# ASPEN PEST CONTROL

WINSBERG, INC. P.O. Box 2815 Lake City FL, 32056 Phone: (386) 755-7449 david@winsberginc.com

David M. Winsberg, PE PE License # 68463 Cert. Auth. # 29596

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### **DEVELOPER**

Brad Handy
DIY Development LLC.
215 Windswept Glen
Lake City, FL 32024 Phone: (386)-466-9168

## **LOCATION MAP**



## **PROJECT LOCATION**

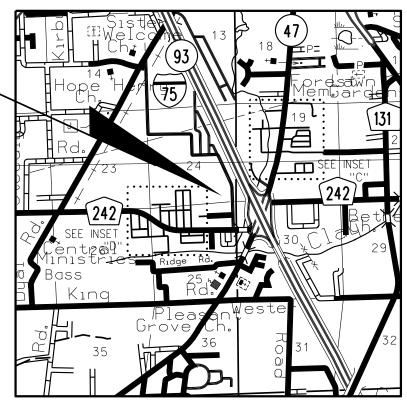
## **PROJECT LOCATION**

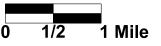
## SUBJECT PROPERTY IS LOCATED AT

SECTION 24, TOWNSHIP 4 SOUTH, RANGE 16 EAST COLUMBIA COUNTY, FLORIDA

For Permitting - Coulmbia County 2nd Submittal **WINSBERG, INC. PROJECT NUMBER: 2391** 

## **VICINITY MAP**





#### **GENERAL NOTES**

- The contractor shall verify all conditions and dimensions at the job site to ensure that all work will fit in the manner intended on the plans. Should any conditions exist that are contrary to those shown on the plans, the contractor shall notify the engineer of difference immediately and prior to proceeding with the work.
- The contractor shall maintain the construction site at all times in a secure manner. All open trenches and excavated areas shall be protected from access
- Site contractor shall coordinate all work with other contractors within
- The contractor shall waste all excess earth on site as directed by the engineer.
- Any public land corner within the limits of construction is to be protected. 5. If a corner monument is in danger of being destroyed and has not been properly referenced, the contractor should notify the engineer.
- Boundary and topographical information shown was obtained from a survey performed by Daniel & Gore, LLC., Florida Certificate No. 7683
- All existing utilities shall be located (horizontal and vertical) prior to beginning work. Any existing utilities shown in these plans are approximate only and shall be verified in the field by non-destructive methods. The engineer shall be notified immediately of any discrepancies.
- The design of all utility service connections (defined as the conduit connecting the utility from the building to the point it enters/leaves the collection/distribution systém) is the responsibility of the contractor and/or his structural engineer or architect. Such utility service connections shall have equivalent or greater capacity than the conduit inside such building(s) serviced, and shall be designed according to all building codes and all other applicable regulations. The site engineer shall be notified immediately if a conflict arises between any proposed service connections
- All site construction shall be in accordance with the Columbia County Land Development Regulations.
- 10. Contractor shall contact the Columbia County Building and Zoning department to perform the following site inspections:

  A) Erosion and sediment control - prior to beginning construction.

  B) Site compliance - once building foundation is poured and improvements

  - are staked out
  - C) Final site compliance once all improvements are finalized.
- All proposed construction shall conform to the latest edition of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction and the Florida Department of Transportation Design Standards.
- All new traffic signage and pavement markings shall conform to the current manual on Uniform Traffic Control Devices and the current FDOT design standards.
- All storm sewer pipes shall have a minimum cover of 6". Limerock backfill shall be used if pipe under pavement has less than 12" cover. 13.
- Existing drainage structures within the construction limits shall be removed, 14. unless otherwise specified in the plans.
- All swales, depression areas and retention ponds shall be inspected monthly for sinkhole occurrence. Should a sinkhole occur, the area should be repaired as soon 15. as possible. If a solution pipe sinkhole forms within the storm water system, the sinkhole shall be repaired by backfilling with a low permeability material. A 2-foot cap that extends 2 feet beyond the perimeter of the sinkhole shall be constructed with clayey soils. The clayey soil should have at least 20% passing the number 200 sieve, compacted to 95% of standard proctor, and compacted in a wet condition with moisture 2%-4% above optimum. The clay soil cap shall be re-graded to prevent ponding and re-vegetated.
- Contractor shall provide an as-built survey meeting the requirements of Chapter 61G17 F.A.C. for the stormwater management systems. Include horizontal and vertical dimensional data so that improvements are located and delineated relative to the boundary. Provide sufficient detailed data to determine whether the improvements were constructed in accordance with the plans.
- Contractor shall contact SRWMD and the engineer of record 48 hours prior to beginning construction

#### **EROSION CONTROL NOTES**

- Contractor shall adhere to the Erosion Control Plan and all erosion and sediment control regulations as set by SRWMD and other governing authorities, and use (as a minimum) the erosion measures control described and shown in these plans.
- This project shall comply with all applicable water quality standards.
- 3. Sediment and erosion control measures and stormwater management facilities shall be installed prior to any other construction.
- Contractor is responsible for implementing additional measures as required for proper erosion and sediment control. The contractor should use BMP's in the Florida Erosion and Sediment Control Inspector's manual to implement a plan that will work and meet actual field conditions.
- Sediment and erosion control measures shall not be removed until all construction is complete and a permanent ground cover has been established.
- 6. During construction and after construction is complete, all structures shall be cleaned of all debris and excess sediment
- All waste generated on the project shall be disposed of by the contractor in areas provided by contractor.
- Loaded haul trucks shall be covered with tarps and excess dirt removed daily.
- 9. Silt fences shall be located on site to prevent sediment and erosion from leaving project limits. Silt fence shall be cleaned or replaced when silt builds up to within one foot of top of silt fence.
- The retention basin(s) shall be constructed initially to serve as a sediment trap during construction.
- A pad of rubble riprap shall be placed at the bottom of all collection flumes and collection pipe outlets.
- All open drainage swales shall be grassed immediately and riprap shall be placed as required to control erosion.
- All disturbed areas shall be stabilized immediately to prevent erosion. All slopes greater then 4h:1v shall be stabilized with sod. Staple sod shall be used on slopes greater than 2h:1v.
- All disturbed areas not sodded shall be seeded with a mixture of long-term regetation and quick-growing short-term vegetation for the following conditions. For the months from September through March, the mix shall consist of 70 pounds per acre of long-term seed and 20 pounds per acre of winter rye. For the months of April through August, the mix shall consist of 70 pounds per acre of long-term seed and 20 pounds per acre of millet.
- All stabilization practices shall be initiated as soon as practicable in areas of the job where construction activities have temporarily or permanently stopped, but in no case shall the disturbed area be left unprotected for more than three (3) days
- Qualified personnel shall inspect the stockpile areas, silt fence, construction entrance, and all disturbed areas that have not been finally stabilized, at least once every seven (7) calendar days and within 24 hours of the end of a storm of 0.5 inches or greater. Corrective actions shall be taken immediately.
- Contractor is responsible for the construction and maintenance of all erosion and sediment controls during proposed construction.

#### **ABBREVIATIONS**

OVER HEAD	UNDER GROUND	TYPE OF UTILITY		Ø	DIAMETER	INV	INVERT
	I UC	C CABLE		DBI	DITCH BOTTOM INLET	EL	ELEVATION
ОНС			1	МН	MANHOLE	LF	LINEAR FEET
OHE	UE	E	ELECTRIC	со	CLEANOUT	NTS	NOT TO SCALE
OHT	UT .	T	TELEPHONE	SAN	SANITARY SEWER	P	PROPERTY LINE
RCP	REINFORC	ED C	ONCRETE PIPE	SS	STORM SEWER	Ç	CENTER LINE
CMP	CORRUGA	TED	METAL PIPE	w	WATER LINE	B B	BASE LINE
HDPE	HIGH DEN	ISITY		VV	WATER LINE	T <u>L</u>	DAGE LINE
POLYETHYLENE PIPE			G	GAS	R	RADIUS OF CURVE	
BCCMP BITUMINOUS COATED			MES MITERED END		EOP	EDGE OF PAVEMENT	
CORRUGATED METAL PIPE			SECTION  WSWT WET SEASON WATER TABLE		ВМ	BENCH MARK	
BCCSP BITUMINOUS COATED CORRUGATED STEEL PIPE					ΙP	IRON PIPE	
SOUTH OF THE STEEL THE				l			

#### LEGEND

ITEM	SYMBOL	ITEM	SYMBOL
CONCRETE MONUMENT	•	METER OR CONTROLS	ATER GAS ELEC
IRON PIPE	•	VALVE	WATER GAS SAN
BENCH MARK		REDUCER	<b>&gt;</b>
SOIL BORING LOCATION	$\oplus$	BACKFLOW PREVENTER	HOH
POWER POLE	$\rightarrow$	FIRE HYDRANT	FH
TELEPHONE POLE	<b>⊸</b>	WATER 90° BEND	L,
SHARED POWER POLE	\$	WATER TEE	上
ANCHOR PIN	$\rightarrow$	SINGLE WATER SERVICE	0
LIGHT	↔	DOUBLE WATER SERVICE	$\Diamond \Diamond$
SIGN & POST	-	SANITARY SINGLE WATER SERVICE	-+⊙-(
TOWER	$\bowtie$	SANITARY DOUBLE WATER SERVICE	o Tvo
FENCE _	• • •	SANITARY MANHOLE	(SAN)
SILT FENCE		STORMWATER MANHOLE	0
VEGETATION OR LANDSCAPING	* * 88	STORMWATER DRAINAGE INLET	
TREE	o (9)	STORMWATER PIPE	
GRAVEL OR RIPRAP		MITERED END SECTION	d
CONCRETE PAVEMENT	ΔΔΔ	ENERGY DISSIPATION PAI	
HANDICAP PARKING	Ġ	DITCH BLOCK	
FLOW ARROW (SHEET)	<b>~~</b> ►	FLOW ARROW (GUTTER)	
GROUND CONTOUR (EXISTING)	-75	GROUND CONTOUR (PROPOSED)	/ ^ \ _ /
SPOT ELEVATION (EXISTING)	× 86.22	SPOT ELEVATION (PROPOSED)	79.56

ICATION TO:	DATE	<b>REVISION NOTES</b>

AND

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#### **GENERAL UTILITY NOTES**

- All existing utilities shall be located prior to beginning work. This includes verifying location (horizontal and vertical) at any connection point of the existing utility. The engineer shall be notified immediately of any discrepancies existing between the construction plans and actual field conditions. Existing utilities shown in these plans are approximate only and shall be verified in the field by non-destructive methods
- Contractor shall review and become familiar with all required utility connections prior to bidding. Contractor shall provide all work and materials required to complete connection to the existing utilities. This includes, but is not limited to, manhole coring, wet taps, pavement repairs and directional boring
- Contractor shall contact the City of Lake City (386.758.5492) prior to beginning work to coordinate inspection of utility connections.
- Existing water should remain in service during construction. The City of Lake City shall be notified in the event interruptions to service are required
- All new and relocated water main pipes, fittings, appurtenances, and packing and joint materials shall conform to applicable American Water Works Association (AWWA) standards and/or manufactures recommendations.
- Sufficient valves shall be provided in new and relocated water mains to minimize inconvenience and sanitary hazards during repairs.
- At high points where air can accumulate in new and relocated water mains, hydrants or air release valves shall be provided to remove air.
- Automatic air release valves on new and relocated water mains shall not be located where flooding of the valve manhole or chamber could occur.
- Hydrant drains, flushing devices, air release valves or chambers, manholes containing valves, blow-offs, meters, or other appurtenances provided in conjunction with new and relocated water mains shall not be connected directly to any sanitary or storm sewer.
- Stones found in trenches for new and relocated water and sanitary sewer mains shall be removed to a depth of at least six inches below the bottom of pipe. Continuous and uniform bedding shall be provided in these trenches. This backfill material shall be tamped in layers around pipe to a sufficient height above pipe to adequately support and protect the pipe
- All tees, bends, plugs, and hydrants in new and relocated water mains shall be provided with restrained joints to prevent movement. Megalug mechanical joint restraints or approved alternative (not thrust blocks) shall be used with manufactures recommendations. All restrained joints shall be left open until
- A 24" minimum cover height shall be provided above any new or relocated water or sanitary sewer main crossing under any surface water. Provide the following features if width of surface water is greater than 15' at this crossing:

  - A) Flexible water tight joints throughout the crossing.
     B) Easily accessible valves located in a manhole.
  - C) Permanent taps on each side of valve within the manhole to allow for sampling and insertion of a small meter to determine leakage.
- Proper backflow prevention shall be provided in accordance with rule 62-555.360 F.A.C. (cross-connection control for public water systems).
- This project shall not include any interconnection between previously separate public water systems having separate water supply sources
- Any new and relocated water laterals shall cross above sanitary sewer pipe or provide protection to prevent contamination as required by FDEP and other
- Contractor shall provide an as-built survey for water and sanitary sewer extensions.
- Contractor shall provide tracer wire above all new and relocated water and sanltary sewer mains
- Locator devices shall be provided at water and sanitary sewer tap locations
- All utility construction shall be in accordance with all applicable building codes and with the City of Lake City Utility Standards unless otherwise approved by

#### PIPES AND FITTINGS

- General: All pipe and fittings for water and wastewater service shall be clearly marked with the name or trademark of the manufacturer, the location of the plant and the strength designation, as applicable.
- Polyvinyl Chloride (PVC):
- Potable water and effluent reuse pipe shall be manufactured from clean virgin type 1, grade 1 rigid unplasticized polyvinyl chloride resin conforming to ASTM designation D1784. Potable water and reuse pipe shall have the national sanitation foundation (NSF) seal, shall conform to AWWA C-900, and shall have a dimension ratio (DR) of not more than 18. PVC pipe for wastewater force mains shall have a DR of not more than 25, or less if design considerations require. The PVC pipe shall have integral bell push on type joints conforming to ASTM D3139. Pipe used for reuse mains shall be purple (Pantone 522C), for water main shall be blue, and for wastewater shall be green in color. for wastewater shall be green in color.
- Connections for pipe 2 inches in diameter and larger shall be rubber compression ring type. Pipe shall be extruded with integral thickened bell walls without increase in DR. rubber ring gaskets shall consist of synthetic compounds meeting the requirements of ASTM designation D1869, and suitable for the designated service. Other connections shall be solvent cemented joints.

#### PIPES AND FITTINGS CONTINUED

- Gravity wastewater PVC pipe and fittings shall be manufactured from polyvinyl chloride resin conforming to ASTM designation D1784. Pipe and fittings of this material shall conform to ASTM designation D3034 and F679, "Standard specifications for type PSM polyvinyl chloride sewer pipe and fittings." All pipe and fittings shall have a standard dimension ratio (SDR) of not more than 35.
- PVC pipe for gravity sewers shall be supplied in standard lengths not to exceed 20 feet, and be furnished with integrally formed bell joints.
- All PVC pipe and accessories less than 2 inches in diameter shall be schedule 80 and be of rigid normal impact polyvinyl chloride. The pipe and accessories shall conform to ASTM specification D1785 and product standard PS21-70. All materials to be furnished complete to perform the work, including
- Connections: Connection of PVC gravity sewer lines to manholes shall be made by using a PVC manhole coupling adapter connecting piece manufactured from a 2 foot piece of PVC pipe with a water stop or rubber boot. The connection shall provide flexibility and a watertight connection at the structure.
- Connections to existing wastewater manholes: Core-drill manhole for installation of wastewater pipe. Install pipe with Kor-n-Seal or equal boot. Grout annular space with non-shrink grout. Coordinate with City of Lake City inspector 48 hours in advance.
- Water service pipe: All potable water service lines shall be 1-inch, 1 1/2 inches or 2 inches polyethylene tubing conforming to AWWA C-800 and C-901.
- Wastewater service lateral: All wastewater service laterals shall be PVC and have a minimum diameter of 6 inches and shall conform to ASTM D3034, SDR 35.
- Pressure Pipe Restraints:
- Pressure pipe fittings shall be restrained with resistant glands and devices as approved by the City. Concrete thrust blocks are not acceptable for pipe restraint unless previously approved by the City for
- The minimum number of restrained joints required for resisting forces at fittings and changes in direction of pipe shall be determined from the length of restrained pipe on each side of fittings and changes in direction necessary to develop adequate resisting friction with the soil. The required lengths of restrained joint ductile iron pipe shall be determined by the engineer.
- G. Special Items:
- Expansion joints: Pipe expansion joints shall be suitable for the applicable service with a minimum 150 PSI working pressure.
- Flanged coupling adapters: Units shall be compatible with ANSI standard B16.1, 125 LB. Flanges.
- Cast iron sleeves and wall pipes: Units shall have integral annular ring waterstops, and also conform to other requirements for cast iron fittings specified in this section. Sleeves and wall pipes to have laying length and ends required for proper installation.
- Tapping saddles: Units shall be fabricated of ductile iron and suitable for either wet or dry installation. The sealing gasket shall be the "O-Ring" type suitable for the applicable service. Outlet flange shall be ANSI B16.1, 125 LB. standard. Tie straps and bolts shall be a corrosion resistant alloy steel.
- Tapping sleeves: Units shall be of the mechanical joint type or fabricated steel type sleeves for pressure connections 4 inches and larger. All pressure connections to asbestos cement pipe and all "size on size" tap shall utilized mechanical joint sleeves.
  - Mechanical joint sleeves: Sleeves shall be cast of gray-iron or ductile iron and have an outlet flange with the dimensions of the class 125 flanges as shown in ANSI B16.1 Properly recessed for tapping valve. Glands shall be gray-iron or ductile iron. Gaskets shall be vulcanized natural or synthetic rubber. Bolts and nuts shall comply with ANSI/AWWA C-111/A.21.11. Sleeves shall be capable of withstanding a 200 PSI working pressure.
  - Steel tapping sleeve: Sleeves shall be fabricated of minimum 3/8-inch carbon steel meeting ASTM A285, grade.
  - Outlet flange shall meet AWWA C-207, Class D, ANSI 150 LB. drilling and be properly recessed for the tapping valve. Bolts and nuts shall be high strength low alloy steel to ANSI/AWWA A.21.11/C-111. Gasket shall be vulcanized natural or synthetic rubber. Sleeve shall have manufacturer applied fusion bonded epoxy coating, minimum 12-mil thickness
- Service saddles: Saddles for ductile iron pipe shall be double strap, anchored by a minimum four (4) bolt pattern on a ductile iron saddle body. Service saddles for PVC pipe shall have a double strap sized exactly to the pipe outside diameter. Sealing gaskets shall be suitable for the applicable service and straps shall be corrosion resistant alloy steel. The City may require a stainless steel strap and fusion epoxy or nylon coated ductile iron body with stainless steel hardware in areas designated as corrosive.
- Polyethylene encasement: Encasement shall have a minimum thickness of 8-mils and comply with the applicable provisions of ANSI/AWWA C-105/A21.5, "Polyethylene encasement for gray and ductile iron piping for water and other liquids."

#### PIPE RESTRAINT NOTES

- Ductile iron fittings to be restrained to PVC (C900) pipe with series 2000 PV mechanical restraint glands as manufactured by Ebaa Iron, Inc. or approved equivalent DI fittings to be restrained to DIP per current DIPRA standards.
- PVC (C900) pipe to be restrained each side of fittings for lengths as noted in table below. Restraint will be accomplished with ductile iron restraint harness conforming to ASTM A-536. Restraint harnesses to be series 1600 as manufactured by Ebaa Iron, Inc. or equivalent. Restraint for DIP shall be by internal restraint gaskets per current DIPRA standards
- The table below shows typical numbers of 20' length sections of pipe to be mechanically restrained for the following assumptions: (1) Depth of cover = 36 lnches, (2) Test pressure = 150 psl, (3) Safety factor = 1.5, (4) Laying conditions = Pipe embedded in loose clean sand and compacted to top of pipe (approximately 90% standard proctor), (5) Silty sands and sand silt mixture for backfill material.

- City of Lake City standard utility notes:
- Other associated utility permits (such as those issued by the City, County, FDOT, FDEP, or other agency) may be required for this project. Please contact the engineer of record or the appropriate government agency for clarification if there are any questions as to what permits are necessary and what permits have or have not been obtained
- The utility plan and plat shows all Public Utility Easements (PUE's) in a metes and bounds format. Upon City's approval of plans for developments not being platted, Owner may choose to grant the metes and bounds easements as shown, or a blanket easement over the entire property, provided facilities are installed within the prescribed distances as shown on the utility plans and in accordance with the Utility Separation Requirements Table in Appendix C of the City of Lake City W/WW/RCW Design Standards.
- All construction materials and methods for potable water, wastewater, and reclaimed water systems shall be in conformance with City of Lake City's most recent Potable Water, Wastewater and Reclaimed Water System Design Standards, and Approved Materials Manual.
- Potable Water and Wastewater mains shall maintain a minimum 10 feet horizontal and 1.5 foot vertical
- A minimum horizontal separation of 10 feet for potable water mains, wastewater force mains, and reclaimed water mains, and 15 feet for gravity wastewater mains shall be provided and maintained from trees, buildings, transformers, and all permanent structures. Live Oak trees require an additional 5 feet horizontal clearance. Service laterals require 5 feet less clearance for each of the utilities; note that water service laterals shall be installed within 3" sleeves. (See City of Lake City Standards Horizontal Separation Distances for Parallel and Perpendicular Clearance from Other Objects Table.)
- Potable water services, requiring a separate water meter, shall be provided to each lot, building or parcel. For commercial, multifamily, and institutional developments, the Developer shall be responsible for installing potable water services and Yoke Assembly Package up to and including the meter yoke, box (installed at final grade) and associated appurtenances, for meters 1" and smaller (see City of Lake City W/WW/RCW Construction Details), with a one-year warranty.
- 2" valves located in paved areas, including sidewalks, shall be City of Lake City approved cast iron, resilient seat gate valves with standard 2" operating nut, threaded with brass nipple between the valves and tapping saddle or tapped tee.
- Water mains 4" in diameter and greater, placed under roadways, shall be cement lined ductile iron pipe (CLDIP) extending 5 feet past the back of curb (3 feet within City of Lake City limits). Tracer wire installed on PVC water mains shall continue across the CLDIP sections.
- 1" and 2" water service crossings located under roadways shall be encased in 3" SCH 40 PVC extending 5' past the back of curb (3 feet inside City of Lake City limits).
- Anchoring tees, couplings, and bends shall be used on all fire hydrant assemblies.
- All pressurized main fittings shall be mechanical joint with restrained joint glands; a sufficient length of the pipe connected to the fittings shall be mechanically restrained to provide reaction as specified on the Restrained Joint Standard in the Construction Details of the City of Lake City Standards. Calculations for required restraint length must be provided if the specified restraint length, due to soil type or depth of cover, differs from those provided on these details.
- All sanitary wastewater service laterals shall be min. 4" diameter PVC (SDR 35) at 1.00% min. slope
- Wastewater cleanout covers located within pavement and sidewalks adjacent to paved areas shall be rated for traffic load bearing. Wastewater cleanout covers in other sidewalks/walkways shall be brass
- Manholes which are not installed under pavement shall have a rim elevation at least 6" above finished grade, and a 10:1 slope to finished grade.
- Unless otherwise noted on the plans, the finished floor elevations of buildings shall be a minimum of 6" above the lowest upstream manhole top. If this is infeasible, a wastewater service lateral backwater valve (BWV) is required on the customer side of the cleanout.
- When a potable or reclaimed water main, or a wastewater force main is routed within 10 ft, of an electric transformer, a 20 ft. length of DIP shall be centered on the transformer with mechanical restraint at each end. No fittings or valves shall occur within 10 ft. of the nearest edge of the transformer. A minimum clearance of 3' shall be maintained between the main and the transformer.

#### MINIMUM NUMBER OF RESTRAINED JOINTS IN 20' STRAIGHT PIPE EACH SIDE OF RESTRAINED FITTING

FITTING	PIPE SIZE						
FITTING	6"	8"	10"	12"	16"	20"	
90° BENDS	1	1	2	2	2	2	
45° BENDS	0	1	1	1	1	1	
22-1/2° BENDS	0	0	0	0	1	1	
11-1/4° BENDS	0	0	0	0	0	0	
TEES (BRANCH)	1	1	2	2	3	4	
DEAD END	2	3	3	4	5	6	

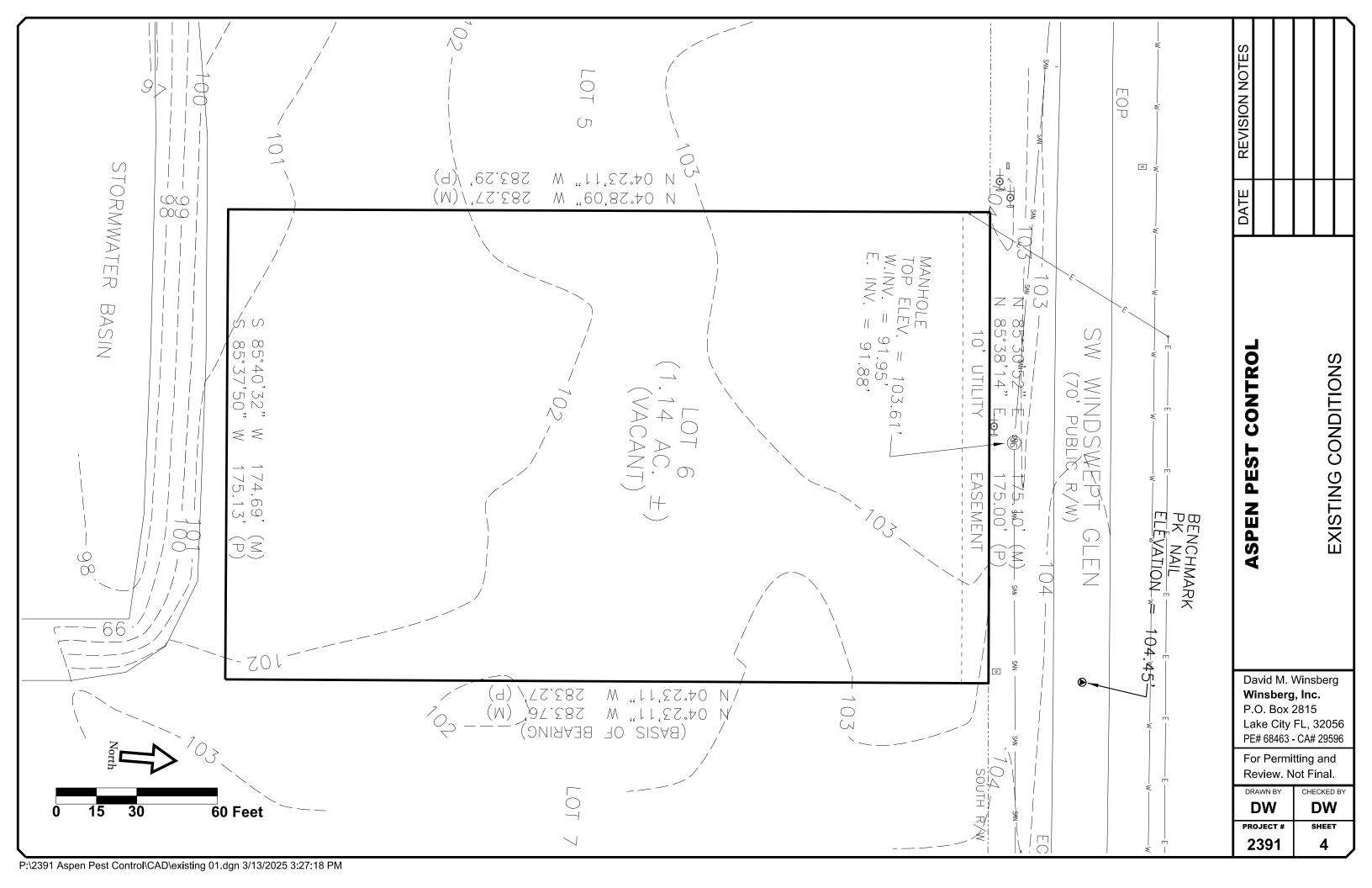
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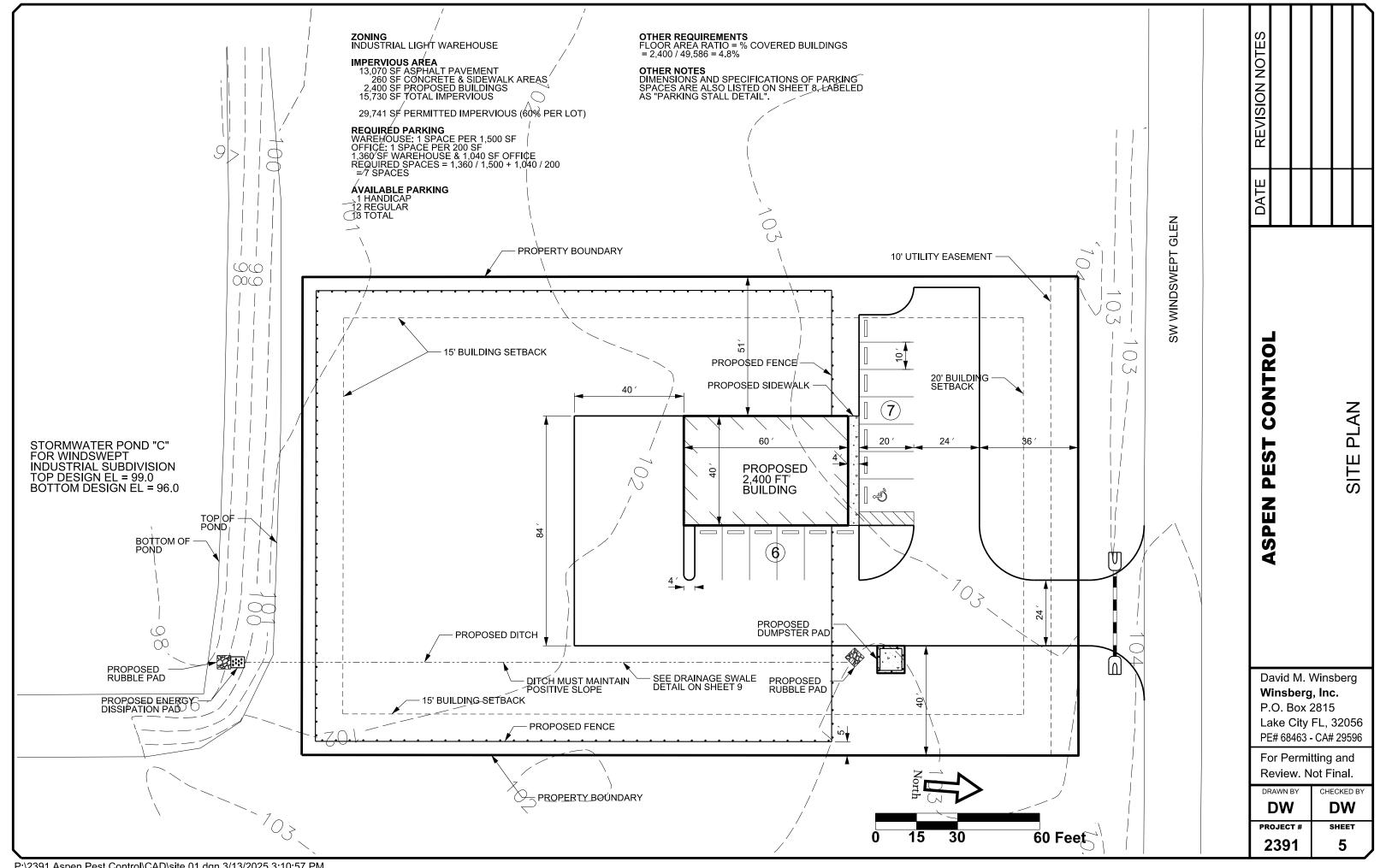
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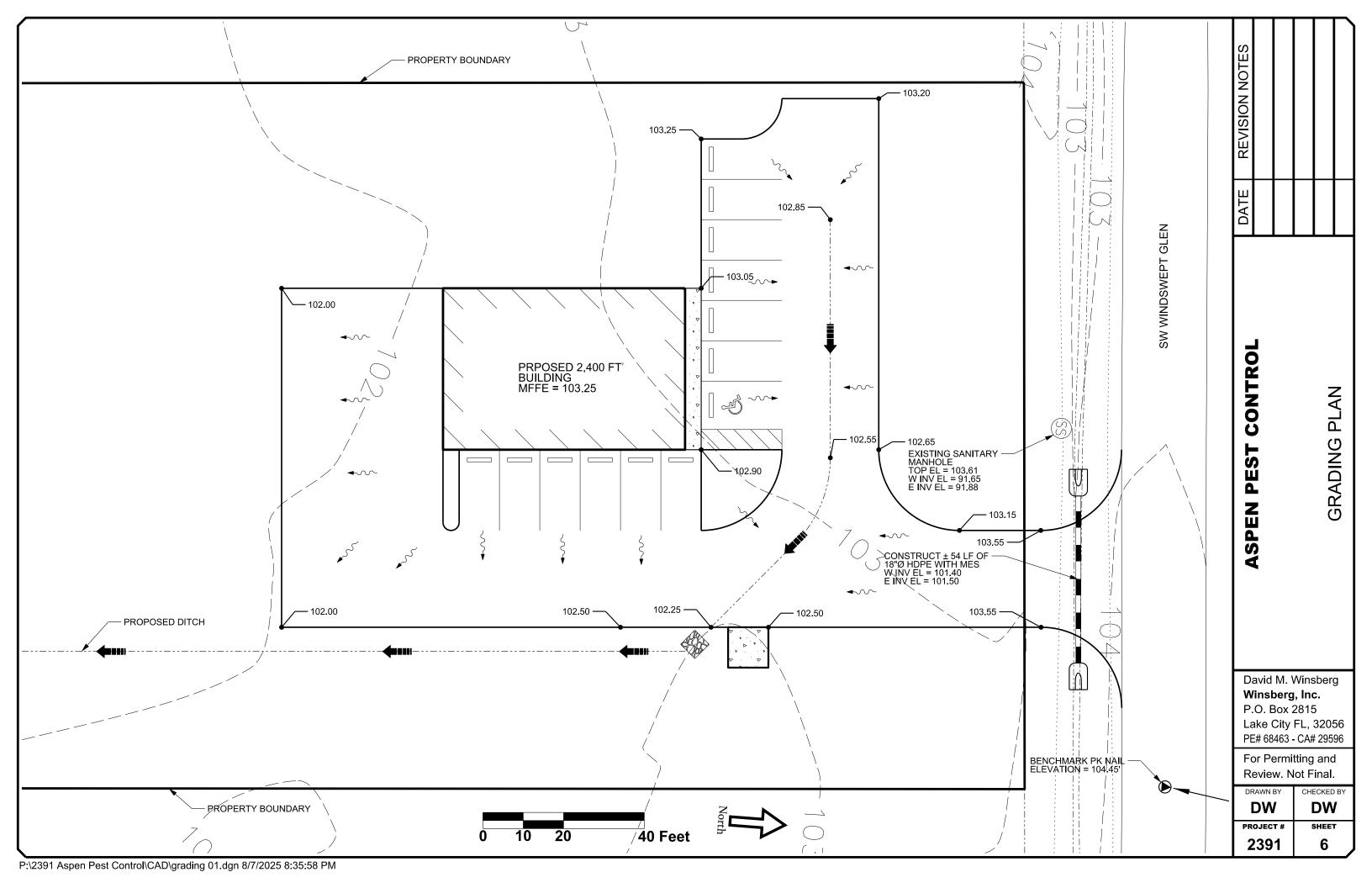
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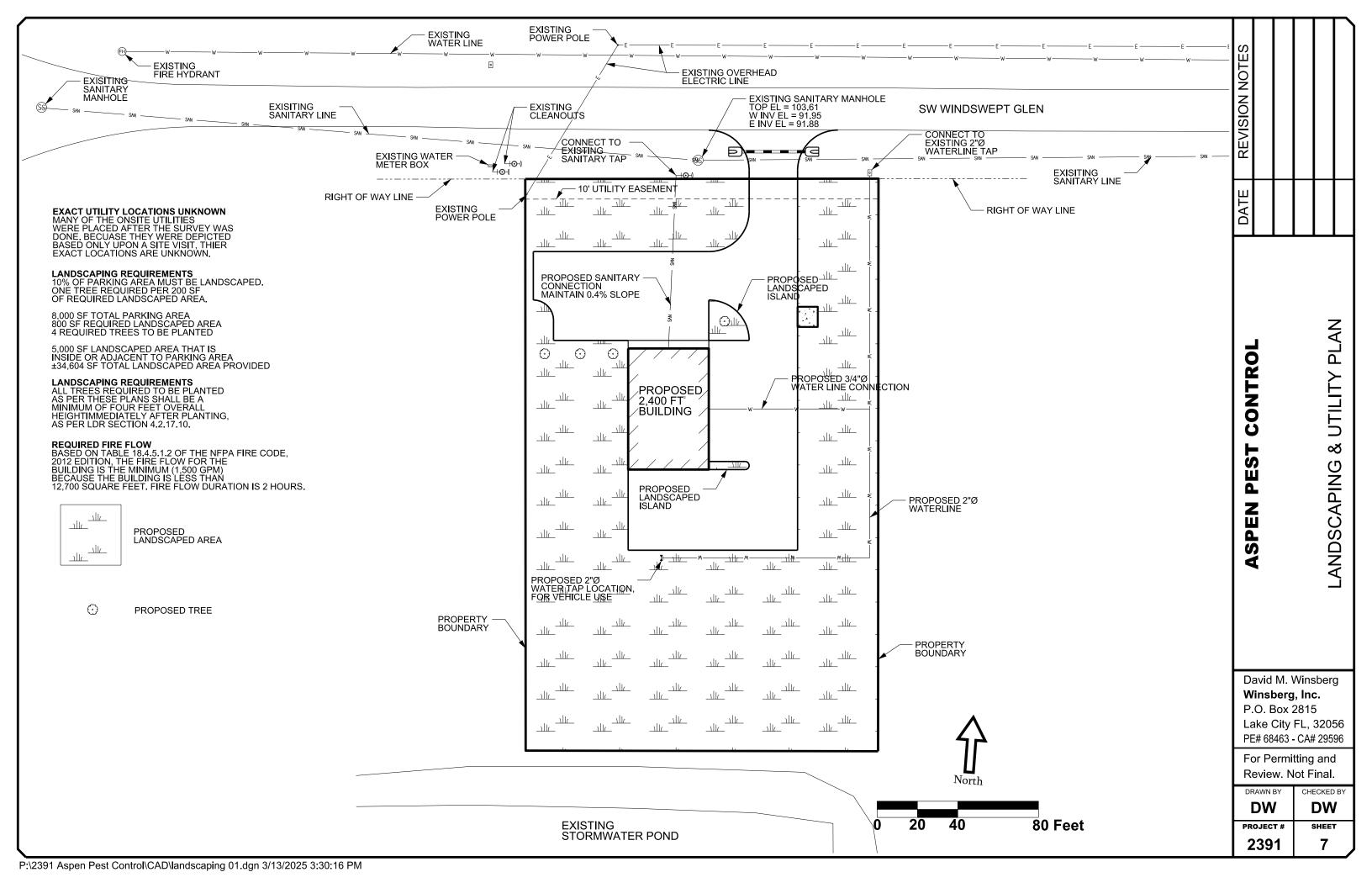
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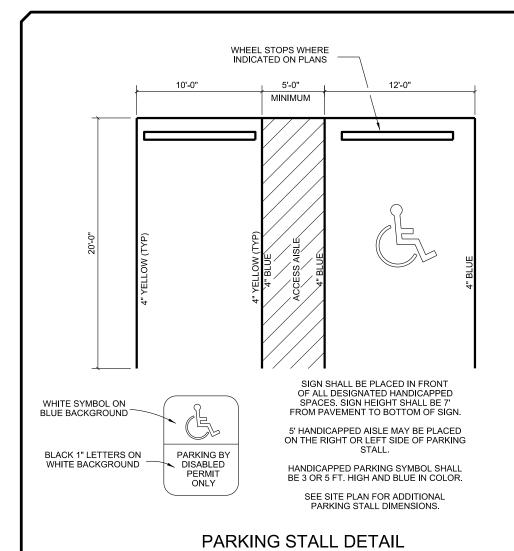
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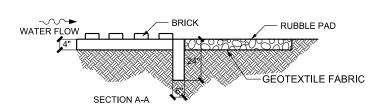


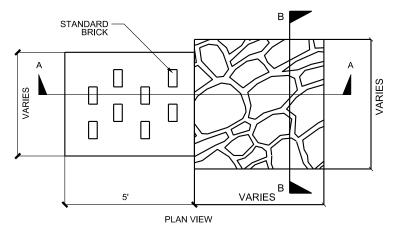






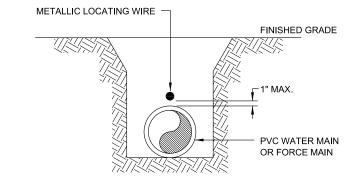
## **EXISTING GROUND** GEOTEXTILE FABRIC SECTION B-B

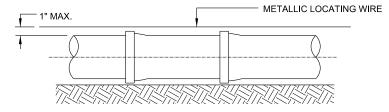




**ENERGY DISIPATION & RUBBLE PADS** 

STABILIZE DISTURBED AREAS





SEE GRADING

PLAN FOR

COMPACTED SUBGRADE

NOTE: SUBGRADE SHALL BE COMPACTED TO

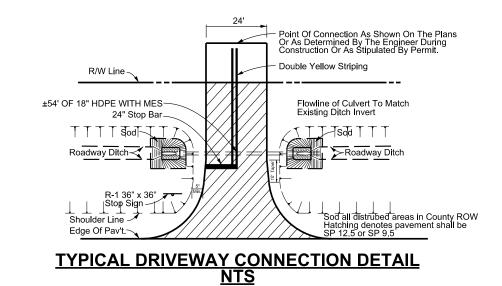
- ELEVATIONS

PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (14 GAUGE COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE. LOCATING WIRE SHALL TERMINATE AT THE TOP OF EACH VALVE BOX AND BE CAPABLE OF EXTENDING 12" ABOVE TOP OF BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION. USE DUCT TAPE AS NECESSARY TO HOLD WIRE DIRECTLY ON THE TOP OF THE PIPE.

## PVC PIPE LOCATING WIRE DETAIL

STABILIZE DISTURBED AREAS

NATURAL GROUND



NATURAL GROUND 100% OF MAXIMUM DRY DENSITY AS ESTABLISHED BY ASTM T-99. PARKING APRON 1.25" TYPE S ASHPHALT 6" LIMEROCK BASE

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**MISCELLANEOUS DETAIL** 

REVISION

DA.

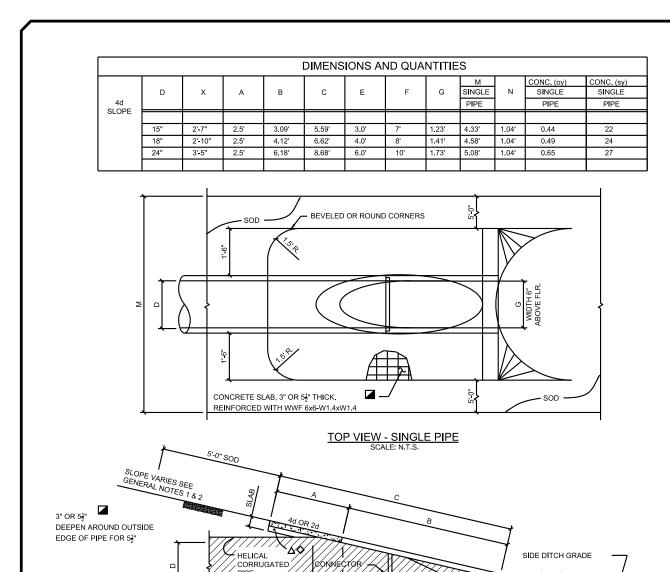
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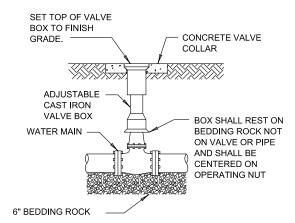
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NOT LESS

F (PIPE TO BE INCLUDED UNDER UNIT PRICE FOR MITERED END SECTION)

NO PIPE JOINT PERMITTED
UNLESS APPROVED BY THE ENGINEER



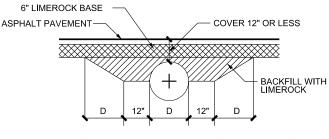
#### NOTES:

SLOPE: 4d MITER: TO C.L. PIPE FOR PIPES 16" AND SMALLER.

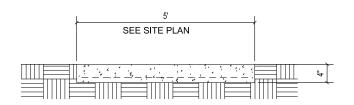
2d FOR PIPES 24" AND LARGER.
2d MITER: TO C.L. PIPE FOR PIPES 18" AND SMALLER.
1d FOR PIPES 24" AND LARGER.

- 1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
- 2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO COME UP TO 4 FOOT DEPTH BELOW FINISHED GRADE.

## VALVE AND BOX DETAIL

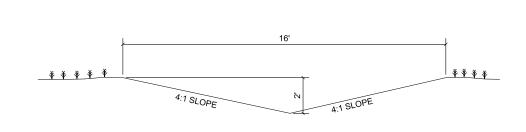


# BACKFILL DETAIL FOR PIPES WITH LESS THAN 12" COVER NTS

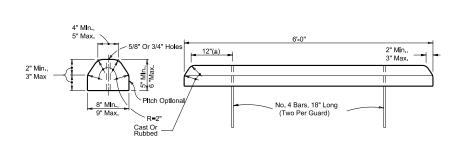


REINFORCED WITH 6x6x10/10 WWM. PROVIDE 1/8"-1/4" CONTRACTION JOINTS AT 10' CENTERS MAXIMUM.

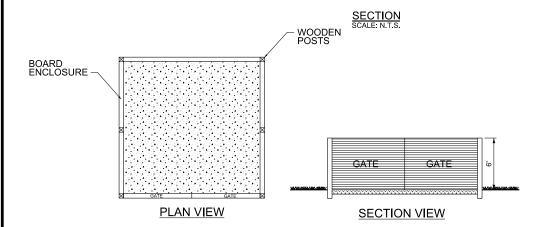
### STANDARD SIDEWALK DETAIL



TYPICAL DRAINAGE SWALE DETAIL



**CONCRETE WHEEL STOP** 



PROVIDE 1/8"-1/4" CONTRACTION JOINTS 10' CENTERS MAXIMUM.

**DUMPSTER PAD DETAIL** 

2500 PSI CONCRETE

David M. Winsberg Winsberg, Inc. P.O. Box 2815 Lake City FL, 32056

PE# 68463 - CA# 29596

**MISCELLANEOUS DETAILS** 

NOTES

REVISION

DAT

CONTRO

**PEST** 

**ASPEN** 

For Permitting and Review. Not Final.

DW DW
PROJECT # SHEET

2391

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PAID FOR AS PIPE CULVERT