

CONSTRUCTION PLANS FOR WINDERMERE DOWNTOWN PROPERTY

PARCEL ID #'s: 17-23-28-9336-02-430, 17-23-28-9336-02-470,
17-23-28-9336-02-490, 17-23-28-9336-02-500, 17-23-28-9336-02-510,
17-29-28-9336-02-520



AERIAL PHOTOGRAPH
N.T.S.

SITE



PROJECT LOCATION

TOWN OF WINDERMERE, FL May 3, 2023

LEGAL DESCRIPTION

That part of Section 33, Township 24 South, Range 27 East, Orange County, Florida, being more particularly described as follows:

Commence at the Southeast corner of said Section 33, Township 24 South, Range 27 East, Orange County, Florida; thence run S8956°28'W along the South line of said Section 33, also being the centerline of State Road 530 (U.S. Highway No. 192), a distance of 994.86 feet to a point on the Southerly projection of the East line of Shoppes of West 192, according to the plat thereof as recorded in Plat Book 93, Pages 127 and 128, Public Records of Orange County, Florida; thence run N00°14'00"E along said Southerly projection, a distance of 100.00 feet to a point on the North right of way line of said State Road 530 (U.S. Highway No. 192); thence continue N0014'00"E along the East line of said Shoppes of West 192 and along the East line of the lands described in Official Records Book 5526, Page 1669, Public Records of Orange County, Florida, a distance of 1037.89 feet for the Point of Beginning; thence run S8946°00"E, a distance of 43.60 feet to a point on a non-tangent curve, concave to the East, having a radius of 91.00 feet; thence from a radial bearing of S8327°27'E run northeasterly along the arc of said curve through a central angle of 2347°55", an arc distance of 37.80 feet, having a chord bearing of N1826°30"E and a chord distance of 37.53 feet; thence run S3020°28'W, a distance of 1.48 feet to the beginning of a curve concave to the West, having a radius of 133.00 feet; thence run Northeasterly along the arc of said curve through a central angle of 26°32'02", an arc distance of 61.59 feet, having a chord bearing of N1704°27'E and a chord distance of 61.04 feet; thence run S8946°00"E, a distance of 80.65 feet; thence run N5830°45'E, a distance of 18.93 feet; thence run N2647°29'E, a distance of 17.99 feet; thence run S8939°32'E, a distance of 227.45 feet; thence run S0057°03'W, a distance of 47.73 feet; thence run S44°18'50"E, a distance of 44.13 feet; thence run S8944°58'E, a distance of 177.16 feet; thence run N3754°25'E, a distance of 53.22 feet; thence run S6656°12'E, a distance of 65.35 feet; thence run N1826°28'E, a distance of 59.31 feet; thence run S8936°22'E, a distance of 269.13 feet; thence run N0011°30"E along the East line of said Southeast 1/4 of Section 33, a distance of 414.43 feet; thence run N8939°32'W along the South line of lands described in Official Records Book 5526, Page 1669, a distance of 993.64 feet; thence run S0014°00'W along the aforesaid East line of the lands described in Official Records Book 5526, Page 1669, a distance of 530.38 feet to the Point of Beginning.

Contains 2.17 acres, more or less



SITE

SECTION 17, TOWNSHIP 23S, RANGE 28E
LOCATION MAP

N.T.S.

PROJECT TEAM

OWNER/DEVELOPER
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UTILITY PROVIDERS

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WINTER GARDEN, FL 34787
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MARCUS I. GEIGER, P.E.
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WINDERMERE DOWNTOWN PROPERTY
KH PROJECT# 149973004
02/09/2023

NO.	DATE	BY

SHEET NUMBER

C0.0

Plotted By: Geier, Marcus - Sheet Set: Windermere Downtown Property - Layout: C1.1 - GENERAL NOTES - May 03, 2023 - 06:15:37pm - K:\ORL\Civil\49973004-Windermere Downtown Property\CADD\CONSTR\PlanSheets\C1.0 - GENERAL NOTES.dwg
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WINDERMERE
 DOWNTOWN
 PROPERTY
 TOWN OF WINDERMERE FL

GENERAL NOTES

KHA PROJECT
 149973004
 DATE
 02/09/2023
 SCALE AS SHOWN
 DESIGNED BY M/G
 DRAWN BY CML
 CHECKED BY M/G DATE: _____

LICENSED PROFESSIONAL
 MARCUS I. GEIER, P.E.
 FL LICENSE NUMBER
 89199
 DATE: _____

No.	REVISIONS	DATE	BY

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CONTRACTOR'S AS-BUILT

- UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH THE OWNER'S ENGINEER WITH COMPLETE "AS-BUILT" INFORMATION, CERTIFIED BY A LICENSED LAND SURVEYOR CURRENTLY REGISTERED IN THE STATE OF FLORIDA. AT A MINIMUM, THIS "AS-BUILT" INFORMATION SHALL INCLUDE: TOP OF PIPE/INVERT ELEVATIONS AND HORIZONTAL LOCATIONS OF ALL WATER, SANITARY SEWER, AND RECLAIM WATER UTILITIES INSTALLED (AS APPLICABLE); PAVEMENT GRADE BREAK LOCATIONS AND SUFFICIENT ELEVATIONS OF FINISHED GRADE SURFACES WHICH ALLOW THE ENGINEER TO DETERMINE COMPLIANCE WITH THE PROPOSED DESIGN; TOP, GRATE, & INVERT ELEVATIONS OF THE STORMWATER COLLECTION SYSTEM, INCLUDING THE POND GRADES (TOP, BANK, BOTTOM), POND CONTROL STRUCTURE, & SWALES; ANY IMPROVEMENTS WITHIN FDOT OR COUNTY RIGHT-OF-WAYS.
- THE DIGITAL "AS-BUILT" FILE, PROVIDED IN AUTOCAD .DWG FORMAT, SHALL ALSO BE PROVIDED IN THE FLORIDA STATE PLANE COORDINATE SYSTEM. NO ENGINEER'S CERTIFICATIONS OF COMPLETION OR REQUESTS FOR FINAL ACCEPTANCE WILL BE SUBMITTED UNTIL THIS INFORMATION HAS BEEN RECEIVED AND APPROVED BY THE OWNER'S ENGINEER.

STORMWATER POLLUTION PREVENTION PLAN

SITE DESCRIPTION

PROJECT NAME AND LOCATION
WINDERMERE DOWNTOWN PROPERTY
TAX PARCELS: 17-23-28-9336-02-430, 17-23-28-9336-02-470, 17-23-28-9336-02-490,
17-23-28-9336-02-500, 17-23-28-9336-02-510, 17-29-28-9336-520
TOWN OF WINDERMERE, FL

*SEE COVER SHEET FOR LOCATION MAP

DEVELOPER NAME AND ADDRESS
WINDERMERE DOWNTOWN PROPERTY, LLC
496 S. HUNT CLUB BOULEVARD
APOPKA, FL 32703
CONTACT: BRETT DARGIS
PHONE: (407)848-1663
EMAIL: brett@v3capgroup.com

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF PROPOSED COMMERCIAL BUILDINGS ON A 2.17 ACRE SITE.

THIS SITE IS LOCATED ON THE CORNER OF MAIN STREET AND 6TH AVENUE.

STORMWATER RUNOFF FROM THE PROPOSED SITE WILL BE MANAGED BY PERVIOUS PAVERS AND EXFILTRATION TRENCH TO PROVIDE THE REQUIRED TREATMENT (QUALITY) AND ATTENUATION (QUANTITY) VOLUMES. THE STORMWATER MANAGEMENT SYSTEM WAS DESIGNED TO MEET OR EXCEED ALL THE REQUIREMENTS OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD), TOWN OF WINDERMERE, AND ORANGE COUNTY.

PROJECT AREA: ±2.17 ACRES
CONTRIBUTING DRAINAGE AREA: ±2.17 ACRES

CONTROL STRUCTURES : CS-A
LONGITUDE : W 81° 32' 01.47" LATITUDE: N 28° 29' 41.33"

CONTROL STRUCTURES : CS-B
LONGITUDE : W 81° 32' 03.73" LATITUDE: N 28° 29' 44.99"

ULTIMATE RECEIVING WATERS: LAKE BUTLER

ACTIVITIES THAT REQUIRE EROSION CONTROL

SITE CLEARING AND GRUBBING; PROVIDING A STABILIZED CONSTRUCTION ENTRANCE, PERIMETER, AND OTHER EROSION AND SEDIMENT CONTROLS; EXCAVATION FOR THE RETENTION POND; SITE GRADING; INSTALLATION OF STORM WATER, SANITARY SEWER, AND WATER STRUCTURES; CURB, ROADWAYS, AND PARKING FACILITIES.

*SEE PLANS FOR THE LOCATION OF TEMPORARY SEDIMENT BARRIERS AND OTHER EROSION CONTROL METHODS.

SOIL PARAMETERS

SOIL TYPES:

SERIES NAME	HYDROLOGIC GROUP
POMELLO FINE SAND	A
SANIBEL MUCK	D
IMMOKALEE FINE SAND	B/D
BASINGER FINE SAND	A/D
TAVARES FINE SAND	A

SEQUENCE OF MAJOR ACTIVITIES

THE ORDER OF CONSTRUCTION IS AS FOLLOWS:

1. PROVIDE STABILIZED CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCES AND OTHER EROSION CONTROL METHODS
3. CLEAR AND GRUB FOR SEDIMENT BASIN AND EARTH DIKE
4. CONSTRUCT EARTH DIKE AND SEDIMENT BASIN
5. FINISH CLEARING AND GRUBBING
6. REMOVE AND STORE TOPSOIL
7. PROVIDE INITIAL GRADING AS REQUIRED
8. STABILIZE ALL DISTURBED AREAS AS SOON AS POSSIBLE
9. INSTALL UTILITIES, STORM SEWER, CURB AND GUTTER
10. INSTALL BASE TO ROAD AND PARKING AREA
11. FINISH GRADING ENTIRE SITE
12. CONSTRUCT FINAL PAVING
13. REMOVE ACCUMULATED SEDIMENT
14. REMOVE ANY ITEMS THAT ARE NOT REQUIRED

TIMING OF CONTROL MEASURES

THE INSTALLATION OF SILT FENCE (AND OTHER EROSION CONTROL MEASURES), A STABILIZED ENTRANCE AND SEDIMENT BASIN SHALL OCCUR PRIOR TO CLEARING AND GRUBBING ACTIVITY. AFTER CONSTRUCTION IS COMPLETE, THE ACCUMULATED SEDIMENT SHALL BE REMOVED AND THE AREAS SHALL BE REGRADED AND PERMANENTLY STABILIZED AS SHOWN ON THE PLANS.

EROSION AND SEDIMENT CONTROLS

BEST MANAGEMENT PRACTICES SHALL BE USED FOR THIS PROJECT TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUN-OFF. THE LOCATION AND DETAILS OF EROSION CONTROL METHODS ARE SHOWN ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR PLACING AND MAINTAINING THESE CONTROL METHODS AS SHOWN ON THE PLANS OR AS REQUIRED. HE/SHE SHALL ALSO PROVIDE THE REQUIRED EROSION PROTECTION AS REQUIRED BY LOCAL, STATE AND FEDERAL LAW.

STORM WATER MANAGEMENT

STORMWATER RUNOFF FROM THE PROPOSED SITE WILL BE MANAGED BY AN EXFILTRATION/PAVE DRAIN SYSTEM TO PROVIDE THE REQUIRED TREATMENT (QUALITY) AND ATTENUATION (QUANTITY) VOLUMES. THE STORMWATER MANAGEMENT SYSTEM WAS DESIGNED TO MEET OR EXCEED ALL THE REQUIREMENTS OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD), TOWN OF WINDERMERE, AND ORANGE COUNTY.

STABILIZATION PRACTICES:

TEMPORARY STABILIZATION - TOPSOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASE, SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH WITHIN 7 DAYS OF THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. THE TEMPORARY SEED REQUIRED CAN BE FOUND IN TABLE 1.65 A OF THE FLORIDA DEVELOPMENT MANUAL. PRIOR TO SEEDING, WHERE SOILS ARE ACIDIC 2 TONS OF PULVERIZED AGRICULTURAL LIMESTONE SHOULD BE ADDED PER ACRE AND 450 POUNDS OF 10-20-20 FERTILIZER SHALL BE APPLIED TO EACH ACRE. AFTER SEEDING, EACH AREA SHALL BE IMMEDIATELY MULCHED WITH STRAW OR EQUIVALENT EQUAL. AREAS OF THE SITE WHICH ARE TO BE PAVED SHALL BE TEMPORARILY STABILIZED BY APPLYING GEOTEXTILE AND STONE SUB-BASE UNTIL BITUMINOUS PAVEMENT CAN BE APPLIED.

PERMANENT STABILIZATION - DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASE SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE APPROPRIATE PERMANENT SEED MIX CAN BE FOUND IN TABLES 1.66A, 1.66B AND 1.66C OF THE FLORIDA DEVELOPMENT MANUAL. PRIOR TO SEEDING, 2 TONS/ACRE OF FINELY GROUND AGRICULTURAL LIMESTONE AND THE PROPER FERTILIZER BASED ON THE TYPE OF SEEDING SHALL BE APPLIED TO EACH ACRE TO PROVIDE PLANT NUTRIENTS. AFTER SEEDING, EACH AREA SHALL BE MULCHED IMMEDIATELY. ALL RETENTION/DETENTION BASINS SHALL BE SODDED AT LEAST TO THE NORMAL WATER LINE. ALL EXPOSED AREAS WITHIN PUBLIC RIGHTS-OF-WAY SHALL BE SOLID SODDED, OTHER AREAS WITH SLOPES STEEPER THAN 4:1 SHALL BE SODDED.

STRUCTURAL PRACTICES:

EARTH DIKE - IF REQUIRED, AN EARTH DIKE SHALL BE CONSTRUCTED ALONG THE SITE PERIMETER. A PORTION OF THE DIKE SHALL DIVERT RUN-ON AROUND THE CONSTRUCTION SITE. THE REMAINING PORTION OF THE DIKE SHALL COLLECT RUNOFF FROM THE DISTURBED AREA AND DIRECT THE RUNOFF TO THE SEDIMENT BASIN.

SEDIMENT BASIN - A SEDIMENT BASIN SHALL BE CONSTRUCTED IN THE COMMON DRAINAGE AREA FOR THE SITE. ALL SEDIMENT COLLECTED IN THE BASIN MUST BE REMOVED FROM THE BASIN UPON COMPLETION OF CONSTRUCTION. SEDIMENT FROM THE BASIN MAY BE USED AS FILL ON THE SITE IF IT IS SUITABLE SOIL.

WASTE DISPOSAL

WASTE MATERIALS - ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A METAL DUMPSTER WITH A SECURE LID IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITIES TO HAVE THE DUMPSTER EMPTIED AT LEAST TWICE A WEEK AND THE WASTE TAKEN TO AN APPROPRIATE LANDFILL. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE. THE SUPERINTENDENT SHALL ORGANIZE TRAINING FOR THE EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH WASTE MATERIALS. THE SUPERINTENDENT SHALL BE RESPONSIBLE FOR POSTING AND ENFORCING WASTE MATERIAL PROCEDURES.

HAZARDOUS WASTE - HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS OR AS DIRECTED BY THE MANUFACTURER. THE SUPERINTENDENT SHALL ORGANIZE THE PROPER TRAINING FOR EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH HAZARDOUS WASTE MATERIALS. THESE PROCEDURES SHALL BE POSTED ON THE SITE. THE PERSON WHO MANAGES THE SITE SHALL BE RESPONSIBLE FOR ENFORCING THE PROCEDURES.

SANITARY WASTE - SANITARY WASTE SHALL BE COLLECTED AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITY FOR COLLECTION OF THE SANITARY WASTE AT LEAST THREE TIMES A WEEK TO PREVENT SPILLAGE ONTO THE SITE.

OFF-SITE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED TO REDUCE SEDIMENT TRACKING OFFSITE. THE CONTRACTOR SHALL PROMPTLY REMOVE ALL MUD, DIRT, OR OTHER MATERIALS TRACKED OR SPILLED ONTO EXISTING PUBLIC ROADS AND FACILITIES, DUE TO CONSTRUCTION. ALL TRUCKS HAULING MATERIALS OFFSITE SHALL BE COVERED WITH A TARP/AULIN.

DUST & DEBRIS CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL WITHIN THE CONSTRUCTION LIMITS AS WELL AS ALONG HAUL ROUTES AND ROADWAYS USED BY THE EQUIPMENT AND VEHICLES. THE CONTRACTOR SHALL ENSURE THAT EXCESSIVE DUST IS NOT TRANSPORTED BEYOND THE LIMITS OF CONSTRUCTION IN POPULATED AREAS. THE CONTRACTOR MAY CONTROL DUST FOR EMBANKMENTS OR OTHER CLEARED OR UNSURFACED AREAS BY APPLYING WATER. INSTALL MULCH, SEED, SOD, OR TEMPORARY PAVING AS EARLY AS PRACTICAL. CONTROL DUST DURING STORAGE AND HANDLING OF DUSTY MATERIALS BY WETTING, COVERING, OR OTHER MEANS AS APPROVED BY THE ENGINEER. DEBRIS SHALL NOT BE ALLOWED TO ACCUMULATE ON THE PROJECT SITE.

ITEMS REQUIRING POLLUTION PREVENTION

THE FOLLOWING ITEMS ARE EXPECTED TO BE PRESENT ON THE PROJECT SITE:

-ASPHALT	-CLEANING SUPPLIES
-CONCRETE	-DETERGENTS
-FERTILIZERS	-MASONARY BLOCK/BRICKS
-METAL PIECES	-PAINT
-PETROLEUM BASED PRODUCTS	-WOOD
-TAR	

THE FOLLOWING ARE NON-STORM WATER SOURCES THAT WILL BE ENCOUNTERED AT THE SITE AND SHOULD BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE:

- UNCONTAMINATED GROUNDWATER EXPOSED DURING EXCAVATION
- WATER FROM WATER LINE FLUSHING
- PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).

SPILL PREVENTION AND CONTROL

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING

-SUPERINTENDENT SHALL INSPECT PROJECT AREA DAILY FOR PROPER STORAGE, USE, AND DISPOSAL OF CONSTRUCTION MATERIALS.

-STORE ONLY ENOUGH MATERIAL ON SITE FOR PROJECT COMPLETION.

-ALL SUBSTANCES SHOULD BE USED BEFORE DISPOSAL OF CONTAINER.

-ALL CONSTRUCTION MATERIALS STORED SHALL BE ORGANIZED AND IN THE PROPER CONTAINER AND IF POSSIBLE, STORED UNDER A ROOF OR PROTECTIVE COVER.

-PRODUCTS SHALL NOT BE MIXED UNLESS DIRECTED BY THE MANUFACTURER.

-ALL PRODUCTS SHALL BE USED AND DISPOSED OF ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

HAZARDOUS PRODUCTS

-MATERIALS SHOULD BE KEPT IN ORIGINAL CONTAINER WITH LABELS UNLESS THE ORIGINAL CONTAINERS CANNOT BE RESEALED. IF ORIGINAL CONTAINERS CANNOT BE USED, LABELS AND PRODUCT INFORMATION SHALL BE SAVED.

-PROPER DISPOSAL PRACTICES SHALL ALWAYS BE FOLLOWED IN ACCORDANCE WITH MANUFACTURER AND LOCAL/STATE REGULATIONS.

PRODUCT SPECIFIC PRACTICES

-PETROLEUM PRODUCTS MUST BE STORED IN PROPER CONTAINERS AND CLEARLY LABELED. VEHICLES CONTAINING PETROLEUM PRODUCTS SHALL BE PERIODICALLY INSPECTED FOR LEAKS. PRECAUTIONS SHALL BE TAKEN TO AVOID LEAKAGE OF PETROLEUM PRODUCTS ON SITE.

-THE MINIMUM AMOUNT OF FERTILIZER SHALL BE USED AND MIXED INTO THE SOIL IN ORDER TO LIMIT EXPOSURE TO STORM WATER. FERTILIZERS SHALL BE STORED IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

-PAINT CONTAINERS SHALL BE SEALED AND STORED WHEN NOT IN USE. EXCESS PAINT MUST BE DISPOSED OF IN AN APPROVED MANNER.

-CONCRETE TRUCKS SHALL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

-SPILL CLEANUP INFORMATION SHALL BE POSTED ON SITE TO INFORM EMPLOYEES ABOUT CLEANUP PROCEDURES AND RESOURCES.

-THE FOLLOWING CLEAN-UP EQUIPMENT MUST BE KEPT ON-SITE NEAR THE MATERIAL STORAGE AREA: GLOVES, MOPS, RAGS, BROOMS, DUST PANS, SAND, SAWDUST, LIQUID ABSORBER, GOGGLES, AND TRASH CONTAINERS.

-ALL SPILLS SHALL BE CLEANED UP AS SOON AS POSSIBLE.

-WHEN CLEANING A SPILL, THE AREA SHOULD BE WELL VENTILATED AND THE EMPLOYEE SHALL WEAR PROPER PROTECTIVE COVERING TO PREVENT INJURY.

-TOXIC SPILLS MUST BE REPORTED TO THE PROPER AUTHORITY REGARDLESS OF THE SIZE OF THE SPILL.

-AFTER A SPILL, THE PREVENTION PLAN SHALL BE REVIEWED AND CHANGED TO PREVENT FURTHER SIMILAR SPILLS FROM OCCURRING. THE CAUSE OF THE SPILL, MEASURES TO PREVENT IT, AND HOW TO CLEAN THE SPILL UP SHALL BE RECORDED.

-THE SUPERINTENDENT SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR AND IS RESPONSIBLE FOR THE DAY TO DAY SITE OPERATIONS. THE SUPERINTENDENT ALSO OVERSEES THE SPILL PREVENTION PLAN AND SHALL BE RESPONSIBLE FOR EDUCATING THE EMPLOYEES ABOUT SPILL PREVENTION AND CLEANUP PROCEDURES.

MAINTENANCE AND INSPECTION PRACTICES

THE FOLLOWING ARE MAINTENANCE AND INSPECTION PRACTICES THAT SHALL BE COMPLETED BY THE CONTRACTOR:

-ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE CHECKED DAILY AND AFTER EACH 0.5 INCH OR GREATER RAINFALL BY THE SUPERINTENDENT OR SOMEONE UNDER HIS/HER DIRECT SUPERVISION.

-ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE KEPT IN GOOD CONDITION. REPAIRS MUST BE MADE WITHIN 24 HOURS OF REPORT.

-THE SILT FENCE SHALL BE INSPECTED PERIODICALLY FOR HEIGHT OF SEDIMENT AND CONDITION OF FENCE.

-THE SILT FENCE SHALL BE CLEARED OF SEDIMENT WHEN SEDIMENT MEASURES ONE-THIRD THE HEIGHT OF THE FENCE.

-THE SEDIMENT BASINS/DITCHES SHALL BE CHECKED MONTHLY FOR DEPTH OF SEDIMENT. THEY SHALL BE CLEANED WHEN SEDIMENT REACHES 10% OF TOTAL CAPACITY AND AFTER CONSTRUCTION IS COMPLETE.

-DIVERSION DIKES SHALL BE INSPECTED MONTHLY. ANY BREACHES SHALL BE PROMPTLY REPAIRED.

-ALL SEEDING SHALL BE CHECKED FOR PROPER GROWTH AND UNIFORMITY. UNSTABILIZED AREAS SHALL BE RE-SODDED.

-A MAINTENANCE REPORT SHALL BE COMPLETED DAILY AFTER EACH INSPECTION OF THE SEDIMENT AND EROSION CONTROL METHODS. THE REPORTS SHALL BE FILED IN AN ORGANIZED MANNER AND RETAINED ON-SITE DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETED, THE REPORTS SHALL BE SAVED FOR AT LEAST THREE YEARS. THE REPORTS SHALL BE AVAILABLE FOR ANY AGENCY THAT HAS JURISDICTION OVER EROSION CONTROL.

-THE SUPERINTENDENT SHALL ORGANIZE THE TRAINING FOR INSPECTION PROCEDURES AND PROPER EROSION CONTROL METHODS FOR EMPLOYEES THAT COMPLETE INSPECTIONS AND REPORTS.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FORM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER.

SIGNATURE AND DATE	NAME AND TITLE, COMPANY / ADDRESS AND TELEPHONE NUMBER	RESPONSIBILITY

Kimley»Horn

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189 S. ORANGE AVENUE, SUITE 1000, ORLANDO, FL 32801
PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL
MARCUS I. GEIGER, P.E.
FL LICENSE NUMBER
89199

KHA PROJECT
149973004
DATE
02/09/2023
SCALE AS SHOWN
DESIGNED BY M/G
DRAWN BY CML
CHECKED BY M/G DATE: _____

SWPP NOTES

WINDERMERE
DOWNTOWN
PROPERTY

TOWN OF WINDERMERE FL

SHEET NUMBER
C2.0

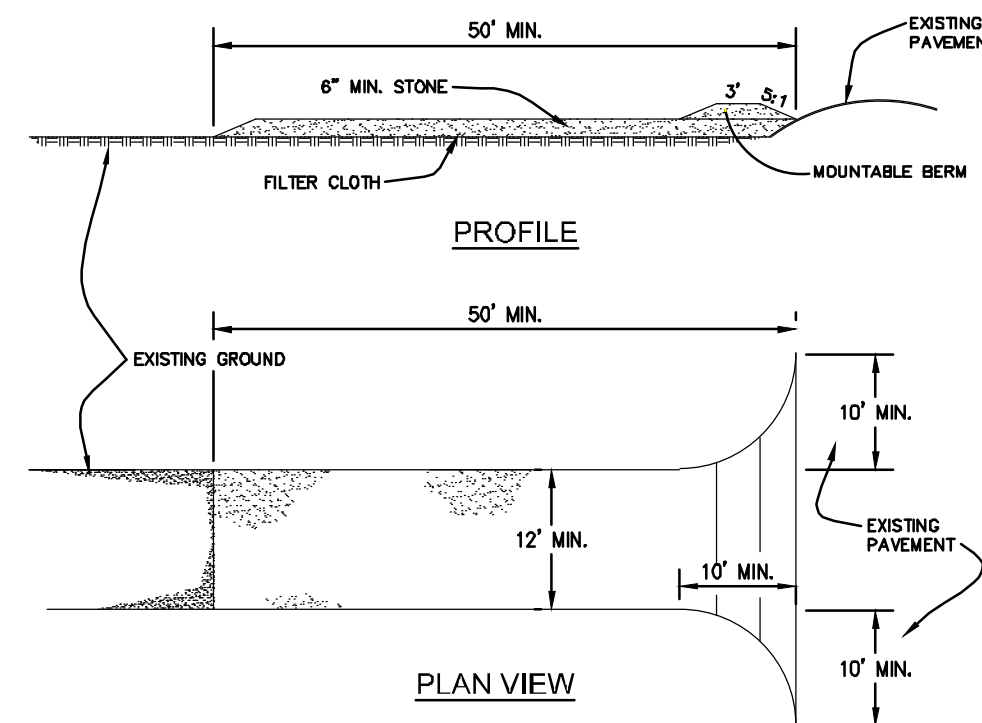
REVISIONS

No. DATE BY

Plotted By: Gábor, Marcus - Sheet Set: Windermere Downtown Property, Layout: C2.1 - EROSION CONTROL DETAIL - May 03, 2023 - 06:16:08pm
 K:\ORL\Civil\149973004-Windermere Downtown Property\CADD\CONSTR\PlanSheets\C2.1 - ERO.dwg
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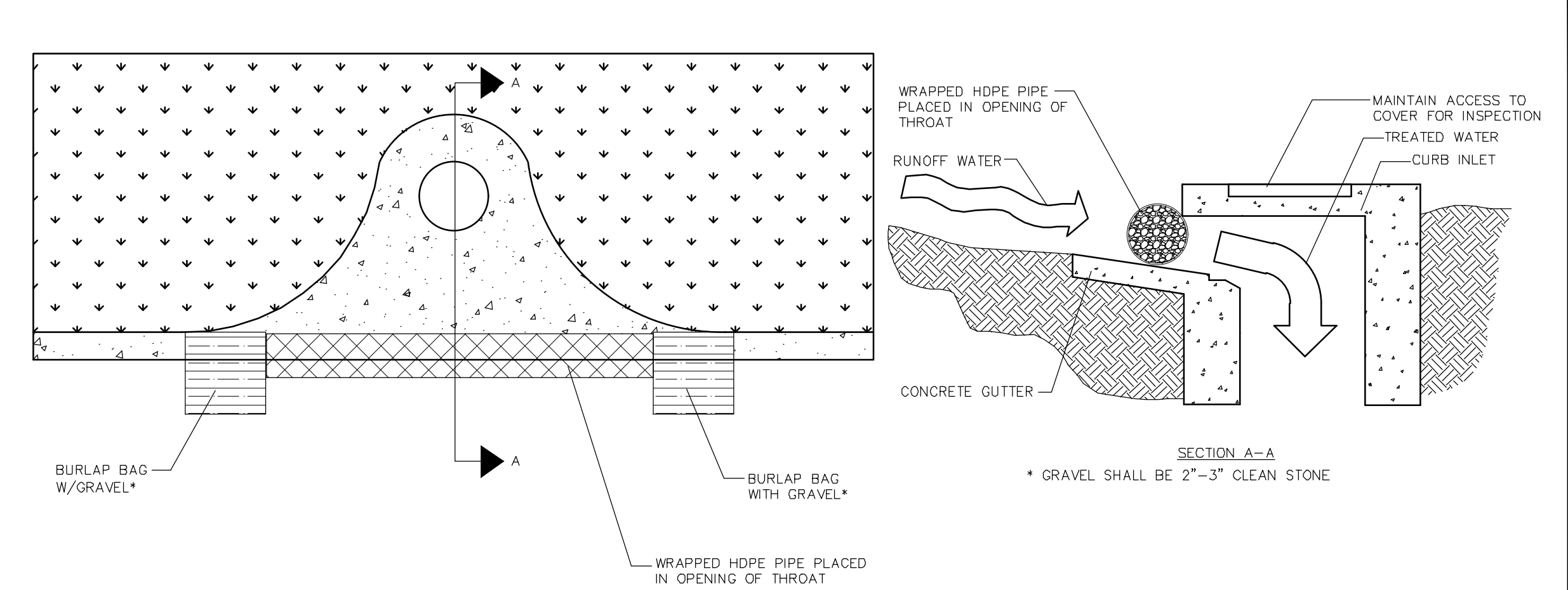
STABILIZED CONSTRUCTION ENTRANCE NOTES:

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET.
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA, PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVED SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.



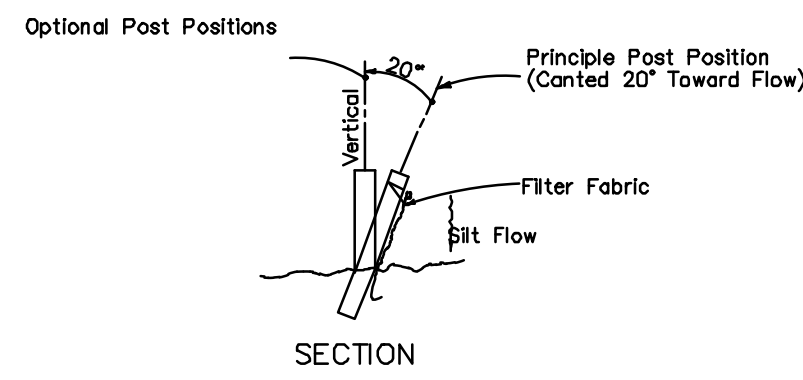
STABILIZED CONSTRUCTION ENTRANCE DETAIL

NTS

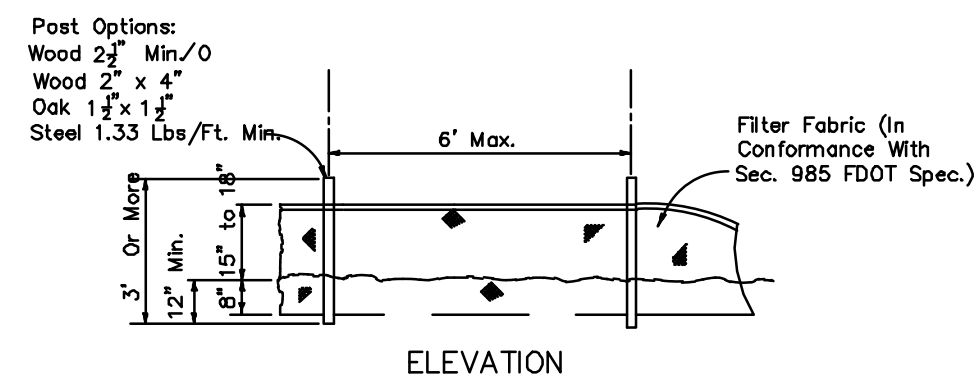


SOCK DRAIN INLET SEDIMENT FILTER

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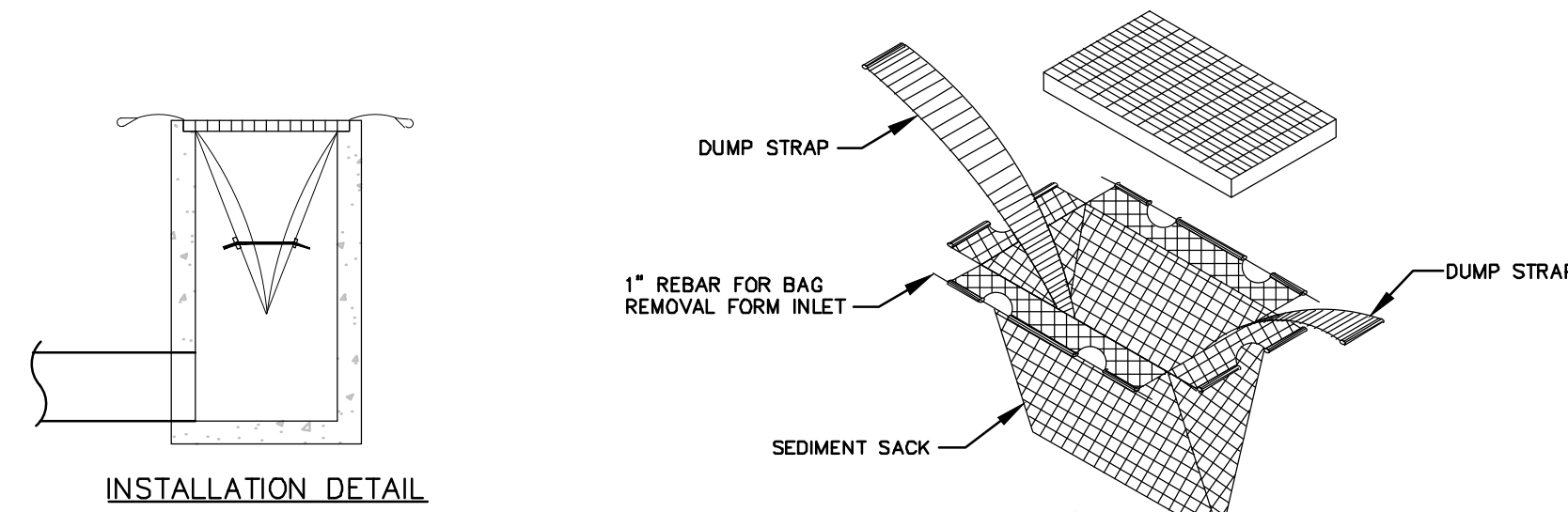
SECTION



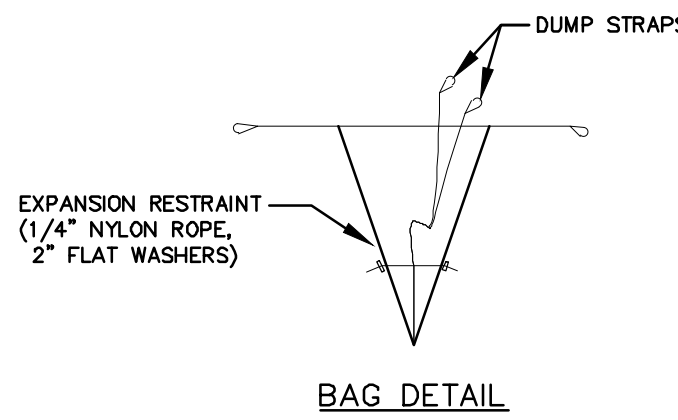
ELEVATION

TYPE III SILT FENCE

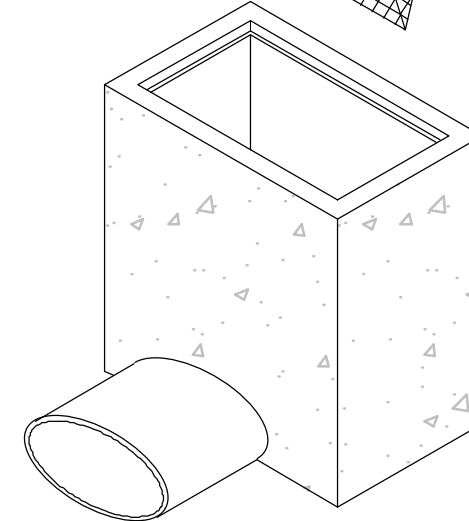
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INSTALLATION DETAIL

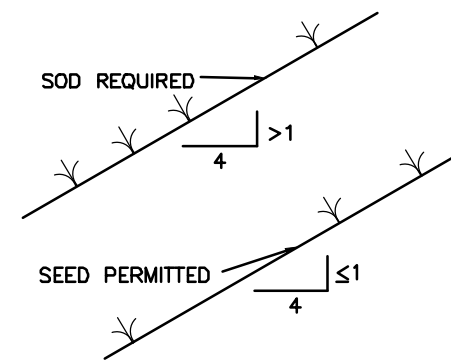


BAG DETAIL



STANDARD INLET SEDIMENT CONTROL DEVICE

NTS



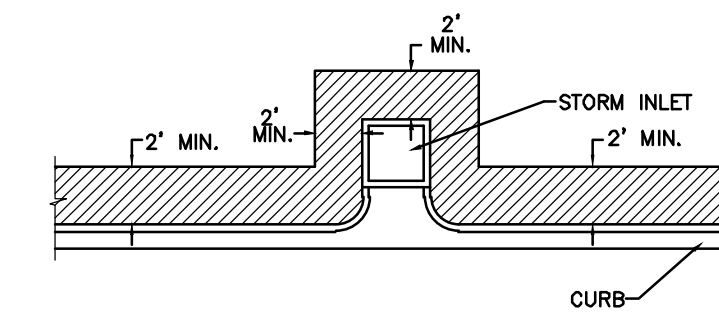
GRASS SLOPES

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FIGURE 8

NOTES:

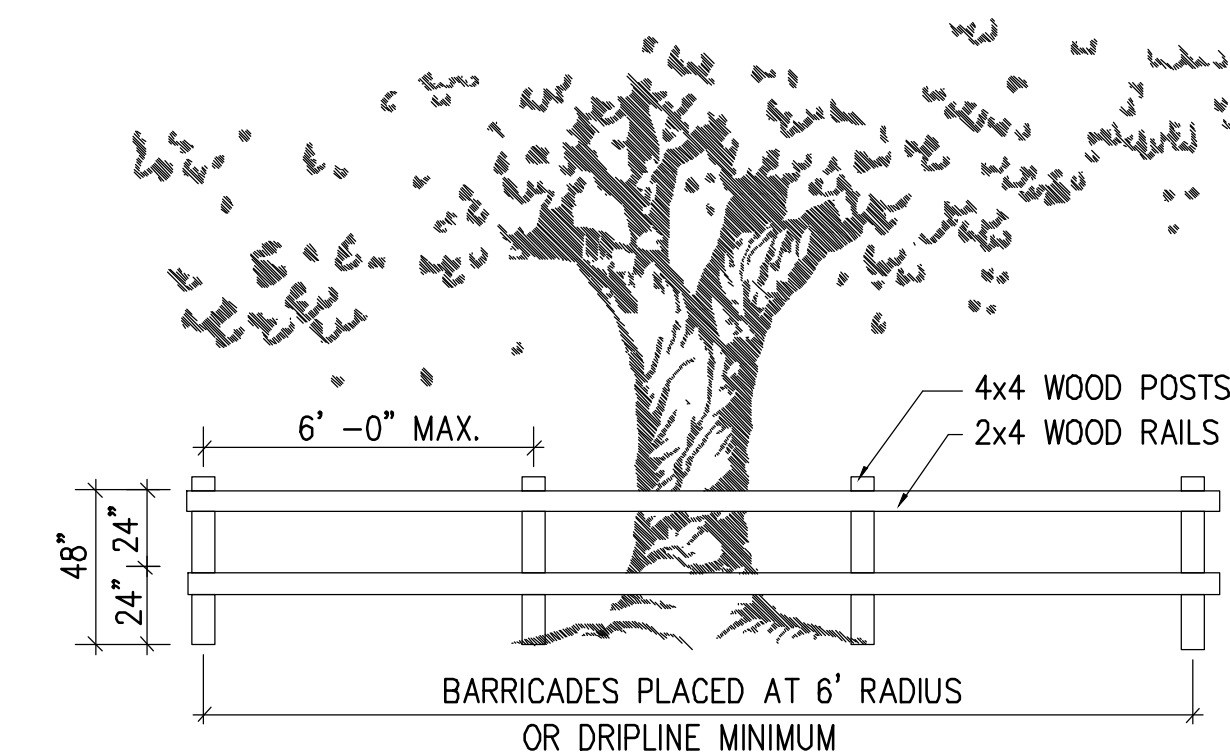
- 1) CONTRACTOR TO MAINTAIN DEBRIS ON-SITE, VEHICLES SHALL BE FREE OF EXCESS DEBRIS PRIOR TO ENTERING COUNTY RIGHT-OF-WAYS.
- 2) DURING ALL TIME OF CONSTRUCTION, THE CONTRACTOR MUST PROVIDE FILTER FABRIC AT ALL EXIST. OR PROP. CATCH BASIN TO PREVENT SYSTEM POLLUTION.
- 3) CONTRACTOR SHALL PROVIDE TRUCK WASH RACKS TO REMOVE CONSTRUCTION DEBRIS FROM VEHICLES PRIOR TO EGRESS.
- 4) DURING ALL TIME OF CONSTRUCTION, THE CONTRACTOR MUST PROVIDE SILT SCREENS AT CONSTRUCTION PERIMETER
- 5) UPON COMPLETION OF CONSTRUCTION, SYSTEM IS TO BE CLEANED BY "CAMELVAC" OR OTHER APPROVED SYSTEM TO THE SATISFACTION OF THE PROJECT ENGINEER AND COUNTY ENGINEER WHEN OR AFTER THE OVERALL SYSTEM IS CLEANED.
- 6) THE CONTRACTOR SHALL MAINTAIN THE FULL SET OF PLANS INCLUDING THESE POLLUTION PREVENTION REQUIREMENTS ON-SITE AT ALL TIMES.



SOD ALONG CURB AND AROUND INLET

NTS

FIGURE 7



TREE PROTECTION DETAIL

NTS

1. ORANGE CONSTRUCTION FENCING CAN BE USED IN LIEU OF WOOD FENCE PER ENGINEER'S REVIEW AND APPROVAL.
2. NO STOCKPILING OF MATERIAL, TRASH OR DEBRIS SHALL BE PERMITTED WITHIN THE BARRIER. CONTRACTOR SHALL ADJUST AND MAINTAIN BARRIER LIMITS AS NECESSARY TO ACCOMMODATE ADJACENT CONSTRUCTION AS DIRECTED BY OWNER. REMOVE PROTECTION AFTER OWNER'S FINAL ACCEPTANCE OF THE PROJECT.

NO.	REVISIONS	DATE	BY

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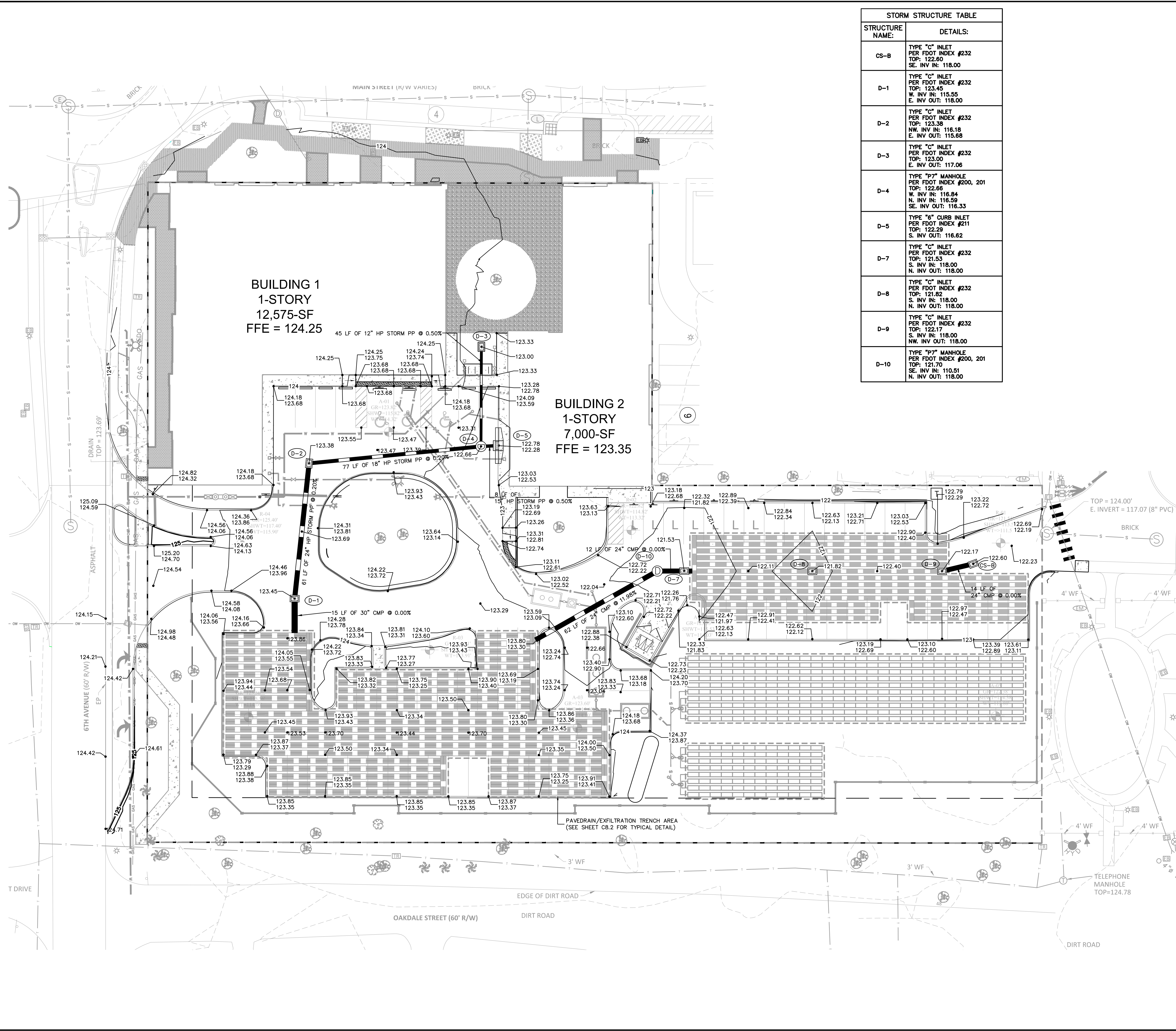
KHA PROJECT	149973004
DATE	02/09/2023
SCALE	AS SHOWN
DESIGNED BY	M/G
DRAWN BY	CML
CHECKED BY	M/G
LICENSED PROFESSIONAL	MARCUS I. GEIBER, P.E.
FL LICENSE NUMBER	89199

**EROSION CONTROL
DETAIL**

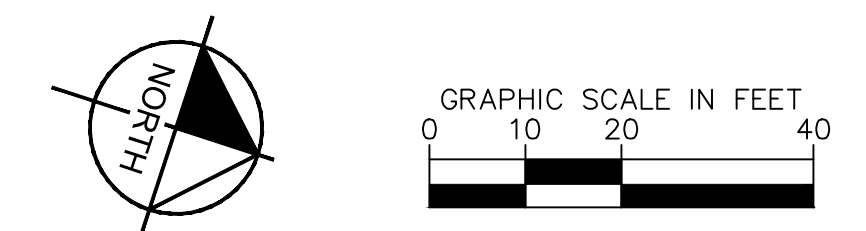
**WINDERMERE
DOWNTOWN
PROPERTY**

Always call 811 two full business days before you dig to have underground utilities located and marked.
Sunshine811.com

Plotted By: Deiber, Marcus. Sheet Set: Windermere Downtown Property - Layout C5.0 GRADING AND DRAINAGE PLAN - May 03, 2023 08:10:00pm. K:\VRL\Civil\149972004-Windermere Downtown Property\Layout\C5.0 GRADING AND DRAINAGE PLAN.dwg
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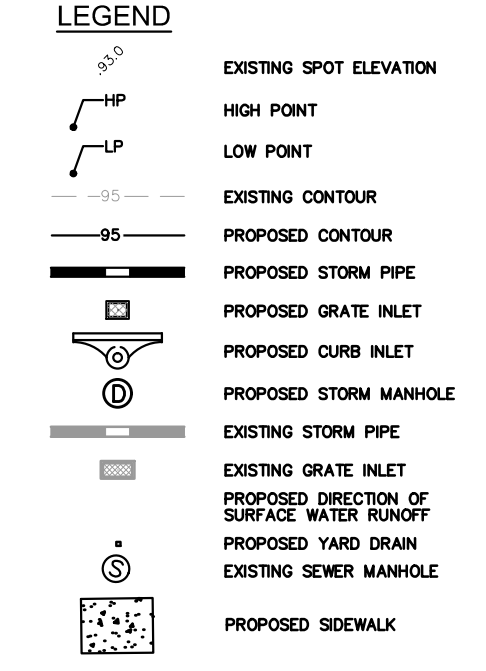
STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
CS-B	TYPE "C" INLET PER FDOT INDEX #232 TOP: 122.60 SE. INV IN: 118.00
D-1	TYPE "C" INLET PER FDOT INDEX #232 TOP: 123.45 W. INV IN: 115.55 E. INV OUT: 118.00
D-2	TYPE "C" INLET PER FDOT INDEX #232 TOP: 123.38 NW. INV IN: 116.18 E. INV OUT: 115.68
D-3	TYPE "C" INLET PER FDOT INDEX #232 TOP: 123.00 E. INV OUT: 117.06
D-4	TYPE "P7" MANHOLE PER FDOT INDEX #200, 201 TOP: 122.66 W. INV IN: 116.84 N. INV IN: 116.59 SE. INV OUT: 116.33
D-5	TYPE "6" CURB INLET PER FDOT INDEX #211 TOP: 122.66 S. INV OUT: 116.62
D-7	TYPE "C" INLET PER FDOT INDEX #232 TOP: 121.53 S. INV IN: 118.00 N. INV OUT: 118.00
D-8	TYPE "C" INLET PER FDOT INDEX #232 TOP: 121.82 S. INV IN: 118.00 N. INV OUT: 118.00
D-9	TYPE "C" INLET PER FDOT INDEX #232 TOP: 122.17 S. INV IN: 118.00 NW. INV OUT: 118.00
D-10	TYPE "P7" MANHOLE PER FDOT INDEX #200, 201 TOP: 121.70 SE. INV IN: 110.51 N. INV OUT: 118.00



- NOTES:**
- ALL STORM DRAIN INLETS CONSTRUCTED AS PART OF NEW DEVELOPMENT PROJECTS IN ORANGE COUNTY SHALL HAVE METAL MEDALLION INLET MARKERS INSTALLED. TEXT ON THE MARKER SHALL BE EVENLY SPACED AND READ "NO DUMPING, ONLY RAIN IN THE DRAIN". MARKERS MUST BE COMMERCIAL GRADE STAINLESS STEEL, ALUMINUM, BRASS OR BRONZE AND EITHER STAMPED FROM SHEET METAL OR CAST. METAL MARKER COLOR MUST BE NON-REFLECTIVE BLUE OR GREEN. AQUATIC CREATURE OR SYMBOL SHOWN ON MARKER SHALL BE CONSISTENT THROUGHOUT THE SUBDIVISION. MARKERS MUST BE AFFIXED TO A CLEAN, PREPARED SURFACE WITH ADHESIVES, FASTENERS, OR HEAT AS RECOMMENDED BY THE MANUFACTURER. MARKERS SHALL BE ALIGNED WITH THE CENTER OF DRAINAGE INLETS AT THE TOP OF THE CURB. LETTERING MUST BE BETWEEN 0.4 - 0.5 INCHES AND THE TOTAL DIAMETER OF THE MARKER BETWEEN 3.75 - 4.25 INCHES.

- VERTICAL INFORMATION SHOWN HEREON BASED ON NAVD88.
- PRIOR TO THE START OF LAND DISTURBING ACTIVITIES, WHICH INCLUDES DEMOLITION, EARTHWORK AND/OR CONSTRUCTION, THE DEVELOPER/CONTRACTOR SHALL PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND SUBMIT TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) A NOTICE OF INTENT (NOI) TO OBTAIN COVERAGE UNDER THE NPDES GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (CGP) PURSUANT TO THE REQUIREMENTS OF 62-621.300(4)(A) F.A.C. A COPY OF THE NOI SHALL BE SUBMITTED TO THE ORANGE COUNTY ENVIRONMENTAL PROTECTION DIVISION (OC EPD). COPIES OF THE SWPPP, NOI, AND FDEP ACKNOWLEDGEMENT LETTER ARE TO BE KEPT ON THE PROJECT SITE AND MADE AVAILABLE UPON REQUEST. UPON COMPLETION OF ALL LAND DISTURBING ACTIVITIES AND AFTER FINAL STABILIZATION OF THE SITE IS COMPLETE, THE DEVELOPER/CONTRACTOR SHALL SUBMIT TO FDEP A NOTICE OF TERMINATION (NOT) TO END THEIR COVERAGE UNDER THE CGP AND PROVIDE A COPY OF THE NOT TO OC EPD.
 - THE SITE SHALL BE STABILIZED FOLLOWING CLEARING, GRUBBING, EARTH WORK OR MASS GRADING TO ESTABLISH A DENSE STAND OF GRASS, OR SHALL INCORPORATE OTHER APPROVED BEST MANAGEMENT PRACTICES, ON ALL DISTURBED AREAS IF DEVELOPMENT DOES NOT BEGIN WITHIN 7 DAYS. FINAL STABILIZATION SHALL ACHIEVE 100% COVERAGE AND A MINIMUM OF 70% DENSITY OF THE DISTURBED LAND AREA AND SHALL INCLUDE A MAINTENANCE PROGRAM TO ENSURE MINIMUM COVERAGE SURVIVAL AND OVERALL SITE STABILIZATION UNTIL SITE DEVELOPMENT.
 - DISCHARGE OF GROUNDWATER FROM DEWATERING OPERATIONS REQUIRES APPROVAL FROM FDEP AND THE APPLICABLE WATER MANAGEMENT DISTRICT. THE DEVELOPER/CONTRACTOR SHALL OBTAIN AND FDEP GENERIC PERMIT FOR THE DISCHARGE OF GROUND WATER FROM DEWATERING OPERATIONS PURSUANT TO THE REQUIREMENTS OF 62-621.300(2)(A) AND 62-620 F.A.C. AND FLORIDA STATUTES CHAPTER 403. DISCHARGE DIRECTED TO THE COUNTY'S MSA REQUIRE AN ORANGE COUNTY RIGHT-OF-WAY UTILIZATION PERMIT FOR DEWATERING PRIOR TO THE START OF ANY DISCHARGES. TO OBTAIN RIGHT-OF-WAY APPROVAL, COPIES OF THE FDEP PERMIT, NOI, DOCUMENTATION SHOWING DEWATERING AT THE SITE IS NOT WITHIN 500 FT OF KNOWN CONTAMINATION, AND A DEWATERING PLAN SHALL BE SUBMITTED TO ALEXIS CLARK, ORANGE COUNTY ENVIRONMENTAL PROTECTION DIVISION (407-836-1433) AND ORANGE COUNTY PUBLIC WORKS DEVELOPMENT ENGINEERING PERMITTING SECTION. ANALYTICAL SAMPLING OF GROUNDWATER MAY BE REQUESTED BY ORANGE COUNTY ON A CASE-BY-CASE BASIS TO CONFIRM SITE CONTAMINATION STATUS.
 - THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING FDEP GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUNDWATER FROM ANY NON-CONTAMINATED SITE ACTIVITY IN ACCORDANCE WITH FLORIDA ADMINISTRATIVE CODE 62-621.300(2) AND 62-620, AND FLORIDA STATUTES CHAPTER 403.
 - THE RIGHT-OF-WAY AND ADJACENT PROPERTIES SHALL BE RESTORED TO EQUAL OR BETTER CONDITIONS.
 - PROVIDE A 6 FOOT HIGH SCREEN FENCE FOR DUST ABATEMENT ON ALL PROPERTY LINES ADJACENT TO ROADS.
 - REFER TO TREE MITIGATION PLANS FOR TREE REMOVAL DETAILS.

- GEOTECHNICAL NOTE:**
- CONTRACTOR TO FOLLOW THE GUIDANCE AND RECOMMENDATIONS AS SPECIFIED WITHIN THE SUBSURFACE SOIL EXPLORATION GEOTECHNICAL ENGINEERING REPORT(S) PERFORMED BY UNIVERSAL ENGINEERING SCIENCES (DATED APR. 28, 2010)
- PAVEDRAIN GENERAL NOTES:**
- REFER TO PAVEDRAIN SPECIFICATIONS AND DETAILS, SHEETS C8.0.
 - ALL PAVEDRAIN PAYER SYSTEMS SHALL BE CONSTRUCTED NOT TO EXCEED MAX. 1.0% SLOPE (ANY DIRECTION).
 - SEE SHEET C8.3 FOR EXFILTRATION JUNCTION DETAILS
- IMPORT FILL NOTES:**
- IMPORT FILL PLACED ON SITE SHALL BE A SOIL WITH LESS THAN 5% FINES WITH A HORIZONTAL PERMEABILITY OF NO LESS THAN 20 FT/DAY.
 - PRIOR TO IMPORT FILL PROCUREMENT, CONTRACTOR SHALL PROVIDE SOILS REPORT AND SPECIFICATIONS OF THE PROPOSED FILL FOR REVIEW BY E.C.S. FLORIDA, LLC (GEOTECHNICAL ENGINEER) AND ENGINEER OF RECORD. PROVIDED FILL SHALL MEET OR EXCEED THE HYDRAULIC CONDUCTIVITY OF THE EXISTING IN SITU SOILS.

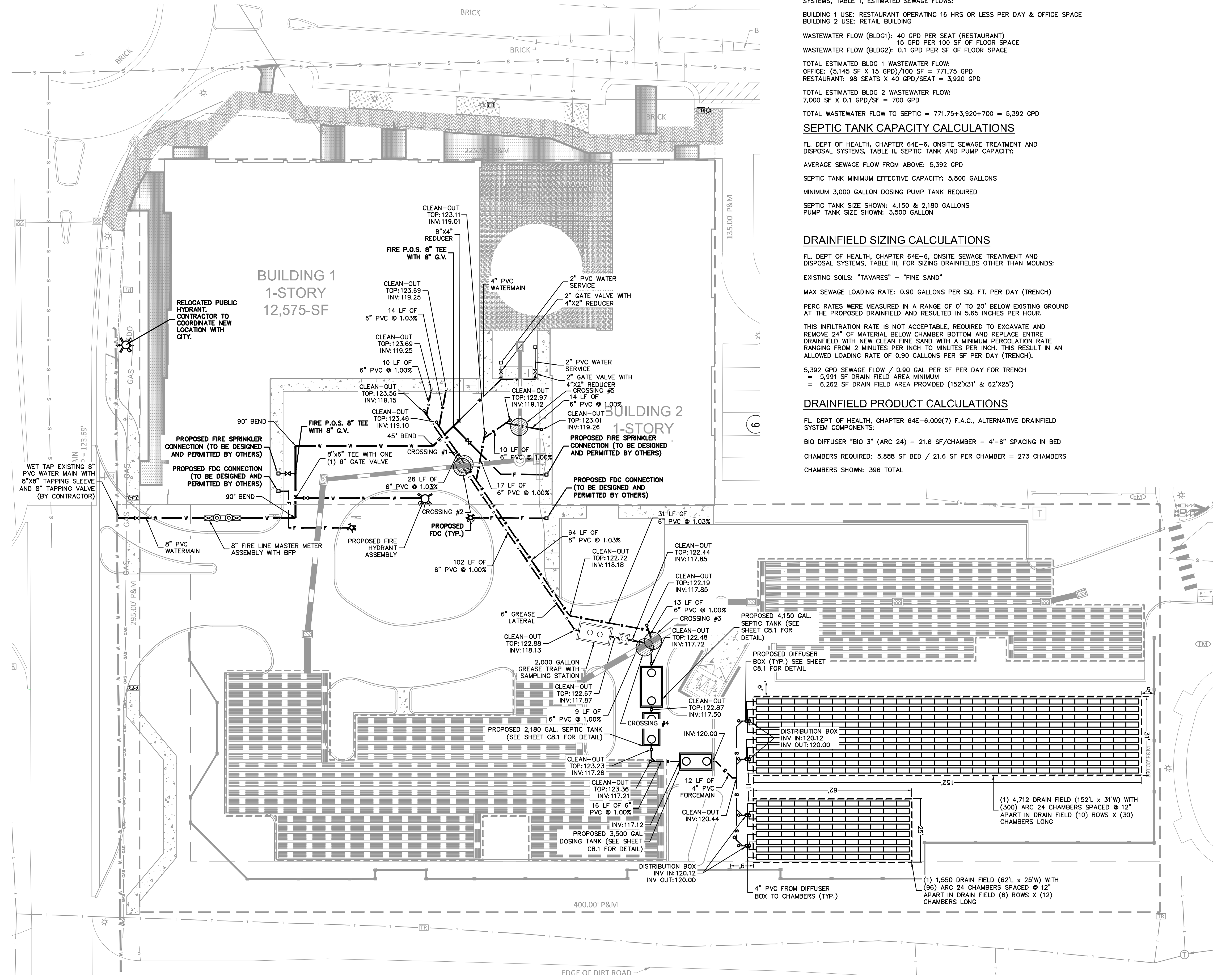


- DATUM/BENCHMARKS:**
- ELEVATIONS SHOWN PER NAVD 88. REFER TO SURVEY FOR ADDITIONAL DETAILS AND BENCHMARKS.

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LICENSED PROFESSIONAL	MARCUS I. DEIBER, P.E.			
KHA PROJECT 149973004	DATE 02/09/2023	SCALE AS SHOWN	DESIGNED BY M/G	DRAWN BY CML
WINDERMERE DOWNTOWN PROPERTY	SHEET NUMBER C5.0	TOWN OF WINDERMERE	FL	DATE

Plotted By: Geier, Marcus - Sheet Set: Windermere Downtown Property - Layout: C6.0 UTILITY PLAN - May 03, 2023 06:18:12pm - K:\OR\Civil\49973004-Windermere Downtown Property\CADD\CONSTR\PlanSheets\C6.0 - UTILITY PLAN.dwg
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SEWAGE FLOW CALCULATIONS

FL. DEPT OF HEALTH, CHAPTER 64E-6, ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS, TABLE I, ESTIMATED SEWAGE FLOWS:

BUILDING 1 USE: RESTAURANT OPERATING 16 HRS OR LESS PER DAY & OFFICE SPACE
 BUILDING 2 USE: RETAIL BUILDING

WASTEWATER FLOW (BLDG1): 40 GPD PER SEAT (RESTAURANT) 15 GPD PER 100 SF OF FLOOR SPACE
 WASTEWATER FLOW (BLDG2): 0.1 GPD PER SF OF FLOOR SPACE

TOTAL ESTIMATED BLDG 1 WASTEWATER FLOW:
 OFFICE: (5,145 SF X 15 GPD)/100 SF = 771.75 GPD
 RESTAURANT: 98 SEATS X 40 GPD/SEAT = 3,920 GPD

TOTAL ESTIMATED BLDG 2 WASTEWATER FLOW:
 7,000 SF X 0.1 GPD/SF = 700 GPD

TOTAL WASTEWATER FLOW TO SEPTIC = 771.75+3,920+700 = 5,392 GPD

SEPTIC TANK CAPACITY CALCULATIONS

FL. DEPT OF HEALTH, CHAPTER 64E-6, ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS, TABLE II, SEPTIC TANK AND PUMP CAPACITY:

AVERAGE SEWAGE FLOW FROM ABOVE: 5,392 GPD

SEPTIC TANK MINIMUM EFFECTIVE CAPACITY: 5,800 GALLONS
 MINIMUM 3,000 GALLON DOSING PUMP TANK REQUIRED

SEPTIC TANK SIZE SHOWN: 4,150 & 2,180 GALLONS
 PUMP TANK SIZE SHOWN: 3,500 GALLON

DRAINFIELD SIZING CALCULATIONS

FL. DEPT OF HEALTH, CHAPTER 64E-6, ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS, TABLE III, FOR SIZING DRAINFIELDS OTHER THAN MOUNDS:

EXISTING SOILS: "TAVARES" - "FINE SAND"

MAX SEWAGE LOADING RATE: 0.90 GALLONS PER SQ. FT. PER DAY (TRENCH)

PERC RATES WERE MEASURED IN A RANGE OF 0' TO 20' BELOW EXISTING GROUND AT THE PROPOSED DRAINFIELD AND RESULTED IN 5.65 INCHES PER HOUR.

THIS INFILTRATION RATE IS NOT ACCEPTABLE, REQUIRED TO EXCAVATE AND REMOVE 24" OF MATERIAL BELOW CHAMBER BOTTOM AND REPLACE ENTIRE DRAINFIELD WITH NEW CLEAN FINE SAND WITH A MINIMUM PERCOLATION RATE RANGING FROM 2 MINUTES PER INCH TO MINUTES PER INCH. THIS RESULT IN AN ALLOWED LOADING RATE OF 0.90 GALLONS PER SF PER DAY (TRENCH).

5,392 GPD SEWAGE FLOW / 0.90 GAL. PER SF PER DAY FOR TRENCH
 = 5,991 SF DRAIN FIELD AREA MINIMUM
 = 6,262 SF DRAIN FIELD AREA PROVIDED (152'X31' & 62'X25')

DRAINFIELD PRODUCT CALCULATIONS

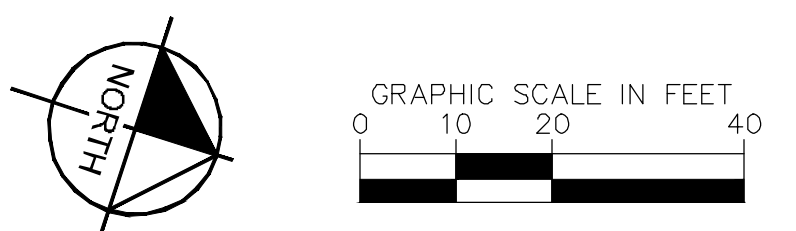
FL. DEPT OF HEALTH, CHAPTER 64E-6.009(7) F.A.C., ALTERNATIVE DRAINFIELD SYSTEM COMPONENTS:

BIO DIFFUSER "BIO 3" (ARC 24) - 21.6 SF/CHAMBER - 4'-6" SPACING IN BED

CHAMBERS REQUIRED: 5,888 SF BED / 21.6 SF PER CHAMBER = 273 CHAMBERS
 CHAMBERS SHOWN: 396 TOTAL

WINDERMERE DOWNTOWN PROPERTY

CROSSING (#)	TOP PIPE				BOTTOM PIPE			CLEARANCE (FT)
	TYPE	SIZE (IN)	INVERT	BOTTOM	TYPE	SIZE (IN)	CROWN	
1	SSWR PVC	6	119.20	118.89	STRM HP	18	117.92	0.97
2	SSWR PVC	6	119.20	118.89	STRM HP	18	117.92	0.97
3	SSWR PVC	6	117.82	117.79	STRM CMP	24	116.28	1.51
4	SSWR PVC	6	117.81	117.78	STRM CMP	24	116.51	1.27
5	STRM CMP	12	121.07	120.69	SSWR PVC	6	119.88	1.00



LEGEND

- EXISTING SANITARY MAIN
- EXISTING REUSE MAIN
- EXISTING WATER MAIN
- EXISTING UNDERGROUND TELE.COMM. LINE
- EXISTING OVERHEAD LINE
- EXISTING FIBER OPTIC LINE
- EXISTING NATURAL GAS LINE
- EXISTING STORM PIPE
- PROPOSED WATER LINE
- PROPOSED POTABLE WATER SERVICE
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY MANHOLE
- PROPOSED SANITARY SERVICE
- PROPOSED STORM PIPE
- PROPOSED STORM INLET

GENERAL UTILITY NOTES:

- PRIOR TO CONSTRUCTION START, CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF EXISTING FIBER OPTIC CABLES, UNDERGROUND ELECTRIC LINES, AND UNDERGROUND TELECOM LINES. CONTRACTOR TO COORDINATE SERVICE LINE ADJUSTMENTS WITH RESPECTIVE SERVICE PROVIDER AND OWNER. BOX ADJUSTMENTS AND SERVICE LINES SHOWN FOR INFORMATIONAL PURPOSES ONLY. DESIGNED BY OTHERS.
- PRIOR TO CONSTRUCTION START, CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF EXISTING NATURAL GAS LINES. CONTRACTOR TO COORDINATE SERVICE LINE, VALVE, AND/OR BOX ADJUSTMENTS WITH SERVICE PROVIDER AND OWNER. SERVICE LINES SHOWN FOR INFORMATIONAL PURPOSES ONLY. DESIGNED BY OTHERS.
- CONTRACTOR TO COORDINATE PROPOSED TRANSFORMER LOCATIONS AND ELECTRIC SERVICE WITH POWER COMPANY AND OWNER. TRANSFORMERS AND SERVICE LINES SHOWN FOR INFORMATIONAL PURPOSES ONLY. DESIGNED BY OTHERS.
- PRIOR TO CONSTRUCTION START, THE CONTRACTOR SHALL BE RESPONSIBLE TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH ORANGE COUNTY UTILITIES (OCU) AND TOWN OF WINDERMERE. CIVIL ENGINEER OF RECORD TO BE PRESENT AT PRE-CON MEETING.

POTABLE WATER & SANITARY WASTEWATER UTILITY NOTES:

- ALL POTABLE WATER AND SANITARY WASTEWATER UTILITIES SHALL BE IN ACCORDANCE WITH ORANGE COUNTY UTILITIES (OCU) STANDARDS, SPECIFICATIONS, AND DETAILS, 2017 ED. CONTRACTOR SHALL BE RESPONSIBLE TO BE FAMILIAR WITH THESE STANDARDS.
- ALL CLEAN-OUTS WITHIN ASPHALT AND/OR CONCRETE AREAS SHALL BE H-20 TRAFFIC BEARING.

GENERAL FIRE SERVICE NOTES:

- ALL UNDERGROUND MAINS SERVING FIRE HYDRANTS OR FIRE PROTECTION SPRINKLER SYSTEMS ON PRIVATE PROPERTY MUST BE PERMITTED PRIOR TO INSTALLATION. THE DRAWING SHALL INDICATE THAT ALL UNDERGROUND FIRE MAINS WILL BE INSTALLED IN ACCORDANCE WITH NFPA 24 (2013 EDITION, "STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES". [F.A.C. 69A-60.005(2)]
- ALL FIRE SERVICE MAIN LOCATED DOWNSTREAM OF THE FIRE POINT OF SERVICE (POS) SHALL BE INSTALLED BY A QUALIFIED AND LICENSED CONTRACTOR. CONSTRUCTION AND MATERIALS SHALL COMPLY WITH APPLICABLE FIRE CODE. CONTRACTOR TO VERIFY REQUIREMENTS WITH ORANGE COUNTY UTILITIES DEPARTMENT PRIOR TO SHOP DRAWING REVIEW.
- FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED NOT MORE THAN 100 FT FROM THE NEAREST FIRE HYDRANT. [NFPA 14: 6.3.5.4]
- PROVIDE SIGNAGE, INDICATING ITS LOCATION AND THE BUILDING IT SERVICES, FOR ALL PROPOSED FIRE DEPARTMENT CONNECTIONS (F.D.C.).
- PRIOR TO FIRE INSTALLATION, THE FLORIDA LICENSED CONTRACTOR SHALL SUBMIT LAYOUT DESIGN DRAWINGS TO THE OFFICE OF THE FIRE MARSHAL. IF REQUIRED BY FLORIDA STATUTE 553.79, DRAWINGS MUST BE SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER. THE DRAWINGS MUST SHOW ALL UNDERGROUND FIRE LINES AND COMPONENTS STARTING FROM THE POINT OF SERVICE AS DEFINED UNDER FLORIDA STATUTE 663.102. THE DESIGN SHALL BE IN ACCORDANCE TO THE CURRENT FLORIDA FIRE PREVENTION CODE AND ALL ADOPTED NFPA CODES AND STANDARDS.

DATUM NOTE:
 ELEVATIONS BASED ON NAVD 88 DATUM

Always call 811 two full business days before you dig to have underground utilities located and marked.



NO.	REVISIONS	DATE	BY

Kimley»Horn

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 189 S. ORANGE AVENUE, SUITE 1000, ORLANDO, FL 32801
 PHONE: 407-898-1511
 WWW.KIMLEY-HORN.COM REGISTRY No. 35106

KHA PROJECT: 149973004
 DATE: 02/09/2023
 SCALE: AS SHOWN
 DESIGNED BY: M/G
 DRAWN BY: CML
 CHECKED BY: M/G

LICENSED PROFESSIONAL: MARCUS I. GEIER, P.E.
 FL LICENSE NUMBER: 89199

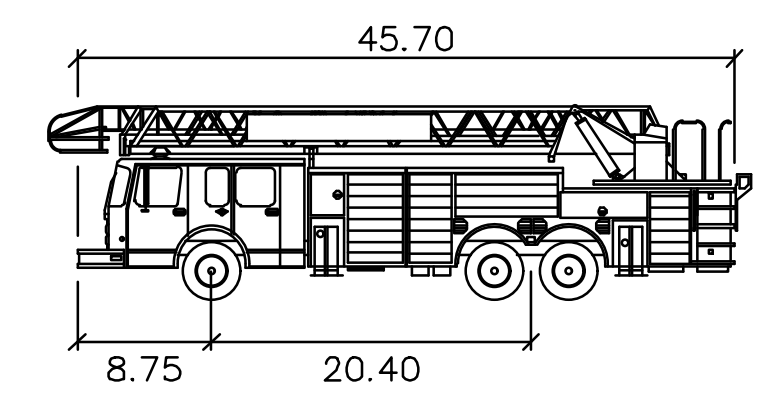
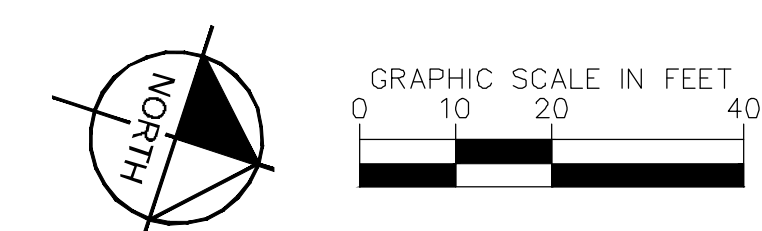
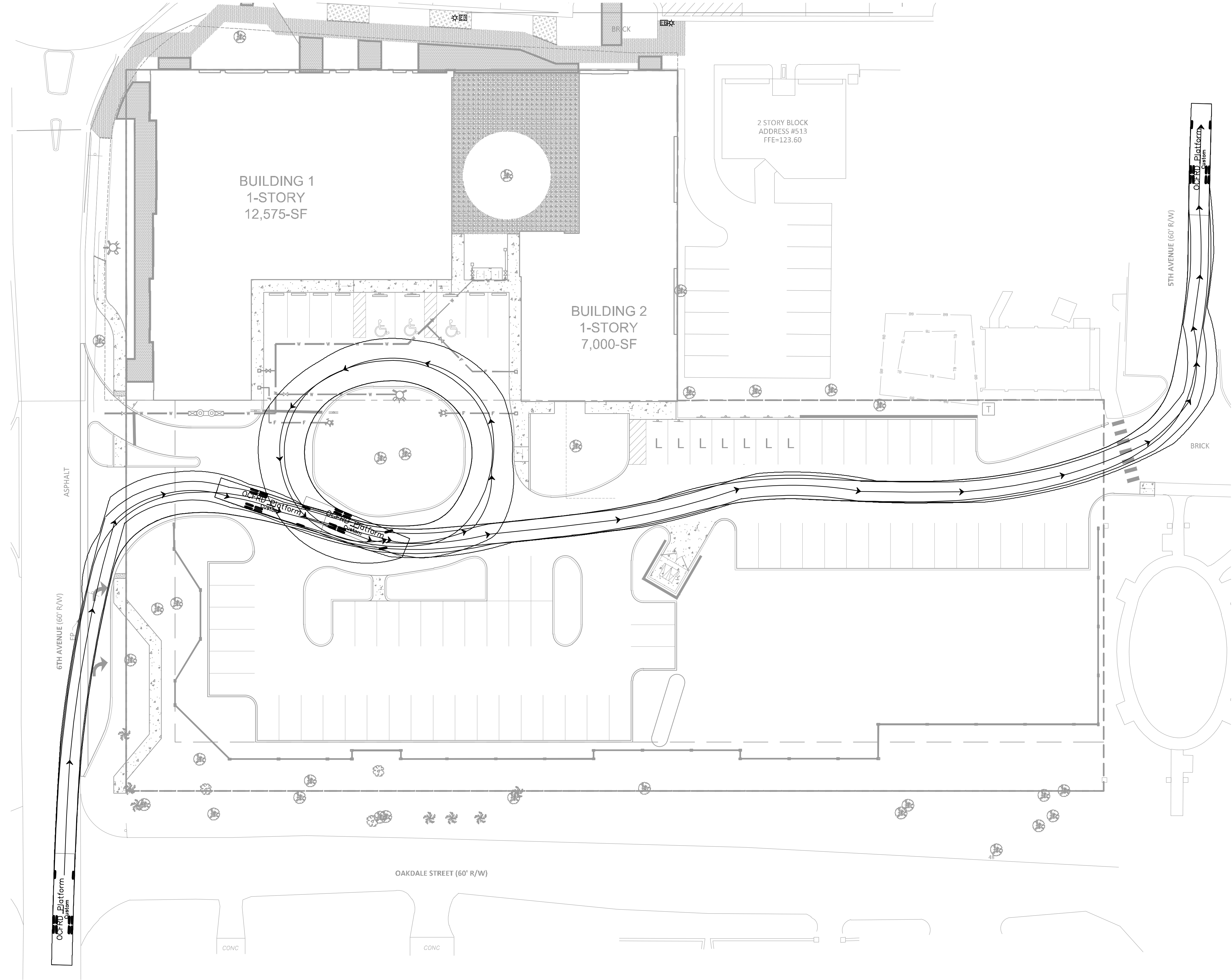
UTILITY PLAN

WINDERMERE DOWNTOWN PROPERTY

TOWN OF WINDERMERE

SHEET NUMBER
C6.0

Plotted By: Geier, Marcus - Sheet Set: Windermere Downtown Property - Layout: C7.0 TRUCK ROUTING PLAN - May 03, 2023 - 06:18:35pm - K:\VOR\Civil\149923004-Windermere Downtown Property\CADD\CONSTR\PlanSheets\C7.0 - TRUCK ROUTING PLAN.dwg
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OCFRD Platform
 feet
 Width : 8.33
 Track : 8.33
 Lock to Lock Time : 6.0
 Steering Angle : 44.2

No.	REVISIONS	DATE	BY

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 PHONE: 407-898-1511
 WWW.KIMLEY-HORN.COM REGISTRY No. 35106

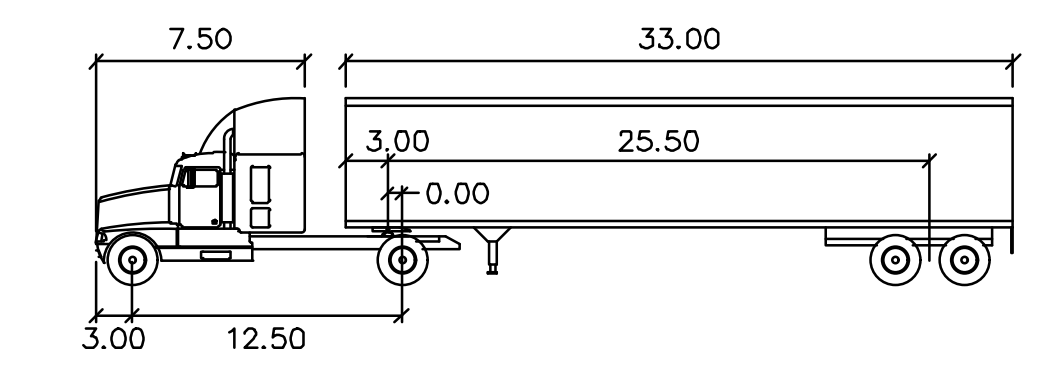
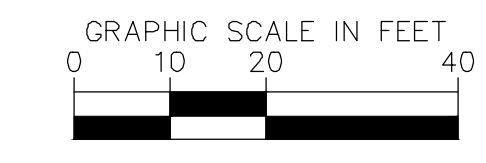
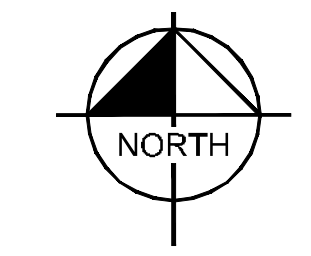
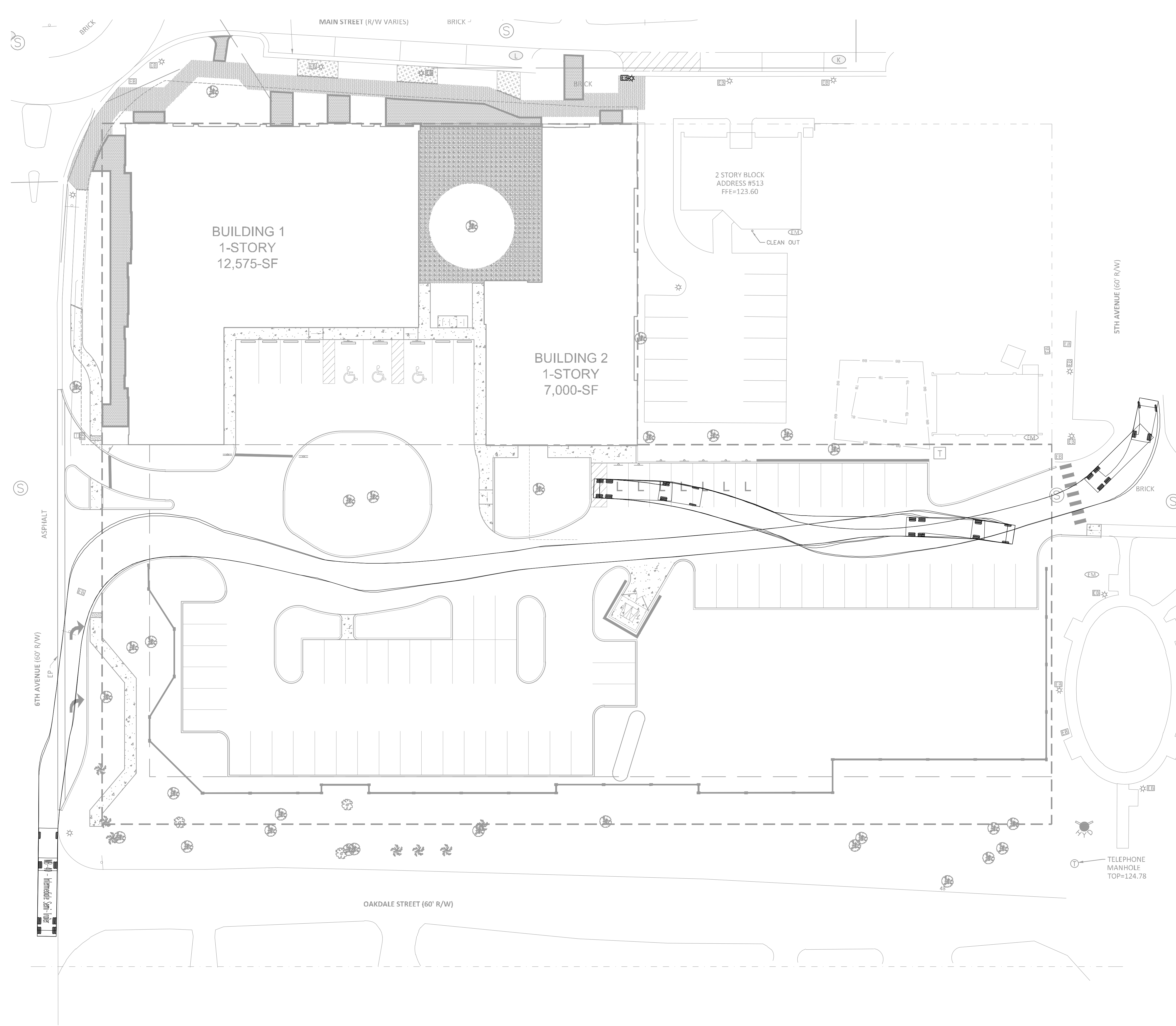
LICENSED PROFESSIONAL
 MARCUS I. GEIER, P.E.
 FL LICENSE NUMBER
 89199
 CHECKED BY: M/G DATE: _____
 DRAWN BY: CML
 DESIGNED BY: M/G
 SCALE: AS SHOWN
 DATE: 02/09/2023
 PROJECT: 149973004

TRUCK ROUTING PLAN

WINDERMERE DOWNTOWN PROPERTY
 TOWN OF WINDERMERE FL

SHEET NUMBER
C7.0

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WB-40

feet	
Tractor Width	: 8.00
Trailer Width	: 8.00
Tractor Track	: 8.00
Trailer Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 20.3
Articulating Angle	: 70.0

No.	REVISIONS	DATE	BY

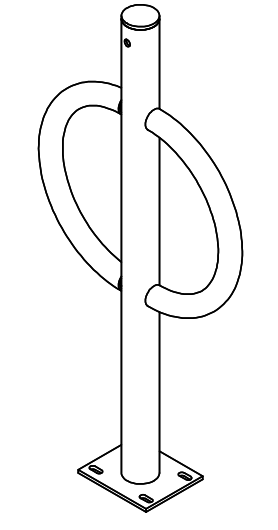
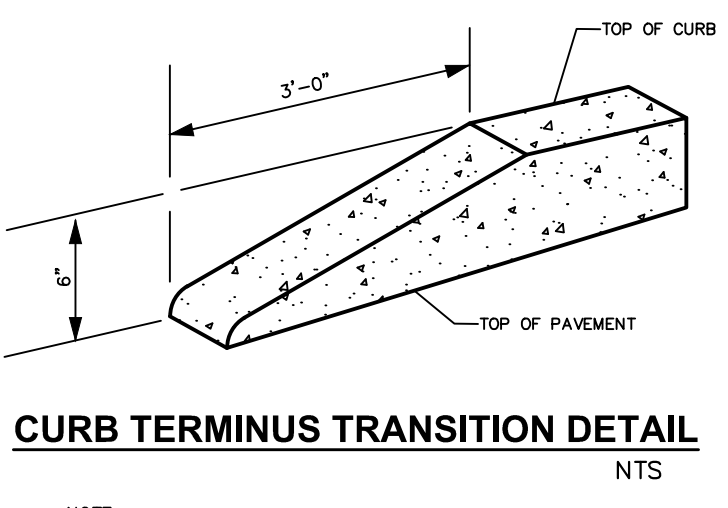
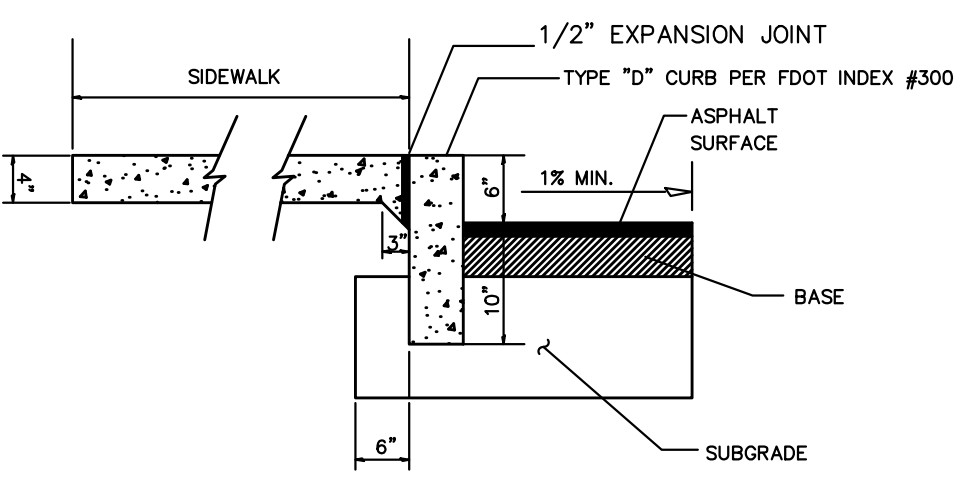
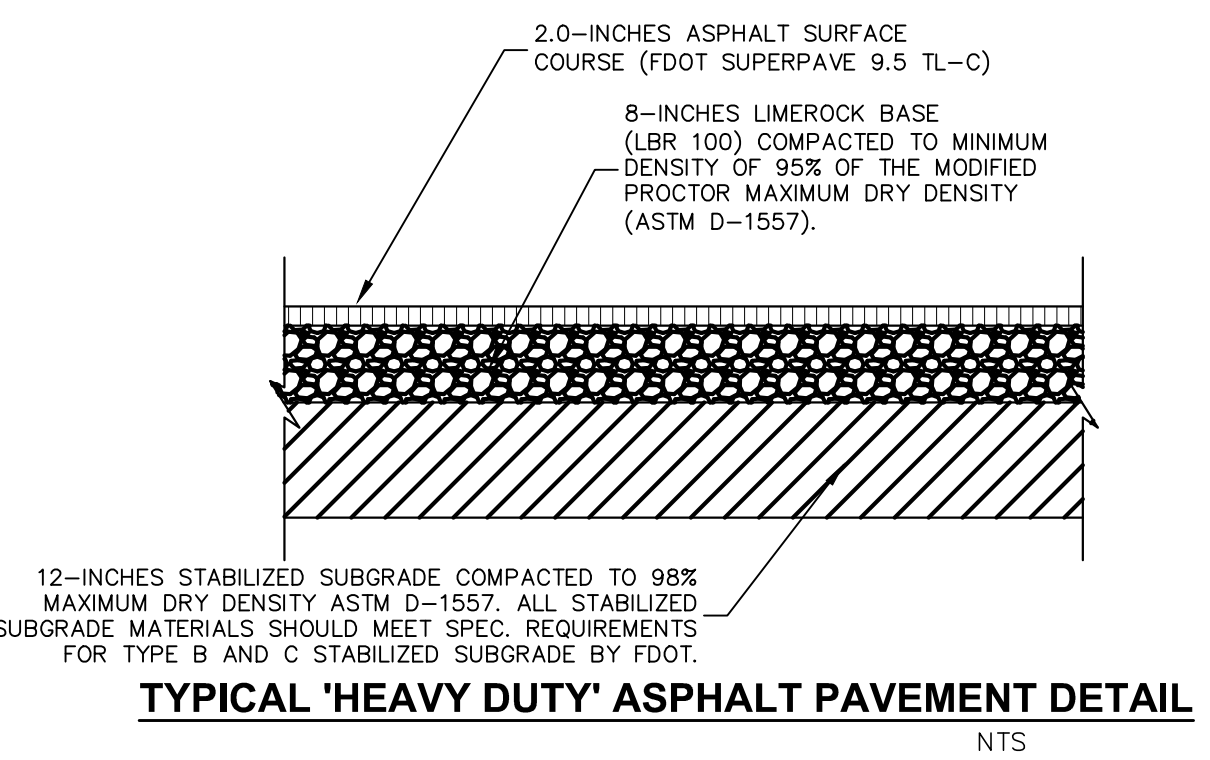
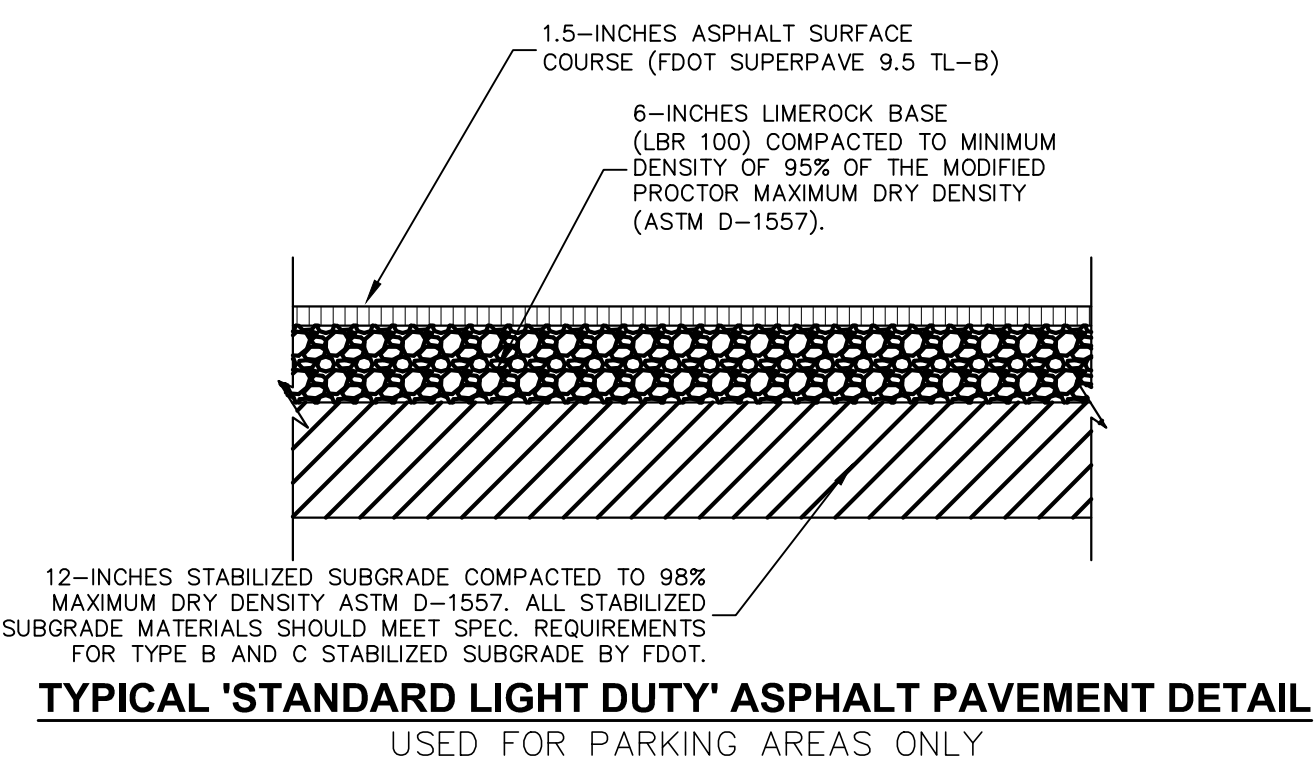
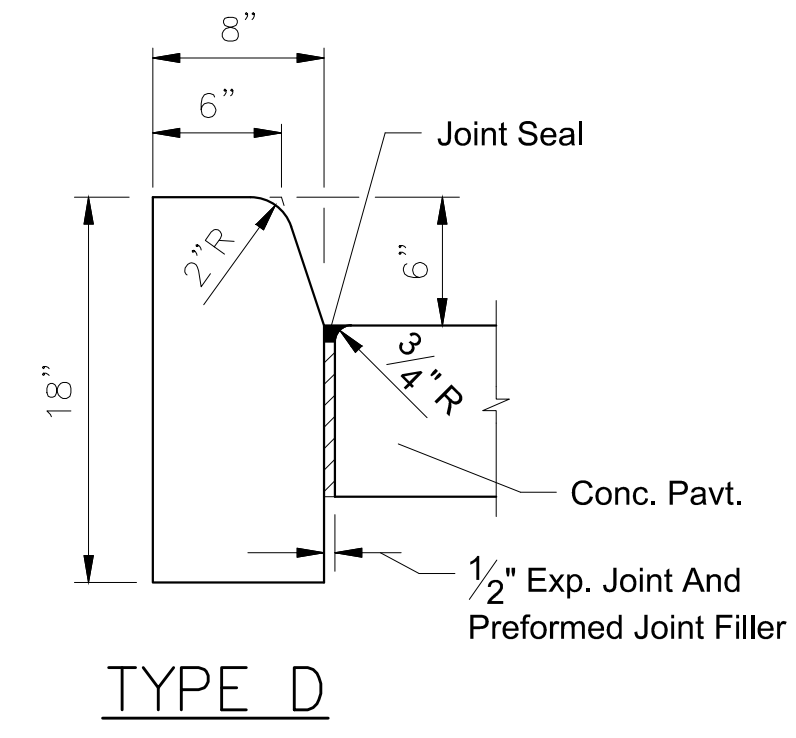
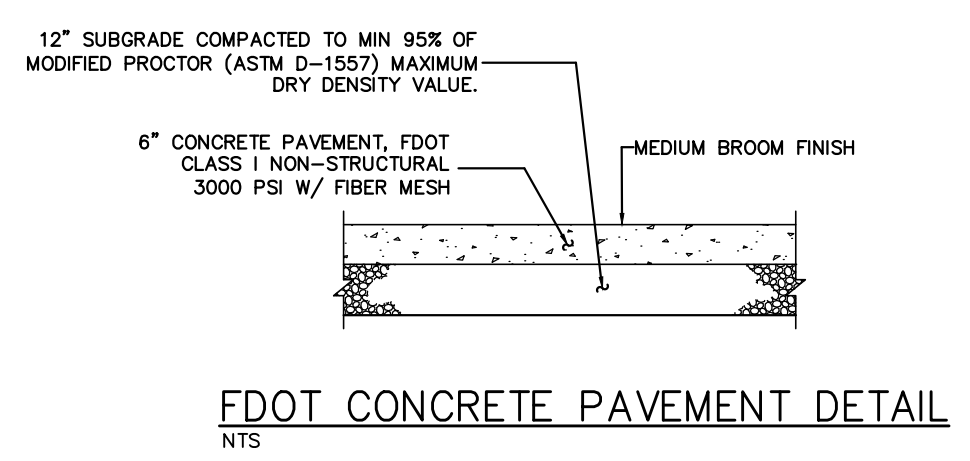
Kimley»Horn
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 PHONE: 407-898-1511
 WWW.KIMLEY-HORN.COM REGISTRY No. 35106

KHA PROJECT	149973004
DATE	02/09/2023
SCALE	AS SHOWN
DESIGNED BY	M/G
DRAWN BY	CML
CHECKED BY	M/G
LICENSED PROFESSIONAL	MARCUS I. GEIBER, P.E.
FL LICENSE NUMBER	89199
M/G DATE:	----

TRUCK ROUTING PLAN

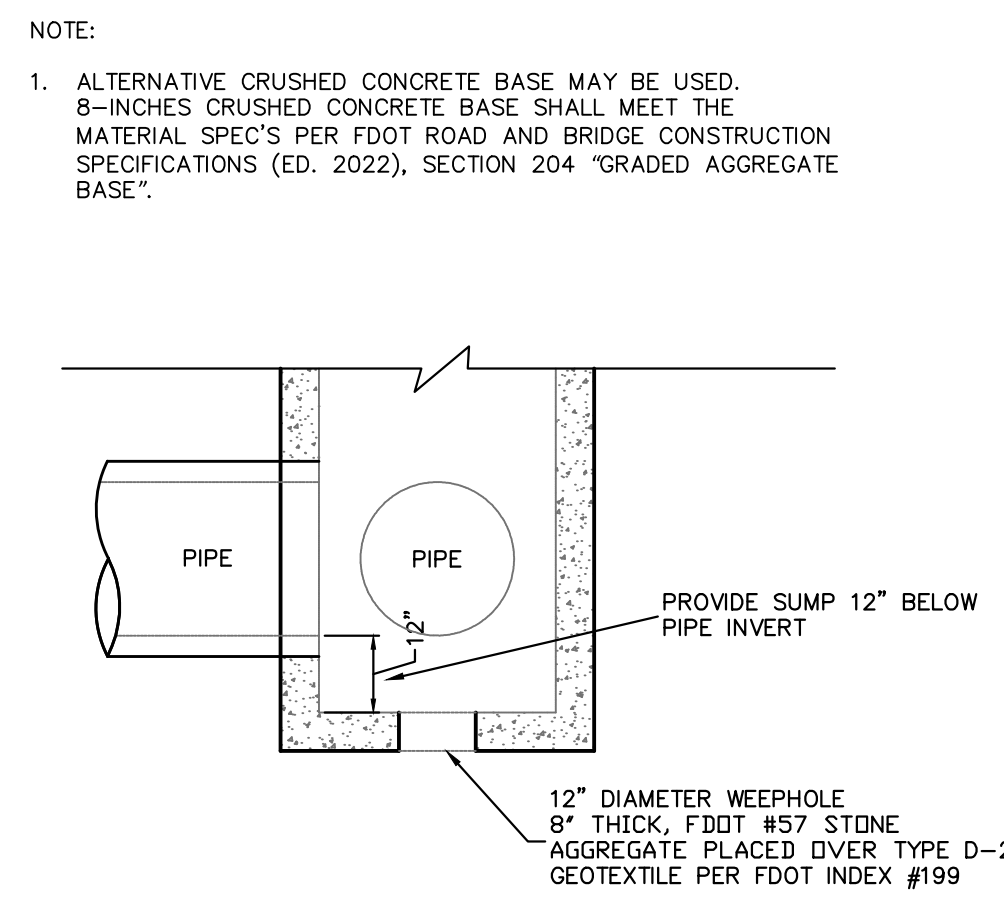
WINDERMERE DOWNTOWN PROPERTY
 TOWN OF WINDERMERE FL

Plotted By: Gabe, Marcus, Sheet Set: Windermere Downtown Property, Layout: 08.0 GENERAL CONSTRUCTION DETAILS, May 03, 2023, DB: LD: 25pm, K:\VORL\Civil\149973004-Windermere Downtown Property\CADD\CONSTR\PlanSheets\C8.0 - GENERAL CONSTRUCTION DETAILS.dwg, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

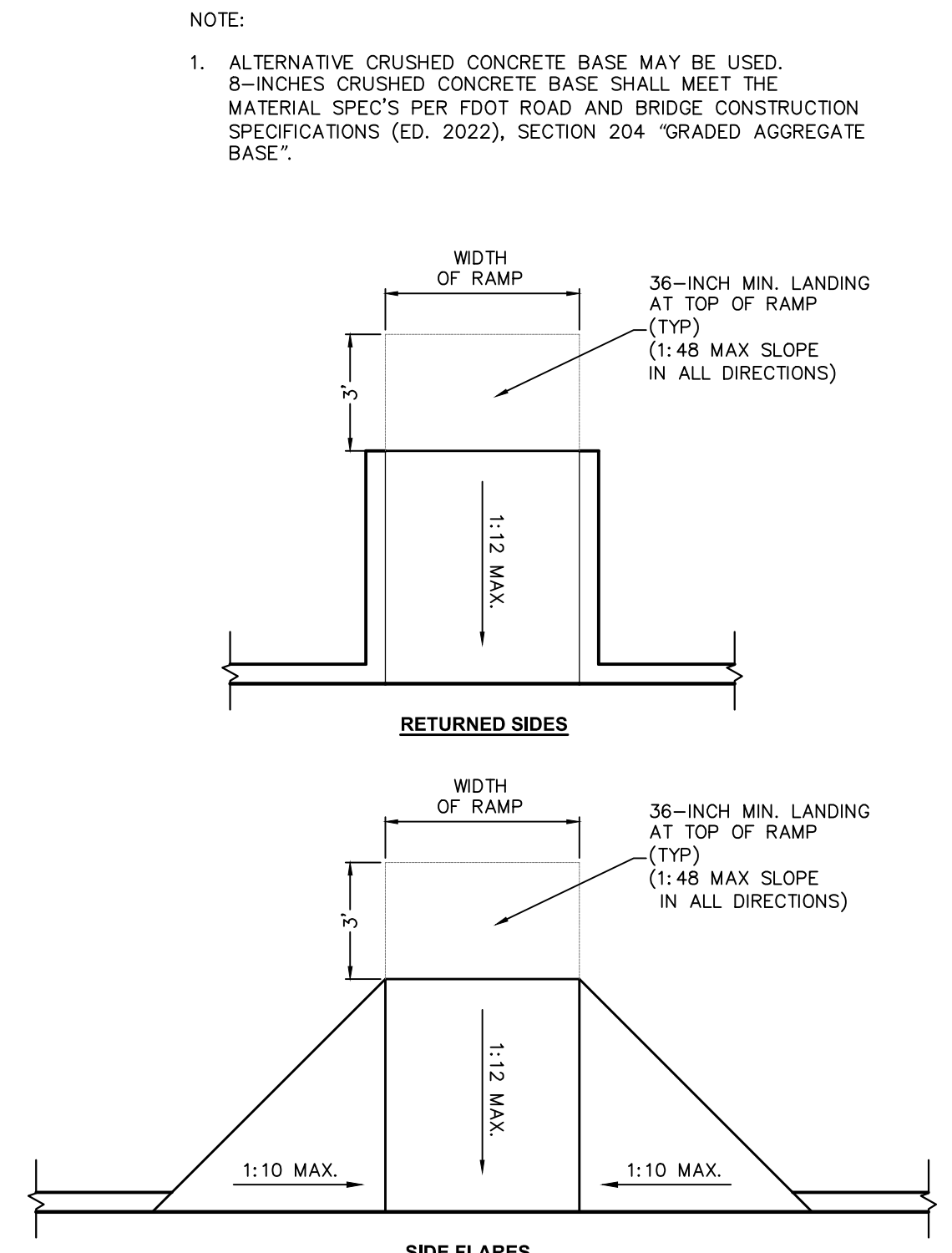


PRODUCT: DERO BIKE HITCH (OR EQUIVALENT)
 FINISH: STAINLESS STEEL (OR OWNER APPROVED)
 NOTE: INSTALL PER MANUFACTURER'S SPECIFICATIONS
 WWW.DERO.COM
 1-800-298-4915

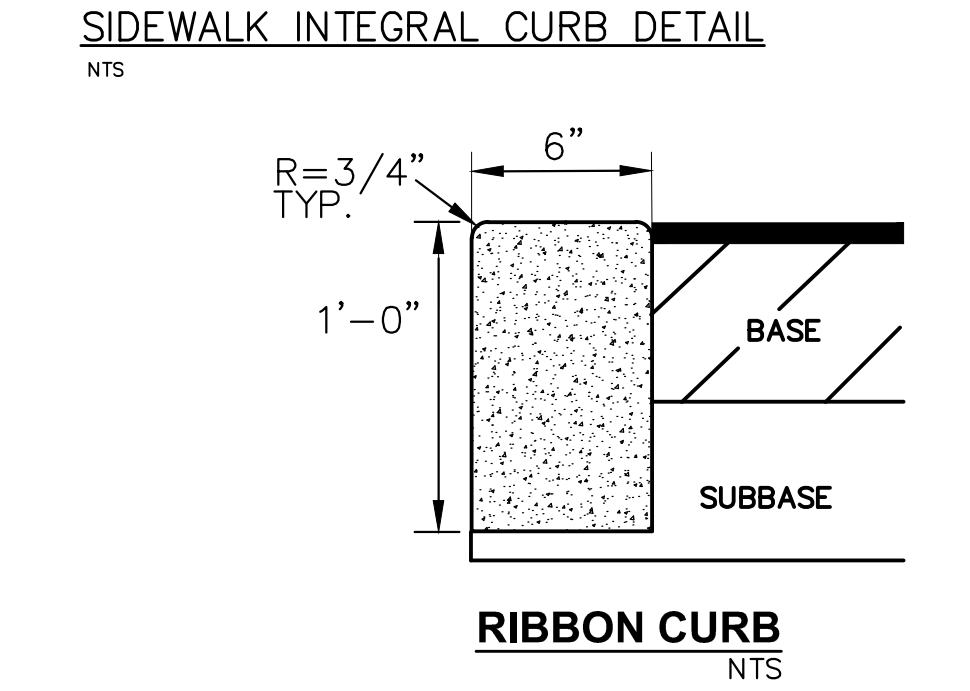
STANDARD BICYCLE RACK DETAIL
 NTS



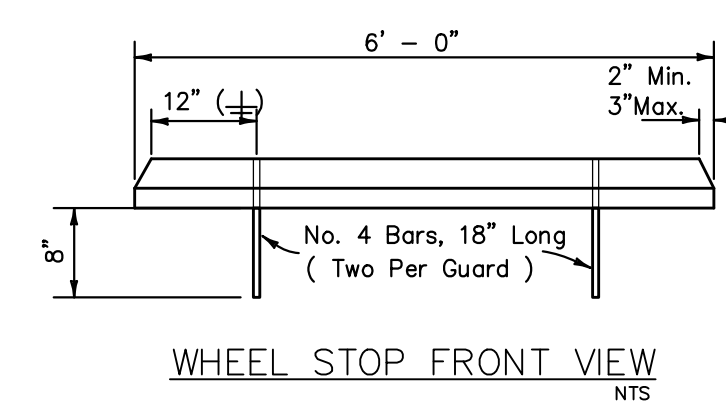
TYPICAL INLET SUMP DETAIL
 PER F.D.O.T. INDEX NO. 232 N.T.S.



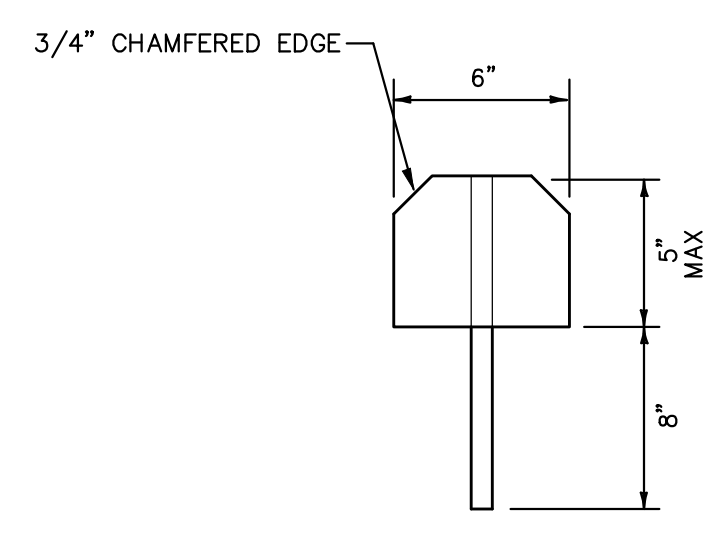
TYPICAL 'ONSITE' ACCESSIBLE CURB RAMPS
 CONSTRUCT PER F.A.C. 2012, CHAPTER 4, SECTION 406 REQUIREMENTS
 (DETECTABLE WARNING STRIPS TO MEET FDOT INDEX 522-002 REQUIREMENTS)



RIBBON CURB
 NTS

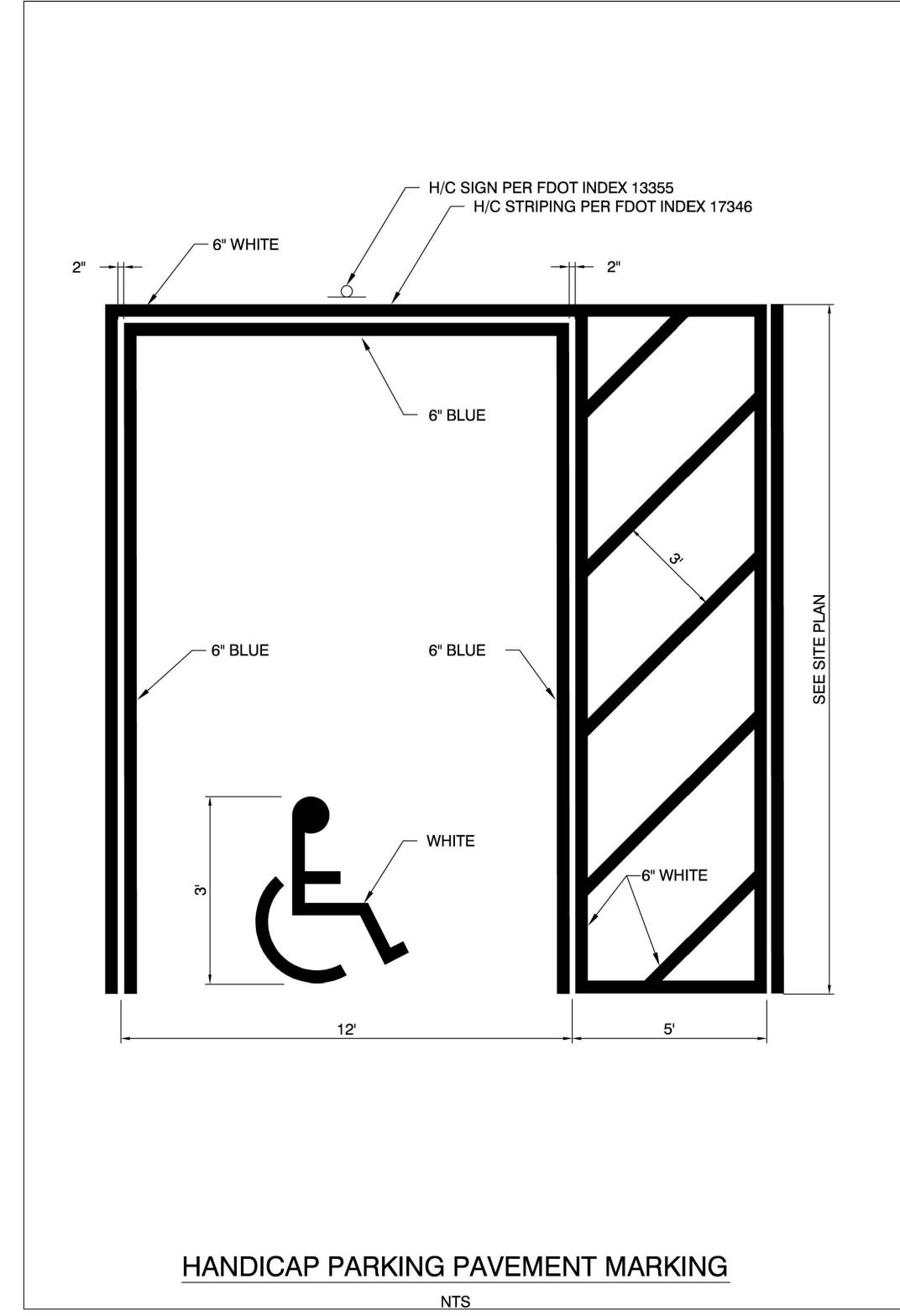


WHEEL STOP FRONT VIEW
 NTS

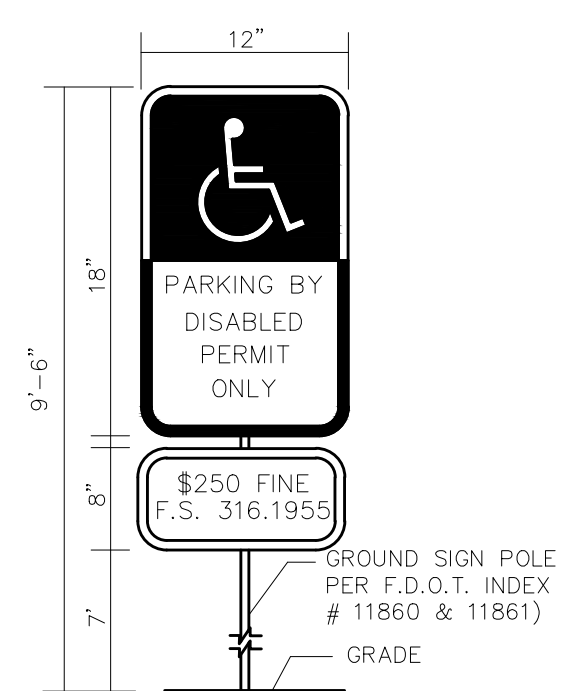


WHEEL STOP PROFILE (TYP.)
 NTS

- NOTES:**
- ALL CURBS TO BE CONSTRUCTED OF 28 DAY, 3000 P.S.I. CONCRETE
 - 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED EVERY 500', CONSTRUCTION JOINT REQUIRED EVERY 10' MAXIMUM (4' MINIMUM).
 - 6" SUBBASE TO BE COMPACTED AND TESTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST AND SHALL BE STABILIZED TO A MINIMUM L.B.R. 40.
 - IN NO INSTANCE SHALL EXTRUDED CURBS (DEFINED AS HEADER-TYPE CURBS INSTALLED DIRECTLY ON TOP OF PAVEMENT) BE PERMITTED.



HANDICAP PARKING PAVEMENT MARKING
 NTS

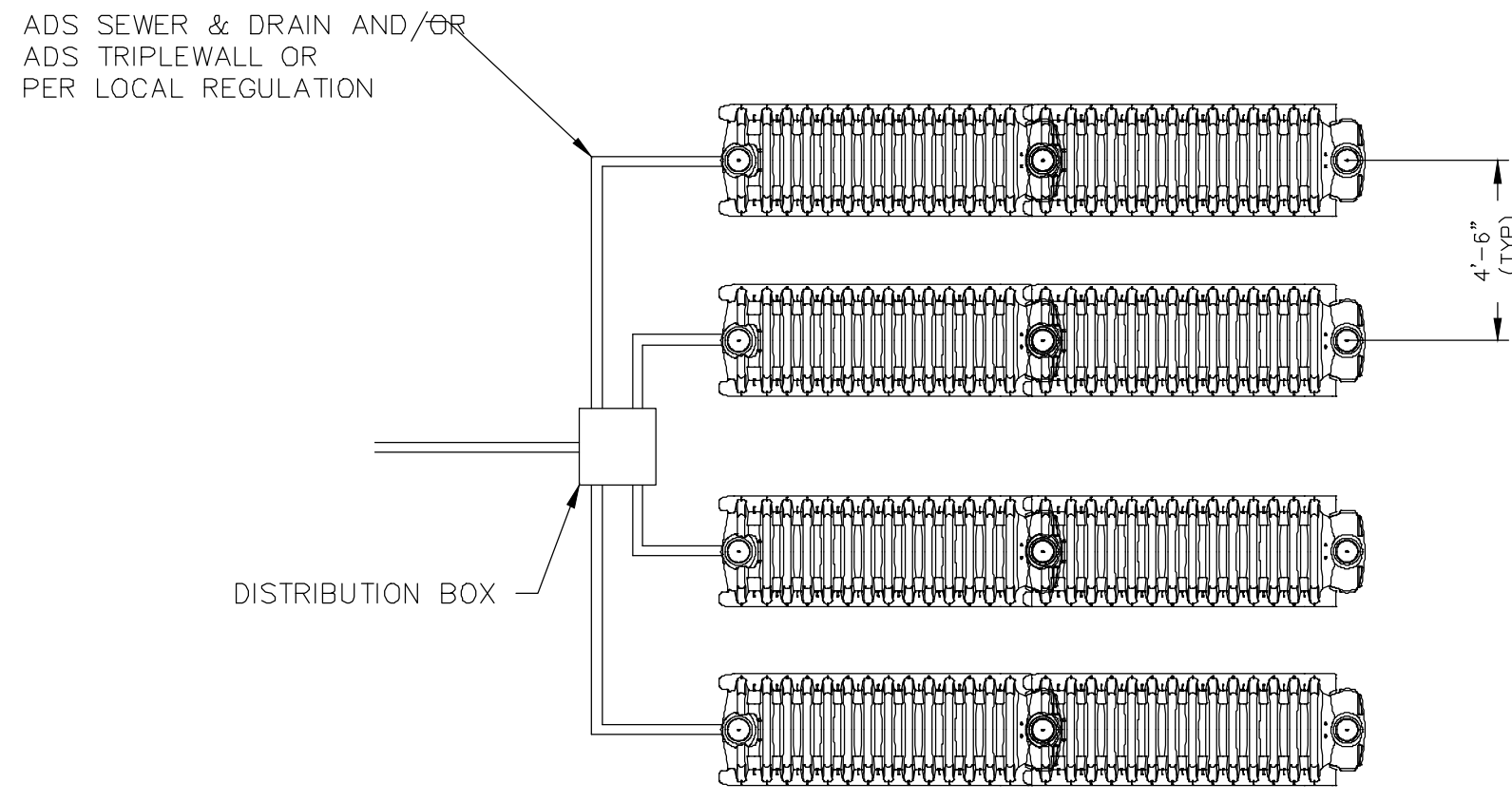


- NOTES:**
- ALL LETTERS ARE 1" SERIES "C" PER MUTCD.
 - TOP PORTION OF SIGN SHALL HAVE REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
 - BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
 - FINE NOTIFICATION SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
 - ONE (1) SIGN REQUIRED FOR EACH PARKING SPACE.
 - INSTALLATION HEIGHT OF SIGN SHALL BE IN ACCORDANCE WITH SECTION 24-23 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

HANDICAP SIGN DETAIL
 NTS

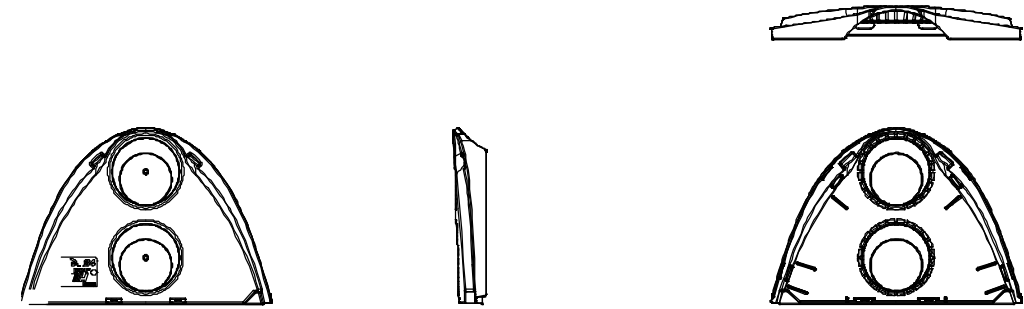
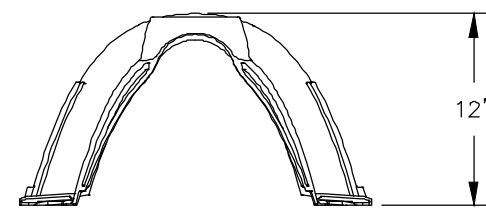
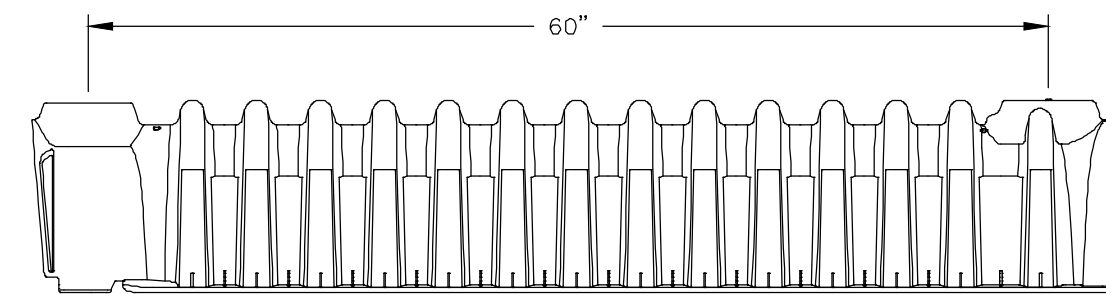
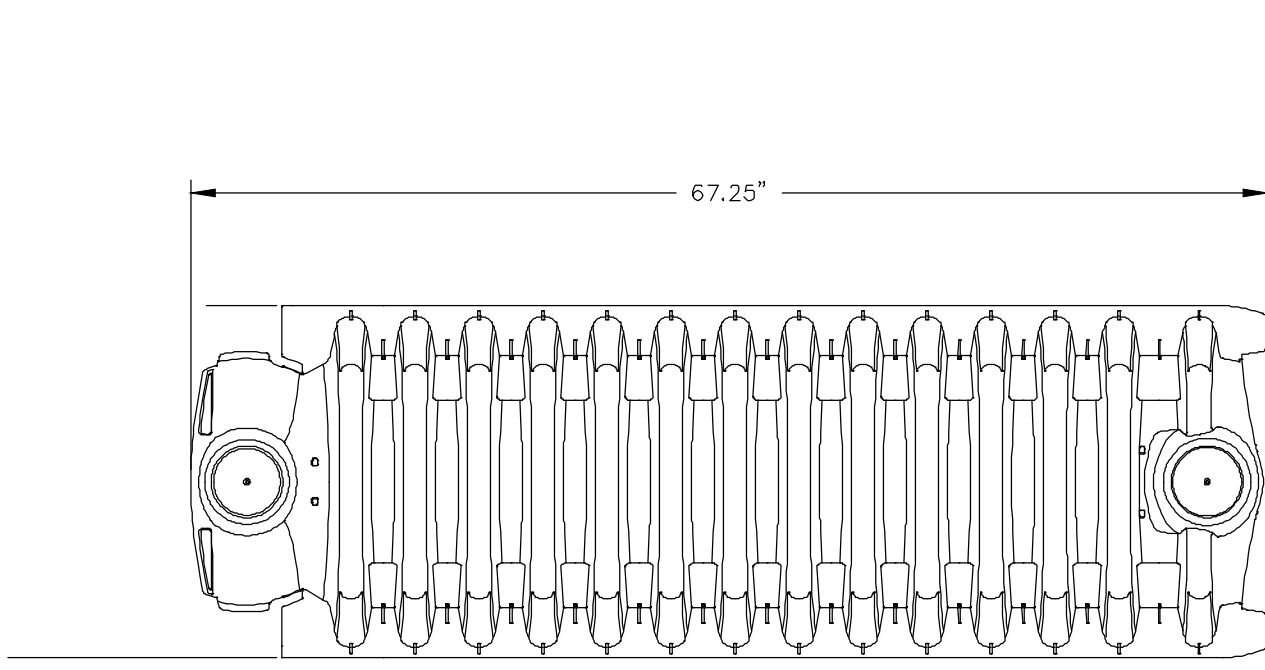
<p>© 2023 KIMLEY-HORN AND ASSOCIATES, INC. 189 S. ORANGE AVENUE, SUITE 1000, ORLANDO, FL 32801 PHONE: 407-898-1511 WWW.KIMLEY-HORN.COM REGISTRY No. 35106</p>		REVISIONS	DATE
		No.	
KHA PROJECT 149973004 DATE 02/09/2023 SCALE AS SHOWN DESIGNED BY M/G DRAWN BY CML CHECKED BY M/G		LICENSED PROFESSIONAL MARCUS I. DEIBER, P.E. FL LICENSE NUMBER 89199	M/G DATE:
GENERAL CONSTRUCTION DETAILS		TOWN OF WINDERMERE	
WINDERMERE DOWNTOWN PROPERTY		SHEET NUMBER C8.0	

Plotted By: Geber, Marcus - Sheet Set: Windermere Downtown Property - Layout: C8.1 - GENERAL CONSTRUCTION DETAILS - May 03, 2023 - 06:19:13pm - K:\VRL_GVL\14973004-Windermere Downtown Property\CADD\CONSTR\PlanSheets\C8.0 - GENERAL CONSTRUCTION DETAILS.dwg
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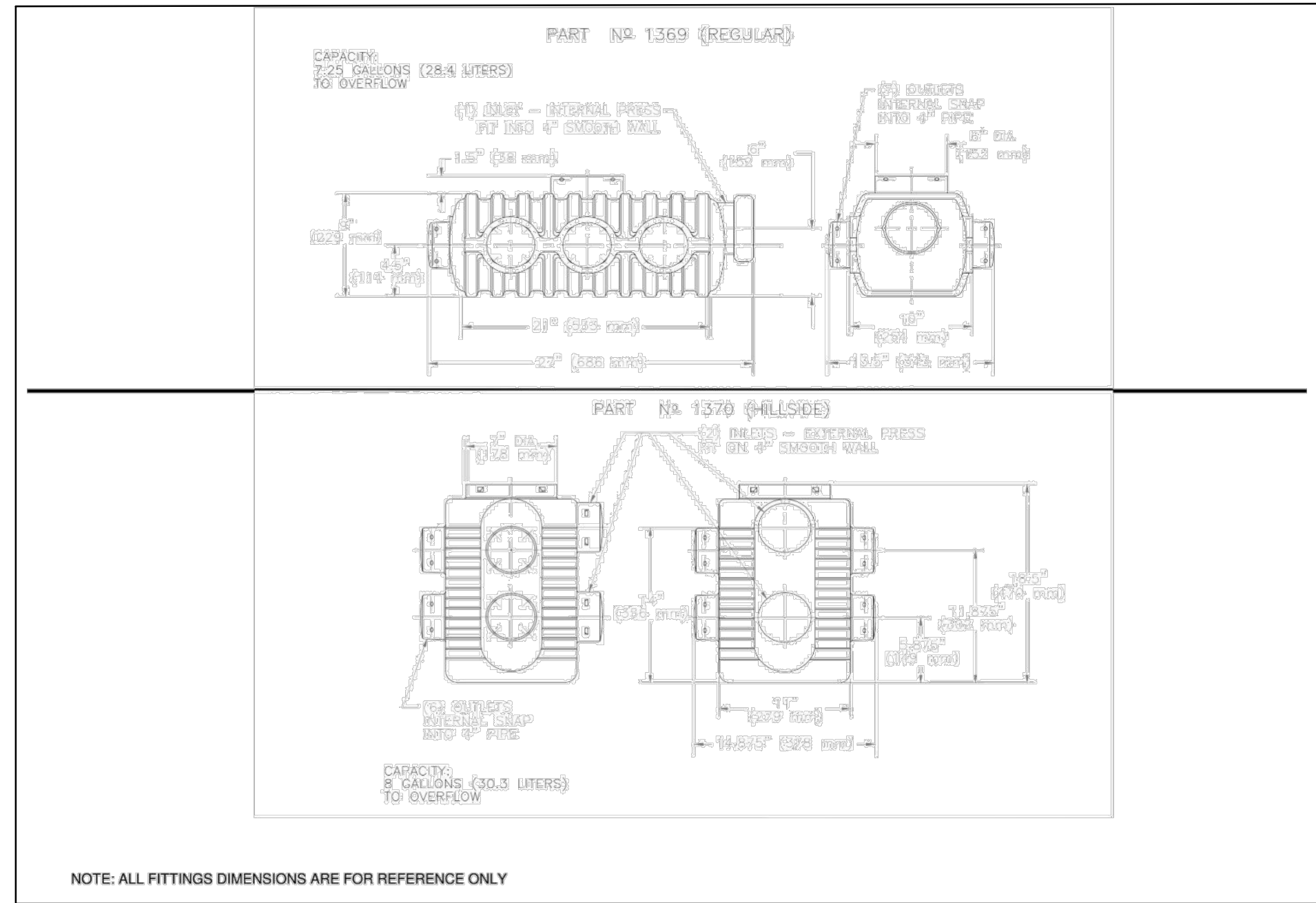


- NOTES:**
- EXCAVATE AND LEVEL INSTALLATION AREAS.
 - SMOOTH IRREGULARITIES IN THE EXCAVATION. A LEVEL, FLAT SURFACE IS REQUIRED.
 - INSTALL ARC LEACHING CHAMBERS IN ADJACENT ROWS TO COVER DESIRED AREA.
 - INSTALL UNIVERSAL END CAP AND SECURE IN PLACE WITH BACKFILL.
 - INSTALL 4" PIPE TO EACH ROW OF ARC CHAMBER USING KNOCKOUTS PROVIDED IN THE UNIVERSAL END CAPS.
 - ENDS OF ROWS MAY BE CONNECTED WITH PIPING TO IMPROVE DISTRIBUTION.
 - FILL PERIMETER AND INTERIOR SIDEWALL AREAS TO TOP OF CHAMBERS AND WALK INTO PLACE. AVOID LARGE ROCKS OR DEBRIS IN COVER MATERIAL.
 - COVER ARC LEACHING CHAMBERS TO A MINIMUM OF 12" OF GRANULAR OVER AFTER CONSOLIDATION FOR H-10 APPLICATIONS. AVOID LARGE ROCKS OR DEBRIS IN COVER MATERIAL. COVER HEIGHTS AND LIVE LOADING LIMITS ARE IMPACTED BY BOTH SOIL TYPE AND COMPACTION REQUIREMENTS. CONTACT ADS WHEN POOR SOILS ARE ENCOUNTERED AND FOR MAXIMUM FILL HEIGHTS. LIVE LOAD CONDITIONS ARE NOT RECOMMENDED.

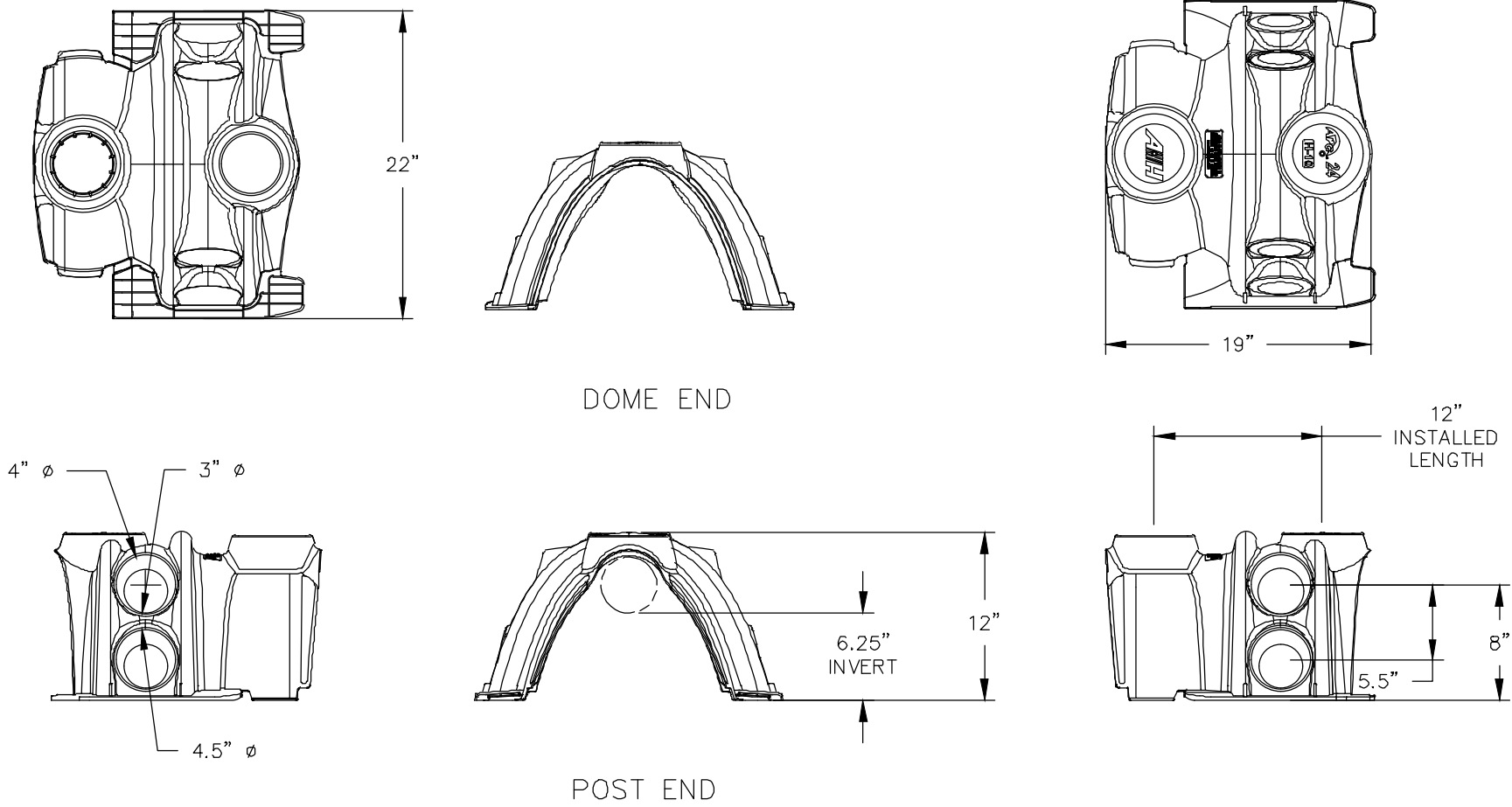
ARC 24 CLUSTER INSTALLATION
NTS



ARC 24 CHAMBER AND END CAP
NTS



DISTRIBUTION BOXES
NTS



ARC 24 SIDE PORT COUPLER
NTS

157 1/2"

149 1/2"

75"

66"

4"

39"

4" DIA. HOLE

STRUCTURAL RIB

INLET

81 1/4"

11 1/2"

63 1/2"

73"

6"

OUTLET

SIDE VIEW

END VIEW

TANK: CATEGORY 4, 6" 2180 GALLON 2 COMPARTMENT TANK REINFORCED WITH #4 STEEL 12" O.C. BOTH WAYS. 6" WALLS AND 6" BOTTOM. INLET AND OUTLET RESILIENT CONNECTORS PER ASTM-923-98. CONNECTORS MUST BE USED WITH APPROVED CLAMP. CONNECTOR WILL ACCEPT 6" PVC PIPE.

LIDS: 5" LID WITH 1-22" ROUND MANHOLE COVER AT EACH END OF TANK
8" LID WITH 1-22" ROUND MANHOLE COVER AT EACH END OF TANK
BOTH LIDS ARE REINFORCED WITH GRADE 60 REBAR.

TANK & LIDS: 4000 PSI CONCRETE AT 28 DAYS

IMPRINTED ON INLET END OF TANK:
LEGEND: FSI2180 STATE APPROVAL: 01-011-46D-C4

WEIGHTS: TANK ONLY 20,657
TANK W/ 5" LID 24,869
TANK W/ 8" LID 29,081

THIS TANK IS RATED FOR H-20 LOADING WHEN USED WITH 8" TRAFFIC LID AND TANK BURIAL DEPTH IS AT LEAST 18" BELOW GROUND SURFACE.

THIS TANK COMPLIES WITH SECTION 1003.5 OF THE 2007 FLORIDA PLUMBING CODE.

INTERCEPTOR CAPACITY PER 1003.5.1 IS SITE SPECIFIC.

THIS SEWAGE TREATMENT RECEPTACLE HAS BEEN DESIGNED, CONSTRUCTED AND STRUCTURALLY TESTED IN ACCORDANCE WITH CHAPTER 64E-6.013, FLORIDA ADMINISTRATIVE CODE, (FAC) DATED APRIL 28, 2010.

DRAWING NOT TO SCALE

FLORIDA SEPTIC, INC.
P.O. BOX 545
HAWTHORNE, FLORIDA 32640
(800) 940-8265

MODEL: 6" 2180 GAL. TANK

REVISED: 05/01/2011

APPROVAL DATE: 04/25/2008

193 1/2"

187 1/2"

80"

71"

5"

42"

4" DIA. HOLE

STRUCTURAL RIB

INLET

105 1/8"

11 1/2"

68 1/2"

99"

6"

OUTLET

SIDE VIEW

END VIEW

TANK: CATEGORY 4, 6" 4150 GALLON 2 COMPARTMENT TANK REINFORCED WITH #4 STEEL 12" O.C. BOTH WAYS. 6" WALLS AND 6" BOTTOM. INLET AND OUTLET RESILIENT CONNECTORS PER ASTM-923-98. CONNECTORS MUST BE USED WITH APPROVED CLAMP. CONNECTOR WILL ACCEPT 6" PVC PIPE.

LIDS: 5" LID WITH 1-22" ROUND MANHOLE COVER AT EACH END OF TANK
8" LID WITH 1-22" ROUND MANHOLE COVER AT EACH END OF TANK
BOTH LIDS ARE REINFORCED WITH GRADE 60 REBAR.

TANK & LIDS: 4000 PSI CONCRETE AT 28 DAYS

IMPRINTED ON INLET END OF TANK:
LEGEND: FSI4150 STATE APPROVAL: 01-011-71D-C4

WEIGHTS: TANK ONLY 30,307
TANK W/ 5" LID 38,669
TANK W/ 8" LID 43,687

THIS TANK IS RATED FOR H-20 LOADING WHEN USED WITH 8" TRAFFIC LID AND TANK BURIAL DEPTH IS AT LEAST 18" BELOW GROUND SURFACE.

THIS TANK COMPLIES WITH SECTION 1003.5 OF THE 2007 FLORIDA PLUMBING CODE.

INTERCEPTOR CAPACITY PER 1003.5.1 IS SITE SPECIFIC.

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DRAWING NOT TO SCALE

FLORIDA SEPTIC, INC.
P.O. BOX 545
HAWTHORNE, FLORIDA 32640
(800) 940-8265

MODEL: 6" 4150 GAL. TANK

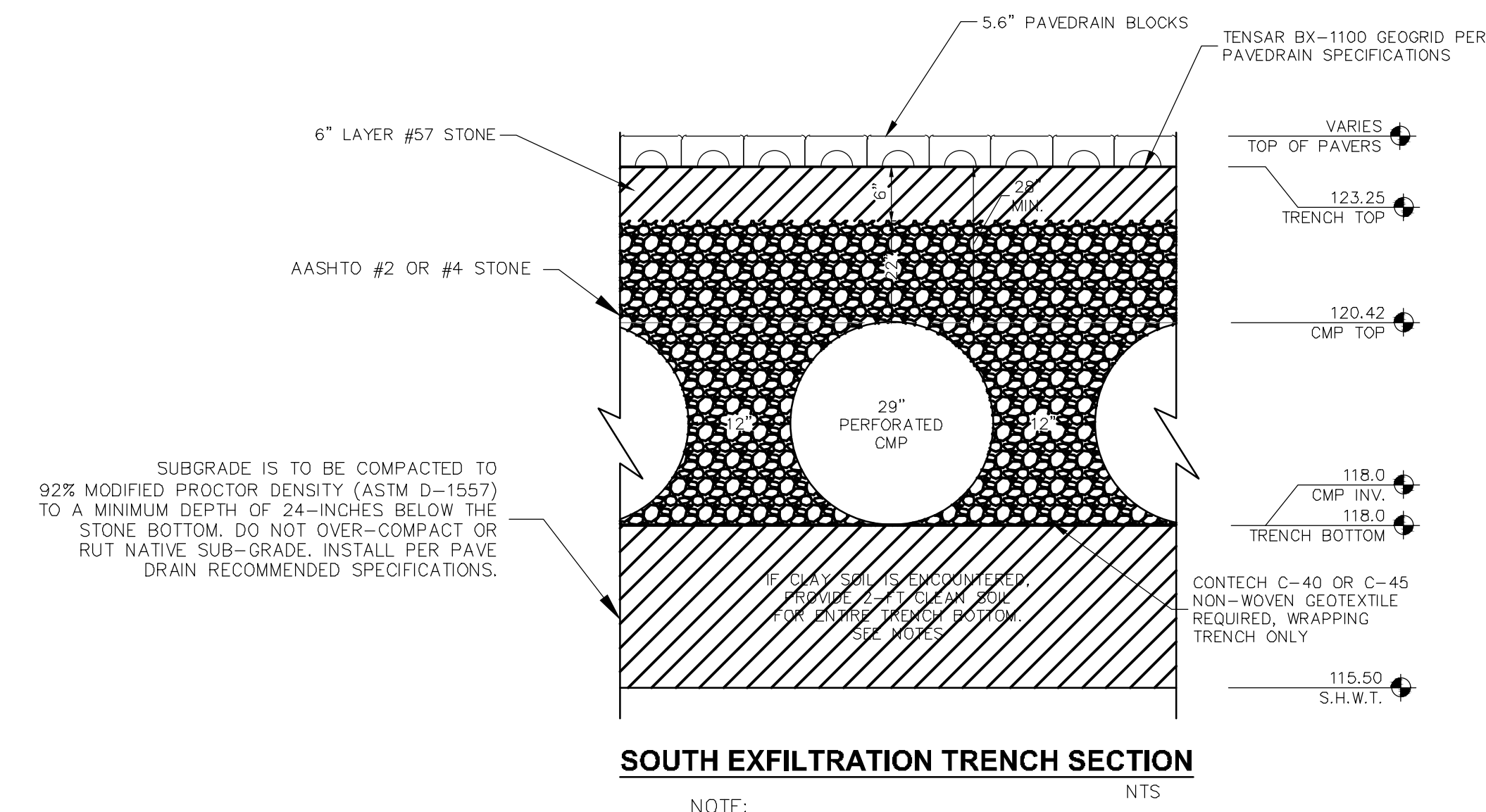
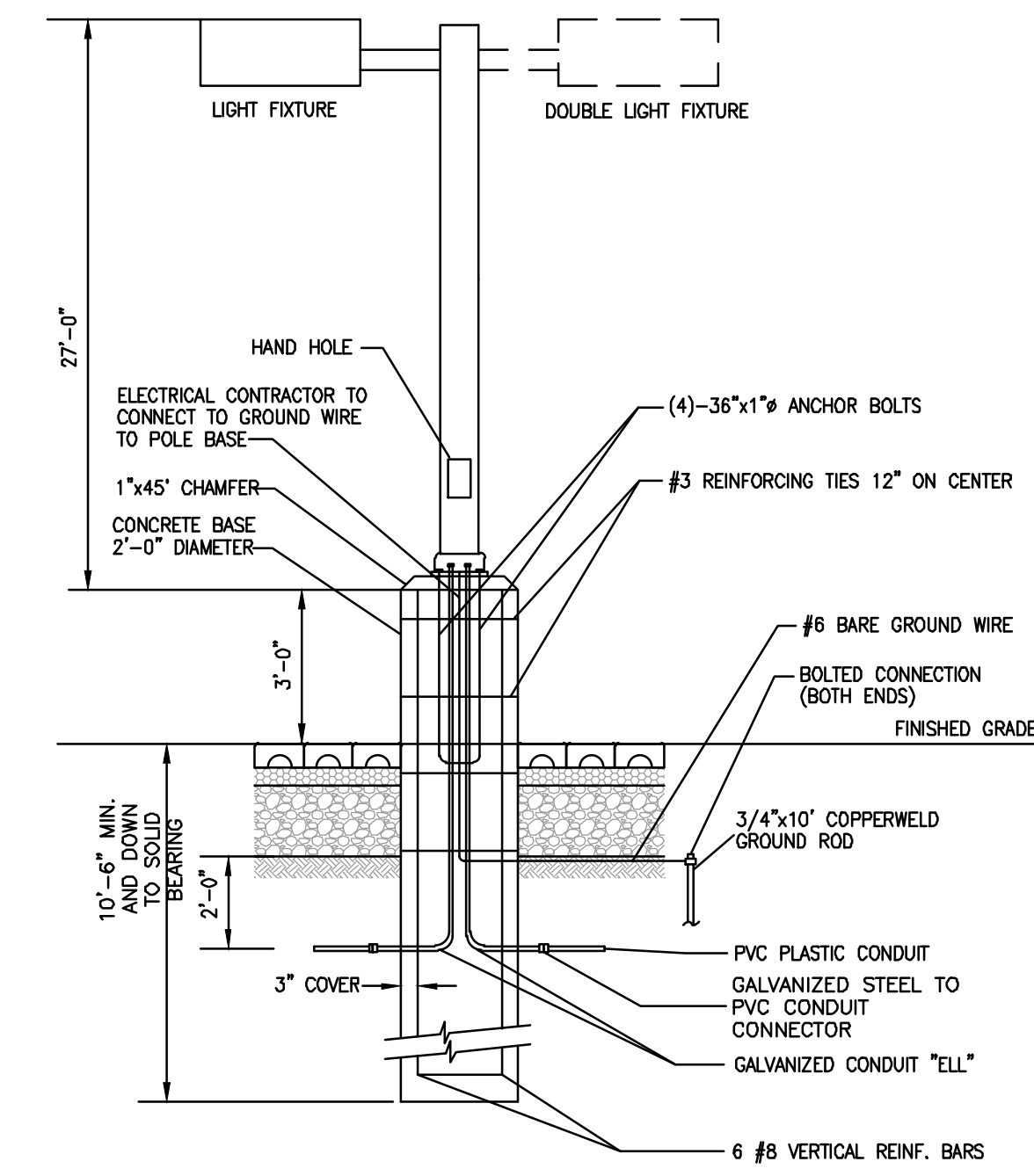
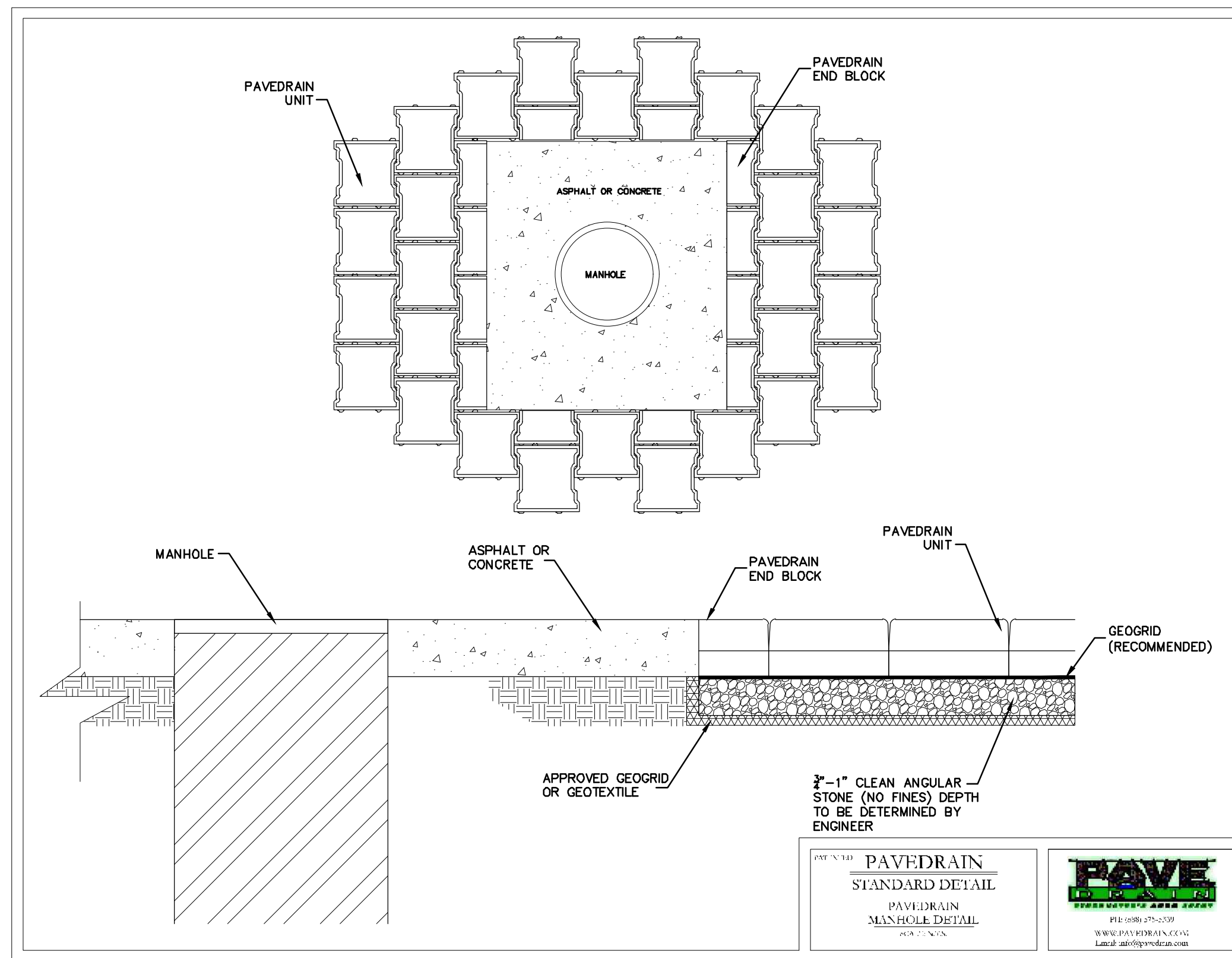
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APPROVAL DATE: 02/14/2008

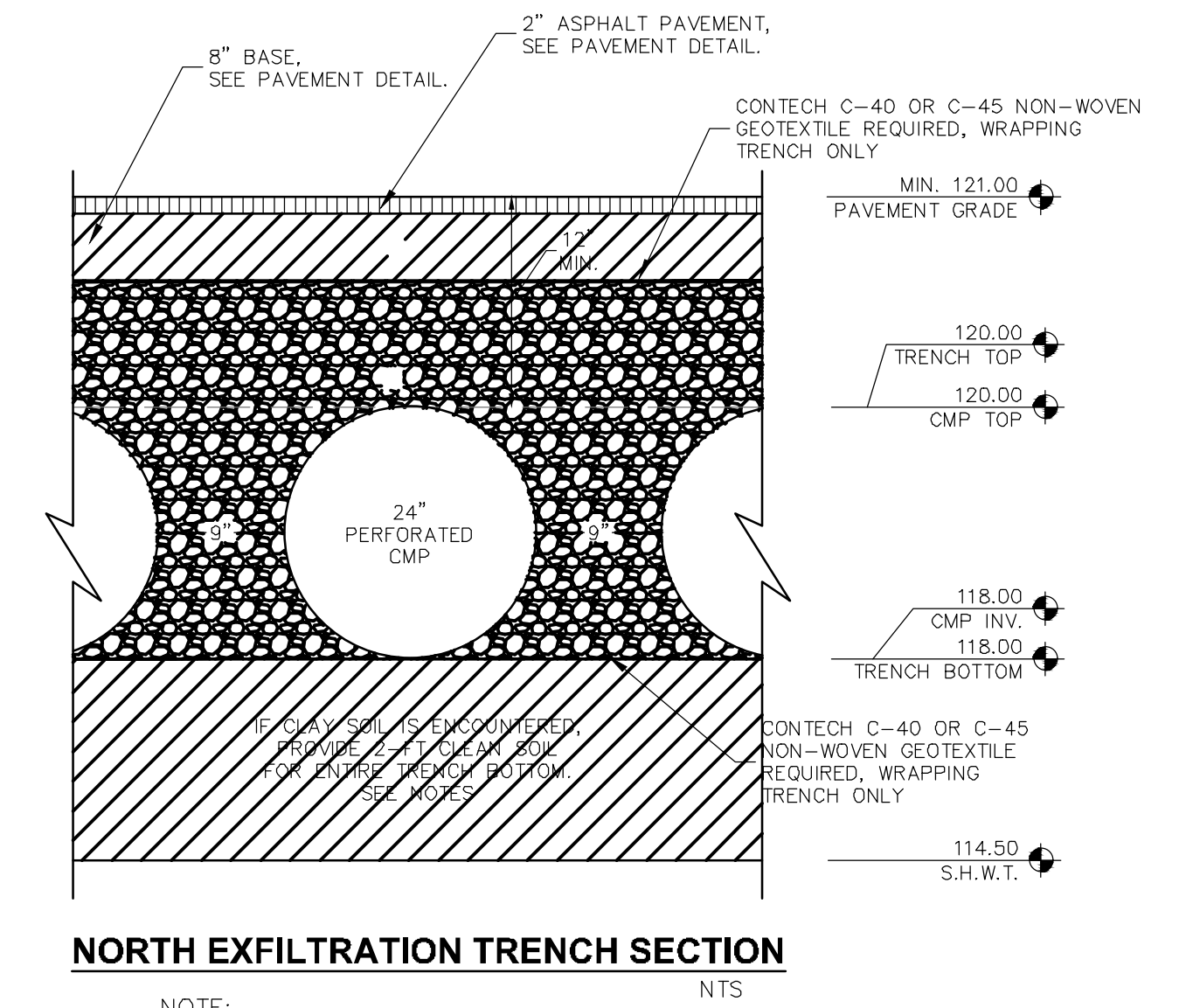
KHA PROJECT 149973004		DATE 02/09/2023		SCALE AS SHOWN		DESIGNED BY M/G		DRAWN BY CML		CHECKED BY M/G		DATE	
LICENSURE PROFESSIONAL		MARCUS I. GEIBER, P.E.		FL LICENSE NUMBER 89199		WWW.KIMLEY-HORN.COM		REGISTRY No. 35106		REVISIONS		No.	
GENERAL CONSTRUCTION DETAILS												TOWN OF WINDERMERE	
WINDERMERE DOWNTOWN PROPERTY												SHEET NUMBER C8.1	

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 PHONE: 407-898-1511
 WWW.KIMLEY-HORN.COM

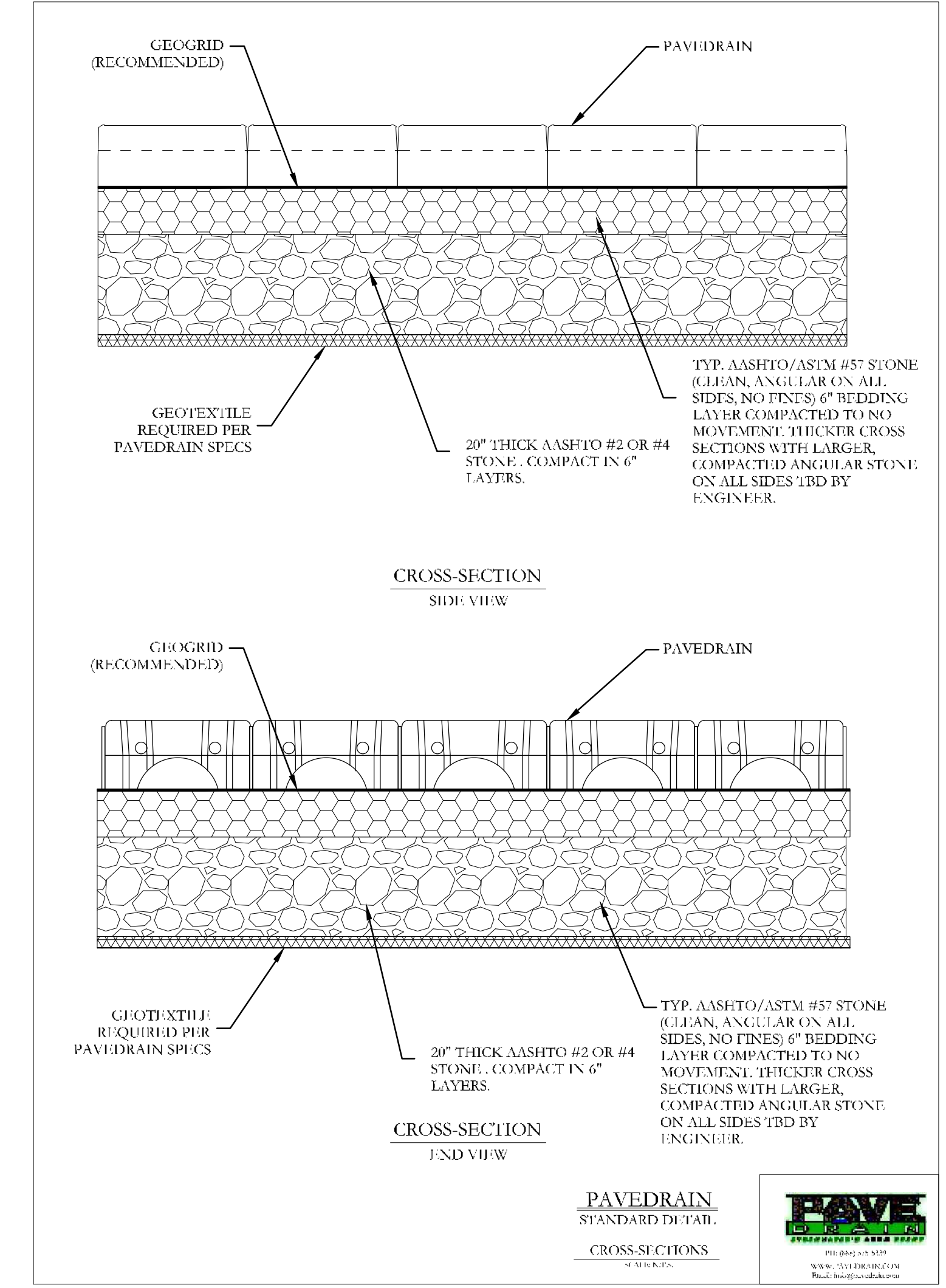
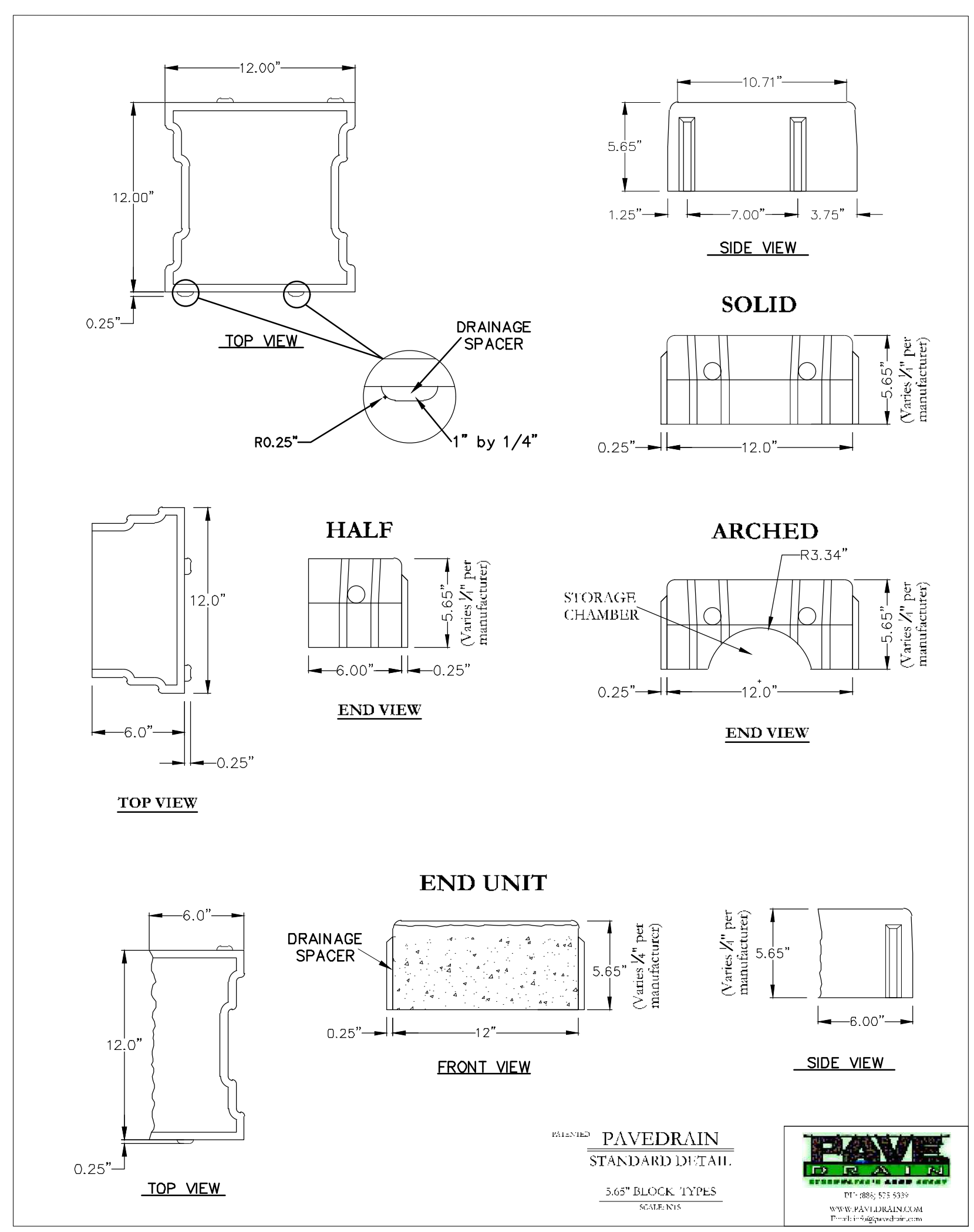
Plotted By: Geber, Marcus - Sheet Set: Windermere Downtown Property - Layout: C8.2 GENERAL CONSTRUCTION DETAILS - MAY 03, 2023 06:19:27pm - K:\V\Civil\148973004-Windermere Downtown Property\CADD\CONSTR\PlanSheets\C8.0 - GENERAL CONSTRUCTION DETAILS.dwg
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NOTE:
 1. TRENCH BOTTOM FILL SHALL BE CLEAN, INORGANIC, GRANULAR SOIL (FINE SAND) WITH A FINES CONTENT OF NO MORE THAN 5 PERCENT. CARE SHOULD BE TAKEN NOT TO OVER-COMPACT THE BOTTOM DURING EXCAVATION AND GRADING.



NOTE:
 1. TRENCH BOTTOM FILL SHALL BE CLEAN, INORGANIC, GRANULAR SOIL (FINE SAND) WITH A FINES CONTENT



No.	REVISIONS	DATE	BY

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 189 S. ORANGE AVENUE, SUITE 1000, ORLANDO, FL 32801
 PHONE: 407-898-1511
 WWW.KIMLEY-HORN.COM REGISTRY No. 35106

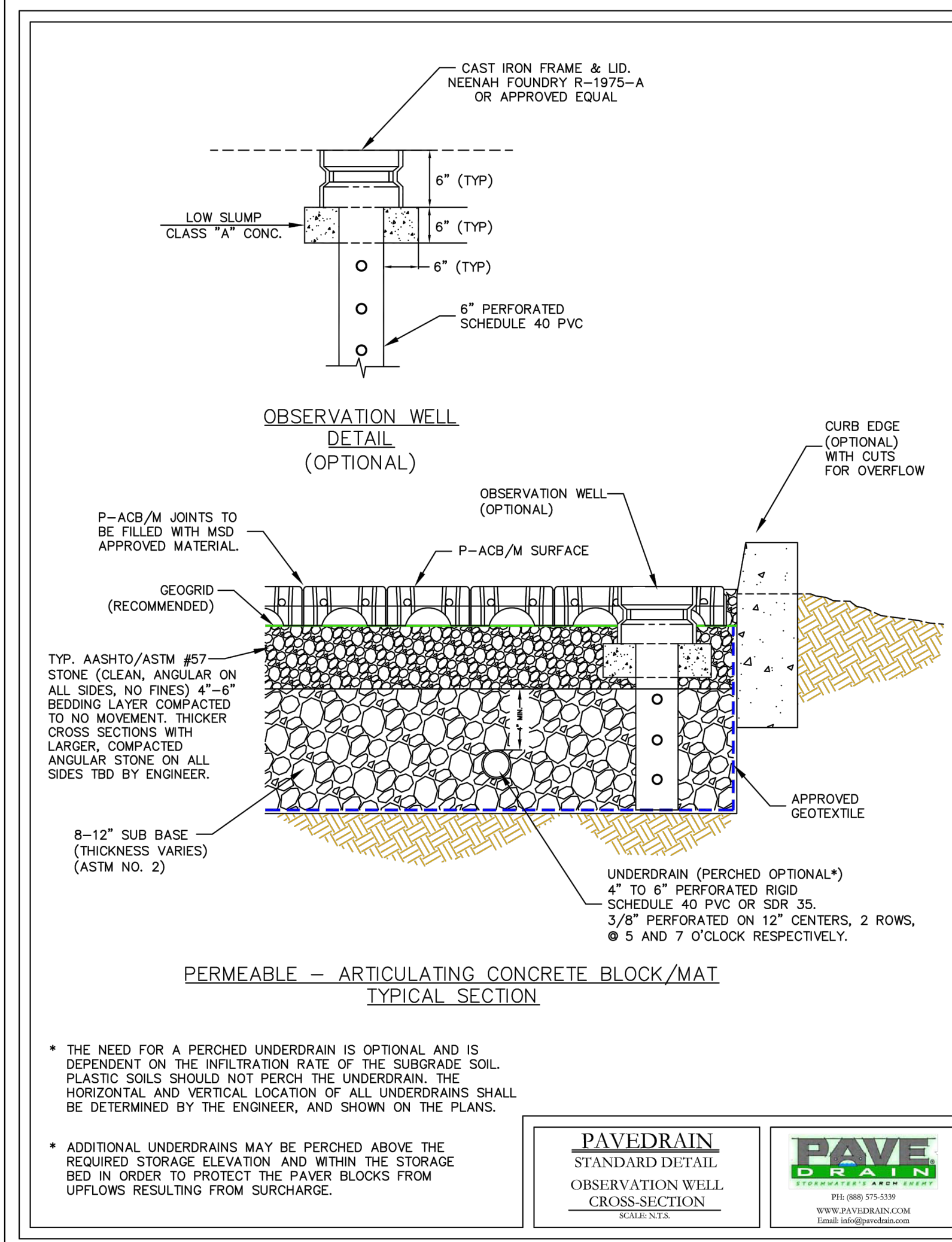
LICENSED PROFESSIONAL	MARCUS I. GEIBER, P.E.
KHA PROJECT	148973004
DATE	02/09/2023
SCALE	AS SHOWN
DESIGNED BY	MIG
DRAWN BY	CML
CHECKED BY	MIG
FL LICENSE NUMBER	89199

GENERAL CONSTRUCTION DETAILS

WINDERMERE DOWNTOWN PROPERTY

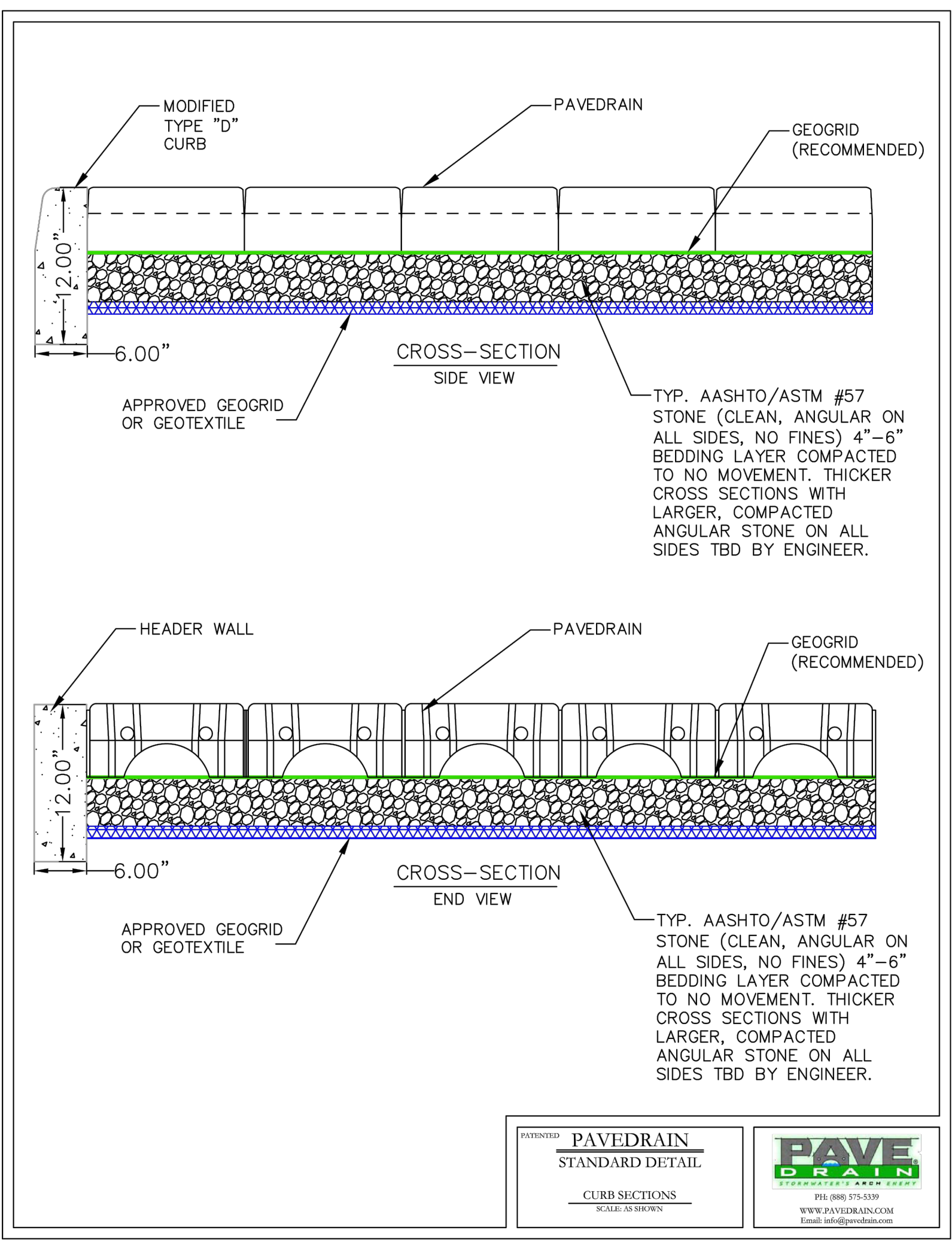
CONTRACTOR NOTE:
 1. CONSTRUCTION AND INSTALLATION SHALL BE PERFORMED BY A CONTRACTOR CERTIFIED BY THE PRODUCT MANUFACTURER AND/OR FAMILIAR WITH AND FOLLOWING THE RECOMMENDATIONS AND PROCEDURES STATED WITHIN THE PAVEDRAIN INSTALLATION MANUAL (LATEST ED.) AND THE PAVEDRAIN NOTES CONTAINED WITHIN SHEET C9.3.
 2. WITHIN 2 WEEKS PRIOR TO THE INSTALLATION OF THE PAVEDRAIN P-ACB SYSTEM, CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH CONTRACTOR PERFORMING INSTALLATION, ENGINEER, SUPPLIER, AND ANY OTHER APPROPRIATE REPRESENTATIVE.

Plotted By: Delier, Marcus - Sheet Set: Windermere - Downtown Property - Layout: 08.3 - GENERAL CONSTRUCTION DETAILS - MDY 03.2023 - DB: ID: 322pm - K:\ORL - Civil\149973004-Windermere - Downtown Property\CADD\CONSTR\PlanSheets\C8.0 - GENERAL CONSTRUCTION DETAILS.dwg
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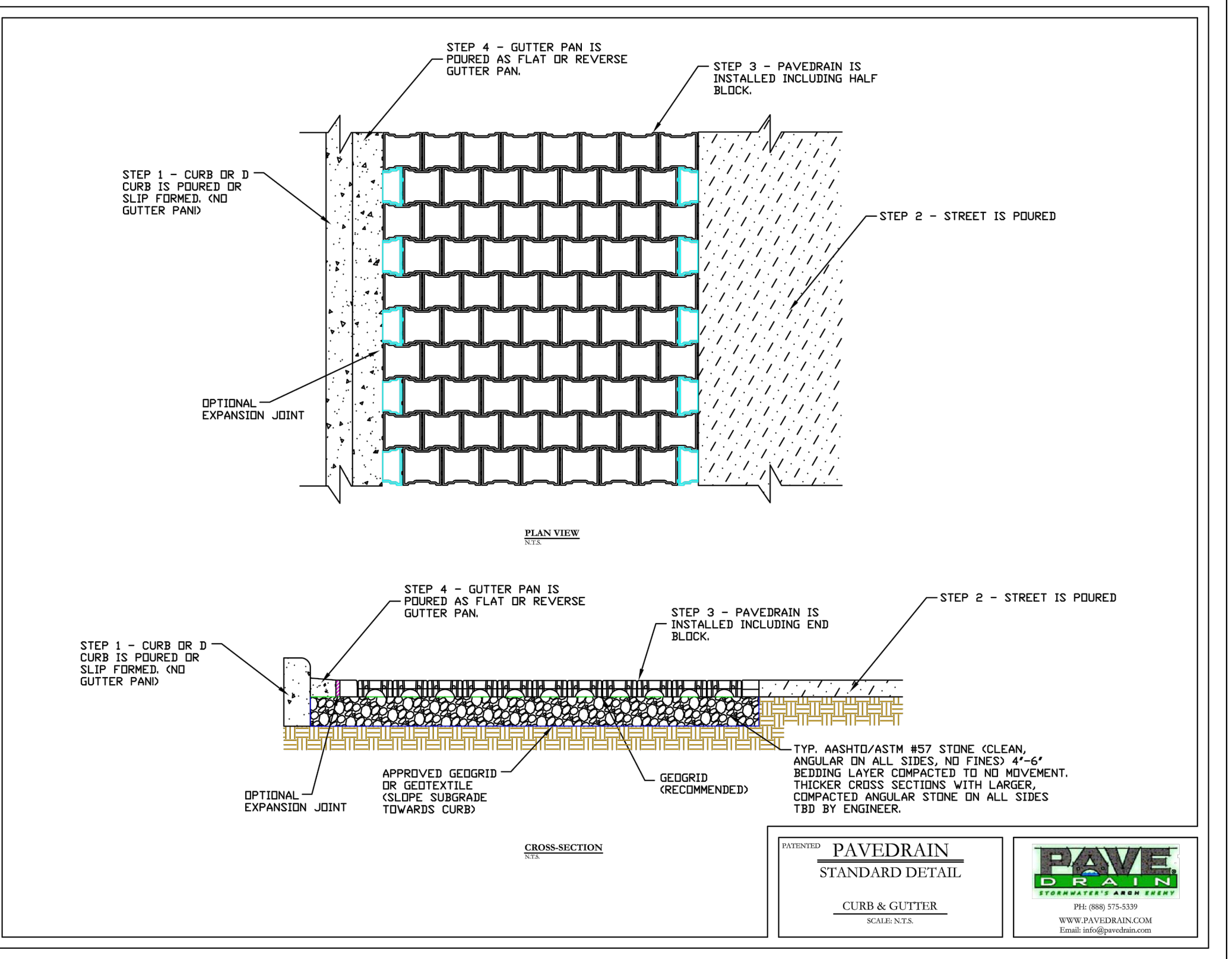
PAVEDRAIN STANDARD DETAIL OBSERVATION WELL CROSS-SECTION
SCALE: N.T.S.

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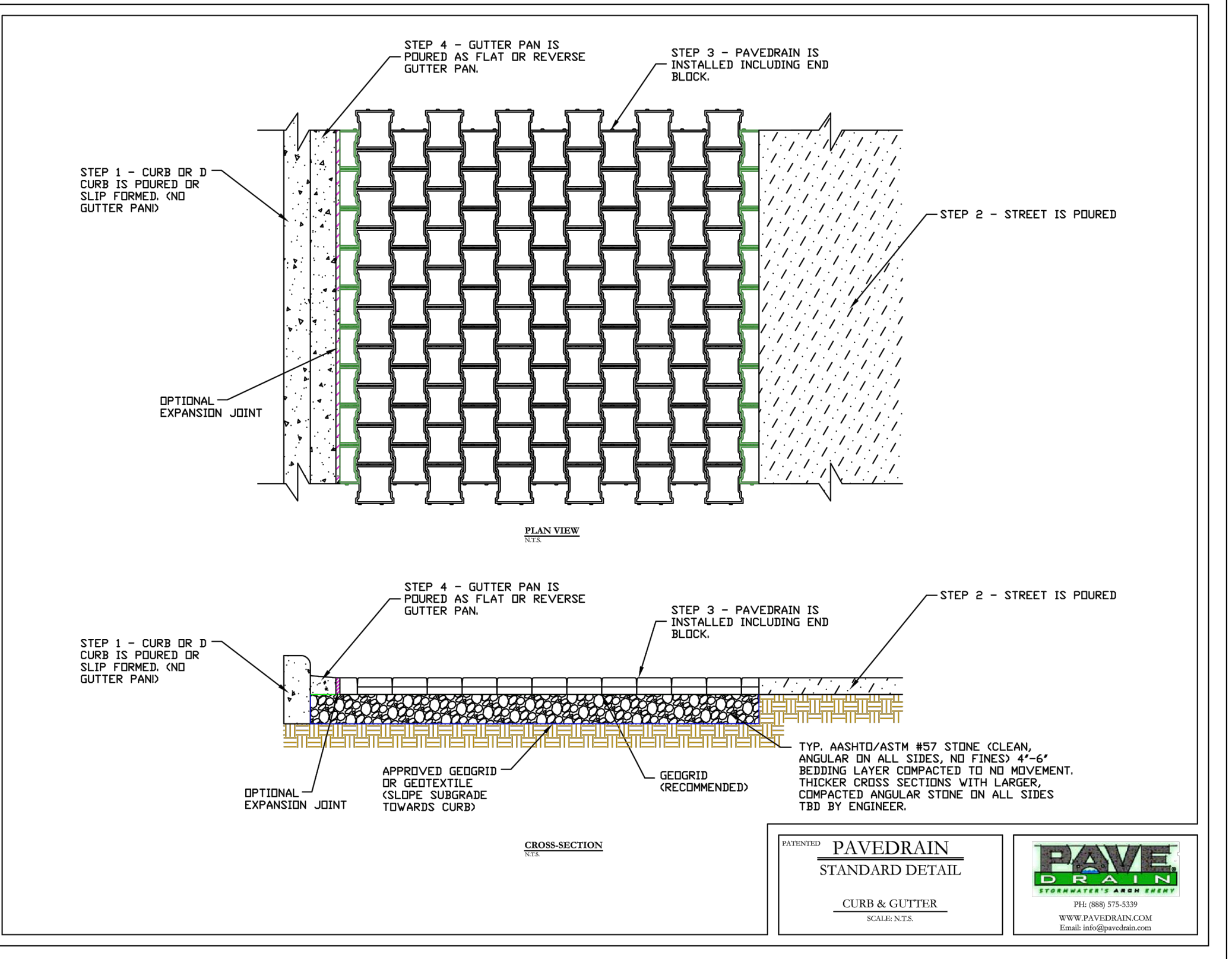
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SCALE: N.T.S.

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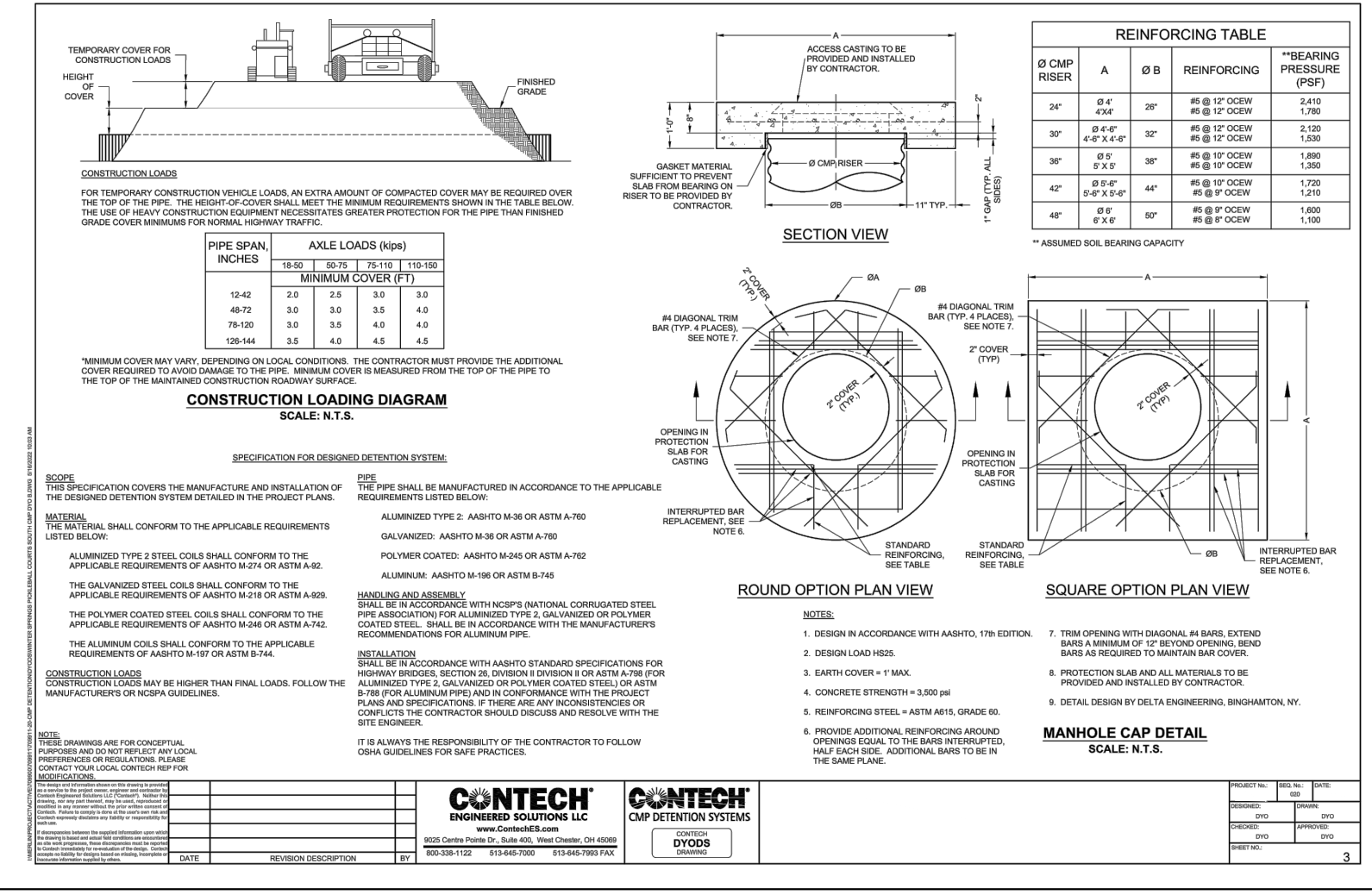
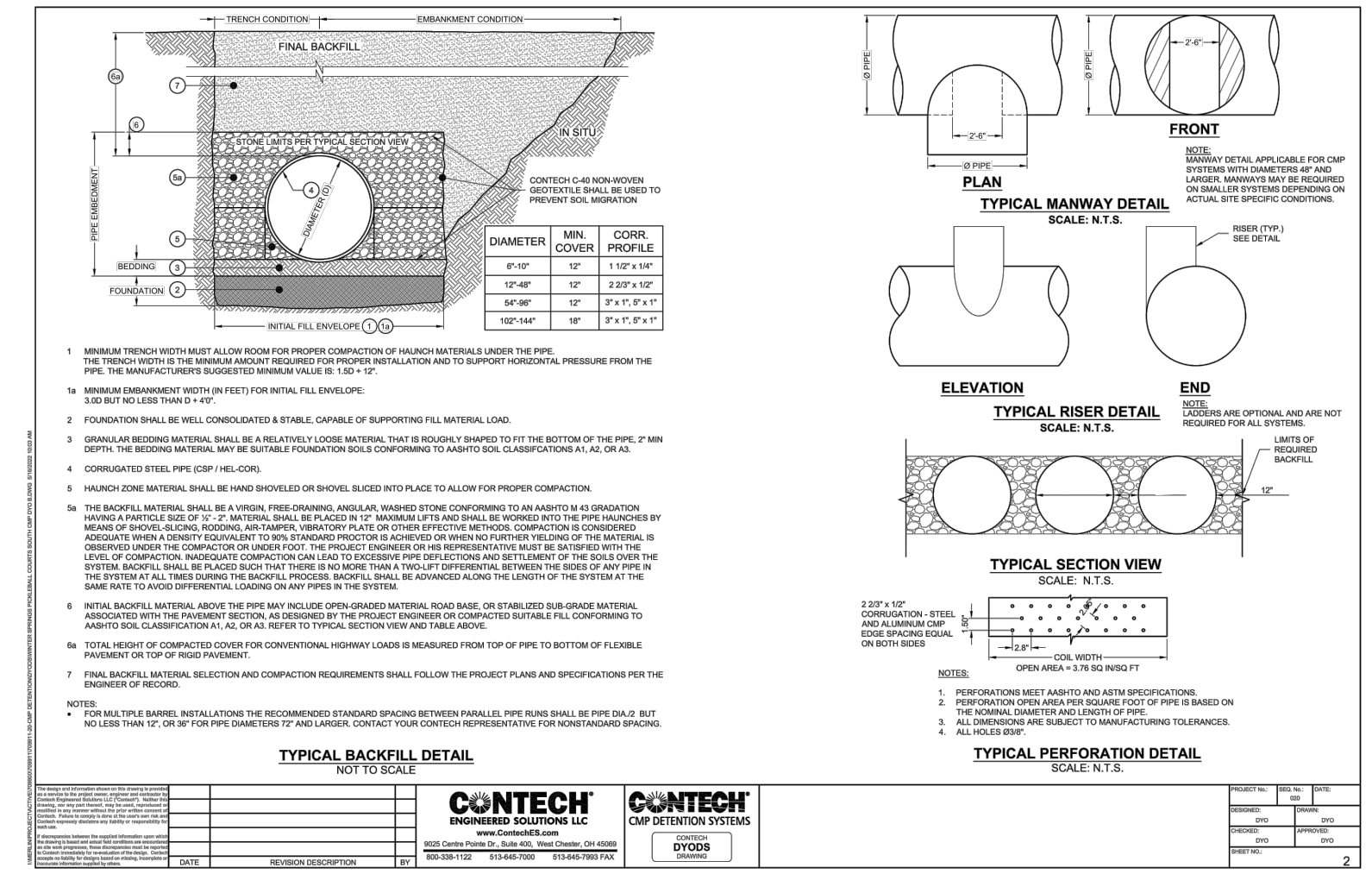
PAVEDRAIN STANDARD DETAIL CURB & GUTTER
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NO.	REVISIONS	DATE	BY

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LICENSED PROFESSIONAL
MARCUS I. DELIER, P.E.
DATE: 02/09/2023
SCALE: AS SHOWN
DESIGNED BY: M/G
DRAWN BY: CML
CHECKED BY: M/G
DATE: _____

GENERAL CONSTRUCTION DETAILS

WINDERMERE DOWNTOWN PROPERTY

TOWN OF WINDERMERE

SHEET NUMBER
C8.3

CONTRACTOR NOTE:

- CONSTRUCTION AND INSTALLATION SHALL BE PERFORMED BY A CONTRACTOR CERTIFIED BY THE PRODUCT MANUFACTURER AND/OR FAMILIAR WITH AND FOLLOWING THE RECOMMENDATIONS AND PROCEDURES STATED WITHIN THE PAVEDRAIN INSTALLATION MANUAL (LATEST ED.) AND THE PAVEDRAIN NOTES CONTAINED WITHIN SHEET C8.4.
- WITHIN 2 WEEKS PRIOR TO THE INSTALLATION OF THE PAVEDRAIN P-ACB SYSTEM, CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH CONTRACTOR PERFORMING INSTALLATION, ENGINEER, SUPPLIER, AND ANY OTHER APPROPRIATE REPRESENTATIVE.

Plotted By: Geller, Marcus. Sheet: Windermere Downtown Property. Layout: 09.0 UTILITY DETAILS. May 03, 2023. 06:20:00pm. K:\OR_CWA\49972004-Windermere Downtown Property\CADD\CONSTR\PlanSheets\CX-UTILITY-DETAILS.dwg
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ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A **FIGURE GN**
DATE: February 11, 2011

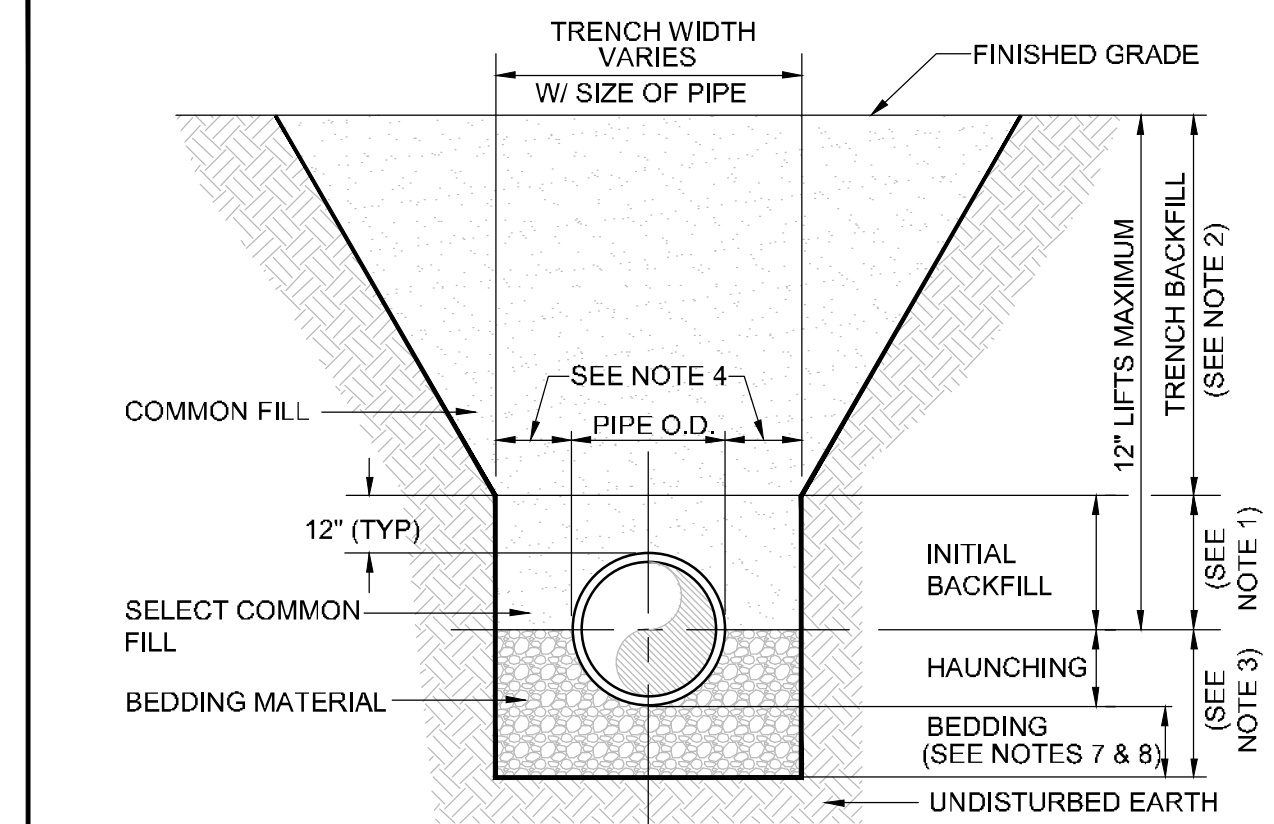
OCU GENERAL NOTES:

- THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN PROXIMITY OF WATER MAINS, WASTEWATER FORCE MAINS, GRAVITY MAINS AND RECLAIMED WATER MAINS. MAIN LOCATIONS SHOWN ON PLANS MAY NOT BE EXACT. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING UTILITY LOCATIONS.
- SHOULD A PIPE EMERGENCY OCCUR, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OCU DISPATCH OPERATOR (407-836-2777) AND THE OCU INSPECTOR.
- THE CONTRACTOR SHALL NOTIFY THE OCU CONSTRUCTION DIVISION AT LEAST SEVEN DAYS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION PROJECT BY CALLING (407) 254-9798.
- THE CONTRACTOR SHALL NOTIFY THE OCU CONSTRUCTION DIVISION AT LEAST 48 HOURS PRIOR TO ANY UTILITIES CONSTRUCTION BY CALLING (407) 254-9798.
- THE MATERIALS, PRODUCTS, AND CONSTRUCTION OF ALL UTILITIES CONNECTING TO THE OCU SYSTEM SHALL BE IN CONFORMANCE WITH THE ORANGE COUNTY UTILITIES STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL.
- ALL OCU MAINS AND FACILITIES WITHIN THE LIMITS OF THE PROJECT SHALL BE SUPPORTED AND PROTECTED AGAINST DAMAGE DURING CONSTRUCTION.
- THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, SHALL IMMEDIATELY REPAIR ALL DAMAGES TO OCU MAINS AND FACILITIES. IF THE REPAIR IS NOT MADE IN A TIMELY MANNER, AS DETERMINED BY OCU, OCU MAY PERFORM REQUIRED REPAIRS AND CLEANUP. THE CONTRACTOR WILL BE CHARGED FOR ALL EXPENSES ASSOCIATED WITH THE REPAIR.
- THE CONTRACTOR SHALL ADJUST ALL EXISTING OCU MAINS AND FACILITIES IN CONFLICT WITH NEW GRADE, NEW OR ALTERED ROADWAYS, SIDEWALKS, DRIVEWAYS, OR STORM WATER IMPROVEMENTS. OCU FACILITIES TO BE ADJUSTED INCLUDE, BUT ARE NOT LIMITED TO PIPELINES, PUMP STATIONS, VALVE BOXES, AIR RELEASE VALVES, FIRE HYDRANTS, MANHOLE COVERS, AND METERS.
- ONLY OCU SHALL OPERATE OCU WATER, WASTEWATER, AND RECLAIMED WATER VALVES. THE CONTRACTOR SHALL COORDINATE VALVE OPERATION WITH THE OCU INSPECTOR. FOR OPERATION OF MAINS NOT OWNED BY OCU, IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE APPROPRIATE UTILITY REPRESENTATIVE.
- CONSTRUCTION ACTIVITIES SHALL NOT CAUSE INTERRUPTIONS IN WATER, WASTEWATER, OR RECLAIMED WATER SERVICE. THE CONTRACTOR SHALL COORDINATE PRE-APPROVED INTERRUPTIONS OF SERVICE WITH THE OCU INSPECTOR 7 WORKING DAYS IN ADVANCE.

- THE CONTRACTOR SHALL PROVIDE FOR BYPASSING AND/OR HAULING WASTEWATER DURING APPROVED INTERRUPTIONS OF WASTEWATER FLOWS AND CONNECTIONS. THE CONTRACTOR SHALL SUBMIT A BYPASS PLAN SIGNED AND SEALED BY A PROFESSIONAL ENGINEER TO OCU DEVELOPMENT ENGINEERING FOR APPROVAL PRIOR TO IMPLEMENTATION BY CONTRACTOR.
- ALL VALVES INSTALLED AS PART OF THIS CONSTRUCTION PROJECT SHALL REMAIN CLOSED DURING CONSTRUCTION. KEEP VALVES ON ALL WET TAPS CLOSED UNTIL CLEARED BY FDEP. DO NOT CONNECT NEWLY CONSTRUCTED WATER MAINS TO ANY EXISTING WATER MAINS UNLESS CLEARED BY FDEP AND OCU.
- THE CONTRACTOR SHALL PROVIDE A JUMPER ASSEMBLY WITH A BACKFLOW PREVENTER FOR MAKING TEMPORARY CONNECTIONS TO AN EXISTING POTABLE WATER SOURCE IN ORDER TO CHLORINATE AND FLUSH NEW WATER MAINS WITH POTABLE WATER. ANY TEMPORARY POTABLE WATER CONNECTIONS TO RECLAIMED WATER OR FORCEMAIN SHALL ALSO BE EQUIPPED WITH A BACKFLOW PREVENTER.
- FOR PVC PIPE THAT WILL BE OWNED AND MAINTAINED BY OCU, NO PIPE BENDING IS ALLOWED. THE MAXIMUM ALLOWABLE TOLERANCE FOR JOINT DEFLECTION IS 0.75 DEGREES (3-INCHES PER JOINT PER 20 FT STICK OF PIPE.) ALIGNMENT CHANGE SHALL BE MADE ONLY WITH SLEEVES AND FITTINGS.
- FOR NON-PVC PIPE THAT WILL BE OWNED AND MAINTAINED BY OCU, LONG RADIUS CURVES, EITHER HORIZONTAL OR VERTICAL, MAY BE INSTALLED WITH STANDARD PIPE BY DEFLECTIONS AT THE JOINTS. MAXIMUM DEFLECTIONS AT PIPE JOINTS, FITTINGS AND LAYING RADIUS FOR THE VARIOUS PIPE LENGTHS SHALL NOT EXCEED 75 PERCENT OF THE PIPE MANUFACTURER'S RECOMMENDATION.

ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

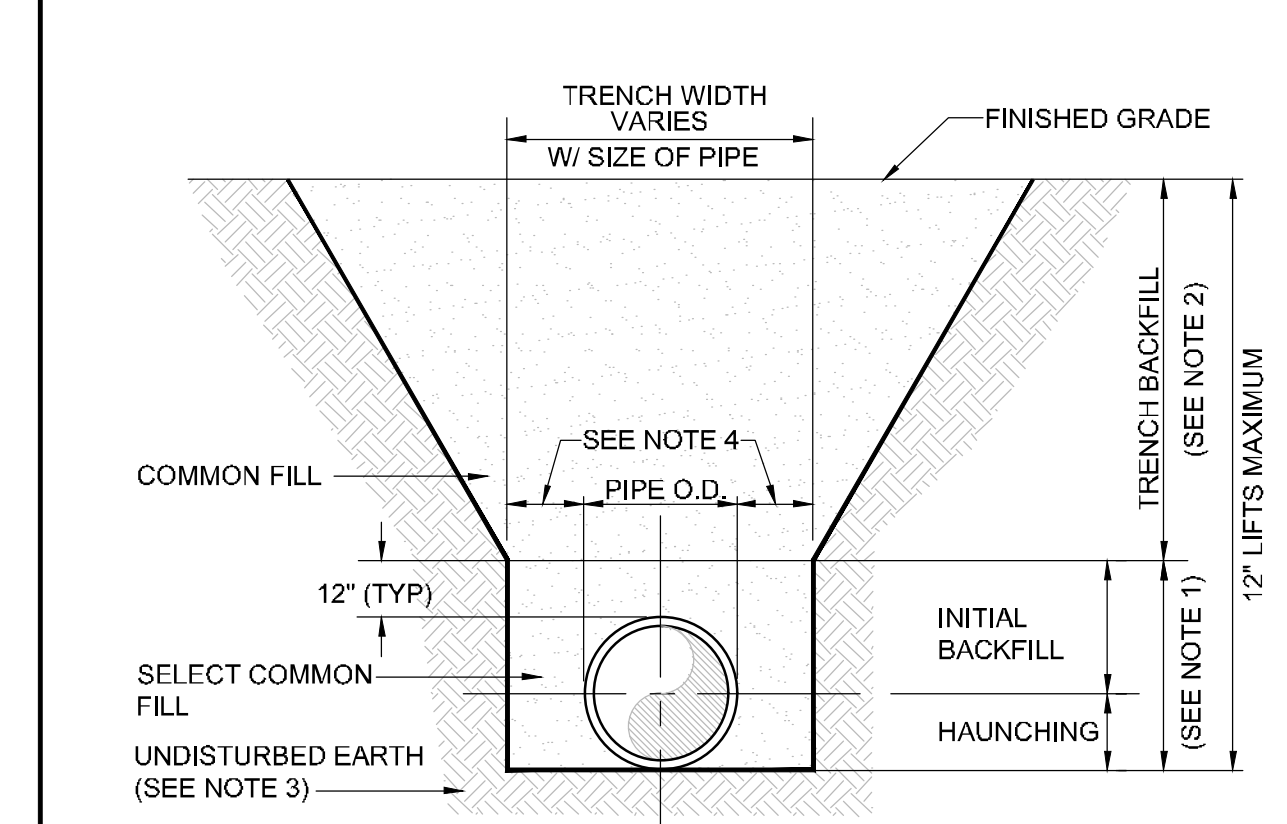
APPENDIX A **STANDARD DRAWINGS** **GENERAL**
DATE: February 11, 2011 **BEDDING AND TRENCHING - TYPE A** **FIGURE A101**



- NOTES:**
- INITIAL BACKFILL: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
 - TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
 - TYPE A BEDDING MATERIAL SHALL CONFORM TO FDOT NO. 57 AGGREGATE.
 - 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
 - WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
 - ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
 - BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER UP TO 12" AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
 - DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. UTILITIES SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
 - FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RW UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A **STANDARD DRAWINGS** **GENERAL**
DATE: February 11, 2011 **BEDDING AND TRENCHING - TYPE B** **FIGURE A102**



- NOTES:**
- INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
 - TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
 - PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY UTILITIES.
 - 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
 - WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
 - ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
 - FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A **STANDARD DRAWINGS** **GENERAL**
DATE: February 11, 2011 **RESTRAINED PIPE TABLE** **FIGURE A104-1**
WATER AND RECLAIMED WATER MAINS

TYPE	MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)									
	PIPE SIZE									
	4"	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	25	36	46	55	64	65	77	89	105	120
45° BEND	10	15	19	23	26	27	32	37	44	50
22-1/2° BEND	5	8	9	11	13	13	15	18	21	24
11-1/4° BEND	3	4	5	6	8	7	8	9	10	12
PLUG OR BRANCH OF TEE	53	74	97	117	135	138	166	194	231	265
VALVE	27	38	49	59	68	69	83	97	116	133
REDUCER	VARIES BY SIZE; TO BE DETERMINED BY THE DESIGN ENGINEER.									

- NOTES:**
- FITTINGS SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
 - INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN LENGTH SHOWN IN THE TABLE.
 - WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.
 - ALL INLINE VALVES SHALL BE RESTRAINED.
 - WHERE INTERNAL RESTRAINED JOINTS ARE USED, THE ENTIRE BELL SHALL BE PAINTED RED.
 - LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH PROCEDURES OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" GUIDELINES PUBLISHED BY DIPRA, USING THE ASSUMPTIONS SHOWN BELOW.

WORKING PRESSURE: 150 PSI
SOIL DESIGNATION: SM (SAND SILT)
LAYING CONDITIONS: 3
DEPTH OF COVER: 3 FT
SAFETY FACTOR: 1.5
CONVERSION FACTOR FOR PVC PIPE: 1.25

THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE-SPECIFIC SOIL DESIGNATIONS, LAYING CONDITIONS, PIPE MATERIAL, ETC. FOR DIP ENCASED IN POLYETHYLENE, INCREASE THE GIVEN VALUE BY A FACTOR OF 1.25.

ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A **STANDARD DRAWINGS** **GENERAL**
DATE: February 11, 2011 **RESTRAINED PIPE TABLE** **FIGURE A104-2**
WASTEWATER FORCE MAINS

TYPE	MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)									
	PVC PIPE SIZE									
	4"	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	18	24	31	38	43	55	65	75	88	100
45° BEND	8	10	13	15	18	23	26	31	38	43
22-1/2° BEND	4	5	6	8	9	11	13	15	18	20
11-1/4° BEND	2	3	4	5	6	8	9	10	11	13
PLUG OR BRANCH OF TEE	38	50	65	79	90	117	139	163	194	223
VALVE	19	25	32	40	45	59	70	82	98	112
REDUCER	VARIES BY SIZE; TO BE DETERMINED BY THE DESIGN ENGINEER.									

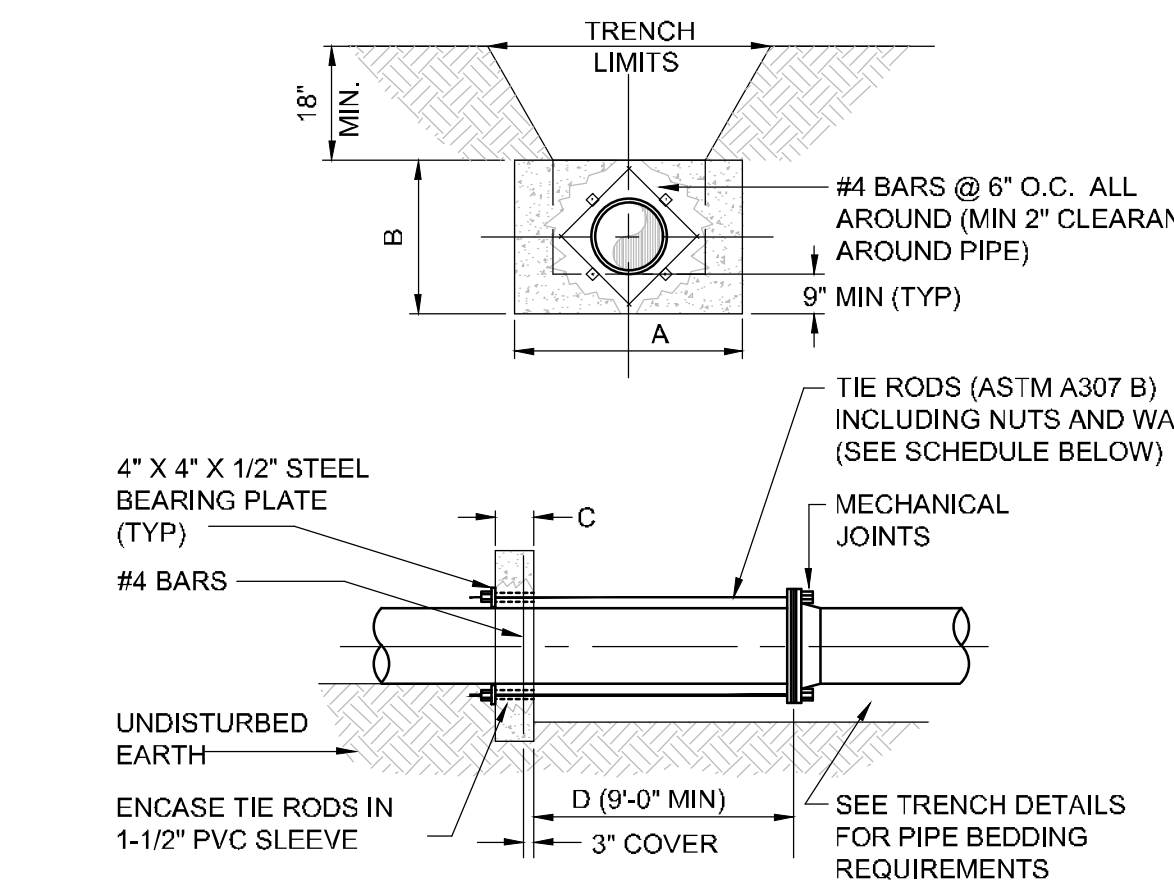
- NOTES:**
- FITTINGS SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
 - INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN LENGTH SHOWN IN THE TABLE.
 - WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.
 - ALL INLINE VALVES SHALL BE RESTRAINED.
 - WHERE INTERNAL RESTRAINED JOINTS ARE USED, THE ENTIRE BELL SHALL BE PAINTED RED.
 - LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH PROCEDURES OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" GUIDELINES PUBLISHED BY DIPRA, USING THE ASSUMPTIONS SHOWN BELOW:

WORKING PRESSURE: 100 PSI
SOIL DESIGNATION: SM (SAND SILT)
LAYING CONDITIONS: 3
DEPTH OF COVER: 3 FT
SAFETY FACTOR: 1.5
CONVERSION FACTOR FOR PVC PIPE: 1.25

THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE-SPECIFIC PARAMETERS, SUCH AS SOIL DESIGNATIONS AND LAYING CONDITIONS.

ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A **STANDARD DRAWINGS** **GENERAL**
DATE: February 11, 2011 **THRUST COLLAR (150 psi)** **FIGURE A105-1**
WATER AND RECLAIMED WATER MAINS



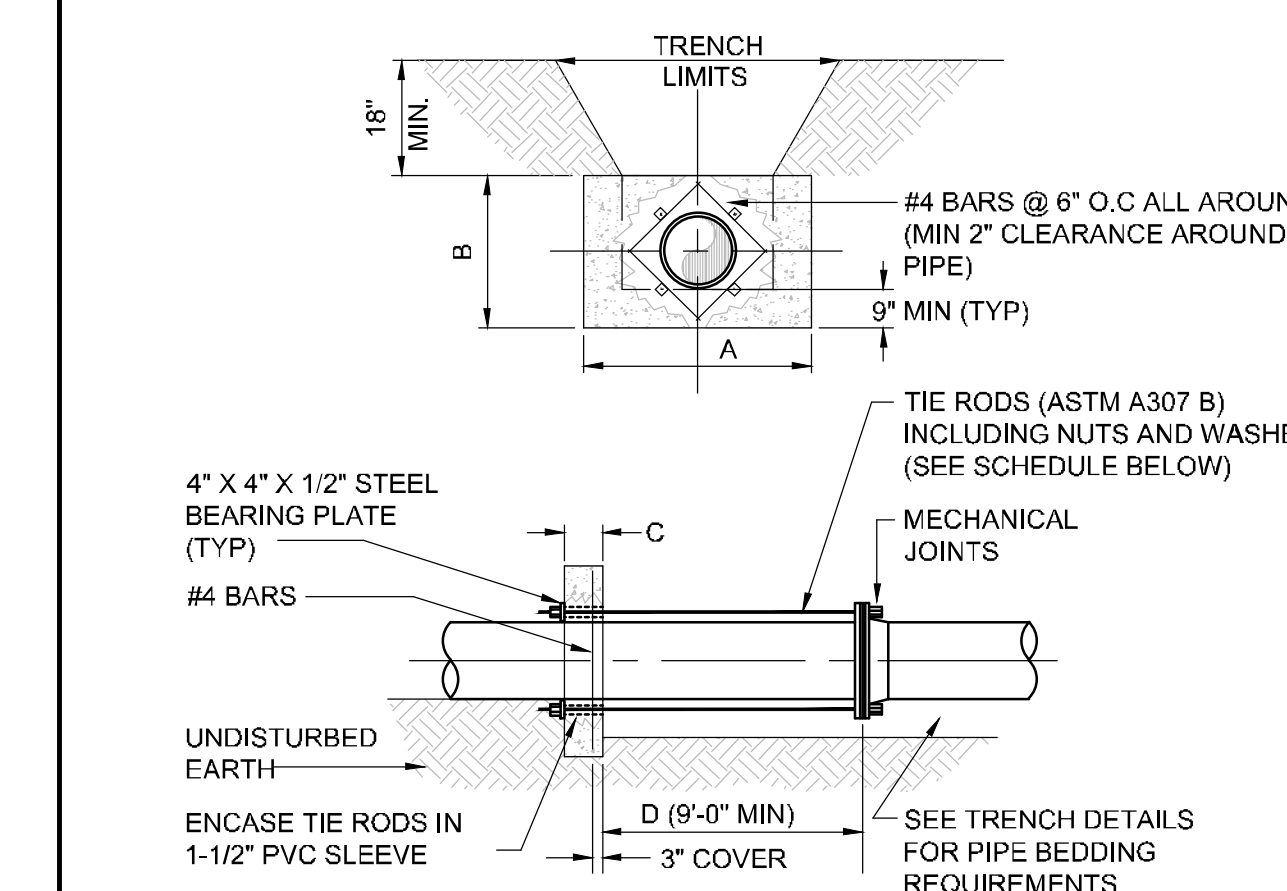
- NOTES:**
- ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
 - MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 3000 PSI.
 - BEDDING, BACKFILL AND COMPACTION SHALL BE AS SPECIFIED ELSEWHERE IN THE STANDARD DRAWINGS.
 - ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILL.
 - NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL AND THE THRUST COLLAR.
 - DESIGN PRESSURE: 150 PSI.
 - REQUIRED FOR LINE STOPS.

PIPE SIZE (INCHES)	DIMENSIONS (FT.)				TIE RODS REQ'D DIA.	NO.
	A	B	C	D		
6	2.0	2.0	1.0	3/4	2	
8	2.5	2.5	1.0	3/4	2	
10	3.5	3.0	1.0	3/4	4	
12	5.0	3.0	1.0	3/4	4	
16	6.0	4.0	1.5	3/4	4	
20	8.0	5.0	1.5	3/4	6	
24	9.0	6.0	1.5	3/4	8	

NOTE: THRUST COLLAR AREAS TO BE COMPUTED ON BASIS OF 2000 LBS/SF SOIL RESTRAINT BEARING.

ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A **STANDARD DRAWINGS** **GENERAL**
DATE: February 11, 2011 **THRUST COLLAR (100 psi)** **FIGURE A105-2**
WASTEWATER FORCE MAINS



- NOTES:**
- ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
 - MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 3000 PSI.
 - BEDDING, BACKFILL AND COMPACTION SHALL BE AS SPECIFIED ELSEWHERE IN THE STANDARD DRAWINGS.
 - ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILL.
 - NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL AND THE THRUST COLLAR.
 - DESIGN PRESSURE: 100 PSI.
 - REQUIRED FOR LINE STOPS.

PIPE SIZE (INCHES)	DIMENSIONS (FT.)				TIE RODS REQ'D DIA.	NO.
	A	B	C	D		
6	2.0	2.0	1.0	3/4	2	
8	2.5	2.5	1.0	3/4	2	
10	3.0	2.5	1.0	3/4	4	
12	4.0	3.0	1.0	3/4	4	
16	5.5	3.5	1.5	3/4	4	
20	7.5	4.0	1.5	3/4	4	
24	8.5	5.0	1.5	3/4	6	

NOTE: THRUST COLLAR AREAS TO BE COMPUTED ON BASIS OF 2000 LBS/SF SOIL RESTRAINT BEARING.

No.	REVISIONS	DATE	BY

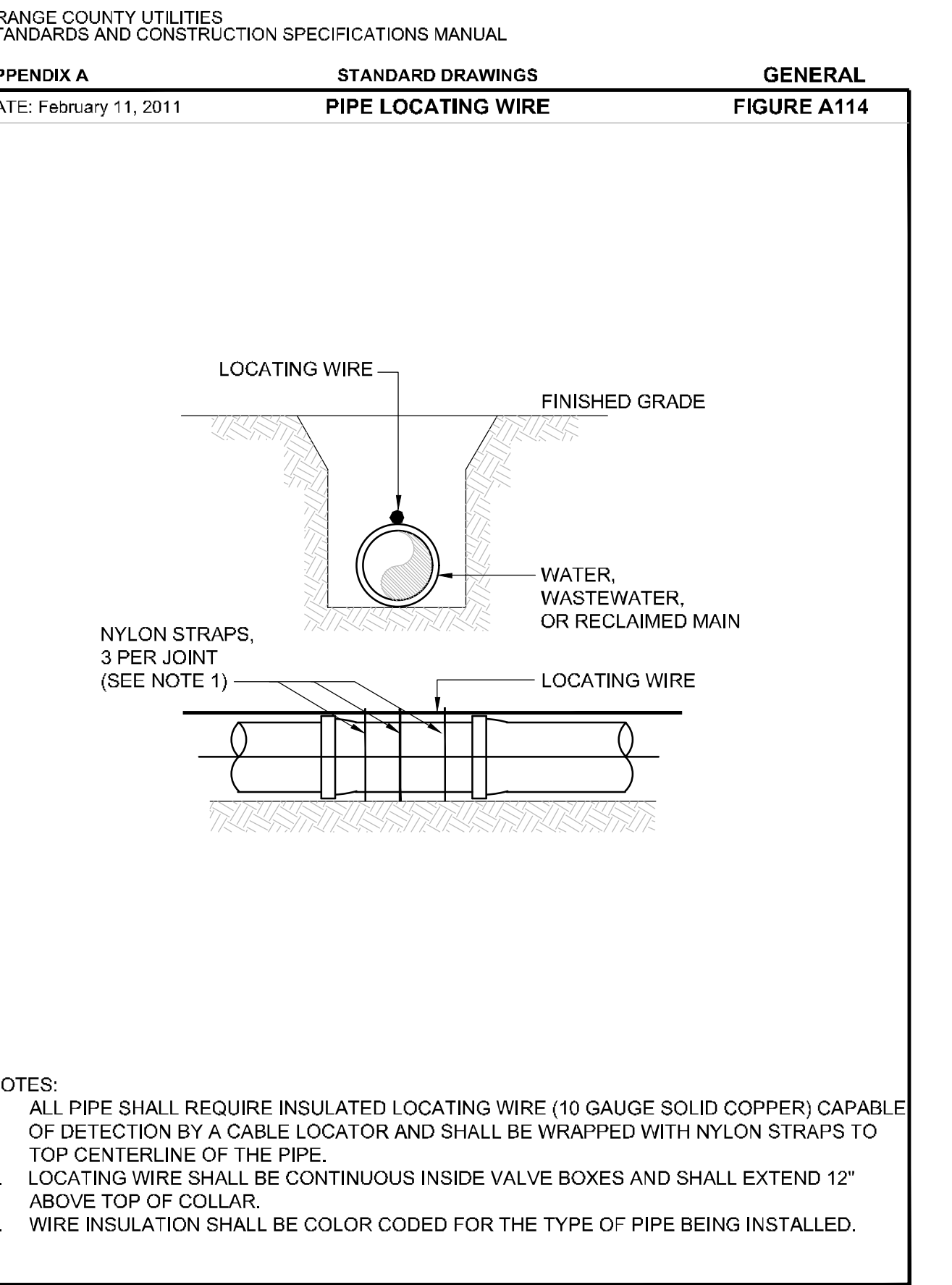
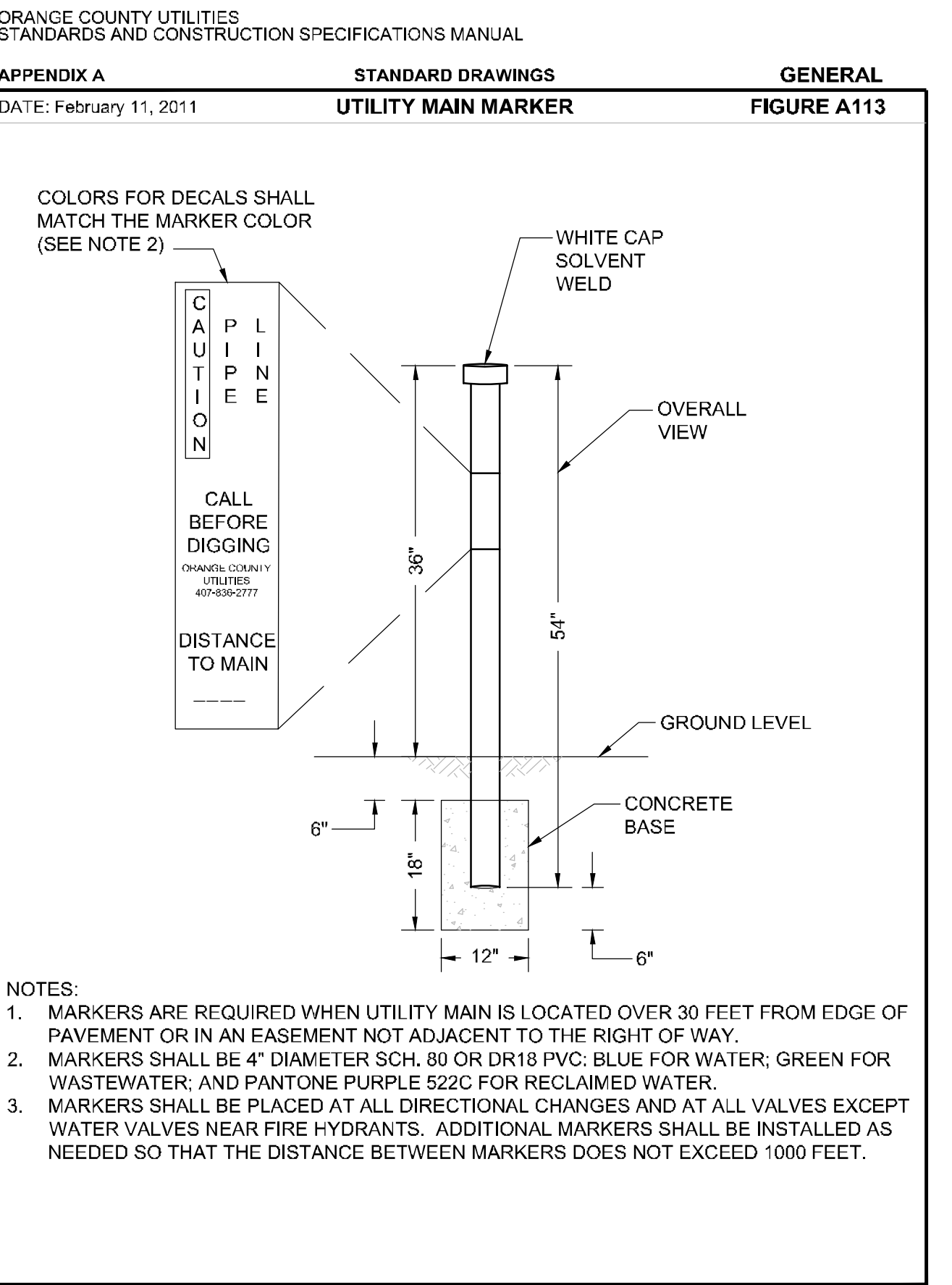
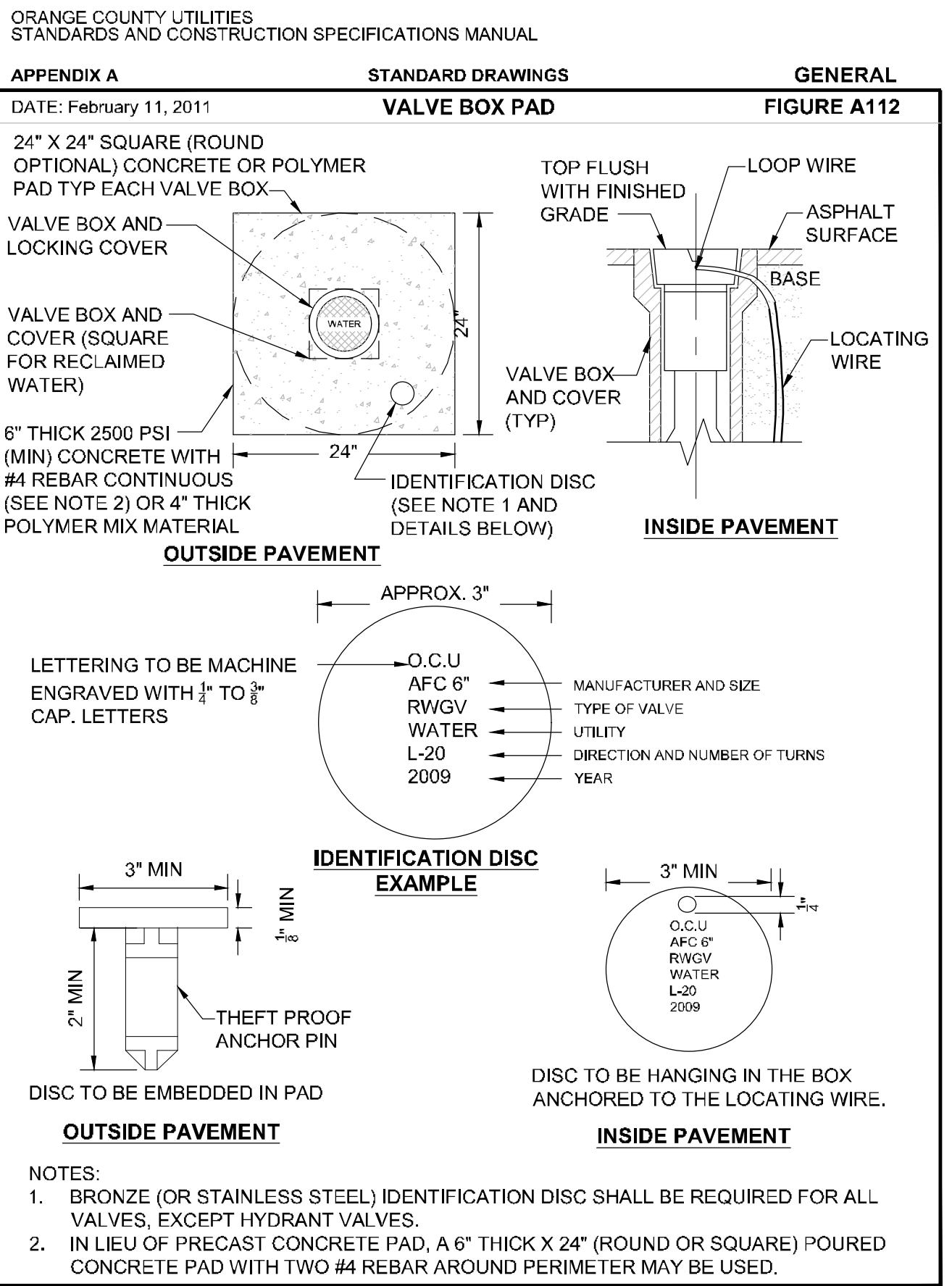
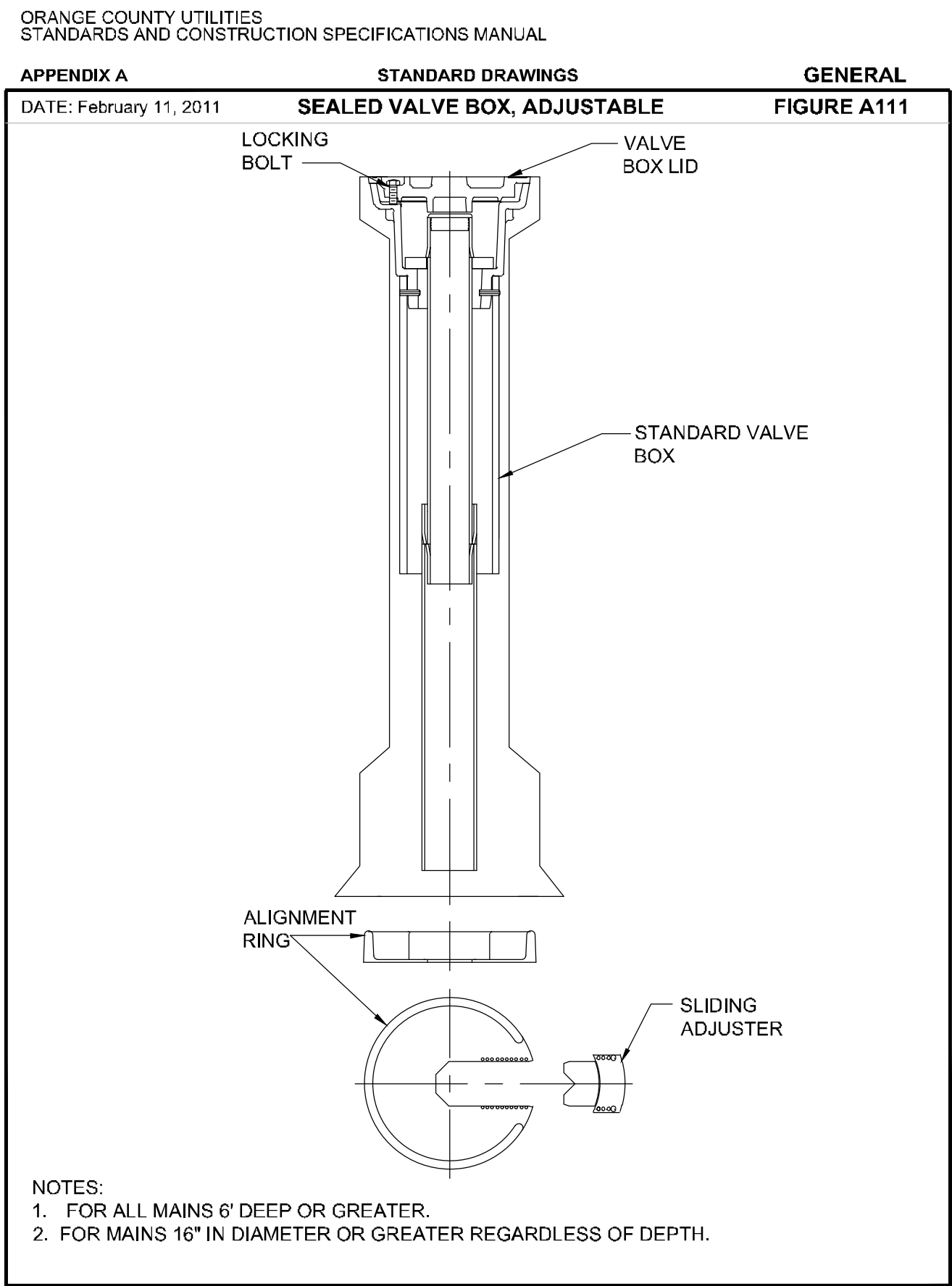
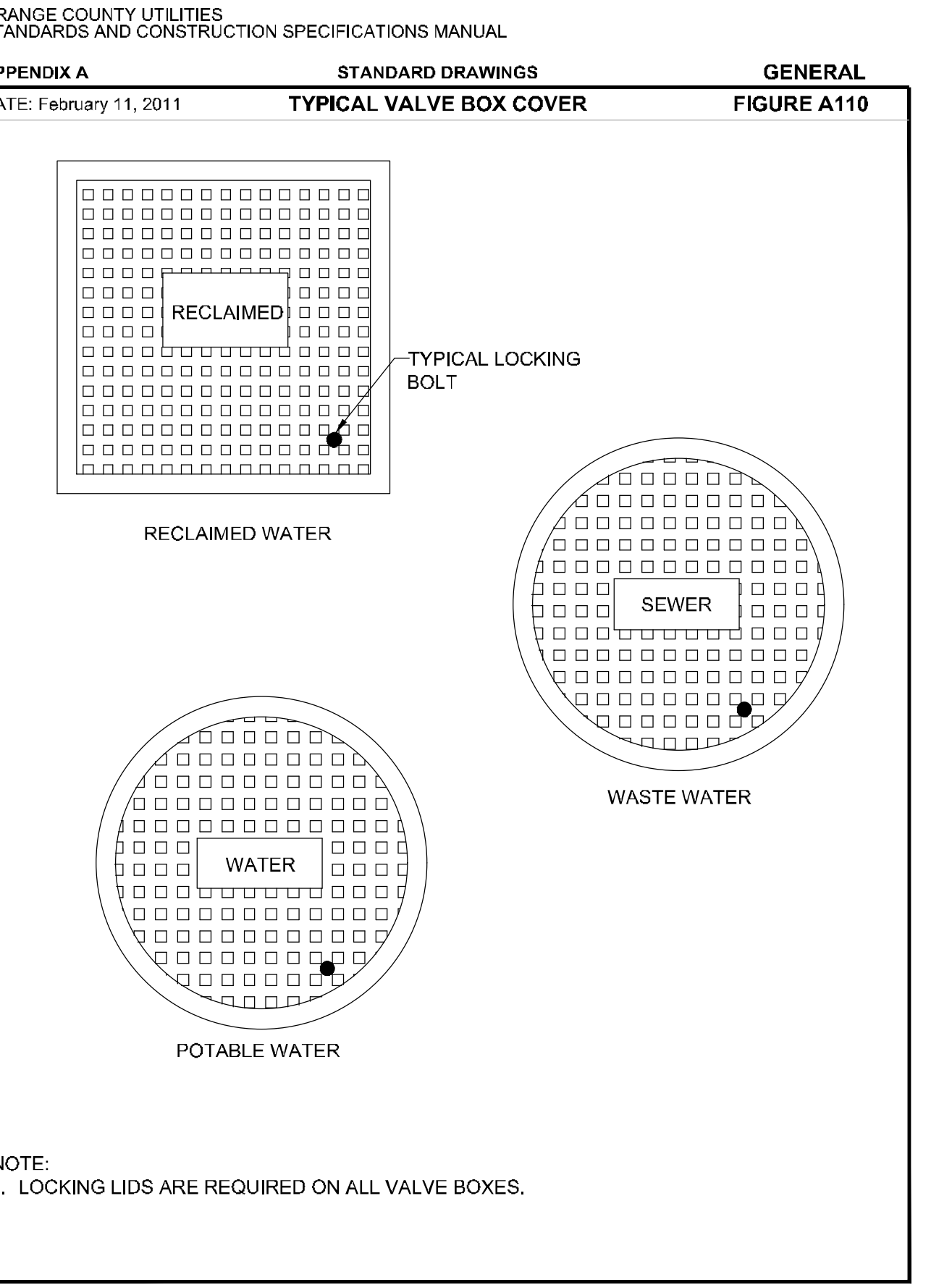
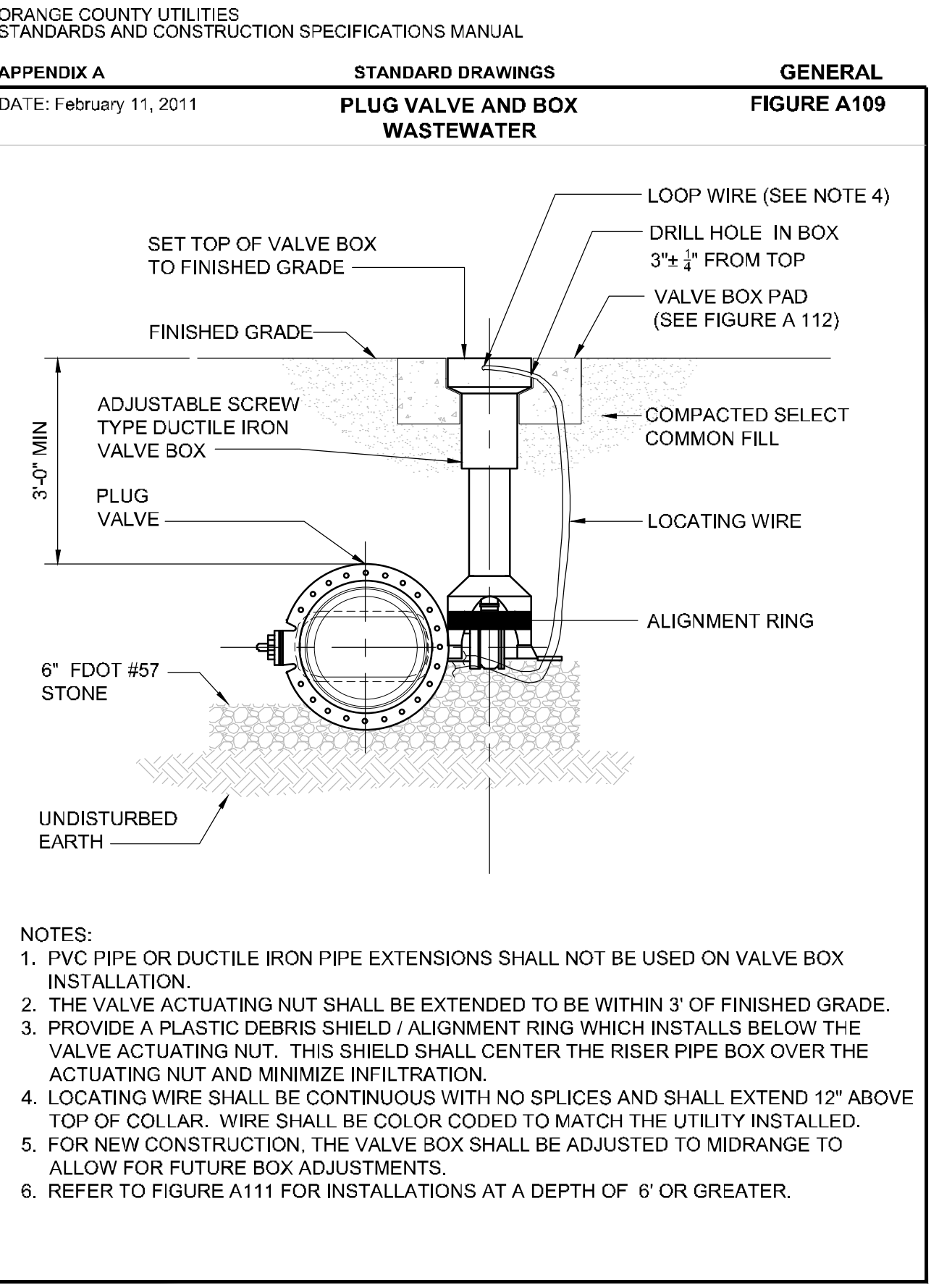
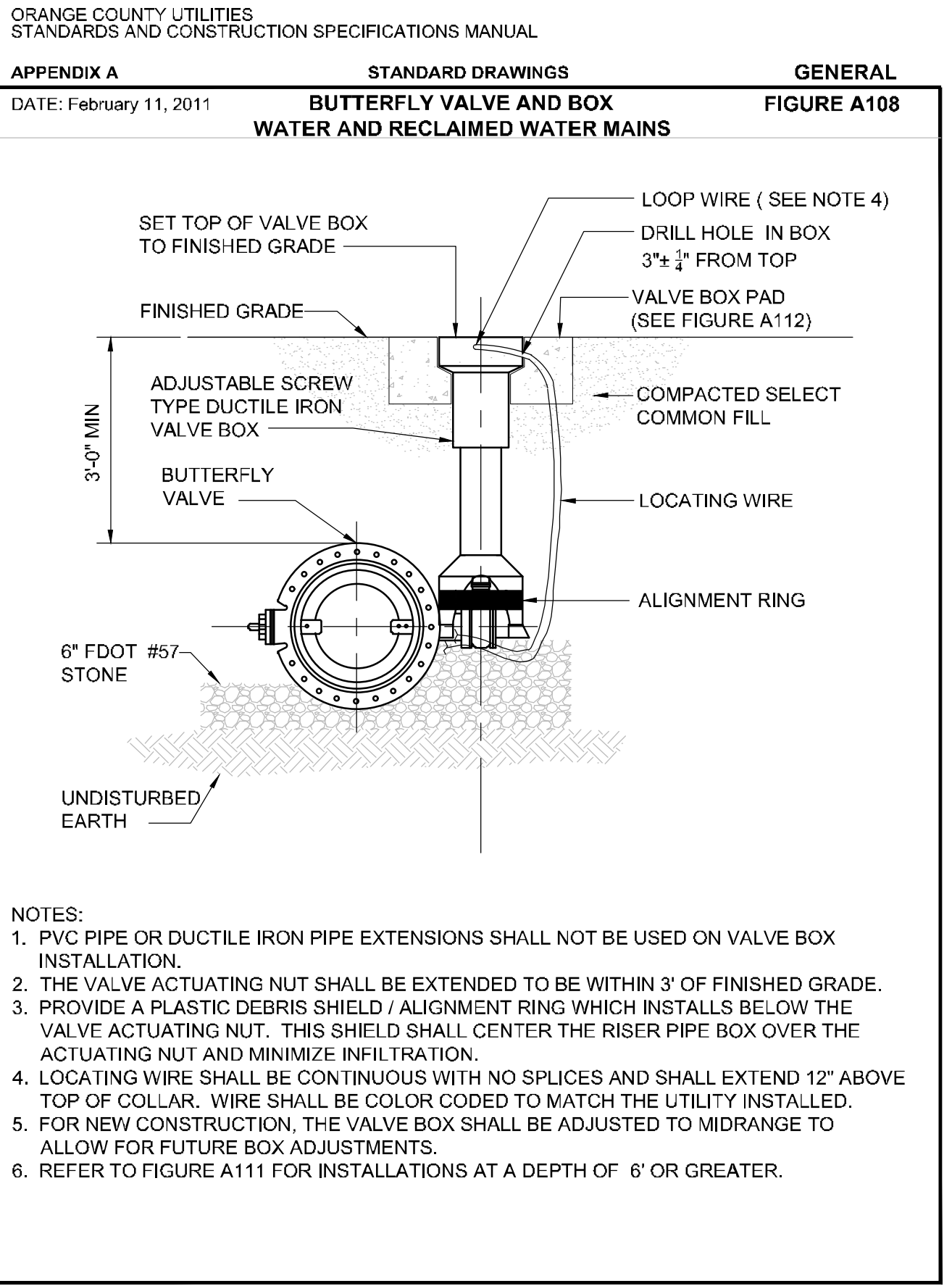
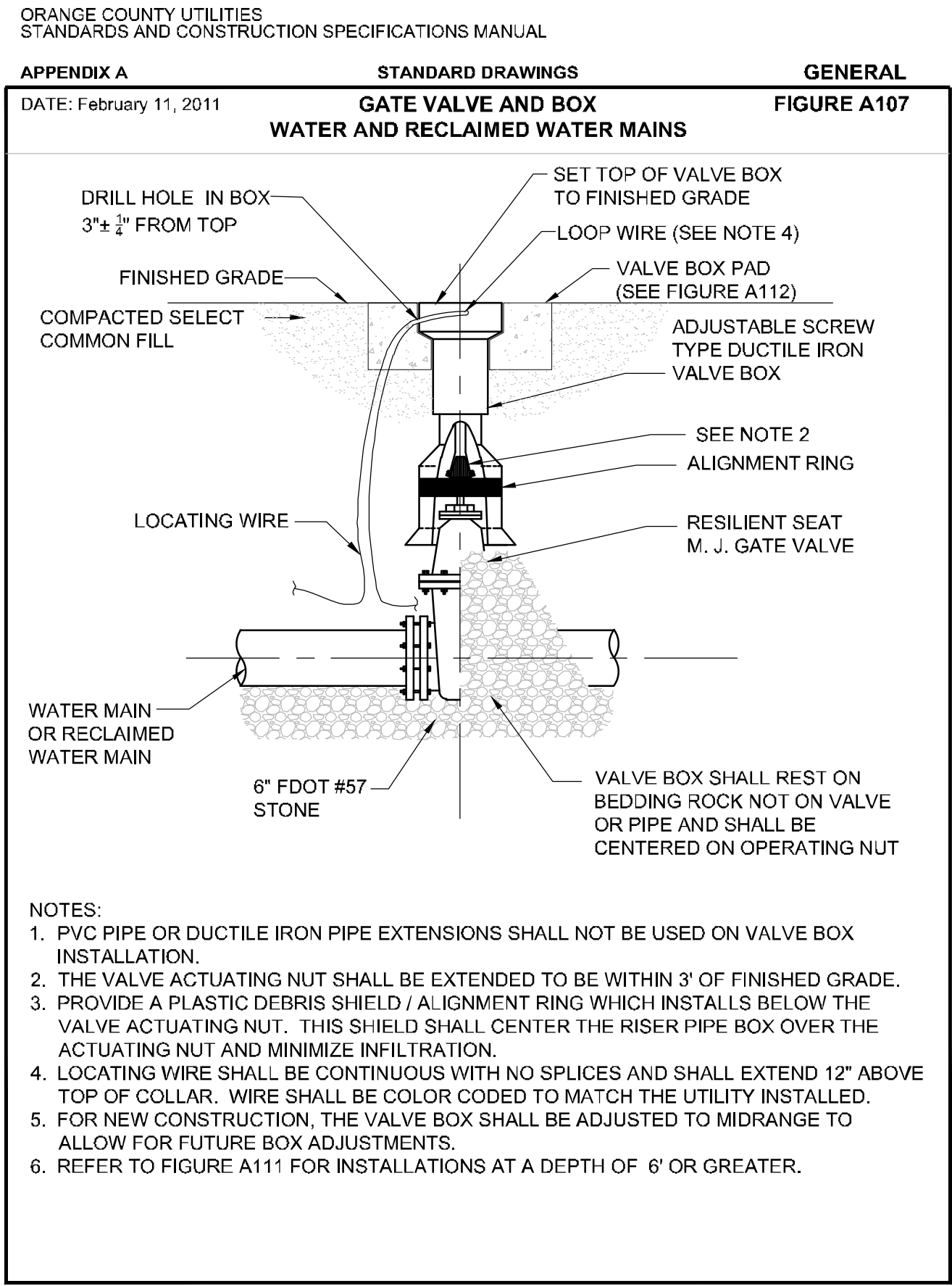
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 PHONE: 407-898-1511
 WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL
 149973004
 DATE: 02/09/2023
 SCALE: AS SHOWN
 DESIGNED BY: M/G
 DRAWN BY: CML
 CHECKED BY: M/G
 DATE: _____

UTILITY DETAILS

WINDERMERE DOWNTOWN PROPERTY

Plotted By: Geiger, Marcus - Sheet: Windermere Downtown Property - Layout: 09.1 UTILITY DETAILS - May 03, 2023 - 06:20:09pm - K:\ORL_Civil\149973004-Windermere Downtown Property\CADD\CONSTR\PlanSheets\CX-UTILITY DETAILS.dwg
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<h1 style="margin: 0;">Kimley»Horn</h1> <p style="font-size: small; margin: 0;"> © 2023 KIMLEY-HORN AND ASSOCIATES, INC. 189 S. ORANGE AVENUE, SUITE 1000, ORLANDO, FL 32801 PHONE: 407-898-1511 WWW.KIMLEY-HORN.COM REGISTRY No. 35106 </p>	<p style="font-size: x-small; margin: 0;"> LICENSED PROFESSIONAL MARCUS I. GEIGER, P.E. FL LICENSE NUMBER 89199 </p>
<h2 style="margin: 0;">UTILITY DETAILS</h2>	<p style="font-size: x-small; margin: 0;"> KHA PROJECT 149973004 DATE 02/09/2023 SCALE AS SHOWN DESIGNED BY M/G DRAWN BY CML CHECKED BY M/G DATE: </p>
<h3 style="margin: 0;">WINDERMERE DOWNTOWN PROPERTY</h3>	<p style="font-size: x-small; margin: 0;"> TOWN OF WINDERMERE SHEET NUMBER C9.1 </p>

Plotted By: Geber, Marcus - Sheet Set: Windermere Downtown Property - Layout: 09.2 UTILITY DETAILS - May 03, 2023 - 06:20:17pm - K:\ORL_Civil\149973004 - Windermere Downtown Property\CADD\CONSTR\PlanSheets\CX_UTILITY_DETAILS.dwg
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ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A STANDARD DRAWINGS GENERAL
DATE: February 11, 2011

SEPARATION REQUIREMENTS FOR WATER, WASTEWATER AND RECLAIMED WATER MAINS FIGURE A116

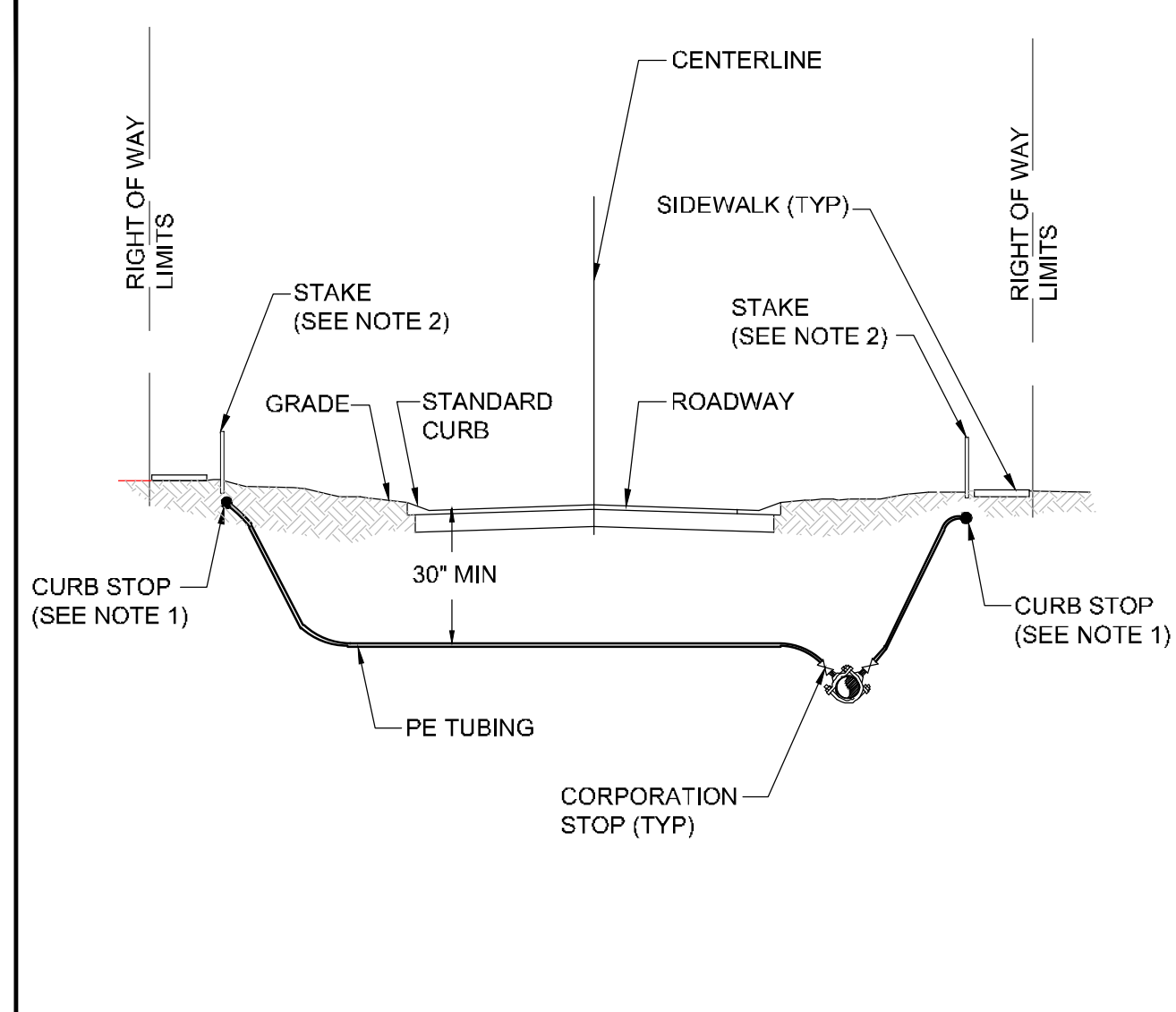
PROPOSED UTILITY	HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS							
	POTABLE WATER		RECLAIMED WATER		WASTEWATER (GRAVITY & FM)		STORM SEWER	
	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT
POTABLE WATER	3' NOTE 1	12"	3' NOTE 1 & 3	12" NOTE 3	6' NOTE 3	12" NOTE 3	3' NOTE 1 & 3	12" NOTE 2 & 3
RECLAIMED WATER	3' NOTE 1 & 3	12" NOTE 3	3' NOTE 1	12"	3' NOTE 1	12"	3' NOTE 1	12" NOTE 2
WASTEWATER (GRAVITY AND FM)	6' NOTE 3	12" NOTE 3	3' NOTE 1	12"	3' NOTE 1	12"	3' NOTE 1	12" NOTE 2
RIGHT OF WAY	3' NOTE 1	N/A	3' NOTE 1	N/A	3' NOTE 1	N/A	N/A	N/A

- NOTES:
- THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE. THREE FEET OF HORIZONTAL SEPARATION IS THE MINIMUM FOR PIPES WITH THREE FEET OF COVER. FOR PIPES INSTALLED AT GREATER DEPTHS, PROVIDE AN ADDITIONAL FOOT OF SEPARATION FOR EACH ADDITIONAL FOOT OF DEPTH. THE 18-INCH SEPARATION REQUIREMENT APPLIES WHEN THE STORM PIPE CROSSES ABOVE THE OCU MAIN, AND WHEN THE STORM PIPE HAS A DIAMETER EQUAL TO OR GREATER THAN 24 INCHES. OTHERWISE, THE REQUIRED SEPARATION IS 12 INCHES.
 - THIS SEPARATION REQUIREMENT COMPLIES WITH MINIMUM FDEP SEPARATION REQUIREMENTS OUTLINED IN 62-555.314, FAC. VARIANCES FROM THE FDEP REQUIREMENTS MUST COMPLY WITH 62-555.314(5), FAC AND MUST BE APPROVED INDIVIDUALLY BY BOTH FDEP AND OCU.
 - DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
 - NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLE OR STRUCTURE.

ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A STANDARD DRAWINGS GENERAL
DATE: February 11, 2011

WATER AND RECLAIMED WATER SERVICES (TYPICAL) FIGURE A120

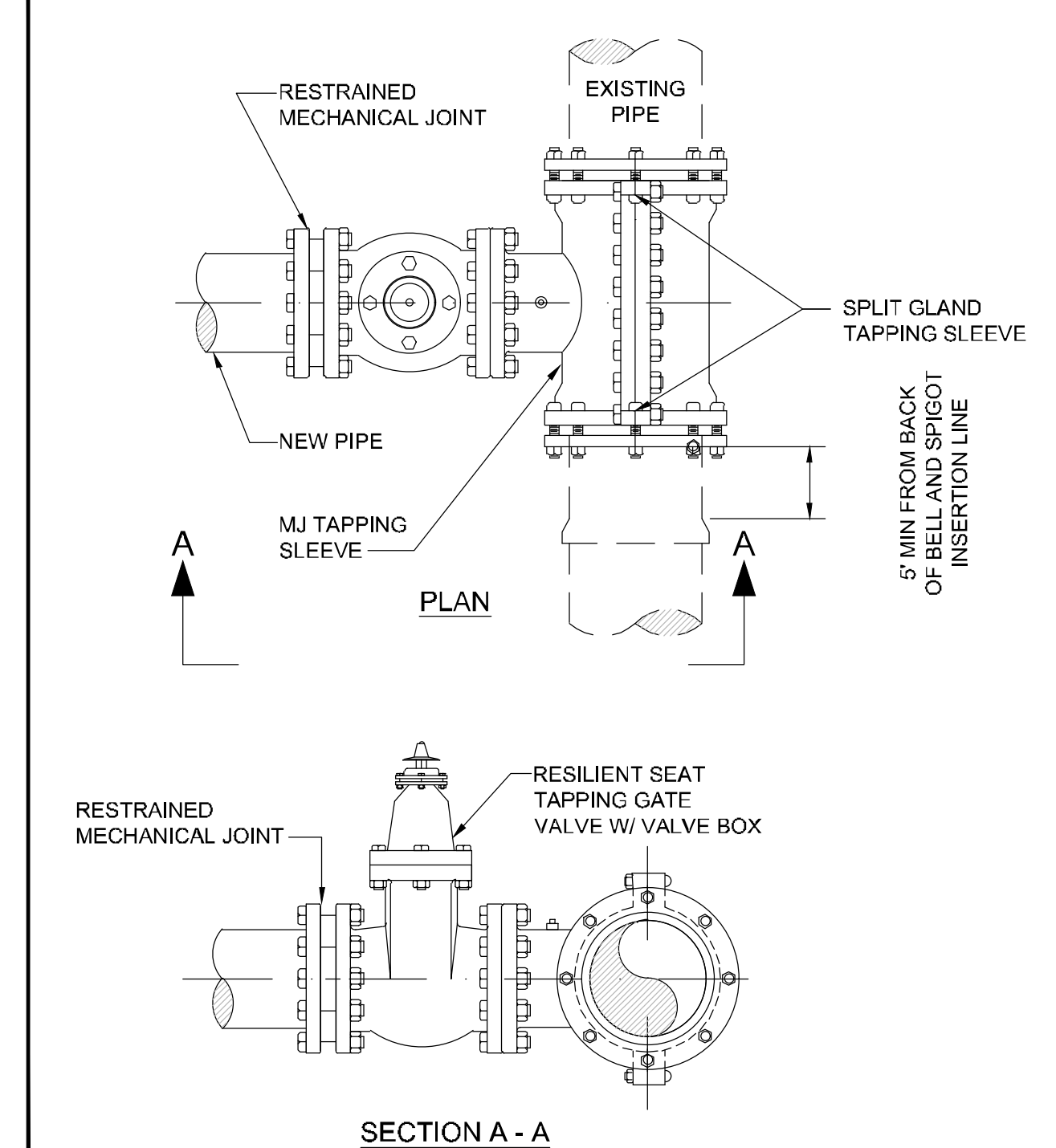


- NOTES:
- CURB STOP SHALL BE INSTALLED ON STREET SIDE OF THE SIDEWALK BETWEEN SIDEWALK AND CURB.
 - CONTRACTOR TO LOCATE CURB STOP BY PLACING A 2" X 2" SQUARE STAKE RISING 24" ABOVE THE GROUND. TOP OF STAKE SHALL BE PAINTED THE COLOR OF THE UTILITY SERVICE AND LABELED WITH THE LOT NUMBER(S) IT SERVES.

ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A STANDARD DRAWINGS GENERAL
DATE: February 11, 2011

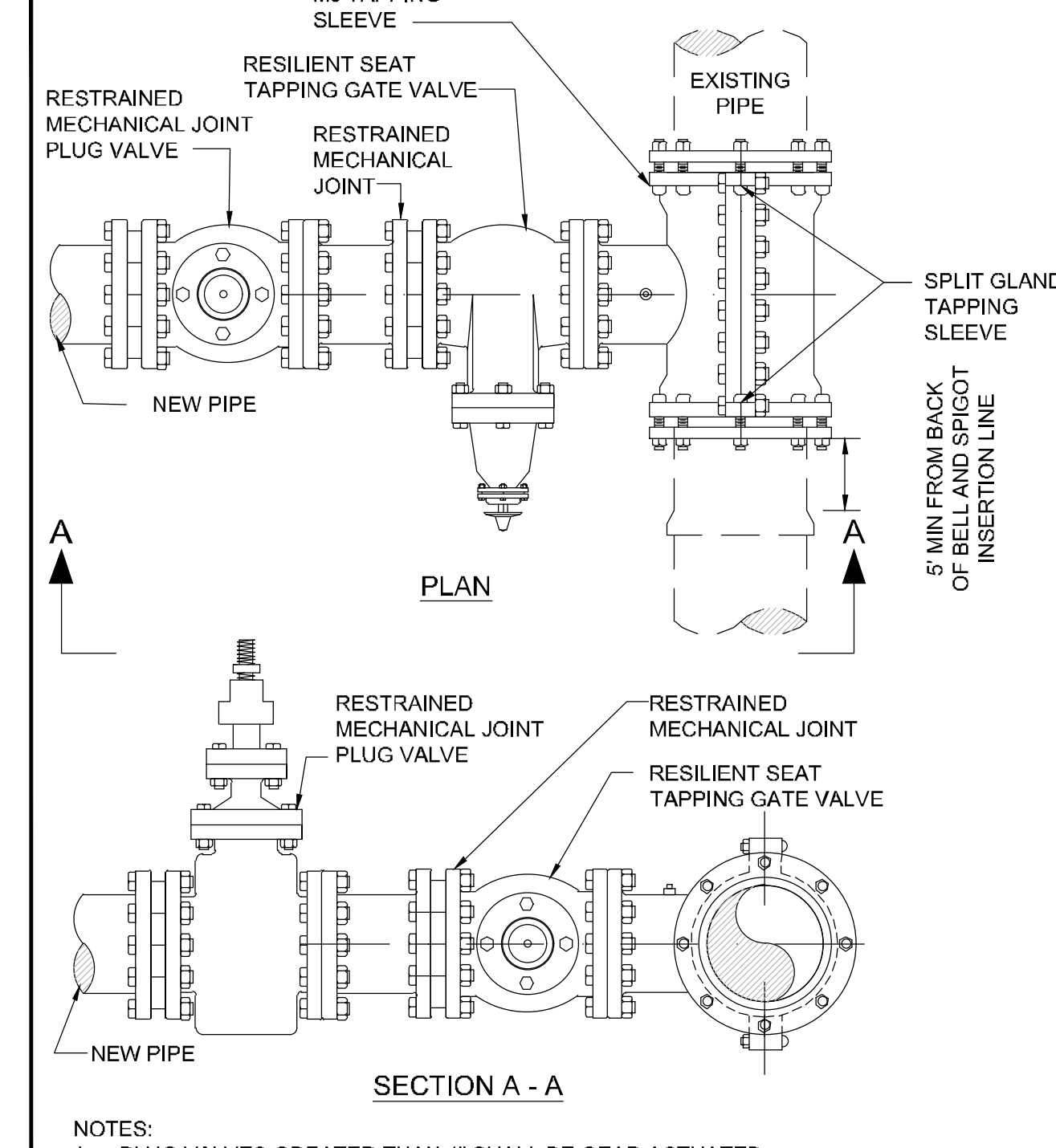
MJ TAPPING SLEEVE AND GATE VALVE ASSEMBLY FOR WATER AND RECLAIMED WATER FIGURE A121-1



ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A STANDARD DRAWINGS GENERAL
DATE: February 11, 2011

MJ TAPPING SLEEVE AND GATE VALVE WITH PLUG VALVE FOR WASTEWATER FIGURE A121-2

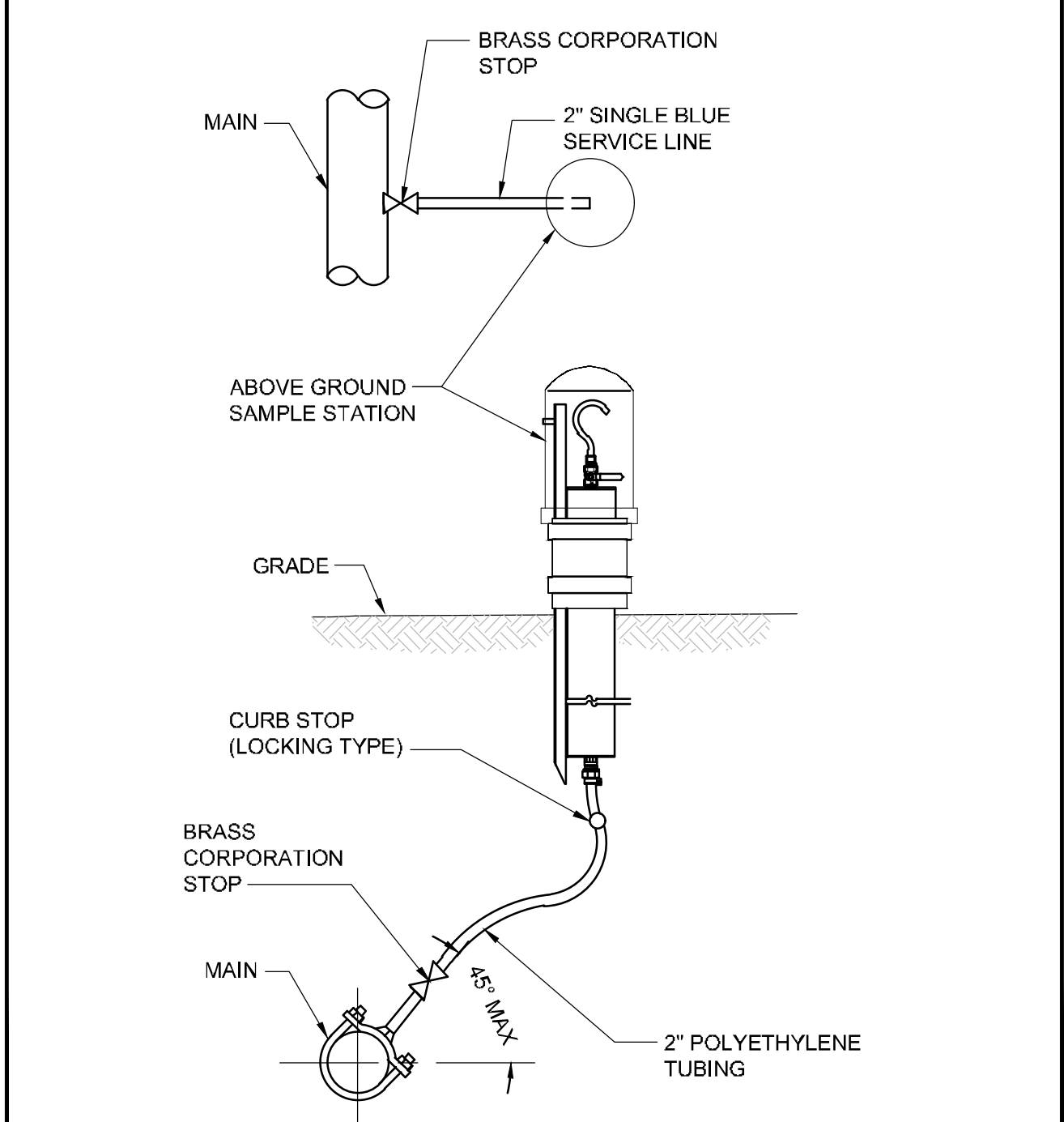


- NOTES:
- PLUG VALVES GREATER THAN 4" SHALL BE GEAR ACTUATED.
 - PLUG VALVE TO BE INSTALLED VERTICALLY, AND TAPPING GATE VALVE TO BE INSTALLED HORIZONTALLY AND ABANDONED IN THE OPEN POSITION.

ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A STANDARD DRAWINGS GENERAL
DATE: February 11, 2011

WATER SAMPLE STATION FIGURE A201

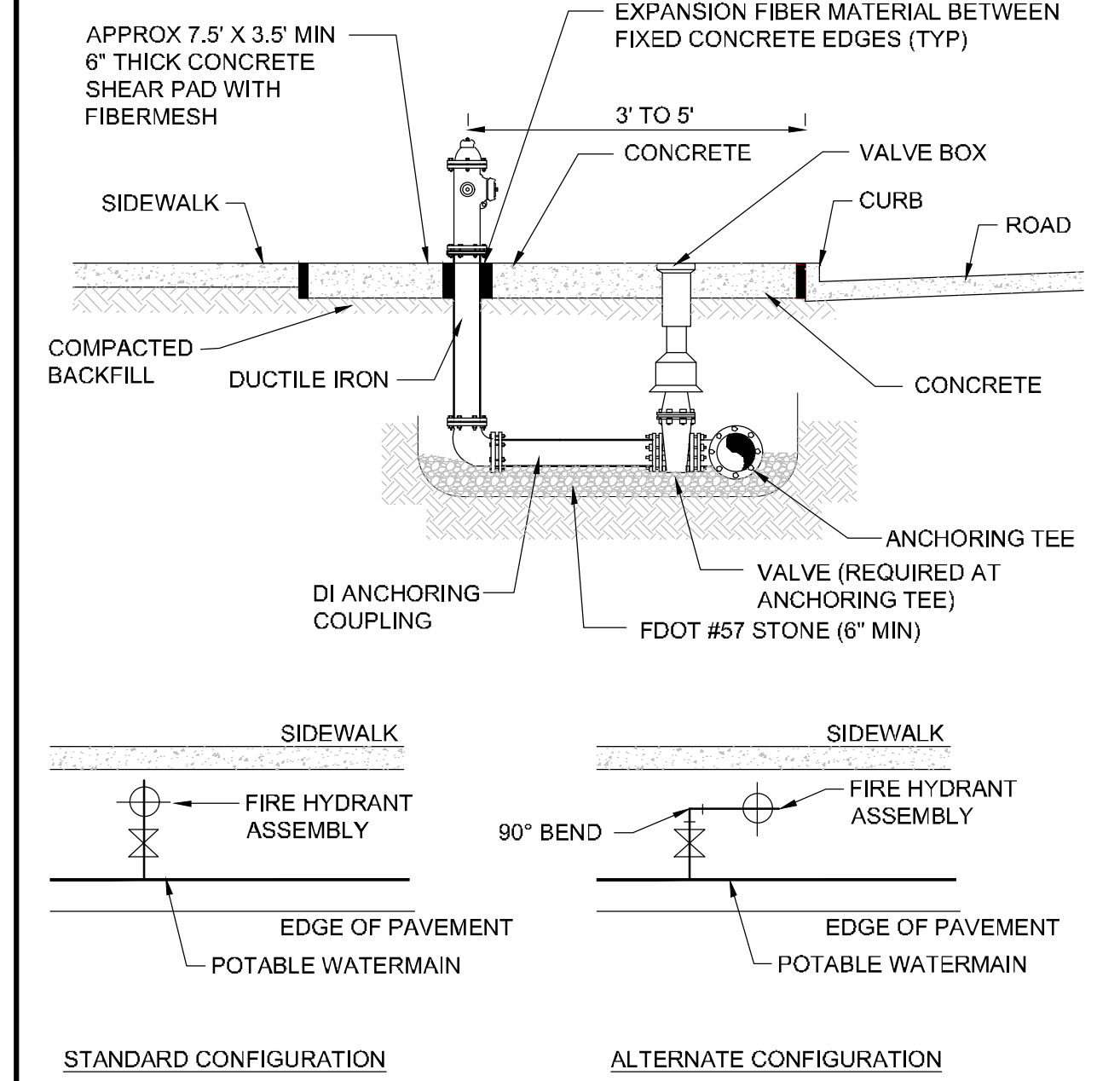


- NOTES:
- A 2 INCH SAMPLE STATION INSTALLED AT THE END OF A CUL-DE-SAC CAN ALSO SERVE AS A BLOW-OFF VALVE WHEN BOTH ARE REQUIRED.

ORANGE COUNTY UTILITIES
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APPENDIX A STANDARD DRAWINGS GENERAL
DATE: February 11, 2011

FIRE HYDRANT ASSEMBLY FIGURE A203

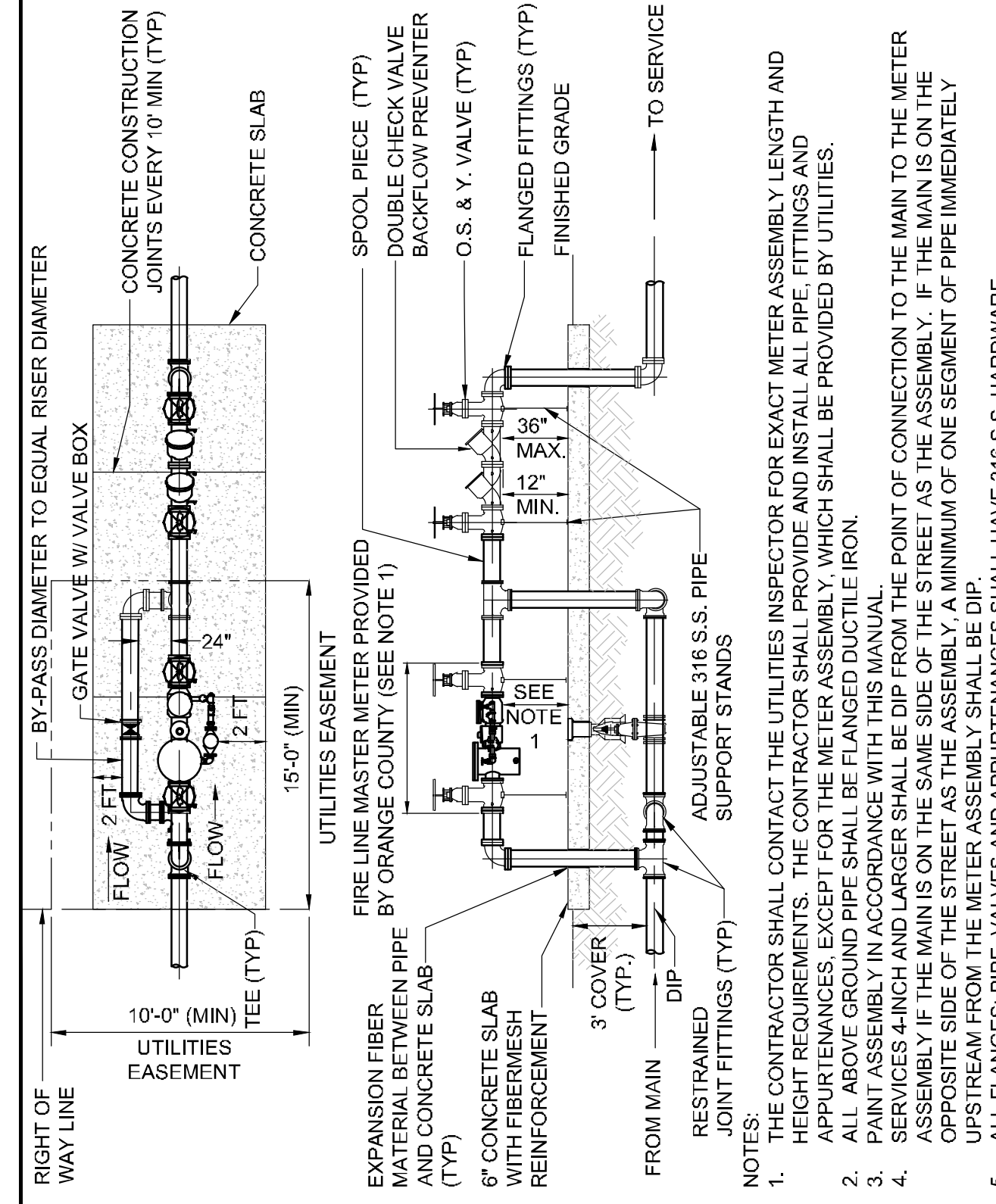


- NOTES:
- CENTER OF THE FLANGE CONNECTION SHALL BE 5" FROM THE TOP OF THE SLAB.
 - BARREL COLORS: PRIVATE HYDRANTS - RED; PUBLIC HYDRANTS - SILVER.
 - BONNET COLORS: TO BE DETERMINED BY FLOW TEST.

ORANGE COUNTY UTILITIES
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APPENDIX A STANDARD DRAWINGS GENERAL
DATE: February 11, 2011

FIRE LINE MASTER METER ASSEMBLY FIGURE A204

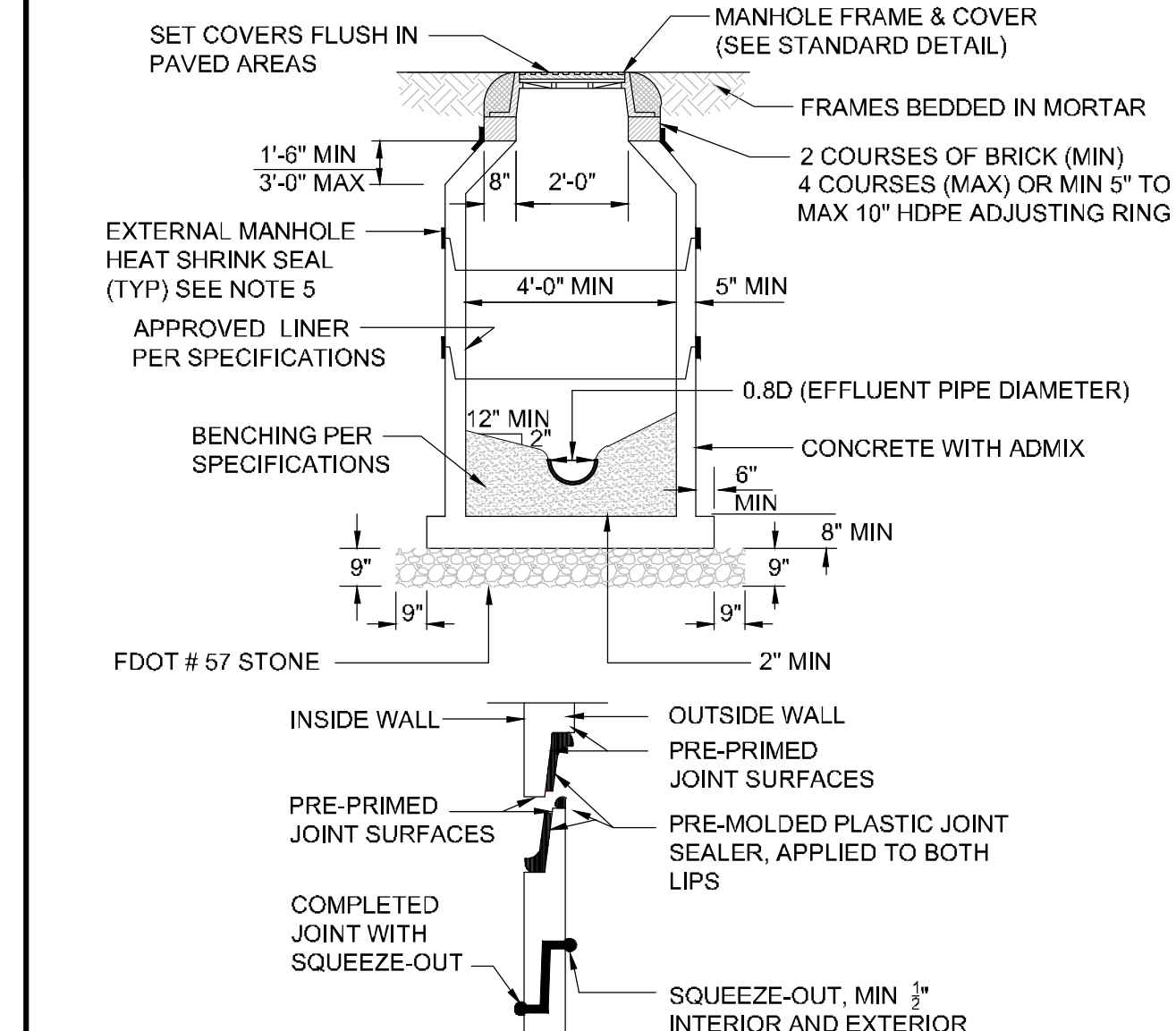


- NOTES:
- THE CONTRACTOR SHALL CONTACT THE UTILITIES INSPECTOR FOR EXACT METER ASSEMBLY LENGTH AND APPROVED MATERIALS. THE UTILITIES INSPECTOR SHALL PROVIDE THE METER ASSEMBLY AND APPROVED MATERIALS. EXCEPT FOR THE METER ASSEMBLY, WHICH SHALL BE PROVIDED BY UTILITIES.
 - ALL ABOVE GROUND PIPE SHALL BE FLANGED DUCTILE IRON.
 - PAIN ASSEMBLY IN ACCORDANCE WITH THIS MANUAL.
 - SERVICES 4-INCH AND LARGER SHALL BE DIP FROM THE POINT OF CONNECTION TO THE MAIN TO THE METER OPPOSITE SIDE OF THE STREET AS THE ASSEMBLY. IF THE MAIN IS ON THE SAME SIDE OF THE STREET AS THE ASSEMBLY, A MINIMUM OF ONE SEGMENT OF PIPE IMMEDIATELY UPSTREAM FROM THE METER ASSEMBLY SHALL BE DIP.
 - ALL FLANGES, PIPE, VALVES AND APPURTENANCES SHALL HAVE 316 S.S. HARDWARE.

ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A STANDARD DRAWINGS GENERAL
DATE: February 11, 2011

PRECAST CONCRETE MANHOLE FIGURE A301



- NOTES:
- DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE MANHOLE CONNECTION DETAIL.
 - ECCENTRIC CONE DESIGN MAY BE USED FOR CONFLICT RESOLUTION WITH OCU APPROVAL.
 - A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO FLOW STREAM.
 - LIFT HOLES THROUGH STRUCTURE ARE NOT PERMITTED.
 - WRAP TIGHTLY AROUND CASTING JOINTS AND APPLY HIGH INTENSITY PROPANE TORCH TO EFFECTIVELY SEAL THEM FROM GROUND WATER INFILTRATION.
 - HDPE ADJUSTING RINGS MAY BE SUBSTITUTED FOR BRICK RISERS.
 - SECTION HEIGHTS VARY AS REQUIRED, AND AS AVAILABLE, FROM APPROVED MANUFACTURERS LISTED IN APPENDIX D.

NO.	REVISIONS	DATE	BY

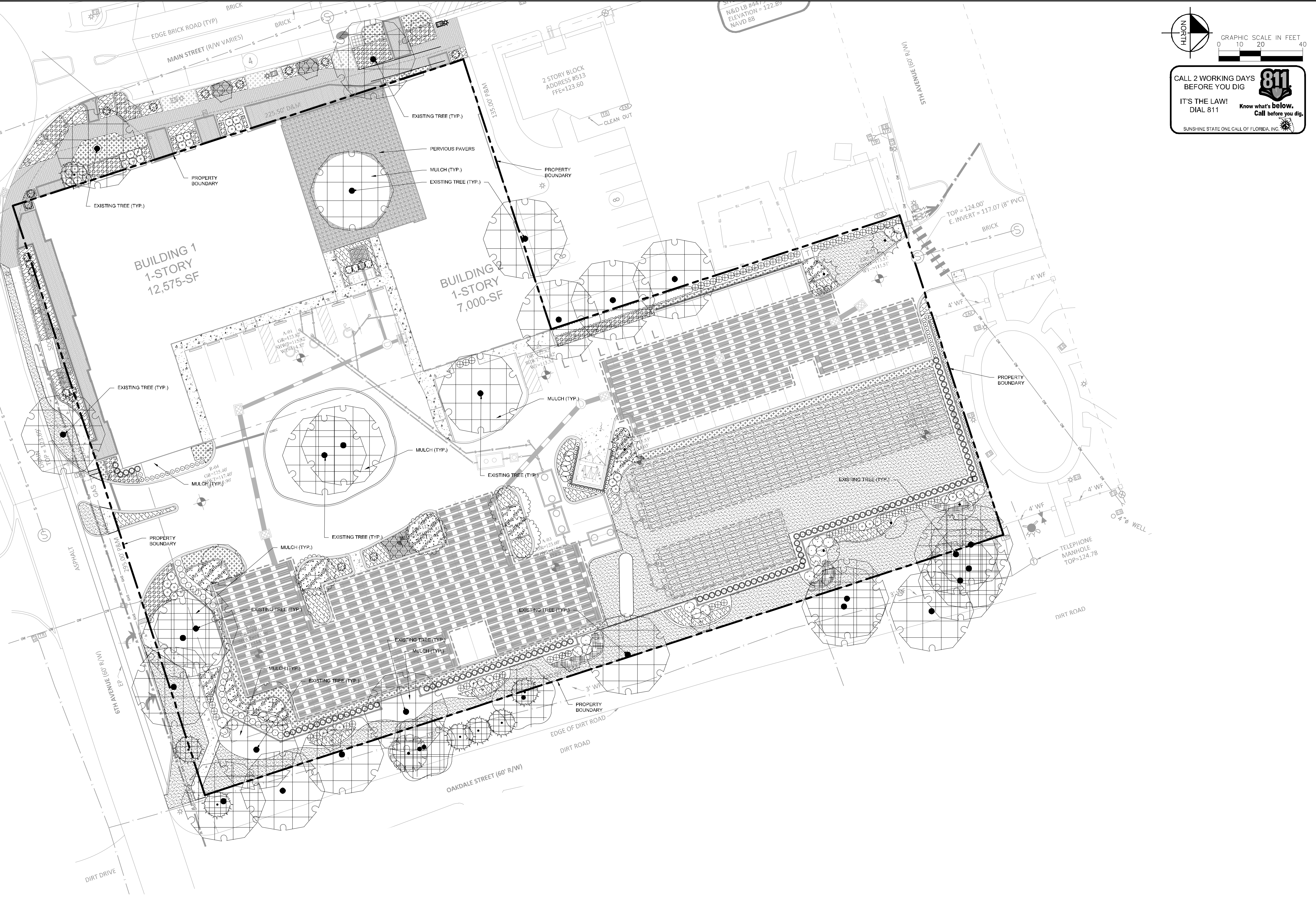
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 WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

LICENSED PROFESSIONAL
 149973004
 DATE: 02/09/2023
 SCALE: AS SHOWN
 DESIGNED BY: M/G
 DRAWN BY: CML
 CHECKED BY: M/G
 MARCUS I. GEIBER, P.E.
 FL LICENSE NUMBER: 89199

KHA PROJECT: 149973004
 DATE: 02/09/2023
 SCALE: AS SHOWN
 DESIGNED BY: M/G
 DRAWN BY: CML
 CHECKED BY: M/G

UTILITY DETAILS
 WINDERMERE DOWNTOWN PROPERTY
 SHEET NUMBER: C9.2
 TOWN OF WINDERMERE

Plotted By: Ceiler, Marcus. Sheet: Sct: Windermere Downtown Property. Layout: L1.00 OVERALL LANDSCAPE PLAN. May 03, 2023. 08:21:28pm. K:\GR-Civil\14997504-Windermere Downtown Property\CADD\CONSTR\PlanSheets\L1.00 - LANDSCAPE PLAN.dwg
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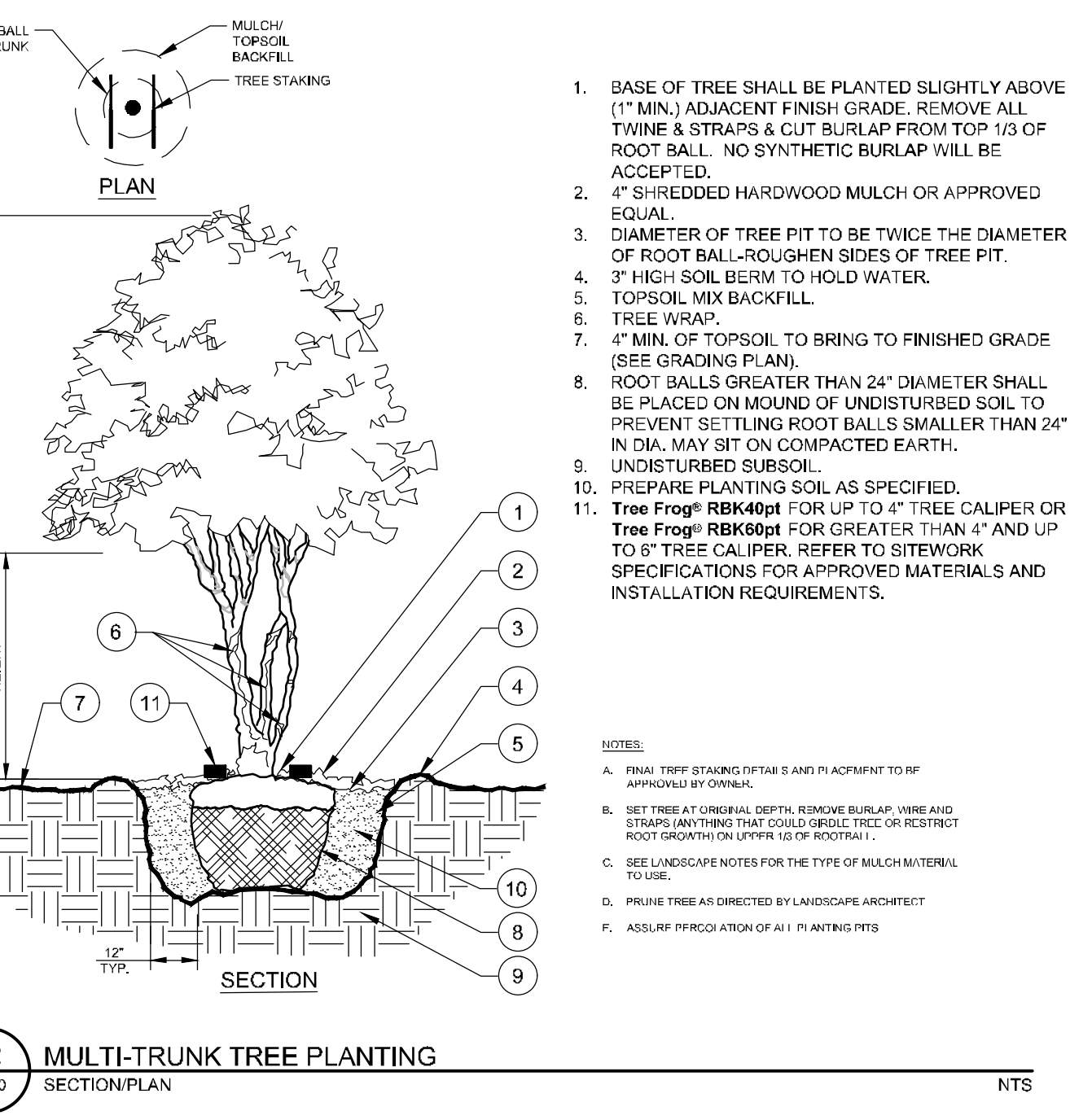
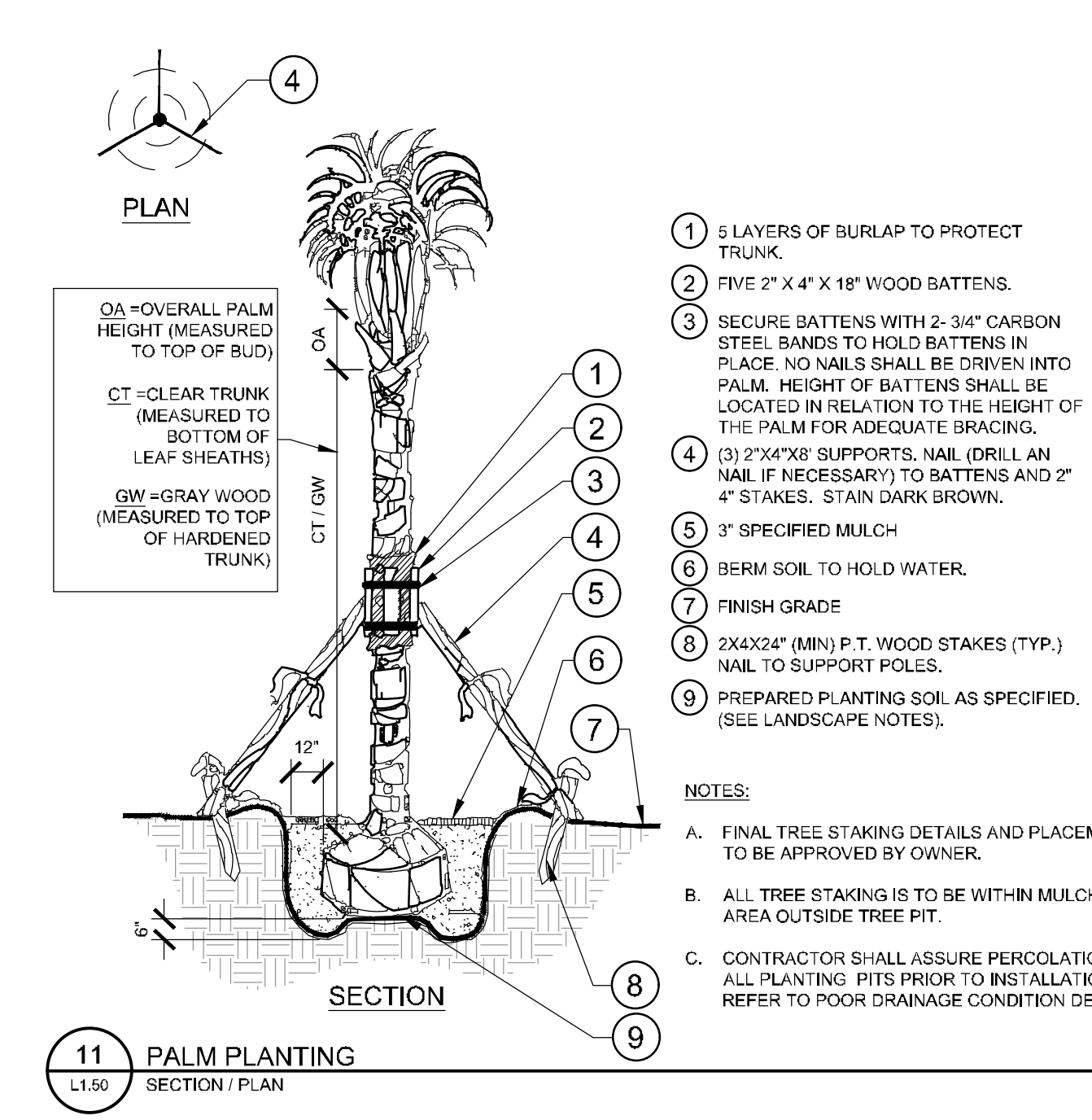
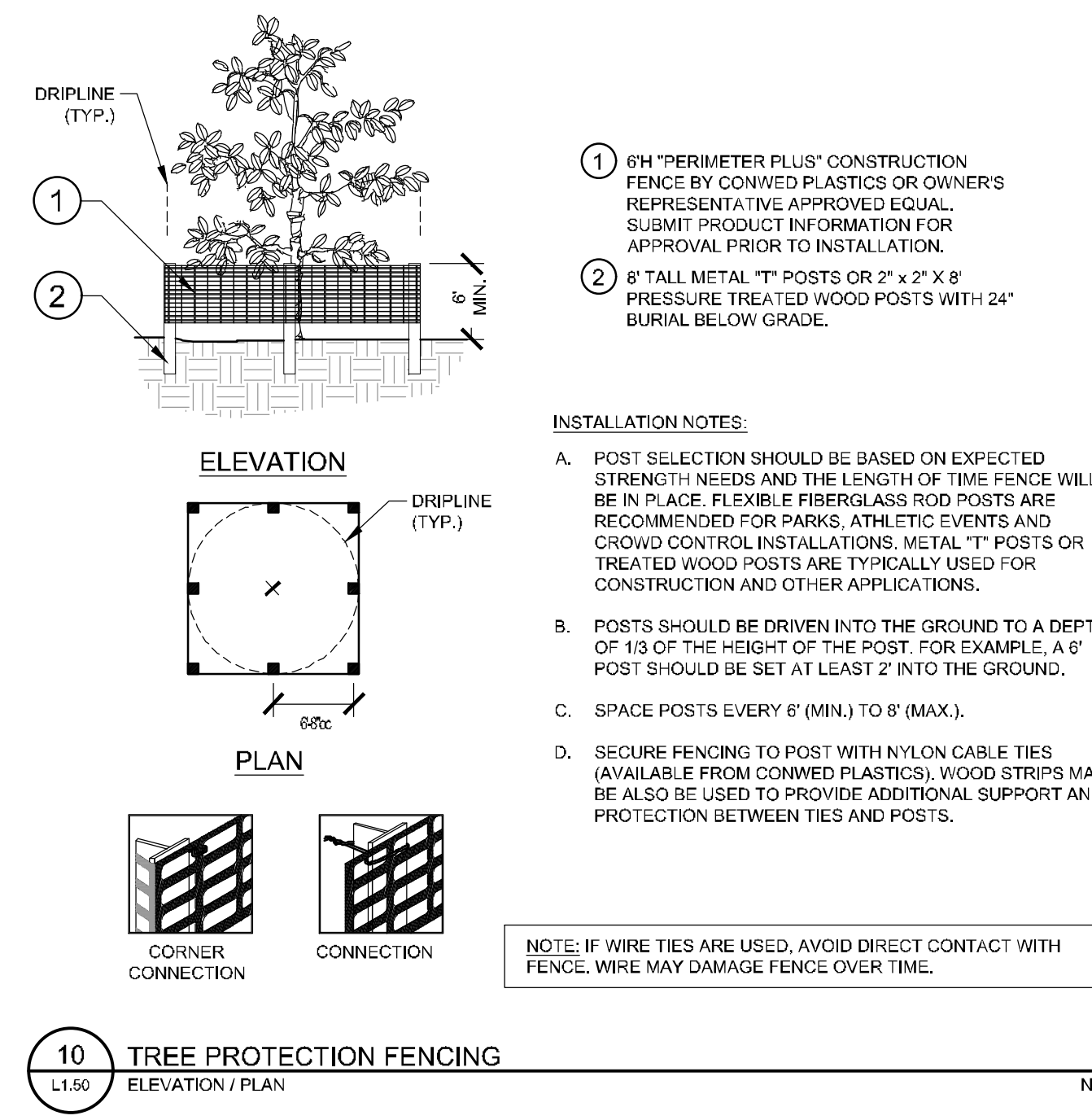
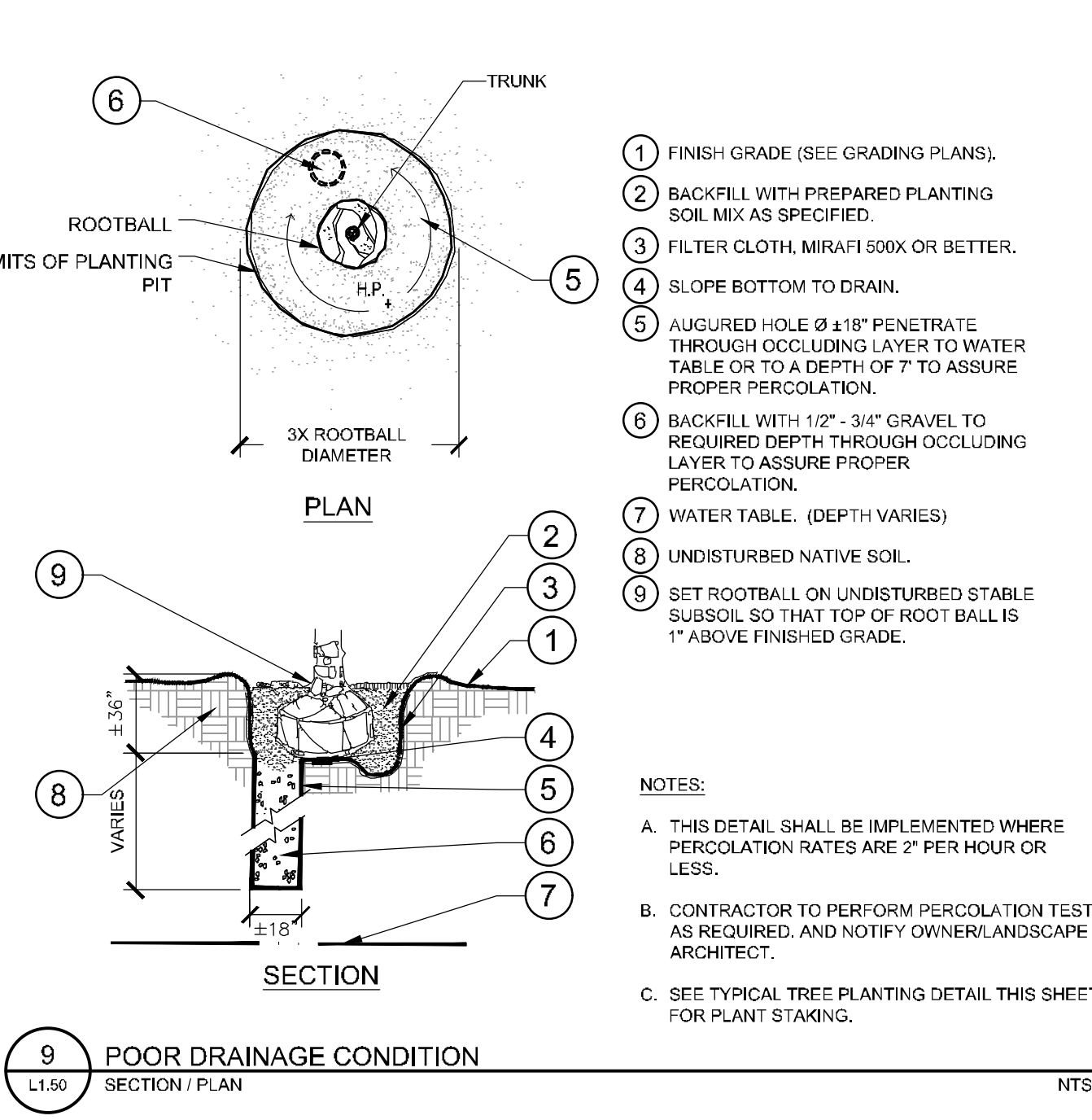
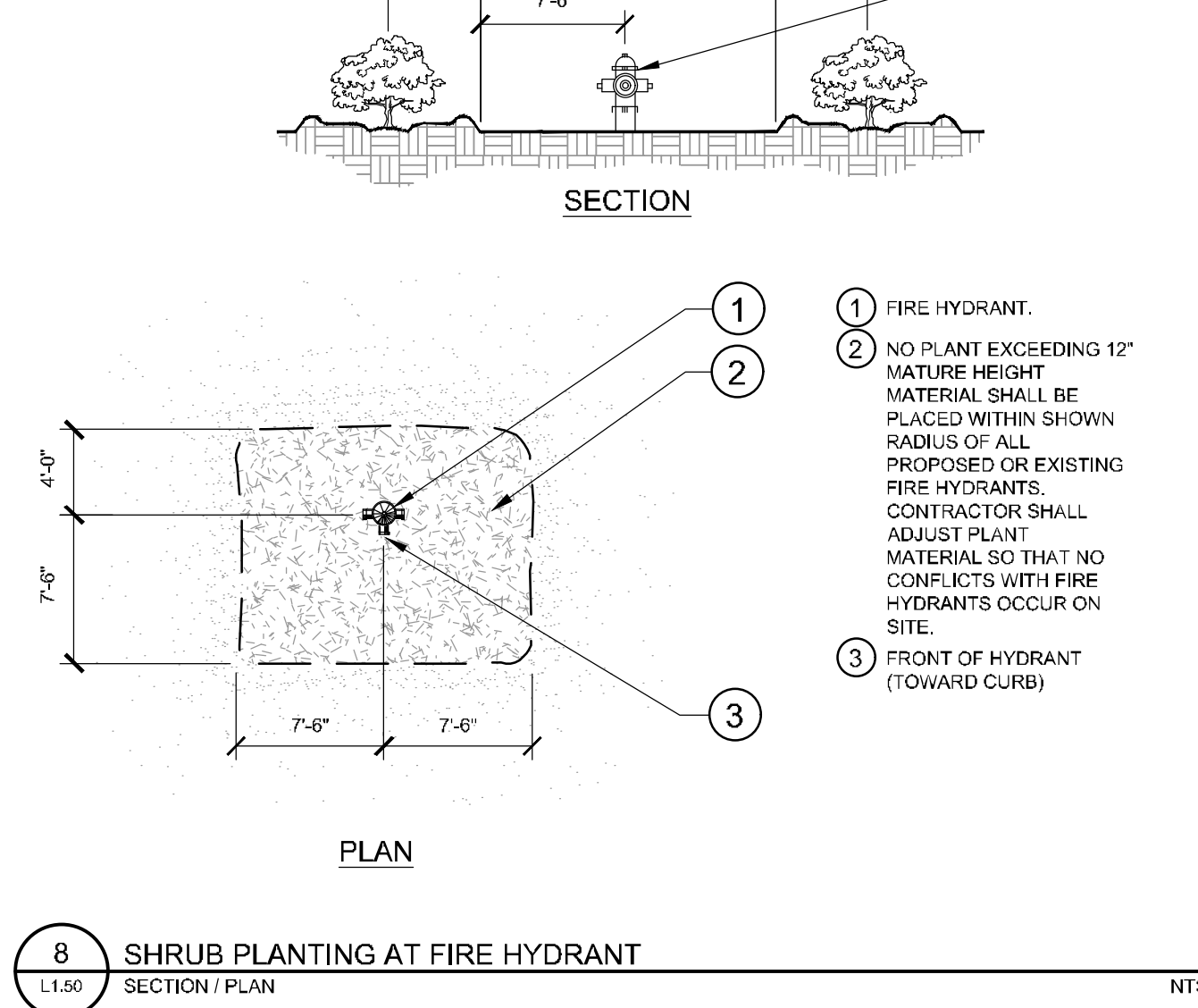
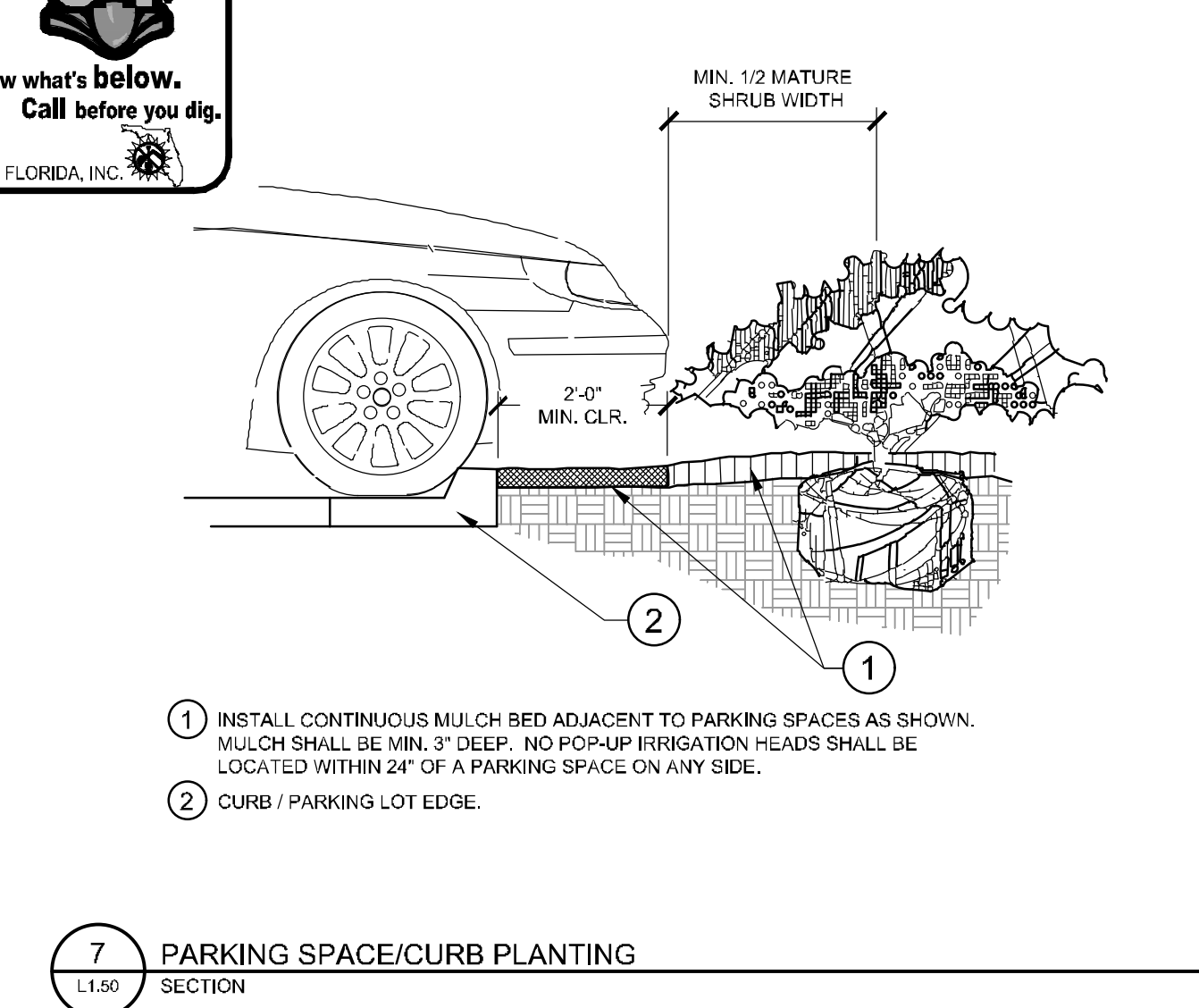
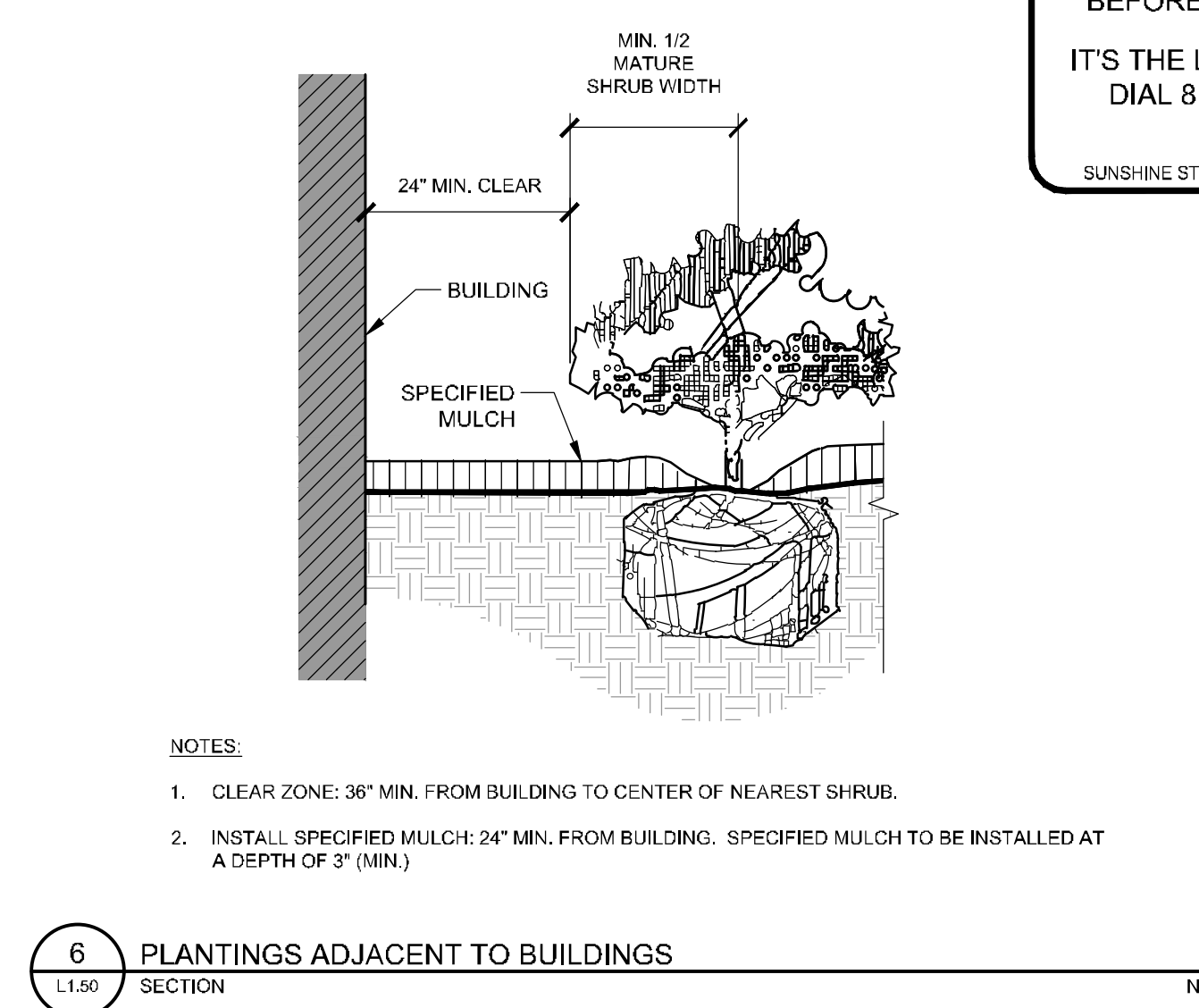
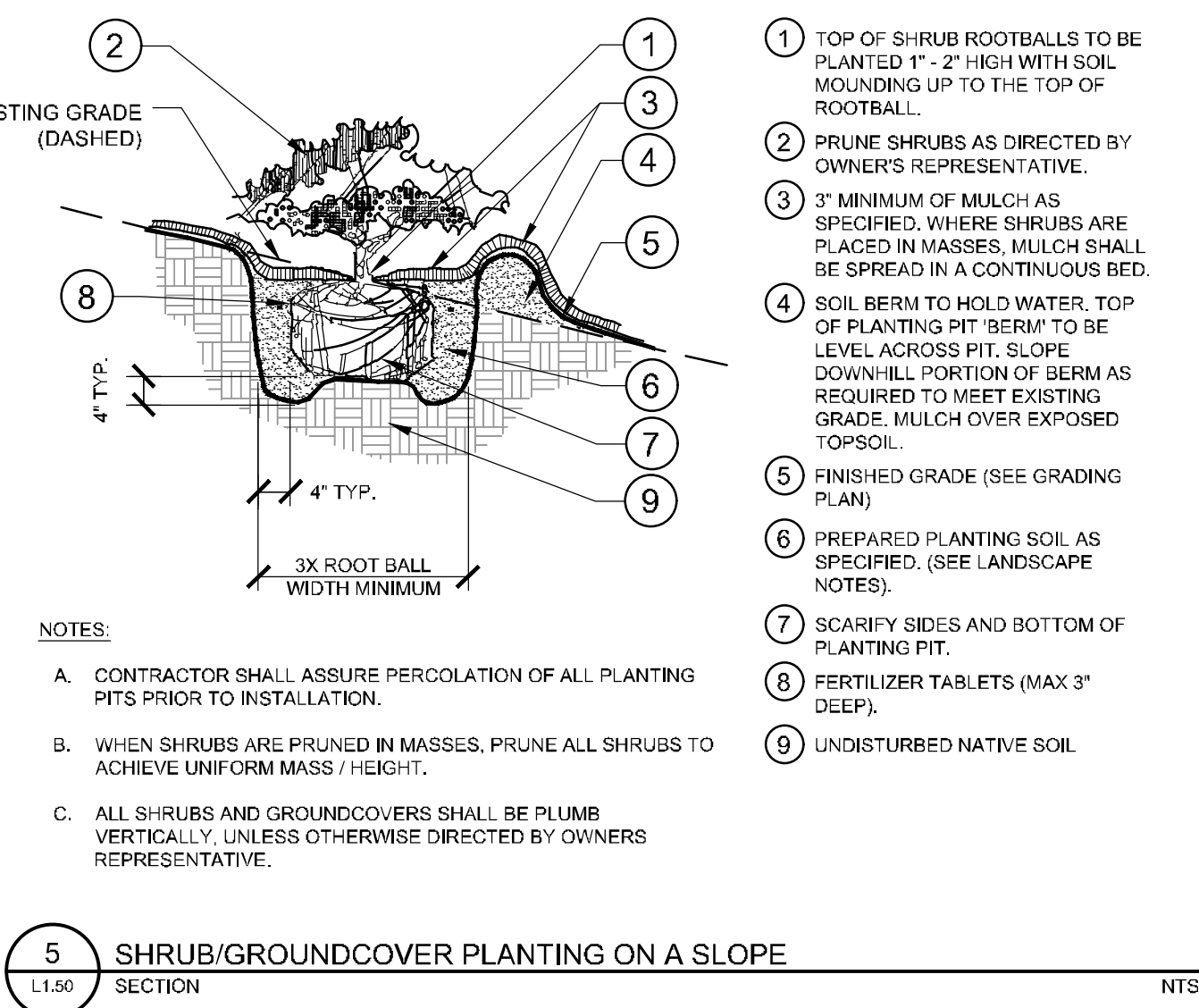
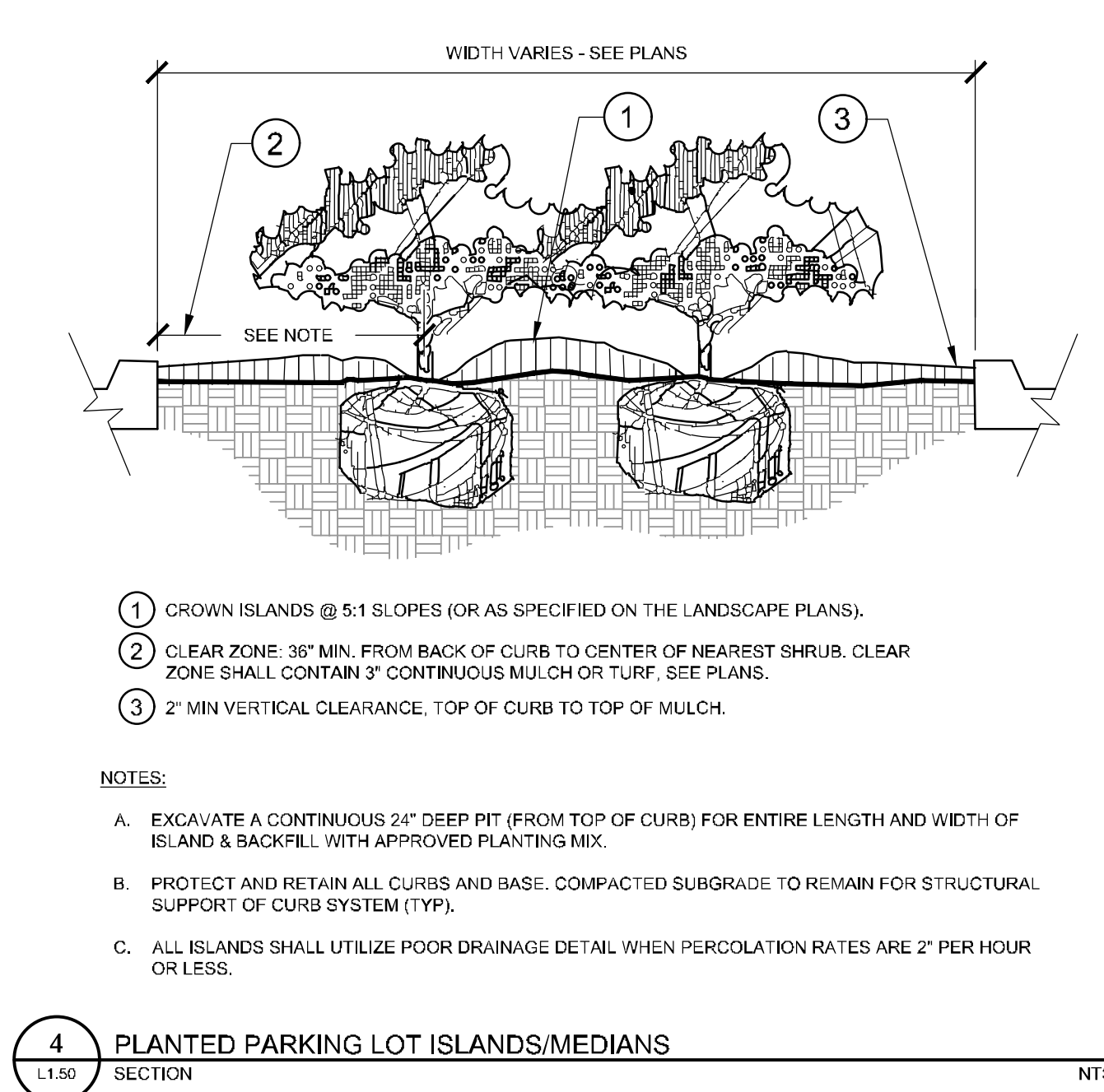
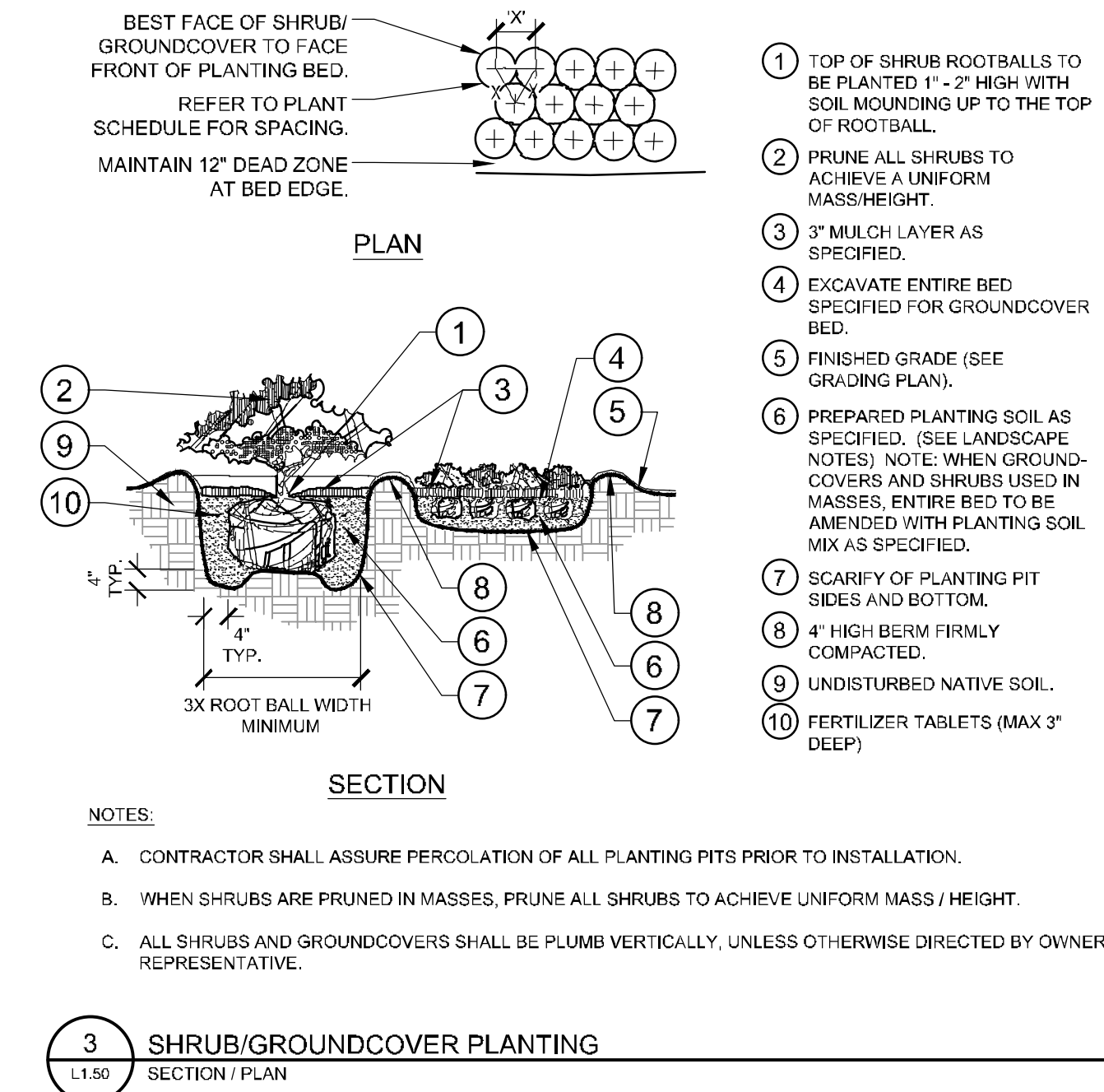
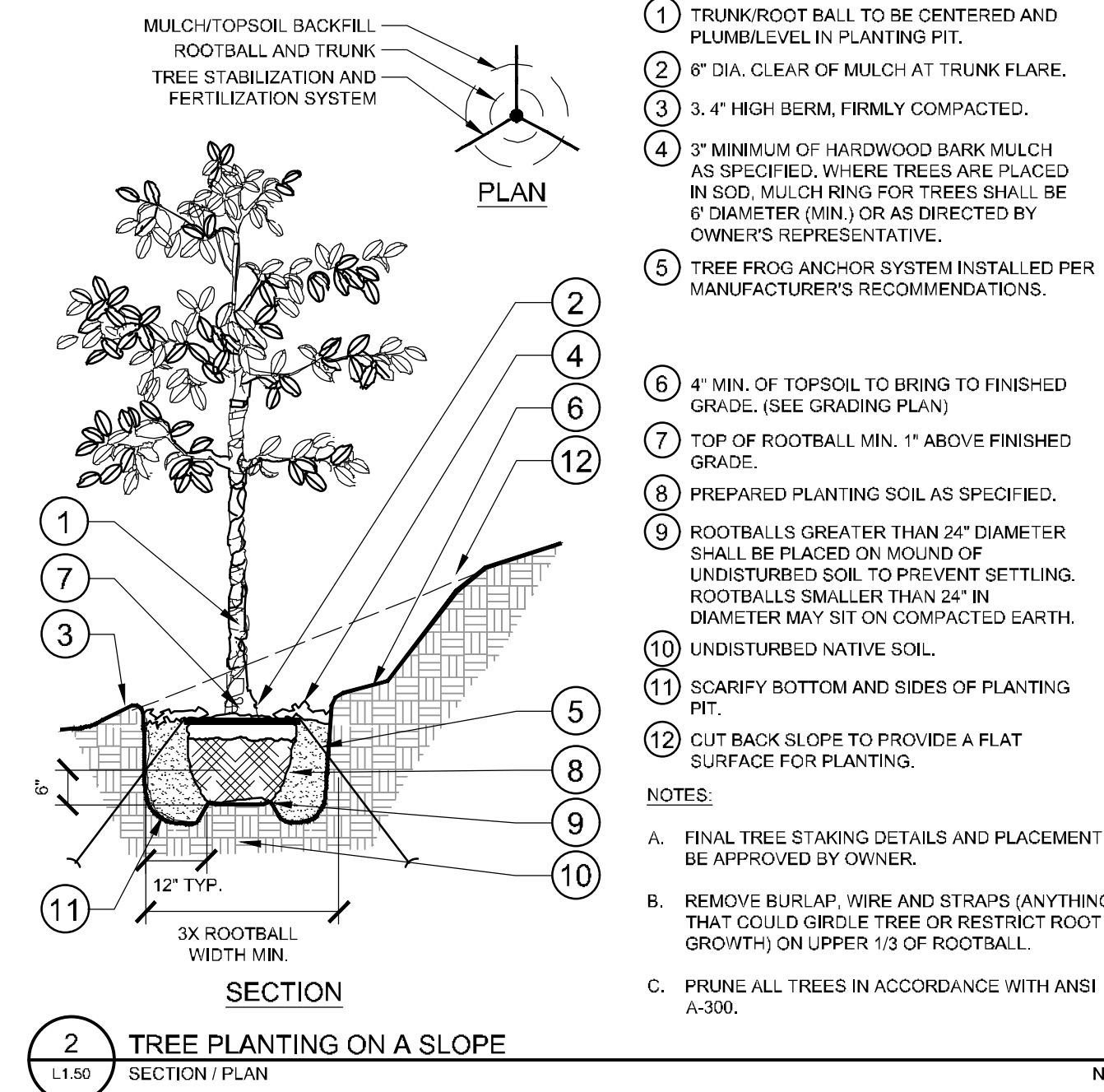
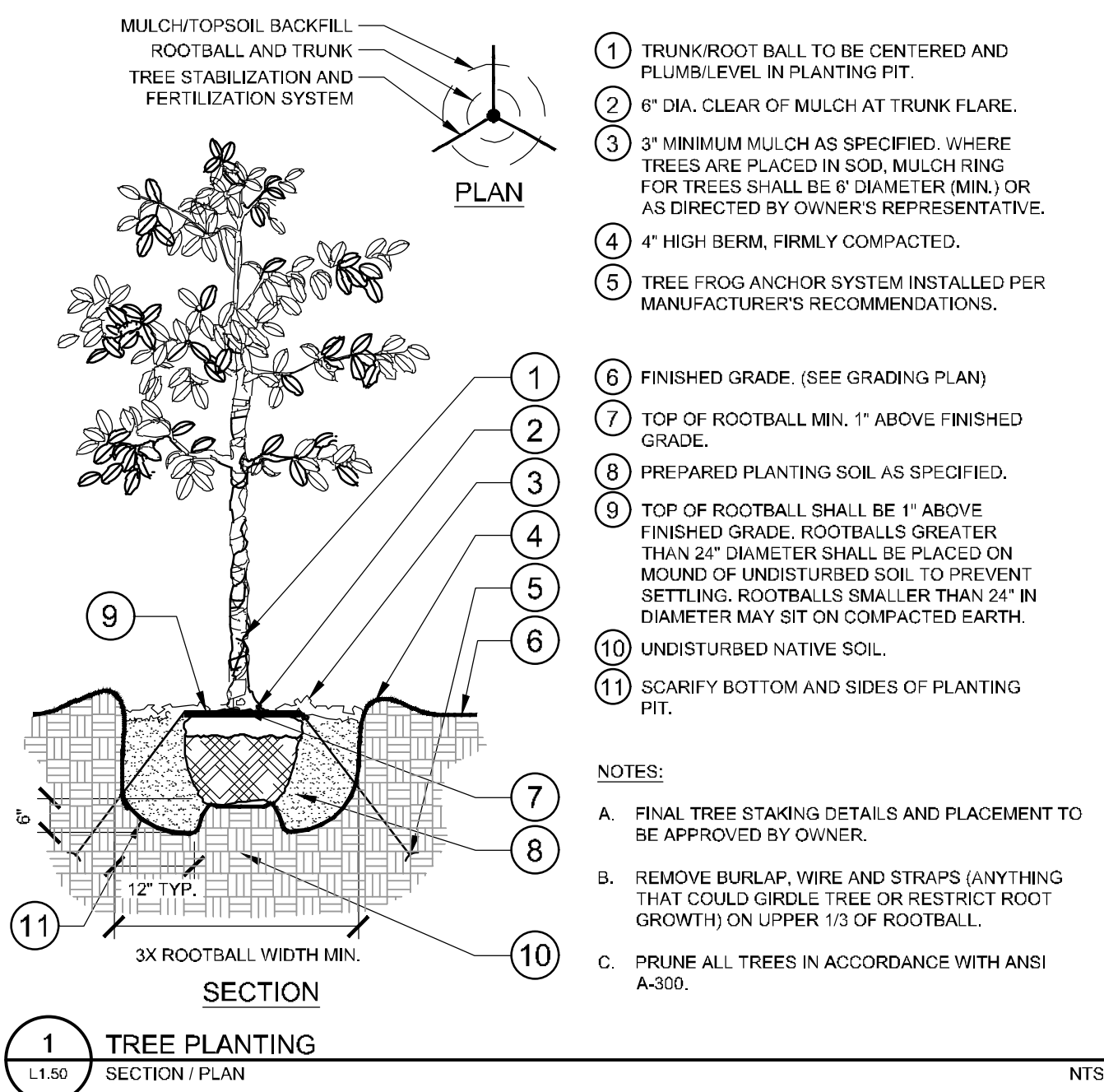


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 IT'S THE LAW! DIAL 811
 Know what's below. Call before you dig.
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A LANDSCAPE PLAN
 L1.00

WINDERMERE DOWNTOWN PROPERTY TOWN OF WINDERMERE		LANDSCAPE PLAN		LICENSED PROFESSIONAL		Kimley»Horn © 2022 KIMLEY-HORN AND ASSOCIATES, INC. 189 S. ORANGE AVENUE, SUITE 1000, ORLANDO, FL 32801 PHONE: 407-698-1511 WWW.KIMLEY-HORN.COM REGISTRY No. 35106	
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DESIGNED BY AKP		DRAWN BY AKP		CHECKED BY AKP		DATE:	
REVISIONS		No.		BY		DATE	

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LANDSCAPE DETAILS

WINDERMERE DOWNTOWN PROPERTY

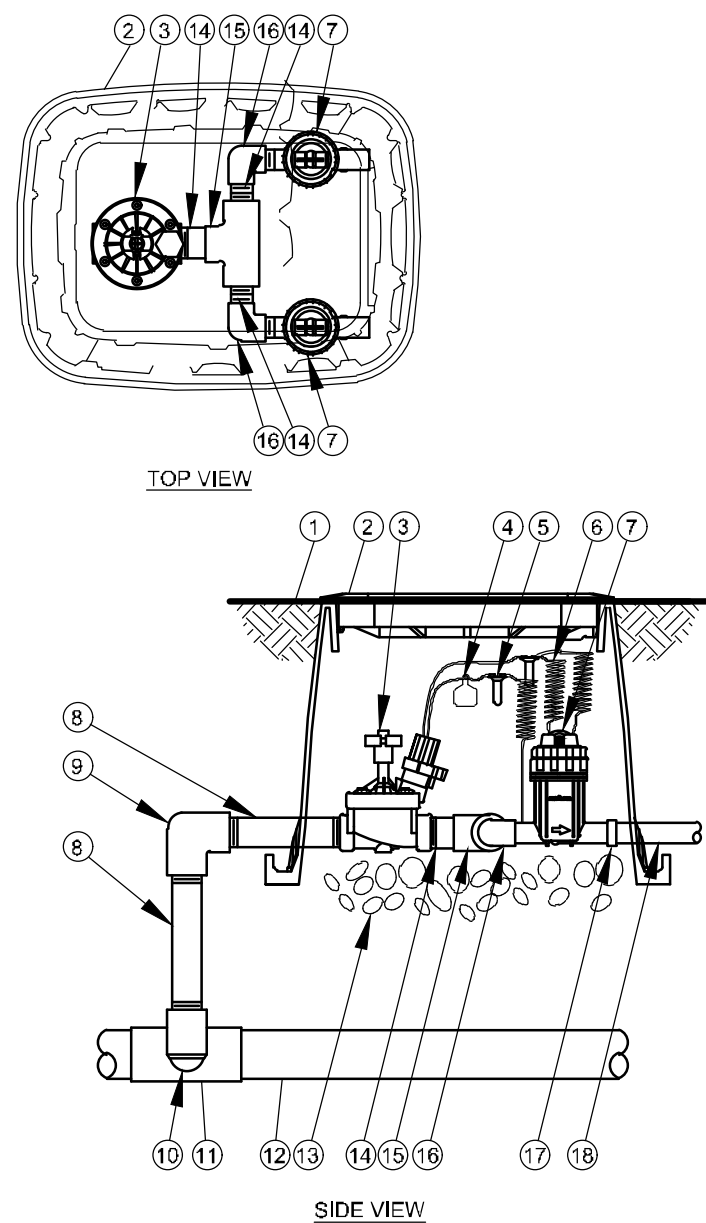
TOWN OF WINDERMERE

SHEET NUMBER **L1.50**

PROJECT	149973004
DATE	02/09/2023
SCALE	AS SHOWN
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DRAWN BY	AKP
CHECKED BY	AKP

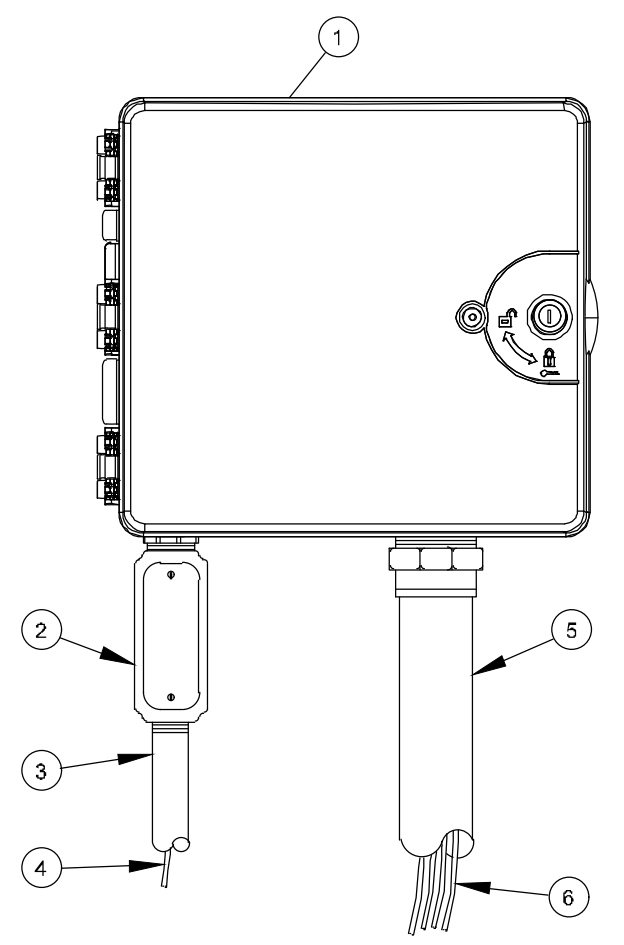
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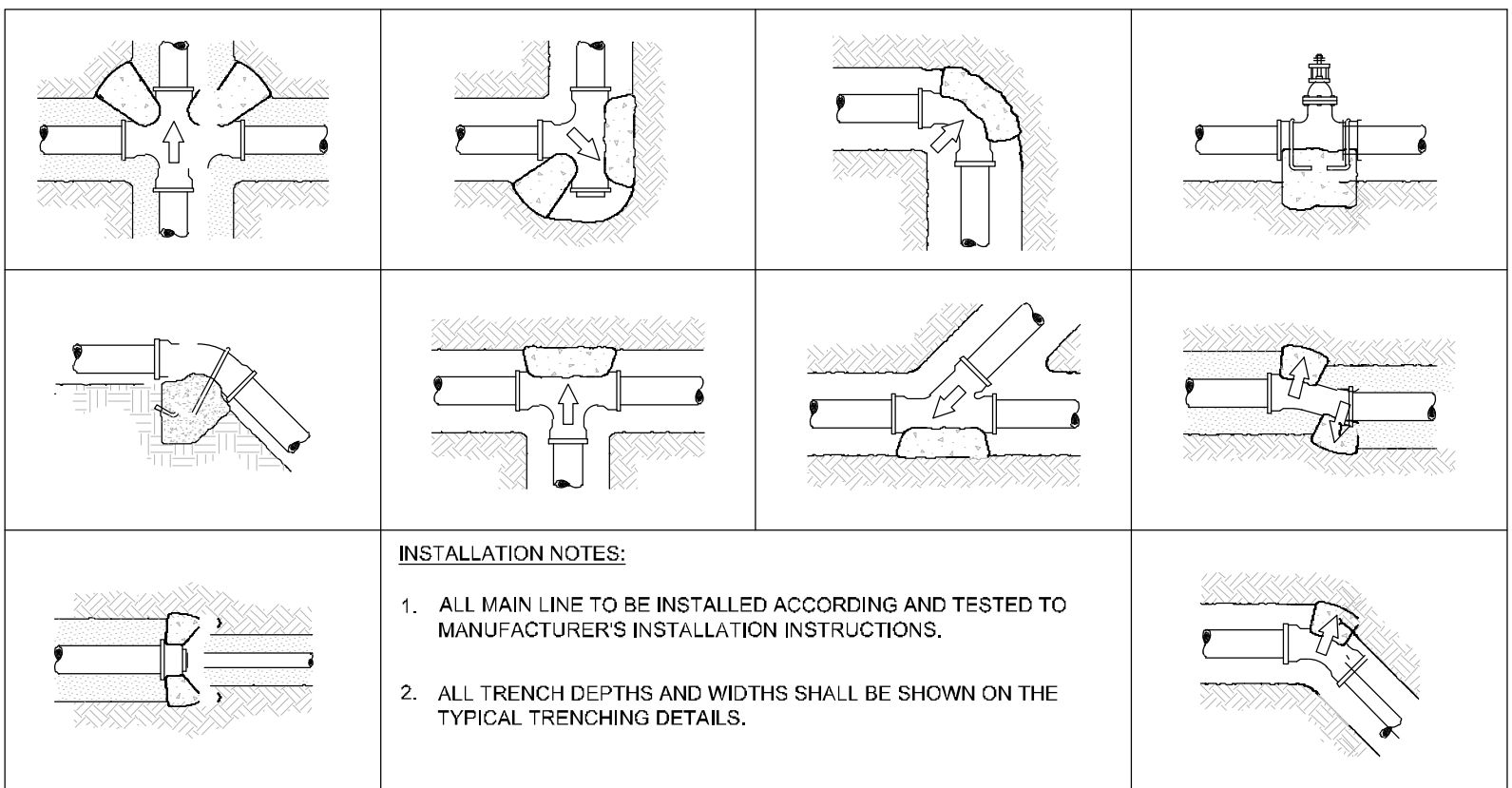
- 1 FINISH GRADE/TOP OF MULCH
- 2 VALVE BOX WITH COVER:
- 3 REMOTE CONTROL VALVE:
- 4 ID TAG
- 5 WATERPROOF CONNECTION:
- 6 30-INCH LINEAR LENGTH OF WIRE, COILED
- 7 PRESSURE REGULATING QUICK CHECK BASKET FILTER:
- 8 PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
- 9 PVC SCH 40 ELL
- 10 PVC SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND PVC SCH 40 ELL
- 11 PVC SCH 40 TEE OR ELL
- 12 MAINLINE PIPE
- 13 3/4-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
- 14 PVC SCH 80 NIPPLE, CLOSE
- 15 PVC SCH 40 TEE
- 16 PVC SCH 40 ELL
- 17 PVC SCH 40 FEMALE ADAPTOR
- 18 LATERAL PIPE

1 COMMERCIAL CONTROL DRIP ZONE VALVE KIT
SECTION / PLAN NTS



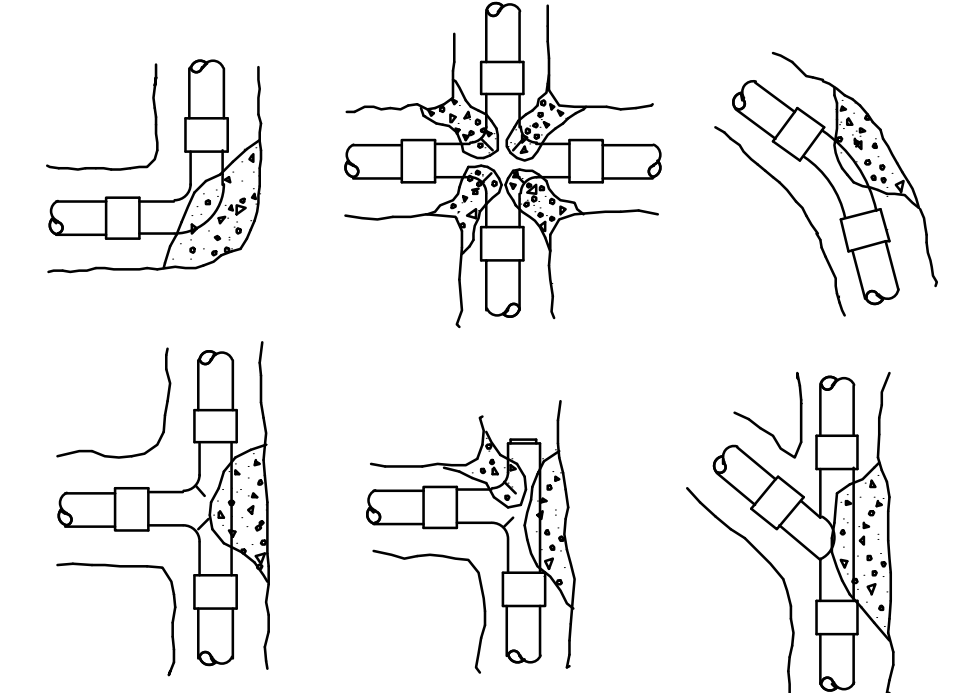
- 1 IRRIGATION CONTROLLER: CONTROLLER (OWNER TO SPECIFY WALL MOUNT OR STAINLESS STEEL PEDESTAL MOUNT). INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
 - 2 JUNCTION BOX
 - 3 1-INCH CONDUIT AND FITTINGS TO POWER SUPPLY
 - 4 POWER SUPPLY WIRE
 - 5 2-INCH CONDUIT AND FITTINGS FOR STATION WIRES
 - 6 WIRES TO REMOTE CONTROL VALVES
- NOTES:
1. FOR EASE OF INSTALLATION INTO A CONTROLLER WITH MORE THAN 24 STATIONS, INSTALL A JUNCTION BOX AT THE BASE OF CONTROLLER AND TRANSITION LARGER VALVE AND COMMON WIRES FROM FIELD TO 18 AWG MULTI CONDUCTOR WIRE TO BE USED IN CONTROLLER.
 2. USE STEEL CONDUIT FOR ABOVE GRADE AND SCH 40 PVC CONDUIT FOR BELOW GRADE CONDITIONS.
 3. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.

2 TYPICAL CONTROLLER
ELEVATION NTS



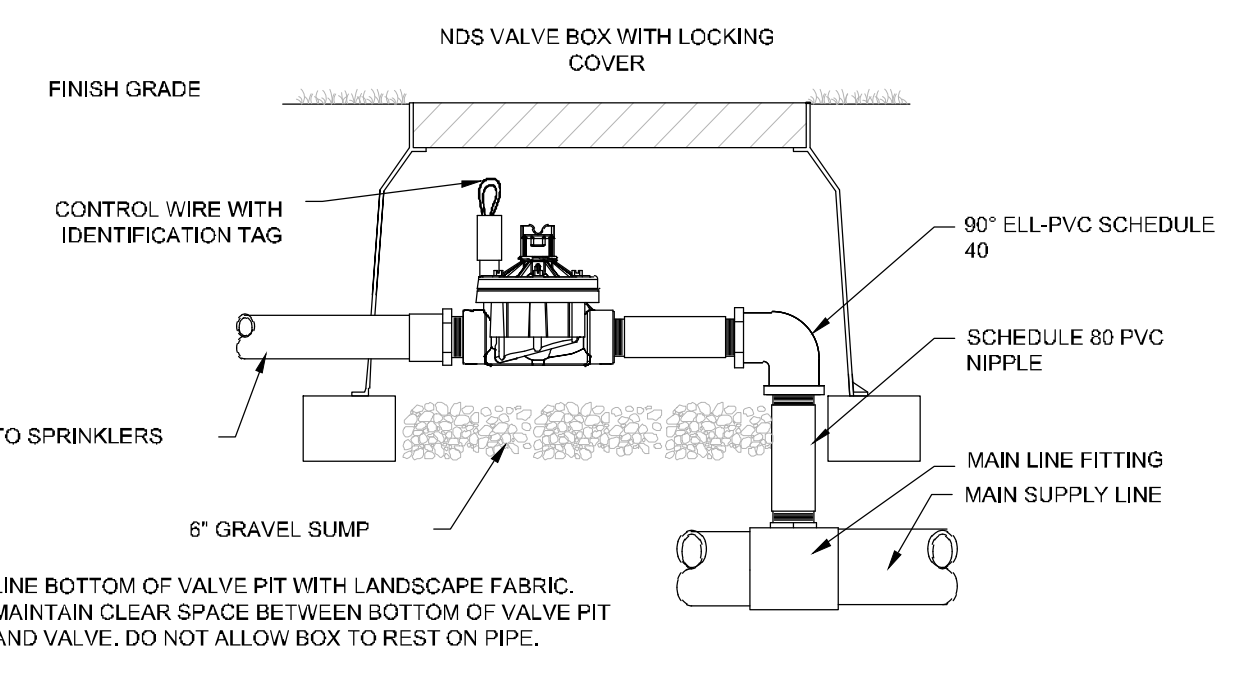
- INSTALLATION NOTES:
1. ALL MAIN LINE TO BE INSTALLED ACCORDING AND TESTED TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 2. ALL TRENCH DEPTHS AND WIDTHS SHALL BE SHOWN ON THE TYPICAL TRENCHING DETAILS.

3 TYPICAL THRUST BLOCK
SECTION NTS

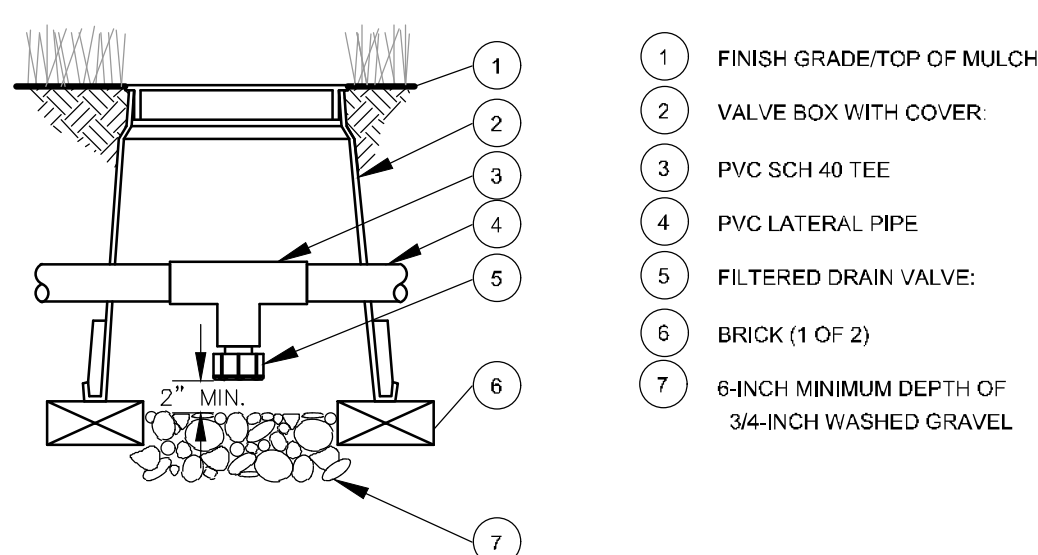


- INSTALLATION NOTES:
1. 3000 PSI CONCRETE OR BETTER IS TO BE USED FOR THRUST BLOCKS.
 2. FOR 45°/90° FITTINGS, MINIMUM OF 2 CUBIC FEET OF CONCRETE TO BE USED.
 3. FOR 22°/12° FITTINGS, MINIMUM OF 0.5 CUBIC FEET OF CONCRETE TO BE USED.
 4. FOR TEES, MINIMUM OF 2 CUBIC FEET OF CONCRETE TO BE USED. THRUST BLOCKS REQUIRED FOR IRRIGATION MAINLINE 2 1/2" AND LARGER.

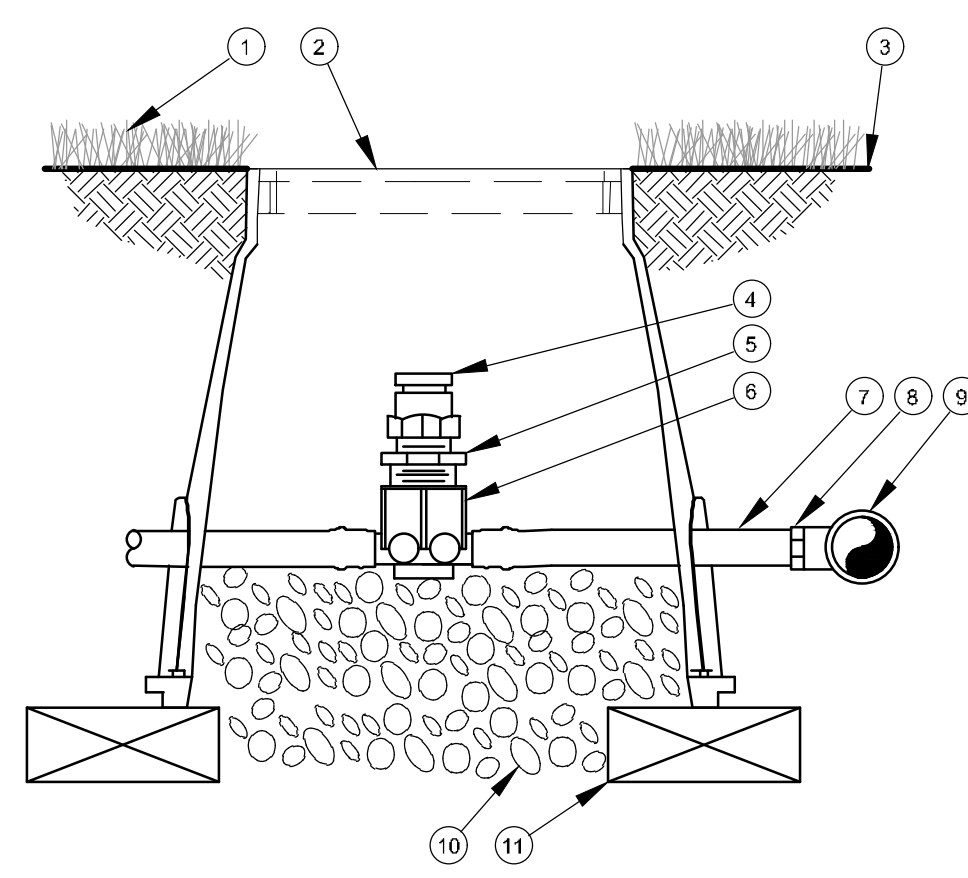
4 THRUST BLOCK REINFORCEMENT
SECTION NTS



5 TYPICAL CONTROL VALVE
SECTION NTS

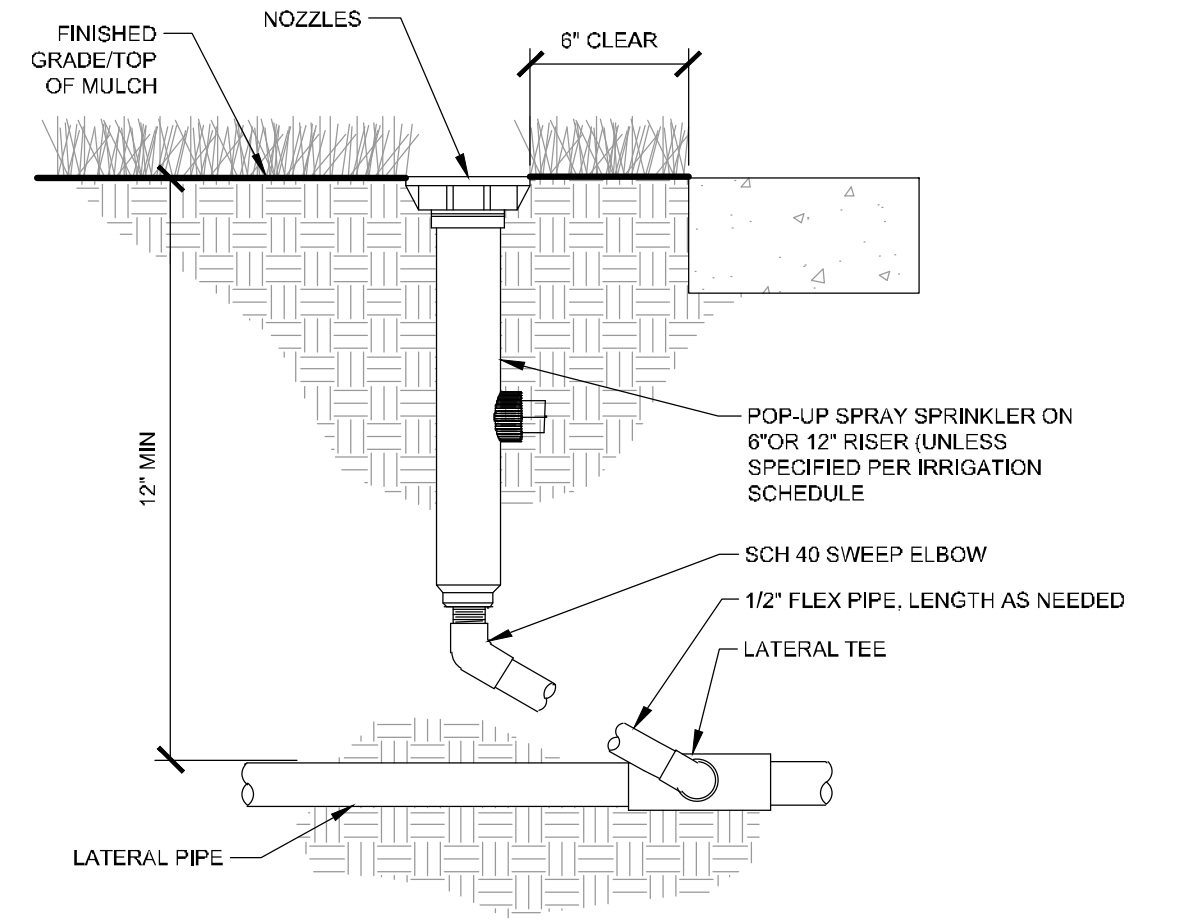


6 DRAIN VALVE
SECTION NTS

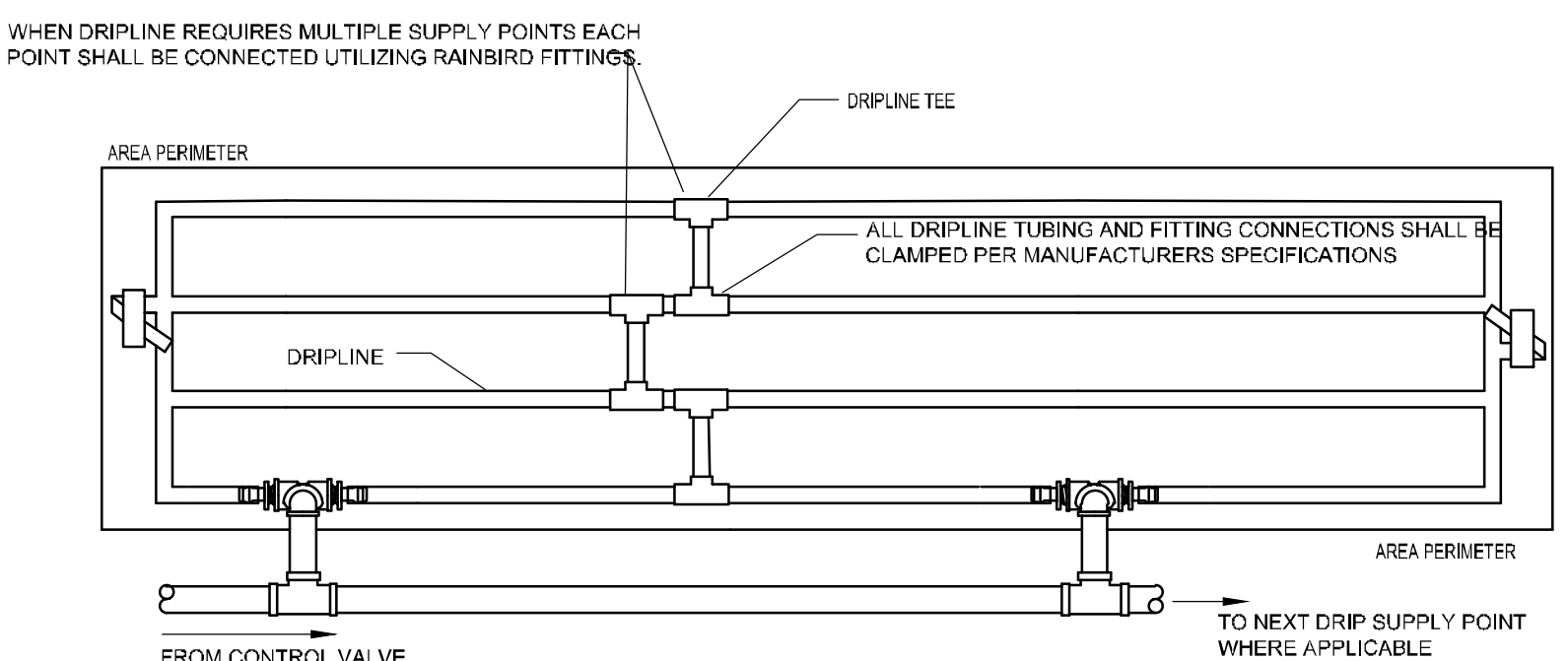


- 1 TURF GRASS
- 2 VALVE BOX LID
- 3 FINISH GRADE
- 4 1/2" AIR RELIEF VALVE: TO BE INSTALLED AT HIGH POINTS IN DRIP ZONE
- 5 1/2" X 3/4" PVC REDUCER BUSHING
- 6 BARB X FEMALE THREAD CONNECTOR
- 7 1/2" BLANK DRIPLINE TUBING
- 8 BARB X MALE THREAD CONNECTOR
- 9 PVC TEE CONNECTED TO PVC HEADER PIPE
- 10 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL
- 11 BRICK (1 OF 2)

7 AIR RELIEF VALVE IN XFS DRIP LINE
SECTION NTS

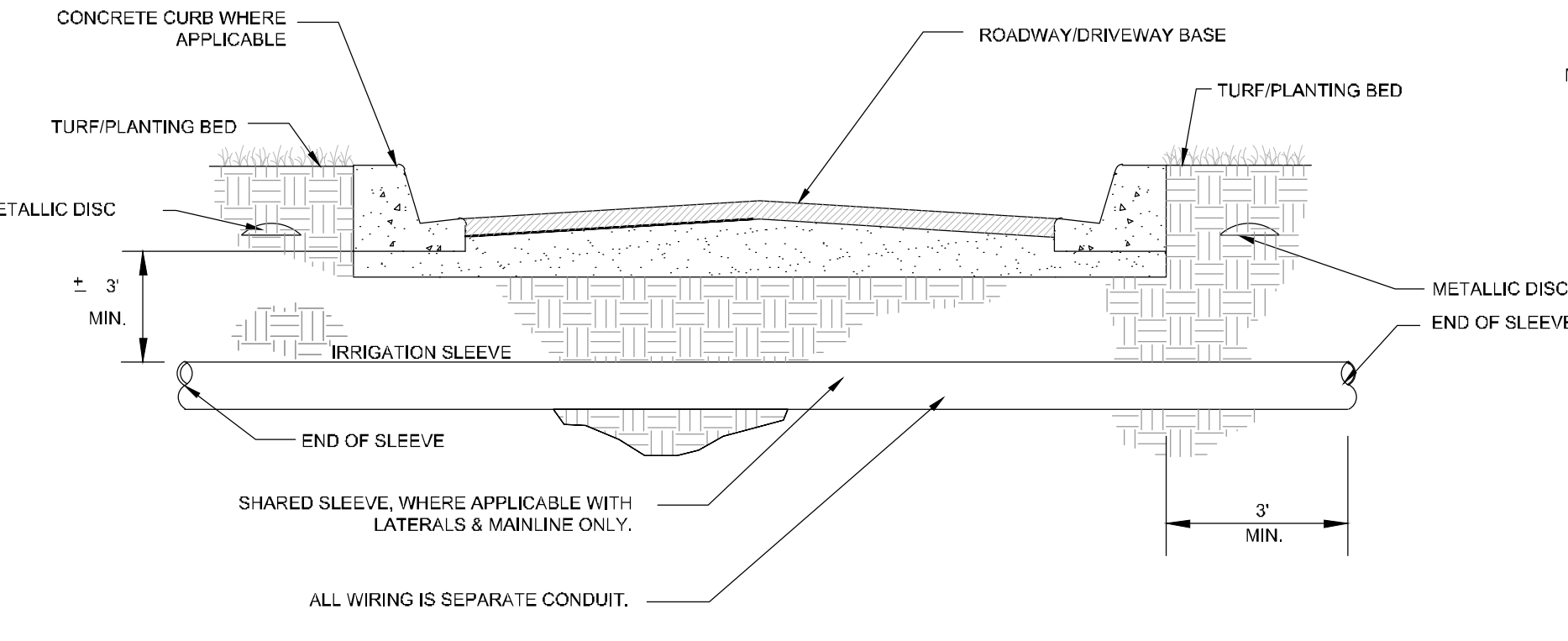


8 TYPICAL SPRAY / ROTAR HEAD
SECTION NTS

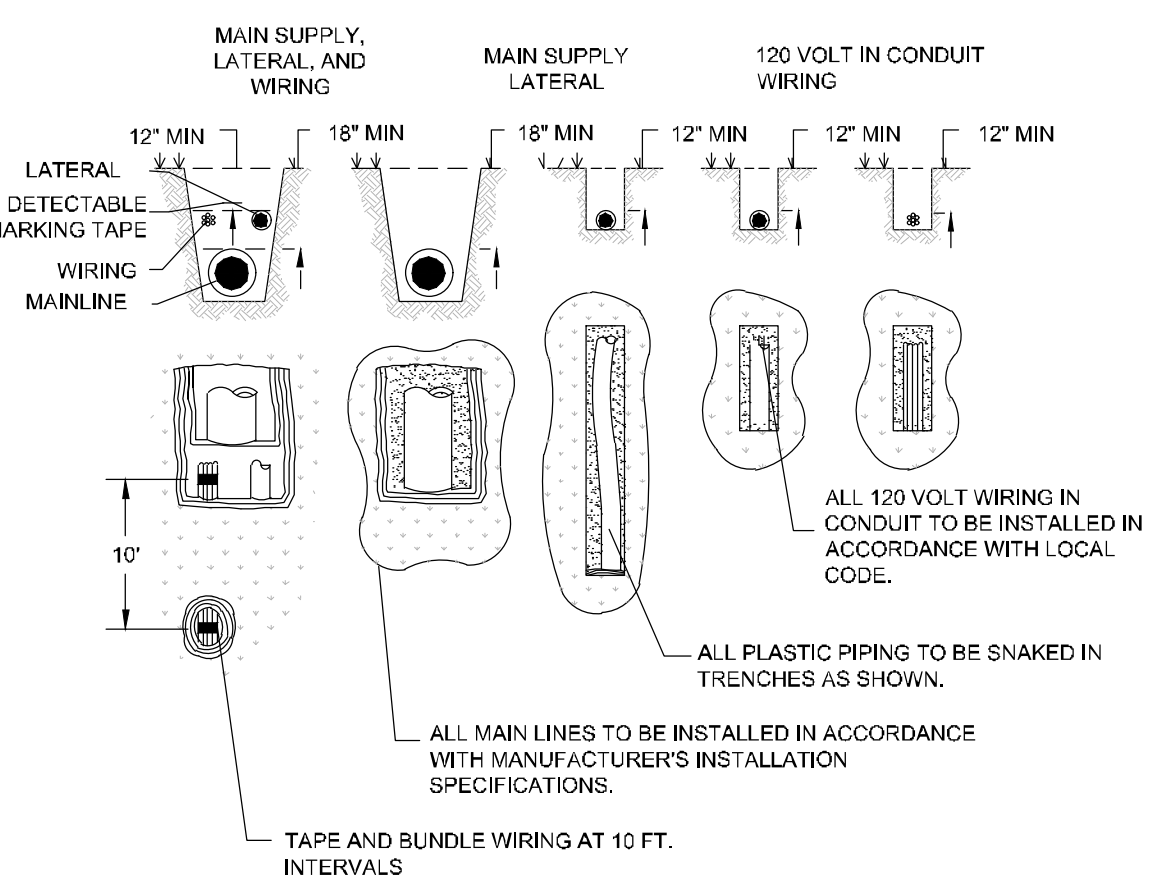


- WHEN DRIPLINE REQUIRES MULTIPLE SUPPLY POINTS EACH POINT SHALL BE CONNECTED UTILIZING RAINBIRD FITTINGS.
- ALL DRIPLINE TUBING AND FITTING CONNECTIONS SHALL BE CLAMPED PER MANUFACTURER'S SPECIFICATIONS.
- CONTRACTOR TO REFER TO IRRIGATION PLAN FOR LOCATION OF CONTROL VALVES THAT UTILIZE MULTIPLE DRIPLINE SUPPLY CONNECTIONS. IF NOT SHOWN, INSTALL WITHIN ADJACENT GREEN AREA NOT IN A HIGHLY VISIBLE AREA.
- NOTE:
1. DRIP TUBING TO BE ROUTED IN THE PLANT MATERIAL BED WITH AT MAXIMUM LATERAL SPACING OF 16 INCHES.
 2. DRIP TUBING TO BE INSTALLED IN A GRID PATTERN. DRIP TUBING SHALL NOT BE INSTALLED IN A LONG CONTINUOUS RUN.
 3. CONTRACTOR TO REFER TO IRRIGATION PLAN FOR LOCATION OF CONTROL VALVES THAT UTILIZE MULTIPLE DRIPLINE SUPPLY CONNECTIONS (IF SHOWN).

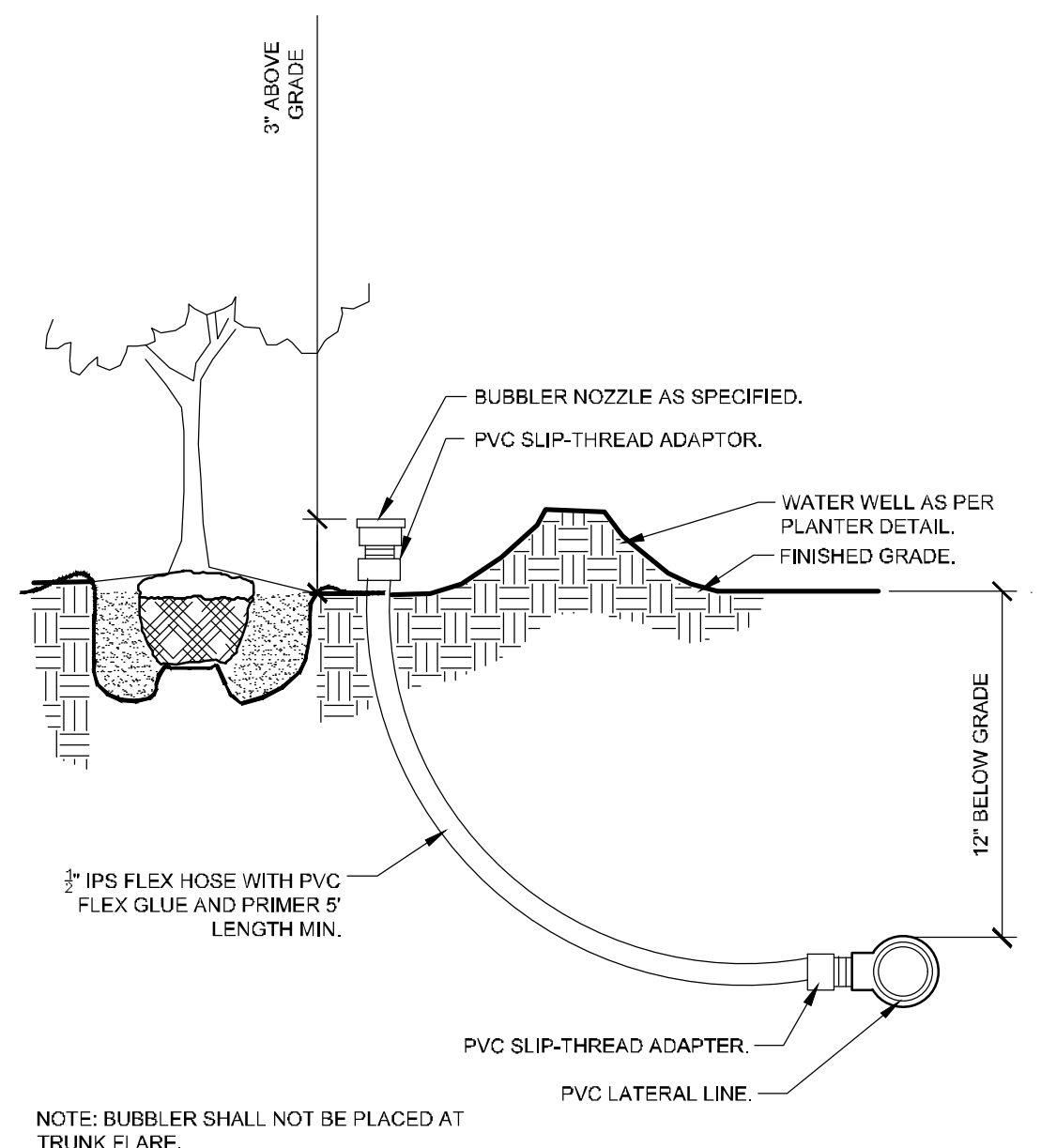
9 TYPICAL DRIP LINE
PLAN NTS



10 TYPICAL SLEEVING
SECTION NTS



11 TYPICAL TRENCHING
SECTION / PLAN NTS



12 TYPICAL BUBBLER
SECTION NTS

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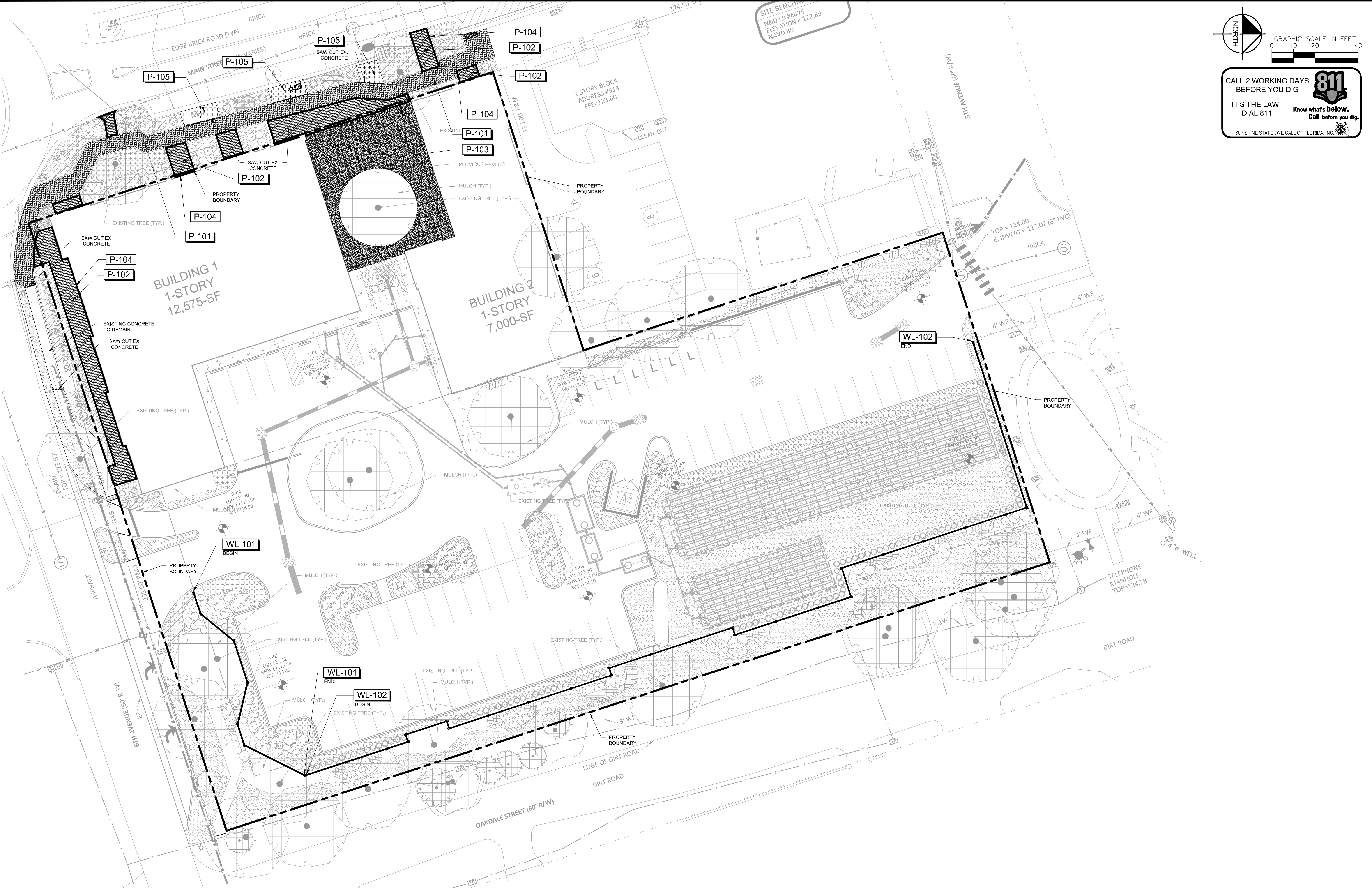
LICENSED PROFESSIONAL
KHA PROJECT 149973004
DATE 02/09/2023
SCALE AS SHOWN
DESIGNED BY AKP
DRAWN BY AKP
CHECKED BY AKP

IRRIGATION DETAILS

WINDERMERE DOWNTOWN PROPERTY

SHEET NUMBER L2.50

Plotted By: Ceiler, Marcus Sheet: Sct: Windermere Downtown Property Layout: L3.01 May 03, 2023 06:23:06pm K:\GBL_Civil\149973004-Windermere Downtown Property\CADD\CONSTR\PlanSheets\L3.00 - HARDSCAPE PLAN.dwg
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REFERENCE NOTES SCHEDULE

PAVING		QTY	MANUFACTURER	MODEL	COLOR	PATTERN	NOTES
	BRICK PAVER FIELD - HERRINGBONE PATTERN	2,115 SF	BELGARD	HOLLAND STONE 60MM	GEORGIA BLEND	HERRINGBONE PATTERN	
	BRICK PAVER FIELD - RUNNING BOND PATTERN	1,889 SF	BELGARD	HOLLAND STONE 60MM	GEORGIA BLEND	RUNNING BOND	INSTALL PER MANUFACTURER'S SPECIFICATIONS
	PERMEABLE PAVER - INTERLOCKING GRID	2,376 SF	BELGARD	TURFSTONE	GRAY		VOIDS TO BE FILLED WITH PEA GRAVEL. GRAY AND WHITE BLEND
	PAVER BANDING 1	448 SF	BELGARD	HOLLAND STONE 60MM	GEORGIA BLEND	SAILOR COURSE	INSTALL PER MANUFACTURER'S SPECIFICATIONS
	EXISTING CONCRETE SIDEWALK TO REMAIN; CONTRACTOR TO SAW CUT TO LAYOUT SHOWN	335 SF					

WALL		QTY	MANUFACTURER	MODEL	WALL HEIGHT	WALL PANEL FINISH	WALL PANEL COLOR	COLUMN VENEER MANUFACTURER	COLUMN VENEER MODEL
	6 PERMACAST WALL	112 LF	PERMACAST	PERMACAST 2.0	6' HEIGHT	SAND FINISH	TO BE PROVIDED FROM OWNER	EL DORADO	HARTFORD
	3' PERMACAST WALL	464 LF	PERMACAST	PERMACAST 2.0	3' HEIGHT	SAND FINISH	TO BE PROVIDED FROM OWNER	EL DORADO	HARTFORD

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 KHA PROJECT 149973004
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 BY: _____
 DATE: _____
WINDERMERE DOWNTOWN PROPERTY
HARDSCAPE PLAN
 SHEET NUMBER **L3.01**
 TOWN OF WINDERMERE, FL