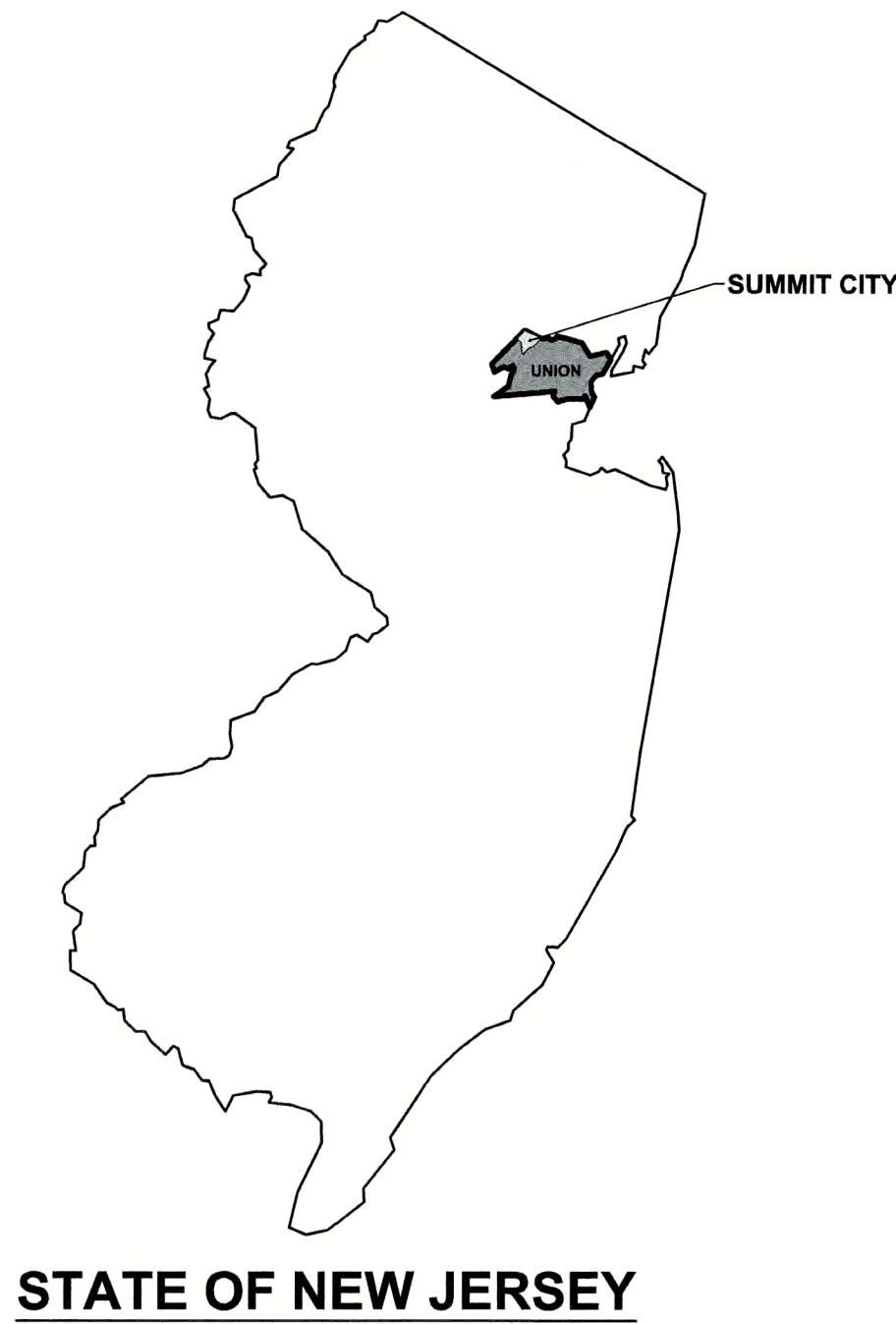


G:\Projects\12675-041\CAD\WIP\PlanSet\12675-041_G100_CoverSheet.dwg Fri, Feb 23, 2024 - 9:43am agonzalez SUBURBAN CONSULTING ENGINEERS, INC.



STATE OF NEW JERSEY

VILLAGE GREEN PHASE III
IMPROVEMENT PROJECT
BLOCK 3311, LOTS 1, 2 & 15
CITY OF SUMMIT, COUNTY OF UNION, STATE OF NEW JERSEY



INDEX OF DRAWINGS

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3	C100	EXISTING CONDITIONS AND DEMOLITION PLAN	A
4	C200	SITE LAYOUT PLAN	A
5	C300	SITE GRADING AND DRAINAGE PLAN	A
6	C400	SITE LIGHTING AND ELECTRIC PLAN	A
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8	CD100	CONSTRUCTION DETAILS I	A
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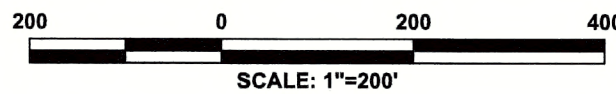
SOURCE: NEARMAP IMAGERY 2022.

PUBLIC UTILITIES LIST				
TELEPHONE	VERIZON	21 BAYARD STREET, NEW BRUNSWICK, NJ 08901	(877) 728-6101	
GAS	PSE&G	48 MIDDLE AVENUE, SUMMIT, NJ 07901	(908) 522-7401	
WATER	NEW JERSEY AMERICAN WATER	167 JFK PARKWAY, SHORT HILLS, NJ 070178	(800) 492-8373	
SEWER	CITY OF SUMMIT - DIVISION OF PUBLIC WORKS	41 CHATHAM ROAD, SUMMIT, NJ 07901	(908) 273-6404	
ELECTRICITY	JCP&L	300 MADISON AVENUE, MORRISTOWN, NJ 07960	(800) 662-3115	
CABLE	COMCAST CABLEVISION	800 RAHWAY AVENUE, UNION, NJ 07083	(732) 606-7400	

NOTE:
PRIOR TO ANY EXCAVATION, CONTRACTOR MUST HAVE ALL UTILITIES MARKED
OUT BY THE APPROPRIATE UTILITY COMPANIES -> 1-800-272-1000 OR 811.



KEY MAP



**CITY OF SUMMIT
OFFICIALS**

MAYOR
NORA RADEST

COMMON COUNCIL MEMBERS

GREG VARTON
COUNCIL PRESIDENT,
WARD 2

LISA K. ALLEN
WARD 2

SUSAN HAIRSTON
PRESIDENT PRO TEM,
WARD 1

MARJORIE FOX
WARD 2

DELIA HAMLET
WARD 1

ANDY MINEGAR
WARD 1

JAIME LEVINE
AT-LARGE

DIRECTOR OF COMMUNITY SERVICES
AARON SCHRAGER, P.E., C.M.E., P.P.

DIRECTOR OF COMMUNITY PROGRAMS
MARK OZOROSKI

VILLAGE GREEN PHASE III
IMPROVEMENT PROJECT
BLOCK 3311, LOTS 1, 2 & 15
CITY OF SUMMIT, COUNTY OF UNION, STATE OF NEW JERSEY

ROBERT GREGORIA, PE
NJ PROFESSIONAL ENGINEER
LICENSE NO. 24GE03365600
DATE: 11/16/2023

DAREN J. PHIL, PE
NJ PROFESSIONAL ENGINEER
LICENSE NO. 24GE03619100
DATE: 11/16/2023

**SUBURBAN CONSULTING
ENGINEERS, INC.**

COA NO: 24GA28037500

- Civil Engineers - Municipal Engineers -
- Landscape Architects -
- Planners - Environmentalists - Land Surveyors -

96 US Highway 206, Suite 101 2430 Highway 34, Bldg. A Suite 1R 505 Main Street, Suite 314
Flanders, NJ 07836 - 973.398.1776 Wall, NJ 08736 - 732.282.1776 Hackensack, NJ 07601 - 201.646.1776

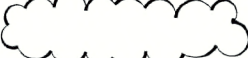
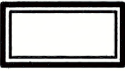
EXCELLENCE ♦ ECONOMY ♦ ENVIRONMENT

EXISTING	PROPOSED	
		WATER MAIN (SIZES)
		GAS MAIN (SIZES)
		UNDERGROUND TELEPHONE LINE
		OVERHEAD TELEPHONE WIRE
		UNDERGROUND ELECTRICAL CONDUIT
		OVERHEAD ELECTRICAL LINE
		UNDERGROUND COMBINED UTILITIES
		STORM DRAINS
		SANITARY SEWERS
		FORCE MAINS
		PAVEMENT
		PROPERTY LINES
		CURB LINES
		FENCES (MTL.)
		GUIDE RAIL (STL.)
		RETAINING WALL

ITEM NO.	DESCRIPTION	UNIT	BID QUANTITY
1	MOBILIZATION (The lump sum unit price is not to exceed requirements of the table in Section 154)	LS	1
2	SOIL EROSION AND SEDIMENT CONTROL	LS	1
3	FUEL PRICE ADJUSTMENT	DOLLAR	200
4	CLEARING SITE	LS	1
5	GRADING AND EARTHWORK	LS	1
6	15" SOLID HDPE DRAIN PIPE	LF	215
7	10" SOLID HDPE DRAIN PIPE	LF	128
8	4" PERFORATED HDPE DRAIN PIPE	LF	20
9	36" DIAMETER DRAIN BASIN	UNIT	1
10	12" DIAMETER DRAIN BASIN	UNIT	1
11	CONCRETE SIDEWALK, 4" THICK	SY	600
12	CONCRETE SIDEWALK, REINFORCED, 6" THICK	SY	510
13	DETECTABLE WARNING SURFACE	SY	2
14	9" X 18" CONCRETE VERTICAL CURB	LF	60
15	TRAFFIC STRIPES, THERMOPLASTIC, 4" WIDE	LF	300
16	TRAFFIC STRIPES, THERMOPLASTIC, 12" WIDE	LF	120
17	BENCH	UNIT	10
18	TRASH RECEPTACLE	UNIT	4
19	SITE LIGHTING AND ELECTRIC	LS	1
20	TOPSOIL SPREADING, 4" THICK	SY	2,500
21	FERTILIZING AND SEEDING, TYPE A-4	SY	2,500
22	STRAW MULCHING	SY	2,500
23	RED SUNSET MAPLE, 10'-12' HT., B&B. 2.5"-3" CAL.	UNIT	2
24	IMPERIAL HONEY LOCUST, 10'-12' HT., B&B. 2.5"-3" CAL.	UNIT	1
25	HIGHTOWER WILLOW OAK, 10'-12' HT., B&B. 2.5"-3" CAL.	UNIT	1
26	KARL FOERSTER FEATHER REED GRASS, 3 GAL.	UNIT	61
27	BLOODTWIG DOGWOOD, 3' HT., 5 GAL.	UNIT	9
28	DWARF FOTHERGILLA, 18"-24" HT., 5 GAL.	UNIT	62
29	MERLOT SWEETSPIRE, 18"-24" HT., 5 GAL.	UNIT	27
30	PINK DIAMONDS BLEEDING HEARTS, 1 GAL.	UNIT	331
31	STELLA DE ORO DAYLILY, 1 GAL.	UNIT	275
32	SIBERIAN IRIS, 1 GAL.	UNIT	41
33	CARDINAL FLOWER, 1 GAL.	UNIT	30

1. THE CONTRACTOR SHALL VERIFY ALL INFORMATION AND REPORT ALL DISCREPANCIES AT THE TIME OF BID.
2. EXISTING CONDITIONS SHOWN HEREON PER "TOPOGRAPHIC SURVEY, MABLE PLAYGROUND AT THE VILLAGE GREEN, BLOCK 3311, LOTS 1, 1.1, 2 & 15, CITY OF SUMMIT, UNION COUNTY, STATE OF NEW JERSEY" PREPARED BY JOSEPH D. PHIL, PLS OF SUBURBAN CONSULTING ENGINEERS, INC., DATED FEBRUARY 13, 2023. VERTICAL DATUM FOR THE PROJECT IS NAVD-88.
3. THE CONTRACTOR SHALL PROVIDE ALL TOOLS, TRANSPORTATION, MATERIALS, LABOR, INSURANCE, AND ALL ELSE NECESSARY TO COMPLETE THE WORK AND/OR INCIDENTAL THERETO.
4. ADEQUATE WARNING SIGNS AND BARRICADES SHALL BE PLACED AROUND ALL EXCAVATIONS. FLASHING LIGHTS OR OTHER ILLUMINATION DEVICES SHALL BE EMPLOYED TO WARN MOTORISTS AND PEDESTRIANS AFTER DARK. ALL TRAFFIC CONTROL MEASURES SHALL MEET THE REQUIREMENTS OF THE N.J.D.O.T. REGULATIONS AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" CURRENT EDITION.
5. WHENEVER THE DRAWINGS INDICATE TO MEET EXISTING CONDITIONS, THE CONTRACTOR SHALL PROVIDE FOR A SMOOTH AND CONTINUOUS TRANSITION FROM PROPOSED TO EXISTING GRADES TO THE ACCEPTANCE OF THE ENGINEER.
6. THE PROPOSED ELEVATIONS SHOWN IN THE PLANS SHALL BE SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER TO MEET THE EXISTING CONDITIONS. THE CONTRACTOR SHALL PERFORM ALL GRADING OPERATIONS AS NECESSARY TO FACILITATE POSITIVE DRAINAGE AND ELIMINATE ANY LOW SPOTS OR PONDING.
7. WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.
8. THE CONTRACTOR SHALL NOT PROCEED WITH ANY EXCAVATION UNTIL THE CONTRACTOR HAS CONTACTED EACH OF THE UTILITY COMPANIES, MUNICIPAL AUTHORITIES, AND THE OWNER TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES. THIS SHALL INCLUDE THE "MARKING OUT" OF PHYSICAL LOCATION OF EACH UTILITY VIA THE ONE CALL SYSTEM - (811). SHOULD PUBLIC MARK-OUTS NOT BE AVAILABLE, THE CONTRACTOR SHALL RETAIN THE SERVICES OF AN UNDERGROUND UTILITY LOCATION SERVICE TO PROPERLY MARK-OUT UTILITIES AT THE SITE AT NO ADDITIONAL COST TO THE OWNER.
9. THIS PLAN DOES NOT CERTIFY TO THE LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ANY UNDERGROUND FEATURE OR STRUCTURE WHICH HAS NOT BEEN EXPOSED FOR DIRECT MEASUREMENT. THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM TEST PITS AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER PRIOR TO CONSTRUCTION ACTIVITIES TO VERIFY LOCATIONS OF UTILITIES. CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL WASTE MATERIAL IN ACCORDANCE WITH GOVERNING REGULATIONS AND THE PROJECT SPECIFICATIONS. THE OWNER IS NOT OBLIGATED TO SUPPLY A DISPOSAL SITE.
11. ALL QUANTITIES DEPICTED ON THESE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES AND BRING DISCREPANCIES TO THE ATTENTION OF THE ENGINEER PRIOR TO BID PROPOSAL SUBMISSION. FORMAL CHANGE ORDERS SHALL BE APPROVED PRIOR TO ANY ITEM INCREASE. WORK PERFORMED PRIOR TO A CHANGE ORDER WILL NOT BE THE RESPONSIBILITY OF THE OWNER.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFE ACCESS TO ALL DRIVeways, WALKS AND BUILDINGS AND PROVIDE ADEQUATE MEASURES TO PREVENT NON-AUTHORIZED PERSONNEL FROM ACCESSING THE SITE DURING CONSTRUCTION. SHOULD WORK HOURS OUTSIDE OF THE DESIGNATED HOURS BE APPROVED BY THE ENGINEER AND THE OWNER, THE CONTRACTOR SHALL PROVIDE SECURITY FOR ALL EMPLOYEES AND INSPECTORS.
13. THE CONTRACTOR SHALL VERIFY THAT ALL PEDESTRIAN ACCESS IS IN COMPLIANCE WITH ALL AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS AND NOTIFY THE ENGINEER WITH ANY DISCREPANCIES PRIOR TO THE INSTALLATION OF ANY IMPROVEMENTS.
14. NO MATERIAL OR EQUIPMENT IS TO BE STORED ON ANY AREA THAT HAS NOT BEEN ESTABLISHED AS A DESIGNATED STAGING AREA. NO MATERIAL SHALL BE PLACED OR ANY DISTURBANCE PERMITTED BEYOND THE PROJECT PROPERTY LINE OR RIGHT-OF-WAY WITHOUT THE WRITTEN PERMISSION OF THE PROPERTY OWNER DIRECTLY INVOLVED. CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE ALL STAGING AREAS TO PRE-CONSTRUCTION CONDITION, OR PREPARE FOR INDICATED IMPROVEMENTS, AS APPROPRIATE.
15. ALL EXCAVATIONS SHALL BE PROTECTED AT THE END OF EACH WORK DAY. THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY.
16. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL LOCAL BUILDING PERMITS. THE OWNER WILL OBTAIN ALL ZONING AND LAND DISTURBANCE PERMITS, IF DEEMED NECESSARY.
17. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE AND REPAIR OF SOIL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PERMIT OR THE CURRENT SOIL EROSION AND SEDIMENT CONTROL STANDARDS FOR NEW JERSEY. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES OR REMEDIATION REQUIRED DUE TO EROSION OR DOWNSTREAM SEDIMENT DEPOSITION.
18. THE CONTRACTOR SHALL MAKE NO PERMANENT MARKINGS OUTSIDE OF THE WORK AREA. IF MARKINGS OUTSIDE THE WORK AREA ARE REQUIRED FOR ANY REASON, THEY SHALL BE NON-PERMANENT IN NATURE (REMOVABLE STAKES, ETC.). IF ANY PERMANENT MARKINGS ARE MADE OUTSIDE OF THE WORK AREA, THEY SHALL BE REPAIRED IN ACCORDANCE WITH THE ENGINEER'S REQUIREMENTS AT NO ADDITIONAL COST TO THE OWNER.
19. THE CONTRACTOR IS REQUIRED TO PROTECT ALL EXISTING FACILITIES AND UTILITIES DESIGNATED TO REMAIN. PHOTOGRAPHIC EVIDENCE OF THE EXISTING CONDITIONS OF THE ENTIRE SITE MUST BE PERFORMED AND PROVIDED TO THE OWNER PRIOR TO THE INSTALLATION OF IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE TO REPAIR ANY DAMAGED AREAS SO THAT THEY MATCH IN ELEVATION, COLOR, AND TEXTURE. CONTRACTOR TO RESTORE ANY UTILITIES DISTURBED BY CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
20. ALL EXISTING STORMWATER UTILITIES (STRUCTURES AND PIPING) THAT ARE NOT DESIGNATED FOR REMOVAL SHALL BE CLEANED AND JETTED AT THE DIRECTION OF THE ENGINEER WITHIN PROJECT LIMITS AND AT CONNECTION POINTS TO STORM SEWER SYSTEM AND TO NEXT DOWNSTREAM STRUCTURE.
21. SUBURBAN CONSULTING ENGINEERS, INC. ("SCE") IS NOT RESPONSIBLE FOR THE CONSTRUCTION OF THIS PROJECT. SCE IS ALSO NOT RESPONSIBLE FOR THE ACTS OR OMISSIONS OF ANY OWNER, CONTRACTOR, SUBCONTRACTOR OR MATERIAL SUPPLIER, FOR SAFETY PRECAUTIONS, PROGRAMS OR ENFORCEMENT, OR FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES EMPLOYED BY ANY PERSON OR ENTITY WITH REGARD TO THIS PROJECT.

EXIST.	RESET	RECONSTRUCT	PROP.
			 "A" INLETS
			 "B" INLETS
			 "E" INLETS
			 MANHOLES
NEW MANHOLE CASTING - SQUARE FRAME, CIRCULAR COVER			
 CAST IRON EXTENSION FRAME FOR EXIST. INLETS		 CAST IRON EXTENSION RING FOR EXIST. MANHOLES	

<i>EXIST.</i>	<i>PROP.</i>	
		RADIAL PINS
		MONUMENTS
		IRON PIPE/PIN
		TEST PIT / SOIL BORING
		WATER VALVE
		WATER GATE VALVE
		GAS VALVE
		HYDRANT
		UTILITY POLES
<i>EXIST.</i>	<i>PROPOSED</i>	
		SIGNS
		BUSHES/TREE LINE
		LIGHTS
		PROP. BLDG.
		BLDG. TO BE DEMOLISHED
	  	DECIDUOUS TREES
	 	CONIFEROUS TREES

G101 LegendQuantitiesAndGeneralNotes.dwg Fri, Feb 23, 2024 - 9:26am agonzalez SUBURBAN CONSULTING ENGINEERS, INC.

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DESCRIPTION

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AAG
11/16/2023

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KAK
11/16/2023

CHECKED BY:

ROBERT GREGORIA, PE
NJ PROFESSIONAL ENGINEER
LICENSE NO. 24GE03365600

Robert Gregoria

24GE03365600

PROFESSIONAL ENGINEER

DATE: 11/16/20

DAREN J. PHIL, PE
NJ PROFESSIONAL ENGINEER
LICENSE NO. 24GE03619100



DATE: 11/16/2023



**SUBURBAN CONSULTING
ENGINEERS, INC.**

COA NO.: 24G-A28037500
ATN100004200

- Civil Engineers - Municipal Engineers -
- Landscape Architects
- Planners - Environmentalists - Land Surveyors -

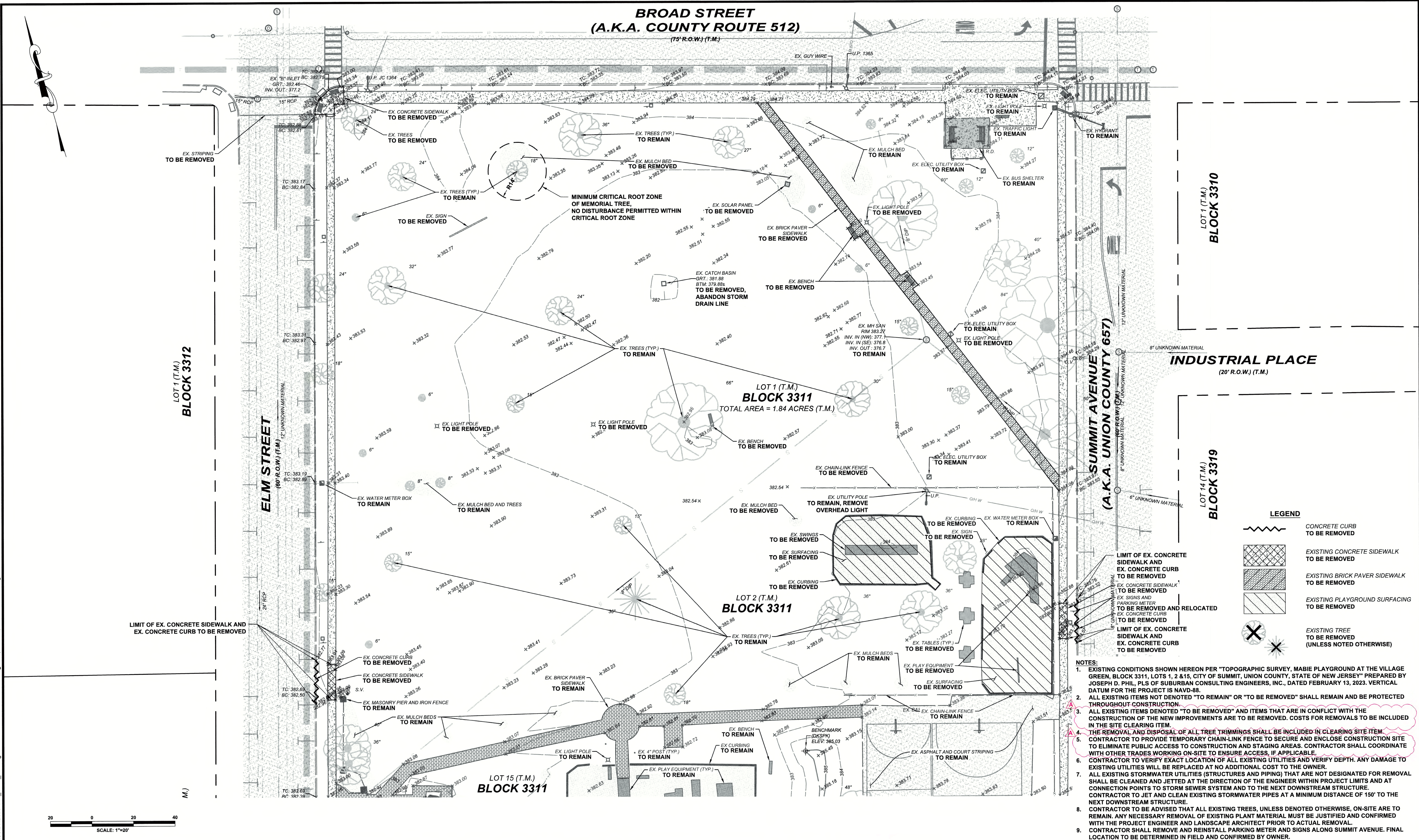
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505 Main Street, Suite 314
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VILLAGE GREEN PHASE III IMPROVEMENT PROJECT BLOCK 3311, LOTS 1, 2 & 15 CITY OF SUMMIT, COUNTY OF UNION, STATE OF NEW JERSEY	PROJECT NUMBER: SCE-R12675.041
	DRAWING NUMBER: G101
	SHEET NUMBER: 2 OF 12
LEGEND, QUANTITIES, AND GENERAL NOTES	
SCALE: N.T.	REV. A

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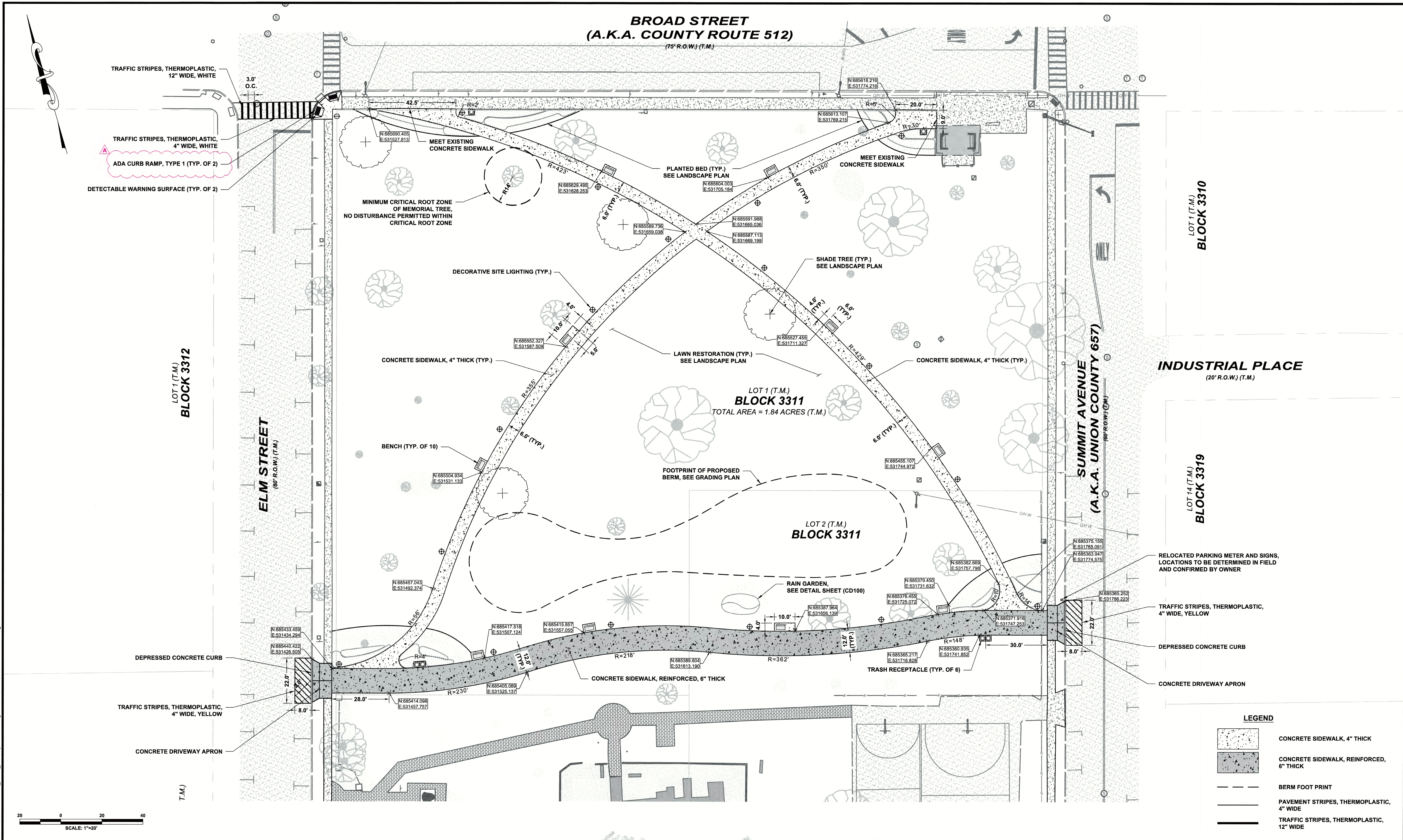
ROBERT GREGORIA, PE
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LICENSE NO. 246503365600
DATE: 11/16/2023

DAREN J. PHIL, PE
NJ PROFESSIONAL ENGINEER
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DATE: 11/16/2023

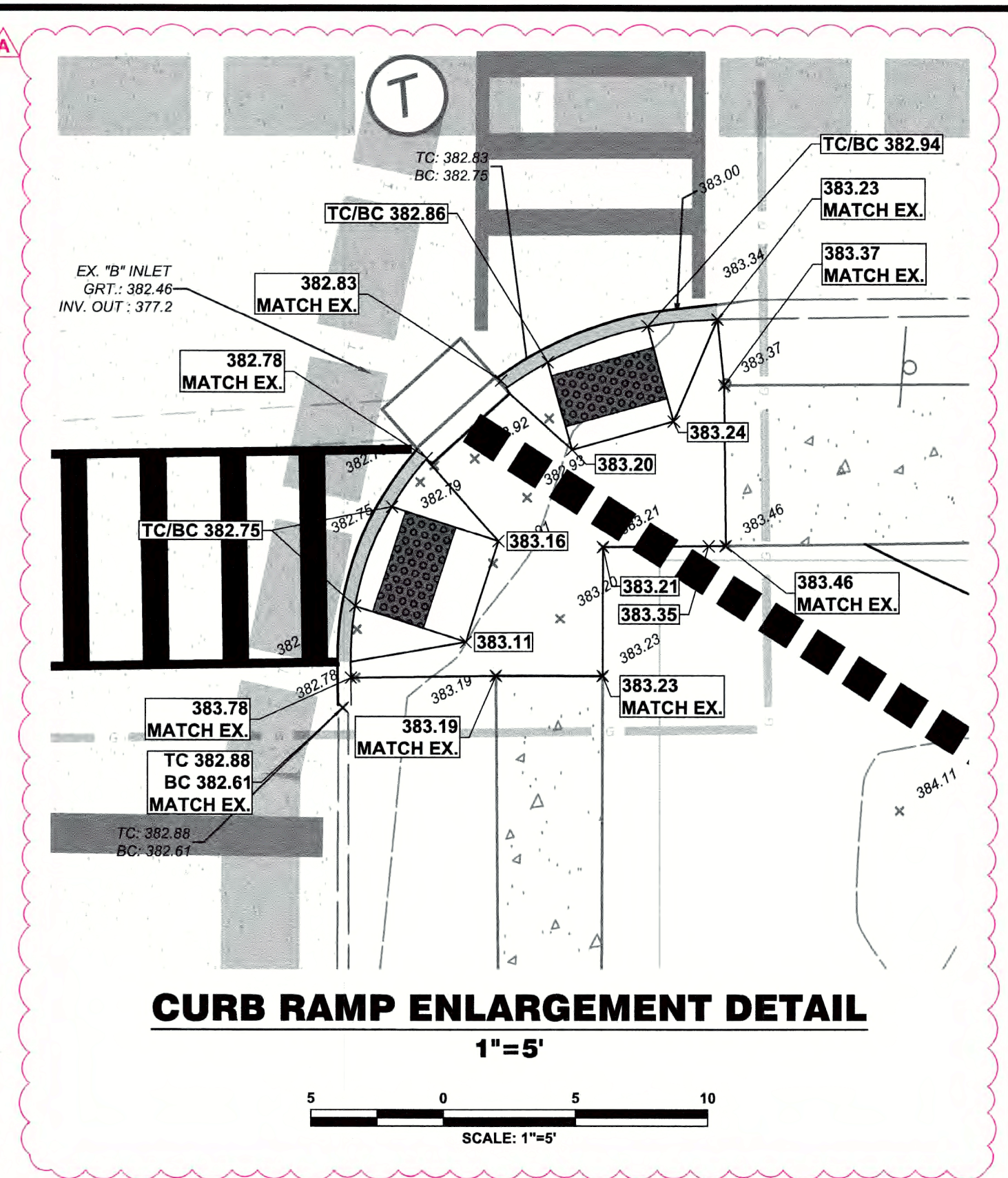
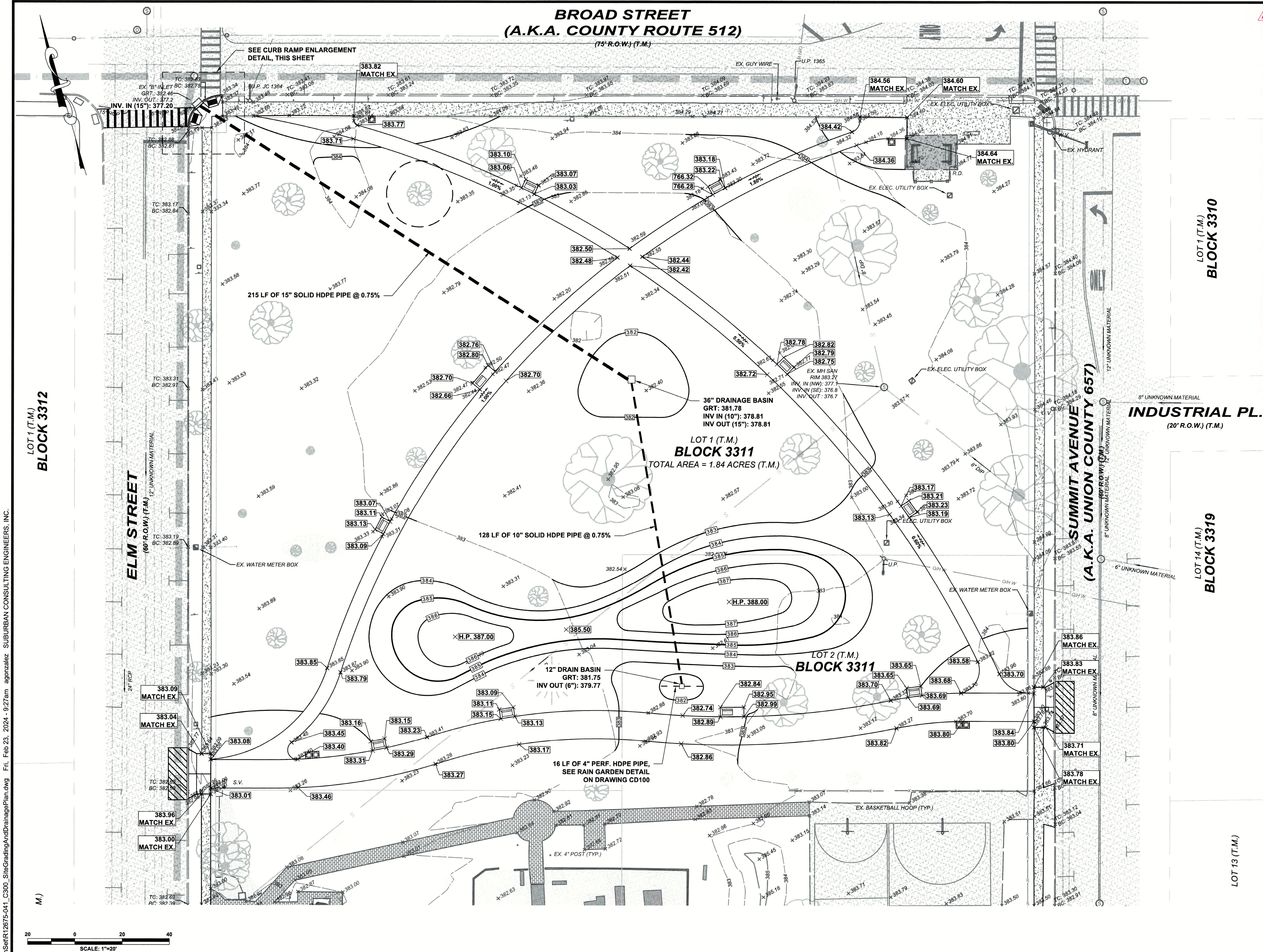
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SUBURBAN CONSULTING ENGINEERS, INC.
COA NO. 24CA28037500
246503365600
- Civil Engineers - Municipal Engineers -
- Landscape Architects -
- Planners - Environmentalists - Land Surveyors -
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**VILLAGE GREEN PHASE III
IMPROVEMENT PROJECT
BLOCK 3311, LOTS 1, 2 & 15**
CITY OF SUMMIT, COUNTY OF UNION, STATE OF NEW JERSEY
EXISTING CONDITIONS AND DEMOLITION PLAN
PROJECT NUMBER:
SCE-R12675.041
DRAWING NUMBER:
C100
SHEET NUMBER:
3 OF 12
SCALE:
1"=20'
REV. A

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REVISED PER NJDOT REVIEWER COMMENTS					CHECKED BY: KAK 11/16/2023		DATE: 11/16/2023		DATE: 11/16/2023		EXCELLENCE ♦ ECONOMY ♦ ENVIRONMENT		SHEET NUMBER: 4 OF 12		DRAWING NUMBER: C200
DESCRIPTION					NO.		DATE:		BY:		SCALE: 1"=20'		SITE LAYOUT PLAN		REV. A
REVISIONS					A		02/23/2024		AAG						
					KAK				CHK:						



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KAK
11/16/2023
CHECKED BY:

ROBERT GREGORIA, PE
NJ PROFESSIONAL ENGINEER
LICENSE NO. 24GE03565000
DATE: 11/16/2023

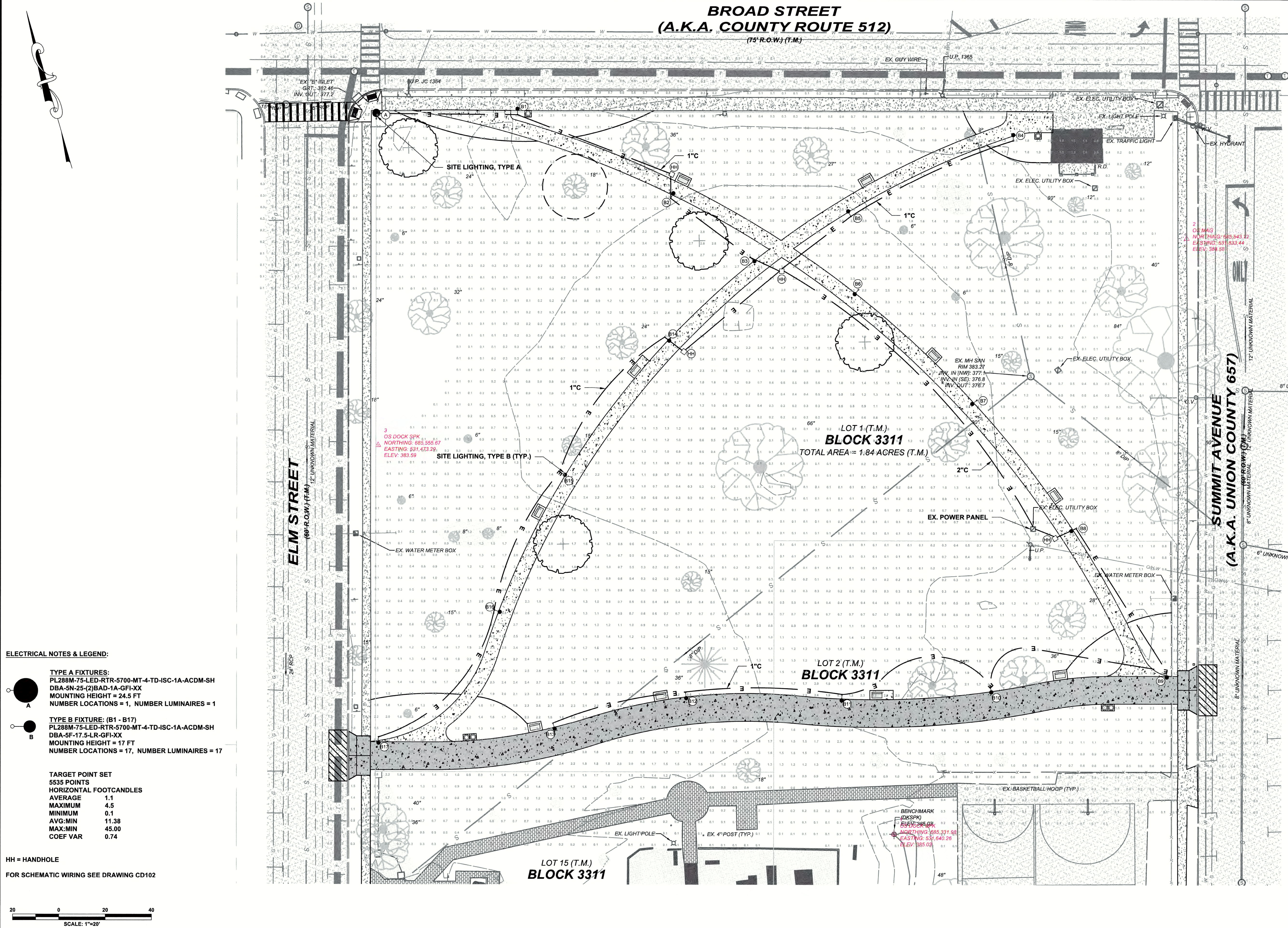
DAREN J. PHIL, PE
NJ PROFESSIONAL ENGINEER
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DATE: 11/16/2023

SC
SUBURBAN CONSULTING
ENGINEERS, INC.
COA NO: 24G128037500
240100000000
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Planners - Environmentalists - Land Surveyors -
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Flinders, NJ 07836 - 973.398.1776 Wall, NJ 08736 - 732.282.1776 Hackensack, NJ 07601 - 201.646.1776
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**VILLAGE GREEN PHASE III
IMPROVEMENT PROJECT
BLOCK 3311, LOTS 1, 2 & 15**
CITY OF SUMMIT, COUNTY OF UNION, STATE OF NEW JERSEY
SITE GRADING AND DRAINAGE PLAN

PROJECT NUMBER:
SCE-R12675-041
DRAWING NUMBER:
C300
SHEET NUMBER:
5 OF 12
SCALE:
1"=20'
REV. A

C:\Projects\12675-041\CAD\WIP\PlanSet\12675-041_C400_SiteLightingAndElectricPlan.dwg Fri, Feb 23, 2024 - 9:27am agonzalez SUBURBAN CONSULTING ENGINEERS, INC.



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DESCRIPTION	NO.	DATE	BY	CHK
	A	02/23/2024	AAG	KAK
				CHK

DRAWN BY:
AAG
11/16/2023
CHECKED BY:
KAK
11/16/2023
CHECKED BY:

ROBERT GREGORIA, PE
NJ PROFESSIONAL ENGINEER
LICENSE NO. 240603616000
DATE: 11/16/2023

DAREN J. PHIL, PE
NJ PROFESSIONAL ENGINEER
LICENSE NO. 240603616000
DATE: 11/16/2023

SC
SUBURBAN CONSULTING ENGINEERS, INC.
COA NO.: 24CA20037800
- Civil Engineers - Municipal Engineers -
- Landscape Architects -
Planners - Environmentalists - Land Surveyors -
96 US Highway 206, Suite 101
Planders, NJ 07836 - 973.398.1776
505 Main Street, Suite 314
Wall, NJ 08736 - 732.282.1776
Hackensack, NJ 07601 - 201.646.1776
EXCELLENCE ♦ ECONOMY ♦ ENVIRONMENT

VILLAGE GREEN PHASE III IMPROVEMENT PROJECT
BLOCK 3311, LOTS 1, 2 & 15
CITY OF SUMMIT, COUNTY OF UNION, STATE OF NEW JERSEY
SITE LIGHTING AND ELECTRIC PLAN
PROJECT NUMBER:
SCE-R12675.041
DRAWING NUMBER:
C400
SHEET NUMBER:
6 OF 12
SCALE:
1"=20'
REV. A

BROAD STREET
(A.K.A. COUNTY ROUTE 512)
(75' R.O.W.) (T.M.)

LANDSCAPE ARCHITECTURAL NOTES

GENERAL NOTES

- A. EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES, STRUCTURES, ETC. NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY REGARDING ANY DISCREPANCIES OR LOCATION CONFLICTS PRIOR TO PLANTING.
- B. IN THE EVENT THAT PLANT QUANTITY DISCREPANCIES OR MATERIAL OMISSIONS OCCUR IN THE PLANTING SCHEDULE, THE PLAN SHALL SUPERSEDE.
- C. ALL PLANTING MATERIALS AND METHODS SHALL MEET OR EXCEED THE REQUIREMENTS OF THE LOCAL MUNICIPAL ORDINANCES AND ANSI Z-60.1 (CURRENT VERSION), THE AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN. IN THE EVENT OF CONFLICTS BETWEEN A.A.N. AND MUNICIPAL STANDARDS, THE MUNICIPAL REQUIREMENTS SHALL SUPERSEDE.
- D. ALL LANDSCAPING SHALL BE PLANTED AS TO NOT TO INTERFERE WITH UTILITY LINES, SIGHT TRIANGLES, UNDERGROUND UTILITIES, OR PUBLIC WALKWAYS OR OTHER EXISTING OR PROPOSED STRUCTURES. ALL PLANT MATERIAL REQUIRED IN SIGHT DISTANCES OR SIGHT TRIANGLE SHALL NOT EXCEED A MATURE HEIGHT GREATER THAN 30" ABOVE THE ELEVATION OF THE ADJACENT ROADWAY. STREET TREES AND SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESSES, OR WITHIN REQUIRED SIGHT DISTANCES OR SIGHT TRIANGLE EASEMENTS SHALL NOT BE BRANCHED ANY LOWER THAN 8'-0" ABOVE GRADE, AND MUST BE APPROPRIATELY PRUNED. NO WOODY PLANTS, EXCEPT GROUNDCOVERS, ARE TO HAVE THEIR CENTERS CLOSER THAN 36" TO THE BACK OF THE CURB.

PLANT MATERIAL

- A. NO PLANT SUBSTITUTION SHALL BE ALLOWED WITH REGARD TO SIZE, SPECIES, NAMED VARIETY OR CULTIVAR WITHOUT PRIOR PERMISSION OF THE APPROVING AUTHORITY.
- B. ALL PLANTS SHALL BE DUG, PACKED, TRANSPORTED AND HANDLED WITH THE UTMOST CARE TO ENSURE ADEQUATE PROTECTION FROM INJURY DESICCATION.
- C. ALL PLANTS SHALL BE FREE FROM DISEASE AND INFESTATION, AND HAVE ALL LEGALLY REQUIRED AGRICULTURAL CERTIFICATIONS.
- D. ALL PLANTS SHALL BE PRUNED TO ENHANCE VIGOR PRIOR TO OR UPON INSTALLATION WHILE RETAINING NATURAL GROWTH HABIT OF THE PLANTS. THE CENTRAL LEADER SHALL NOT BE CUT; PLANTS PROVIDED IN THIS CONDITION SHALL NOT BE ACCEPTED. DAMAGED, BROKEN, OR CONFLICTING BRANCHES SHALL BE PRUNED CLEANLY, FLUSH WITH THE MAIN TRUNK OR BRANCH.
- E. ALL PLANTS SHALL BE NURSERY-GROWN AND TAGGED WITH A DURABLE LABEL INDICATING THE GENUS, SPECIES AND SPECIFIED VARIETY OR CULTIVAR.

PLANTING

- A. SOIL MUST BE FROST-FREE, FRIABLE AND NOT MUDDY AT THE TIME OF PLANTING.
- B. BACKFILL MATERIAL FOR PLANTING PITS SHALL BE COMPOSED OF 70% TOPSOIL, 20% FULLY COMPOSTED COW OR HORSE MANURE AND 10% PEAT MOSS. TOPSOIL SHALL MEET NJDOT STANDARD SPECIFICATIONS AND MAY BE FROM ON-SITE OR IMPORTED SOURCES. SOIL SHALL CONTAIN NO ACIDIC MARL, NOR ANY LARGE STONES.
- C. PLANTS SHALL BE SET TO ULTIMATE FINISHED GRADE SO THAT THEY WILL BE LEFT IN THE RELATIONSHIP TO THE SURROUNDING GROUND AS THEY HAD, PRIOR TO BEING DUG. PLANTS SHALL BE SET SO THAT THEIR CROWNS ARE APPROXIMATELY THREE INCHES ABOVE THE FINAL GRADE WITH ROOT TOPSOIL AND MULCH GENTLY MOUNDING TO AVOID EXCESSIVE DRYING AT THE SURFACE. UNDER NO CIRCUMSTANCES SHALL PLANTINGS AT RELATIVELY DRY LOCATIONS BE PERFORMED IN A MOUNDED MANNER.
- D. THE CORD BINDING THE BALL OF ALL BALLED AND BURLAPPED (B&B) PLANTS SHALL BE CUT AND REMOVED, AND BURLAP ON THE UPPER 1/3 OF THE ROOT BALL SHALL BE REMOVED. PLANTS WITH SYNTHETIC NON-DEGRADABLE ROOT BALL WRAPS SHALL NOT BE ACCEPTABLE.
- E. ALL PROPOSED TREES SHALL BE SET IN BEDS MULCHED TO THE LIMIT OF THEIR PLANTING PITS. ALL PROPOSED SHRUBS SHALL BE SET IN CONTINUOUS MASSED PLANTING BEDS RATHER THAN ISOLATED INDIVIDUALS. ALL TREE AND SHRUB BEDS SHALL RECEIVE A 4" THICK APPLICATION OF A THOROUGHLY COMPOSTED ORGANIC MULCH, FREE OF ANY OBJECTIONABLE OR FOREIGN MATERIALS.
- F. ALL FINAL LAYOUT PLANTINGS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

MAINTENANCE

- A. ALL PLANTINGS SHALL BE WATERED AS NECESSARY FOR SOUND HORTICULTURAL PRACTICE DURING THE FIRST GROWING SEASON TO ENSURE THEIR PROPER ESTABLISHMENT.
- B. ALL DISTURBED AREAS BEYOND THE LIMITS OF THE MULCHED PLANTING BEDS SHALL BE PERMANENTLY STABILIZED WITH TURFGRASSES PER THE SOIL EROSION AND SEDIMENT CONTROL PLANS.
- C. IN GENERAL, SHRUBS ARE TO BE PLANTED AT INTERVALS WHICH WILL ALLOW THEM TO FULLY DEVELOP INTO CONTINUOUS MASSES OF THE INDIVIDUAL SPECIES. THEREFORE, NO PRUNING TO SHAPE OR SHEARING IS REQUIRED OR DESIRABLE. WHERE DEAD OR CONFLICTING BRANCHING DEVELOPS, IT SHOULD BE PRUNED OUT.

TRANSPLANTING & POST-PLANTING CARE NOTES:

- A. THE LOCATION OF UTILITIES AND OTHER OBSTRUCTIONS BOTH BELOW AND ABOVE GROUND SHALL BE TAKEN INTO CONSIDERATION PRIOR TO TRANSPLANTING ANY TREE.
- B. AN INITIAL ASSESSMENT SHALL BE CONDUCTED PRIOR TO TRANSPLANTING. THIS SHALL INCLUDE, BUT IS NOT LIMITED TO, GENERAL HEALTH OF THE PLANTS, STRUCTURAL CONDITIONS, SPECIES DATA, SIZE AND QUALITY OF ROOT SYSTEM, AND ANY OTHER RELATED ISSUE THAT WILL IMPACT THE ESTIMATED RATE OF SUCCESS. ASSESSMENT SHALL ALSO INCLUDE THE EVALUATION OF THE EXISTING SITE AND INSTALLATION SITE'S CONDITIONS, SUCH AS SOIL CONDITIONS, SLOPE, LOCATION OF UTILITIES BELOW AND ABOVE GROUND AND ANY STRUCTURES OR OBSTACLES.
- C. FOR SHADE TREES, MEASURE THE DIAMETER OF THE TREE TRUNK ONE FOOT ABOVE THE GROUND. DIG A BALL APPROXIMATELY ONE FOOT IN WIDTH FOR EACH INCH OF TRUNK DIAMETER ABOVE THE ONE INCH DIAMETER SIZE, WHICH SHOULD HAVE A MINIMUM BALL DIAMETER OF 16 INCHES. DEPTH OF THE BALL SHOULD BE ABOUT 2/3 TO 3/4 ITS WIDTH.
- D. PROPOSED LOCATIONS SHALL BE STAKED/MARKED OUT BY THE CONTRACTOR AND APPROVED BY THE LANDSCAPE ARCHITECT. CONTRACTOR TO NOTIFY THE LANDSCAPE ARCHITECT OF PLANTING LOCATION ADJUSTMENTS AS A RESULT OF UNANTICIPATED CONDITIONS IMMEDIATELY.
- E. DEPTH OF THE PLANTING PIT IS DETERMINED BY THE DEPTH AND FIRMNESS OF THE ROOT BALL AND SHALL NOT EXCEED THE DEPTH OF THE ROOT BALL. THE SOIL DIRECTLY BENEATH THE ROOT BALL SHOULD BE UNDISTURBED OR PREPARED TO PREVENT SETTLING. THE PLANTING PIT WIDTH SHOULD BE A MINIMUM OF 12 INCHES GREATER DIAMETER TO TWO TIMES THE DIAMETER OF THE ROOT BALL. THE SIDES OF THE PLANTING HOLE SHOULD BE FRIABLE AND LOOSENED TO BREAK ALL "GLAZING".
- F. NO PLANTING HOLES SHALL BE LEFT OPEN WITHOUT PROPERLY SECURING THEM FROM PUBLIC SAFETY.
- G. TREES THAT HAVE BEEN DUG SHALL BE PLANTED WITHIN 48 HOURS. ROOT BALL SHALL BE COVERED WITH DAMP MATERIAL TO RETAIN MOISTURE UNTIL TIME OF PLANTING. TREES MUST BE PROTECTED/COVERED WHEN TRANSPORTING TO THE PROPOSED LOCATION.
- H. TREES SHALL BE PLACED IN THE SAME COMPASS ORIENTATION FROM WITH THEY ORIGINATED. ROOT FLARE SHALL BE AT OR ABOVE THE FINISHED GRADE. ALL ROOT BALL SUPPORTING MATERIALS SHALL BE CUT OFF FROM THE TOP THIRD OF THE ROOT BALL AND REMOVED FROM THE PLANTING PIT PRIOR TO FINAL BACKFILLING. ALL BROKEN, TORN OR DAMAGED ROOTS GREATER THAN ONE INCH IN DIAMETER SHALL BE CLEAN-CUT TO PREVENT ROT AND DISEASE. SEVER ANY CIRCLING OR KINKED ROOTS DISCOVERED DURING PROCEDURE TO PREVENT FUTURE GIRDLING OF THE PLANT.
- I. BACKFILL SHALL BE EXISTING SOIL EXCAVATED FROM PLANTING PIT. BACKFILL SHALL BE INSTALLED AND SETTLED IN LAYERED SECTIONS TO LIMIT FUTURE SETTLING AND PREVENT AIR POCKETS. BACKFILL SHALL NOT BE COMPACTED TO A DENSITY THAT INHIBITS ROOT GROWTH. WATER SHALL BE ADDED TO THE ROOT BALL AND BACKFILL TO BRING THE ROOT BALL TO FIELD CAPACITY.
- J. PLANTS ARE TO BE MULCHED TO THE LANDSCAPE ARCHITECT'S APPROVAL. ROOT FLARE SHALL BE EXPOSED.
- K. CONTRACTOR TO PROVIDE POST-PLANTING CARE FOR A MINIMUM OF TWO YEARS.

LOT 1 (T.M.)
BLOCK 3312

ELM STREET
(60' R.O.W.) (T.M.)

SUMMIT AVENUE
(A.K.A. UNION COUNTY 657)
(60' R.O.W.) (T.M.)

INDUSTR
(20' R.O.W.) (T.M.)

LOT 1 (T.M.)
BLOCK 3310

LOT 14 (T.M.)
BLOCK 3319

T.M.)

20 0 20 40
SCALE: 1"=20'

RESTORE LAWN IN AREAS DISTURBED
BY CONSTRUCTION (TYP)

LOT 1 (T.M.)
BLOCK 3311
TOTAL AREA = 1.84 ACRES (T.M.)

LOT 2 (T.M.)
BLOCK 3311

RAIN GARDEN AREA, SEE DETAIL ON
SHEET CD100

PLANT SCHEDULE

TREES	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONT.	GAL.	QTY	REMARKS
+	AF	Acer rubrum 'Frankford'	Red Sunset® Maple	10'-12' Ht.	B&B	2.5'-3" Cal.	2	
+	GI	Gleditsia triacanthos inermis 'Impicola'	Imperial® Honey Locust	10'-12' Ht.	B&B	2.5'-3" Cal.	1	
+	QE	Quercus phellos 'QPSTA'	Hightower® Willow Oak	10'-12' Ht.	B&B	2.5'-3" Cal.	1	
SHRUBS	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	QTY	REMARKS
○	CK	Calamagrostis x acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Grass	—	3 GAL.		61	
○	CB	Cornus sanguinea	Bloodtwig Dogwood	3' Ht.	5 GAL.		9	
○	FG	Fothergilla gardenii	Dwarf Fothergilla	18"-24" Ht.	5 GAL.		62	
○	IM	Itea virginica 'Merlot'	Merlot Sweetgum	18"-24" Ht.	5 GAL.		27	
GROUND COVERS	CODE	BOTANICAL NAME	COMMON NAME	CONT.	SPACING	QTY		
■	DP	Dicentra x Pink Diamonds®	Pink Diamonds Bleeding Hearts	1 GAL.		331		
■	HO	Hemerocallis x 'Stella de Oro'	Stella de Oro Daylily	1 GAL.		275		
■	IS	Iris sibirica	Siberian Iris	1 GAL.		41		
■	LC	Lobelia cardinalis	Cardinal Flower	1 GAL.		30		

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AAG
11/16/2023

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11/16/2023

CHECKED BY:

ROBERT GREGORIA, PE
NJ PROFESSIONAL ENGINEER
LICENSE NO. 3633065600

DATE: 11/16/2023

DAREN J. PHIL, PE
NJ PROFESSIONAL ENGINEER
LICENSE NO. 24063619100

DATE: 11/16/2023



SUBURBAN CONSULTING
ENGINEERS, INC.

COA NO.: 24CA28037200
2/16/2024

- Civil Engineers - Municipal Engineers -
- Landscape Architects -
- Planners - Environmentalists - Land Surveyors -
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Flanders, NJ 07836 - 973.398.1776 Wall, NJ 08736 - 732.282.1776 Hackensack, NJ 07601 - 201.646.1776

EXCELLENCE ♦ ECONOMY ♦ ENVIRONMENT

VILLAGE GREEN PHASE III
IMPROVEMENT PROJECT
BLOCK 3311, LOTS 1, 2 & 15
CITY OF SUMMIT, COUNTY OF UNION, STATE OF NEW JERSEY

LANDSCAPE PLAN

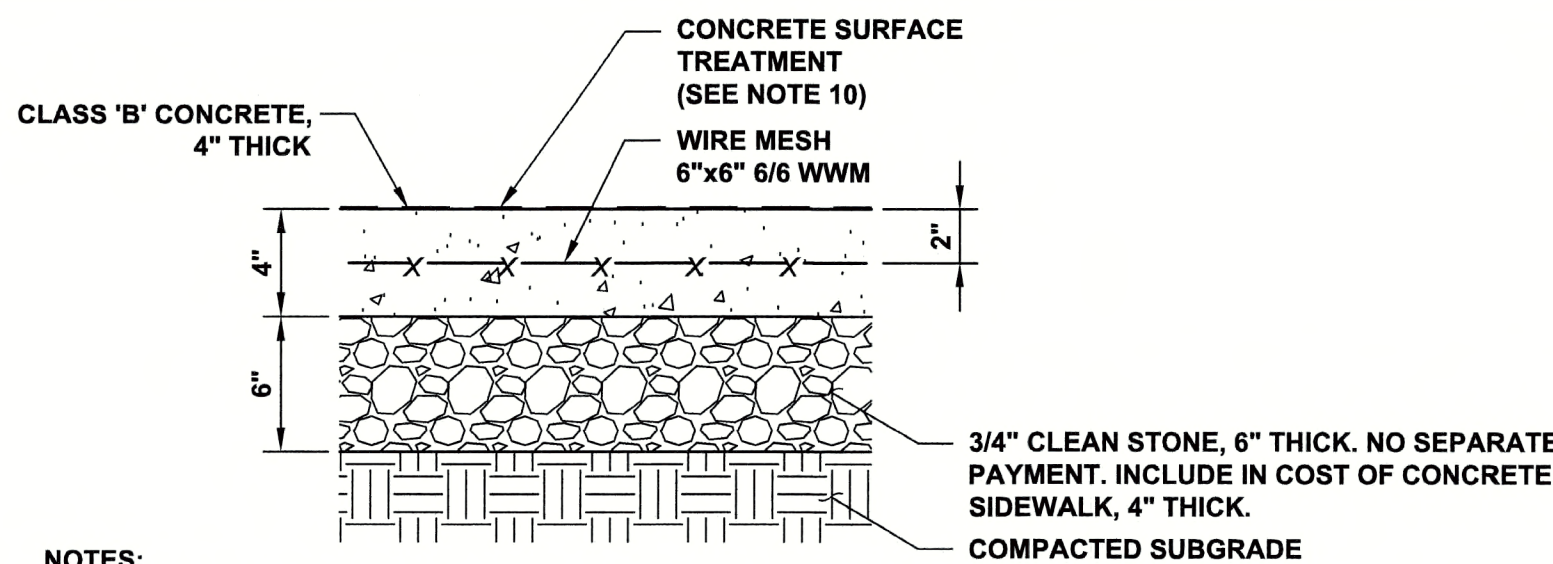
PROJECT NUMBER:
SCE-R12675.041

DRAWING NUMBER:
LA200

SHEET NUMBER:
7 OF 12

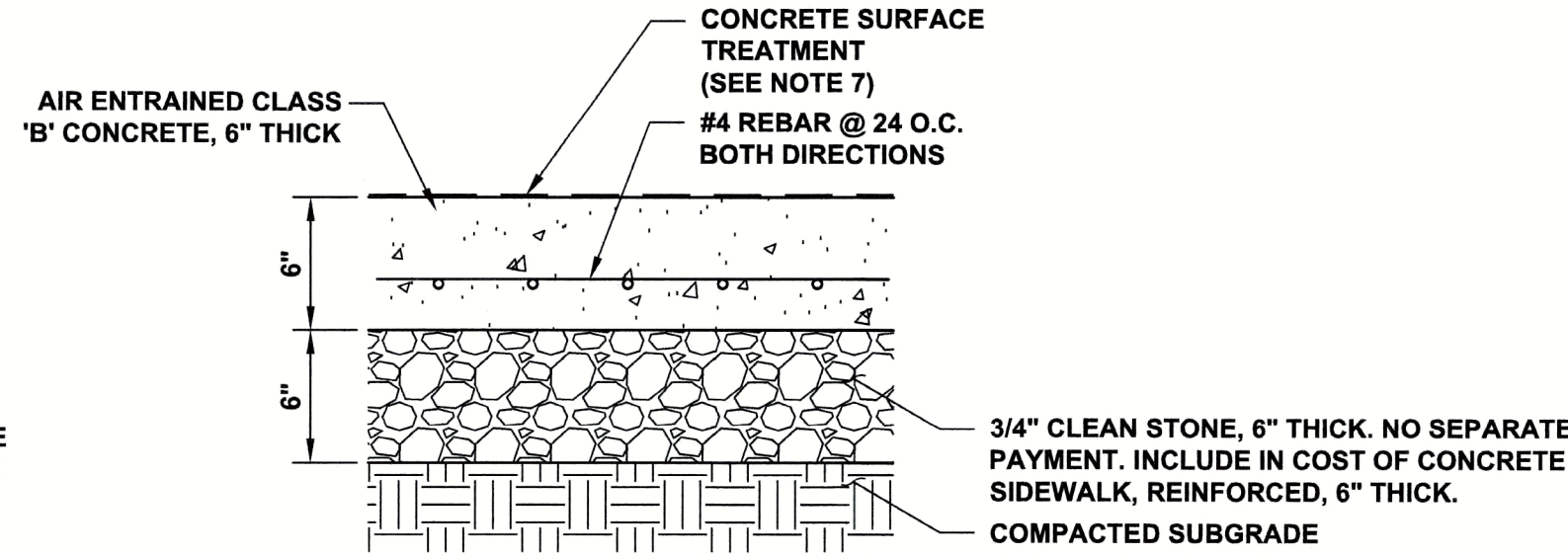
SCALE:
1"=20' REV. A

G:\Projects\12675-041\CAD\WIP\PlanSet\12675-041_CD100_ConstructionDetails.dwg Fri, Feb 23, 2024 - 9:27am agonzalez SUBURBAN CONSULTING ENGINEERS, INC.



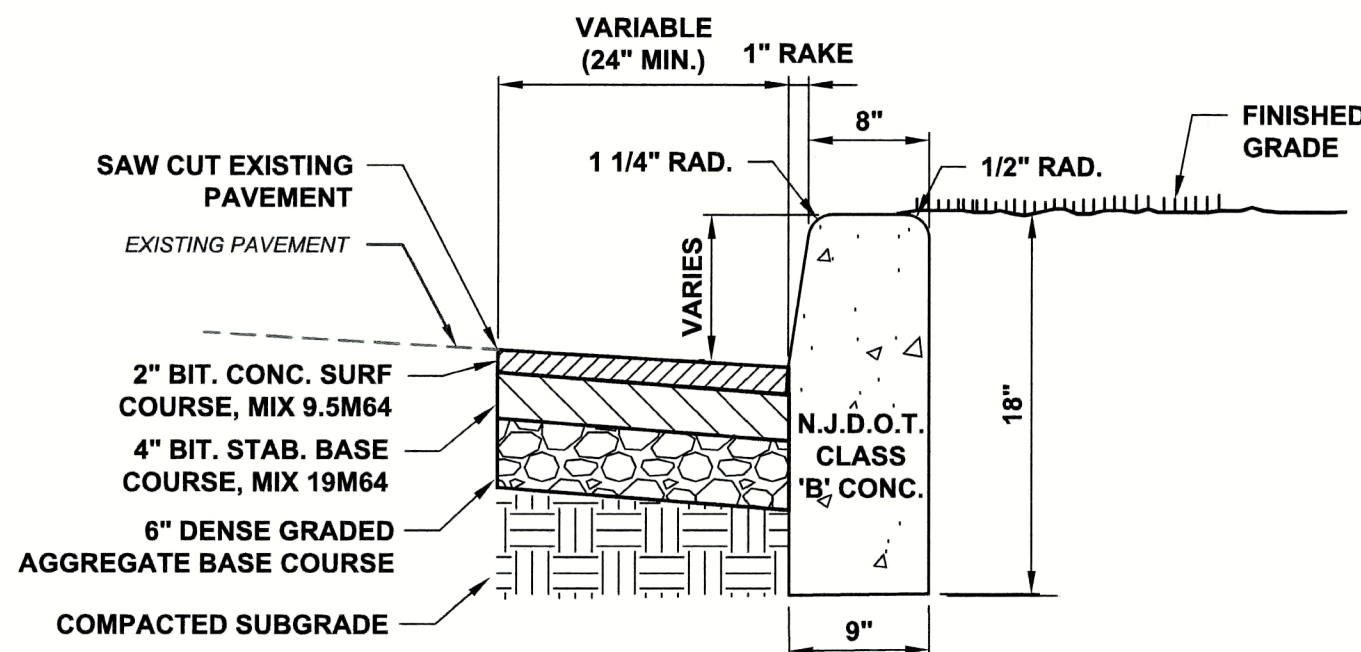
- NOTES:
- SUBBASE SHALL BE COMPACTED TO THE SATISFACTION OF THE ENGINEER.
 - EXPANSION JOINTS OF 1/2" WIDE BITUMINOUS CELLULAR TYPE JOINT FILLER WILL BE PROVIDED EVERY 12' MAX IN BOTH DIRECTIONS.
 - LONGITUDINAL JOINTS, 1/4" WIDE, SHALL BE PROVIDED BETWEEN CURBS AND ABUTTING SIDEWALKS AND SHALL BE FILLED WITH PREMOLDED BITUMINOUS TYPE JOINT FILLER.
 - TRANSVERSE SURFACE GROOVES SHALL BE CUT IN SIDEWALKS BETWEEN EXPANSION JOINTS AT INTERVALS EQUAL TO THE SIDEWALK WIDTH.
 - ALL CONCRETE SHALL BE CLASS 'B' AIR ENTRAINED.
 - ALL JOINTS AND EDGES ARE TO BE TOOLED.
 - SURFACE SHALL BE BRUSHED TRANSVERSELY TO A NEAT FINISH.
 - LIQUID MEMBRANE FORMING CURING COMPOUND SHALL BE APPLIED IN COMPLIANCE WITH N.J.D.O.T. SPECS.
 - SCORING JOINTS WILL BE 6" O.C.
 - SIDEWALKS SHALL RECEIVE SURFACE TREATMENT TO MATCH EXISTING SIDEWALKS INSTALLED IN OTHER AREAS OF THE VILLAGE GREEN. TREATMENT SHALL BE STONESCAPE AS MANUFACTURED BY TRAFFIC CALMING USA OR APPROVED EQUAL
 - ALL CONCRETE SIDEWALKS TO HAVE WHITE PIGMENT ADDED TO THE MIXTURE.

CONCRETE SIDEWALK, 4" THICK
N.T.S.



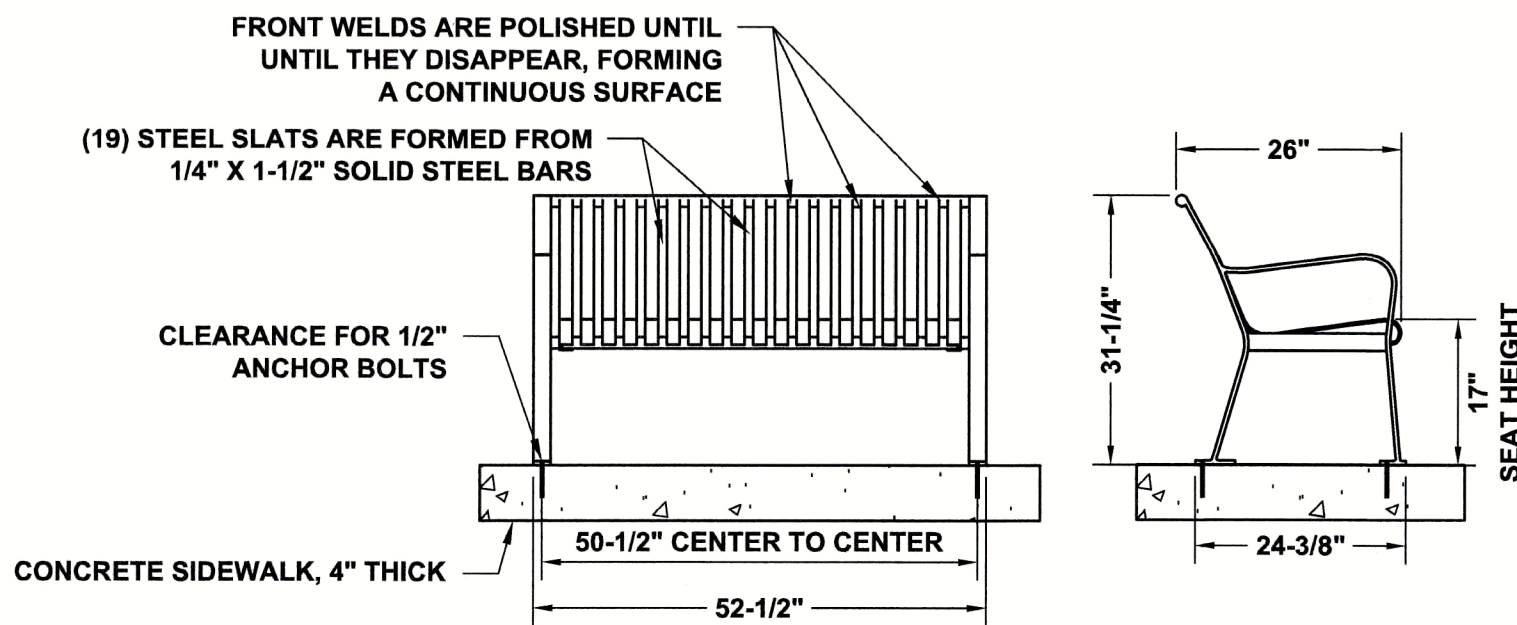
- NOTES:
- SUBBASE SHALL BE COMPACTED TO THE SATISFACTION OF THE ENGINEER.
 - THE SAME BRAND AND TYPE OF CONCRETE SHALL BE USED THROUGHOUT THE PROJECT.
 - ALL CONTROL JOINTS SHALL BE 1/4" WIDE X 3/4" DEEP IN A 10' X 10' MAXIMUM GRID.
 - ALL CONTROL JOINTS SHALL BE FILLED WITH TRAFFIC GRADE ELASTOMETRIC CAULK.
 - ALL CONCRETE SHALL BE CLASS 'B' AIR ENTRAINED MINIMUM 4,000 PSI STRENGTH WITH FIBER GLASS REINFORCEMENT.
 - SURFACE SHALL BE HARD STEEL-TROWEL FINISH (JUST BEFORE GLASSY) AND SHALL BE CHEMICALLY SEALED WITH PERMANENT, NON-GLOSSY CONCRETE SEALANT.
 - SIDEWALKS SHALL RECEIVE SURFACE TREATMENT TO MATCH EXISTING SIDEWALKS INSTALLED IN OTHER AREAS OF THE VILLAGE GREEN. TREATMENT SHALL BE STONESCAPE AS MANUFACTURED BY TRAFFIC CALMING USA OR APPROVED EQUAL
 - ALL CONCRETE SIDEWALKS TO HAVE WHITE PIGMENT ADDED TO THE MIXTURE.

CONCRETE SIDEWALK, REINFORCED 6" THICK
N.T.S.



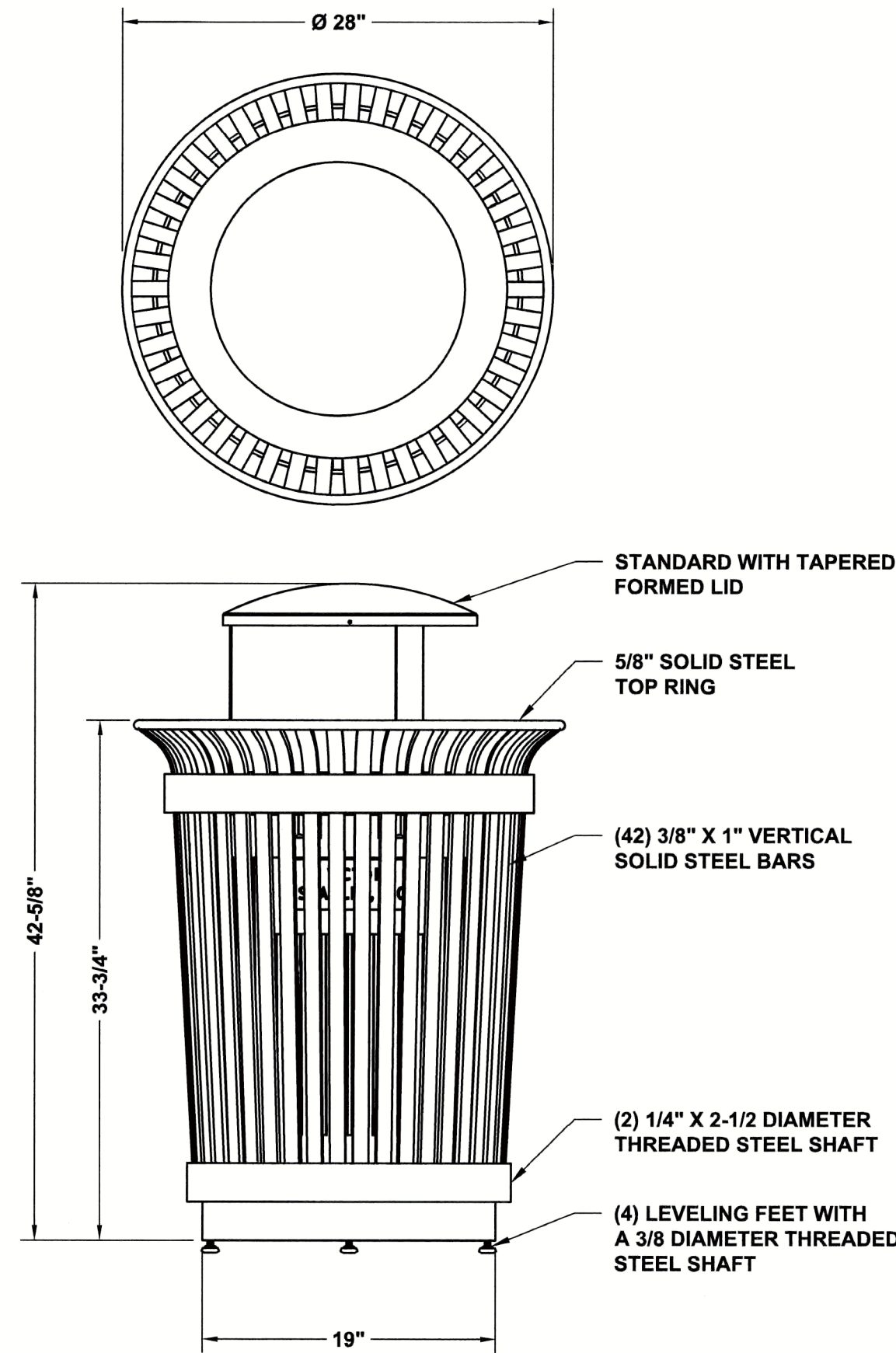
- NOTES:
- TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 20" APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS IMPREGNATED FIBER JOINT FILLER, COMPLYING WITH THE REQUIREMENTS OF A.A.S.H.O. SPEC. M-213, RECESSED 1/4" IN FROM THE FRONT FACE AND TOP OF CURB.
 - PAVEMENT REPAIR TO BE INCLUDED IN COST OF CONCRETE VERTICAL CURB.

9"X18" CONCRETE VERTICAL CURB
N.T.S.



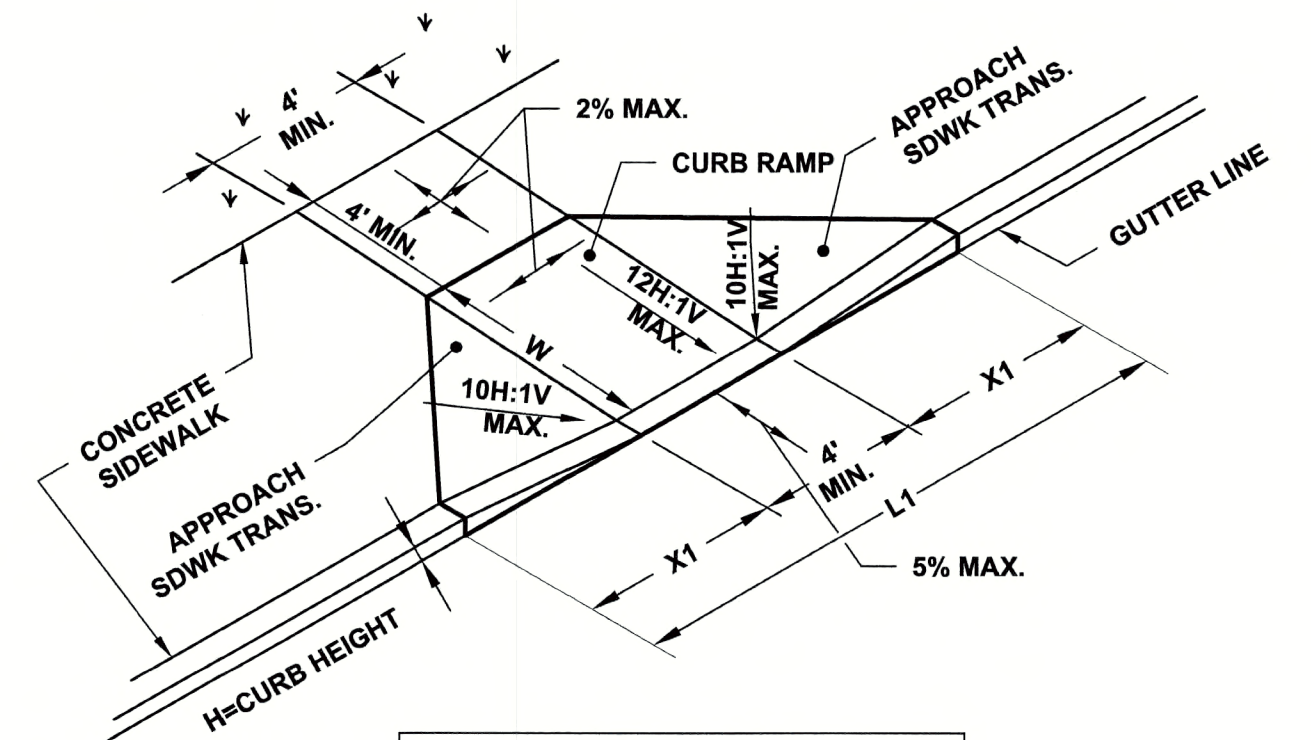
- NOTES:
- BENCH SHALL BE STEELITES RB COLLECTION, MODEL NO. RB-28-4 AS MANUFACTURED BY VICTOR STANLEY, OR APPROVED EQUAL.
 - CONTRACTOR TO SEE ATTACHMENTS IN CONTRACT SPECIFICATIONS FOR ADDITIONAL PRODUCT INFORMATION AND ASSEMBLE PRODUCT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

BENCH
N.T.S.



- NOTES:
- CONTRACTOR SHALL FURNISH AND INSTALL TRASH RECEPTACLE, MODEL #RB-36, TAPERED FORMED LID, COLOR TO BE BLACK, MANUFACTURED BY VICTOR STANLEY OR APPROVED EQUAL.
 - ALL STEEL MEMBERS COATED WITH ZINC RICH EPOXY THEN FINISHED WITH POLYESTER POWDER COATING.
 - ALL TRASH RECEPTACLES TO BE INSTALLED WITH TAMPER RESISTANT STAINLESS STEEL HARDWARE.
 - INSTALL ON CONCRETE SIDEWALK, REINFORCED, 6" THICK.

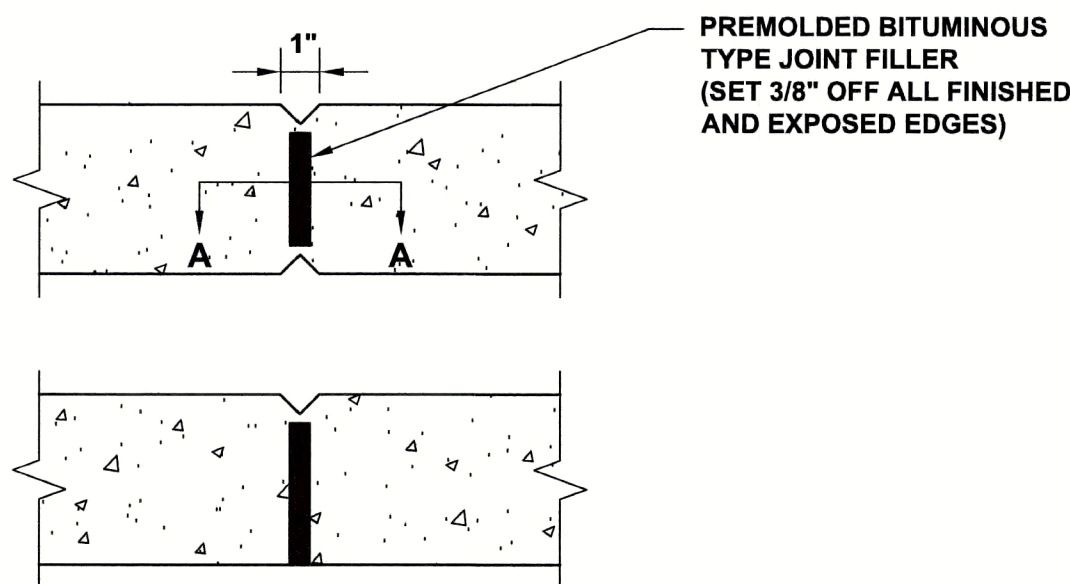
TRASH RECEPTACLE
N.T.S.



DIMENSIONS			
H INCHES	X 1 FEET	L 1 FEET	W FEET
3	2.5	9.0	3
4	3.3	10.6	4
5	4.2	12.4	5
6	5.0	14.0	6
7	5.8	15.6	7
8	6.7	17.4	8
9	7.5	19.0	9

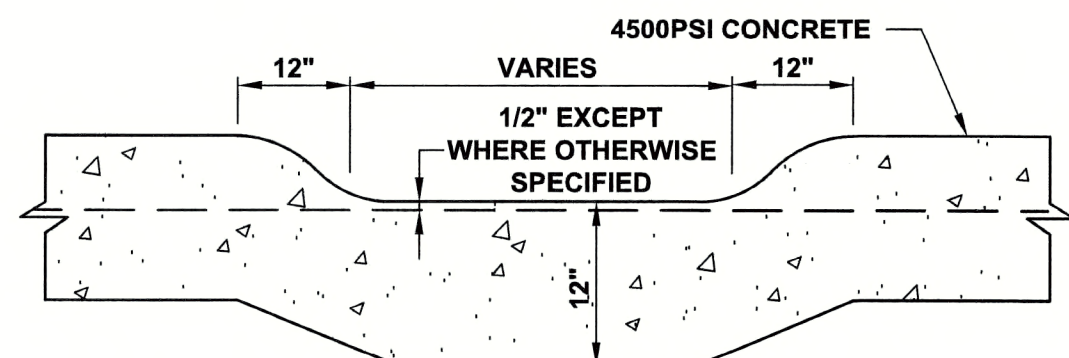
- NOTES:
- LANDING AREA, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP SHALL BE KEPT CLEAR OF OBSTRUCTIONS.
 - DIMENSIONS SHOWN IN TABLES ARE FOR RELATIVELY FLAT SIDEWALK AREAS. CARE SHOULD BE TAKEN WHEN DETERMINING CURB RAMP SIZE BASED ON CURB HEIGHT (H) WHERE ELEVATION OF CURB AND SIDEWALK VARY DRASTICALLY IN AREA OF PROPOSED CURB RAMP.
 - CURB (DROPPED CURB) GUTTERLINE TO BE FLUSH WITH ROADWAY PAVEMENT A MINIMUM OF 4 FEET AT ALL CURB RAMPS.
 - FOR CURB RAMP TYPES 5 AND 6, IF A GRASS BUFFER DOES NOT EXIST, SLOPE CURB TO EQUAL SLOPE OF ADJACENT CURB RAMP.
 - PREFERRED AND ALTERNATE TREATMENTS SHOULD NOT BE INTERMIXED WITHIN THE SAME INTERSECTION.
 - DIMENSIONS SHOWN IN TABLES ARE FOR 3 INCH TO 9 INCH CURB HEIGHTS. WHERE THE CURB HEIGHTS ARE OTHER THAN WHAT IS PROVIDED IN THE TABLES, THE DIMENSIONS OF THE RAMPS WILL BE DETERMINED BY THE ENGINEER.
 - CAST-IRON DETECTABLE WARNING SURFACES SHALL BE PROVIDED ON ALL CURB RAMPS IN ACCORDANCE WITH THE DETAIL INCLUDED IN THESE CONSTRUCTION PLANS.
 - COST FOR CURB RAMPS AND DETECTABLE WARNING SURFACES SHALL BE PAID FOR AND INCLUDED IN THE CONCRETE SIDEWALK, 4" THICK PAY ITEM.
 - PAVEMENT REPAIR TO BE INCLUDED IN COST OF CONCRETE VERTICAL CURB.

ADA CURB RAMP TYPE 1
N.T.S.



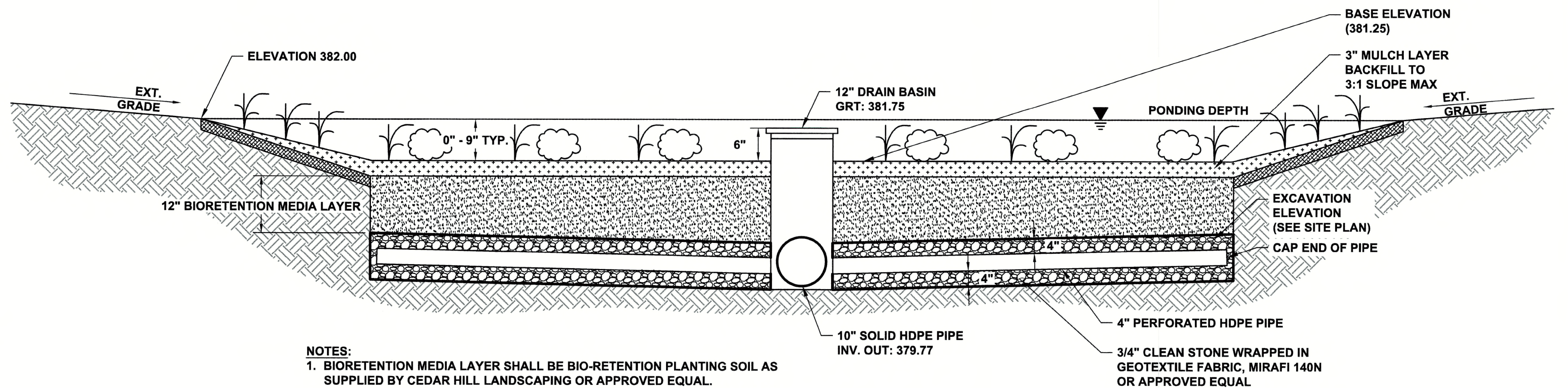
- NOTES:
- EXPANSION JOINTS SPACED EVERY 8'-10' O.C.
 - V-NOTCH TO BE CAST IN PLACE, NOT TOOLED.
 - PLACE AT CRITICAL LOCATIONS SUCH AS FENCE POSTS AND CORNERS.

CONCRETE CURB EXPANSION JOINT
N.T.S.



- NOTES:
- PAVEMENT REPAIR TO BE INCLUDED IN COST OF CONCRETE VERTICAL CURB.

DEPRESSED CURB
N.T.S.

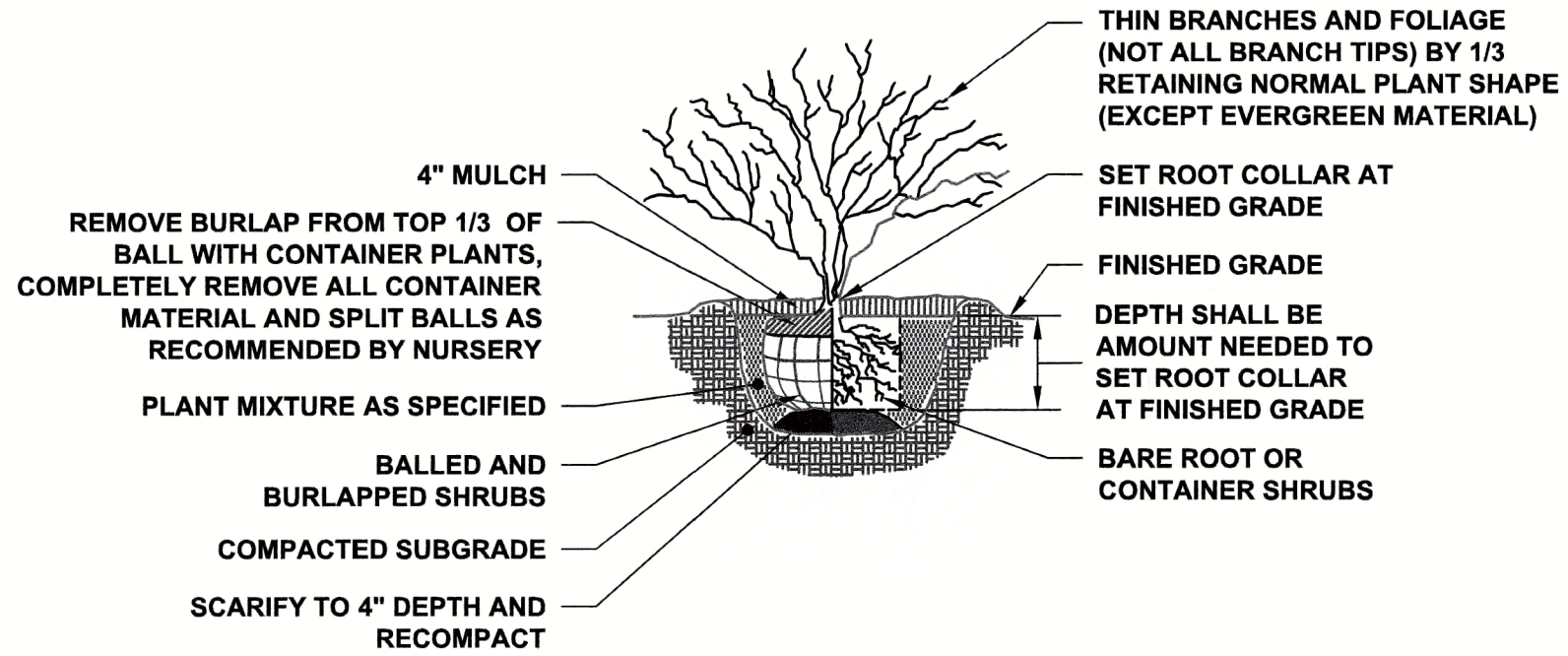


- NOTES:
- BIORETENTION MEDIA LAYER SHALL BE BIO-RETENTION PLANTING SOIL AS SUPPLIED BY CEDAR HILL LANDSCAPING OR APPROVED EQUAL.
 - CONTRACTOR SHALL PERFORM FLOOD TEST ON RAIN GARDEN TO ENSURE AREA DRAINS WITHIN 70 HOURS.
 - CONTRACTOR SHALL REFRAIN FROM USING HEAVY EQUIPMENT FOR CONSTRUCTION OF THE RAIN GARDEN TO AVOID OVER COMPACTION OF MATERIAL.

RAIN GARDEN DETAIL
N.T.S.

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REVISED PER NJDOT REVIEWER COMMENTS				NO.				DATE:				BY:				CHK:				DESCRIPTION				REVISIONS				CONSTRUCTION DETAILS I					

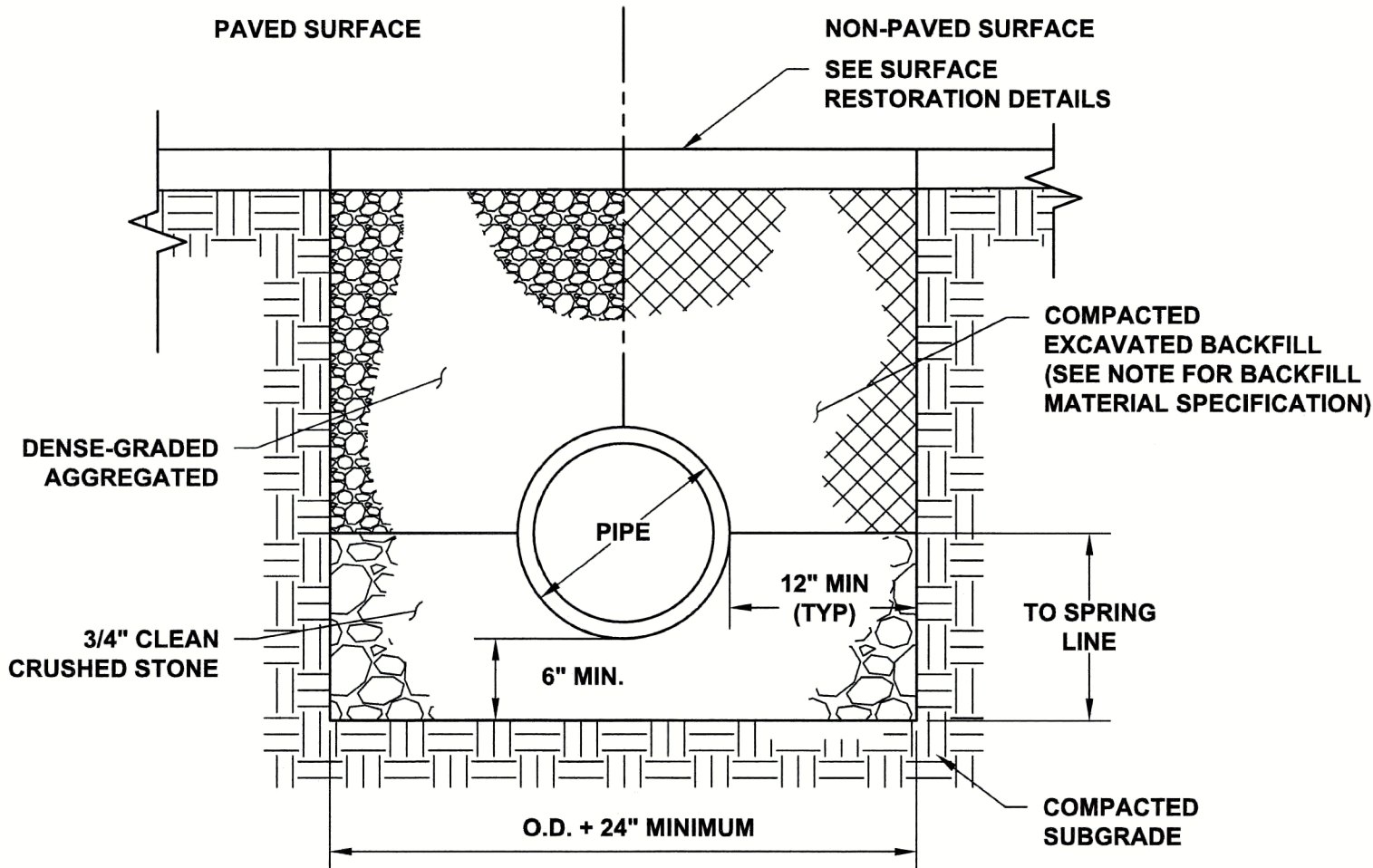
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- NOTES:
1. MAINTAIN SAME GROUND LINE AS IN THE NURSERY.
 2. DO NOT PRUNE EVERGREEN SHRUBS EXCEPT TO REMOVE DEAD AND BROKEN BRANCHES.

SHRUB PLANTING DETAIL

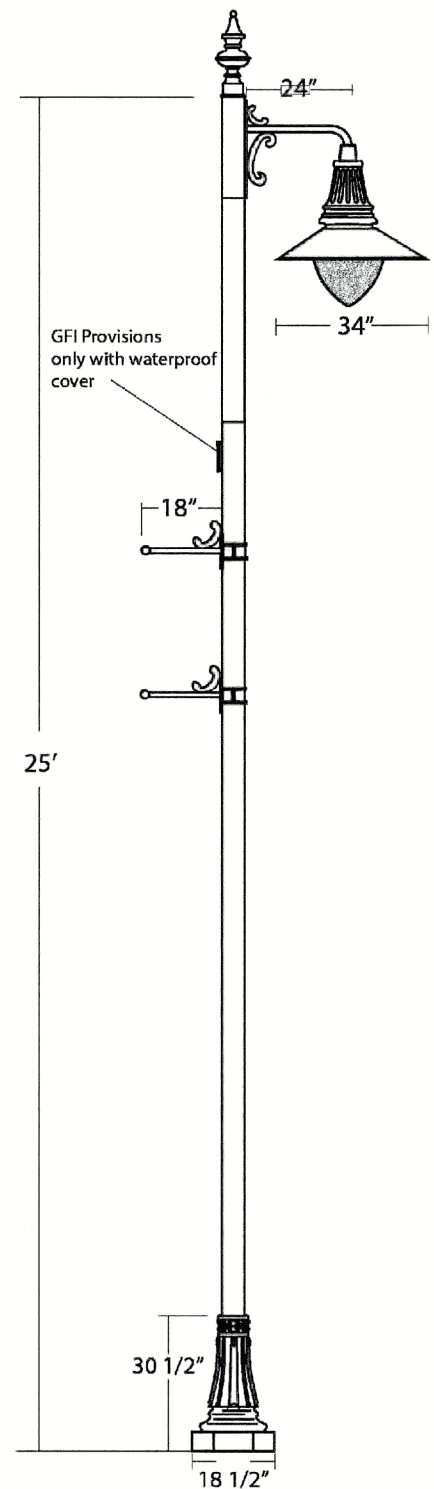
N.T.S.



- BACKFILL SPECIFICATIONS:
1. SHALL BE FREE OF DEBRIS AND STONES 2" OR GREATER IN ANY DIMENSION.
 2. SHALL BE PLACED IN 12" LIFTS AND COMPACTED TO 95% MAXIMUM DENSITY.

SOLID DRAINAGE PIPE TRENCH

N.T.S.

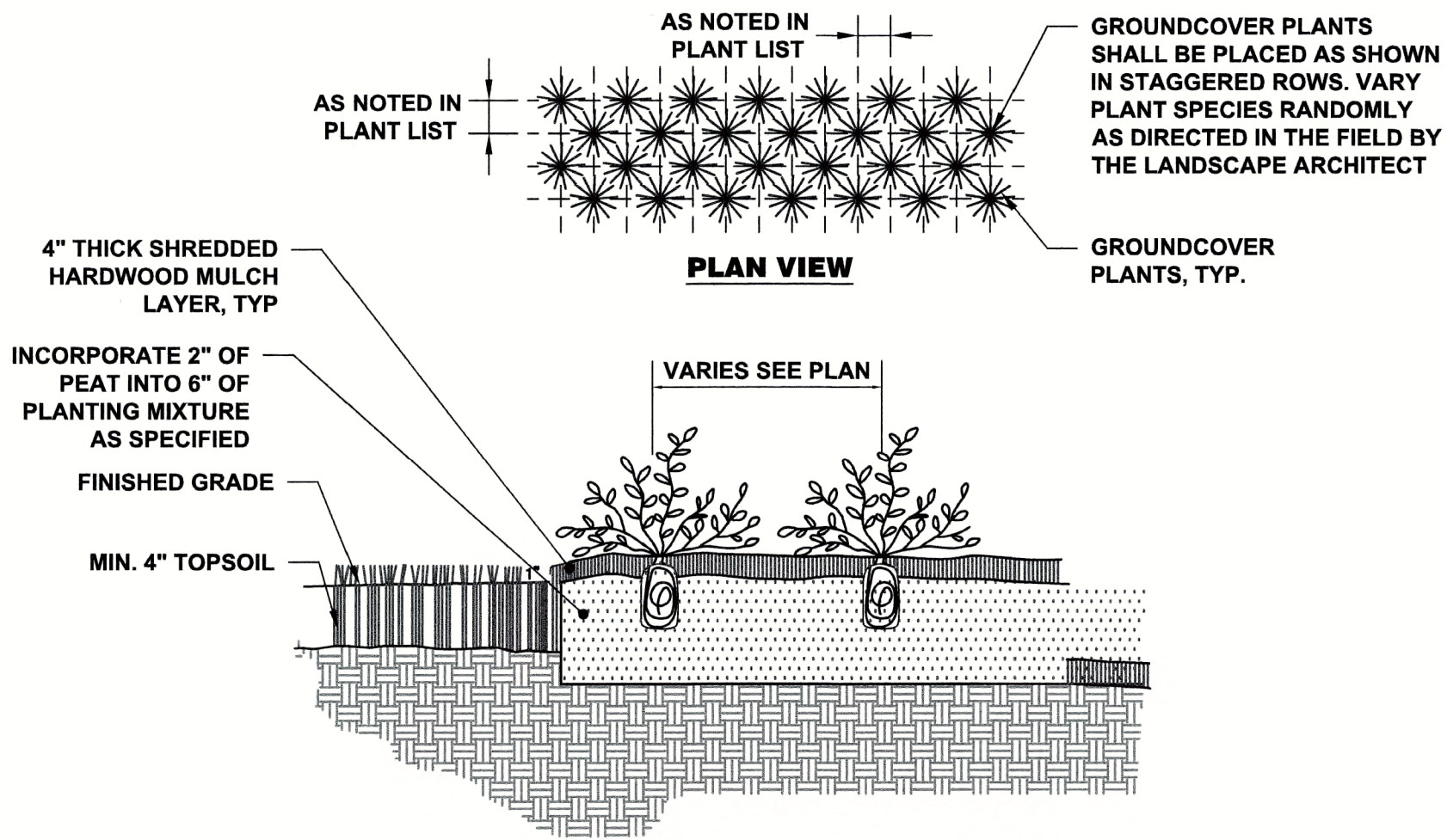


SPECIFICATIONS	
Housing:	Corrosion resistant, cast A356 aluminum alloy, .188" min. wall thickness ballast compartment, and heavy gauge spun aluminum hood.
LED:	75 watts, multi-tap.
Lens:	Tear drop, sealed into cast aluminum frame.
Arm:	Extruded and cast aluminum.
Pole:	5" DIA. x 20' HT. Non-fluted, decorative pole. Durable corrosion resistant, cast aluminum base with hand hole and cover. The pole shall be 5" dia. x 3/16" wall thickness, extruded 6063-T6 aluminum alloy.
Finish:	RAL 6005 polyester powder fuse coating.
Options:	GFI - Ground Fault Interruptor. Finial. Banner arm with scroll and plate.

LED ENGINE INFORMATION	
LUMINOUS FLUX	10187
WATTAGE	75
COLOR TEMPERATURE	4000K
CRI	>77
MILLIAMPS	530
OVERHEATING PROTECTION	YES
OPERATING POSITION	UNIVERSAL
AVERAGE LIFETIME 10% FAILURE	50000 HOURS
DIODE MANUFACTURER	PHILIPS
LUMEN MAINTENANCE AT END OF LIFE	70%
INPUT VOLTAGE	120-277

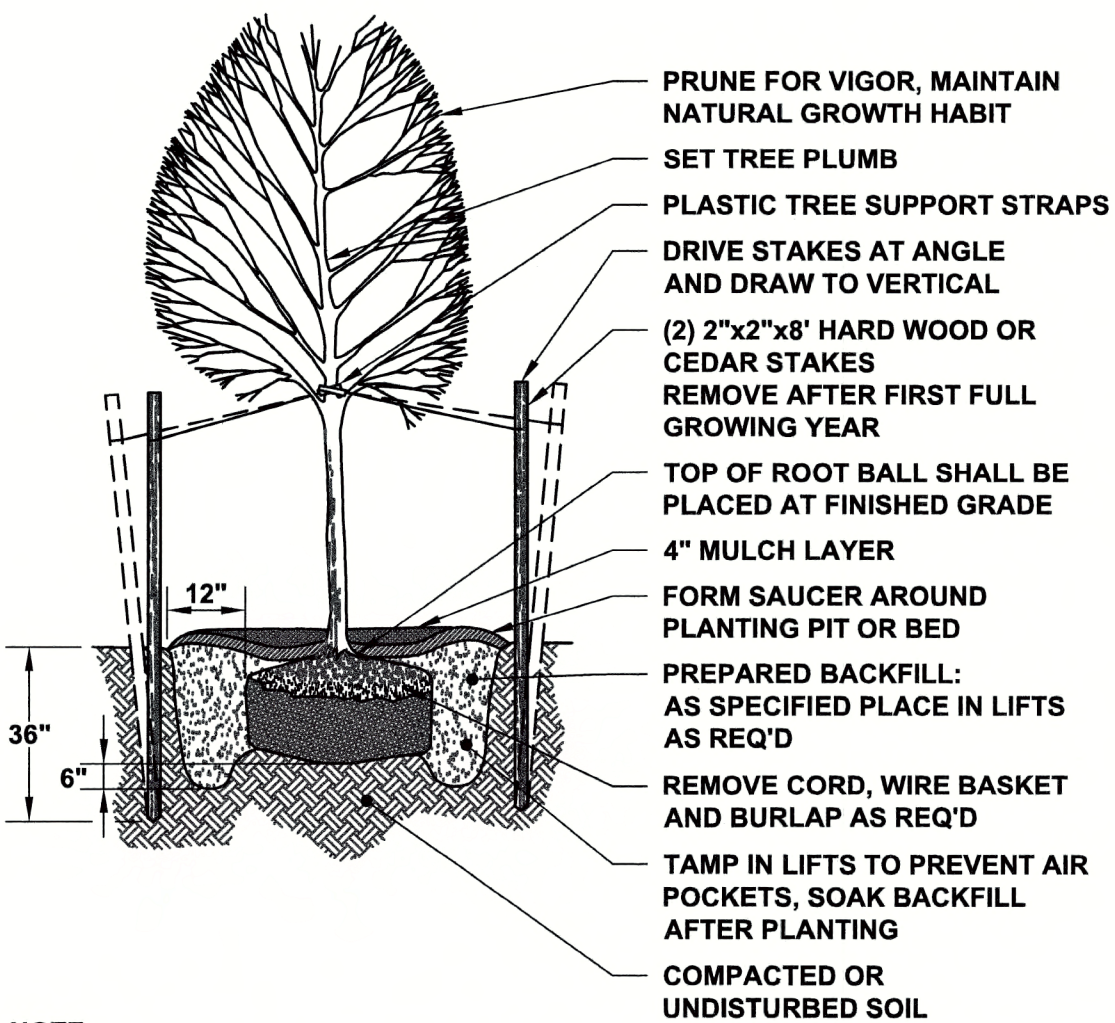
SITE LIGHTING - TYPE A

N.T.S.



GROUND COVER/PERENNIAL PLANTING

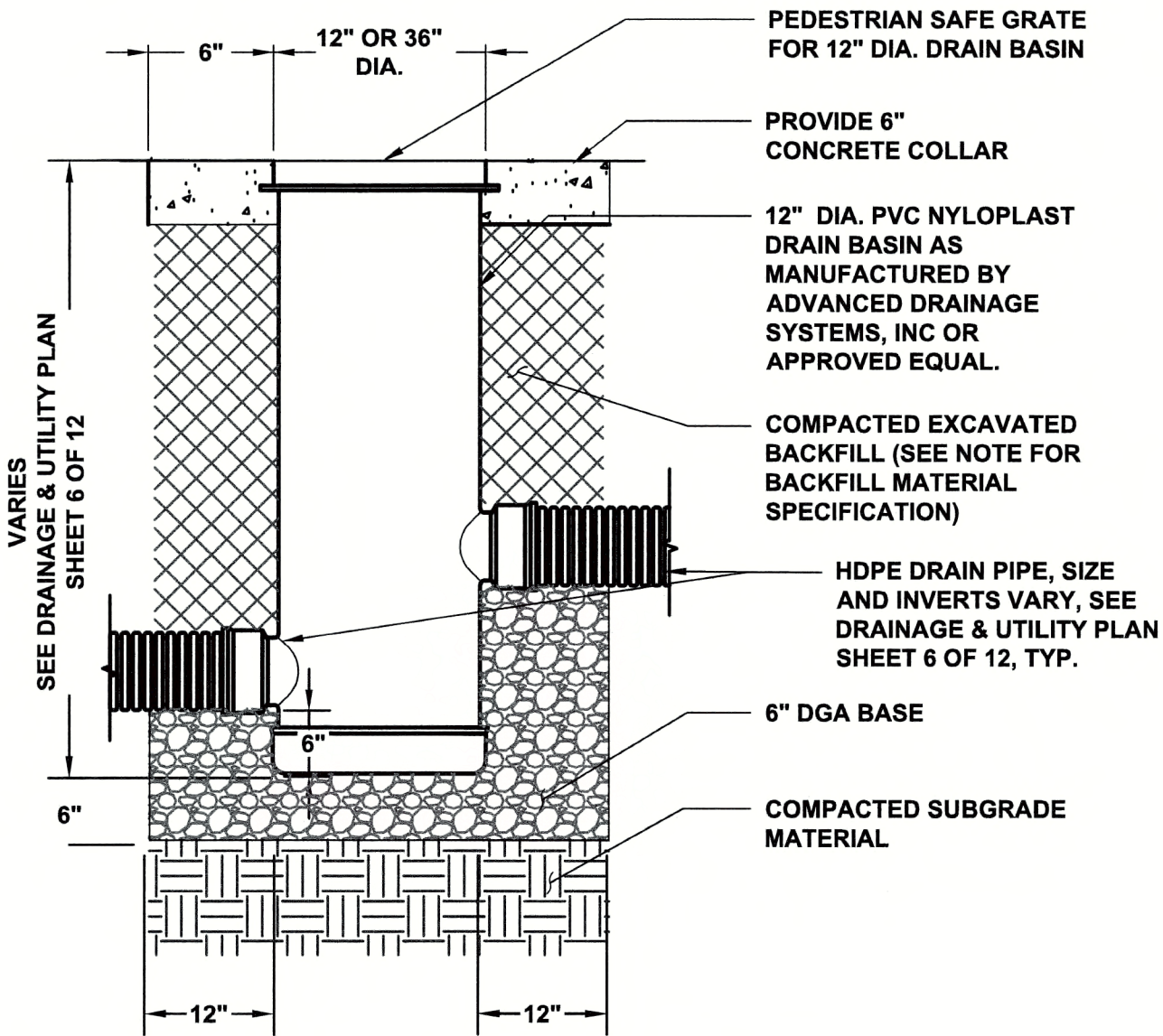
N.T.S.



NOTE:
CONTRACTOR SHALL SUPPLY AND INSTALL GATOR BAGS ON ALL TREE MATERIAL.

DECIDUOUS TREE PLANTING

N.T.S.

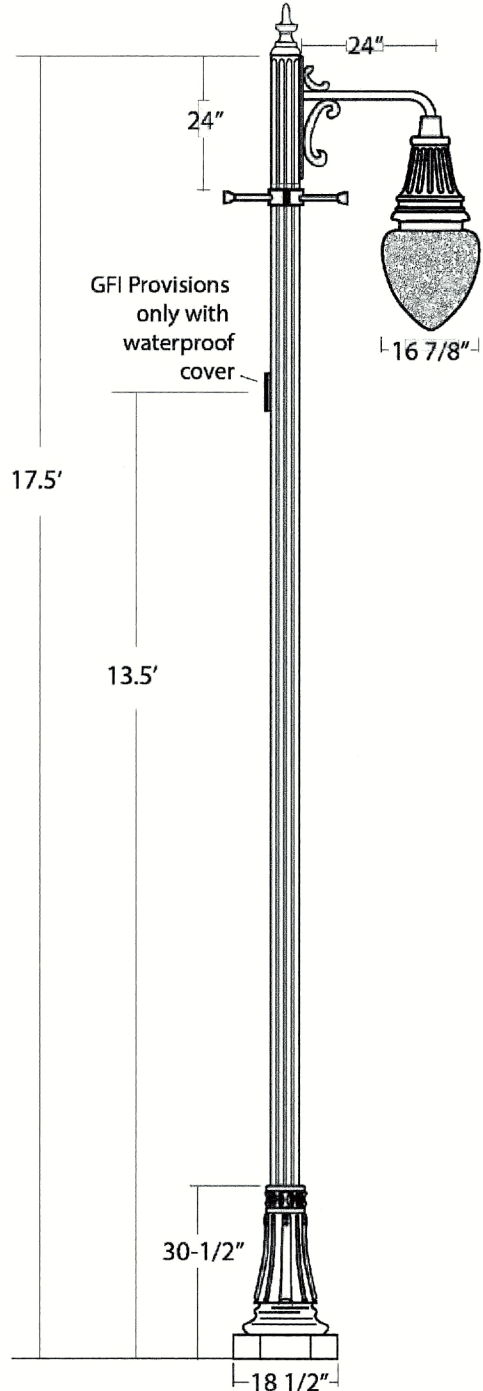


- NOTES:
1. GRATE AND FRAME SHALL MEET ADA REQUIREMENTS FOR GRATE OPENING WIDTHS AND SHALL BE DUCTILE IRON PER ASTM A536.
 2. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE.
 3. DRAIN BASIN SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

- BACKFILL SPECIFICATION
1. SHALL BE FREE OF DEBRIS AND STONES 2" OR GREATER IN ANY DIMENSION.
 2. SHALL BE PLACED IN 12" LIFTS AND COMPACTED TO 95% MAXIMUM DENSITY.

DRAINAGE BASIN DETAIL

N.T.S.

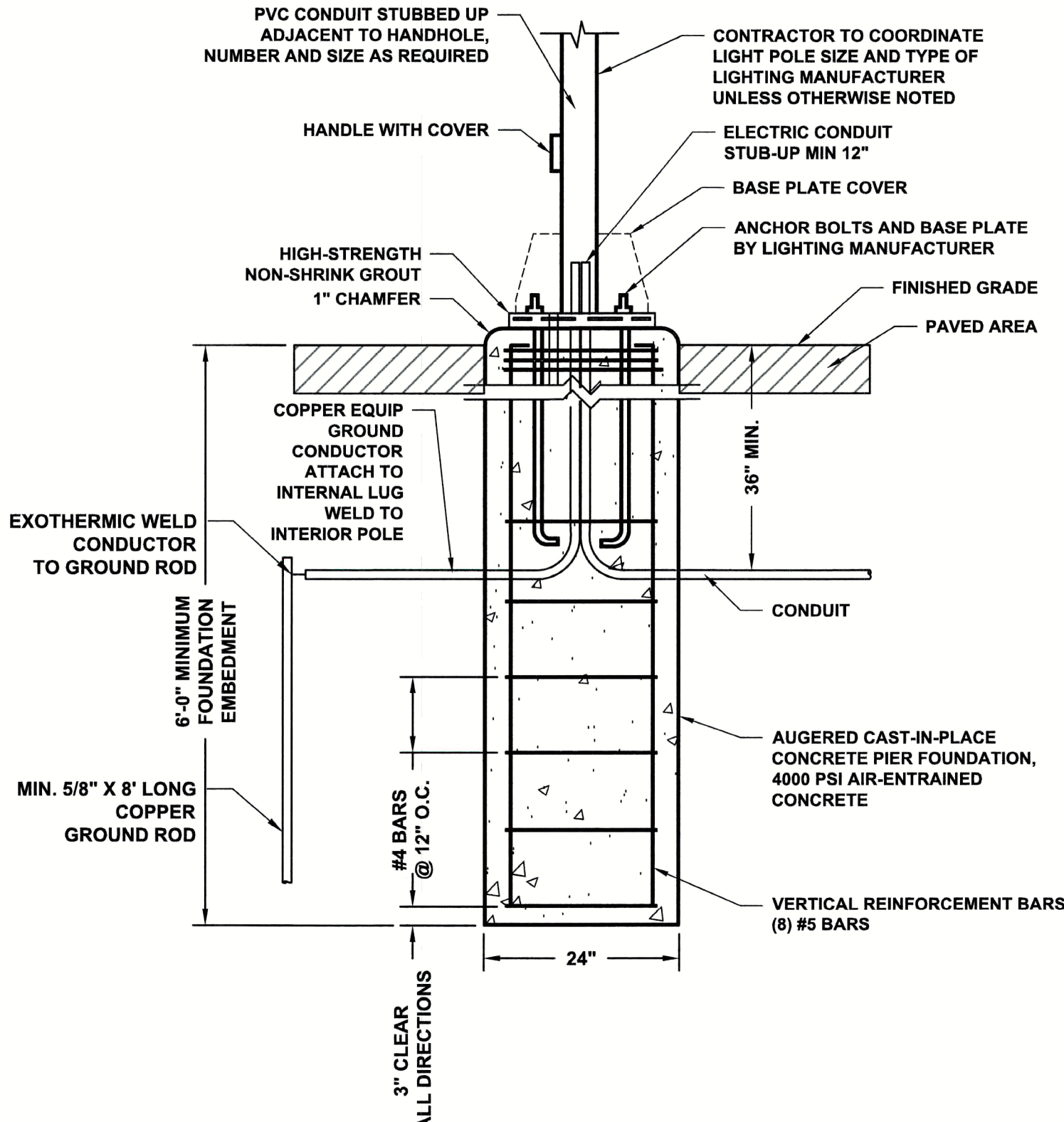


SPECIFICATIONS	
Housing:	Corrosion resistant, cast A356 aluminum alloy, .188" min. wall thickness ballast compartment, and heavy gauge spun aluminum hood.
LED:	75 watts, multi-tap.
Lens:	Tear drop, sealed into cast aluminum frame.
Arm:	Extruded and cast aluminum.
Pole:	5" DIA. x 20' HT. Non-fluted, decorative pole. Durable corrosion resistant, cast aluminum base with hand hole and cover. The pole shall be 5" dia. x 3/16" wall thickness, extruded 6063-T6 aluminum alloy.
Finish:	RAL 6005 polyester powder fuse coating.
Options:	GFI - Ground Fault Interruptor. Finial.

LED ENGINE INFORMATION	
LUMINOUS FLUX	10187
WATTAGE	75
COLOR TEMPERATURE	4000K
CRI	>77
MILLIAMPS	530
OVERHEATING PROTECTION	YES
OPERATING POSITION	UNIVERSAL
AVERAGE LIFETIME 10% FAILURE	50000 HOURS
DIODE MANUFACTURER	PHILIPS LUXEON REBEL
LUMEN MAINTENANCE AT END OF LIFE	70%
INPUT VOLTAGE	120-277

SITE LIGHTING - TYPE B

N.T.S.



LIGHT POLE FOUNDATION DETAIL

N.T.S.

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REVISIONS				

DRAWN BY:	AAG
CHECKED BY:	KAK
CHECKED BY:	

ROBERT GREGORIA, PE
NJ PROFESSIONAL ENGINEER
LICENSE NO. 142693365600

DATE: 11/16/2023

DAREN J. PHIL, PE
NJ PROFESSIONAL ENGINEER
LICENSE NO. 142693365600

DATE: 11/16/2023



SUBURBAN CONSULTING ENGINEERS, INC.

COA NO.: 24CA28037500

- Civil Engineers - Municipal Engineers -

- Landscape Architects

- Planners - Environmentalists - Land Surveyors -

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2430 Highway 34, Bldg. A Suite 1R

Wall, NJ 08736 - 732.282.1776

505 Main Street, Suite 314

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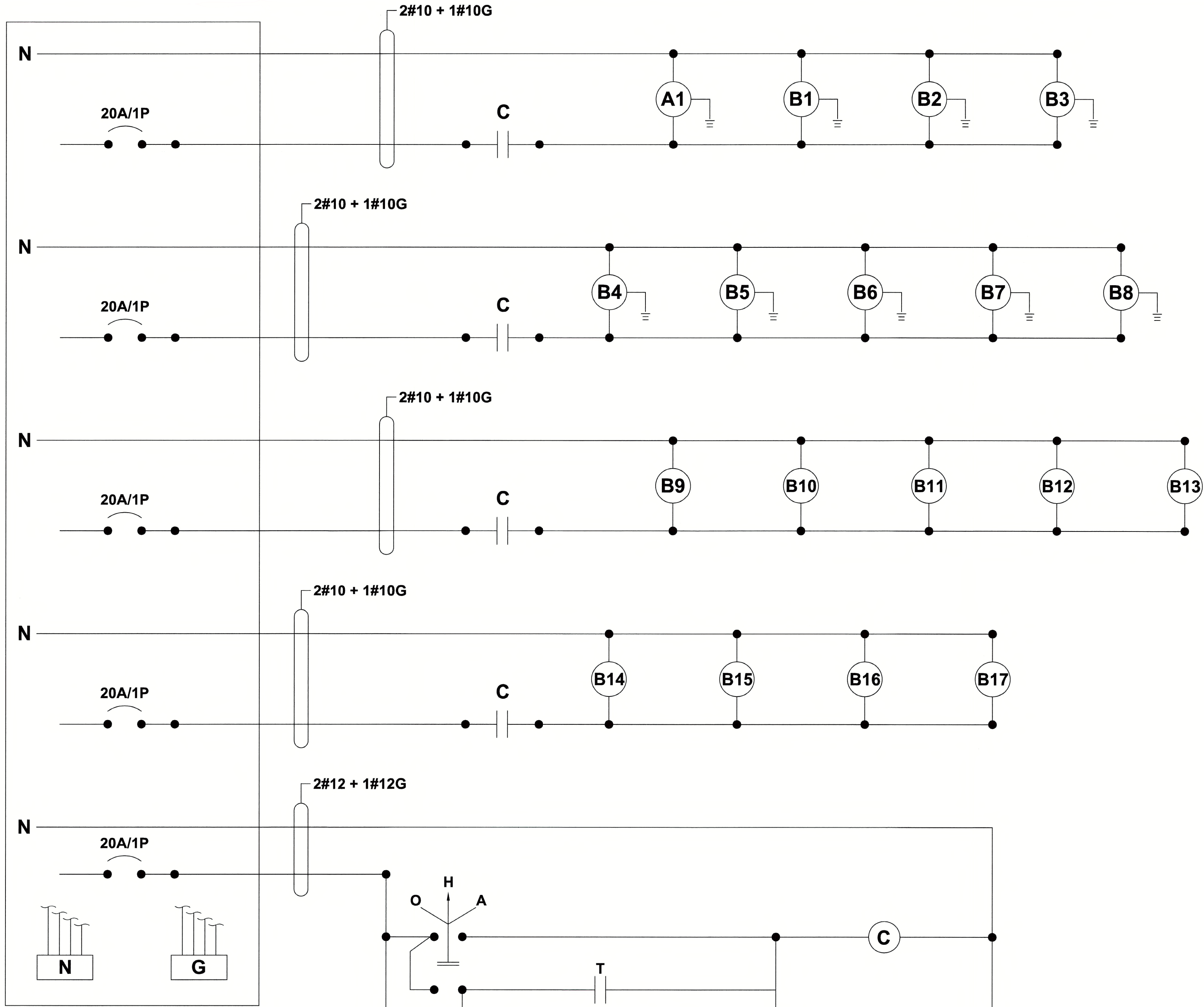
EXCELLENCE ♦ ECONOMY ♦ ENVIRONMENT

VILLAGE GREEN PHASE III IMPROVEMENT PROJECT
BLOCK 3311, LOTS 1, 2 & 15
CITY OF SUMMIT, COUNTY OF UNION, STATE OF NEW JERSEY

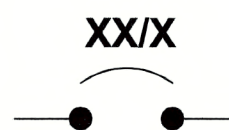
CONSTRUCTION DETAILS II

PROJECT NUMBER:	SCE-R12675.041
DRAWING NUMBER:	CD101
SHEET NUMBER:	9 OF 12
SCALE:	AS NOTED
REV.	A

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LEGEND



CIRCUIT BREAKER
XX = AMP RATING
X = POLES



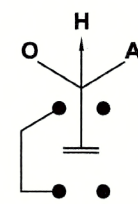
CONTACTOR



TIMER

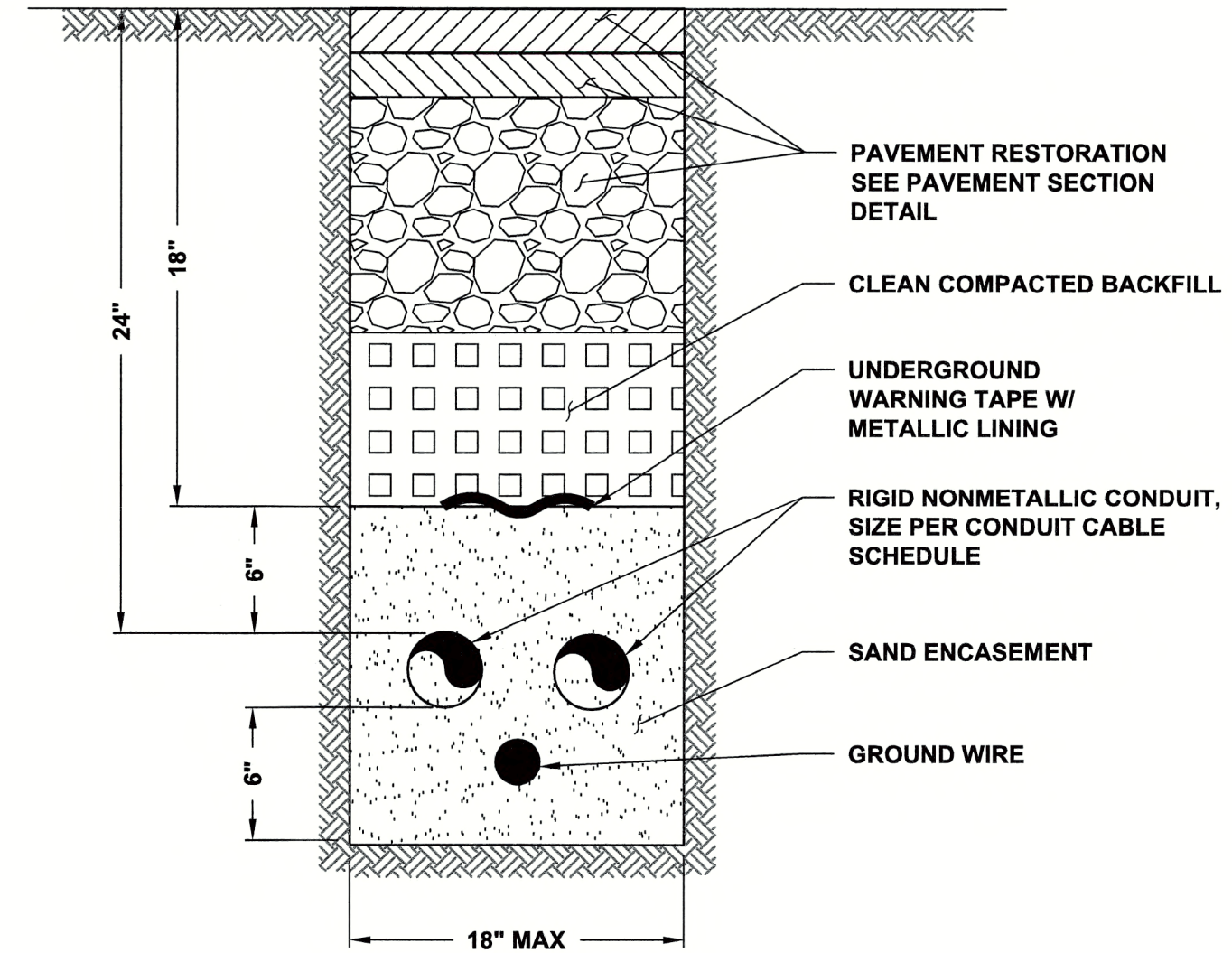


PHOTOCELL

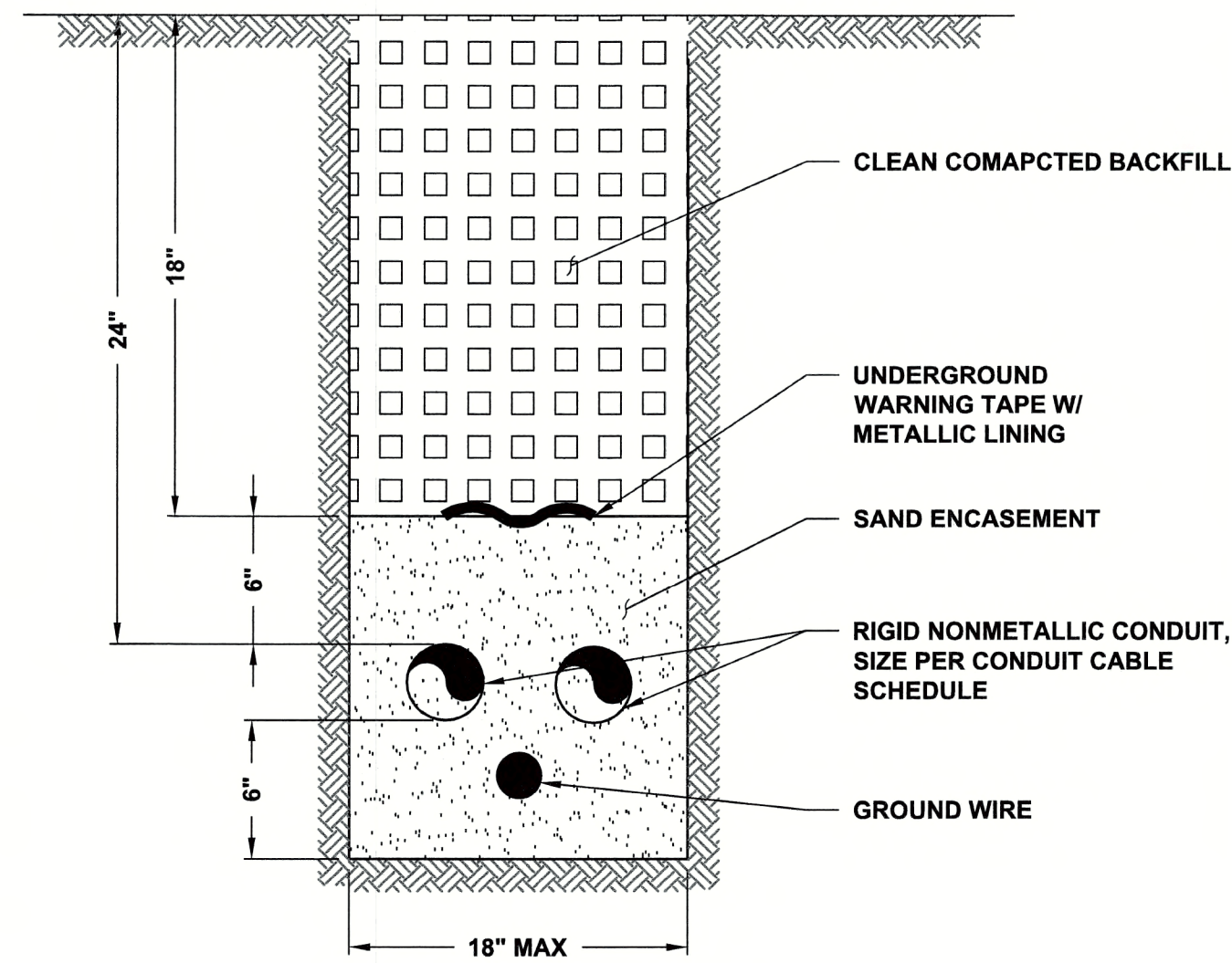


**HAND-OFF AUTO, 3 POSITION
MAINTAINED CONTACT SWITCH**

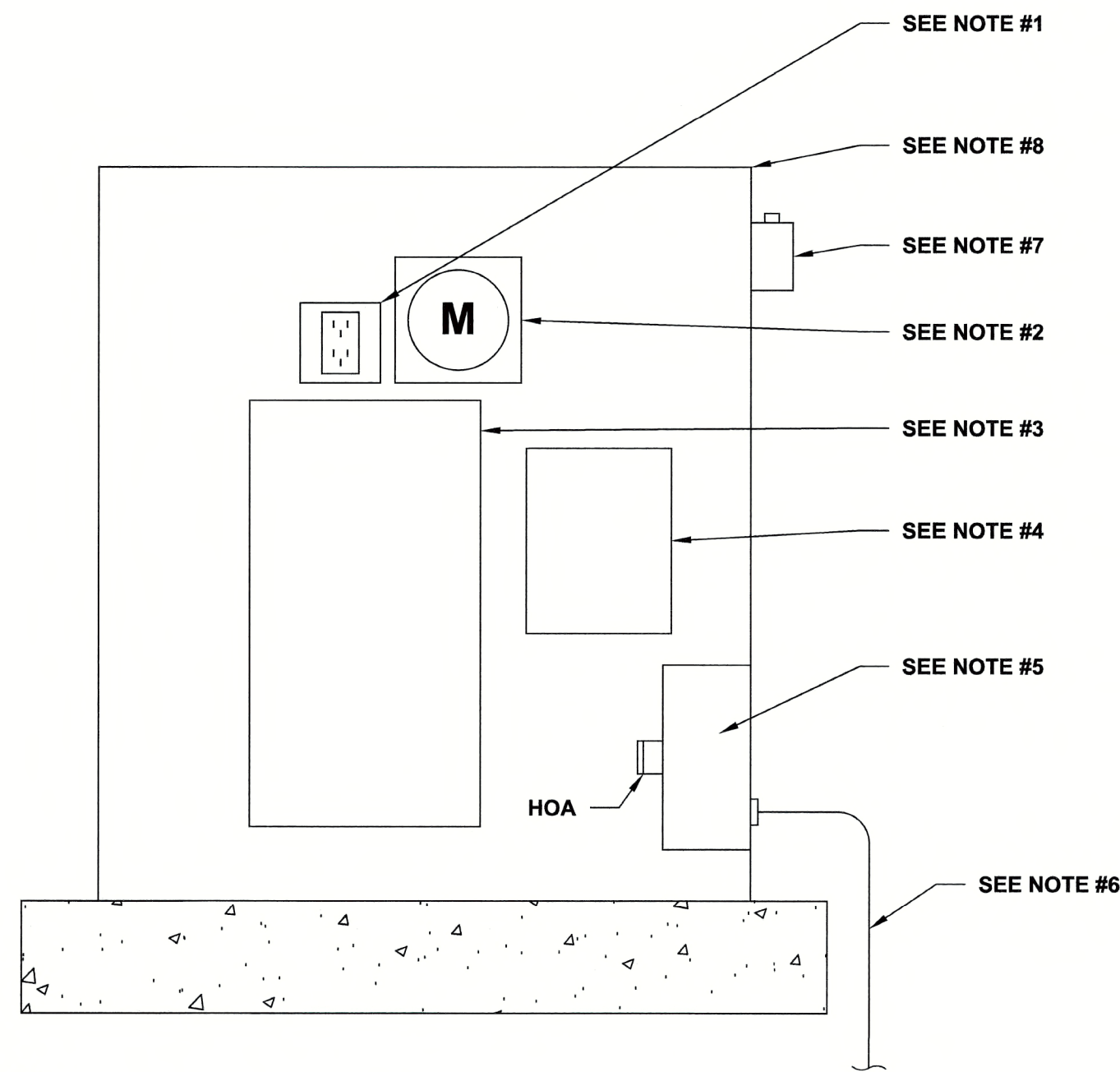
SCHEMATIC WIRING SITE LIGHTING - TIMER & PHOTOCELL CONTROLLED N.T.S.



TRENCH DETAIL (FOR SCHEDULE 80 PVC CONDUIT WITH ELECTRICAL WIRING) (IN PAVEMENT AREA) N.T.S.

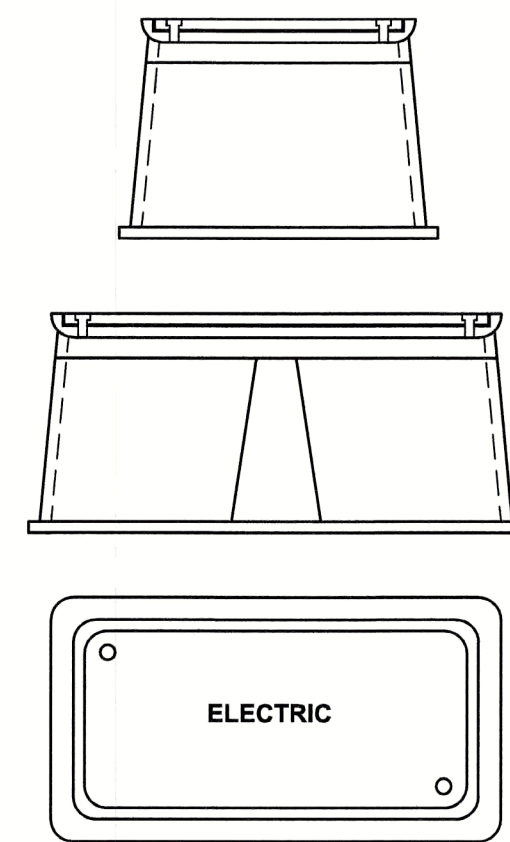


TRENCH DETAIL (FOR SCHEDULE 80 PVC CONDUIT WITH ELECTRICAL WIRING) (IN GRASS AREA) N.T.S.



- NOTES:**
- EXISTING RECEPTACLE TO REMAIN.
 - EXISTING REVENUE METER TO REMAIN.
 - EXISTING PANEL TO REMAIN. INSTALL BREAKERS AS SHOWN ON WIRING DIAGRAM.
 - REPLACE EXISTING TIMER WITH NEW TIMER.
 - 30A, 4 POLE CONTACTOR IN NEMA-4X SS PANEL FURNISH & INSTALL.
 - CONDUIT TO OUTDOOR LIGHTS
 - OUTDOOR RATED 120V, 20A, PHOTOCELL. FURNISH & INSTALL.
 - EXISTING PANEL TO REMAIN.

EXISTING CONTROL PANEL DETAIL N.T.S.



- NOTES:**
- CONTRACTOR SHALL SELECT REQUIRED SIZE.
 - ALL UNDERGROUND PVC CONDUITS SHALL BE SCH 80.
 - CIRCUITS MAY BE COMBINED IN COMMON CONDUIT.
 - ALL UNDERGROUND CONDUITS MUST TRANSITION TO ABOVE GROUND VIA RGS COUPLING AND RGS ELBOW AND CONDUIT.
 - CONDUIT FILL MUST MEET NEC LATEST EDITION.
 - CONTRACTOR SHALL INSTALL HANDHOLE ON 3/4" STONE BASE, 6" THICK MIN.

QUAZITE HANDHOLE N.T.S.

BILL OF MATERIALS			
ITEM NO.	DESCRIPTION	REMARKS	
1	CONDUIT	PVC - CARLON, RGS - WHEATLAND	OR APPROVED EQUAL
2	WIRE	SOUTH WIRE TYPE XHHW-2	OR APPROVED EQUAL
3	CIRCUIT BREAKERS	MATCH EXISTING STYLE & SC RATING	SEE WIRING DIAGRAM
4	CONTACTOR	SQ-D, 4 POLE, 30 AMP, 120V COIL	OR APPROVED EQUAL
5	HOA SWITCH	ALLEN BRADLEY NEMA TYPE 13	OR APPROVED EQUAL
6	TIMER	HEAVY DUTY TORK OR INTERMATIC 120V, 20A CONTACTOR RATING	OR APPROVED EQUAL
7	PHOTOCELL	OUTDOOR TYPE INTERMATIC 120V OPERATION, 20A CONTACT	OR APPROVED EQUAL
8	HANDHOLE	QUAZITE	OR APPROVED EQUAL
9	JUNCTION BOX	HOFFMAN NEMA 4X 5.5	OR APPROVED EQUAL

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A	02/23/2024	AAG	KAK

DESCRIPTION	REVISIONS
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DRAWN BY:
AAG
11/16/2023

CHECKED BY:
KAK
11/16/2023

CHECKED BY:

ROBERT GREGORIA, PE
NJ PROFESSIONAL ENGINEER
LICENSE NO. 24060365600

DATE: 11/16/2023

DAREN J. PHIL, PE
NJ PROFESSIONAL ENGINEER
LICENSE NO. 24060361000

DATE: 11/16/2023



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ENGINEERS, INC.**

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EXCELLENCE ♦ ECONOMY ♦ ENVIRONMENT

**VILLAGE GREEN PHASE III
IMPROVEMENT PROJECT
BLOCK 3311, LOTS 1, 2 & 15
CITY OF SUMMIT, COUNTY OF UNION, STATE OF NEW JERSEY**

CONSTRUCTION DETAILS III

PROJECT NUMBER:
SCE-R12675.041

DRAWING NUMBER:
CD102

SHEET NUMBER:
10 OF 12

SCALE:
AS NOTED

REV. A

TOTAL DISTURBANCE (TOTAL) = 39,406 S.F. (0.90 ACRES)

VILLAGE GREEN PHASE III IMPROVEMENT PROJECT BLOCK 3311, LOTS 1, 2 & 15 CITY OF SUMMIT, COUNTY OF UNION, STATE OF NEW JERSEY	PROJECT NUMBER: SCE-R12675.041
	DRAWING NUMBER: C500
SOIL EROSION AND SEDIMENT CONTROL PLAN	
SHEET NUMBER: 11 OF 12	
SCALE: AS SHOWN	REV. A

SOMERSET-UNION COUNTY SOIL CONSERVATION DISTRICT SOIL EROSION & SEDIMENT CONTROL NOTES

- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 30 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO NJ STATE STANDARDS.
- PERMANENT VEGETATION SHALL BE SEEDING OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH WILL BE USED FOR PROTECTION UNTIL SEEDING IS ESTABLISHED.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NJ STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY, 7TH EDITION LAST REVISED JANUARY 2014.
- A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS OR PRELIMINARY GRADING.
- IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING ALL CRITICAL AREAS SUBJECT TO EROSION (I.E.: STEEP SLOPES, ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO THE NJ STATE STANDARDS.
- ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (I.E.: SLOPES GREATER THAN 3:1).
- THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING 48 HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY.
- TRAFFIC CONTROL STANDARDS REQUIRE THE INSTALLATION OF A 50'X30'X6" PAD OF 1 1/2" OR 2" STONE, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
- AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
- IN THAT NJSA 4:24-39 ET SEQ., REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES, ALL SITE WORK FOR SITE PLANS AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS, WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.
- CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
- ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT NJ STATE SOIL EROSION & SEDIMENT CONTROL STANDARDS.
- THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES IN OWNERSHIP.
- MULCHING TO THE NJ STANDARDS IS REQUIRED FOR OBTAINING A CONDITIONAL REPORT OF COMPLIANCE. CONDITIONALS ARE ONLY ISSUED WHEN THE SEASON PROHIBITS SEEDING.
- CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT ROADS CLEAN DURING LIFE OF CONSTRUCTION PROJECT.
- THE DEVELOPER SHALL BE RESPONSIBLE FOR REMEDIATING ANY EROSION OR SEDIMENT PROBLEMS THAT ARISE AS A RESULT OF ONGOING CONSTRUCTION AT THE REQUEST OF THE SOMERSET-UNION SOIL CONSERVATION DISTRICT.
- HYDRO SEEDING IS A TWO-STEP PROCESS. THE FIRST STEP INCLUDES SEED, FERTILIZER, LIME, ETC., ALONG WITH MINIMAL AMOUNTS OF MULCH TO PROMOTE CONSISTENCY. GOOD SEED TO SOIL CONTACT AND GIVE A VISUAL INDICATION OF COVERAGE. UPON COMPLETION OF SEEDING OPERATION, HYDROMULCH SHOULD BE APPLIED AT A RATE OF 1500 LBS. PER ACRE IN SECOND STEP. THE USE OF HYDROMULCH, AS OPPOSED TO STRAW, IS LIMITED TO OPTIMUM SEEDING DATES AS LISTED IN THE NJ STANDARDS.

ADDITIONAL SOIL EROSION & SEDIMENT CONTROL NOTES

- ANY DISTURBED AREA THAT WILL BE LEFT EXPOSED FOR MORE THAN FOURTEEN (14) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW OR HAY AND TACKED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS. SEE NOTE 3 BELOW.
- PERMANENT SEEDING AND STABILIZATION TO BE IN ACCORDANCE WITH THE "STANDARDS FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION COVER". SPECIFIED RATES AND LOCATIONS SHALL BE ON THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN.
- TOPSOIL STOCKPILE PROTECTION
 - APPLY GROUND LIME AT A RATE OF 90 LBS PER 1,000 SQ. FT. UNLESS A SOIL TEST SPECIFIES OTHERWISE.
 - APPLY FERTILIZER (10-10-10) AT A RATE OF 11 LBS. PER 1,000 SQ. FT. UNLESS A SOIL TEST SPECIFIES OTHERWISE.
 - APPLY PERENNIAL RYEGRASS SEED AT 1 LB. PER 1,000 SQ. FT. AND ANNUAL RYEGRASS AT 1 LB. PER 1,000 SQ. FT.
 - MULCH STOCKPILE WITH UNROTTED SMALL GRAIN STRAW AT A RATE OF 90 LBS. PER 1,000 SQ. FT.
 - APPLY A LIQUID MULCH BINDER OR TACK TO UNROTTED SMALL GRAIN STRAW.
 - PROPERLY ENTRENCH A SILT FENCE AT THE BOTTOM OF THE STOCKPILE.
- TEMPORARY SEEDING SPECIFICATIONS
 - APPLY GROUND LIME AT A RATE OF 90 LBS PER 1,000 SQ. FT. UNLESS A SOIL TEST SPECIFIES OTHERWISE.
 - APPLY FERTILIZER (10-10-10) AT A RATE OF 11 LBS. PER 1,000 SQ. FT. UNLESS A SOIL TEST SPECIFIES OTHERWISE.
 - APPLY PERENNIAL RYEGRASS SEED AT 1 LB. PER 1,000 SQ. FT. AND ANNUAL RYEGRASS AT 1 LB. PER 1,000 SQ. FT. (2/15 - 5/1 OR 8/15 - 10/15) OR PEARL MILLET AT A RATE OF 0.5 LB PER 1,000 SQ. FT. (5/1 - 9/1).
 - MULCH SEEDING AREAS WITH UNROTTED SMALL GRAIN STRAW AT A RATE OF 90 LBS. PER 1,000 SQ. FT.
 - APPLY A LIQUID MULCH BINDER OR TACK TO UNROTTED SMALL GRAIN STRAW.
- PERMANENT SEEDING SPECIFICATIONS
 - APPLY TOPSOIL TO A DEPTH OF 5 INCHES (UNSETTLED).
 - APPLY GROUND LIME AT A RATE OF 90 LBS PER 1,000 SQ. FT. AND WORK FOUR INCHES INTO SOIL UNLESS A SOIL TEST SPECIFIES OTHERWISE.
 - APPLY FERTILIZER (10-20-10) AT A RATE OF 11 LBS. PER 1,000 SQ. FT. UNLESS A SOIL TEST SPECIFIES OTHERWISE.
 - APPLY HARD FESCUE SEED AT 2.5 LBS. PER 1,000 SQ. FT. AND CREEPING RED FESCUE SEED AT 1.5 LBS PER 1,000 SQ. FT. AND PERENNIAL RYEGRASS SEED AT 1.0 LBS PER 1,000 SQ. FT. PLANTING SHALL OCCUR BETWEEN 2/1 - 4/30 OR 8/15 - 10/30. PLANTING MAY BE CONDUCTED FROM 5/1 TO 8/14 IF IRRIGATION IS PROVIDED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS.
 - MULCH SEEDING AREAS WITH UNROTTED SMALL GRAIN STRAW AT A RATE OF 90 LBS. PER 1,000 SQ. FT.
 - APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.

DUST CONTROL NOTES

THE FOLLOWING METHODS SHOULD BE USED FOR CONTROLLING DUST:

MULCHES - SEE STANDARDS FOR STABILIZATION WITH MULCHES ONLY (Pg. 5-1).

VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER (Pg. 7-1), PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION (Pg. 4-1), AND PERMANENT STABILIZATION WITH SOD (6-1).

SPRAY-ON ADHESIVES - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

Soil De-compaction and Testing Requirements

Soil Compaction Testing Requirements

- Subgrade soils prior to the application of topsoil (see permanent seeding and stabilization notes for topsoil requirements) shall be free of excessive compaction to a depth of 6.0 inches to enhance the establishment of permanent vegetative cover.
- Areas of the site which are subject to compaction testing and/or mitigation are graphically denoted on the certified soil erosion control plan.
- Compaction testing locations are denoted on the plan. A copy of the plan or portion of the plan shall be used to mark locations of tests, and attached to the compaction remediation form, available from the local soil conservation district. This form must be filled out and submitted prior to receiving a certificate of compliance from the district.
- In the event that testing indicates compaction in excess of the maximum thresholds indicated for the simplified testing methods (see details below), the contractor/owner shall have the option to perform either (1) compaction mitigation over the entire mitigation area denoted on the plan. (excluding exempt areas), or (2) perform additional, more detailed testing to establish the limits of excessive compaction whereupon only the excessively compacted areas would require compaction mitigation. Additional detailed testing shall be performed by a trained, licensed professional.

Compaction Testing Methods

- Probing Wire Test (see detail)
- Hand-held Penetrometer Test (see detail)
- Tube Bulk Density Test (licensed professional engineer required)
- Nuclear Density Test (licensed professional engineer required)

Note: Additional testing methods which conform to ASTM standards and specifications, and which produce a dry weight, soil bulk density measurement may be allowed subject to District approval.

Soil compaction testing is not required if/when subsoil compaction remediation (scarification/tillage (6" minimum depth) or similar) is proposed as part of the sequence of construction.

Procedures for Soil Compaction Mitigation

Procedures shall be used to mitigate excessive soil compaction prior to placement of topsoil and establishment of permanent vegetative cover.

Restoration of compacted soils shall be through deep scarification/tillage (6" minimum depth) where there is no danger to underground utilities (cables, irrigation systems, etc.). In the alternative, another method as specified by a New Jersey Licensed Professional Engineer may be substituted subject to District Approval.

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REVISED PER NJDOT REVIEWER COMMENTS

DESCRIPTION

REVISIONS

NO. DATE: BY: CHK:

NO. DATE: BY: CHK:

TABLE 16-1: DUST CONTROL MATERIALS

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS / ACRE
ANIONIC ASPHALT EMULSION	7 : 1	COARSE SPRAY	1,200
LATEX EMULSION	12.5 : 1	FINE SPRAY	235
RESIN IN WATER	4 : 1	FINE SPRAY	300
POLYACRYLAMIDE (PAM)- SPRAY ON POLYACRYLAMIDE (PAM)- DRY SPRAY	APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS. MAY ALSO BE USED AS AN ADDITIVE TO SEDIMENT BASINS TO FLOCCULATE AND PRECIPITATE SUSPENDED COLLOIDS. SEE SEDIMENT BASIN STANDARD (Pg. 26-1)		
ACIDULATED SOY BEAN STICK	NONE	COARSE SPRAY	1,200

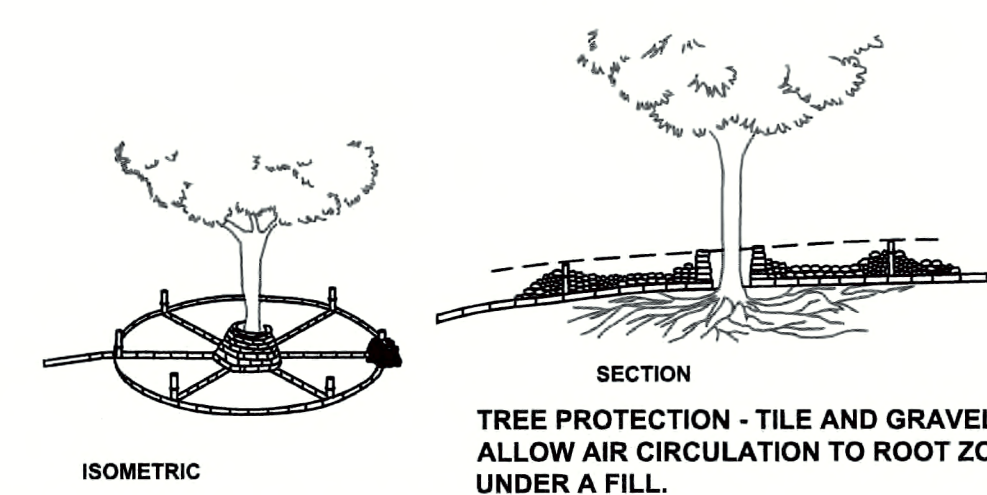
TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, AND SPRING-TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

SPRINKLING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET.

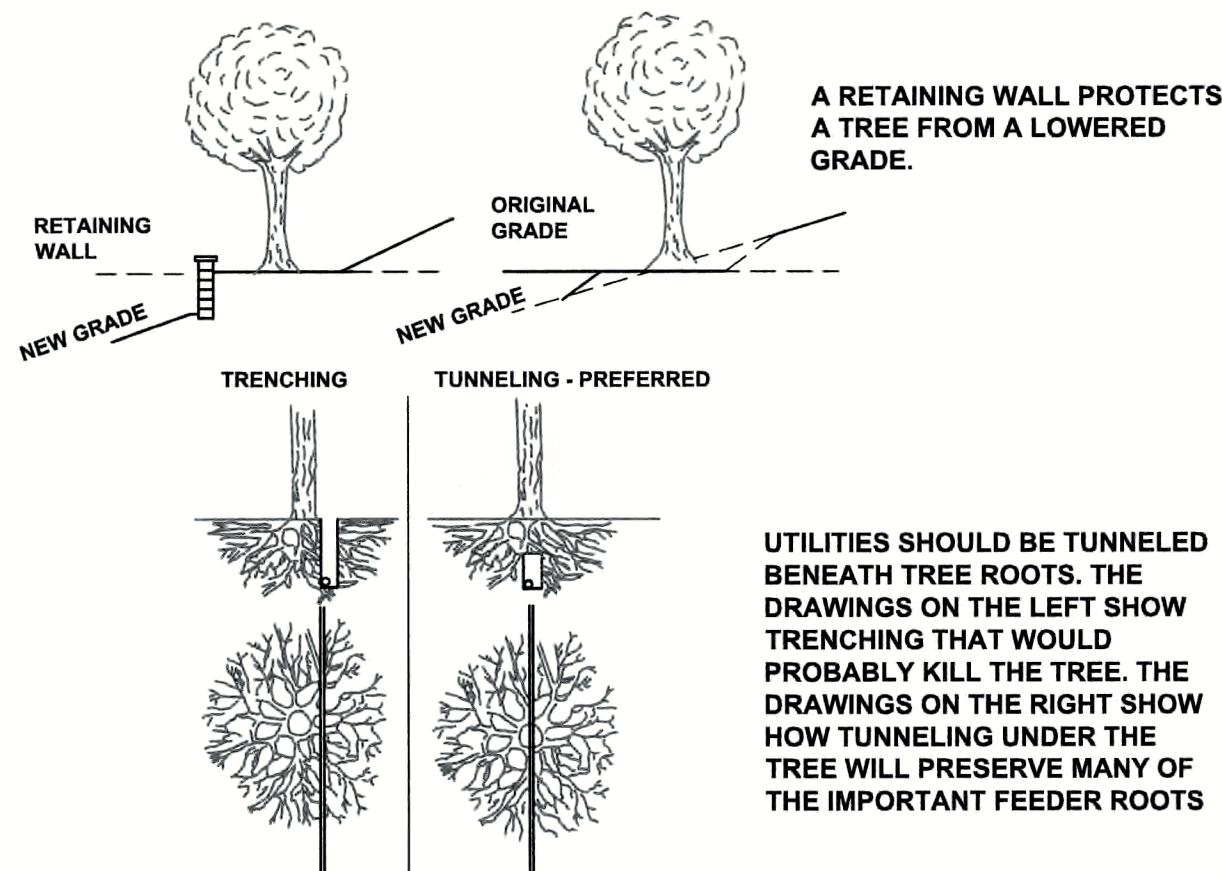
BARRIERS - SOLID MATERIAL FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.

CALCIUM CHLORIDE - SHALL BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. IF USED ON STEEPER SLOPES, THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS OR ACCUMULATION AROUND PLANTS.

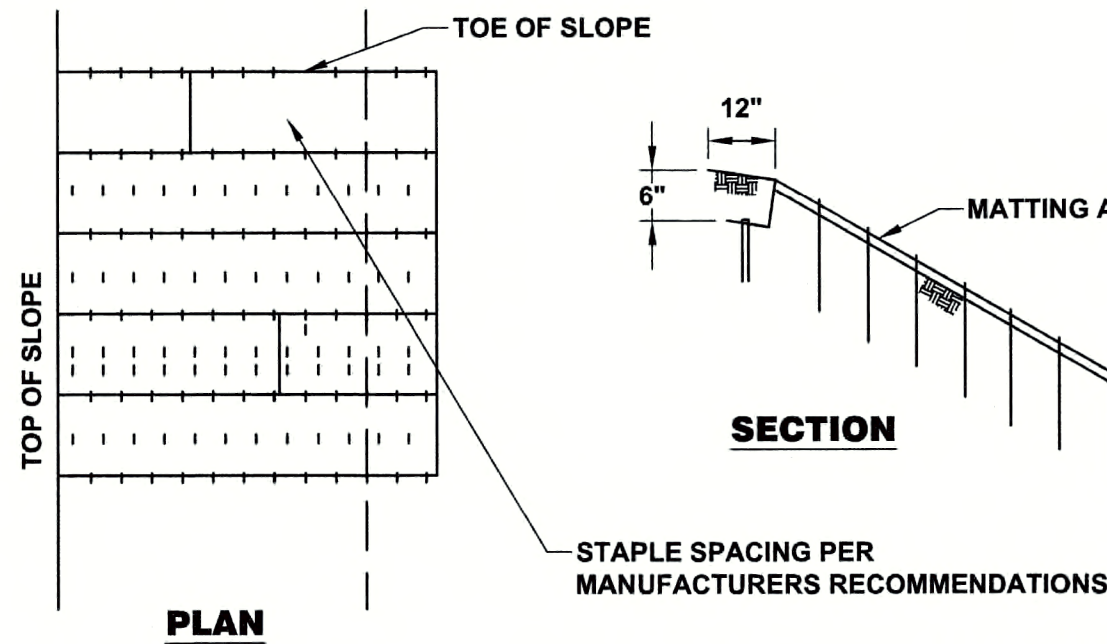
STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.



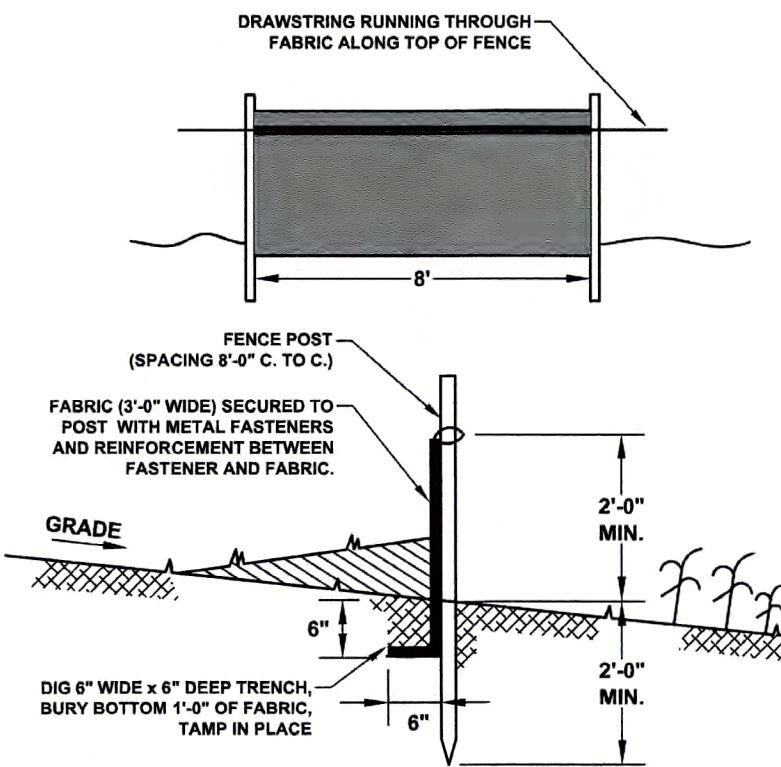
TREE PROTECTION IN FILL AREAS
N.T.S.



TREE PROTECTION UNDERGROUND UTILITY INSTALLATION
N.T.S.



TOPSOIL STOCKPILE STABILIZATION
N.T.S.



SILT FENCE DETAIL
N.T.S.

REQUIREMENTS FOR SILT FENCE:

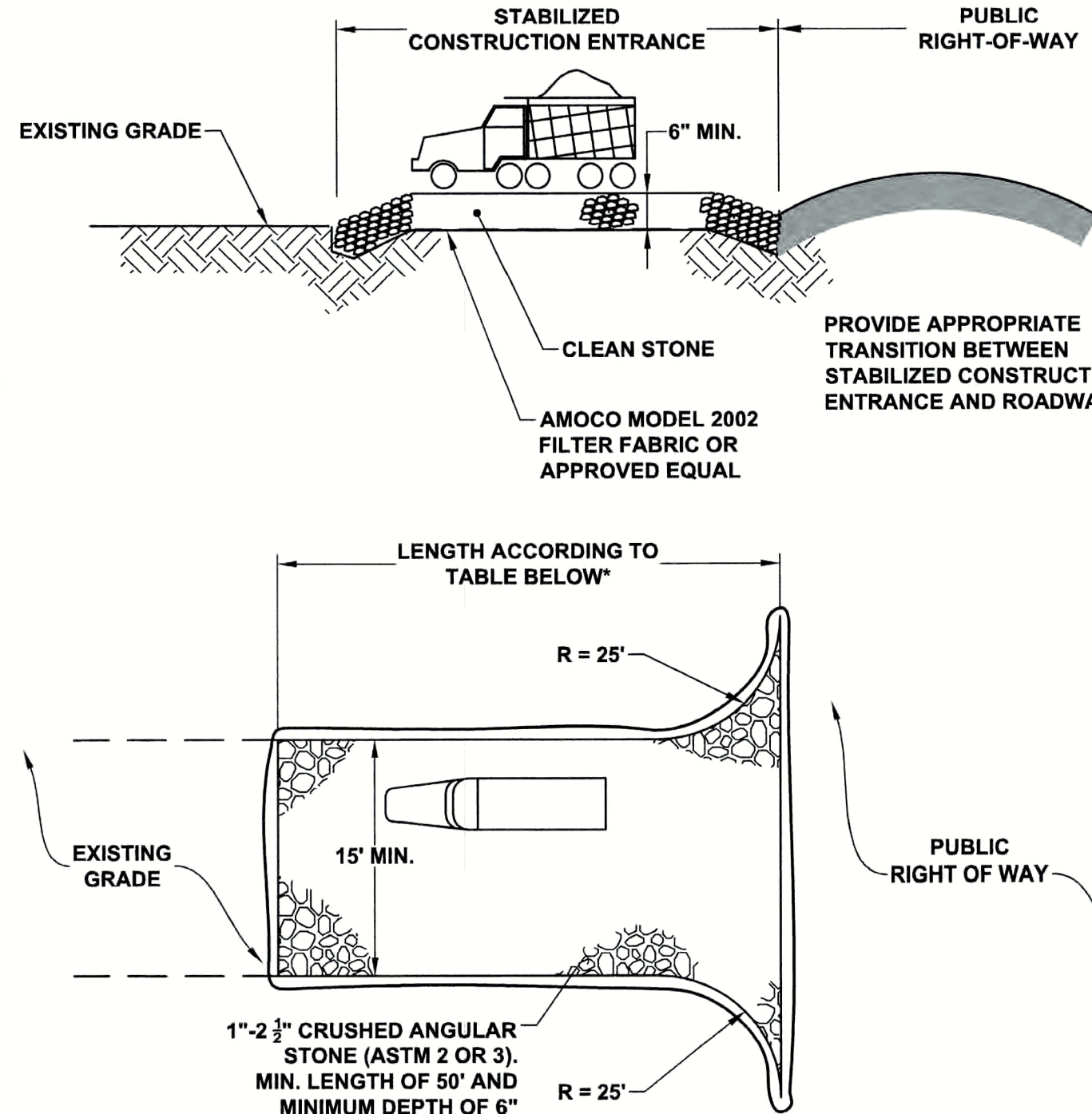
- FENCE POSTS SHALL BE SPACED 8 FEET CENTER TO CENTER OR CLOSER. THEY SHALL EXTEND AT LEAST 2 FEET INTO THE GROUND AND EXTEND AT LEAST 2 FEET ABOVE GROUND. POSTS SHALL BE CONSTRUCTED OF HARDWOOD WITH A MINIMUM DIAMETER THICKNESS OF 1.5 INCHES.
- WHERE INDICATED AS SUPER SILT FENCE A METAL FENCE WITH 6 INCH OR SMALLER OPENINGS AND AT LEAST 2 FEET HIGH MAY BE UTILIZED, FASTENED TO THE FENCE POSTS, TO PROVIDE REINFORCEMENT AND SUPPORT TO THE GEOTEXTILE FABRIC WHERE SPACE FOR OTHER PRACTICES IS LIMITED AND HEAVY SEDIMENT LOADING IS EXPECTED.
- A GEOTEXTILE FABRIC, RECOMMENDED FOR SUCH USE BY THE MANUFACTURER, SHALL BE BURIED AT LEAST 6 INCHES DEEP IN THE GROUND. THE FABRIC SHALL EXTEND AT LEAST 2 FEET ABOVE THE GROUND. THE FABRIC MUST BE SECURELY FASTENED TO THE POSTS USING A SYSTEM CONSISTING OF METAL FASTENERS (NAILS OR STAPLES) AND A HIGH STRENGTH REINFORCEMENT MATERIAL (NYLON WEBBING, GROMMETS, WASHERS, ETC.) PLACED BETWEEN THE FASTENER AND THE GEOTEXTILE FABRIC. THE FASTENING SYSTEM SHALL RESIST TEARING AWAY FROM THE POST. THE FABRIC SHALL INCORPORATE A DRAWSTRING IN THE TOP PORTION OF THE FENCE FOR ADDED STRENGTH.

ESTIMATE A TREE'S PROTECTED ROOT ZONE (PRZ) BY CALCULATING THE CRITICAL ROOT RADIUS (CRR).

- MEASURE THE DBH (DIAMETER OF TREE AT BREAST HEIGHT, 4.5 FEET ABOVE GROUND ON THE UPHILL SIDE OF TREE) IN INCHES.
- MULTIPLY MEASURED DBH BY 1.5 OR 1.0. EXPRESS THE RESULT IN FEET.

DBH X 1.5: CRITICAL ROOT RADIUS FOR OLDER, UNHEALTHY, OR SENSITIVE SPECIES.

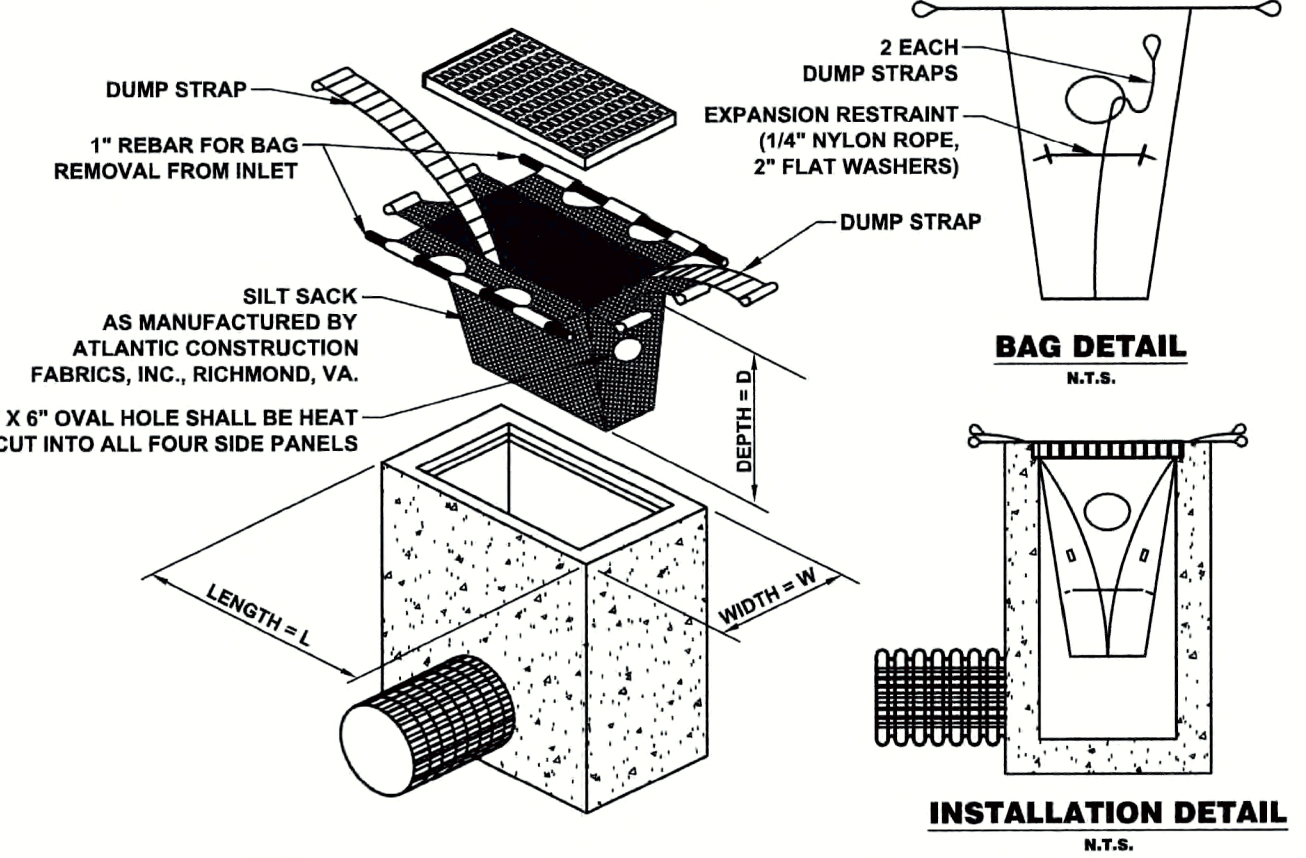
DBH X 1.0: CRITICAL ROOT RADIUS FOR YOUNGER, HEALTHY, OR TOLERANT SPECIES.



PERCENT SLOPE OF ROADWAY	LENGTH STONE REQUIRED	
	COARSE GRAINED SOILS	FINE GRAINED SOILS
0 TO 2%	50 FT.	100 FT.
2 TO 5%	100 FT.	200 FT.
> 5%	ENTIRE SURFACE STABILIZED WITH FABC BASE COURSE	

AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY.

STABILIZED CONSTRUCTION ENTRANCE
N.T.S.



INLET PROTECTION DEVICE
N.T.S.

VILLAGE GREEN PHASE III IMPROVEMENT PROJECT
BLOCK 3311, LOTS 1, 2 & 15
CITY OF SUMMIT, COUNTY OF UNION, STATE OF NEW JERSEY

SOIL EROSION NOTES AND DETAILS

PROJECT NUMBER:
SCE-R12675-041

DRAWING NUMBER:
C510

SHEET NUMBER:
12 OF 12

SCALE:
AS NOTED

REV. A

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EXCELLENCE ♦ ECONOMY ♦ ENVIRONMENT

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