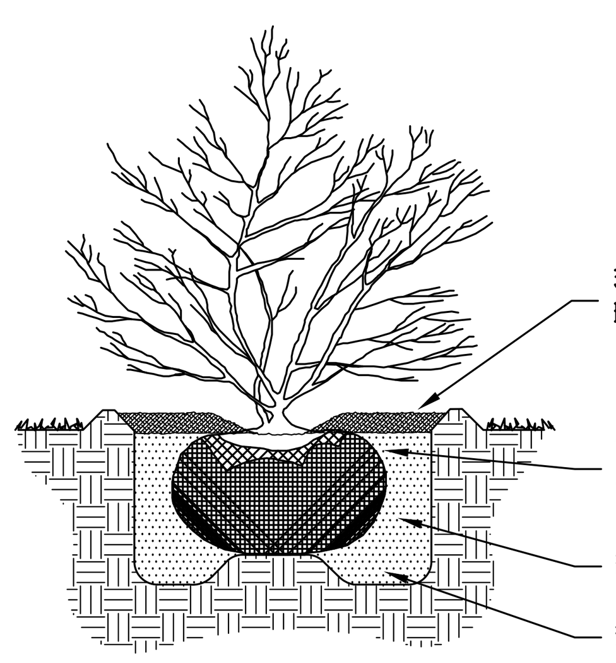
PROJECT: JBA-2040

SHEET L5



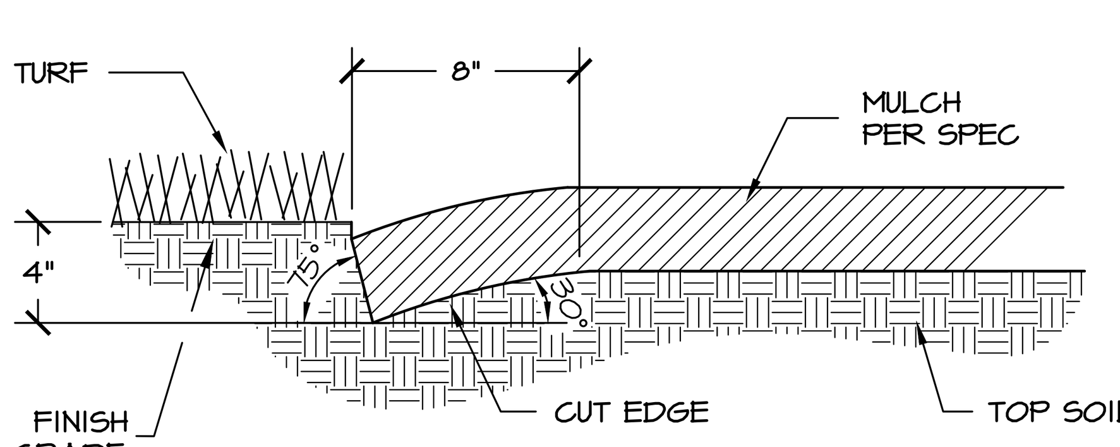
NOTES:
1. REMOVE ALL TWINE, ROPE, OR BINDINGS FROM ALL TRUNKS.
2. REMOVE BURLAP AND WIRE BASKETS FROM THE TOP 1/3 OF ALL ROOT BALLS AFTER PLANTING. IF SYNTHETIC WRAP/BURLAP IS USED, IT MUST BE COMPLETELY REMOVED.
3. STAKING OF TREES TO BE THE CONTRACTOR'S OPTION; HOWEVER, THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT ALL TREES ARE PLANTED STRAIGHT AND REMAIN STRAIGHT FOR A MIN OF 1 YEAR. ALL STAKING SHALL BE REMOVED AT THE END OF THE 1 YEAR WARRANTY PERIOD.
4. TREE TREES PLANTED IN TURF AREAS: REMOVE TURF 3' DIA. FROM TREE TRUNK.

1 TREE PLANTING/STAKING
NOT TO SCALE

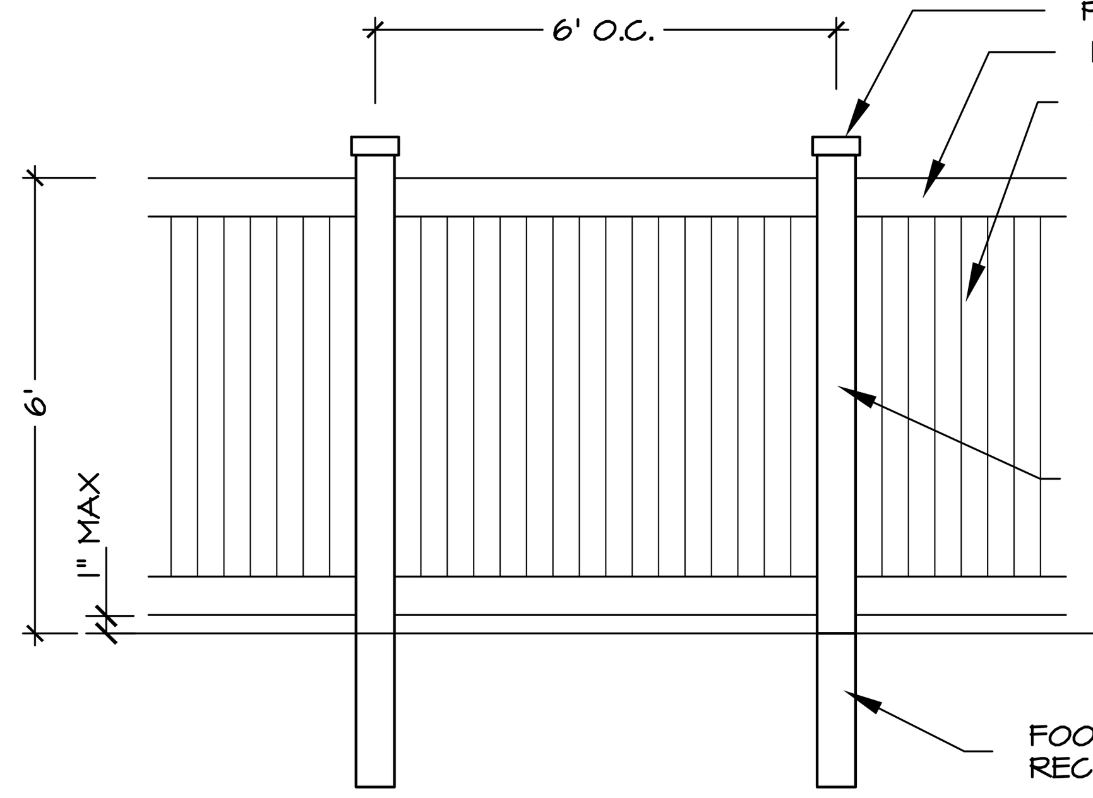


NOTE: DIG HOLE TWICE THE SIZE OF ROOTBALL.

2 SHRUB PLANTING
NOT TO SCALE

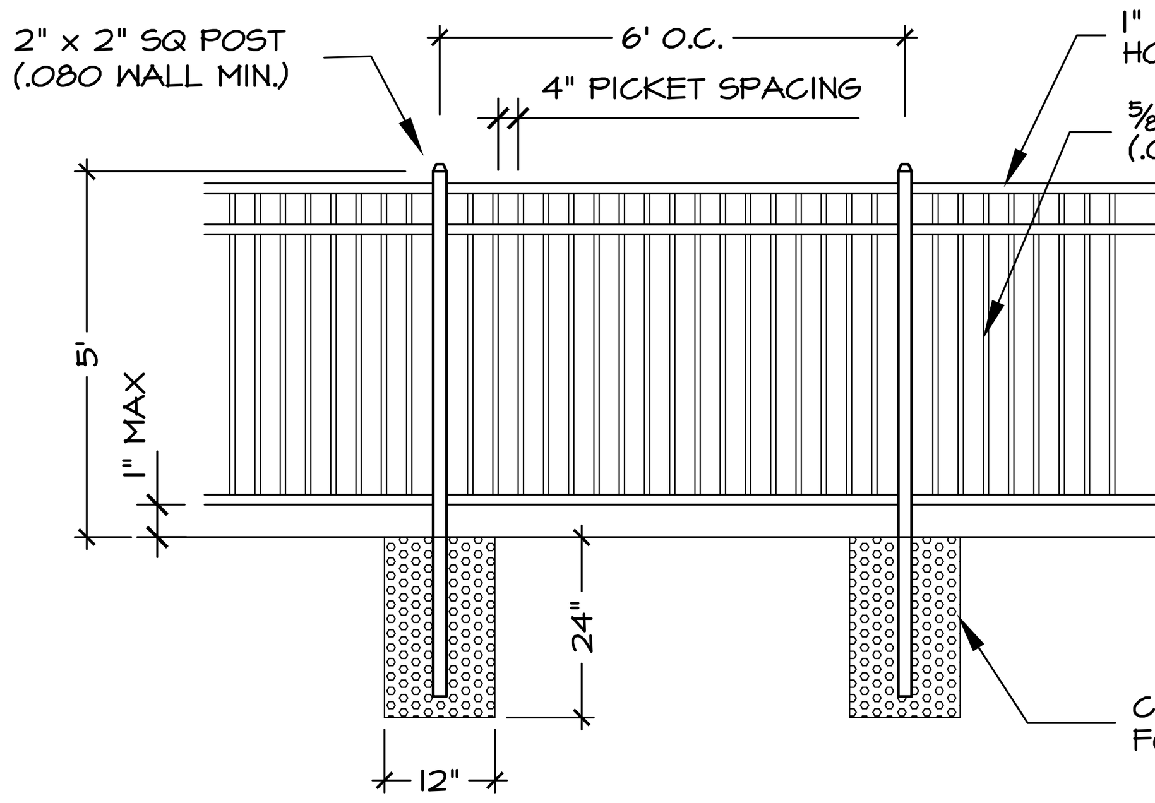


3 PLANTER CUT BED EDGE
NOT TO SCALE



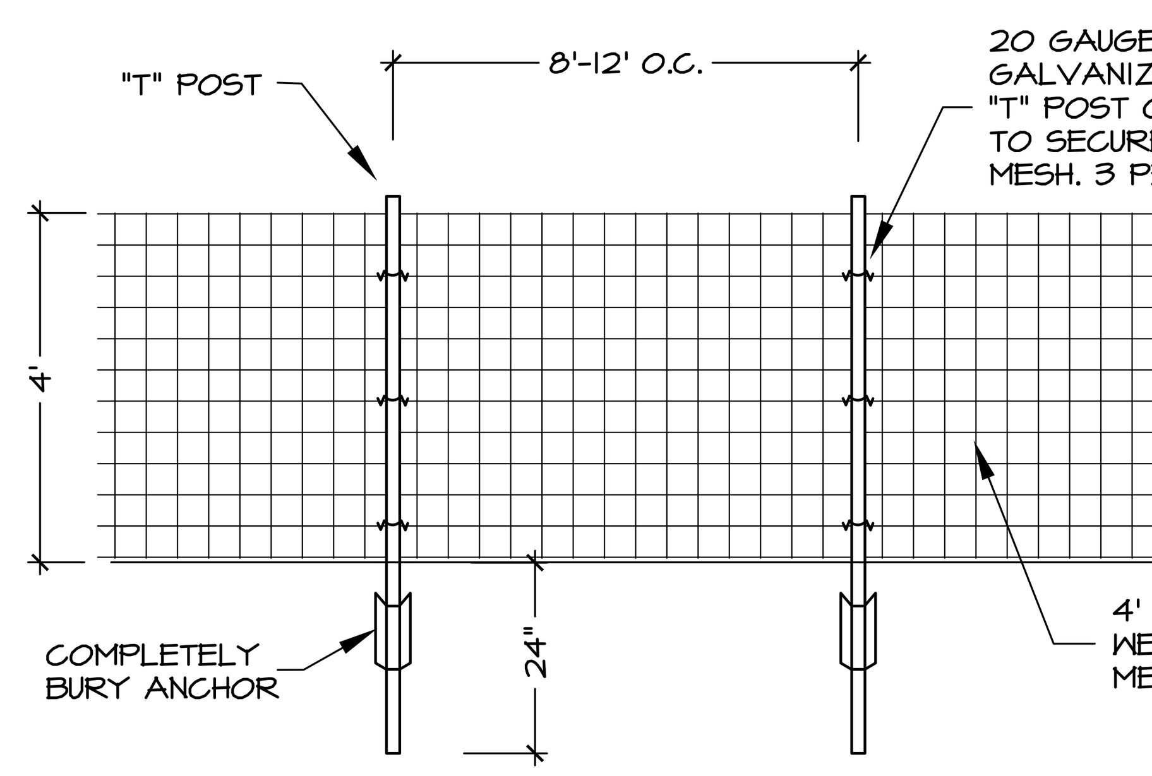
NOTES:
1. FENCE TO STEP DOWN TO 3' HEIGHT 20' FROM ROW.
2. VINYL FENCE STYLE MAY VARY SLIGHTLY.

4 VINYL PRIVACY FENCE
NOT TO SCALE



NOTES:
1. DECORATIVE IRON FENCE STYLE MAY VARY SLIGHTLY.

5 DECORATIVE IRON FENCE
NOT TO SCALE



NOTES:
1. "T" POST FENCE STYLE MAY VARY SLIGHTLY.

6 4' "T" POST FARM FENCE
NOT TO SCALE

PLANT SCHEDULE

SYM	COMMON NAME	BOTANICAL NAME	SIZE
EVERGREEN TREES			
BH	BLACK HILLS SPRUCE	PICEA GLAUCA 'DENSATA'	6-8' HT B&B
MJ	MOONGLOW JUNIPER	JUNIPERUS SCOPULORUM 'MOONGLOW'	6-8' HT B&B
SHADE TREES (CLASS III)			
RO	RED OAK	QUERCUS RUBRA	2" CAL B&B
SHADE/STREET TREES (CLASS II)			
	AUTUMN PURPLE ASH	FRAXINUS AMERICANA 'AUTUMN PURPLE'	2" CAL B&B
	COMMON HACKBERRY	CELTIS OCCIDENTALIS	2" CAL B&B
	SKYLINE HONEYLOCUST	GLEDITSIA TRIACANTHOS INERMIS 'SKYCOLE'	2" CAL B&B
	LITTLELEAF LINDEN	TILIA CORDATA	2" CAL B&B
	MANCHURIAN ASH	FRAXINUS MANDSHURICA	2" CAL B&B
	AMERICAN SWEETGUM	LIQUIDAMBER STYRACIFLUA	2" CAL B&B
TT	TULIP TREE	LIRODENDRON TULIPIFERA	2" CAL B&B
ORNAMENTAL TREES (CLASS I)			
AM	FLAME AMUR MAPLE	ACER GINNALA 'FLAME'	6-8' HT. MULTI-STEM
RR	ROYAL RAINDROPS CRABAPPLE	MALUS x 'JFS-KW5'	2" CAL B&B
SHRUBS/ORNAMENTAL GRASSES/PERENNIALS			
BL	DARK PURPLE BLOOMERANG LILAC	SYRINGA x 'SMSJBPT'	5 GAL
BO	BLUE OAT GRASS	HELICTOTRICHON SEMPERVIRENS	1 GAL
CR	RED FLOWER CARPET ROSE	ROSA 'FLOWER CARPET- NOARE'	2 GAL
GF	GOLDFLAME SPIREA	SPIRAEA x BUMALDA 'GOLDFLAME'	3 GAL
IH	IVORY HALO DOGWOOD	CORNUS ALBA 'BAILHALO'	5 GAL
SN	SUMMERWINE NINEBARK	PHYSOCARPUS OPULIFOLIA 'SEWARD'	5 GAL
SW	SPILLED WINE WEIGELA	WEIGELA FLORIDA 'BOKRASPIWI'	2 GAL

LAWN

6' VINYL FENCE ALONG EAST & WEST PERIMETER BACK OF LOT LINES & COMMON AREAS (TYP) SEE DTL 4, THIS SHT

5' DECORATIVE IRON FENCE ALONG NORTH BACK OF LOTS (TYP) SEE DTL 5, THIS SHT

FOOTHILL VEGETATION TO REMAIN NATURAL

4' "T" POST FARM FENCE W/ 14 GAUGE WELDED WIRE MESH ALONG WESTERN OPEN SPACE (TYP) SEE DTL 6, THIS SHT

EXISTING FENCE (TYP)

NOTES

1. ALL PLANTING AREAS SHALL BE INSTALLED BE IN ACCORDANCE WITH CITY OF STAR CODE. NEW HOPE ROAD WILL MEET THE REQUIREMENT TO INSTALL ONE (1) TREE PER 35' LINEAR FEET. REFER TO SHT L7 - SPEC SECTION 32 90 00 - LANDSCAPE SPECIFICATIONS.
2. ALL PLANTING AREAS TO BE WATERED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM. REFER TO SHT L7 - SPEC SECTION 32 84 00 - IRRIGATION PERFORMANCE SPECIFICATIONS.
3. LOCATE AND PROTECT ALL UTILITIES DURING CONSTRUCTION.
4. TREES SHALL NOT BE PLANTED WITHIN THE 10-FOOT CLEAR ZONE OF ALL STORM DRAIN PIPE, STRUCTURES, OR FACILITIES. SEEPAGE BEDS MUST BE PROTECTED FROM ANY AND ALL CONTAMINATION DURING THE CONSTRUCTION AND INSTALLATION OF THE LANDSCAPE IRRIGATION SYSTEM. NO SOD SHALL BE PLACED OVER OPEN SAND WINDOWS WHERE INDICATED ON PLAN.
5. NO TREES SHALL IMPEDE THE 40' VISION TRIANGLE AT ALL INTERSECTIONS. NO CONIFEROUS TREES OR SHRUBS OVER 3' HIGH AT MATURITY WILL BE LOCATED WITHIN SIGHT TRIANGLE OR ROW. AS TREES MATURE, THE OWNER SHALL BE RESPONSIBLE FOR PRUNING TREE CANOPIES TO MEET REQUIREMENTS FOR MAINTAINING CLEAR VISIBILITY WITHIN 40' STREET VISION TRIANGLE.
6. TREES SHALL BE PLANTED NO CLOSER THAN 50' FROM INTERSECTION STOP SIGNS.
7. CLASS II TREES AND LANDSCAPE IN FRONT OF BUILDING LOTS ON INTERIOR STREETS TO BE COMPLETED DURING CONSTRUCTION ON THESE LOTS. TREE LOCATIONS MAY BE ALTERED TO ACCOMMODATE DRIVEWAYS AND UTILITIES. TREES MUST BE CLASS II AND SHALL NOT BE PLANTED WITHIN 5' OF WATER METERS OR UNDERGROUND UTILITY LINES. BUILDER SHALL BE REQUIRED TO INSTALL STREET TREES 5' FROM BACK OF SIDEWALKS EVERY 35' ADJACENT TO ALL BUILDABLE HOME LOTS PRIOR TO OCCUPANCY. FLEXIBILITY IN TREE PLACEMENT AND QUANTITIES TO BE GIVEN FOR DRIVEWAY AND UTILITY CONFLICTS. TREES TO BE SELECTED FROM THE SHADE/STREET TREES (CLASS II) LIST IN THE PLANT SCHEDULE AS SHOWN ON THIS SHT.
8. PLANT LIST IS SUBJECT TO SUBSTITUTIONS OF SIMILAR SPECIES DUE TO PLANT MATERIAL AVAILABILITY. BURLAP AND WIRE BASKETS TO BE REMOVED FROM ROOT BALL AS MUCH AS POSSIBLE, AT LEAST HALFWAY DOWN THE BALL OF THE TREE. ALL NYLON ROPES TO BE COMPLETELY REMOVED FROM TREES.
9. ALL EXISTING TREE ON SITE ARE SCRUB VOLUNTEER TREES ALONG DITCH BANKS AND ARE TO BE REMOVED. NO EXISTING TREES ON SITE TO BE MITIGATED FOR.
10. STREET TREES SHALL BE PLANTED NO CLOSER THAN 25' FROM STREET LIGHT FIXTURES.

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REVISED

NO.	DATE	DESCRIPTION
1	5/2/20	STREET TREES

FINAL PLAT LANDSCAPE PLAN
TRAPPER RIDGE SUBDIVISION NO. 4
TRILOGY DEVELOPMENT, INC.

DATE: 04-04-20
PROJECT: JBA-2040
SHEET L6

SECTION 32 90 00 - LANDSCAPE WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections.

1.2 SUMMARY
A. This Section includes provisions for the following items:
1. Trees.
2. Shrubs; Ground cover.
3. Lawns.
4. Topsoil and Soil Amendments.
5. Miscellaneous Landscape Elements.
6. Initial maintenance of landscape materials.
B. Related Sections: The following sections contain requirements.
1. Underground sprinkler system is specified in Section 32 84 00 - Irrigation

1.3 QUALITY ASSURANCE
A. Subcontract landscape work to a single firm specializing in landscape work.
B. Source Quality Control:
1. General: Ship landscape materials with certificates of inspection required by governing authorities. Comply with regulations applicable to landscape materials.
2. Do not make substitutions. If specified landscape material is not obtainable, submit proof of non-availability to Architect, with proposal for use of equivalent material.
3. Analysis and Standards: Package standard products with manufacturer's certified analysis. For other materials, provide analysis by recognized laboratory made in accordance with methods established by the Association of Official Agriculture Chemists, wherever applicable.
4. Trees, Shrubs and Groundcovers: Provide trees, shrubs, and groundcovers of quantity, size, genus, species, and variety shown and scheduled for work complying with recommendations and requirements of ANSI Z60.1 "American Standard for Nursery Stock". Provide healthy, vigorous stock, grown in recognized nursery in accordance with good horticultural practice and free of disease, insects, eggs, larvae, and defects such as knots, sun-scald, injuries, abrasions, or disfigurement.
5. Label at least one tree and one shrub of each variety with attached waterproof tag with legible designation of botanical and common name.
a. Where formal arrangements or consecutive order of trees or shrubs are shown, select stock for uniform height and spread.
6. Inspection: The Architect may inspect trees and shrubs either at place of growth or at site before planting, for compliance with requirements for genus, species, variety, size, and quality. Architect retains right to further inspect trees and shrubs for size and condition of balls and root systems, insects, injuries and latent defects, and to reject unsatisfactory or defective material at any time during progress of work. Remove rejected trees or shrubs immediately from project site.

1.4 SUBMITTALS
A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.
B. Plant and Material Certifications:
1. Certificates of inspection as required by governmental authorities.
2. Manufacturer's or vendor's certified analysis for soil amendments and fertilizer materials.
3. Label data substantiating that plants, trees, shrubs and planting materials comply specified requirements.
C. Mulch: Submit 1 gal bag of mulch sample for approval.

1.5 DELIVERY, STORAGE AND HANDLING
A. Sod: Time delivery so that sod will be placed within 24 hours after stripping. Protect sod against drying and breaking of rolled strips.
B. Trees and Shrubs: Provide freshly dug trees and shrubs. Do not prune prior to delivery unless otherwise approved by Architect. Do not bend or bind-tie trees or shrubs in such manner as to damage bark, break branches, or destroy natural shape. Provide protective covering during delivery. Do not drop balled and burlapped stock during delivery.
C. Deliver trees and shrubs after preparations for planting have been completed and plant immediately. If planting is delayed more than 6 hours after delivery, set trees and shrubs in shade, protect from weather and mechanical damage, and keep roots moist by covering with mulch, burlap or other acceptable means of retaining moisture.
D. Do not remove container-grown stock from containers until planting time.
E. Do not drop or dump materials from vehicles during delivery or handling. Avoid any damage to rootballs during deliver, storage and handling.

1.6 JOB CONDITIONS
A. Utilities: Determine location of underground utilities and work in a manner which will avoid possible damage. Hand excavate, as required. Maintain grade stakes until removal is mutually agreed upon by parties concerned.
B. Excavation: When conditions detrimental to plant growth are encountered, such rubble fill, adverse drainage conditions, or obstructions, notify Architect before planting.
C. Adjacent Landscape: Protect planted areas adjacent to construction area. Replace or recondition to prior conditions at project completion.

1.7 SEQUENCING AND SCHEDULING
A. Planting Time: Proceed with, and complete landscape work as rapidly as portions of site become available, working within seasonal limitations for each kind of landscape work required.
1. Plant or install all plant materials during normal planting seasons from 15 March to 15 November.
2. Correlate planting with specified maintenance periods to provide maintenance from date of substantial completion.
B. Coordination with Lawns: Plant trees and shrubs after final grades are established and prior to planting of lawns, unless otherwise acceptable to Architect. If planting of trees and shrubs occurs after lawn work, protect lawn areas and promptly repair damage to lawns resulting from planting operations.

1.8 SPECIAL PROJECT WARRANTY
A. Warranty lawns through specified lawn maintenance period, until Final Project Acceptance.
B. Warranty trees and shrubs, for a period of one year after date of substantial completion, against defects including death and unsatisfactory growth, except for defects resulting from neglect by Owner, abuse or damage by others, or unusual phenomena or incidents beyond Landscape Installer's control.
C. Remove and replace trees, shrubs, or other plants dead or in unhealthy condition during warranty period. Make replacements during growth season following end of warranty period. Replace trees and shrubs which are in doubtful condition at end of warranty period; unless, in opinion of Architect, it is advisable to extend warranty period for a full growing season.

PART 2 - PRODUCTS

2.1 TOPSOIL
A. If deemed usable, native topsoil shall be stockpiled for re-use in landscape work. Topsoil shall be fertile, friable, natural loam, surface soil, reasonable free of subsoil, clay lumps, brush, weeds, roots, stumps, stones larger than 1 inch in any dimension, and other extraneous or toxic matter harmful to plant growth.
1. Contractor shall send a minimum of three (3) representative topsoil samples for testing. See testing requirements below. Contractor is responsible for whatever soil additives are recommended by the tests. Submit to Architect for approval. Compost will be added to other additives and added regardless of test results.
B. If quantity of stockpiled topsoil is insufficient, contractor to provide imported topsoil that is fertile, friable, natural loam, surface soil, reasonably free of subsoil, clay lumps, brush, weeds and other litter, and free of roots, stumps, stones larger than 1 inches in any dimension, and other extraneous or toxic matter harmful to plant growth.
1. Obtain topsoil from local sources or areas with similar soil characteristics to that of project site. Obtain topsoil only from naturally well-drained sites where topsoil occurs in a depth of not less than 4 inches. Do not obtain from bogs or marshes.
2. Composition: Topsoil shall contain from 1 to 20% organic matter as determined by the Organic Carbon, 6A, Chemical Analysis Method described in USDA Soil Survey Investigation Report No. 1. Maximum particle size, 3/4-inch, with maximum 3% retained on 1/4-inch screen.
Other components shall conform to the following limits:

pH	6.5 to 7.5
Soluble Salts	600 ppm maximum
Silt	25-50%
Clay	10-30%
Sand	20-50%

3. Contractor shall submit representative soil report on imported topsoil proposed for use for approval. Report shall meet standards below. Contractor is responsible for whatever soil additives are recommended by the test. Compost will be in addition to other additives and added regardless of test results.

C. Soil Testing
1. Soil tests are required for this project (see above for requirements). Test shall be provided as follows:
a. Provide certified analysis at time of sample submitted (three samples imported topsoil). Amend soils per chemist's recommendations and as herein specified unless otherwise approved by Architect.
2. Test shall include, but not limited to recommendations on chemical distributions, organic contents, pH factors, and sieve analysis as necessary. Test #1T by Western Laboratories (1-800-658-3858) is required.
3. Contractor is responsible for whatever soil additives are recommended by the soil testing laboratory.
4. Contractor shall coordinate, obtain and pay for all soil tests.
5. If regenerative noxious weeds are present in the soil, remove all resultant growth including roots throughout one-year period after acceptance of work, at no cost to Owner.

2.2 pH ADJUSTERS
A. When pH does not comply with this specification, commercial grade aluminum sulfate shall be used to adjust soil pH.

2.3 SOIL AMENDMENTS
A. Compost: Compost: "Cascade Compost" from Cloverdale Nursery (208) 375-5262 and NuSoil Compost (208) 629-6912 or approved equal in equal amounts by volume.
B. Commercial Fertilizer: Fertilizer shall be complete, standard commercial brand fertilizer. It shall be free-flowing and packaged in new waterproof, non-overlaid bags clearly labeled as to weight, manufacturer, and content. Protect materials from deterioration during delivery and while stored at site.
1. Commercial fertilizer "A" for trees and shrubs during planting; slow release Agriform Planting 5-gram tablets 20-10-5 type or equal.
2. Commercial fertilizer "B" for lawn areas, applied to bed prior to sodding, to be 16-16-17 applied at the rate of ten pounds per acre.
3. Commercial fertilizer "C" for lawn areas three to four weeks after planting sod. Organic Fertilizer Milorganite (6-0-2) type or equal.
C. Herbicide: Pre-emergent for topical application in planting beds. Oxiadiazon 2G brand or pre-approved equal. Use in accordance with manufacturer's recommendation on all planting beds.

2.4 PLANT MATERIALS
A. Quality: Provide trees, shrubs, and other plants of size, genus, species, and variety shown for landscape work and complying with recommendations and requirements of ANSI Z60.1 "American Standard for Nursery Stock".
B. Deciduous Trees: Provide trees of height and caliper scheduled or shown with branching configuration recommended by ANSI Z60.1 for type and species required. Single stem trees except where special forms are shown or listed.
C. Deciduous Shrubs: Provide shrubs of the height shown or listed, not less than minimum number of canes required by ANSI Z60.1 for type and height of shrub.
D. Coniferous and Broadleafed Evergreens: Provide evergreens of sizes shown or listed. Dimensions indicate minimum spread for spreading and semi-spreading type evergreens and height for other types, such as globe, dwarf, cone, pyramidal, broad upright, and columnar. Provide normal quality evergreens with well balanced form complying with requirements for other size relationships to the primary dimension shown.

2.5 GRASS MATERIALS
A. Lawn sod: Provide strongly rooted sod, not less than 1 growing season old, and free of weeds and undesirable native grasses. Provide only sod capable of growth and development when planted (viable, not dormant).
1. Provide sod of uniform pad sizes with maximum 5% deviation in either length or width. Broken pads or pads with uneven ends will not be acceptable. Sod pads incapable of supporting their own weight when suspended vertically with a firm grasp on upper 10% of pad will be rejected.
B. Provide sod composed of: Rhizomatous Tall Fescue (RTF) from the The Turf Company, Meridian, ID (208) 888-3760 or approved equal.

2.6 MISCELLANEOUS LANDSCAPE MATERIALS
A. Anti-Desiccant: Emulsion type, film-forming agent designed to permit transpiration, but retard excessive loss of moisture from plants. Deliver in manufacturer's fully identified containers and mix in accordance with manufacturer's instructions.
B. Mulch: Mulch for planting beds shall be medium ground bark mulch, free of splinters, consistent in appearance, and shall contain no toxic substance detrimental to plant life.
C. Stakes and Guys: Provide stakes and deadmen of sound new hardwood, treated softwood, or redwood, free of knot holes and other defects. Provide wire ties and guys of 2-strand, twisted, pliable galvanized iron wire, not lighter than 12 ga. with zinc-coated turnbuckles. Provide not less than 2 inch diameter rubber or plastic hose, cut to required lengths and of uniform color, material, and size to protect tree trunks from damage by wires.

PART 3 - EXECUTION

3.1 PREPARATION - GENERAL
A. General Contractor shall be responsible for excavating planting areas to appropriate depths for placement of topsoil as specified herein.
B. Lay out individual tree and shrub locations and areas for multiple plantings. Stake locations and outline areas and secure Architect's acceptance before start of planting work. Make minor adjustments as may be required.

3.2 PREPARATION OF PLANTING SOIL
A. Before mixing, clean topsoil of roots, plants, sod, stones, clay lumps, and other extraneous materials harmful or toxic to plant growth.
B. Mix specified compost and fertilizers with topsoil at rates specified. Delay mixing fertilizer if planting will not follow placing of planting soil in a few days.
Compost: Lawn Areas: 1/4 compost, : 3/4 topsoil.
Shrub Areas: 1/3 compost, 2/3 topsoil.
Fertilizer: Per soil test and manufacture's recommendations.
C. For shrub and lawn area, mix planting soil either prior to planting or apply on surface of topsoil and mix thoroughly before planting.

3.3 PREPARATION FOR PLANTING LAWNS
A. After excavating and removing surface material to proper depth, loosen subgrade of lawn areas to a minimum depth of 4 inches. Remove stones measuring over 1-1/2 inches in any dimension. Remove sticks, roots, rubbish, and other extraneous matter. Limit preparation to areas which will be planted promptly after preparation.
1. Spread topsoil mix to minimum depth of 4 inches for sodded lawns as required to meet lines, grades, and elevations shown, after light rolling, addition of amendments, and natural settlement. Place approximately 1/2 of total amount of topsoil required. Work into top of loosened subgrade to create a transition layer and then place remainder of planting soil. Add specified soil amendments as required and mix thoroughly into upper 4 inches of topsoil.

3.4 PREPARATION OF PLANTING BEDS
A. Loosen subgrade of planting areas to a minimum depth of 6 inches using a culti-mulcher or similar equipment. Remove stones measuring over 1 1/2 inches in any dimension. Remove stocks, stones, rubbish, and other extraneous matter.
B. Spread planting soil mixture to minimum 12 inch depth required to meet lines, grades, and elevations shown, after light rolling and natural settlement. Add 1 1/2 inches of specified compost over entire planting area and mix thoroughly into upper 6 inches of topsoil. Place approximately 1/2 of total amount of planting soil required. Work into top of loosened subgrade to create a transition layer, then place remainder of the planting soil.
C. Apply Pre-Emergent per manufacturer's recommendation.

3.5 PLANTING TREES AND SHRUBS
A. Set balled and burlapped (B&B) stock on layer of compacted planting soil mixture, plumb and in center of pit or trench with top of ball at same elevation as adjacent finished landscape grades. Remove burlap from sides of balls; retain on bottoms. When set, place additional backfill around base and sides of ball, and work each layer to settle backfill and eliminate voids and air pockets. Place fertilizer tablets in excavated area per manufacture's written instructions. When excavation is approximately 2/3 full, water roughly before placing remainder of backfill. Repeat watering until no more is absorbed. Water again after placing final layer of backfill. Remove all ties from around base of trunk.
B. Set container grown stock, as specified, for balled burlapped stock, except cut cans on 2 sides with an approved can cutter and remove can; remove bottoms of wooden boxes after partial backfilling so as not to damage root balls.
C. Trees planted in turf area: Remove turf 3' dia around tree trunk. Dish top of backfill to allow for mulching.
D. Mulch pits, and planted areas. Provide not less than following thickness of mulch, and work into top of backfill and finish level with adjacent finish grades.
1. Provide 3 inches thickness of mulch.
E. If season and weather conditions dictate, apply anti-desiccant, using power spray, to provide an adequate film over trunks, branches, stems, twigs and foliage.
F. Prune, thin out, and shape trees and shrubs in accordance with standard horticultural practice. Prune trees to retain required height and spread. Unless otherwise directed by Architect, do not cut tree leaders, and remove only injured or dead branches from flowering trees, if any. Prune shrubs to retain natural character.
G. Remove and replace excessively pruned or misformed stock resulting from improper pruning.
H. Guy and stake trees immediately after planting, as indicated.
I. Apply approved herbicide to all shrub bed areas at manufacture specified rate. Re-apply as necessary for elimination of weeds.

3.6 SODDING NEW LAWNS
A. General: Install lawn sod in all areas designated on the drawings.
B. Soil Preparation
1. Any sod lawn areas that may have become compacted prior to sodding must be scarified to a depth of eight (8) inches by approved means, then finish graded as hereinbefore described.
C. Lay sod within 24 hours from time of stripping. Do not plant dormant sod or if ground is frozen.
D. Sod Placement
1. Sod will be brought onto lawn areas by wheeled means with proper protection of sod beds. Sod layers shall be experienced, or if inexperienced, shall be constantly supervised by an experienced foreman. The Contractor shall insure that the base immediately ahead of sod layer is moist. Sod shall be laid tight with not gaps. Allowance shall be made for shrinkage. Lay sod with long edges perpendicular to primary slope.
2. Lay to form a solid mass with tightly fitted joints. Butt ends and sides of strips; do not overlap. Stagger strips to offset joints in adjacent courses. Work on boards to avoid damage to subgrade or sod. Tamp or roll lightly to ensure contact with subgrade. Work sifted soil into minor cracks between pieces; remove excess to avoid smothering of adjacent grass.
3. Sod shall be rolled with a two hundred (200) pound roller after installation to insure proper contact between soil and sod. Final rolling must provide a uniform surface. After final rolling, the sod lawn shall be mowed and watered. Approval of sod lawns shall be based on uniform, healthy and vigorous growth with no dry or dead spots.
4. Add fertilizer "B" at the manufacturer's recommended application rate.
E. Water sod thoroughly with a fine spray immediately after planting.
F. Sodded Lawn Establishment
1. The Contractor shall be responsible for first mowing, subsequent mowings and fertiilizing of sod lawn areas until Final Acceptance of the project.
2. Mowing shall be done by an approved "reel" type mower. Mower blades shall be set at two (2) inches high for all mowings.
3. Subsequent fertilizing shall occur three to four weeks after installation. Apply fertilizer as per the Manufacturer's recommended application rate. Verify all methods of application. Contractor shall notify the Architect in writing that the fertilizer applications have occurred and on what dates.

3.7 MAINTENANCE
A. Begin landscape maintenance immediately after planting. Maintenance shall continue until Project Final Acceptance.
B. Maintain trees, shrubs, and other plants by pruning, cultivating, and weeding as required for healthy growth. Restore planting saucers. Tighten and repair stake and guy supports and reset trees and shrubs to proper grades or vertical position as required. Restore or replace damaged wrappings. Spray as required to keep trees and shrubs free of insects and disease.
C. Maintain lawns by watering, fertilizing, weeding, mowing, trimming, and other operations such as tolling, regrading and replanting as required to establish a smooth, acceptable lawn, free of eroded or bare areas.
D. Maintain lawns for no less than period stated above, or longer as required to establish acceptable lawn.

3.8 CLEANUP AND PROTECTION
A. During landscape work, keep pavements clean and work area in an orderly condition.
B. Protect landscape work and materials from damage due to landscape operations, operations by other contractors and trades, and trespassers. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged landscape work as directed.

3.9 INSPECTION AND ACCEPTANCE
A. When landscape work is completed, including maintenance, Architect will, upon request, make an inspection to determine acceptability.
B. When inspected landscape work does not comply with requirements, replace rejected work and continue specified maintenance until reinspected by Architect and found to be acceptable. Remove rejected plants and materials promptly from project site.

END OF SECTION

SECTION 02810 - SPRINKLER IRRIGATION

PART 1 - GENERAL

1.1 CONDITIONS AND REQUIREMENTS:
A. General and Supplementary Conditions, and Division 1 General Requirements.

1.2 SUMMARY
A. Work included:
1. Provide and install a complete and operating automatic irrigation system for all lawn and planting areas.
2. Connect to main water supply at existing site stubout as provided.
3. Sleeving under paved areas (by others)
4. Obtain and pay for all permits and fees for the work of this section.
5. Perform work on a design/construct basis, subject to the requirements of the Contract Documents, applicable codes, and good design practice.
6. Winterization of system.

1.3 SUBMITTALS
A. Within 30 days after Contractor's receipt of Owner's Notice to Proceed, submit:
1. Manufacturer's printed product information and catalog cut sheets for all system components; five copies.
B. Shop Drawings: Submit shop drawings for underground irrigation system including plan layout and details illustrating location and type of head, type and size of valve, piping circuits, circuit GPM, pipe size, controls, and accessories.
C. Record Drawings: At completion of this work, submit to the Contractor:
1. Record Drawings; reproducible and five prints.
2. Operations and Maintenance information (2 copies), including:
a. Information including descriptive details, parts list, specifications, maintenance schedules and procedures for system components.
b. Operation, adjustment of system and components instructions.
c. Winterization procedures.
d. Schedule indicating required open valve time to produce given precipitation amounts and seasonal adjustments.
e. Warranties and guarantees.

1.4 GUARANTEE
A. Guarantee in writing all materials, equipment and workmanship furnished to be free of all defects of workmanship and materials. Within one year after date of Substantial Completion repair or replace all defective parts or workmanship that may be found at no additional cost to Owner.
B. Fill and repair all depressions and replace all necessary lawn and planting which result from the settlement of irrigation trenches for one year after date of Substantial Completion.
C. Supply all manufacturer's printed guarantees.

1.5 QUALITY ASSURANCE
A. Contractor shall be licensed in the State in which this work is being performed.
B. Contractor shall have at least two years prior experience in projects of equal or larger scope. Provide minimum of three references and list of similar projects with owners' names, addresses, and phone numbers, when requested by Owner.
C. Contractor shall employ on site at all times a foreman who is thoroughly experienced and competent in all phases of the work of this Section.

1.6 SYSTEM DESCRIPTION
A. Design requirements:
1. Minimum water coverage: Planting areas-85%, Lawn areas-100% (full head-to-head)
2. Layout system to obtain optimum coverage using manufacturer's standard heads. Spray on walks, walls or paved areas is not acceptable.
3. Zoning shall be designed for optimum use of available pressure and efficient distribution for types of plantings and shapes of planting areas.
4. Design pressures: Install pressure regulating equipment as necessary.
5. Provide/install approved fixed tee or coupling device for air blow winterization. Location shall be on main supply line downstream from main shut off valve.
6. Install approved backflow prevention device in conformance with local or prevailing codes, and in approved site location. Provide for drainage without erosive damage.

PART 2 - PRODUCTS

2.1 PIPE AND FITTINGS
A. PVC 1120, ASTM D-1784, permanently marked with manufacturer's name, schedule rating, size, type. Solvent-weld type:
1. Pipe:
a. Pressure lines: Schedule 40 solvent weld.
b. Lateral lines: Class 200 pvc.
c. Sleeving: Class 200 pvc.
2. Fittings: Schedule 40 PVC, solvent-weld type. Install threaded joints where required at valves, risers, etc.
3. Risers: Lawn and shrub heads - flexible and damage-resistant plastic "polypipe" riser.
4. Solvent: NSF approved solvent for Type I & II PVC.
B. Polyethylene Pipe
1. Pipe: Class 100, 3/4" lateral line, for use on drip irrigation zone(s) where drip tubing is not otherwise used.
2. Fittings: Schedule 80 PVC.
3. Clamps: Stainless Steel.
C. Drip Line: Netafim Techline Dripperline, with .6 GPH drippers at 18" spacing.

2.2 SPRINKLER HEADS
A. Description: Appropriate for application in throw, pressure and discharge. Each type of head shall be of a single manufacturer.
1. Lawn heads: pop-up type.
B. Manufacturer: Rainbird or Hunter.

2.3 AUTOMATIC CONTROL SYSTEM
A. General; Furnish low voltage system manufactured expressly for control of automatic circuit valves of underground irrigation systems. Provide unit of capacity to suit number of circuits as indicated.
B. Control Enclosure: Maufacturer's standard wall mount with locking cover, complying with NFPA 70.
C. Circuit Control: each circuit variable from approximately 5 to 60 minutes. Including switch for manual or automatic operation of each circuit.
D. Timing Device: Adjustable 24-hour and 7 or 14 day clocks to operate any time of day and skip any day in a 7 or 14 day period.
E. Wiring: Solid or stranded direct-burial type as recommended by manufacturer of control unit; type AWG-UF, UL approved.

2.4 VALVING
A. Manual valves: brass or bronze for direct burial, gate valves, 150 pound class, threaded connection with cross type handle designed to receive operating key.
B. Automatic circuit valves: high impact plastic with corrosion-resistant internal parts. Low power solenoid control, normally closed, with manual flow adjustment.
1. Drip Control Zone Kit: Hunter PCZ-101.
2. Standard sprinkler valve shall be Rainbird PEB-PRS-B.
C. Quick coupler valve: brass or bronze construction with hinged top. One per zone.
D. Manual drain valves:
1. Bronze construction, straight type, 150 pound class, threaded connections, with cross type operating handle designed to receive operating key. Calco, Champion 100, or approved equal.
2. Size: 3/4 inch.
E. Manual Flushing Valve: Netafim Model TLSOV, two per zone (each end).

2.5 MISCELLANEOUS
A. Chemicals: primer and solvent glue as required by pipe manufacturer.
B. Valve box - high impact plastic, green in color.
C. Valve cover and frame - compatible with valve box with provision for locking.
D. Drainage backfill - clean gravel or crushed stone, graded from 3" maximum to 3/4" minimum.

PART 3 - EXECUTION

3.1 GENERAL
A. Install system to provide for adequate protection against freeze damage.
B. Install system in accordance with approved Contractor design drawings. All deviations from the plans must be approved, and clearly recorded on record drawing.
C. Install system and components in strict accordance with manufacturer's recommendations.
D. Install quick coupler(s) on main supply line, approximately equal spacing, at valve box locations or intervals of approximately 200 feet, whichever is greater. Locate adjacent to paved surfaces, at valve boxes where practical.

3.2 SURFACE CONDITIONS
A. Examine the areas and conditions under which work will be performed. Notify Contractor of conditions detrimental to timely and proper completion of Section work. Do not proceed until unsatisfactory conditions are corrected.
B. Locate all underground utilities and structures and notify Architect of any conflict with Section work. Protect structures and utilities. Repair or replace said structures or utilities damaged by this work at no cost to the Owner.

3.3 SLEEVING
A. Sleeving installed by others. Coordinate with other trades.

3.4 TRENCHING AND BACKFILLING
A. Trenching and backfilling shall be per applicable ISPWC Section.
B. Cut trenches straight and without abrupt grade changes to allow the following minimum cover:
1. Main Lines and Sleeving: 18 inches.
2. PVC Laterals: 12 inches.
C. Surround lines with 2 inches of clean rock-free material on all sides.

3.5 MISCELLANEOUS VALVES
A. Install manual drain valves up stream. Install devise at mainline tap in accordance with manufacturer requirements for complete operation. Install backflow provision and connect to controller.

3.6 CIRCUIT VALVES
A. Install in valve box, arranged for easy adjustment and removal.
1. Provide union on downstream side.
2. Install valve box on bricks - four required.
3. Install top flush with finish grade.
4. Adjust automatic control valves to provide flow rate of rated operating pressure required for each sprinkler circuit.

3.7 PIPE INSTALLATION
A. Lay PVC pipe in accordance with standard and acceptable practice. Thrust blocks to be used at points of intersection and change of direction in main line pipe as per manufacturer's recommended specifications. Install manual drains.
B. PVC pipe joints, solvent welded except as indicated. Cut pipe square, deburr, wipe from surface all saw chips, dust, dirt, moisture and any foreign matter which may contaminate the cemented joint. Apply cleaner/primer and solvent cement, make joints in accordance with manufacturer's recommendations. Use Teflon thread sealant (tape) at all threaded joints.
C. Contractor shall size pipe according to schedule provided. Flow velocities shall not exceed 5 feet/second in all cases. Lateral lines shall be laid out and installed per zone to balance the pressure loss and provide minimum fluctuation in system operating pressures.

Pipe Size	Pipe Section	Pipe Size	Pipe Section
3/4"	0-9 GPM	1 1/2"	26-34 GPM
1"	10-17 GPM	2"	35-50 GPM
1 1/4"	18-25 GPM	2 1/2"	51-80 GPM

D. Techline Drip Line: Place in shallow furrow at finish grade, below layer of specified mulch. Lay in uniform pattern in groundcover areas, or as per shrub pattern layout. Coil 20 linear feet at each balled and burlapped tree around base and to allow for tree removal if required. Flush all lines with full head of water prior to installation of flush valves at end of circuit runs.
E. Flush Valves: Install flush valve at end of each drip line run.

3.8 SPRINKLER HEADS
A. Flush circuit lines with full head of water prior to head installation.
1. Install heads at level with mulch or lawn.
2. Locate part-circle shrubbery heads to maintain a minimum distance of six inches (6") from walls and four inches (4") from other boundaries unless otherwise indicated. Keep overspray to a minimum.

3.9 CONTROL WIRE INSTALLATION
A. Bury wires beside or below main line pipe in same trench.
B. Bundle multiple wires together with tape at ten feet (10') maximum intervals.
C. Provide 36 inch loop in wires at each valve where controls are connected and at 100' maximum intervals between.
D. Make all electrical joints (splices) in boxes only. Make electrical joints waterproof per manufacturers requirements.

3.10 AUTOMATIC CONTROLLER
A. Install on site as approved. Verify location with Owner Representative.
B. Install typewritten legend inside controller door.Coordinate power with electrical.
C. Install controller per manufacturers requirements.

3.11 TESTING
A. Do not allow or cause any work of this Section to be covered up or enclosed until it has been inspected and tested.
B. Pressure testing:
1. Make necessary provision for thoroughly bleeding the line of air and debris.
2. Before testing, cap all risers, and install all valves.
3. Fill all main supply lines with water. Pressurize to 100 psi. Close air supply and test for leakage. Test shall be approved if no greater than 5 psi loss occurs in 15 minutes.
4. Fill all zone lines with water to static pressure. Hold for 15 minutes. Inspect for leakage.
5. Contractor shall provide all required testing equipment and personnel. Test shall be performed in presence of Architect. Contractor shall make notice of test (48) hours in advance.
6. Provide required testing equipment and personnel.
7. Repair leaks, and retest until acceptance by the Architect.
C. Coverage inspection: upon completion of all systems, perform a coverage test to determine if coverage of water afforded all areas is complete, adequate and uniform. Change heads, nozzles, orifices and/or adjustment as directed to provide uniform coverage.
D. Final inspection:
1. Clean, adjust, and balance all systems. Verify that:
a. Remote control valves are properly balanced;
b. Heads are properly adjusted for radius and arc of coverage;
c. The installed system is workable, clean and efficient.
E. Winterization: Winterize system at the end of first season of system operation. Review procedures with Owner Representative.

END OF SECTION

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CHECKED BY:
KCS

DRAWN BY:
JJN

REVISED

NO.	DATE	DESCRIPTION
1	5/2/20	STREET TREES

FINAL PLAT LANDSCAPE PLAN
TRAPPER RIDGE SUBDIVISION NO. 4
TRILOGY DEVELOPMENT, INC.

DATE:
04-04-20
PROJECT:
JBA-2040
SHEET
L7