Parking Technology Improvements

University of Rhode Island
Kingston, Rhode Island

OWNER / APPLICANT:
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Office of Capital Projects
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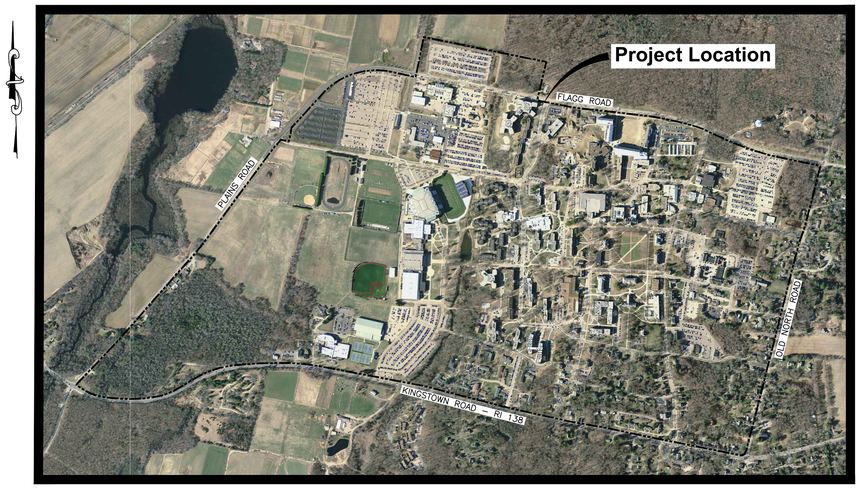

Scale : N.T.S.

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ISSUED FOR BID
NOVEMBER 6, 2024

REFERENCE

1. PROJECT LOCATION: UNIVERSITY OF RHODE ISLAND, KINGSTON, RI 02881
2. EXISTING CONDITIONS COMPILED FROM UNIVERSITY OF RHODE ISLAND GIS BASEMAPPING AND FIELD OBSERVATIONS.

GENERAL NOTES

1. PER AVAILABLE RIDEM MAPPING, THE PROJECT SITE IS LOCATED OUTSIDE A NATURAL HERITAGE AREA.
2. THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED MARCH 2018 WITH ALL REVISIONS AND ADDENDA, AND THE RHODE ISLAND STANDARD DETAILS ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO. ALL WORK SHALL MEET OR EXCEED THE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WITH LATEST REVISIONS. THE LATEST REVISION OF THE STANDARD SPECIFICATIONS MAY BE OBTAINED AT THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION.
3. THE CONTRACTOR SHALL MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY CONSTRUCTION PERMITS, PAY ALL FEES AND POST ALL BONDS ASSOCIATED WITH THE SAME, AND COORDINATE WITH THE ENGINEER AND OWNER'S REPRESENTATIVE AS REQUIRED.
4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR SHALL PROVIDE TEMPORARY FENCING AND/OR BARRIERS AROUND ALL OPEN EXCAVATED AREAS IN ACCORDANCE WITH OSHA FEDERAL, STATE, AND LOCAL REQUIREMENTS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK WHICH WOULD BE AFFECTED. NO FIELD ADJUSTMENTS IN THE LOCATION OF SITE ELEMENTS SHALL BE MADE WITHOUT THE ENGINEER'S APPROVAL.
6. IF ANY DEVIATION OR ALTERATION OF THE WORK PROPOSED ON THESE DRAWINGS IS REQUIRED, THE CONTRACTOR SHALL IMMEDIATELY CONTACT AND COORDINATE ANY DEVIATIONS WITH THE ENGINEER AND OWNER.
7. ANY AREA OUTSIDE OF THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
8. ALL SITE WORK SHALL MEET OR EXCEED THE SITE WORK SPECIFICATIONS PREPARED FOR THIS PROJECT.
9. ALL SIGNS SHALL BE REFLECTORIZED TYPE III SHEETING AND CONFORM WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST REVISION.
10. ALL UTILITIES (LOCATION AND ELEVATION) DEPICTED SHALL BE CONSIDERED APPROXIMATE ONLY. BEFORE COMMENCING SITE WORK IN ANY AREA, CONTACT "DIG SAFE" AT 1-888-DIG-SAFE (1-888-344-7233) TO ACCURATELY LOCATE UNDERGROUND UTILITIES. ANY DAMAGE TO EXISTING UTILITIES OR STRUCTURES AND THE COST TO REPAIR THE DAMAGES TO INITIAL CONDITIONS, AS DEPICTED ON THE PLANS, SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
11. NO EXCAVATION SHALL BE DONE UNTIL UTILITY COMPANIES ARE PROPERLY NOTIFIED IN ADVANCE. NOTE THAT NOT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL RESPECTIVE UTILITY COMPANIES TO VERIFY AND LOCATE EXISTING UTILITIES.

LAYOUT NOTES

1. ALL LINES ARE PERPENDICULAR OR PARALLEL TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED.
2. ACCESSIBLE RAMPS SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY STANDARDS.
3. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL PERFORM BENCHMARK FIELD LEVEL VERIFICATION AND COORDINATE LAYOUT CHECK. THE CONTRACTOR SHALL CONTACT PARE CORPORATION IF ANY DISCREPANCIES ARE FOUND.
4. DIMENSIONS OF PARKING SPACES AND DRIVEWAYS ARE FROM FACE OF CURB TO FACE OF CURB. DIMENSIONS FROM BUILDING ARE FROM FACE OF BUILDING TO FACE OF CURB.

DEMOLITION NOTES

1. THE CONTRACTOR SHALL COORDINATE ALL DEMOLITION OF STRUCTURES, PAVEMENT AND CONCRETE MATERIALS, AND UTILITIES WITH APPROPRIATE PROPOSED SITE GENERAL, GRADING, UTILITY, AND LANDSCAPING DRAWINGS.
2. ALL NOTED UTILITIES TO BE REMOVED AND DISPOSED OF, RELOCATED OR CAPPED REPRESENT ALL KNOWN SITE CONDITIONS TO BE DEMOLISHED. THE CONTRACTOR SHALL COORDINATE ALL UNFORESEEN CONDITIONS WITH THE PROJECT ENGINEER, OWNER AND/OR RESPECTIVE UTILITY COMPANIES PRIOR TO PROCEEDING WITH WORK.
3. WATER, SEWER, DRAINAGE, GAS, AND OTHER SITE UTILITIES SERVICING THE EXISTING FACILITIES ARE TO REMAIN ACTIVE THROUGHOUT CONSTRUCTION. THERE SHALL BE NO INTERRUPTION OF UTILITY SERVICES DURING THE CONSTRUCTION OPERATION WITHOUT APPROVAL FROM THE OWNER.

GRADING AND UTILITY NOTES

1. UNDERGROUND UTILITIES DEPICTED WERE COMPILED FROM AVAILABLE RECORD PLANS AND SHALL BE CONSIDERED APPROXIMATE ONLY. BEFORE COMMENCING SITE WORK IN ANY AREA, CONTACT "DIG SAFE" AT 1-888-DIG-SAFE (1-888-344-7233) TO ACCURATELY LOCATE UNDERGROUND UTILITIES. ANY DAMAGE TO EXISTING UTILITIES OR STRUCTURES DEPICTED OR NOT DEPICTED ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS TO REPAIR SUCH DAMAGES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. NO EXCAVATION SHALL BE DONE UNTIL UTILITY COMPANIES ARE PROPERLY NOTIFIED.
2. ALL WORK PERFORMED AND ALL MATERIALS FURNISHED SHALL CONFORM WITH THE LINES AND GRADES ON THE PLANS AND SITE WORK SPECIFICATIONS.
3. AT ALL LOCATIONS WHERE EXISTING CURBING OR PAVEMENT ABUT NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAWCUT TO A CLEAN, SMOOTH EDGE. BLEND NEW PAVEMENT AND CURBS SMOOTHLY INTO EXISTING BY MATCHING LINES, GRADES AND JOINTS.
4. ALL UTILITY COVERS, GRATES, ETC. SHALL BE ADJUSTED TO BE FLUSH WITH THE SURROUNDING SURFACE OR PAVEMENT FINISH GRADE. RIM ELEVATIONS OF STRUCTURES AND MANHOLES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING PLANS.
5. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION OF PRIVATE UTILITIES BY THE UTILITY COMPANIES, AS REQUIRED.
6. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION SHALL BE PROVIDED ON A SKETCH TO SCALE OF THE EXISTING UTILITY WITH TIES TO KNOWN POINTS, PHOTOS AND FURNISHED TO THE ENGINEER FOR RESOLUTION.
7. THE CONTRACTOR SHALL PROTECT ALL UNDERGROUND DRAINAGE, SEWER AND UTILITY FACILITIES FROM EXCESSIVE VEHICULAR LOADS DURING CONSTRUCTION. ANY DAMAGE TO THESE FACILITIES RESULTING FROM CONSTRUCTION LOADS SHALL BE RESTORED TO ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
8. GAS, ELECTRIC, AND COMMUNICATIONS ROUTING ARE SUBJECT TO REVIEW AND APPROVAL BY APPROPRIATE UTILITY COMPANIES.
9. DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES BY PROVIDING TEMPORARY SUPPORTS OR SHEETING AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
10. EXCAVATION REQUIRED WITHIN THE PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO ADDITIONAL COST TO THE OWNER.
11. PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MIN. OF 1/8" PER FOOT UNLESS SPECIFIED OTHERWISE.
12. THE PROPOSED WALKWAYS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2% AND A MAXIMUM RUNNING SLOPE OF 5% AS SHOWN ON CONSTRUCTION DETAILS AND GRADING PLAN.

EROSION AND SEDIMENTATION CONTROL NOTES - RHODE ISLAND

1. ALL EROSION CONTROLS SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST REVISION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING OR INSTALLING ALL TEMPORARY SEDIMENT AND EROSION CONTROLS AS SHOWN ON THESE PLANS AND SHALL MAINTAIN ALL EROSION CONTROL MEASURES AS NECESSARY DURING THE ENTIRE CONSTRUCTION PERIOD.
3. ANTI-TRACKING PADS (R.I. STD. DETAIL 9.9.0) SHALL BE PROVIDED AT ALL POINTS OF VEHICULAR INGRESS AND EGRESS ON THE CONSTRUCTION SITE AND SHALL BE MAINTAINED TO LIMIT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADS.
4. EROSION CONTROL BARRIERS SHALL BE INSTALLED AS SHOWN ON THE EROSION CONTROL PLAN PRIOR TO COMMENCEMENT OF CONSTRUCTION OPERATIONS.
5. SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED ON A WEEKLY BASIS AND AFTER EACH STORM EVENT OF 0.25 INCH OR GREATER DURING CONSTRUCTION TO ENSURE THAT CHANNELS, DITCHES AND PIPES ARE CLEAR OF DEBRIS AND THAT THE EROSION CONTROL BARRIERS ARE INTACT. IDENTIFIED DEFICIENCIES SHALL BE CORRECTED IMMEDIATELY.
6. DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS AS NECESSARY, OR AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
7. THE CONTRACTOR SHALL CLEAN AND MAINTAIN EROSION CONTROL BARRIER WHEN SEDIMENT ACCUMULATES TO ONE HALF THE HEIGHT OF THE BARRIER. MATERIAL COLLECTED FROM THE SEDIMENTATION BARRIERS SHALL BE REMOVED AS NECESSARY AND DISPOSED IN AN UPLAND AREA.
8. THE CONTRACTOR SHALL SCHEDULE HIS WORK TO ALLOW THE FINISHED SUBGRADE ELEVATIONS TO DRAIN PROPERLY WITHOUT PONDING. SPECIFICALLY, ALLOW WATER TO ESCAPE WHERE PROPOSED CURB MAY RETAIN RUNOFF PRIOR TO APPLICATION OF SURFACE PAVING. PROVIDE TEMPORARY POSITIVE DRAINAGE, AS REQUIRED, TO STABILIZED DISCHARGE POINTS.
9. INSTALLATION OF THE EROSION CONTROL BARRIERS AS ILLUSTRATED IS INTENDED TO REPRESENT THE MINIMUM SEDIMENTATION CONTROL FACILITIES NECESSARY TO MEET ANTICIPATED SITE CONDITIONS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED AS CONDITIONS WARRANT OR AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
10. REQUIRED SEDIMENTATION CONTROL FACILITIES MUST BE PROPERLY ESTABLISHED, CLEARLY VISIBLE AND IN OPERATION PRIOR TO INITIATING ANY LAND CLEARING ACTIVITY AND/OR OTHER CONSTRUCTION RELATED WORK. SUCH FACILITIES SHALL REPRESENT THE LIMIT OF WORK. WORKERS SHALL BE INFORMED THAT NO CONSTRUCTION ACTIVITY IS TO OCCUR BEYOND THE LIMIT OF WORK AT ANY TIME THROUGHOUT THE CONSTRUCTION PERIOD.
11. THE CONTRACTOR SHALL MAINTAIN A SUFFICIENT RESERVE OF VARIOUS EROSION CONTROL MATERIALS ONSITE AT ALL TIMES FOR EMERGENCY PURPOSES OR ROUTINE MAINTENANCE.
12. EXISTING AND NEWLY INSTALLED CATCH BASINS AND STORM DRAIN INLETS SHALL BE PROTECTED WITH APPROPRIATE TEMPORARY INLET PROTECTION IN ACCORDANCE WITH THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK.
13. DEWATERING WASTE WATERS PUMPED FROM EXCAVATIONS SHALL BE CONVEYED BY HOSE TO AN UPLAND AREA AND DISCHARGED INTO STRAW BALE CORRALS OR SEDIMENTATION BAGS.
14. THE CONTRACTOR SHALL NOT REMOVE ANY TEMPORARY SEDIMENT CONTROL BARRIERS UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED.
15. CONSTRUCTION SITE WASTE MATERIALS SHALL BE PROPERLY CONTAINED ONSITE AND DISPOSED OFF SITE AT A LOCATION IN ACCORDANCE WITH THE LOCAL AND STATE REGULATIONS.
16. RIP-RAP OR OTHER ENERGY DISSIPATERS SHALL BE USED WHERE NECESSARY TO PREVENT SCOUR.
17. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 14 DAYS UPON COMPLETION OF WORK IN THAT AREA.
18. ALL DRAINAGE STRUCTURES SHALL BE CLEARED OF ACCUMULATED SEDIMENT PRIOR TO ACCEPTANCE OF FINAL PROJECT.
19. NEWLY VEGETATED AREAS SHALL BE MAINTAINED REGULARLY TO ENSURE STABLE VEGETATED SURFACES.
20. EROSION AND SEDIMENTATION CONTROLS SHALL BE UTILIZED AS SHOWN ON THE PLANS. POTENTIAL EROSION AND SEDIMENTATION PROBLEMS ASSOCIATED WITH THE CONSTRUCTION OF THE PROJECT SHALL BE AVOIDED THROUGH THE PROJECT SCHEDULING AND THE USE OF APPROPRIATE STANDARD CONTROLS (RHODE ISLAND SOIL EROSION AND SEDIMENTATION CONTROL HANDBOOK) AS ILLUSTRATED ON THE PROJECT PLANS.
21. WHERE EROSION CONTROLS ARE NEEDED ON IMPERVIOUS SURFACES, THE CONTRACTOR SHALL PROVIDE SAND BAG EROSION CONTROL BARRIER.
22. TEMPORARY DIVERSION (TD) MAY CONSIST OF A DITCH OR SWALE, OR MAY BE ACHIEVED USING WOOD CHIPS, COIR LOGS, OR SIMILAR MATERIALS.
23. TEMPORARY SEDIMENT TRAPS (TST) AND TEMPORARY SWALES (TSW) SHALL BE SIZED BY THE CONTRACTOR USING THE PARAMETERS CONTAINED IN THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK.

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SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Parking Technology Improvements
University of Rhode Island
Kingston, RI

REVISIONS:

0	11-06-2024	ISSUED FOR BID

PROJECT NO.:	20002.00
DATE:	NOVEMBER 6, 2024
SCALE:	AS NOTED
DESIGNED BY:	KJM
CHECKED BY:	MBA
DRAWN BY:	AKL
APPROVED BY:	DLP

DRAWING TITLE:

NOTES

DRAWING NO.:

C1.1

SHEET NO. 1 OF 11

ABBREVIATIONS

GENERAL

AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADA	AMERICANS WITH DISABILITIES ACT
ADJ	ADJUST
APPROX	APPROXIMATE
AC	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
ASSF	AREA SUBJECT TO STORM FLOWAGE
ATD	ASPHALT TURNDOWN
ATG	ADJUST TO GRADE
BB	BITUMINOUS BERM
BC	BOTTOM OF CURB (FINISHED GRADE ON LOW SIDE OF CURB)
BD	BOUND
BIT	BITUMINOUS
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BMP	BEST MANAGEMENT PRACTICE
BO	BY OTHERS
BOL	BOLLARD
BOS	BOTTOM OF SLOPE
BOT	BOTTOM
BPM	BLACKOUT PAVEMENT MARKING
BR	BRIDGE
BS	BOTTOM OF STAIR (FINISHED GRADE AT BOTTOM STAIR)
BW	BOTTOM OF WALL (FINISHED GRADE ON LOW SIDE OF WALL)
BWL	BROKEN WHITE LINE
BYL	BROKEN YELLOW LINE
C=	CURVE LENGTH
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CCW	CEMENT CONCRETE WALK
CD	CHECK DAM
CE	CONSTRUCTION ENTRANCE
CEM	CEMENT
CFS	COMPOST FILTER SOCK
CG	CLEAR AND GRUB VEGETATION
CH	CHORD LENGTH
CI	CURB INLET
CIP	CAST IRON PIPE
CL	CENTERLINE
CLDI	CEMENT-LINED DUCTILE IRON
CLF	CHAIN LINK FENCE
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CLR	CLEAR
CLS	CLASS
CM	SAWCUT AND MATCH
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
COMM	TELECOMMUNICATIONS
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CP	CONCRETE PAD
CR GR	CROWN GRADE
CSP	CORRUGATED STEEL PIPE
CSTR	CONCRETE STAIRS
CTE	CONNECT TO EXISTING
CW	CROSSWALK
DEMO	DEMOLITION
DET	DETECTABLE
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DIV	DIVERSION
DMH	DRAIN MANHOLE
DTP	DRIPLINE TREE PROTECTION
DWL	DOTTED WHITE LINE
DWLEx	DOTTED WHITE LINE EXTENSION
DBWL	DOUBLE WHITE LINE
DWP	DETECTABLE WARNING PAVER
DYL	DOTTED YELLOW LINE
DYLEx	DOTTED YELLOW LINE EXTENSION
DBYL	DOUBLE YELLOW LINE
DW	STEADY DON'T WALK - PORTLAND ORANGE
DWY	DRIVEWAY
ELEV (or EL)	ELEVATION
EMB	EMBANKMENT
EMH	ELECTRIC MANHOLE
EOP	EDGE OF PAVEMENT
ETR	EXISTING TO REMAIN. PROTECT DURING CONSTRUCTION.
EXIST (or EX)	EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDC	FIRE DEPARTMENT CONNECTION
FDN	FOUNDATION
FES	FLARED END SECTION
FFE	FINISH FLOOR ELEVATION
FLDSTN	FIELDSTONE
FND	FOUND
FT	FOOT
GAR	GARAGE
GD	GROUND
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
GTD	GRADE TO DRAIN
GV	GATE VALVE
HCPS	HANDICAP ACCESSIBLE PARKING SIGN
HDBC	HEAVY DUTY BITUMINOUS CONCRETE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HDPS	HANDICAP ACCESSIBLE PARKING SIGN
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HMAW	HOT MIXED ASPHALT WALKWAY
HOR	HORIZONTAL
HPR	HEADWALL PROTECTION RACK
HYD	HYDRANT
ID	INSIDE DIAMETER
INV	INVERT
JCT	JUNCTION
L=	LENGTH OF CURVE
LB	LEACH BASIN
LOD	LIMIT OF DISTURBANCE
LP	LOW POINT
LS	LOAM AND SEED
LSOD	LOAM AND SOD
LT	LEFT
LTP	LIGHT POLE
LPR	LICENSE PLATE READER
MAX	MAXIMUM
MB	MAILBOX
MCW	MONOLITHIC CONCRETE WALK
MH	MANHOLE
MIN	MINIMUM
MON	MONITORING
MUTCD	MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
OCS	OUTLET CONTROL STRUCTURE
OD	OUTSIDE DIAMETER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OWS	OIL WATER SEPARATOR
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCFES	PRECAST CONCRETE FLARED END SECTION
PCTC	PRECAST CONCRETE TRANSITION CURB
PCR	PEDESTRIAN CURB RAMP
PE	POLYETHYLENE
PERF	PERFORATED
PGL	PROFILE GRADE LINE
PHMA	POROUS HOT MIXED ASPHALT PAVEMENT
PI	POINT OF INTERSECTION
PIV	POST INDICATOR VALVE
POC	POINT ON CURVE
POT	POINT ON TANGENT
PM	PAVEMENT MARKING
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PSB	PLANTABLE SOIL BORROW
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVCH	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
PWW	PAVED WATER WAY
QPA	QUALIFYING PERVIOUS AREA
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
R=	RADIUS
RA	RAILING
RCP	REINFORCED CONCRETE PIPE
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
RRLS	RIPRAP LEVEL SPREADER
ROW	RIGHT OF WAY
RR	RAILROAD
RRS	RIPRAP SLOPE
RS	RIPRAP SPILLWAY
RT	RIGHT
RTAD	REFER TO ARCHITECTURAL DRAWINGS
RTED	REFER TO ELECTRICAL DRAWINGS
RTFPD	REFER TO FIRE PROTECTION DRAWINGS
RTLD	REFER TO LANDSCAPE DRAWINGS
RTMD	REFER TO MECHANICAL DRAWINGS
RTPD	REFER TO PLUMBING DRAWINGS
RTSD	REFER TO STRUCTURAL DRAWINGS
S=	SLOPE
SB	SAND BAG EROSION CONTROL BARRIER
SDR	STANDARD DIMENSIONAL RATIO
SED	SEDIMENT
SESC	SOIL EROSION AND SEDIMENT CONTROL
SFL	STATE FREEWAY LINE
SFCD	SEDIMENT FOREBAY CHECK DAM
SG	SWING GATE
SHL	STATE HIGHWAY LINE
SHLD	SHOULDER
SHLO	STATE HIGHWAY LAYOUT
SHP	HANDICAP PARKING PAVEMENT MARKING
SM	SEDIMENT MARKER
SMH	SEWER MANHOLE
SSD	STOPPING SIGHT DISTANCE
ST	STREET
STA	STATION
SW	SIDEWALK
SWL	SINGLE SOLID WHITE LINE
SWR	SEWER
SYL	SINGLE SOLID YELLOW LINE
T=	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TD	TEMPORARY DIVERSION
TEMP	TEMPORARY
TC	TOP OF CURB
TDS	TEMPORARY DIVERSION SWALE
TGP	TREE GROUP PROTECTION
TIP	TEMPORARY INLET PROTECTION
TMH	TELEPHONE MANHOLE
TOS	TOP OF SLOPE
TP	TEST PIT
TRAN	TRANSITION
TRM	TURF REINFORCEMENT MAT
TS	TOP OF STAIR (FINISHED GRADE OF TOP STAIR)
TST	TEMPORARY SEDIMENT TRAP
TSW	TEMPORARY SWALE
TW	TOP OF WALL
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
VERT	VERTICAL
VC	VERTICAL CURVE
VCC	VERTICAL CONCRETE CURB
VCP	VEHICULAR CONCRETE PAVEMENT
VFC	VITRIFIED CLAY
VEG	VEGETATION
VEH	VEHICULAR
VFS	VEGETATED FILTER STRIP
VGC	VERTICAL GRANITE CURB
VGTC	VERTICAL GRANITE TRANSITION CURB
VLF	VINYL FENCE
w/	WITH
WG	WATER GATE
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
WMH	WATER MANHOLE
WPM	WATER PAINT MARK
X-SECT	CROSS SECTION
YD	YARD DRAIN
4DY	4" DOUBLE YELLOW EPOXY RESIN PAVEMENT MARKING
4W	4" SOLID WHITE EPOXY RESIN PAVEMENT MARKING
12W	12" SOLID WHITE EPOXY RESIN PAVEMENT MARKING

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	SETBACKS	
	EASEMENT LINE	
255	CONTOUR	262
x 407.5	SPOT ELEVATION	x 261.5
D D D	DRAINAGE LINE	D D D
W W W	WATER LINE	W W W
	FIRE WATER LINE	FW FW
S S S	SANITARY SEWER LINE	S S S
G G G	GAS LINE	G G G
E E E	ELECTRIC	E E E
T T T	TELECOMMUNICATIONS LINE	T T T
OHW	OVERHEAD ELECTRIC LINE	OHW
	LIMIT OF DISTURBANCE	LOD
	LIMIT OF DISTURBANCE/COMPOST FILTER SOCK	LOD/CFS
	CATCH BASIN	
	HYDRANT	
	DRAINAGE MANHOLE	
	SEWER MANHOLE	
	UTILITY POLE	
WV	WATER VALVE	
GG	GAS GATE	
	LIGHT POLE	
	POLE & LICENSE PLATE READER (LPR)	
	TREE LINE	
	STONE WALL	
	CHAIN LINK FENCE	
	WIRE FENCE	
	WOOD FENCE	
	FENCE	
	CURBING	
	EDGE OF PAVEMENT	
	SAWCUT LINE	
	SIGN	
	COMPOST FILTER SOCK	
	SAND BAGS	
	EXISTING TREES	
	PROTECT EXISTING TREE TO REMAIN	
	REMOVE & DISPOSE TREE. DISPOSE OF TREE & STUMP OFF-SITE	

RHODE ISLAND STANDARD DETAILS

- 7.1.0 = PRECAST CONCRETE CURB - R.I. STD. 7.1.0
- 7.1.3 = PRECAST CONCRETE WHEELCHAIR RAMP TRANSITION CURB - R.I. STD. 7.1.3
- 7.2.0 = PRECAST CONCRETE SLOPED FACE CURB - R.I. STD. 7.2.0
- 7.3.0 = GRANITE CURB - R.I. STD. 7.3.0

PARE

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS

8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1755
14 BOBALA ROAD, SUITE 2B, HOLYOKE, MA 01040, 413.507.3448

OWNER / APPLICANT:

University of Rhode Island
Office of Capital Projects
60 Tootell Road
Kingstown, RI 02881
(401) 874-2725

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Parking Technology Improvements
University of Rhode Island
Kingston, RI

REVISIONS:

0	11-06-2024	ISSUED FOR BID

PROJECT NO.:	20002.00
DATE:	NOVEMBER 6, 2024
SCALE:	AS NOTED
DESIGNED BY:	KJM
CHECKED BY:	MBA
DRAWN BY:	AKL
APPROVED BY:	DLP

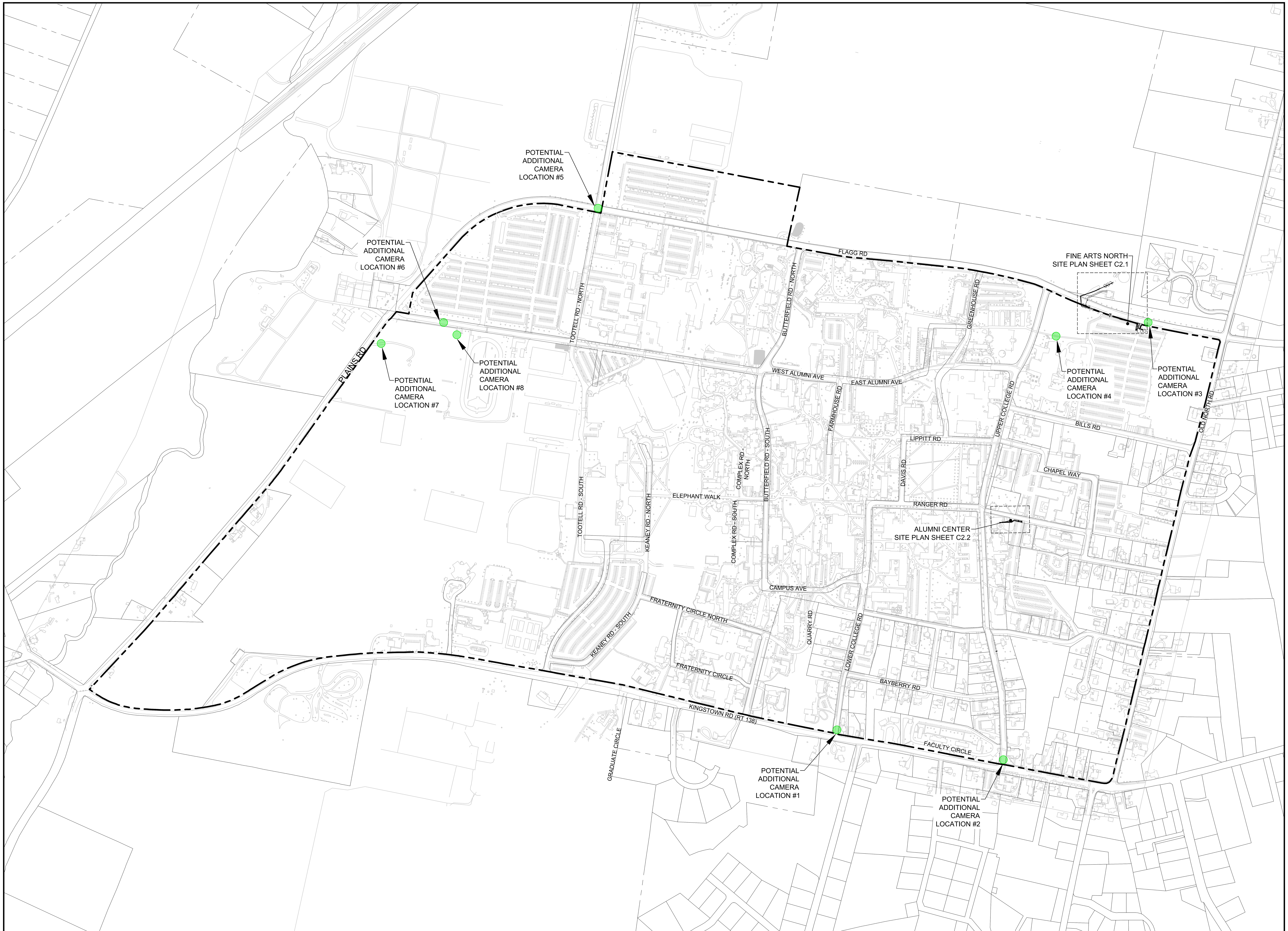
DRAWING TITLE:

LEGEND

DRAWING NO.:

C1.2

SHEET NO. 2 OF 11



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8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
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Parking Technology Improvements
University of Rhode Island
Kingston, RI

REVISIONS:

0	11-06-2024	ISSUED FOR BID

PROJECT NO.:	20002.00
DATE:	NOVEMBER 6, 2024
SCALE:	1" = 300'
DESIGNED BY:	KJM
CHECKED BY:	MBA
DRAWN BY:	AKL
APPROVED BY:	DLP

DRAWING TITLE:

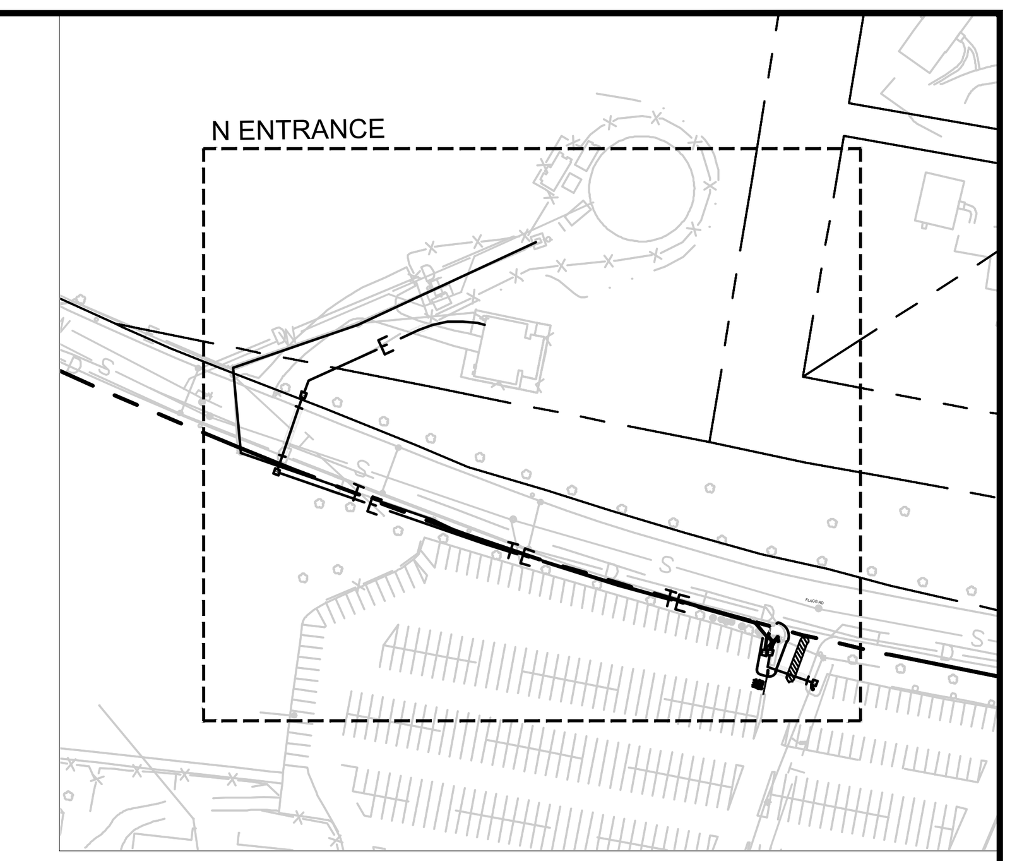
OVERALL PLAN

DRAWING NO.:

C1.3

SHEET NO. 3 OF 11

N ENTRANCE
SCALE: 1"=20'



FINE ARTS NORTH LOT
SCALE: 1"=150'

NOTES:

1. CONTRACTOR SHALL PROVIDE 4" THICK LOAM AND SEED ON ALL DISTURBED AREAS UNLESS NOTED OTHERWISE.
2. INSTALL 'JUTE MESH' EROSION CONTROL FABRIC WHERE FINAL GRADING ARE 3:1 (33%) OR GREATER PER MANUFACTURER'S INSTRUCTIONS.
3. UNLESS OTHERWISE SPECIFIED, CONTRACTOR TO LOAM AND SEED ALL DISTURBED AREAS.
   SEEDING NOTE: USE UNIVERSITY OF RHODE ISLAND NO. 2 IMPROVED SEED MIX OR APPROVED EQUIVALENT.
4. LANDSCAPE ESTABLISHMENT AND MAINTENANCE NOTES: CONTRACTOR SHALL ENSURE THAT ALL LAWN AREAS AND PLANTINGS ARE FULLY ESTABLISHED AND ACCEPTABLE TO THE OWNER'S REPRESENTATIVE PRIOR TO RELINQUISHED THEIR RESPONSIBILITIES FOR MAINTENANCE OF THESE AREAS.
5. ALL ACCESSIBLE RAMPS SHALL BE CONSTRUCTED WITH DETECTABLE WARNING PAVERS.
6. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL EMPLOY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF RHODE ISLAND TO ESTABLISH CONTROL ON THE SITE AND TO PERFORM FIELD MEASUREMENTS AS REQUIRED TO LAYOUT THE PROPOSED BUILDING AND SITE IMPROVEMENTS. THE CONTRACTOR'S SURVEYOR SHALL COORDINATE THE BUILDING LAYOUT WITH THE PROJECT LAND SURVEYOR TO ACCURATELY LOCATE THE BUILDING ON THE SITE.
7. EXPANSION JOINTS (E.J.) 20 FEET O.C. (MAX.) UNLESS OTHERWISE NOTED.
8. CONTROL JOINTS (C.J.) 5 FEET O.C. (MAX.) UNLESS OTHERWISE NOTED.
9. PAVEMENT MARKINGS SHALL BE EPOXY PAVEMENT MARKING UNLESS NOTED OTHERWISE. WATERBORNE PAVEMENT MARKINGS ARE NOT ACCEPTABLE.
10. CONTRACTOR SHALL REMOVE AND RESET FULL CURB SECTION. PROVIDE PAVEMENT AND CURB LOCK AS REQUIRED. AVOID CUTTING CURB SECTIONS.
11. PROPOSED POLES WITHOUT EXTENDED FOUNDATIONS SHALL BE SET A MINIMUM OF 5' FROM THE EDGE OF ROAD.
12. ALL ELECTRICAL AND TELECOMMUNICATIONS SERVICES SHOWN ARE SCHEMATIC. COORDINATION WITH EXISTING FIELD CONDITIONS WILL BE REQUIRED DURING CONSTRUCTION. ALL ROUTING CHANGES SHALL BE COORDINATED WITH THE ELECTRICAL, TELECOMMUNICATIONS, AND CIVIL ENGINEERS.

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DRAWN BY:	AKL
APPROVED BY:	DLP

DRAWING TITLE:

FINE ARTS NORTH SITE PLAN

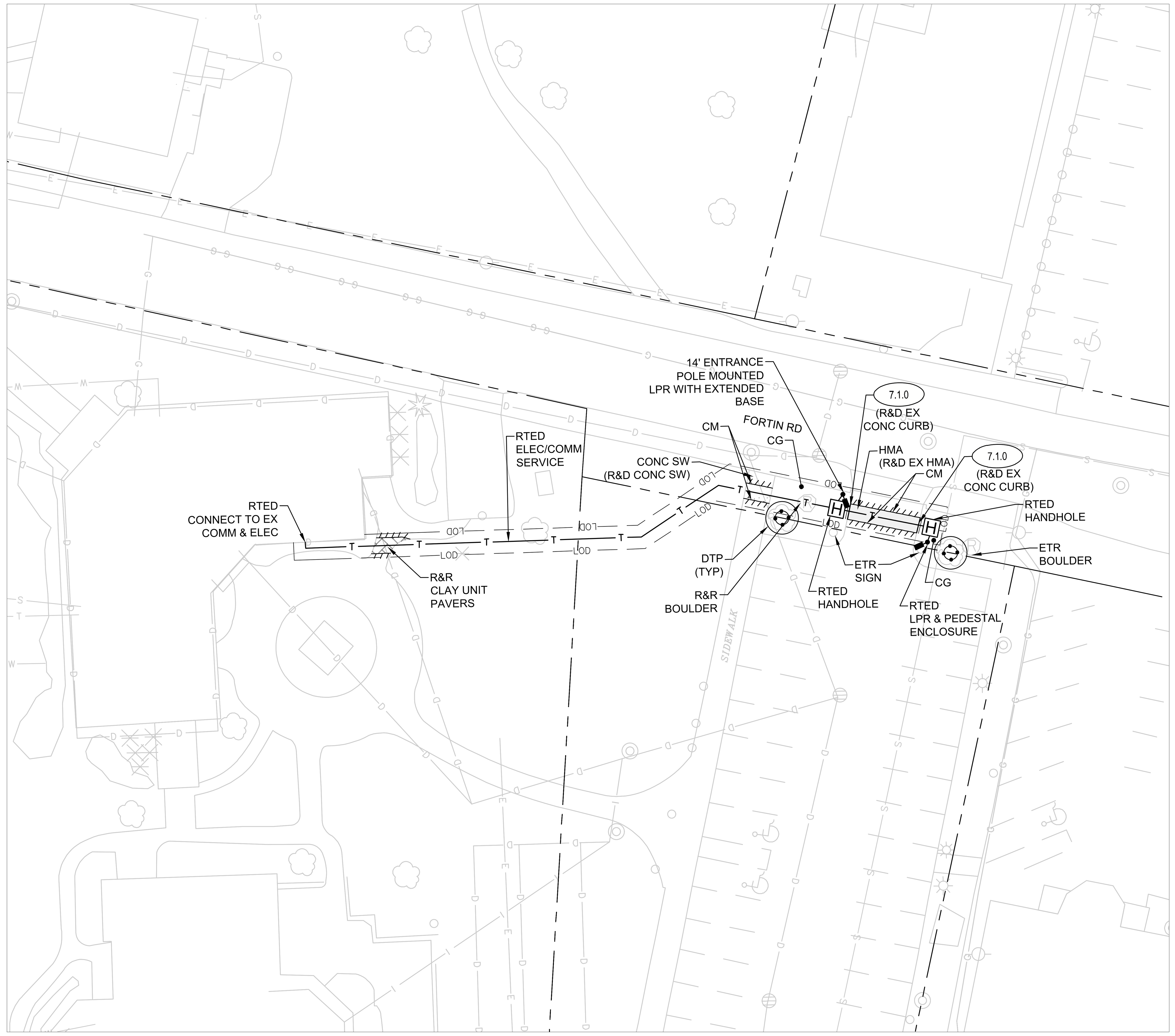
DRAWING NO.:

C2.1

SHEET NO. 4 OF 11

WELCOME CENTER AND ALUMNI CENTER LOTS

SCALE: 1"=150'



N ENTRANCE

SCALE: 1"=20'

NOTES:

1. CONTRACTOR SHALL PROVIDE 4" THICK LOAM AND SEED ON ALL DISTURBED AREAS UNLESS NOTED OTHERWISE.
2. INSTALL 'JUTE MESH' EROSION CONTROL FABRIC WHERE FINAL GRADING ARE 3:1 (33%) OR GREATER PER MANUFACTURER'S INSTRUCTIONS.
3. UNLESS OTHERWISE SPECIFIED, CONTRACTOR TO LOAM AND SEED ALL DISTURBED AREAS. SEEDING NOTE: USE UNIVERSITY OF RHODE ISLAND NO. 2 IMPROVED SEED MIX OR APPROVED EQUIVALENT.
4. LANDSCAPE ESTABLISHMENT AND MAINTENANCE NOTES: CONTRACTOR SHALL ENSURE THAT ALL LAWN AREAS AND PLANTINGS ARE FULLY ESTABLISHED AND ACCEPTABLE TO THE OWNER'S REPRESENTATIVE PRIOR TO RELINQUISHED THEIR RESPONSIBILITIES FOR MAINTENANCE OF THESE AREAS.
5. ALL ACCESSIBLE RAMPS SHALL BE CONSTRUCTED WITH DETECTABLE WARNING PAVERS.
6. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL EMPLOY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF RHODE ISLAND TO ESTABLISH CONTROL ON THE SITE AND TO PERFORM FIELD MEASUREMENTS AS REQUIRED TO LAYOUT THE PROPOSED BUILDING AND SITE IMPROVEMENTS. THE CONTRACTOR'S SURVEYOR SHALL COORDINATE THE BUILDING LAYOUT WITH THE PROJECT LAND SURVEYOR TO ACCURATELY LOCATE THE BUILDING ON THE SITE.
7. EXPANSION JOINTS (E.J.) 20 FEET O.C. (MAX.) UNLESS OTHERWISE NOTED.
8. CONTROL JOINTS (C.J.) 5 FEET O.C. (MAX.) UNLESS OTHERWISE NOTED.
9. PAVEMENT MARKINGS SHALL BE EPOXY PAVEMENT MARKING UNLESS NOTED OTHERWISE. WATERBORNE PAVEMENT MARKINGS ARE NOT ACCEPTABLE.
10. CONTRACTOR SHALL REMOVE AND RESET FULL CURB SECTION. PROVIDE PAVEMENT AND CURB LOCK AS REQUIRED. AVOID CUTTING CURB SECTIONS.
11. PROPOSED POLES WITHOUT EXTENDED FOUNDATIONS SHALL BE SET A MINIMUM OF 5' FROM THE EDGE OF ROAD.
12. ALL ELECTRICAL AND TELECOMMUNICATIONS SERVICES SHOWN ARE SCHEMATIC. COORDINATION WITH EXISTING FIELD CONDITIONS WILL BE REQUIRED DURING CONSTRUCTION. ALL ROUTING CHANGES SHALL BE COORDINATED WITH THE ELECTRICAL, TELECOMMUNICATIONS, AND CIVIL ENGINEERS.
13. REMOVE AND RESET EXISTING WELCOME CENTER LICENSE PLATE READER (LPR) CAMERAS PER MANUFACTURE'S RECOMMENDATIONS.

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CHECKED BY:	MBA
DRAWN BY:	AKL
APPROVED BY:	DLP

DRAWING TITLE:

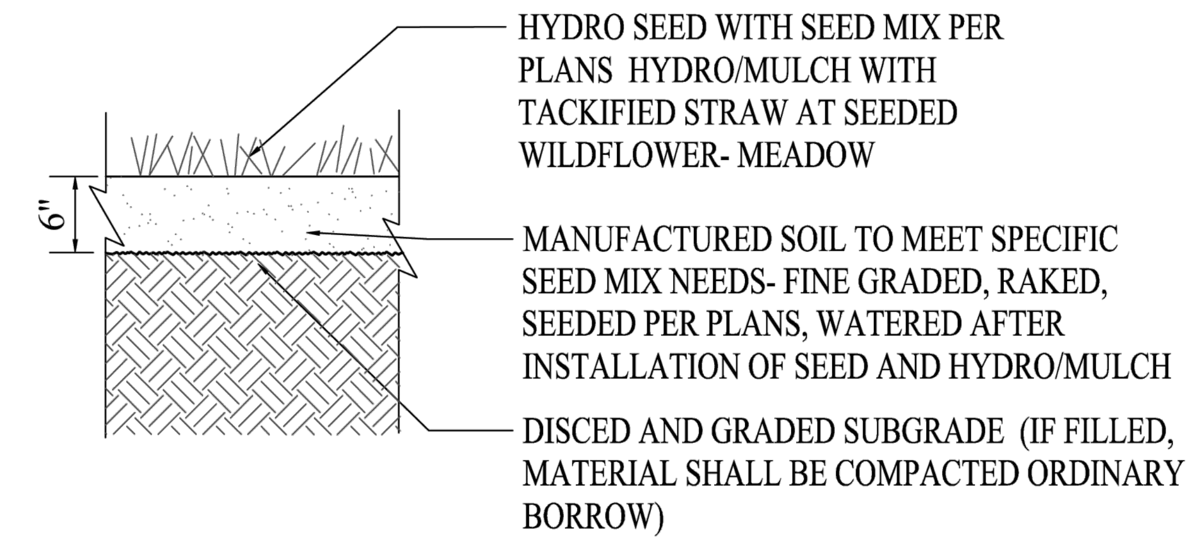
ALUMNI CENTER SITE PLAN

DRAWING NO.:

C2.2

SHEET NO. 5 OF 11

Grass & Turf Alternative Seeding Details (URI2017-60)



Grass Seeding
District: Campus-wide

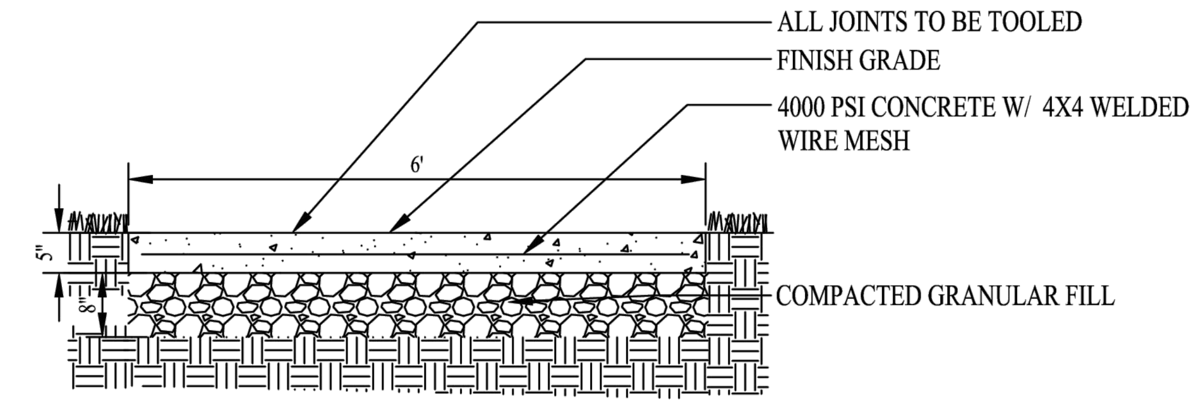
Design Narrative:
- Till in hydroseed
- Decompact soil before application

Turf Alternative Seeding
District: Campus-wide, exclusive of Historic Campus Core District

Design Narrative:
- Till in hydroseed
- Decompact soil before application/conversions of extensive turf areas to meadow plantings should be considered in all districts except the Historic Campus Core District.
- Areas of conversion shall be thoroughly studied and proposed locations shall be submitted, reviewed, and approved by the CP& D office.
- Meadow areas shall not use topsoil appropriate for lawns; meadow soil mixture to be designed specifically for meadow mix.

LOAM AND SEED DETAIL
NOT TO SCALE

6-Foot Wide Pedestrian Path (URI2017-17)



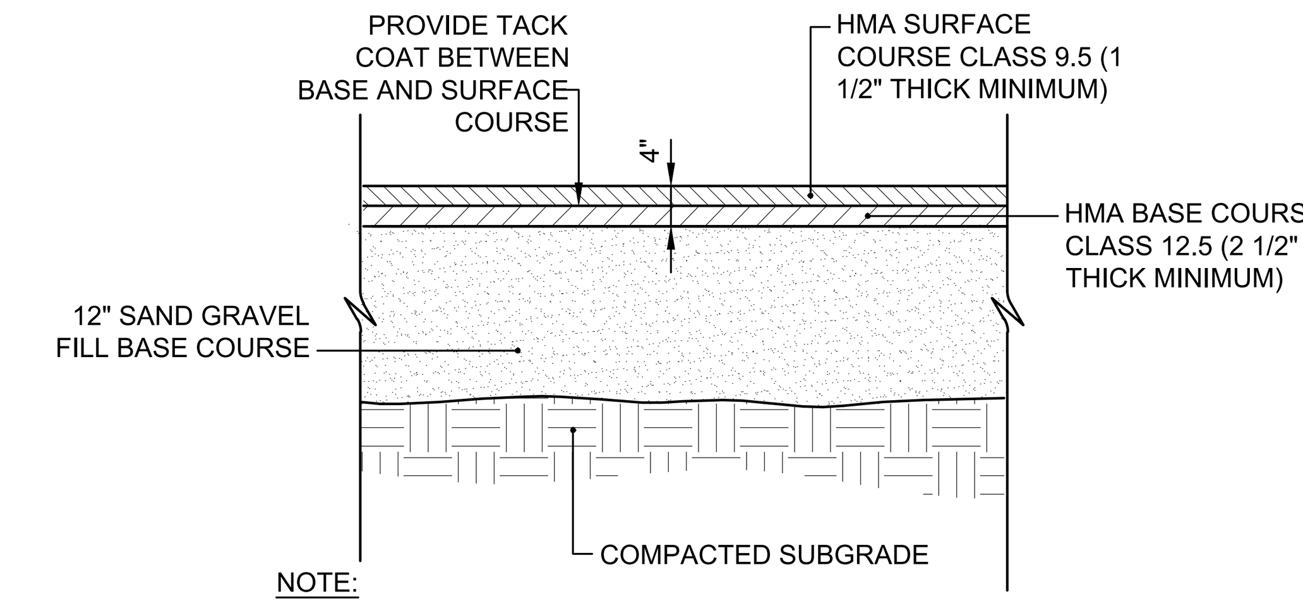
District:
Campus-wide

Color:
Gray

Make:
Cast-in-place concrete

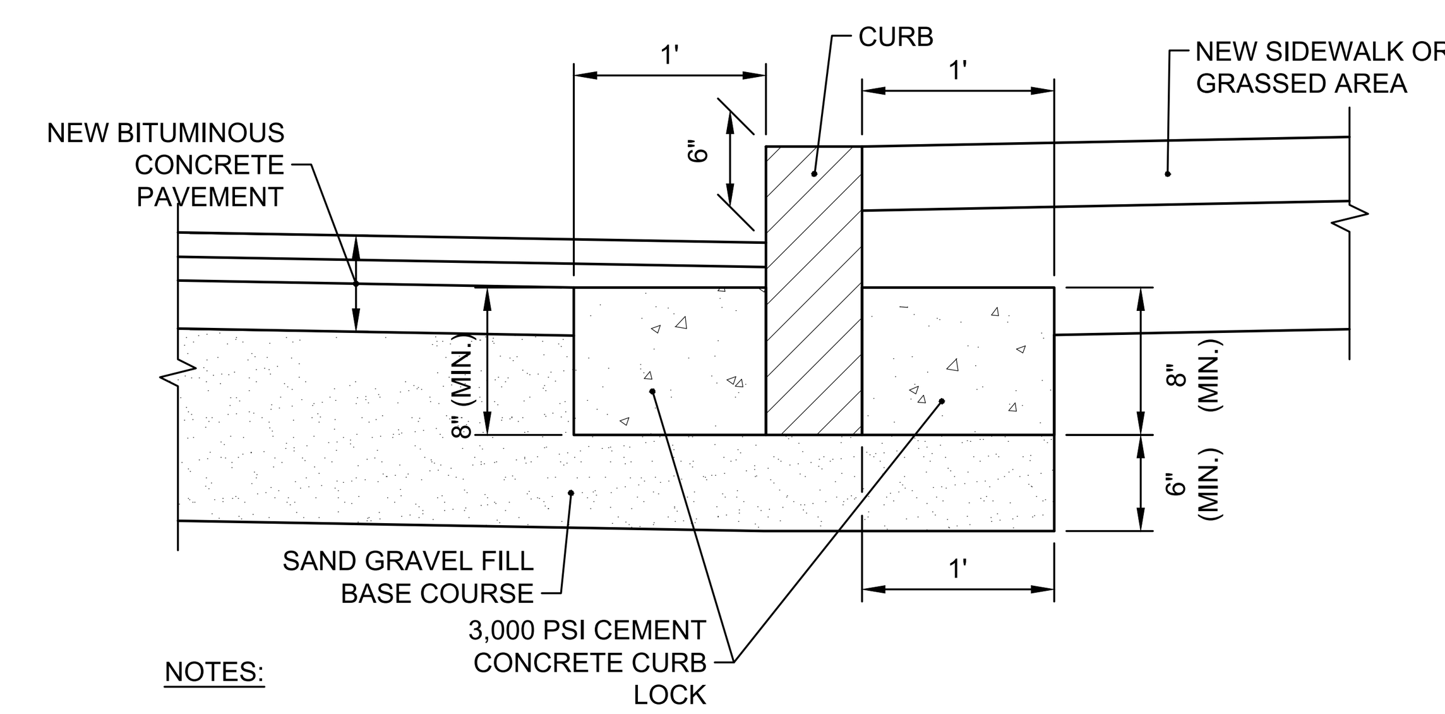
Design Narrative:
- Concrete shall have welded wire mesh reinforcement
- Expansion joints shall have dowels (see expansion joint detail)
- All score joints shall be tooled, brushed, and tooled again to create "window pane" aesthetic
- No running bond score joint pattern will be accepted
- All concrete pavement shall be sealed at time of initial installation
- 6-foot wide paths shall be poured to a depth of 5 inches
- Add silane-siloxane sealer to increase salt resistance
- Wire mesh must be three inches clear on all faces of concrete pour

CEMENT CONCRETE WALK
NOT TO SCALE



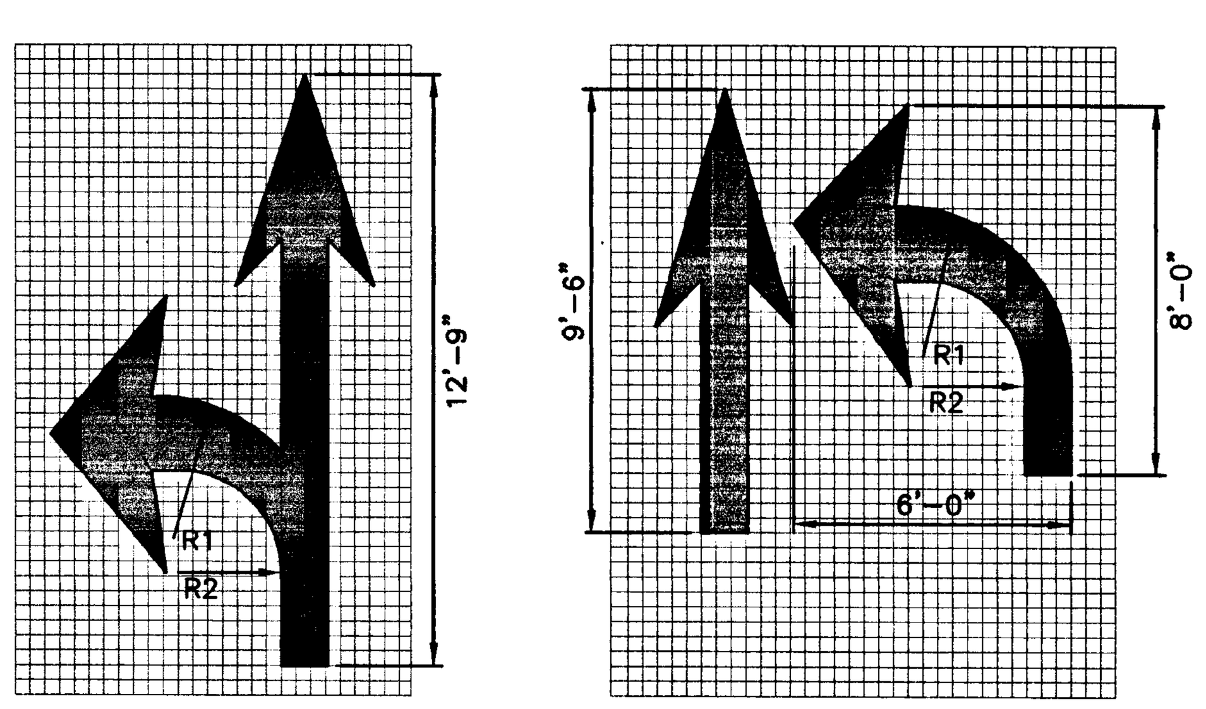
NOTE:
1. SUBMIT JOB MIX FORMULAS TO ENGINEER FOR APPROVAL PRIOR TO PLACEMENT.
2. THE ABOVE DETAIL REPRESENTS THE MINIMUM REQUIRED DIMENSIONS. BASE AND PAVEMENT THICKNESS SHALL MATCH EXISTING WHERE EXCEEDING THE ABOVE DIMENSIONS.

HOT MIX ASPHALT PAVEMENT
NOT TO SCALE

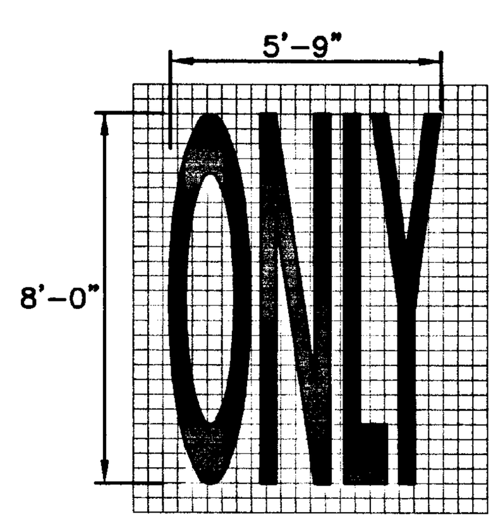


NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. PROVIDE CEMENT CONCRETE CURB LOCK ON ALL CURBS

CURB SETTING DETAIL
NOT TO SCALE



R1 = 3'-2"
R2 = 2'-2"

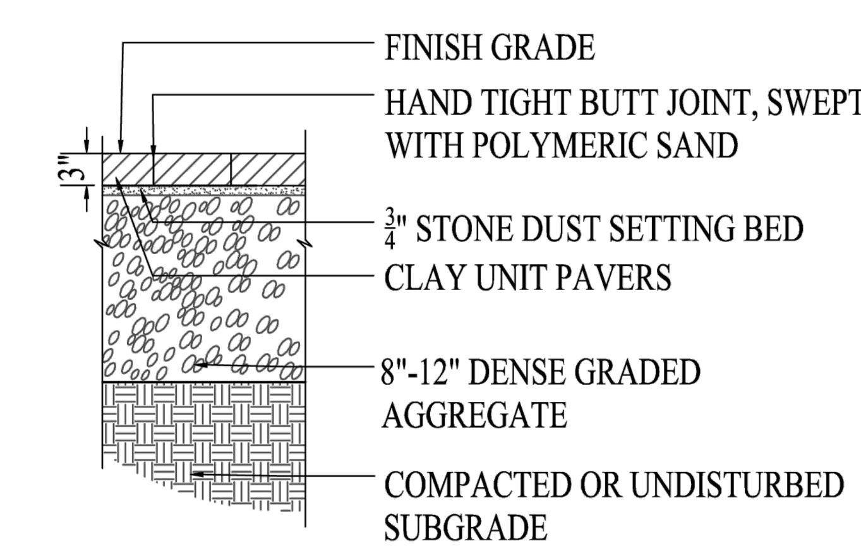


NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION T.20 OF THE R.I. STANDARD SPECIFICATIONS.
2. THE LONGITUDINAL SPACE BETWEEN WORD OR SYMBOL MESSAGES, INCLUDING ARROWS, SHOULD BE AT LEAST FOUR TIMES THE HEIGHT OF THE CHARACTER FOR LOW SPEED ROADS BUT NOT MORE THAN TEN TIMES THE HEIGHT OF THE CHARACTER UNDER ANY CONDITIONS.
3. THE SPACING OF THE PAVEMENT MARKINGS WILL BE AS SHOWN ON THE PLAN AND AS PER THE MUTCD.
4. SYMBOLS AND WORDS SHALL MEET THE REQUIREMENTS OF THE FHWA "STANDARD ALPHABET AND SYMBOLS FOR HIGHWAY PAVEMENT MARKINGS.

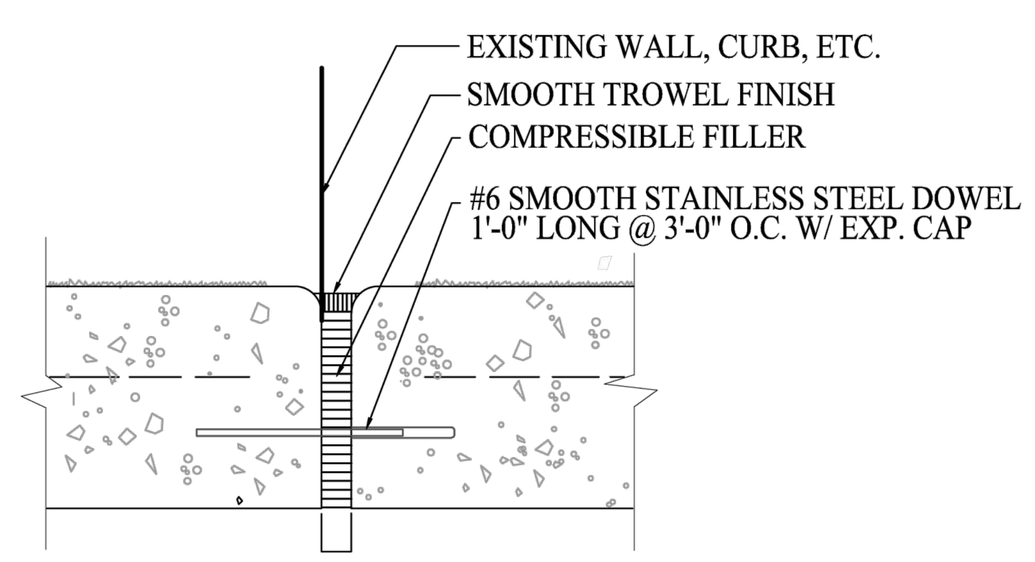
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS			PAVEMENT MARKINGS ARROWS AND ONLY	R.I. STANDARD 20.1.0
NO.	BY	DATE	CHIEF ENGINEER TRANSPORTATION / CHIEF DESIGN ENGINEER TRANSPORTATION / JUNE 15, 1998 ISSUE DATE	

Clay Unit Pavers on Aggregate Subbase (URI2017-24)



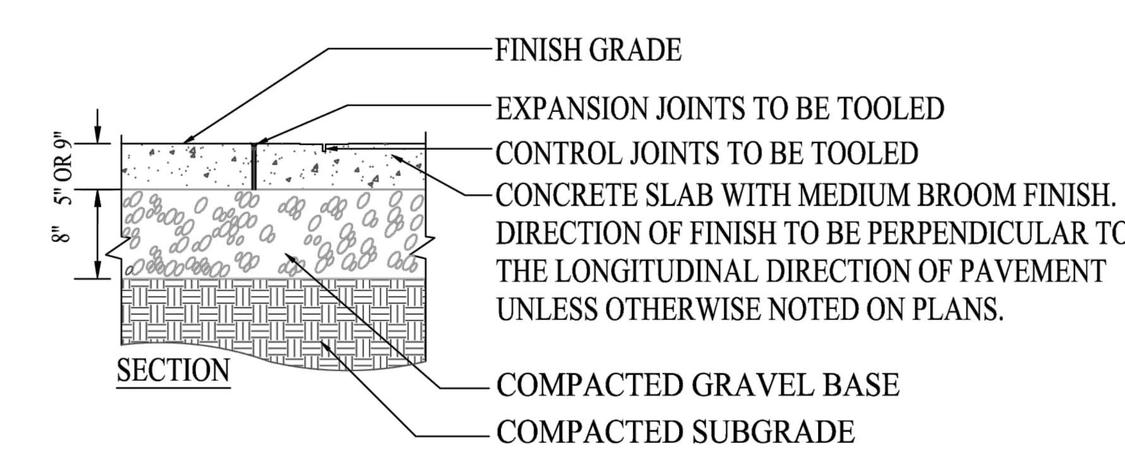
Expansion Joint (URI2017-21)



District:
Campus-wide

Design Narrative:
- Expansion joints should be installed at all building walls, benches, and anywhere a vertical element abuts concrete pavement
- 9-inch thick slab shall have expansion designated by civil
- 5-inch thick slab shall have expansion joints every 20 feet minimum
- 5 feet max. distance for contraction joint
- Sealant for joints shall be fast-curing self-leveling polyurethane

Concrete Control Joint/Expansion Joint (URI2017-20)



District:
Campus-wide

Design Narrative:
- Expansion joints should be installed at all building walls, benches, and anywhere a vertical element abuts concrete pavement
- 9-inch thick slab shall have expansion designated by civil
- 5-inch thick slab shall have expansion joints every 20 feet minimum
- 5 feet max. distance for contraction joint

EXPANSION AND CONTROL JOINTS FOR SIDEWALK PAVING
NOT TO SCALE

District:
Case-by-case basis

Color:
Designated on a case-by-case basis

Make:
TBD

Design Narrative:
- Coursing patterns and colors to be approved by CP&D

CLAY UNIT PAVERS ON AGGREGATE SUBBASE DETAIL
NOT TO SCALE

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0" 1"
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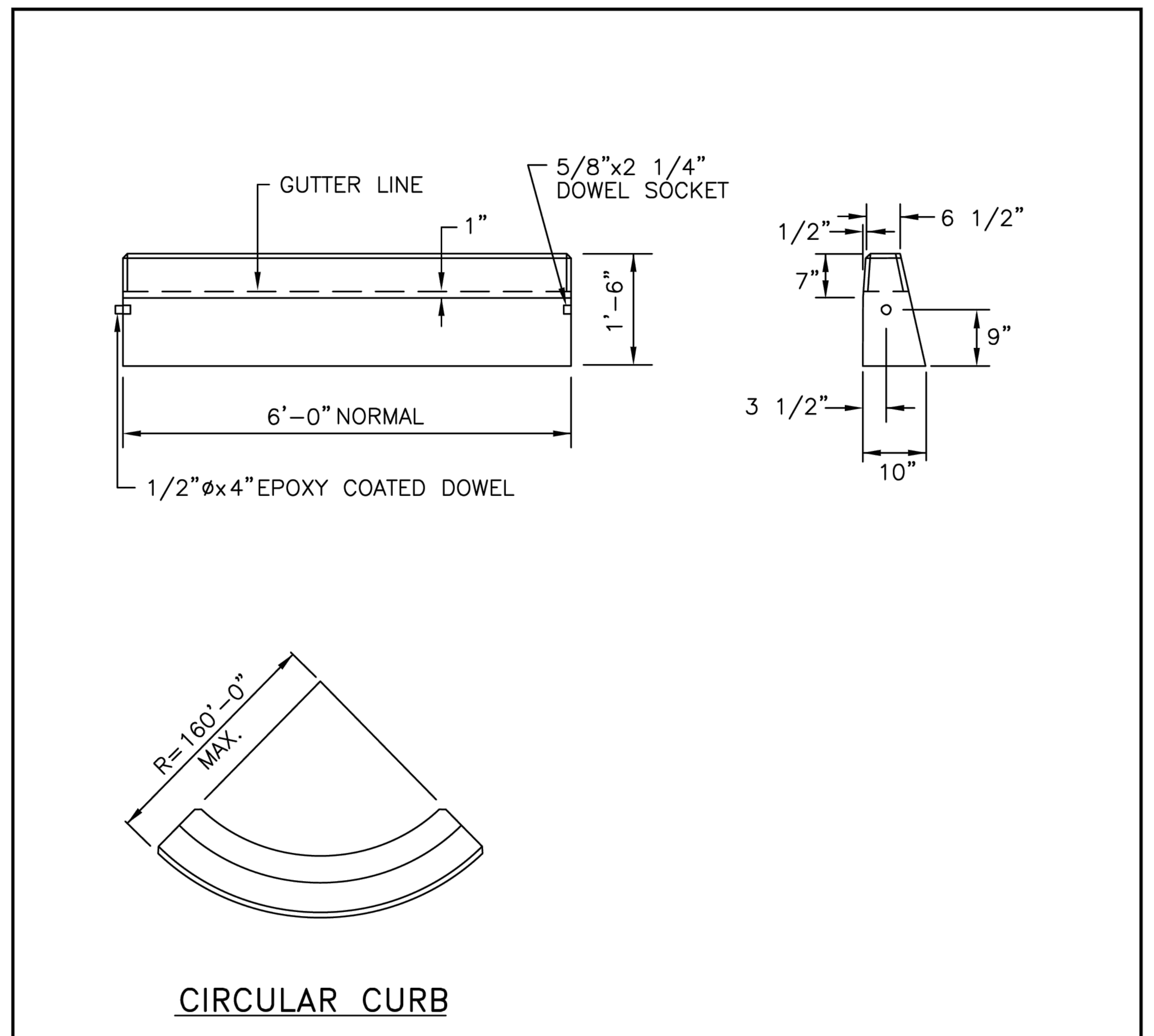
APPROVED BY:	DLP

DRAWING TITLE:
DETAILS 1

DRAWING NO.:
C3.1

SHEET NO. 6 OF 11



NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'-0".
3. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
4. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADII OF 160'-0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.
5. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.

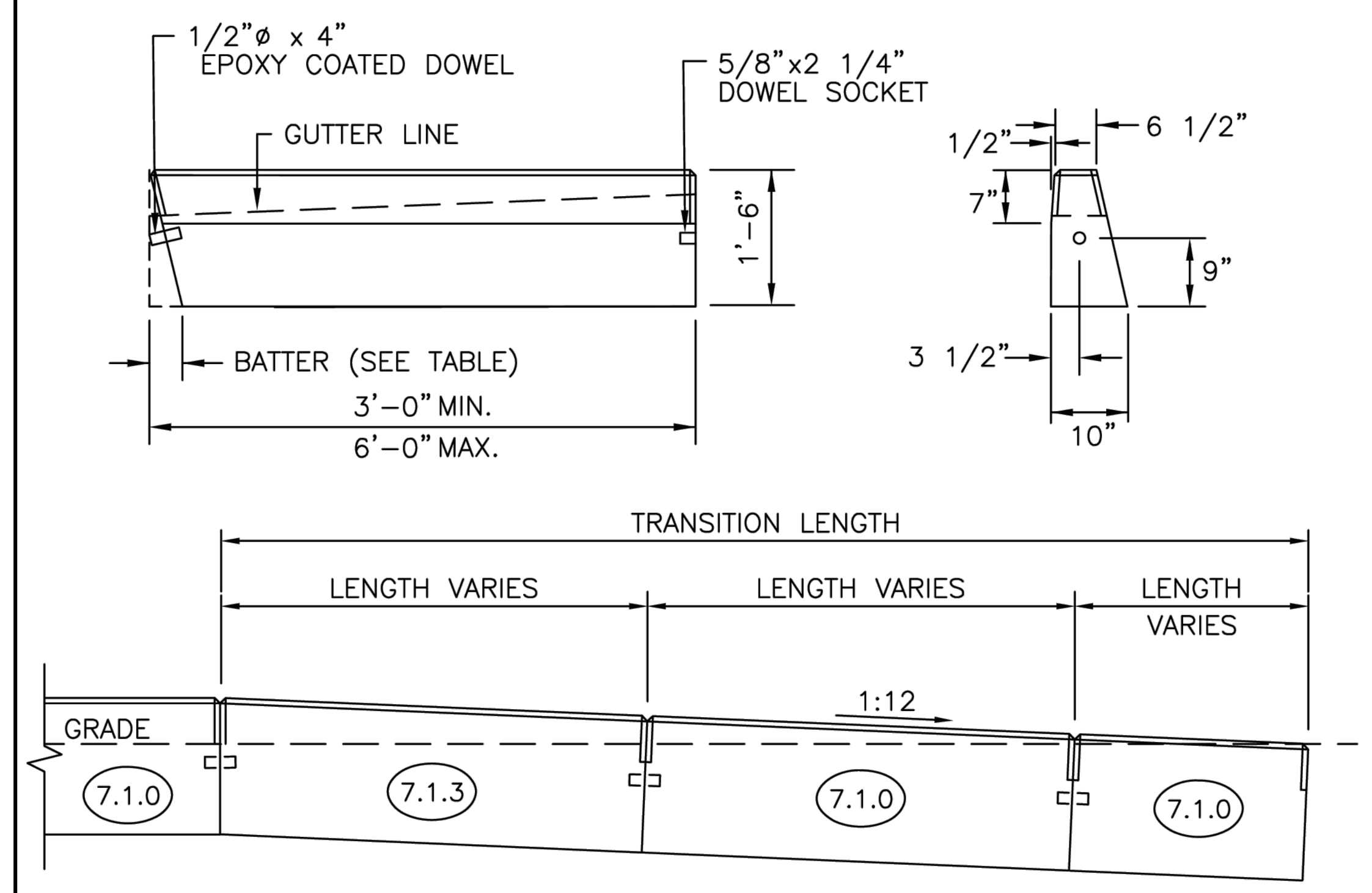
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE
1	MLP	Mar 05

PRECAST CONCRETE CURB

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 7.1.0



TRANSITION LENGTH (FT.)	BATTER (IN.)
6.0	1.5
7.0	1.3
8.0	1.2
9.5	1.0
11.5	0.8
15.0	0.6
18.0	0.5

NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADII OF 160'-0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.
3. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
4. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
5. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR CURB FILLER PIECES TO BE 3'-0" (GREATER LENGTHS PREFERRED).

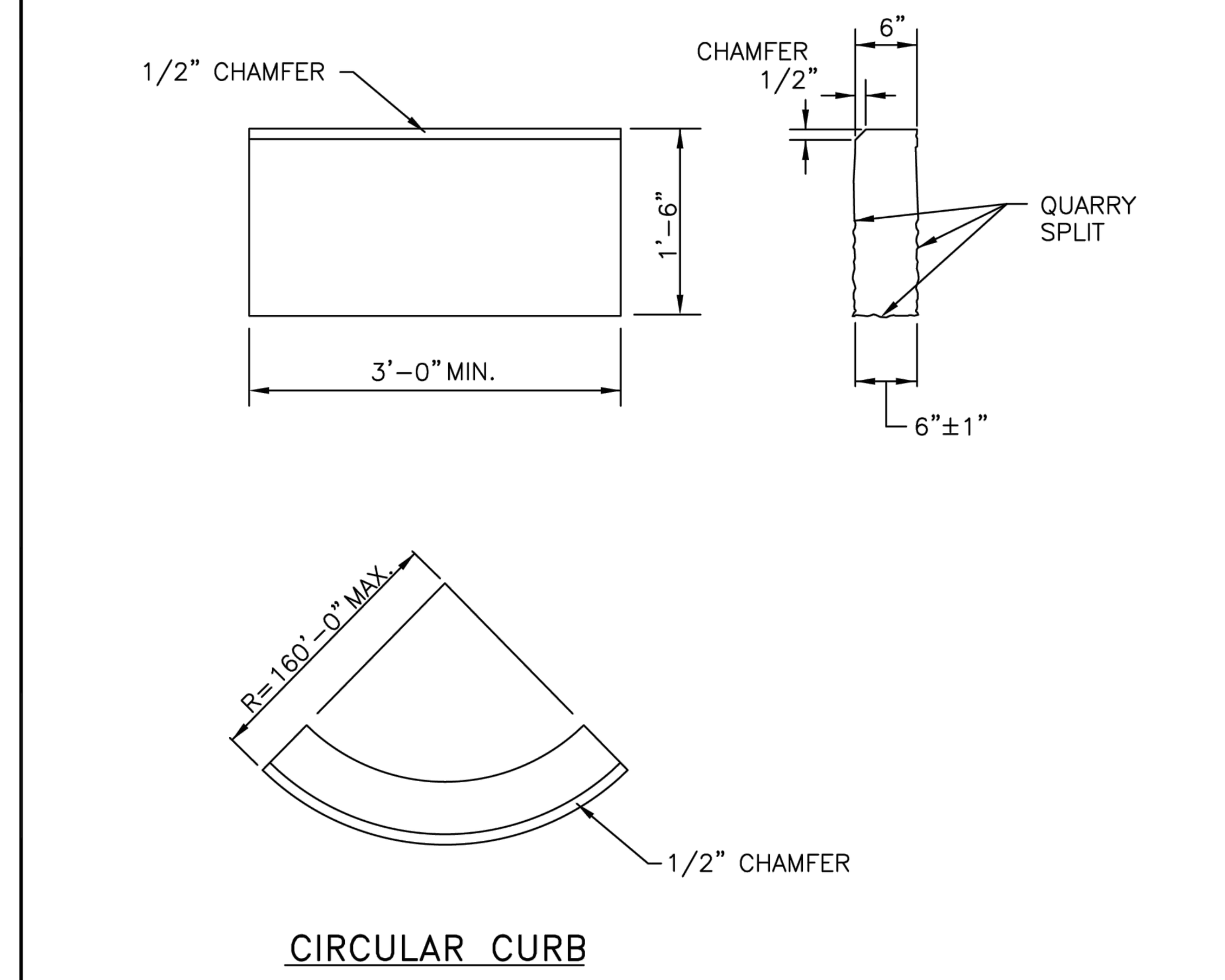
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE
1	MLP	Mar 05

PRECAST CONCRETE WHEELCHAIR RAMP TRANSITION CURB

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 7.1.3



NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. TOP SURFACE TO BE DRESSED BY SAW. REMAINDER MAY BE QUARRY SPLIT.
3. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR PIECES TO BE 3'-0".
4. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADII OF 160'-0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.

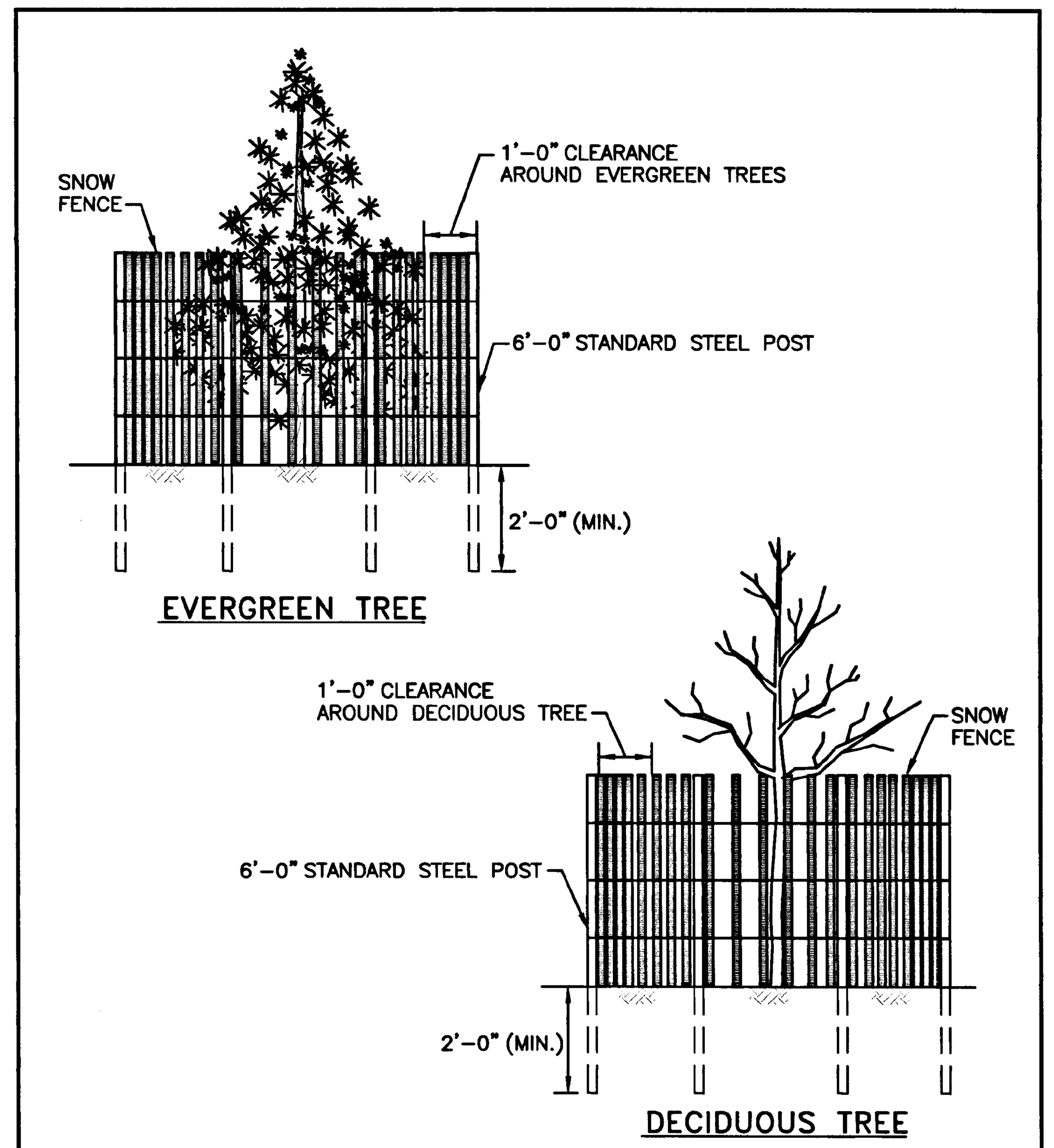
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE
1	MLP	Mar 2005
2	MLP	Sep 2012

GRANITE CURB

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 7.3.0



NOTE:
SHALL BE IN ACCORDANCE WITH SECTION L.11 OF THE R.I. STANDARD SPECIFICATIONS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

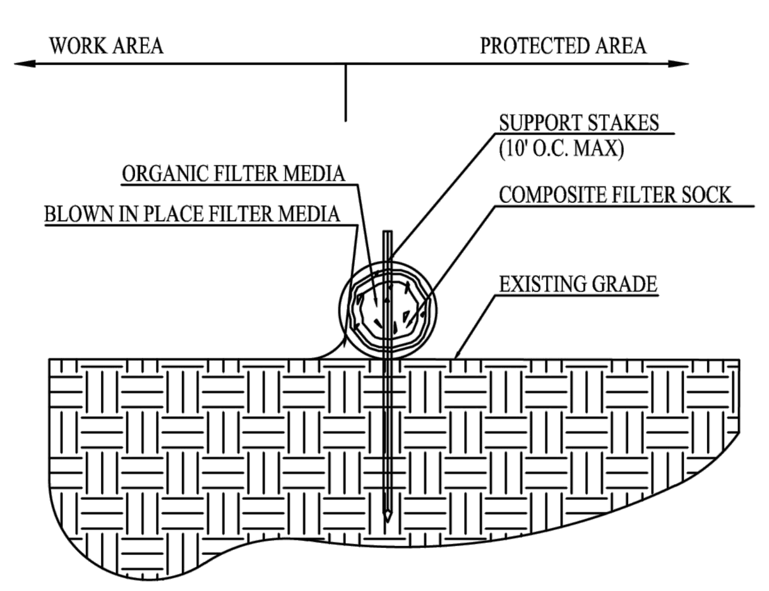
REVISIONS		
NO.	BY	DATE

DRIP LINE TREE PROTECTION DEVICE FOR EXISTING TREES

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 51.1.1

Erosion Control Compost Filter Sock, Coir\Log\ Curlex (URI2017-47)



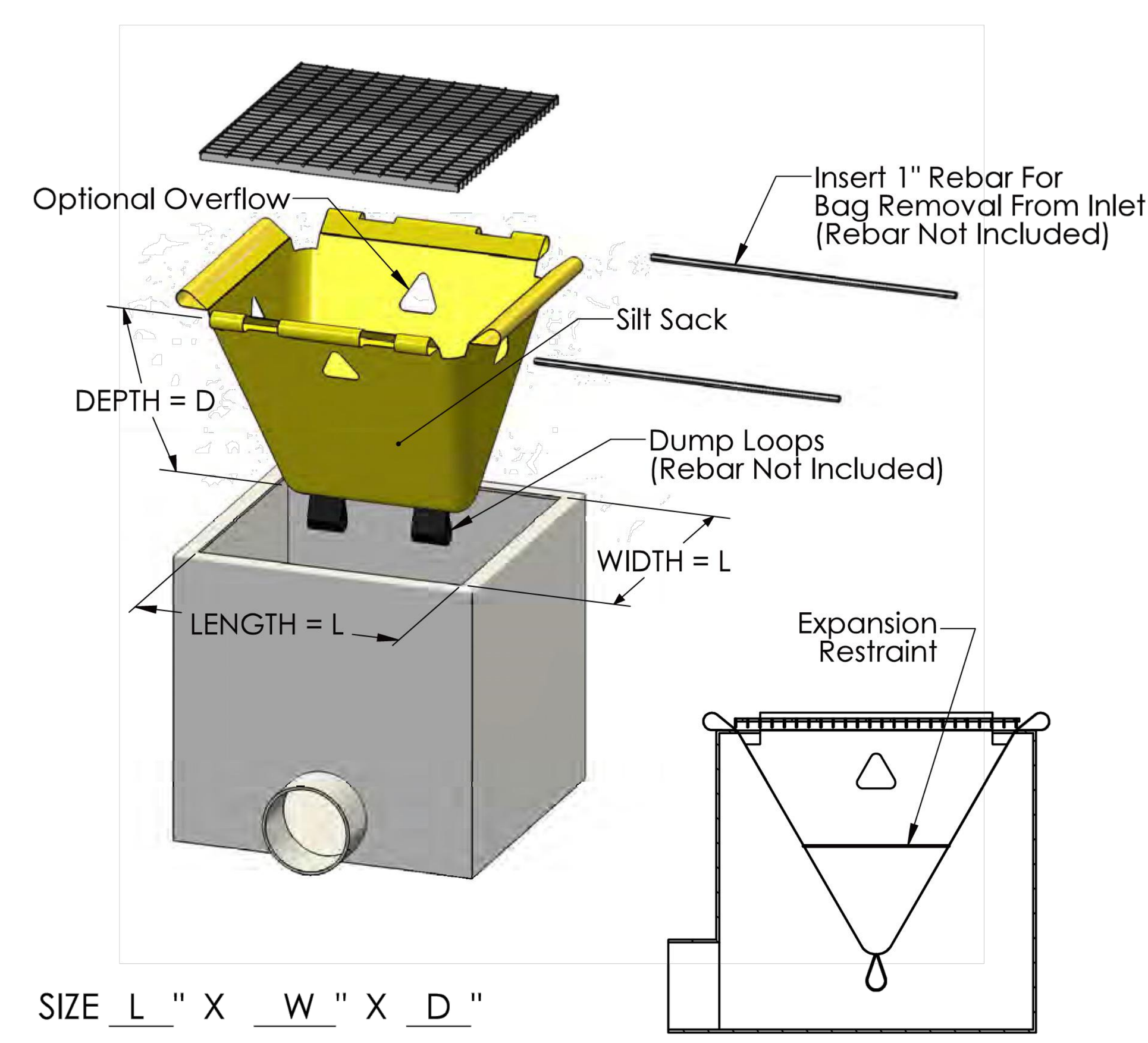
District:
Campus-wide

Make:
Filtrexx

Design Narrative:
- Use as silt fence replacement, site perimeters, on slopes with erosion risks, along toe of slopes, around drains or inlets.
- Mesh to be biodegradable. Photodegradable shall only be considered when the filter sock is removed immediately after project competion.
- Use in concert with typical erosion control fencing

COMPOST FILTER SOCK
NOT TO SCALE

Erosion Control Silt Sack (URI2017-49)



District:
Campus-wide

Color: N/A

Make:
ACF Environmental or approved equal

Design Narrative:
- Silt sacks are to be used as part of a multi-step approach for reducing sediments into the drainage system

INLET SEDIMENT CONTROL DEVICE
NOT TO SCALE

Gutter Buddy/EconoCurb Curb Inlet Filters (URI2017-50)

District:
Campus-wide

Color: N/A

Make:
GutterBuddy or approved equal

Design Narrative:
- GutterBuddies and EconoCurb are to be used as a multi-step approach for reducing sediments into the drainage system during construction

CURB INLET FEATURE
NOT TO SCALE

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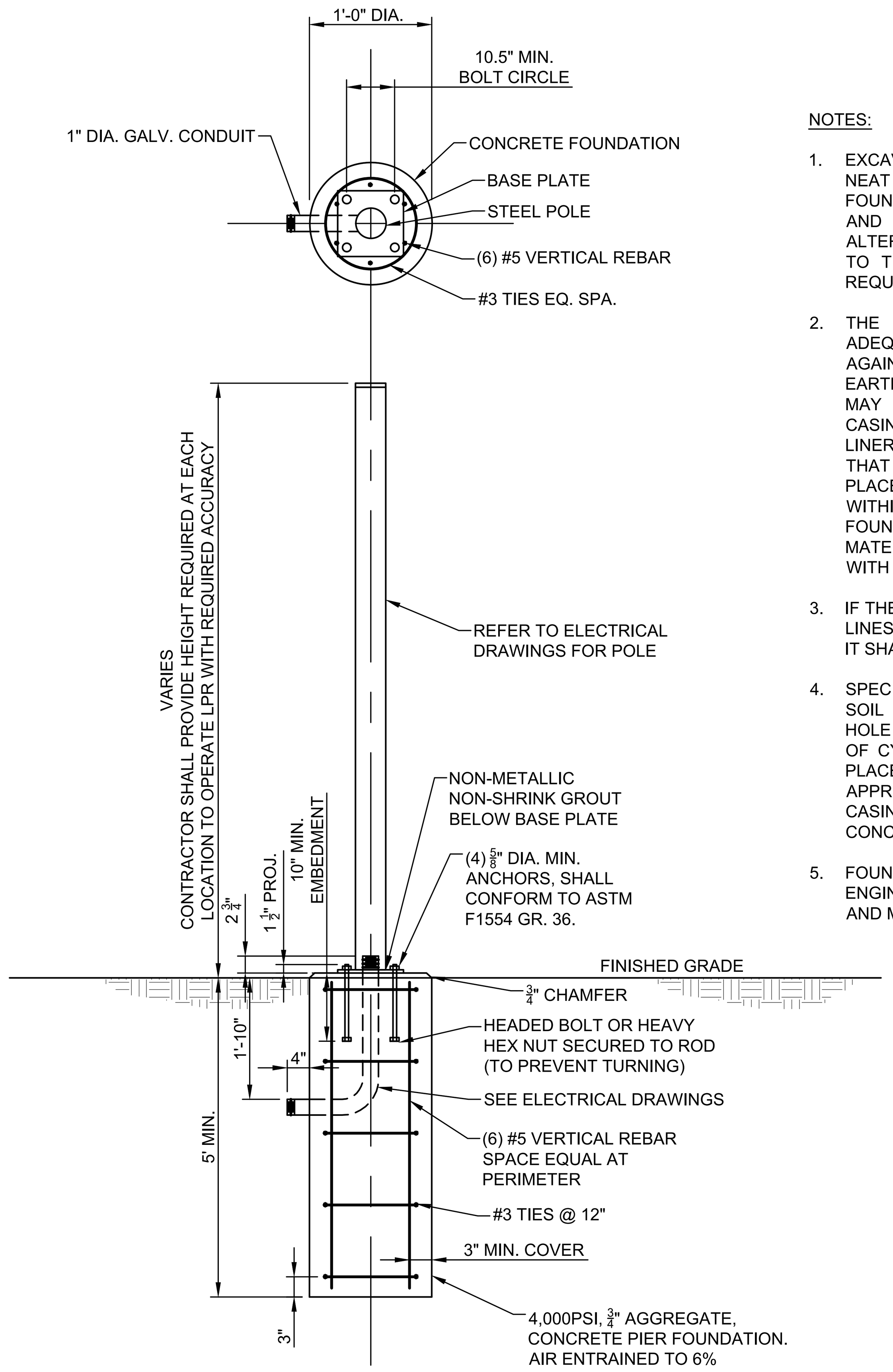
DRAWING NO.:	C3.2
SHEET NO.	7 OF 11

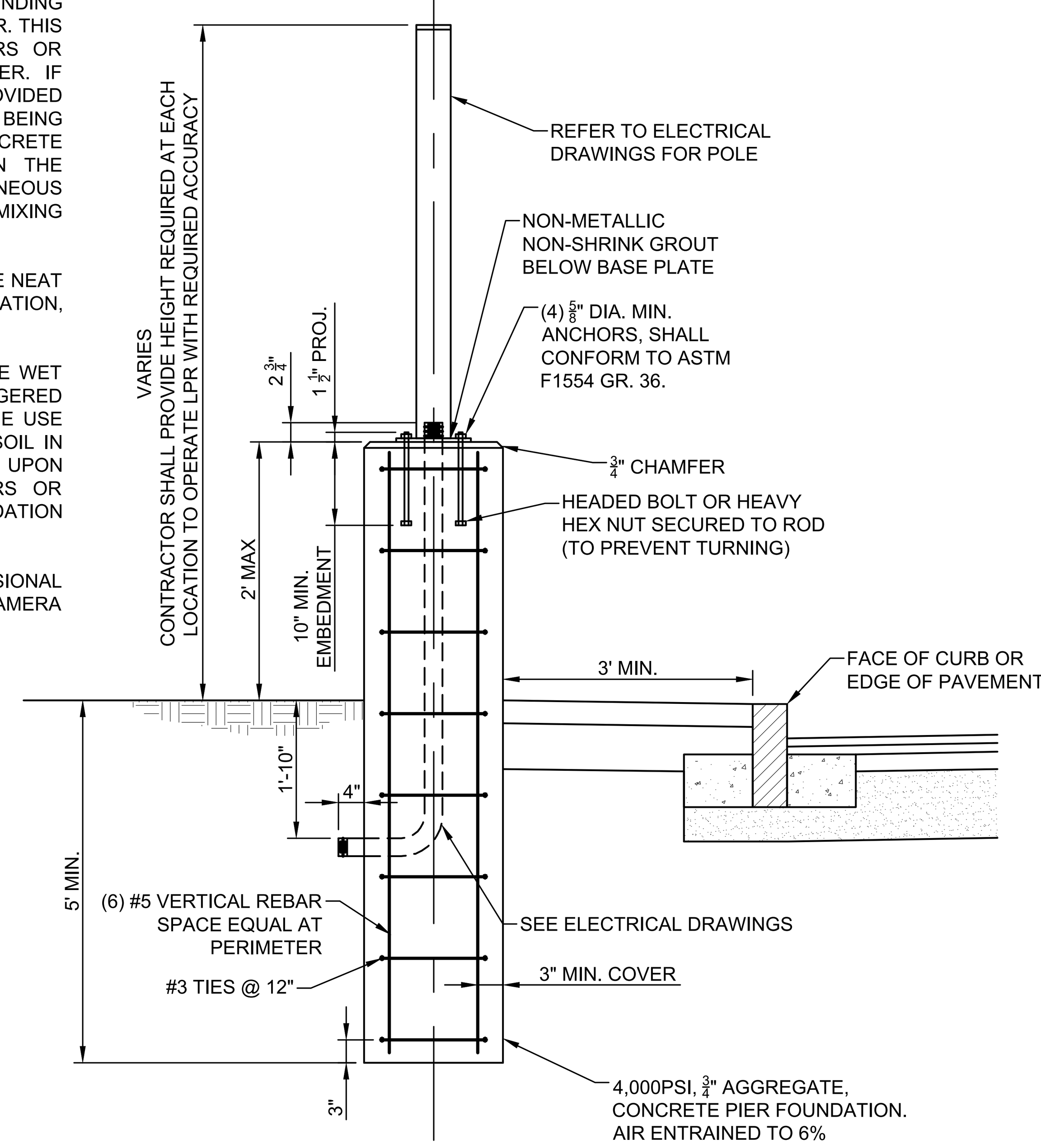


LPR POLE DETAIL

NOT TO SCALE

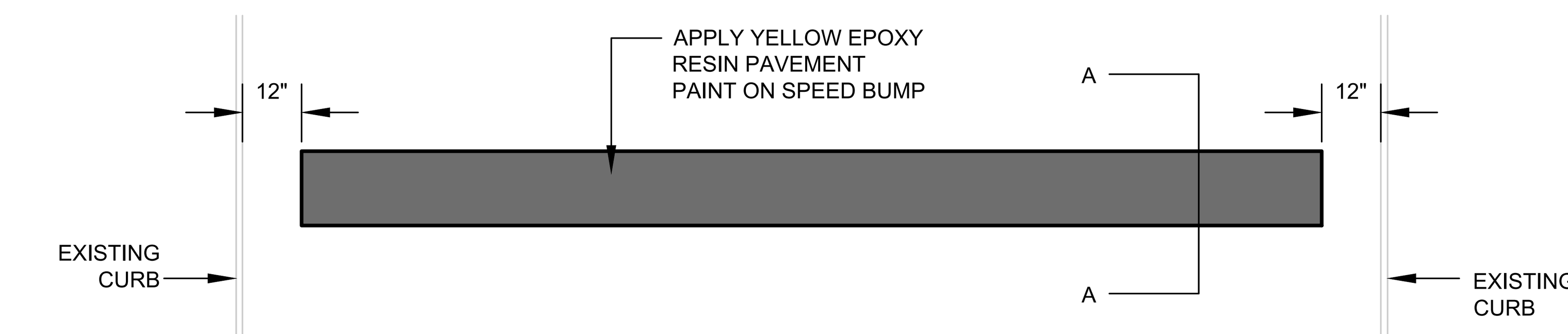
NOTES:

1. EXCAVATION SHALL BE BY THE AUGER METHOD TO THE NEAT LINES OF THE OUTSIDE DIMENSION OF THE FOUNDATIONS WITHOUT DISTURBING THE SOIL AROUND AND BELOW THE PROPOSED FOUNDATION BOTTOM. ALTERNATE METHODS OF EXCAVATION MAY BE SUBMITTED TO THE ENGINEER FOR APPROVAL IF THEY MEET THE REQUIREMENTS LISTED IN NOTES 2, 3, AND 4.
2. THE EARTH WALLS OF THE FOUNDATION SHALL BE ADEQUATELY AND SECURELY PROTECTED AT ALL TIMES AGAINST CAVE-INS. DISPLACEMENT OF THE SURROUNDING EARTH AND FOR THE EXCLUSION OF GROUND WATER. THIS MAY BE DONE BY THE USE OF CYLINDER LINERS OR CASINGS THAT ARE APPROVED BY THE ENGINEER. IF LINERS ARE USED THEY MAT BE RECLAIMED PROVIDED THAT THEY ARE WITHDRAWN AS THE CONCRETE IS BEING PLACE, MAINTAINING A SUFFICIENT HEAD OF CONCRETE WITHIN THE LINER TO PREVENT REDUCTION IN THE FOUNDATION DIAMETER AND TO PREVENT EXTRANEOUS MATERIAL FROM FALLING IN FROM THE SIDES AND MIXING WITH THE CONCRETE.
3. IF THE SOIL IS DISTURBED OR REMOVED BEYOND THE NEAT LINES OF THE OUTSIDE DIMENSIONS OF THE FOUNDATION, IT SHALL BE REPLACE WITH THE CONCRETE.
4. SPECIAL CARE SHOULD BE GIVEN TO AREAS WHERE WET SOIL IS ENCOUNTERED, TO ENSURE THAT PRAUGERED HOLE DOES NOT COLLAPSE. THIS MAY REQUIRE THE USE OF CYLINDER LINERS OR CASINGS TO HOLD THE SOIL IN PLACE UNTIL READY FOR CONCRETE PLACEMENT, UPON APPROVAL FROM THE ENGINEER. THE CYLINDERS OR CASINGS SHALL BE WITHDRAWN AS THE FOUNDATION CONCRETE IS PLACED.
5. FOUNDATIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER FOR A 14' POLE WITH A 5.0 SF MAX EPA CAMERA AND MOUNT ATTACHED TO TOP.

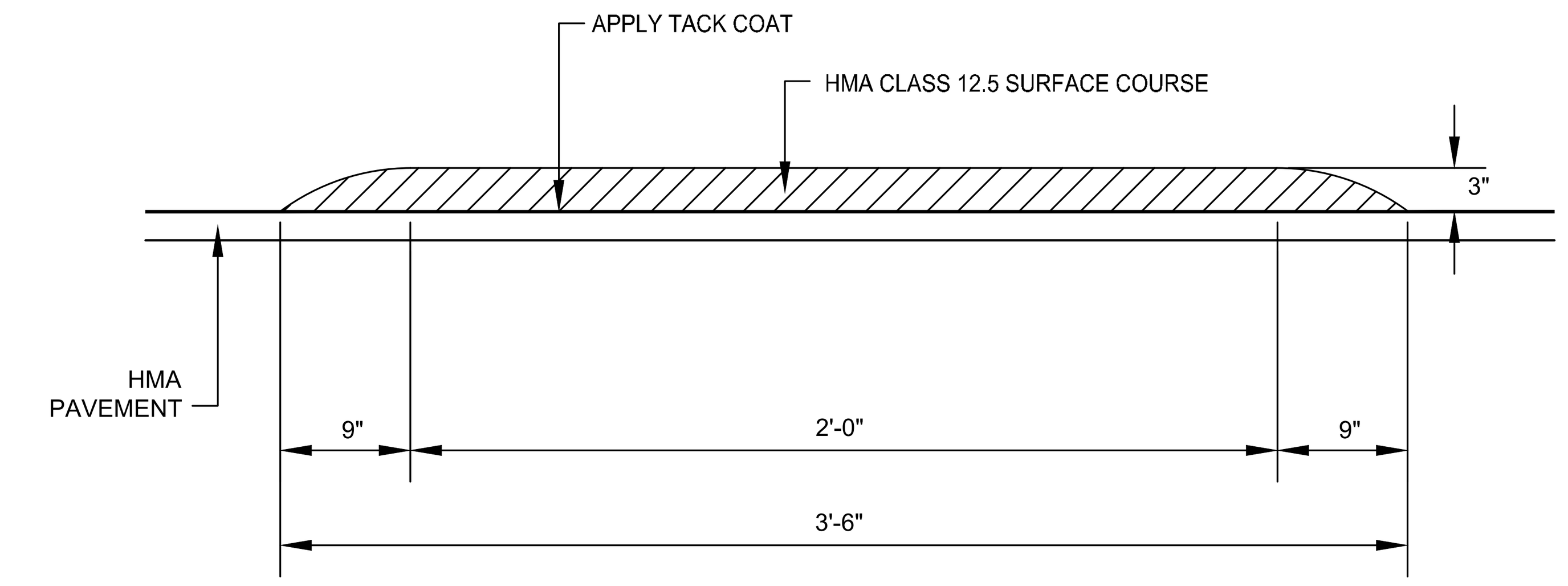


LPR POLE DETAIL WITH EXTENDED FOOTING

NOT TO SCALE



PLAN

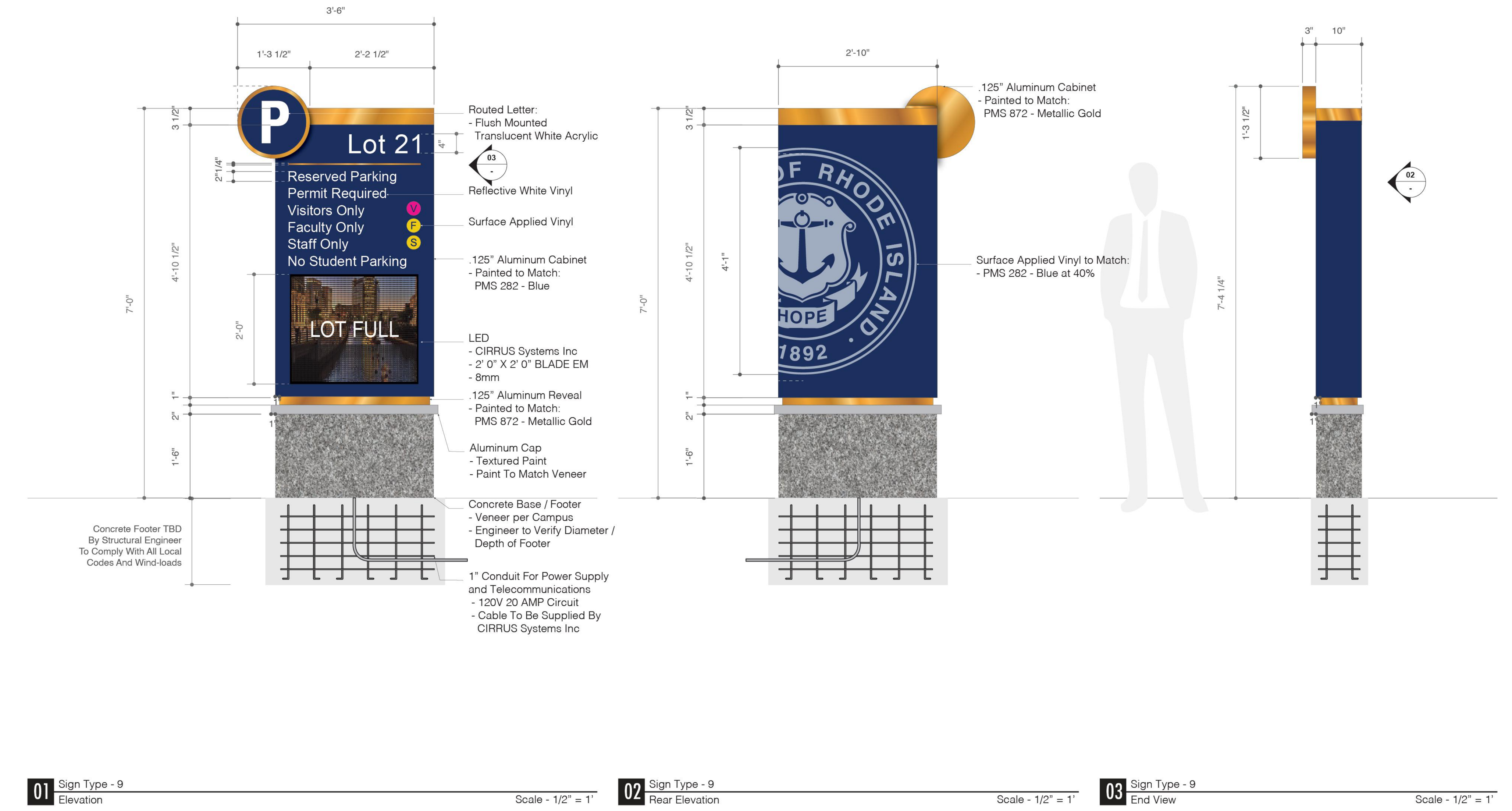


SECTION A-A

SPEED BUMP

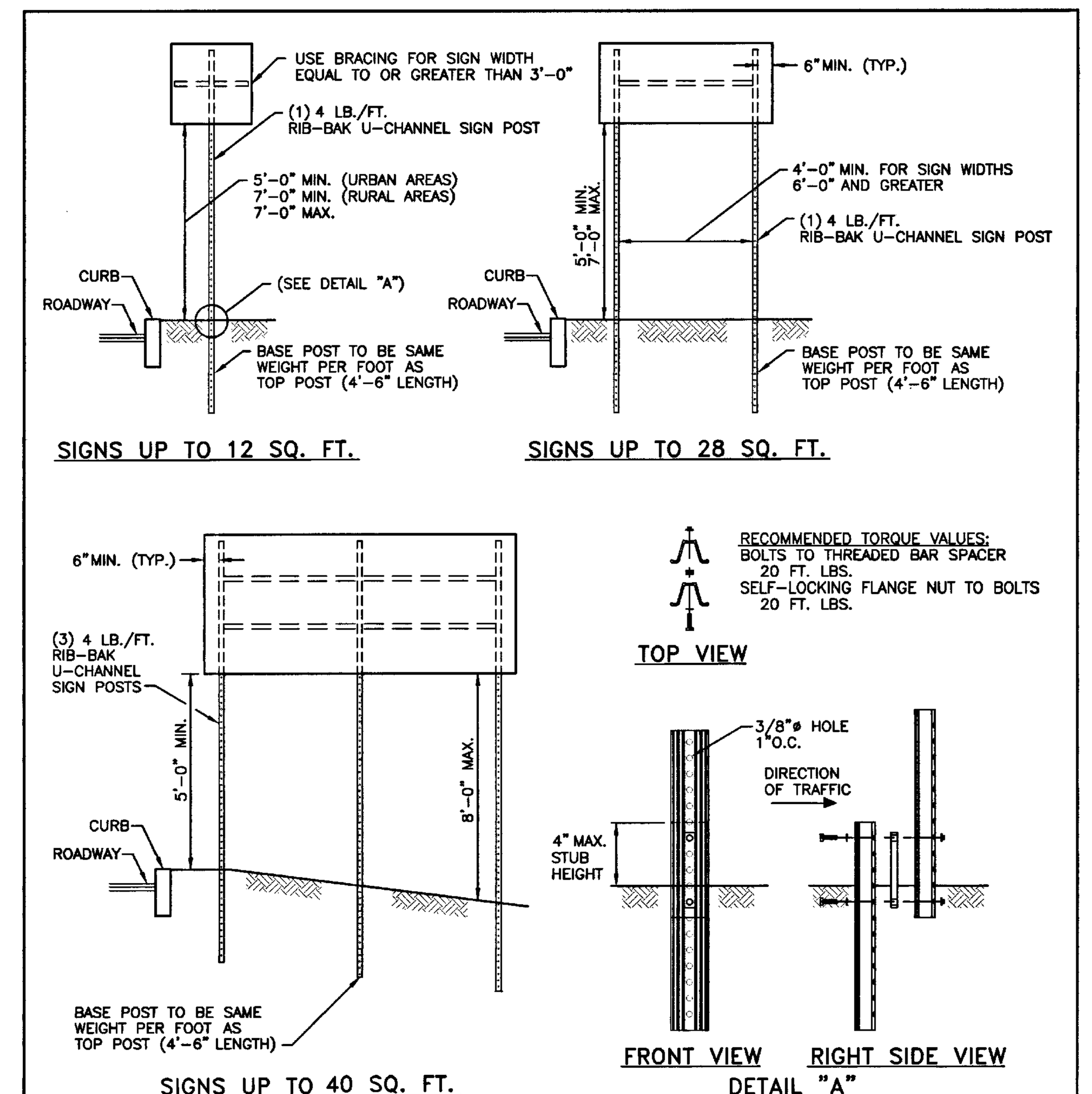
NOT TO SCALE

ALTERNATE 1



WAYFINDING PARKING LOT IDENTIFICATION SIGN WITH LED DISPLAY

SCALE AS INDICATED



INSTALLATION PROCEDURE:
1. REMOVE A SPADE FULL OF SOIL (APPROXIMATELY 2" DEEP) FROM WHERE THE BASE POST WILL BE LOCATED.
2. DRIVE THE BASE POST IN THE CENTER OF THE HOLE JUST CREATED, TO WITHIN 4" OF GRADE LEVEL.
3. PLACE ONE BOLT AND FLAT WASHER IN THE TOP HOLE OF THE BASE POST. (IF THE TOP HOLE ON THE BASE POST, OR THE BOTTOM HOLE ON THE TOP POST IS LESS THAN 3/4" FROM END OF THE POST USE THE SECOND AND SIXTH HOLES.) WITH THE THREADED BAR SPACER ALIGNED WITH TOP HOLE ON THE BACK SIDE OF THE BASE POST, SECURELY TIGHTEN THE BOLT TO 20 FT. LBS. OF TORQUE. REPEAT THIS PROCESS FOR THE LOWER BOLT.
4. NEST THE TOP POST OVER THE PROTRUDING BOLTS ON THE BASE POST. PLACE A SELF-LOCKING FLANGE NUT ON EACH BOLT AND TIGHTEN SECURELY TO 20 FT. LBS. OF TORQUE.
5. REPLACE SOIL REMOVED IN STEP 1.
6. IN TRIPLE POST INSTALLATIONS USING 4 LB./FT. POSTS IN WEAK SOIL, A 1'-0"W x 6"H SOIL PLATE IS REQUIRED.

NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION T.15 OF THE R.I. STANDARD SPECIFICATIONS.
2. THE SIVER ANODIZED BAR SPACER IS FOR USE WITH 2, 2.5 AND 2.75 LB./FT. RIB-BAK POST GRADE SP-80 ONLY.
3. THE GOLD ANODIZED BAR SPACER IS FOR USE WITH 3 AND 4 LB./FT. RIB-BAK POST GRADE SP-80 ONLY.
4. INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE MANUFACTURE'S RECOMMENDATIONS.
5. FOR SIGNS GREATER THAN 40 SQ. FT., REFER TO STD. 30.1.0, 30.1.1, 30.2.0, 30.2.1, 30.3.0, 30.3.1, 30.4.0, 30.4.1, 30.4.2 AND 30.4.3

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE

SIGN POST SELECTION AND INSTALLATION DETAILS
U-CHANNEL POST (SIGNS UP TO 8'-0"Wx4'-0"H)

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 24.2.0

LEGEND	DESIGNATION	SIZE
STOP	R1-1	(30" x 30")
DO NOT ENTER	R5-1	(30" x 30")

NOTE:
1. SIGNS SHALL BE CONSTRUCTED OF TYPE III REFLECTORIZED SHEETING AND IN ACCORDANCE WITH MUTCD REQUIREMENTS, LATEST REVISION.
2. THE CONTRACTOR SHALL SUBMIT SAMPLE SIGNS TO THE OWNER FOR APPROVAL PRIOR TO FURNISHING.
3. LETTERS, COLOR, AND FONT FOR NON-STANDARD SIGNS SHALL BE SELECTED BY THE OWNER.
4. ALL SIGN MOUNTING SHALL CONFORM TO R.I. STD. DETAIL 24.2.0 EXCEPT R7-8 AND R7-8P. R7-8 AND R7-8P SHALL CONFORM TO ACCESSIBLE SIGN MOUNTING DETAIL.

SIGN SCHEDULE

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1755
14 BOBALA ROAD, SUITE 2B, HOLYOKE, MA 01040, 413.507.3448

OWNER / APPLICANT:

University of Rhode Island
Office of Capital Projects
60 Tootell Road
Kingstown, RI 02881
(401) 874-2725

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Parking Technology Improvements University of Rhode Island
Kingston, RI

REVISIONS:

0	11-06-2024	ISSUED FOR BID

PROJECT NO.:	20002.00
DATE:	NOVEMBER 6, 2024
SCALE:	AS NOTED
DESIGNED BY:	KJM
CHECKED BY:	MBA
DRAWN BY:	AKL
APPROVED BY:	DLP

DRAWING TITLE:

DETAILS 3

DRAWING NO.:

C3.3

SHEET NO. 8 OF 11

MISCELLANEOUS LEGEND

ALL ITEMS SHOWN ARE NOT NECESSARILY USED ON THIS PROJECT

Symbol	Description
# / E### (circle)	PARTIAL PLAN/DETAIL CALL OUT TAG; TOP NUMBER INDICATES PLAN/DETAIL AND BOTTOM NUMBER INDICATES SHEET CONTAINING PLAN/DETAIL.
# / E### (circle with arrow)	ELEVATION PLAN CALL OUT TAG; TOP NUMBER INDICATES PLAN/DETAIL AND BOTTOM NUMBER INDICATES SHEET CONTAINING PLAN/DETAIL.

SITE LEGEND

ALL ITEMS SHOWN ARE NOT NECESSARILY USED ON THIS PROJECT

Symbol	Description
A	TYPE "A" QUAZITE HANDHOLE; REFER TO HANDHOLE TYPE "A" DETAIL FOR ADDITIONAL INFORMATION.
	UTILITY POLE.
—— UE ——	UNDERGROUND ELECTRIC SERVICE.
—— US ——	UNDERGROUND SECURITY SERVICE.
——OHS——	OVERHEAD SECURITY SERVICE.

GENERAL NEW WORK NOTES

1. USE #10 CONDUCTORS FOR ALL HOMERUNS OVER 100 FEET IN LENGTH.
2. LOCATIONS SHOWN FOR CONNECTIONS TO EQUIPMENT ARE DIAGRAMMATIC. INSTALL FOR EASE OF MAINTENANCE AND TO SUIT EQUIPMENT.
3. PROVIDE ALL REQUIRED PULL BOXES, JUNCTION BOXES, AND DISCONNECT SWITCHES.
4. DO NOT INSTALL OUTLET BOXES BACK TO BACK.
5. COLOR CODE ALL WIRING.
6. PROVIDE CONDUIT SLEEVES AS REQUIRED. THROUGH FIRE RATED SEPARATIONS, FIRE SEAL AFTER WIRING IS COMPLETE.
7. PROVIDE A NYLON PULL CORD IN ALL EMPTY CONDUITS.
8. CONCEAL ALL WIRING UNLESS OTHERWISE NOTED.
9. PROVIDE ALL GROUNDING INCLUDING GREEN EQUIPMENT GROUND IN ALL RACEWAYS.
10. CIRCUIT NUMBERS INDICATE PANEL AND CIRCUIT BREAKER FOR EQUIPMENT CONNECTIONS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO INSTALL ALL REQUIRED WIRING PER NATIONAL ELECTRIC CODE AND PROJECT SPECIFICATIONS TO PROPERLY ENERGIZE THE ELECTRICAL SYSTEM. ALL WIRING SHALL BE RUN IN A NEAT AND ORDERLY MANNER.
11. WHERE THE NUMBER OF CURRENT CARRYING CONDUCTORS IN A RACEWAY OR CABLE EXCEEDS THREE, THE ALLOWABLE AMPACITY SHALL BE REDUCED PER NATIONAL ELECTRIC CODE TABLE BASED ON NO DIVERSITY. CONSIDER NEUTRALS TO BE CURRENT CARRYING CONDUCTORS.
12. DO NOT COMBINE CIRCUITS OR USE COMMON NEUTRALS
13. LABEL ("BROTHER P-TOUCH LABELING SYSTEM" OR APPROVED EQUAL) OR ENGRAVE EACH RECEPTACLE PLATE WITH PANEL DESIGNATION AND CIRCUIT NUMBER.
14. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS. NO CLAIM FOR EXTRA COMPENSATION SHALL BE ENTERTAINED FOR WORK WHICH A PRELIMINARY EXAMINATION WOULD HAVE REVEALED. THE SUBMISSION OF A BID WILL BE CONSIDERED AS ACKNOWLEDGMENT ON THE PART OF THE BIDDER OF HIS VISITATION TO THE SITE.
15. OBTAIN ALL NECESSARY PERMITS AND CERTIFICATES. PRESENT SATISFACTORY PROOF OF FINAL INSPECTION AND APPROVAL BY AUTHORITIES HAVING JURISDICTION.
16. MAINTAIN CORRECT PHASE SEQUENCE OF ALL FEEDERS AND CIRCUITS BY ESTABLISHING PHASE IDENTIFICATION AND MAINTAINING CORRECT RELATIONSHIP THROUGHOUT THE SYSTEM. PROVIDE LINE BALANCE WITHIN 10% OF NORMAL LOADS.
17. SEE LOW VOLTAGE SPECIFICATIONS FOR ADDITIONAL SCOPE OF WORK. PROVIDE ALL ASSOCIATED POWER CONNECTIONS AND EMPTY RACEWAY SYSTEM AND BOXES. PROVIDE PLASTIC END BUSHINGS AND PULLSTRINGS IN ALL CONDUITS.
18. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL LPR DEVICES AND EQUIPMENT LOCATIONS WITH THE LOW VOLTAGE VENDOR PRIOR TO ROUGH IN.
19. ELECTRICAL CONTRACTOR SHALL PROVIDE LOCKABLE DISCONNECTING MEANS FOR ALL ELECTRIC SIGNS AND OUTLINE LIGHTING BRANCH CIRCUITS IN ACCORDANCE WITH NEC ARTICLE 600. PROVIDE WEATHERPROOF INSTALLATION WHEN INSTALLED OUTDOORS. COORDINATE WITH SIGN VENDOR FOR EXACT LOCATIONS AND BRANCH CIRCUIT REQUIREMENTS. AT A MINIMUM PROVIDE A 120V, 20A BRANCH CIRCUIT AT AN ACCESSIBLE LOCATION FOR EACH ENTRANCE TO EACH TENANT SPACE FOR A SIGN OR OUTLINE LIGHTING SYSTEM EXCEPT FOR ENTRANCES USED ONLY BY SERVICE PERSONNEL OR EMPLOYEES.
20. ALL NEW CIRCUIT BREAKERS SHALL MATCH EXISTING PANEL CIRCUIT BREAKER MANUFACTURER, TYPE AND AIC RATINGS.
21. PROVIDE 120V, 20A, GFCI TYPE CIRCUIT BREAKERS FOR ALL LPR COMMUNICATION BOXES INSTALLED UNDER DIVISION 27 AND POWER WIRED BY THE ELECTRICAL CONTRACTOR. LPR COMMUNICATION BOX HAS TWO (2) DUPLEX RECEPTACLES.
22. PROVIDE PULL STRING IN ALL EMPTY CONDUITS.

CIRCUIT TRACING NOTE

ELECTRICAL CONTRACTOR SHALL UPDATE ALL EXISTING PANELBOARD DIRECTORIES TO REFLECT ALL CIRCUITS MADE SPARE FROM DEMOLITION. ALL EXISTING CIRCUIT BREAKERS IN ALL EXISTING PANELBOARDS SHOWN ON THE DRAWINGS SHALL BE TRACED OUT AND LABELED IN PANELBOARD OF ORIGIN. ALL CIRCUITS THAT ARE NO LONGER IN USE SHALL BE PULLED BACK TO PANEL OF ORIGIN. ALL CIRCUIT BREAKERS NOT BEING UTILIZED SHALL BE LABELED AS SPARE AND PUT IN THE OPEN (OFF) POSITION.

ABBREVIATIONS

ALL ABBREVIATIONS SHOWN ARE NOT NECESSARILY USED ON THIS PROJECT

A/AMP	AMPERE	KW	KILOWATT
AC	ALTERNATING CURRENT	KWH	KILOWATT HOURS
ADA	AMERICAN WITH DISABILITIES ACT	LAN	LOCAL AREA NETWORK
AF	AMPERE FRAME	LPR	LICENSE PLATE RECOGNITION
AFF	ABOVE FINISHED FLOOR	LTG	LIGHTING
AFG	ABOVE FINISHED GRADE	LV	LOW VOLTAGE
AHJ	AUTHORITY HAVING JURISDICTION	MAX	MAXIMUM
AIC	AMPERE INTERRUPTING CAPACITY	MCB	MAIN CIRCUIT BREAKER
ALCS	AUTOMATED LIGHTING CONTROL SYSTEM	M/G	MOTOR/GENERATOR SET
AL	ALUMINUM	MH	MANHOLE
AT	AMPERE TRIP	MIN	MINIMUM
ATS	AUTOMATIC TRANSFER SWITCH	MLO	MAIN LUG ONLY
AWG	AMERICAN WIRE GAUGE	MTD	MOUNTED
AV	AUDIO VISUAL	MTG	MOUNTING
B	BURIED	N	NEUTRAL
BFG	BELOW FINISHED GRADE	NA	NOT APPLICABLE
BOF	BOTTOM OF FIXTURE	NC	NORMALLY CLOSED CONTACT
C	CONDUIT	NEC	NATIONAL ELECTRICAL CODE
CA	CABLE	NF	NOT FUSIBLE
CAT	CATALOG	NG	NATIONAL GRID (ELECTRIC UTILITY)
CATV	CABLE TELEVISION	NL	NIGHT LIGHT
CCTV	CLOSED CIRCUIT TELEVISION SYSTEM	NIC	NOT IN CONTRACT
CB	CIRCUIT BREAKER	NO	NORMALLY OPEN CONTACT
CBA	COLOR BY ARCHITECT	NTS	NOT TO SCALE
CD	CANDELA	OPD	OVER CURRENT PROTECTION DEVICE
CKT	CIRCUITS	P	POLE
CPU	CENTRAL PROCESSING UNIT	PH	PHASE
CONT.	CONTINUATION	POS	PROVIDED UNDER OTHER SECTIONS
CU	COPPER	POTS	PLAIN ORDINARY TELEPHONE
\℄	CENTERLINE	PVC	POLYVINYL CHLORIDE
dB	DECIBEL	PWR	POWER
DC	DIRECT CURRENT	RGS	RIGID GALVANIZED STEEL
DN	DOWN	RIEC	RHODE ISLAND ELECTRICAL CODE
DWG	DRAWING	RMS	ROOT MEAN SQUARE VALUE
EC	ELECTRICAL CONTRACTOR	RPM	REVOLUTIONS PER MINUTE
ECPS	EMPTY CONDUIT WITH PULLSTRING	SN	SOLID NEUTRAL
EG	EQUIPMENT GROUND	SS	SECURITY
ELEV	ELEVATION	SWBD	SWITCHBOARD
EMT	ELECTRIC METALLIC TUBING	TTB	TELEPHONE TERMINAL BOARD
ETR	EXISTING TO REMAIN	TEL	TELEPHONE
F	FAHRENHEIT	TML	TERMINAL
FA	FIRE ALARM	TSP	TWISTED SHIELDED-PAIR
FACP	FIRE ALARM CONTROL PANEL	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
FBA	FINISH BY ARCHITECT		
FDR	FEEDER	TYP	TYPICAL
FLA	FULL LOAD AMPERES	UG	UNDERGROUND
FLMT	FLEXIBLE LIQUID TIGHT METALLIC TUBING	UL	UNDERWRITERS LABORATORIES
FREQ	FREQUENCY	UNO	UNLESS NOTED OTHERWISE
G	GROUND	UON	UNLESS OTHERWISE NOTED
GEC	GROUNDING ELECTRODE CONDUCTOR	UPS	UNINTERRUPTIBLE POWER SUPPLY
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	UTP	UNSHIELDED TWISTED-PAIR
GND	GROUND	V	VOLTS
HH	HANDHOLE	VA	VOLT-AMPERE
HP	HORSEPOWER	VO	TELEPHONE
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING	VFD	VARIABLE FREQUENCY DRIVE
		VSD	VARIABLE SPEED DRIVE
HZ	HERTZ	W	WATTS
IG	ISOLATED GROUND	W/	WITH
JB	JUNCTION BOX	WP	WEATHERPROOF
KVA	KILOVOLT-AMPERE	XFMR/T	TRANSFORMER

EXISTING ELECTRICAL EQUIPMENT LEGEND

ALL ITEMS SHOWN ARE NOT NECESSARILY USED ON THIS PROJECT

Symbol	Description
(no designation)	EXISTING ELECTRICAL EQUIPMENT WITHOUT A DESIGNATION IS TO REMAIN.
XE	"XE" INDICATES EXISTING ELECTRICAL EQUIPMENT WHICH IS TO BE REMOVED. PULL BACK WIRING AND CONDUIT BACK TO NEXT ACTIVE OUTLET OR POWER SOURCE.
XR	"XR" INDICATES EXISTING ELECTRICAL EQUIPMENT TO BE REMOVED AND RELOCATED. EXISTING CIRCUIT SHALL BE EXTENDED TO NEW LOCATION OF RELOCATED EXISTING ELECTRICAL EQUIPMENT.
XN	"XN" INDICATES NEW LOCATION OF RELOCATED EXISTING ELECTRICAL EQUIPMENT.
XD	"XD" INDICATES EXISTING EQUIPMENT/DEVICE TO REMAIN. EXISTING CIRCUIT/ WIRING SHALL BE REMOVED. PULL BACK WIRING AND CONDUIT BACK TO NEXT ACTIVE OUTLET OR POWER SOURCE. ALL HVAC/PLUMBING INTERLOCKING WIRING SHALL REMAIN. REFER TO RENOVATION PLANS FOR NEW CIRCUIT INFORMATION.
XW	"XW" INDICATES EXISTING EQUIPMENT/DEVICE TO BE REMOVED. EXISTING CIRCUIT/WIRING AND BACK BOX SHALL REMAIN. NEW DEVICE SHALL BE LOCATED IN PLACE. EXTEND CIRCUIT/WIRING TO NEW ELECTRICAL EQUIPMENT/DEVICE.

GENERAL NOTES:

1. DOTTED SYMBOLS INDICATE EXISTING ELECTRICAL EQUIPMENT.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
3. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THE CONTINUITY OF ALL EXISTING CIRCUITS WHICH ARE REMAINING.

SHEET LIST

SHEET NUMBER	SHEET NAME
E0.0	SYMBOL LIST, ABBREVIATIONS AND NOTES
ES1.0	FINE ARTS NORTH LOT
ES1.1	BRIAR LANE & ALUMNI CENTER LOTS
E2.0	DETAILS
E2.1	DETAILS

Creative
DIVISION OF THE RISE GROUP
HVAC - ELECTRICAL - PLUMBING - FIRE PROTECTION
D/B/A CREATIVE ENVIRONMENT CORP.
195 FRANCES AVE BLDG. #2 CRANSTON RI 02910
OFFICE - 401.438.7733
CEC#20230012

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1755
14 BOBALA ROAD, SUITE 2B, HOLYOKE, MA 01040, 413.507.3448

OWNER / APPLICANT:
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Office of Capital Projects
60 Tootell Road
Kingstown, RI 02881
(401) 874-2725

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Parking Technology Improvements
University of Rhode Island
Kingston, RI

STEVEN COSTA
No. 7813
REGISTERED PROFESSIONAL ENGINEER (ELECTRICAL)
11/07/2024

REVISIONS:

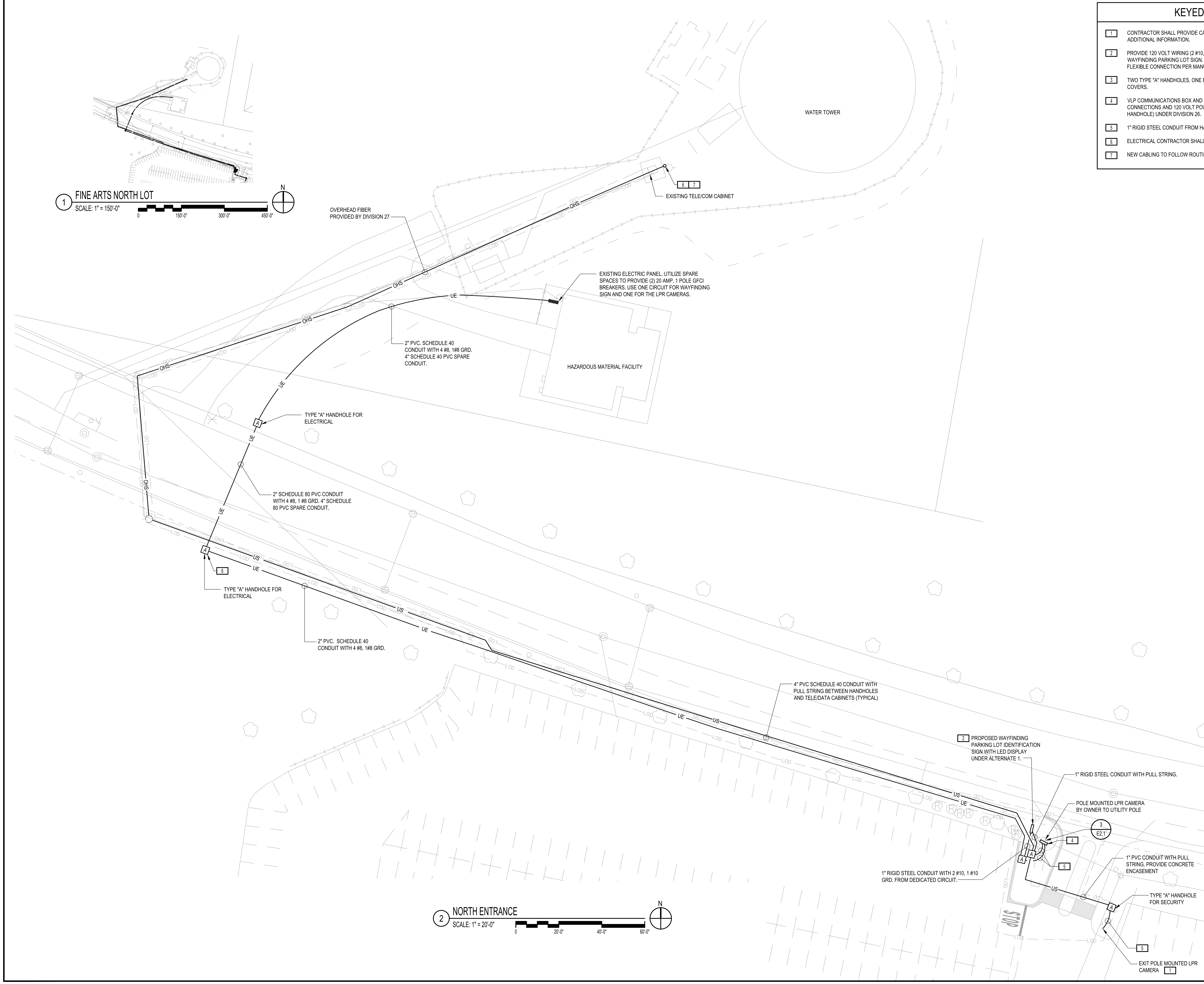
0	11-6-2024	ISSUED FOR BID

PROJECT NO.:	20002.00
DATE:	NOVEMBER 6, 2024
SCALE:	NONE
DESIGNED BY:	GD
CHECKED BY:	SC
DRAWN BY:	DD
APPROVED BY:	SC

DRAWING TITLE:
SYMBOL LIST, ABBREVIATIONS AND NOTES

DRAWING NO.:
E0.0

SHEET NO. ___ OF 11



2 NORTH ENTRANCE

SCALE: 1" = 20'-0"

0 20'-0" 40'-0" 60'-0"

KEYED SHEET NOTES

1. CONTRACTOR SHALL PROVIDE CAMERA POLE. REFER TO LPR POLE DETAILS ON E2.1 FOR ADDITIONAL INFORMATION.
2. PROVIDE 120 VOLT WIRING (2 #10, 1 #10GRD FROM NEAREST ELECTRICAL HANDHOLE) TO WAYFINDING PARKING LOT SIGN. PROVIDE "WP" SERVICE DISCONNECT AND SEALTITE FLEXIBLE CONNECTION PER MANUFACTURERS INSTALLATION MANUAL AND SPECIFICATIONS.
3. TWO TYPE "A" HANDHOLES. ONE FOR ELECTRIC, ONE FOR SECURITY. PROVIDE LABELING ON COVERS.
4. VLP COMMUNICATIONS BOX AND MOUNTING HARDWARE FURNISHED BY OWNER. CONDUIT, CONNECTIONS AND 120 VOLT POWER WIRING (2 #10, 1 #10GRD FROM NEAREST ELECTRICAL HANDHOLE) UNDER DIVISION 26.
5. 1" RIGID STEEL CONDUIT FROM HANDHOLE TO CAMERA POLE.
6. ELECTRICAL CONTRACTOR SHALL PROVIDE 4" RIGID STEEL CONDUIT RISER, AS REQUIRED.
7. NEW CABLING TO FOLLOW ROUTING OF EXISTING CABLING BY DIVISION 27.

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0" 1"
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Kingston, RI

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11/07/2024

REVISIONS:

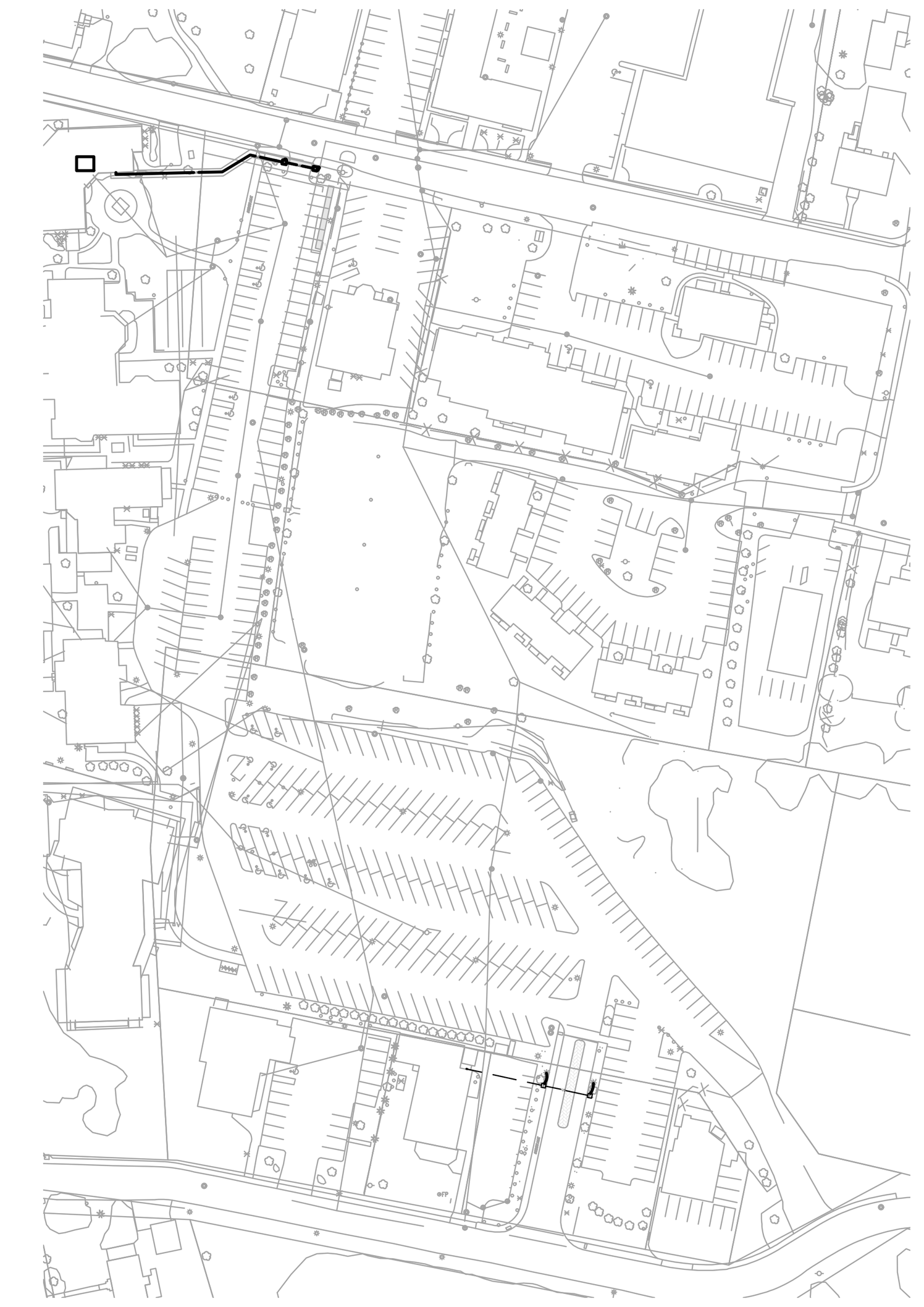
0	11-6-2024	ISSUED FOR BID

PROJECT NO.:	20002.00
DATE:	NOVEMBER 6, 2024
SCALE:	AS NOTED
DESIGNED BY:	GD
CHECKED BY:	SC
DRAWN BY:	DD
APPROVED BY:	SC

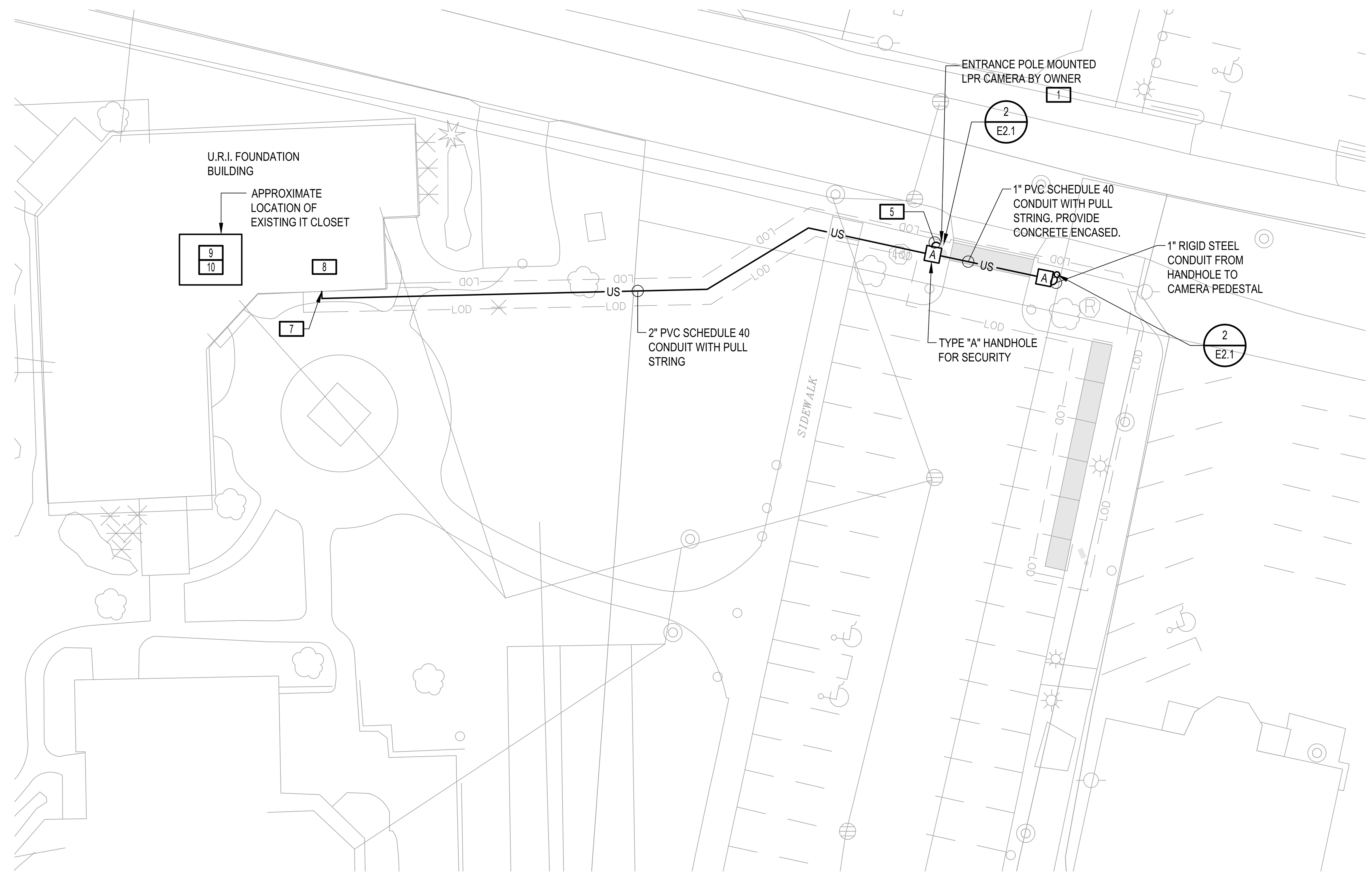
DRAWING TITLE:
FINE ARTS NORTH LOT

DRAWING NO.:
ES1.0

SHEET NO. ___ OF 11



1 WELCOME CENTER AND ALUMNI CENTER LOTS
SCALE: 1" = 150'-0"
0 150'-0" 300'-0" 450'-0"
N



2 NORTH ENTRANCE
SCALE: 1" = 20'-0"
0 20'-0" 40'-0" 60'-0"
N

KEYED SHEET NOTES

1	CONTRACTOR SHALL PROVIDE CAMERA POLE. REFER TO LPR POLE DETAILS ON E2.1 FOR ADDITIONAL INFORMATION.
2	NOT USED.
3	TWO TYPE "A" HANDHOLES. ONE FOR ELECTRIC, ONE FOR SECURITY. PROVIDE LABELING ON COVERS.
4	NOT USED.
5	1" RIGID STEEL CONDUIT FROM HANDHOLE TO CAMERA POLE.
6	NOT USED.
7	CONTRACTOR SHALL SWEEP-UP WITH RIGID STEEL CONDUIT TO NEW NEMA-3R 12"X12"X6"DP GALVANIZED GASKETED PULL BOX.
8	PROVIDE ADDITIONAL CONDUITS AND 120V POWER WIRING WITHIN BUILDING AS REQUIRED.
9	ELECTRICAL CONTRACTOR SHALL INTERCEPT EXISTING CONTROL BOX POWER AND EXTEND TO NEW LPR CONTROLLER.
10	PROVIDE 2" CONDUIT TO EXISTING IT CLOSET.

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PROJECT NO.:	20002.00
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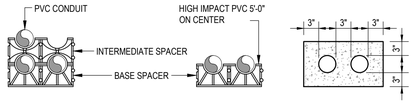
SCALE:	AS NOTED
DESIGNED BY:	GD
CHECKED BY:	SC
DRAWN BY:	DD
APPROVED BY:	SC

DRAWING TITLE:
ALUMNI CENTER LOT

DRAWING NO.:
ES1.1

SHEET NO. ___ OF 11

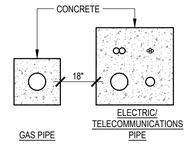


TYPICAL SPACER DETAILS

TYPICAL CONCRETE ENVELOPE

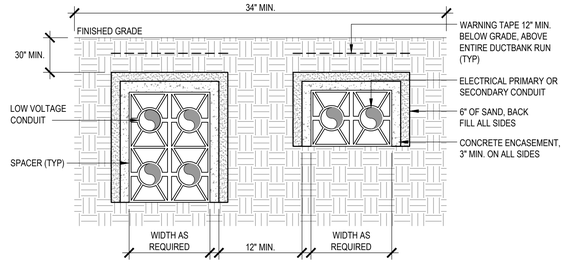
SPACER NOTES:

1. ALL BASE AND INTERMEDIATE SPACERS TO BE INTERLOCKING TYPE.
2. ALL SPACERS TO MAINTAIN 3" SPACE WITH 4" DUCTS.
3. ALL SPACERS TO BE CONSTRUCTED OF HIGH IMPACT PVC.
4. ALL SPACERS TO BE INSTALLED AT 5'-0" ON CENTERS ALONG ENTIRE RUN.



GAS PIPE

ELECTRIC/ TELECOMMUNICATIONS PIPE

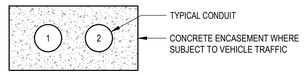


GENERAL NOTES:

1. ALL CONDUITS ARE PVC, SIZE PER THIS DETAIL AND "DUCT SCHEDULE".
2. ALL DIMENSIONS ARE MINIMUM.
3. ALL DESCRIPTIONS ARE TYPICAL FOR THIS DIAGRAM.
4. CONDUIT DUCTBANK CROSS SECTION IS SUBJECT TO APPROVAL BY UTILITIES COMPANY, PRIOR TO CONSTRUCTION.
5. DUCTBANK TRENCH MUST BE COORDINATED, INSPECTED, AND APPROVED WITH THE UTILITY COMPANIES REQUIREMENTS, PRIOR TO INSTALLATION AND PRIOR TO BACKFILL.
6. ALL TRENCHING, CONCRETE WORK, BACKFILLING, GRADING, AND RESURFACING SHALL BE PROVIDED BY THE GENERAL CONTRACTOR. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
7. THE MINIMUM SIZE CONDUIT SHALL BE 2" SCHEDULE 40 PVC. ALL SWEEPS AT FOUNDATIONS AND RISERS SHALL HAVE A MINIMUM RADIUS OF THIRTY-SIX INCHES. THE RISER SWEEP SHALL BE GALVANIZED STEEL. THE ELECTRICAL CONTRACTOR SHALL INSTALL BELL ENDS ON THE CONDUITS. THE ELECTRICAL CONTRACTOR SHALL INSTALL CONDUIT PLUGS AND NYLON PULL LINES IN ALL UNUSED CONDUITS. AT THE RISE POLE, THE GALVANIZED RIGID STEEL SWEEPS AND RIGID ADAPTORS SHALL NOT BE ENCASED IN CONCRETE. THE ELECTRICAL CONTRACTOR SHALL INSTALL GALVANIZED STEEL CONDUIT UP THE POLE PER UTILITY COMPANIES REQUIREMENTS, INCLUDING CONDUIT GROUND STRAPS, (UNLESS OTHERWISE DIRECTED BY UTILITY COMPANIES REPRESENTATIVE). UTILITY COMPANIES WILL SPECIFY ON WHICH QUARTER OF THE POLE THE RISER SHALL BE INSTALLED, USUALLY AWAY FROM ONCOMING TRAFFIC.
8. EXCEPT AS NOTED ON CONSTRUCTION DOCUMENTS, CURVES AND BENDS IN CONDUIT SHALL BE GRADUAL, AND THE RADIUS OF CURVATURE SHALL NOT BE LESS THAN FORTY FEET. ALL CURVES SHALL BE FORMED WITH 5-DEGREE COUPLINGS. THE MINIMUM LENGTH BETWEEN SINGLE, 5-DEGREE COUPLINGS IS 42". HEAT BENDING IS NOT ALLOWED.
9. PITCH OF DUCTS SHALL BE SUCH AS TO CAUSE ALL DUCTS TO DRAIN TOWARD ONE OR BOTH EQUIPMENT FOUNDATIONS OR PULLBOXES. MINIMUM PITCH SHALL BE THREE INCHES PER ONE HUNDRED FEET.
10. THE ELECTRICAL CONTRACTOR SHALL INSURE THAT CLEARANCES ARE MET AND MAINTAINED, AND THAT THEY ARE INSPECTED BY THE UTILITY COMPANY. UNLESS LOCAL JURISDICTIONS REQUIRE GREATER CLEARANCES, THE MINIMUM CLEARANCES SHALL BE AS FOLLOWS:
    A. TELECOMMUNICATION SYSTEMS - ELECTRIC UTILITY CONDUIT SHALL NOT BE DIRECTLY ABOVE OR BELOW TELECOMMUNICATION CONDUIT, EXCEPT WHEN CROSSING BELOW COMMUNICATION CONDUIT AT APPROXIMATELY RIGHT ANGLES. THE ELECTRIC UTILITY CONDUIT AND TELECOMMUNICATION CONDUIT SHALL BE SEPARATED B A MINIMUM OF 3" OF CONCRETE ENCASEMENT.
    B. WATER, GAS, SEWER - ELECTRIC UTILITY CONDUIT SHALL NOT BE DIRECTLY ABOVE OR BELOW THESE UTILITIES EXCEPT WHEN CROSSING ABOVE THESE UTILITIES AT APPROXIMATELY RIGHT ANGLES. WHEERE THE PATHS OF THESE UTILITIES CROSS UNDER ELECTRIC UTILITY CONDUITS AT RIGHT ANGLES, THE MINIMUM SEPARATION IS 12". A MINIMUM SEPARATION OF 24" SHALL BE MAINTAINED BETWEEN PARALLEL PLACEMENT OF ANY OF THESE UTILITIES AND ELECTRICAL CONDUIT.
11. A 6-INCH CLEARANCE SHALL BE BETWEEN CONDUIT ENVELOPES AND MAJOR SUBSURFACE PIPES.
12. THE UTILITY COMPANIES ATTEMPT TO PULL CABLES. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL AN APPROVED BEFORE THE ELECTRICAL CONTRACTOR SHALL MANDREL ALL PRIMARY CONDUITS TO INSURE THEIR INTEGRITY 2,500 POUND TEST NYLON PULL LINE IN EACH CONDUIT RUN INCLUDING RISERS AND SPARES. PULL LINE INSTALLATION AND MANDRILLING OF THE DUCTS SHALL BE WITNESSED BY A UTILITY REPRESENTATIVE.
13. ELECTRIC UTILITY DUCT BANK SHALL NOT SHARE A CONCRETE ENCASEMENT WITH FOREIGN UTILITIES.
14. DETAIL IS SHOWN FOR BIDDING AND COORDINATION PURPOSES. CONFORM TO UTILITY COMPANY DETAILS.
15. ALL TRENCHING, REINFORCING, CONCRETE WORK, BACKFILLING, GRADING, AND SURFACING SHALL BE PROVIDED BY THE GENERAL CONTRACTOR. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

1 TYPICAL DUCTBANK CONSTRUCTION DETAIL

NOT TO SCALE

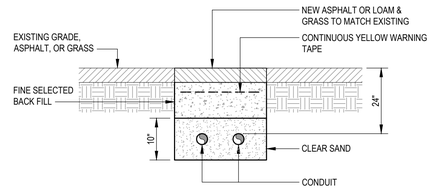


NOTES:

1. REFER TO "TYPICAL DUCTBANK CONSTRUCTION DETAIL".

2 TYPICAL DUCT SECTION

NOT TO SCALE

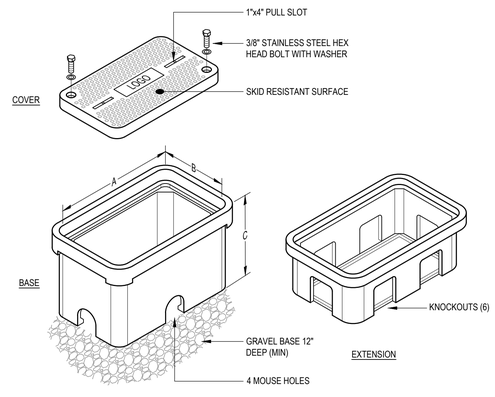


3 BURIED CONDUIT DETAIL

NOT TO SCALE

TYPE	DESCRIPTION	DIMENSIONS		
		A	B	C
EH	ELECTRICAL HANDHOLE	30"	17"	24"
LH	LOW VOLTAGE HANDHOLE	30"	17"	24"

NOTE:
PROVIDE QUAZITE TYPE PG SERIES POLYMER CONCRETE HANDHOLE AND LID RATED FOR ANSI TIER 22, WITH A DESIGN/TEST LOAD OF 22,500/33,750 LBS.

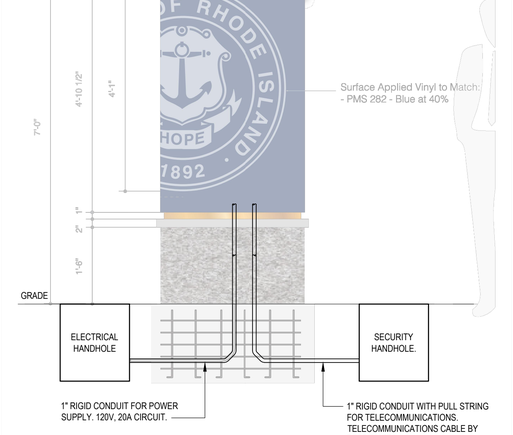


NOTES:

1. STANDARD HANDHOLE AND COVER COLOR SHALL BE AS SPECIFIED BY THE ARCHITECT.
2. PROVIDE 1" X 4" BELL PULL SLOT FOR EACH HANDHOLE.
3. PROVIDE HANDHOLES BY QUAZITE OR APPROVED EQUAL.
4. COVER, RING AND BOX SHALL BE MADE OF THE SAME MATERIAL.
5. PROVIDE IMPRINTED LOGO TO MATCH.

4 HANDHOLE TYPE "A" DETAIL

NOT TO SCALE



NOTES:

1. POWER CONDUCTORS AND TELECOMMUNICATIONS SHALL BE KEPT SEPARATE IN ACCORDANCE WITH THE NEC. COORDINATE WITH MANUFACTURE'S SUBMITTAL DETAILS PROVIDE INSULATED BUSHINGS, FITTINGS AND LIQUIDTIGHT CONDUIT AS REQUIRED.
2. PROVIDE 120V, 20A WEATHERPROOF LOCKABLE DISCONNECT TOGGLE SWITCH. COORDINATE LOCATION WITH MANUFACTURER'S SUBMITTAL DETAILS.
3. SEE SITE/CIVIL DRAWINGS FOR EXACT SIGN AND CONCRETE BASE REQUIREMENTS.

5 WAYFINDING SIGN FOUNDATION DETAIL - ALTERNATE 1

NOT TO SCALE

PARE
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ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401.334.4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508.543.1170
14 ROBBIA ROAD, SUITE 2B, HOLYOKE, MA 01040, 413.527.3446

OWNER / APPLICANT:

University of Rhode Island
Office of Capital Projects
60 Tootell Road
Kingstown, RI 02881
(401) 874-2725

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Parking Technology Improvements
University of Rhode Island
Kingston, RI

STEVEN COSTA
No. 7813
REGISTERED PROFESSIONAL ENGINEER (ELECTRICAL)
11/07/2024

REVISIONS:

0	11-6-2024	ISSUED FOR BID

PROJECT NO.:	20002.00
DATE:	NOVEMBER 6, 2024
SCALE:	NONE
DESIGNED BY:	GD
CHECKED BY:	SC
DRAWN BY:	DD
APPROVED BY:	SC

DRAWING TITLE:
DETAILS

DRAWING NO.:
E2.0
SHEET NO. ___ OF 11

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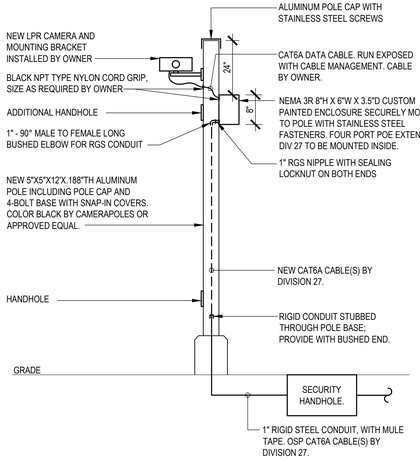
DIVISION OF THE RISE GROUP
HVAC - ELECTRICAL - PLUMBING - FIRE PROTECTION
D/B/A CREATIVE ENVIRONMENT CORP.
195 FRANCES AVE BLDG. #2 CRANSTON RI 02910
OFFICE - 401.438.7733
CEC#20220012

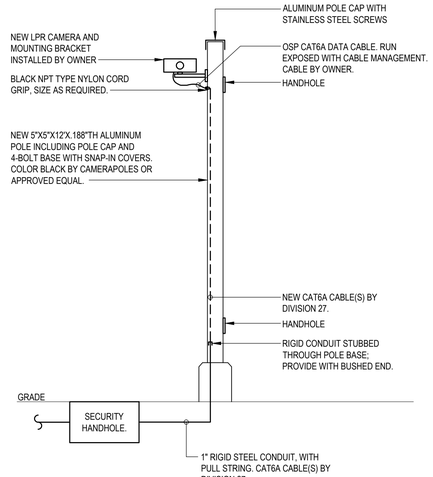


GENERAL NOTES:

1. NEC ARTICLE 770.133 (A) "NONCONDUCTIVE OPTICAL FIBER CABLES SHALL BE PERMITTED TO OCCUPY THE SAME CABLE TRAY OR RACEWAY WITH CONDUCTORS FOR ELECTRIC LIGHT, POWER, CLASS 1, NON-POWER-LIMITED FIRE ALARM, TYPE ITC, OR MEDIUM POWER NETWORK POWERED BROADBAND COMMUNICATIONS CIRCUITS OPERATING AT 1000 VOLTS OR LESS."
2. NEC ARTICLE 800.133 (A) (1) (C) EXCEPTION NO. 2: POWER CONDUCTORS IN OUTLET BOXES, JUNCTION BOXES, OR SIMILAR FITTINGS OR COMPARTMENTS WHERE SUCH CONDUCTORS ARE INTRODUCED SOLELY FOR POWER SUPPLY TO COMMUNICATIONS EQUIPMENT. THE POWER CIRCUIT CONDUCTORS SHALL BE ROUTED WITHIN THE ENCLOSURE TO MAINTAIN A MINIMUM OF 6MM (1/4 IN.) SEPARATION FROM COMMUNICATIONS CIRCUIT CONDUCTORS.
3. ELECTRICAL CONTRACTOR SHALL DRILL ALL NECESSARY HOLES.
4. ELECTRICAL CONTRACTOR SHALL VERIFY DETAIL FOR EXACT MEANS AND METHODS. PROVIDE ADDITIONAL MODIFICATIONS AS NEEDED FOR AHJ APPROVAL.
5. POLE SHALL BE CUSTOM PAINTED AS DIRECTED BY URI AND THE CIVIL ENGINEER. ALL FIELD MOUNTED DEVICES, ACCESSORIES, ENCLOSURES, AND EQUIPMENT SHALL BE CUSTOM PAINTED TO MATCH.

1 LPR CAMERA WITH POE EXTENDER DETAIL

NOT TO SCALE

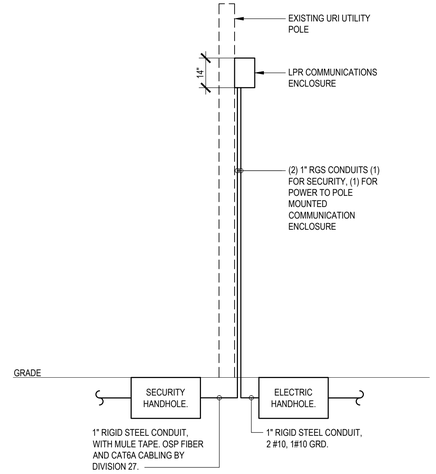


GENERAL NOTES:

1. ELECTRICAL CONTRACTOR SHALL DRILL ALL NECESSARY HOLES.
2. ELECTRICAL CONTRACTOR SHALL VERIFY DETAIL FOR EXACT MEANS AND METHODS. PROVIDE ADDITIONAL MODIFICATIONS AS NEEDED FOR AHJ APPROVAL.
3. POLE SHALL BE CUSTOM PAINTED AS DIRECTED BY URI AND THE CIVIL ENGINEER. ALL FIELD MOUNTED DEVICES, ACCESSORIES, AND EQUIPMENT SHALL BE CUSTOM PAINTED TO MATCH.

2 LPR CAMERA WITHOUT POE EXTENDER DETAIL

NOT TO SCALE



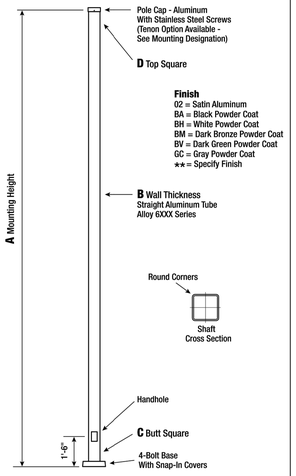
GENERAL NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE.
2. DETAILS ARE CONCEPTUAL. CONTRACTOR SHALL MAKE A COMPLETE AND OPERATIONAL SYSTEM. CONTRACTOR SHALL FABRICATE ONE UNIT PRIOR TO SITE INSTALLATION, TO ASCERTAIN THE EQUIPMENT WILL FIT INTO ENCLOSURE.

3 LPR ENCLOSURE - UTILITY POLE MOUNTING DETAIL

NOT TO SCALE

12 ft Aluminum Pole



Satin Aluminum or Powder Coated Finish per Customer Specification.

A Mtg. Hgt.	B Wall Thickness	C Butt Square	Total Weight	Maximum EPA 90	100	110	120	130	O.D. Cat. Number	Catalog Number
12	0.188"	5	100	35.0	27.6	25.6	20.8	17.2	11-087	CP12SA05

C Butt Sq.	D Top Sq.	F Bolt Cir. Dia.	G Base Sq.	H Bolt Proj.	I Bolt Size
5	5	10.5 - 11.5	11.25	2	.75 x 30 x 3

Dimensions in Inches

CP12SA05 - BA (FINISH)

Pole

The pole shaft will be constructed of seamless extruded tube of 6XXX Series Aluminum Alloy per the requirements of ASTM B221. The shaft assembly shall be full-length heat treated after base weld.

Base Style

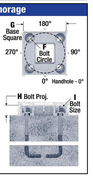
4-Bolt Cast Aluminum Base Flange of Alloy 356-T6 with Aluminum Snap-In Bolt Covers.

Handhole

2" x 4" Handhole with curved Lap Style Aluminum Door and two (2) Stainless Steel Self-Tapping Attaching Screws. A Grounding Provision incorporating a tapped 1/14"-20NC hole is provided opposite the Handhole.

Anchorage

Anchorage Kit will include four (4) L-shaped Steel Anchor Bolts conforming to AASHTO M314-90 Grade 55. Ten inches (10") of threaded end will be galvanized per ASTM A153. Kits will contain four (4) Hex Nuts, four (4) Lock Washers, and four (4) Flat Washers (all components Galvanized Steel). A bolt circle template will be provided.



Vibration Damper

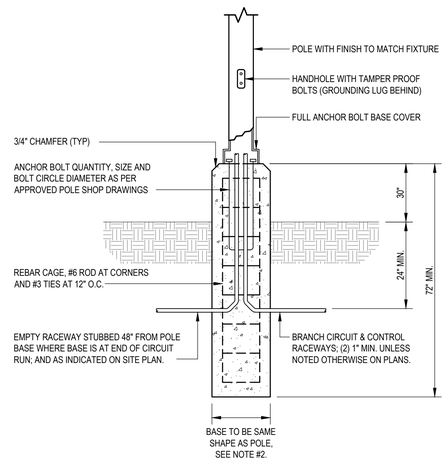
When determined necessary by Camera Poles, a Vibration Damper will be factory-installed inside the pole shaft. Customer specification of the damper is available.

EPA Notes

Effective Projected Area (EPA) in square feet. EPA's calculated using wind velocity (mph) indicated in accordance with 2009 AASHTO LTS-5 using a 25 year design life. Maximum EPA is based on the total weight shown. Increased total weight may reduce the maximum EPA. If weight is exceeded, or if other design life or code is required, please consult us.

CAMERAPOLES

800 E. Northwest Highway
Suite 700
Palatine, IL 60074
(888) 364-8902
www.camerapoles.org

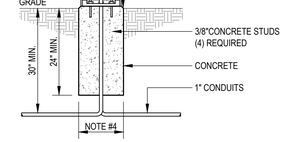


NOTES:

1. POLE BASE SHALL BE PRECAST CONCRETE F&I BY G.C.
2. ROUND POLE = ROUND BASE, SQUARE POLE = SQUARE BASE. BASE TO BE 2" LARGER THAN POLE ANCHOR BOLT COVER IN EACH DIMENSION, 18" MINIMUM.
3. PITCH FINISHED GRADE AWAY FROM POLE BASE.

4 POLE BASE WITH JUNCTION BOX DETAIL

NOT TO SCALE



NOTES:

1. PEDESTAL BASE SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
2. ROUND PEDESTAL = ROUND BASE, SQUARE PEDESTAL = SQUARE BASE. BASE TO BE 2" LARGER THAN PEDESTAL ANCHOR BOLT COVER IN EACH DIMENSION, 18" MINIMUM.
3. PITCH FINISHED GRADE AWAY FROM PEDESTAL BASE.
4. EXACT SIZE TO BE AS REQUIRED.

5 EXTERIOR LPR CAMERA PEDESTAL

NOT TO SCALE

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8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401.334.4100
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