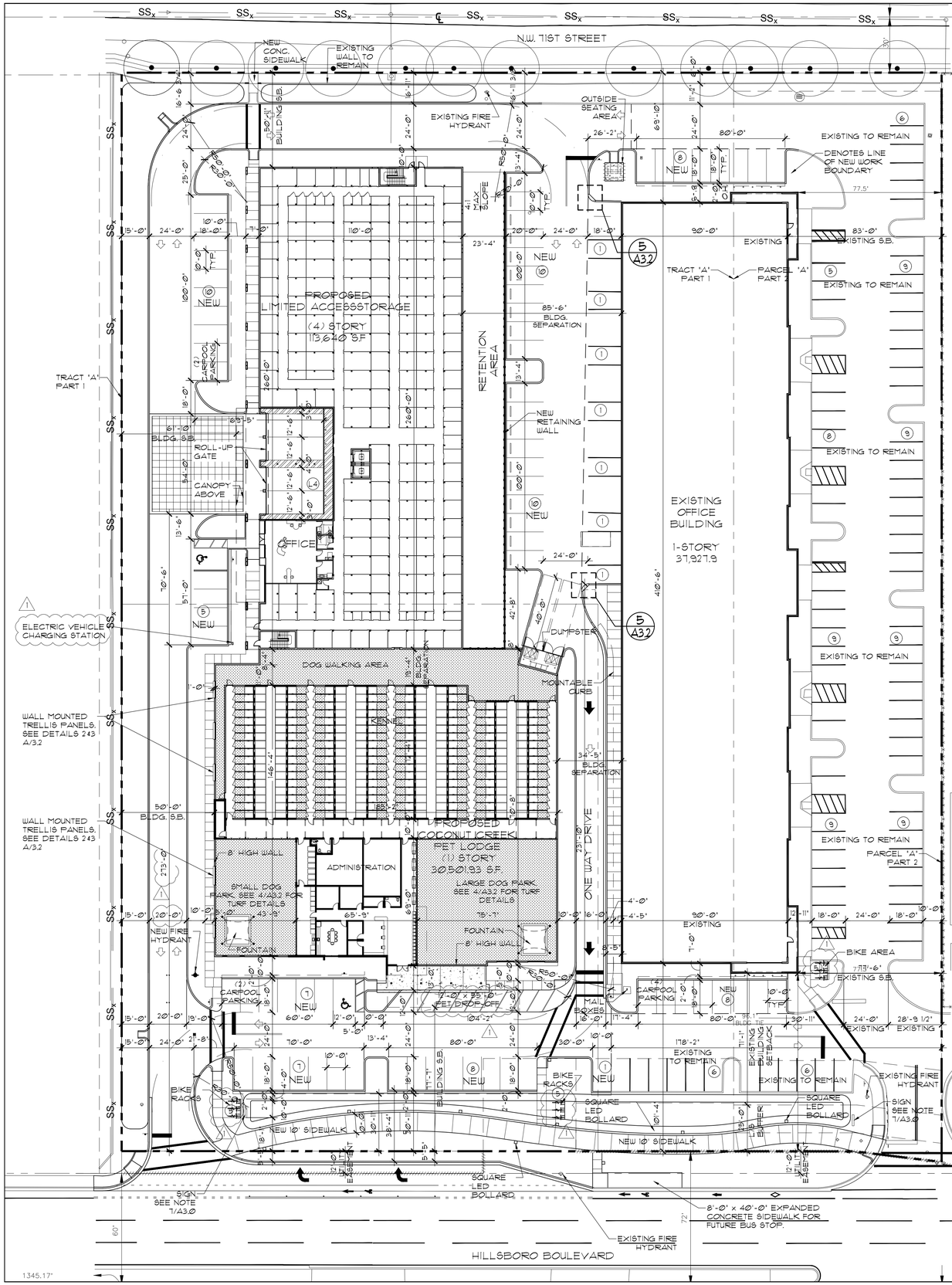
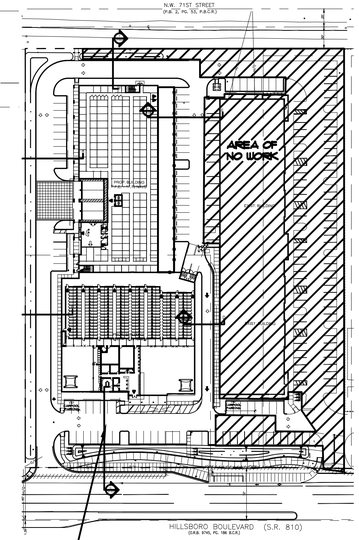




6 A3.0 SITE KEY

1. ADDRESS NUMBERS
ADDRESS NUMBERS SHALL BE AT LEAST 6" TALL AND PLACED IN A HIGHLY VISIBLE LOCATION ON THE BUILDING.

2. CONSTRUCTION SITE MATERIALS RECYCLING NOTE: 75% PERCENT OF CONSTRUCTION AND DEMOLITION DEBRIS WILL BE RECYCLED AND DIVERTED AWAY FROM LANDFILL.

3. SITE LIGHTING: SHIELDS WILL BE USED IF NECESSARY TO LIMIT LIGHT/GLARE TO SURROUNDING RESIDENTIAL AREAS.

4. SITE SIGNAGE: SIGNAGE WILL BE REVIEWED SEPARATELY UNDER SEPARATE PERMIT APPLICATION.

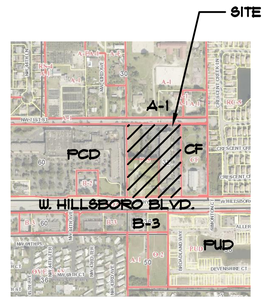
7 A3.0 NOTES

SELF-SERVICE STORAGE BUILDING (4-STORIES)	
GROUND FLOOR	26,200 S.F.
OFFICE:	972 S.F.
STORAGE:	25,228 S.F.
SECOND FLOOR	27,600 S.F.
THIRD FLOOR	30,420 S.F.
FOURTH FLOOR	29,420 S.F.
TOTAL GROSS AREA	113,640 S.F.
PET LODGING AREA (1 STORY)	
ADMIN/OFFICE	2,316.52 S.F.
KENNEL & SUPPORT FACILITY	7,223.47 S.F.
EXTERIOR COVERED WALKWAYS/ EXTERIOR COVERED KENNELS	4,675.69 S.F.
EXTERIOR ASTRO TURF AREAS	13,960.46 S.F.
EXTERIOR NON-COVERED WALKWAY	1,808.79 S.F.
DOG FOUNTAINS AREAS	476.00 S.F.
TOTAL GROSS AREA	30,460.93 S.F.
EXISTING OFFICE BUILDING (1 STORY)	
OFFICE	37,927.9 S.F.
TOTAL GROSS AREA	37,927.9 S.F.

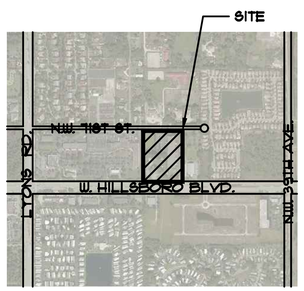
1 A3.0 SITE PLAN

1"=30'-0"

NORTH



5 A3.0 VICINITY MAP



4 A3.0 LOCATION MAP

LEGAL DESCRIPTION:

LEDER HILLSBORO COMPANY LIMITED PART 1 125-31 B PORTION TRACT A DESC AS COM SE COR TRACT A,THEN W 73.14 ALG S/L TR A TO POB,CONT W 61.86,S 12, W 195,N 306.92,E 256.86,S 295.03 TO POB K/A ANIMAL HOSPITAL

LEDER HILLSBORO COMPANY LIMITED- PART 2 166-43 B PARCEL A LESS FOR DESC AS COM SE COR TR A,THEN W 73.14 ALG S/L TR A TO POB,CONT W 61.86,S 12,W 195 N 306.92,E 256.86, S 295.03 TO POB± TOGETHER WITH LEDER HILLSBORO COMPANY LIMITED PART 1 125-31 B PARCEL A & BUFFER PARCEL LESS FOR DESC IN OR 33445/162 FOR ADD'L R/W FOR HILLSBORO RD

3 A3.0 LEGAL DESCRIPTION

SITE DATA

DESCRIPTION	ACRES	S.F. AREA	% COVERAGE
GROSS SITE AREA	5.96	259,602.50 S.F.	100 %
PROPOSED IMPERVIOUS			72.6 %
SIDEWALKS		12,068.49 S.F.	4.8 %
BUILDING		78,384.68 S.F.	30.1 %
VEHICULAR		97,921.8 S.F.	37.7 %
PROPOSED PERVIOUS			27.4 %
LANDSCAPE OPEN SPACE		51,349.98 S.F.	20 %
TURF OPEN SPACE		14,193.85 S.F.	5.4 %
RETENTION		5,683.7 S.F.	2.0 %
CURRENT ZONING:	B-3 PROPOSED PCD		
FLUM:	L-3		
PROPOSED USES:	EXISTING OFFICE/ SELF-SERVICE STORAGE/ PET LODGE		

DEVELOPMENT STANDARDS	ALLOWED	PROVIDED
FAR - TOTAL BUILDING AREA / GROSS SITE	-	.64
MAX. BUILDING COVERAGE	40%	30.1%
HEIGHT OF BUILDING (MEASURED BY CODE)	-	53'
MIN. OPEN SPACE	20%	25.4%
MIN. DISTANCE BETWEEN BLDGS. AND PARKING	10'	10' (PHASE 11)
SETBACKS	REQUIRED	PROPOSED
ABUTTING THE ROAD	25'-0"	77'-7"
NEXT TO THE PCD BOUNDARY (NO PARKING)	25'-0"	25'-0"
BETWEEN BUILDINGS	10' PER STORY	85'-6" & 18'-4"
PERIMETER LANDSCAPE	25'	15' + 10' = 25'

PARKNG RATES AND REQUIREMENTS PCD			
SELF-SERVICE STORAGE & 1 EMPLOYEE	1 SPACE /5,000 S.F.	113,640/5,000	24
PET LODGING	1 SPACE /2000 S.F.	7,264.47/2,000 S.F.	4
PET OFFICE/ADMIN	1 SPACE /300 S.F.	2,316.52/300 S.F.	8
EXISTING /OFFICE	1 SPACE /300 S.F.	37,927.9/300 S.F.	127
TOTAL SPACES REQUIRED:			163
PARKING PROVIDED			
REGULAR PARKING (10'-0" X 18'-0" + 2' OVERHANG)			158 SPACES
HANDICAPPED PARKING (12'-0" X 18'-0" + 2' OVERHANG)			8 SPACES
LOADING			4 SPACES
TOTAL PARKING SPACES PROVIDED:			170 SPACES
PET DROP-OFF			3 SPACES
BIKE PARKING			15 SPACES

2 A3.0 SITE DATA

LEDER HILLSBORO
4181 W HILLSBORO BOULEVARD
COCONUT CREEK, FLORIDA

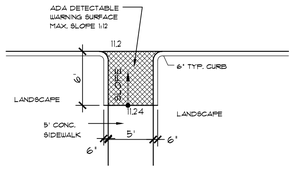
KENNETH R. CARLSON – ARCHITECT, P.A.
1166 W. NEWPORT CENTER DR. SUITE 311
DEERFIELD BEACH, FLORIDA 33442
PH. (954) 427 - 8848
FAX (954) 427 - 9329
e-mail: kencarlson.com
AA C001818
LEED AP
28968-AP-BD+C

Revisions:
08/24/17 DRC RESPONSES

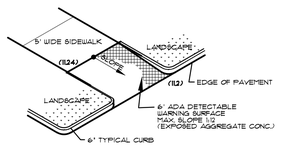
DRAWN BY: DFS
CHECKED BY: KC
DATE: 11-23-16
SCALE: AS NOTED 16/12
PROJECT #
CAD DWG FILE: A3.0

KENNETH R. CARLSON
AR12546

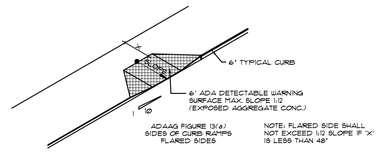
SHEET OF
A3.0
PAGE OF



PLAN
RAMP 'A'



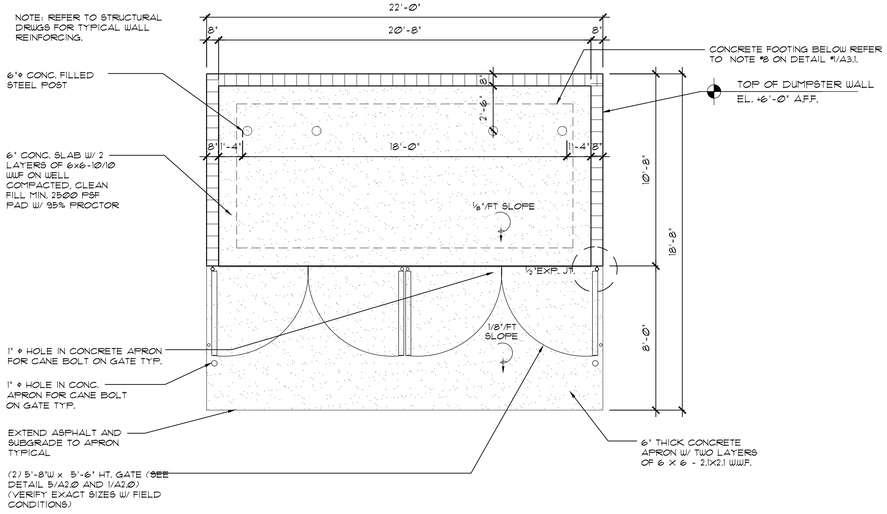
ISOMETRIC
RAMP 'A'



ISOMETRIC
RAMP 'B'

1 / A3.1 TYPICAL ADA CURB RAMPS

N.T.S.



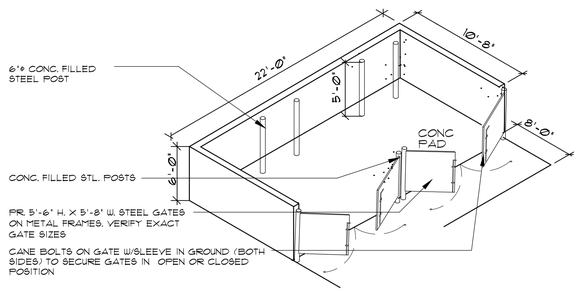
2 / A3.1 DUMPSTER PLAN

1/4" = 1'-0"

LOCATIONAL CRITERIA

1. DUMPSTER ENCLOSURE MUST BE LOCATED AWAY FROM PROJECT ENTRANCES, AND NO CLOSER THAN TWENTY-FIVE (25) FEET TO ANY DWELLING UNIT OR OUTDOOR RECREATION AREA.

2. DUMPSTER ENCLOSURES SHOULD BE LOCATED NO FURTHER THAN 150 FEET FROM A BUILDING EGRESS POINT OR FROM ANY DWELLING UNIT.



3. LOCATE DUMPSTER ENCLOSURES SO THAT COLLECTION VEHICLES DO NOT HAVE TO BACK OUT INTO MAJOR ROADS.

4. ORIENT DUMPSTER ENCLOSURES TO PERMIT FULLY MECHANICALLY ASSISTED PICK-UP BY FRONT END LOADING TRUCKS.

5. WHEN DUMPSTERS ARE TO BE SERVICED FROM AN ALLEY, ENCLOSURES SHOULD BE ANGLED THIRTY (30) DEGREES AND RECESSED OFF THE ALLEY APPROXIMATELY SIX (6) FEET. THE INTENT OF RECESSING THE ENCLOSURE IS SO THAT GATES DO NOT OPEN INTO THE ALLEY OBSTRUCTING TRAFFIC AND SO ADEQUATE SIGHT DISTANCES CAN BE MAINTAINED.

6. ENCLOSURE WALLS - MASONRY WITH PLASTERED AND PAINTED SURFACES OR FINISHED WITH OTHER APPROVED MATERIALS, COLOR AND FINISH TO MATCH BUILDINGS

7. GATE CONSTRUCTION - STURDY PAINTED GALVANIZED METAL FRAME WITH GALVANIZED STEEL DECK FINISH ATTACHED PROVIDE GATE STOPS TO SECURE GATES WHEN IN OPEN POSITION.

8. THE SLAB WILL BE 6" CONC. SLAB ON GRADE WITH 2 LAYERS OF 6X6-10/10 W.W.M. AND MONOLITHIC FOOTING AS PER STRUCTURAL DRAWINGS

9. THE FOOTING WILL BE AS PER STRUCTURAL DRAWINGS

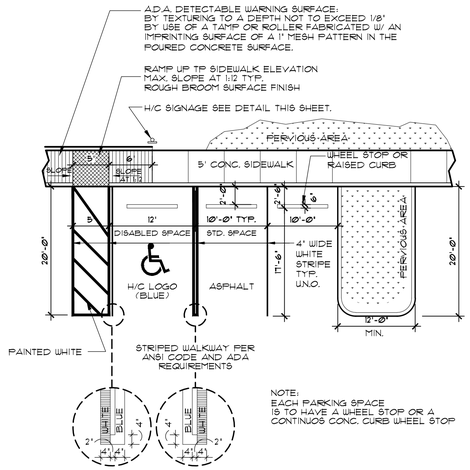
10. REFER TO STRUCTURAL DRAWINGS FOR WALL REINFORCING

11. PLACE A MIN. OF 18" WIDE CONC. TOE AT ALL DUMPSTER ISLANDS.

12. SITE DUMPSTER ENCLOSURE SHALL BE CONSTRUCTED

3 / A3.1 DUMPSTER DETAIL & NOTES

NTS

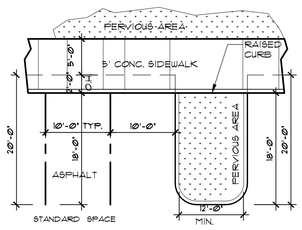


NOTE:
EACH PARKING SPACE IS TO HAVE A WHEEL STOP OR A CONTINUOS CONC. CURB WHEEL STOP

5 / A3.1 TYP. PARKING DETAIL

NTS

NOTE: SITE ONLY-NOT INSIDE PARKING STRUCTURE

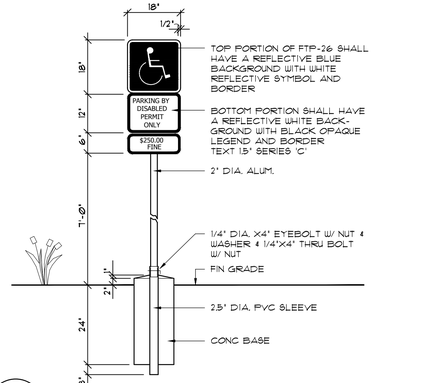


NOTE:
EACH PARKING SPACE IS TO HAVE A CONTINUOUS CONC. CURB.

7 / A3.1 TYP. SITE PARKING DETAIL

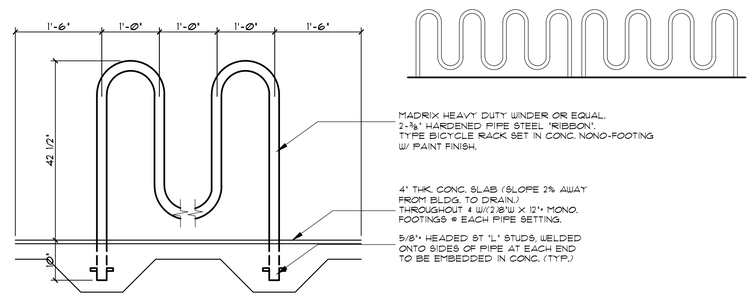
NTS

NOTE: SITE ONLY-NOT INSIDE PARKING STRUCTURE

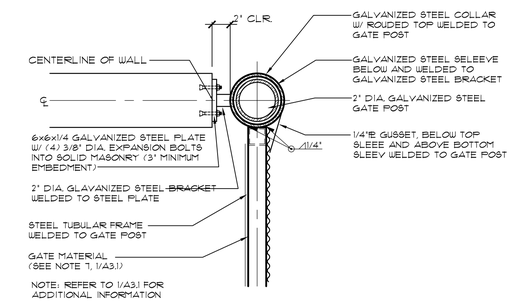


6 / A3.1 DISABLED SIGNAGE

NTS



8 / A3.1 BICYCLE RACK



4 / A3.1 SWING GATE - JAMB

SCALE: 3/4" = 1'-0"

KENNETH R. CARLSON - ARCHITECT, P.A.
1166 W. NEWPORT CENTER DR. SUITE 311
DEERFIELD BEACH, FLORIDA 33442
PH. (954) 427 - 8848
e-mail: ken@kencarlson.com
AA C0001818
LEED AP
28968-AP-BD+C
FAX (954) 427 - 9929

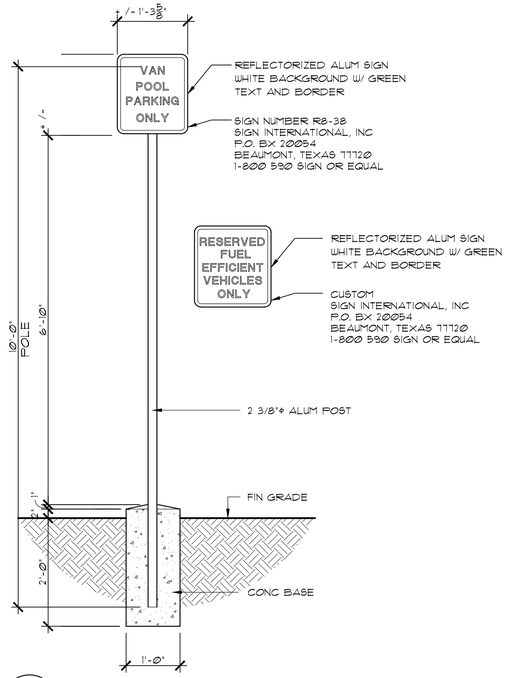
LEDER HILLSBORO
4181 W HILLSBORO BOULEVARD
COCONUT CREEK, FLORIDA

Revisions:
@8/24/17
DRC RESPONSES

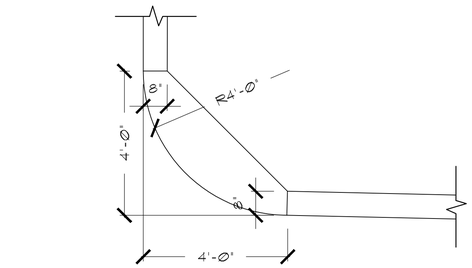
DRAWN BY: DFS
CHECKED BY: KC
DATE: 11-23-16
SCALE: AS NOTED
PROJECT #: 1611.2
CAD DWG FILE: A3.1

KENNETH R. CARLSON
AR12546

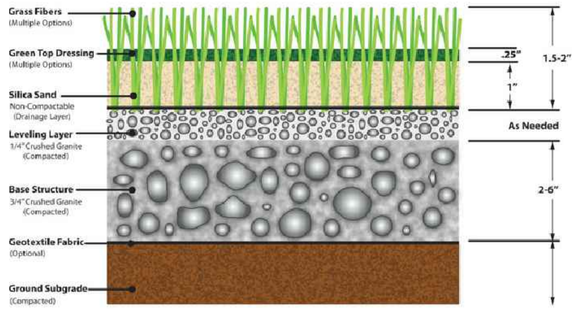
SHEET OF
A3.1
PAGE OF



6 A3.2 *SITE SIGNAGE TYPICAL*
3/4" = 1'-Ø"



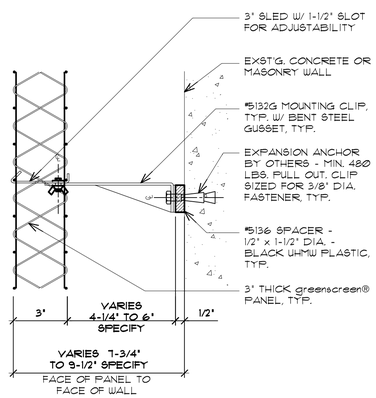
5 A3.2 *CORNER CURB DETAIL*
N.T.S.



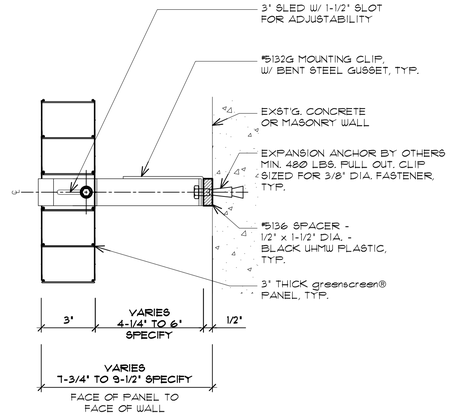
4 A3.2 *SYNTHETIC TURF DETAIL*
N.T.S.

13-320(b)(1)	
LEED Accredited Professional	
Sustainable Site Development	
Construction Pollution Prevention	Implementation of an erosion and sedimentation control plan will be in Implementation of an erosion and sedimentation control plan will be in erosion and airborne dust.
Construction site materials recycling	Construction waste will be recovered, reused and recycled. Waste will be separated into the following categories and recycles accordingly: concrete, metals, gypsum board, lumber.
Stormwater management	Drainage system will incorporate a combination of swale and underground storage enhancing drainage sustainability.
Alternative transportation	iv. County bus stop and local shuttle service are located adjacent to the site v. Short-term bicycle storage is provided on site
Mnimizing heat island effect	A high-reflecting roof will be provided – roofing materials used on the project will have a SRI equal to or greater than 78
Water Efficiency	
Innovative water technologies	i. Toilets, urinals, private lavatory faucets and shower heads shall be water sense labeled and/or meet/exceed the USGBC baseline consumption values (water closet 1.6GPF, lavatory faucet (restroom) 0.5GPM, kitchen faucet 2.2 GPM, Shower head 2.5 GPM)
Water efficient Landscape	Reduction in outdoor water consumption through the selection of native plant species and xeriscaping design concept
Energy Efficiency	
Minimum energy performance	Building will be designed to meet the 2014 Florida building code and Florida energy code which is 20% above the national baseline
On-site renewable energy	Not applicable/Not provided
Indoor Environmental Quality	
Indoor air quality	Mechanically ventilated spaced will be designated to meet ASHREA Interior paints and coatings, adhesives and sealants will be low or no voc. standard 62.1-2004 – ventilation for acceptable indoor air quality
Materials and Recycling	
Recycling of demolition waste	Materials will be sorted and recycled as available
Storage and collection of recyclables post occupancy	On-site collection and storage of recyclables will be provided
Building re-use	
Regional materials	When available, regionally sources materials will be used and specified
13-320(b)(3)	
Acknowledgement to maintain the green building components for the life of the building.	owner agrees to maintain the building components for the life of the building
Action 1.6 – Ensure 100% of new development projects throughout the City contain *conspicuous displays of green technology* that function in the project design while providing a social, artistic, and environmental value.	vertical green walls are incorporated into the Pet Lodge Site Wall design. They make a dramatic statement and create a welcoming environment for employees, clients, and visitors.Creates habitats for birds and beneficial insects, increasing biodiversity. Eco-friendly cleaning producs will be used. in the Pet Lodge and Storage Facility.
Action 2.2 – Achieve 40% greenroof coverage for new construction in MainStreet Project Area and 10% greenroof coverage for new construction for areas outside of MainStreet. (i.e. high albedo paint on roof)	all roof surfaces are painted white.
Action 5.1 – Increase recycling throughout the City by 25% by 2014 and 50% by 2020.	Although the site will have recycling as a part of the business function, additional educational information will be displayed so that patrons of the site can easliy recycle disposable
Action 5.3 – Require all construction and demolition debris to divert 75% of waste from landfills.	Construction waste will be recovered, reused and recycled. Waste will be separated into the following categories and recycles accordingly: concrete, metals, gypsum board, lumber.
Action 6.2 – Bicycle parking on site	Provision of bike racks to promote alternative modes of transportation and increase mobility in the City
Action 6.4 – Alternative vehicle parking.	Site selection was related to public transportation, a bus stop located in front of site, to promote alternative modes of transportation and increase mobility in the City.

1 A3.2 *GREEN STANDARDS*



3 A3.2 *WALL MOUNTED TRELLIS PANEL SECTION*
3"=1'-Ø"



2 A3.2 *WALL MOUNTED TRELLIS PANEL PLAN*
3"=1'-Ø"

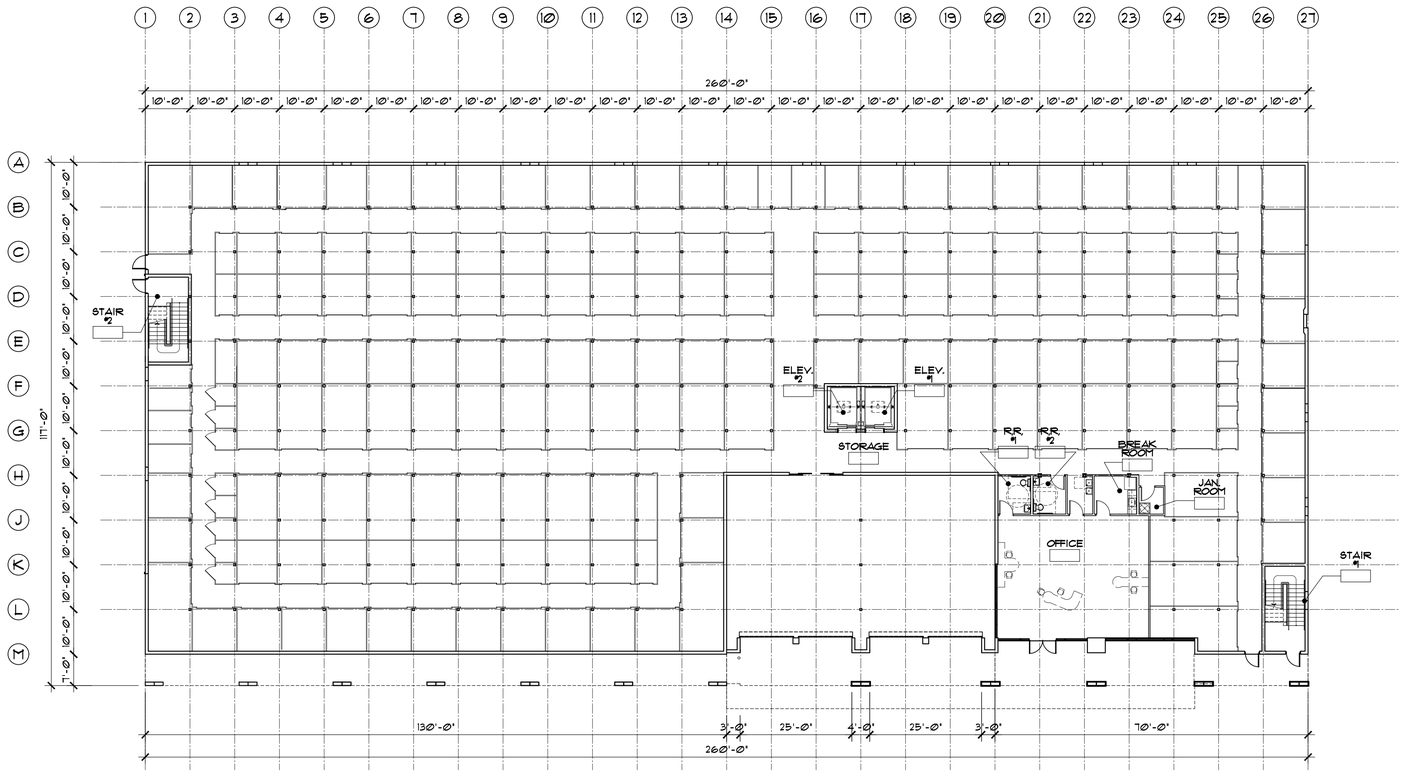
LEDER HILLSBORO
4181 W HILLSBORO BOULEVARD
COCONUT CREEK, FLORIDA

KENNETH R. CARLSON – ARCHITECT, P.A.
1166 W. NEWPORT CENTER DR. SUITE 311
DEERFIELD BEACH, FLORIDA 33442
PH. (954) 427 - 8848 FAX (954) 427 - 9929
e-mail: kens@kencarlson.com
AA C001818
LEED AP
28968-AP-BD+C
KENNETH R. CARLSON
AR12546

Revisions:
08/24/17 DRC RESPONSES

DRAWN BY: DFS
CHECKED BY: KC
DATE: 11-23-16
SCALE: AS NOTED
PROJECT #: 16-12
CAD DWG FILE: A3.1

SHEET OF
A3.2
PAGE OF



1 A4.0 **GROUND FLOOR PLAN**

1/16"=1'-0"

NORTH

GRAPHIC SCALE
(in feet)
16' 4' 0 8' 16' 32'
1/16"=1'

LEDER HILLSBORO

4181 W HILLSBORO BOULEVARD
COCONUT CREEK, FLORIDA

KENNETH R. CARLSON – ARCHITECT, P.A.

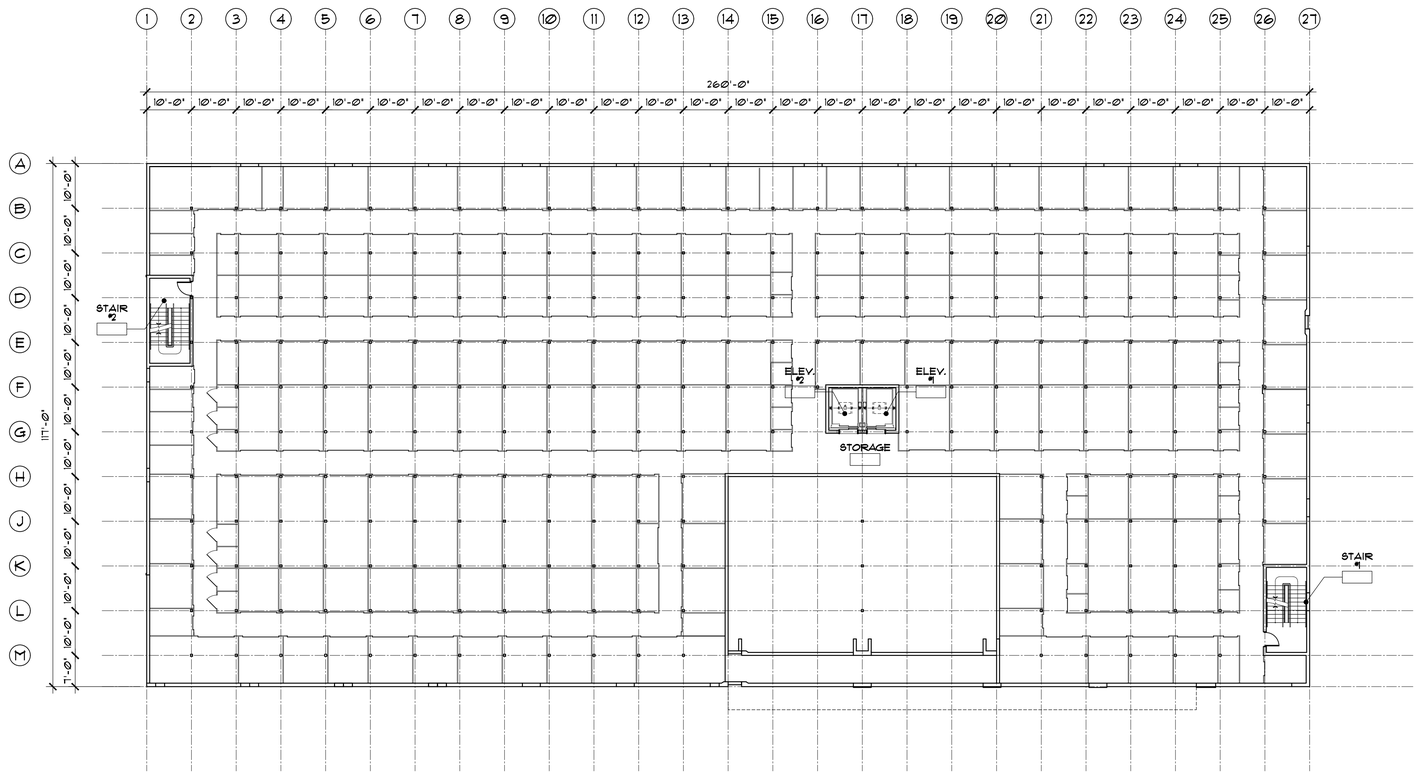
1166 W. NEWPORT CENTER DR. SUITE 311
DEERFIELD BEACH, FLORIDA 33442
PH. (954) 427 - 8848
FAX (954) 427 - 9329
AA C001818
e-mail: kenc@kencarlson.com

Revisions:

DRAWN BY: DPS
CHECKED BY: KC
DATE: 11-23-16
SCALE: AS NOTED
PROJECT #: 1612
CAD DWG FILE: A4.0

KENNETH R. CARLSON
AR12546

SHEET OF
A4.0
PAGE OF



1 / A4.1 **SECOND FLOOR PLAN**

1/16"=1'-0"

NORTH

GRAPHIC SCALE
(in feet)
16' 4' 0 8' 16' 32'
1/16"=1'

KENNETH R. CARLSON – ARCHITECT, P.A.
1166 W. NEWPORT CENTER DR. SUITE 311
DEERFIELD BEACH, FLORIDA 33442
PH. (954) 421 - 8848 FAX (954) 421 - 9329
e-mail: kenc@kencarlson.com
AA C001818

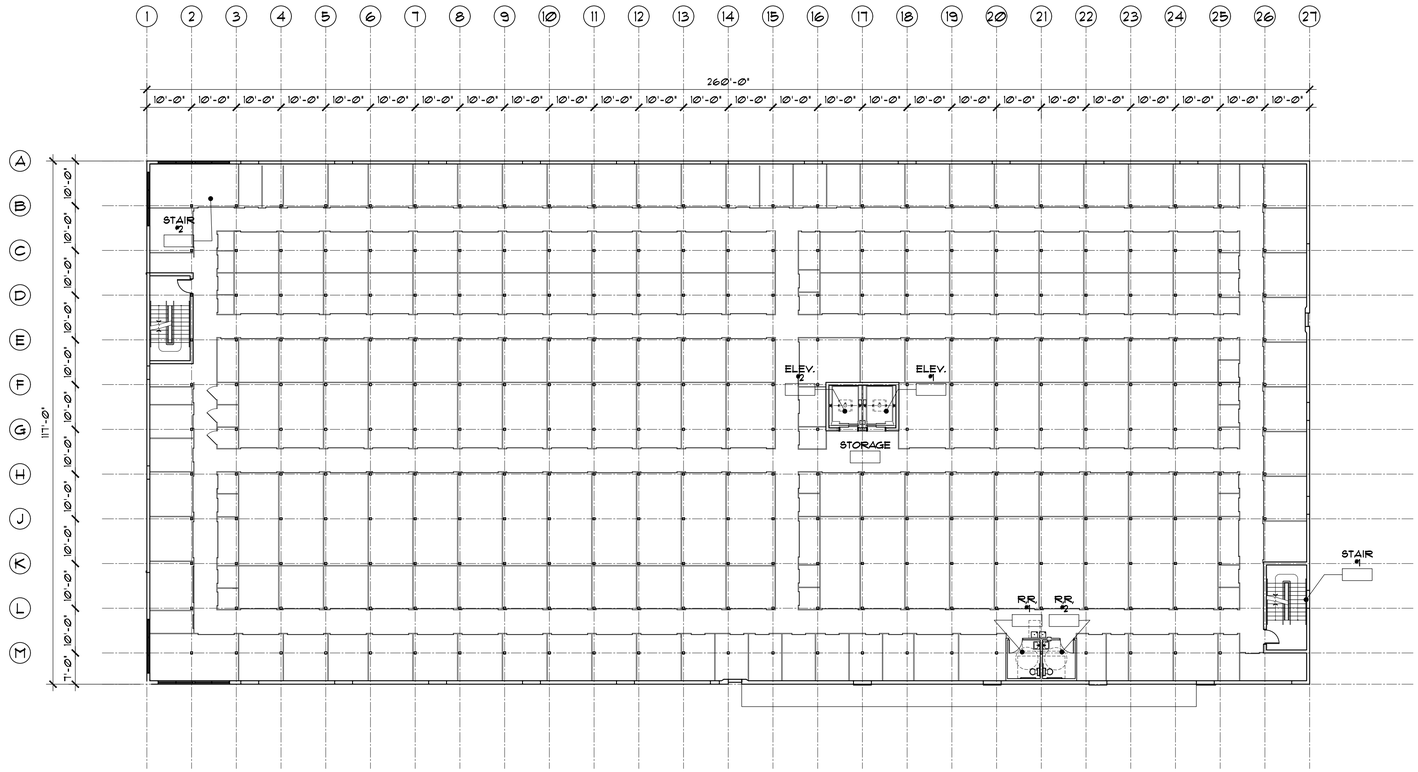
LEDER HILLSBORO
4181 W HILLSBORO BOULEVARD
COCONUT CREEK, FLORIDA

Revisions:

DRAWN BY: DFS
CHECKED BY: KC
DATE: 11-23-16
SCALE: AS NOTED
PROJECT #: 1612
CAD DWG FILE: A4.1

KENNETH R. CARLSON
AR12546

SHEET OF
A4.1
PAGE OF



1 / A4.2 *THIRD FLOOR PLAN*

1/16"=1'-0"

NORTH

GRAPHIC SCALE
(in feet)
16' 4' 0 8' 16' 32'
1/16"=1'

LEDER HILLSBORO

4181 W HILLSBORO BOULEVARD
COCONUT CREEK, FLORIDA

KENNETH R. CARLSON – ARCHITECT, P.A.

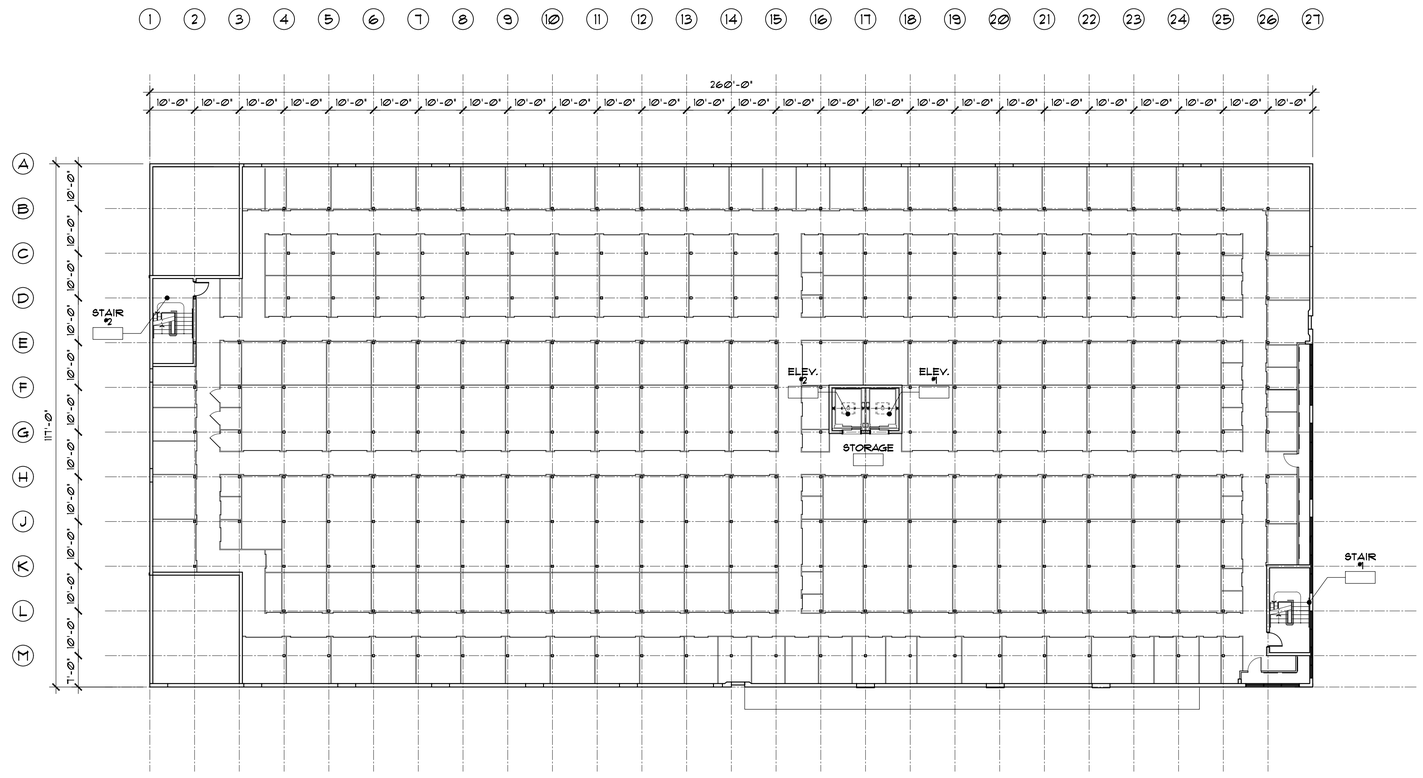
1166 W. NEWPORT CENTER DR. SUITE 311
DEERFIELD BEACH, FLORIDA 33442
PH. (954) 427 - 8848
FAX (954) 421 - 9329
e-mail: kenc@kencarlson.com
AA C001818

Revisions:

DRAWN BY: DPS
CHECKED BY: KC
DATE: 11-23-16
SCALE: AS NOTED
PROJECT #: 1612
CAD DWG FILE: A4.2

KENNETH R. CARLSON
AR12546

SHEET OF
A4.2
PAGE OF



1/A4.2 *FORTH FLOOR PLAN*

1/16"=1'-0"

NORTH

GRAPHIC SCALE
(in feet)
16' 4' 0 8' 16' 32'
1/16"=1'

LEDER HILLSBORO

4181 W HILLSBORO BOULEVARD
COCONUT CREEK, FLORIDA

KENNETH R. CARLSON – ARCHITECT, P.A.

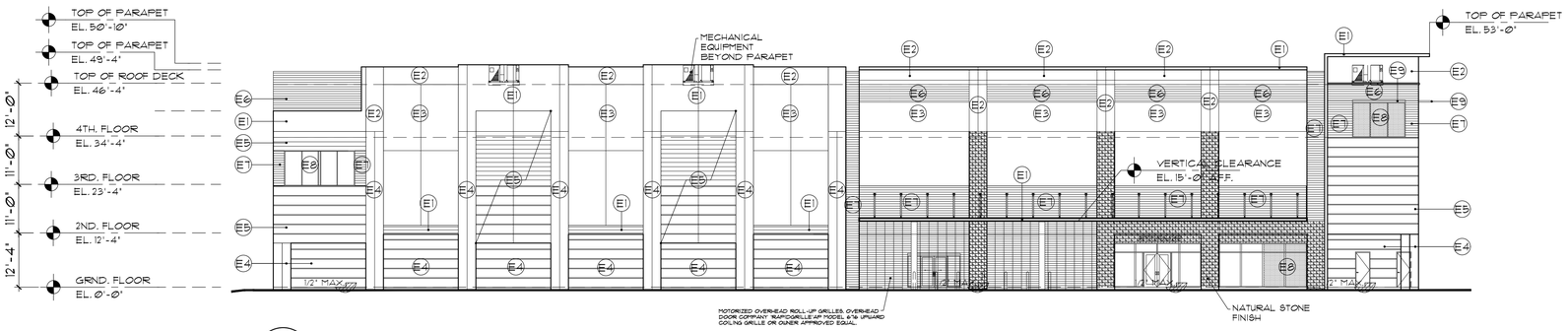
1166 W. NEWPORT CENTER DR. SUITE 311 AA C001818
DEERFIELD BEACH, FLORIDA 33442
PH. (954) 427 - 8848 FAX (954) 427 - 9329
e-mail: kenc@kencarlson.com

Revisions:

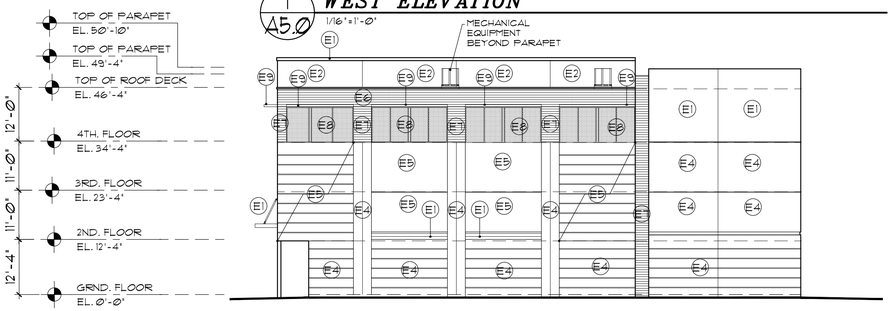
DRAWN BY: DPS
CHECKED BY: KC
DATE: 11-23-16
SCALE: AS NOTED
PROJECT #: 1612
CAD DWG FILE: A4.2

KENNETH R. CARLSON
AR12546

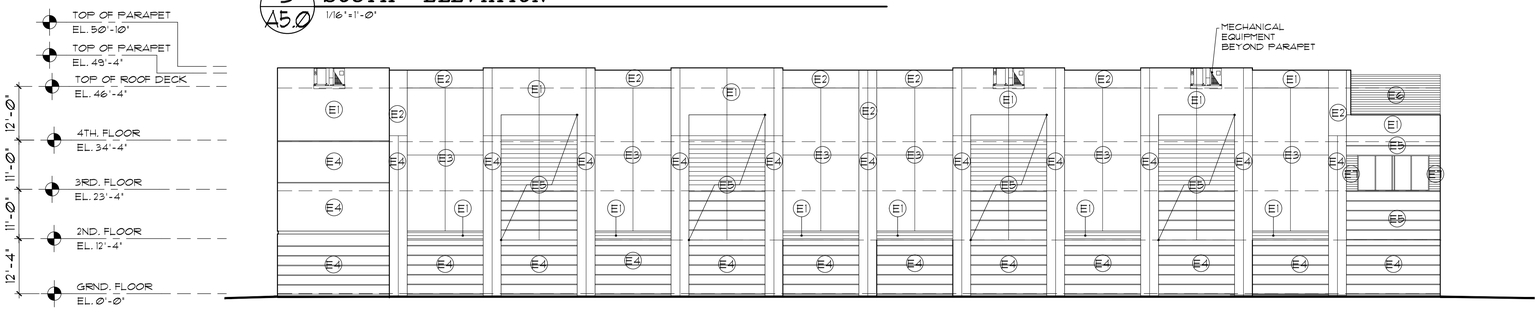
SHEET OF
A4.3
PAGE OF



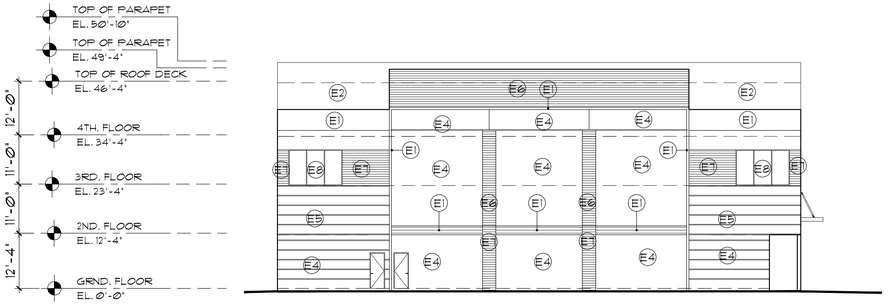
1 A5.0 **WEST ELEVATION**
1/16"=1'-0"



3 A5.0 **SOUTH ELEVATION**
1/16"=1'-0"



3 A5.0 **EAST ELEVATION**
1/16"=1'-0"



3 A5.0 **NORTH ELEVATION**
1/16"=1'-0"

MARK	DESCRIPTION	PAINT CODE	BRAND NAME	COLOR NAME
E1	PAINTED MEDIUM TEXTURE	SW 7006	SHERWIN WILLIAMS	EXTRA WHITE
E2	PAINTED MEDIUM TEXTURE	SW 7007	SHERWIN WILLIAMS	CEILING BRIGHT WHITE
E3	PAINTED MEDIUM TEXTURE	SW 9166	SHERWIN WILLIAMS	DRIFT OF MIST
E4	PAINTED MEDIUM TEXTURE	SW 7038	SHERWIN WILLIAMS	TONY TAUPE
E5	PAINTED MEDIUM TEXTURE	SW 2803	SHERWIN WILLIAMS	ROOKWOOD TERRA COTTA
E6	PAINTED MEDIUM TEXTURE	SW 7071	SHERWIN WILLIAMS	GRAY SCREEN
E7	PAINTED MEDIUM TEXTURE	SW 7075	SHERWIN WILLIAMS	WEB GRAY
E8	SPANDREL GLAZING			
E9	ALUMINUM SILVER POWDER COATED LOUVERED AWNING.			SILVER

NOTE:

- ALL WINDOWS WHICH COULD SHOW STORAGE UNIT ROLL-UP DOORS WILL BE OBSCURED WITH SPANDREL GLAZING TO ENSURE NO VISIBILITY DAY OR NIGHT.
- SIGNAGE UNDER A SEPARATE PERMIT.
- ADDRESS NUMBERS
ADDRESS NUMBERS SHALL BE AT LEAST 6" TALL AND PLACED IN A HIGHLY VISIBLE LOCATION ON THE BUILDING.

LEDER HILLSBORO
4181 W HILLSBORO BOULEVARD
COCONUT CREEK, FLORIDA

KENNETH R. CARLSON – ARCHITECT, P.A.
1166 W. NEWPORT CENTER DR. SUITE 311 AA C001878
DEERFIELD BEACH, FLORIDA 33442 LEED AP
PH. (954) 427 - 2848 28368-AP-BD+C
e-mail: kenrc@kencarlson.com FAX (954) 427 - 9329

Revisions:

DRAWN BY: DPG
CHECKED BY: KC
DATE: 11-23-16
SCALE: AS NOTED
PROJECT #: 16112
CAD DWG FILE: A5.0

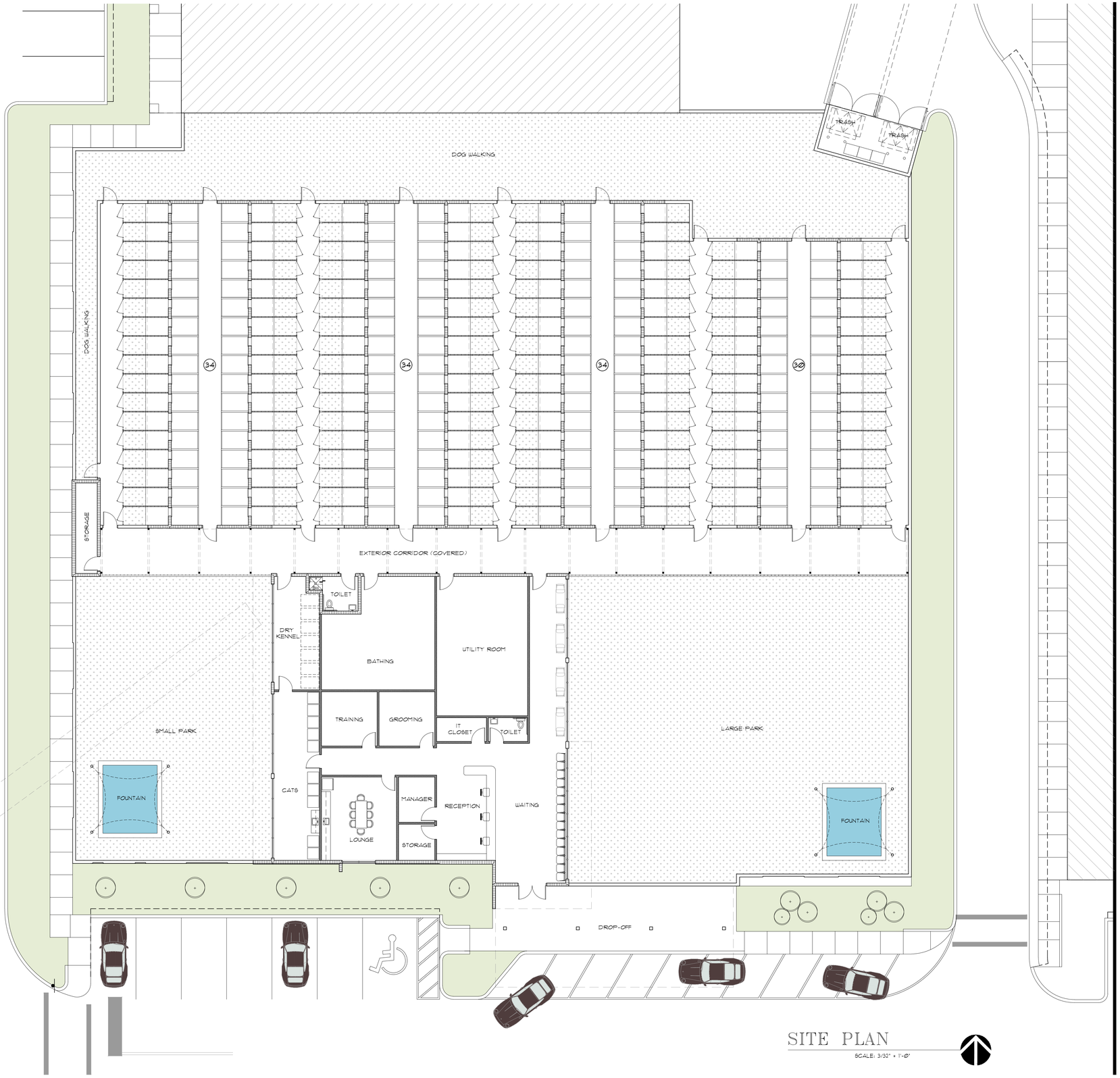
KENNETH R. CARLSON
AR12546

SHEET OF
A5.0
PAGE OF



LOCATION MAP

SCALE: NTS



6' UTILITY EASEMENT
(P.B. 125, PG. 31, B.C.R.)

SITE PLAN

SCALE: 3/32" = 1'-0"

GUTIERREZ & LOZANO ARCHITECTS

2830 W. STATE ROAD 84, SUITE117
FT. LAUDERDALE, FL. 33312
PHONE: (954) 321-3442
FAX: (954) 321-3864

REVISIONS

MANUEL GUTIERREZ
STATE OF FLA. REG. No. 8253

SEAL

CARLOS LOZANO
STATE OF FLA. REG. No. 0014722

PET LODGE COCONUT CREEK

AT:
4181 W HILLSBORO BOULEVARD
COCONUT CREEK, FLORIDA

SHEET TITLE :

SITE PLAN

SCALE: 3/32" = 1'-0"

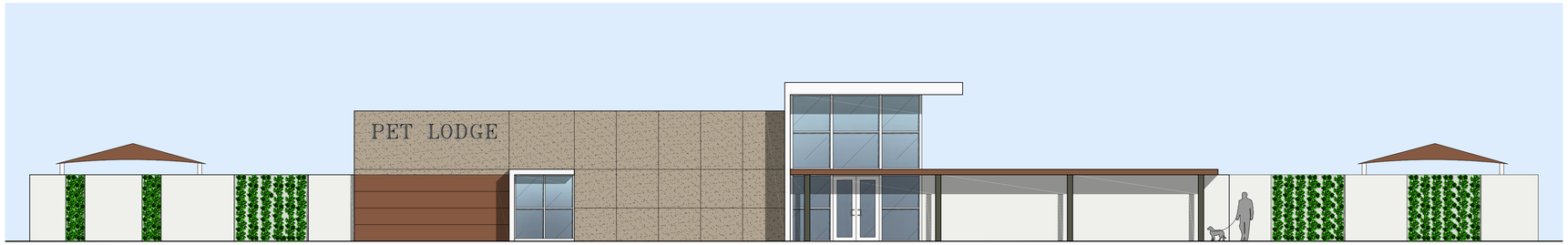
JOB No.:

DATE: 1/16/17

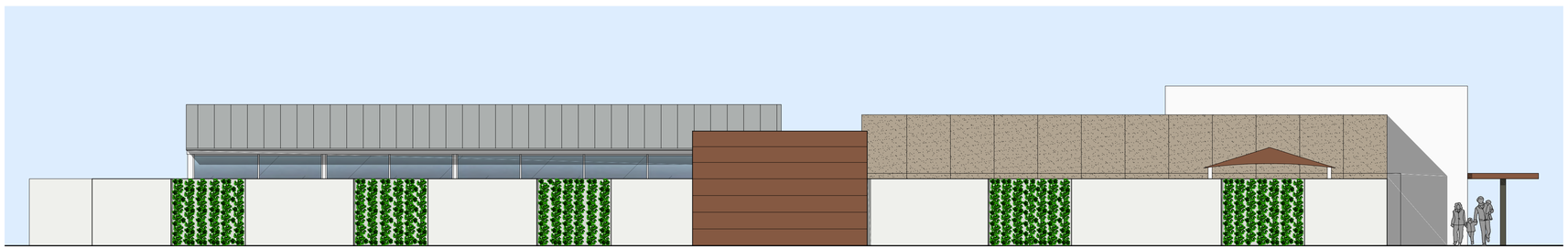
SHEET

SP-1

OF



SOUTH ELEVATION (A / A-1)
SCALE: 1/8" = 1'-0"



WEST ELEVATION (B / A-1)
SCALE: 1/8" = 1'-0"

GUTIERREZ & LOZANO ARCHITECTS
2830 W. STATE ROAD 84, SUITE117
FT. LAUDERDALE, FL. 33312
PHONE: (954) 321-3442
FAX: (954) 321-3864
WWW.GUTIERREZLOZANO.COM

REVISIONS

MANUEL GUTIERREZ
STATE OF FLA. REG. No. 8253

SEAL

CARLOS LOZANO
STATE OF FLA. REG. No. 0014722

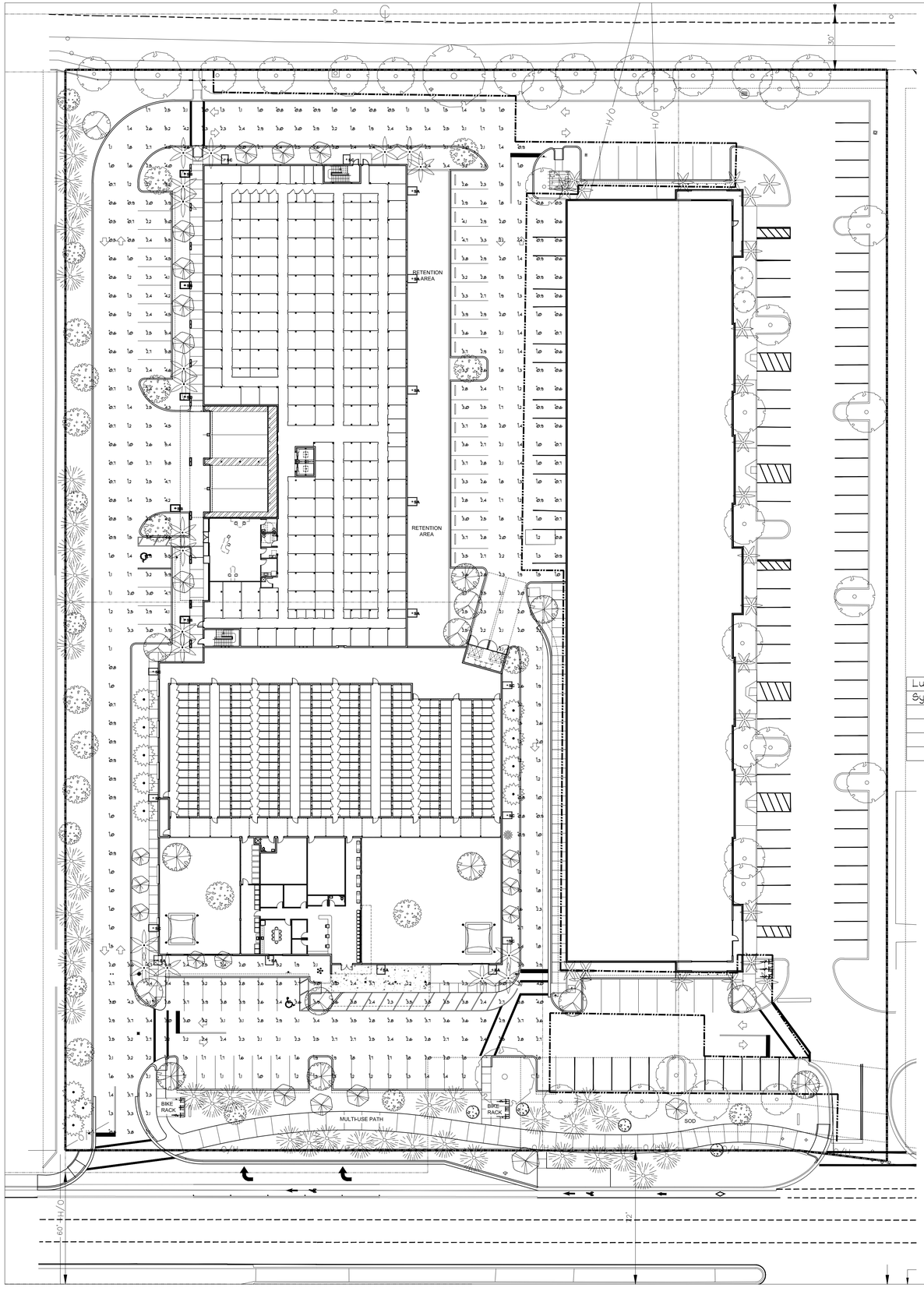
PET LODGE COCONUT CREEK
AT:
4181 W HILLSBORO BOULEVARD
COCONUT CREEK, FLORIDA

SHEET TITLE :
ELEVATIONS

JOB No.:

DATE: 1/27/17

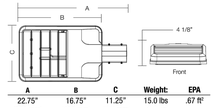
SHEET
A-1
OF



PRODUCT IMAGE(S)

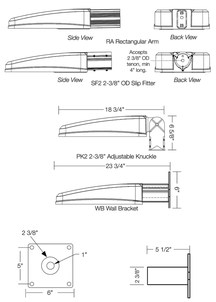


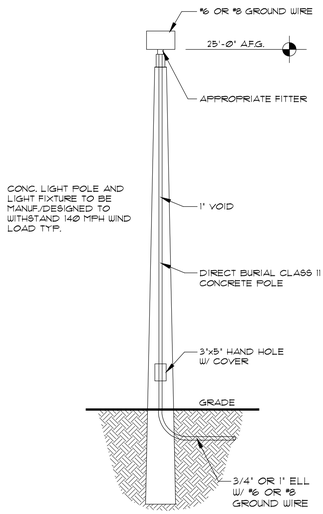
DIMENSIONS



A	B	C	Weight:	EPA
22.75" (578 mm)	16.75" (425 mm)	11.25" (286 mm)	15.0 lbs (6.8 kg)	.67 ft²

MOUNTING OPTIONS





3 SL1 *LIGHTING SPECIFICATION SA,SB,SC,&SD*
NOT TO SCALE

4 SL2 *LIGHT POLE – SITE LIGHTING*
N.T.S. (MATCH EXISTING LIGHITING POLES)

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description	Lum. Watts
	9	SA	SINGLE	N.A.	0.900	BEACON VP-S-60NB-136-5K-T4-BCW BLDG. MTD. - 25' A.G.	137
	5	SB	SINGLE	N.A.	0.900	BEACON VP-S-60NB-136-4K-T2-BCW BLDG. MTD. - 25' A.G.	137
	8	SC	SINGLE	N.A.	0.900	BEACON VP-S-30NB-90-5K-T2-BCW BLDG. MTD. - 25' A.G.	90
	1	SD	SINGLE	N.A.	0.900	BEACON VP-S-22NB-50-4K-T2-BCW POLE MTD. - 15' A.G.	53.65

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
DRIVES & PARKING	Illuminance	Fc	2.21	5.9	0.5	4.42	11.80
PROPERTY LINE - LEFT	Illuminance	Fc	0.02	0.3	0.0	N.A.	N.A.
PROPERTY LINE - LOWER	Illuminance	Fc	0.03	0.2	0.0	N.A.	N.A.
PROPERTY LINE - RIGHT	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.
PROPERTY LINE - UPPER	Illuminance	Fc	0.00	0.1	0.0	N.A.	N.A.

HARDSCAPE LUMEN TABLE DATA
HARDSCAPE = 99,802 SQ FT - 748,512 LUMENS ALLOWED
23 LIGHTING FIXTURES USED - 272,966 LUMENS TOTAL

NOTE: ALL SITE LIGHTING FIXTURES INCLUDE THE BEACONNECT FEATURE TO MEET MANDATORY LEVEL REDUCTION DURRING NON-BUSINESS HOURS PER CODE.

2 SL1 *SITE PHOTOMETRY*

1 SL1 *SITE LIGHTING PLAN*
SCALE 1" = 20'

NORTH

NOTE:
SITE LIGHTING IS PRESCRIPTIVE AND CAN ONLY BE CHANGED BY CONTRACTOR SUBMITTING SIGNED AND SEALED ENGINEERED PHOTOMETRIC FOR ARCHITECT'S AND ENGINEER'S APPROVAL. ONCE APPROVED CONTRACTOR MUST SUBMIT AND GET APPROVAL FROM CITY OF COCONUT CREEK AT CONTRACTOR'S EXPENSE.

LEDER HILLSBORO
4181 W HILLSBORO BOULEVARD
COCONUT CREEK, FLORIDA

KENNETH R. CARLSON – ARCHITECT, P.A.
1166 W. NEWPORT CENTER DR. SUITE 311
DEERFIELD BEACH, FLORIDA 33442
PH. (954) 427 - 8848
FAX (954) 427 - 9329
AA C00I878
e-mail: kencarlson@kencarlson.com

Revisions:

DRAWN BY: DPS
CHECKED BY: KC
DATE: 11-23-16
SCALE: AS NOTED
PROJECT #: 1612
CAD DWG FILE: SL1

KENNETH R. CARLSON
AR12546

SHEET OF
SL1
PAGE OF

General Symbols

Existing	Proposed	Description
		Centerline & Baseline of Survey or Construction
		Building Access (ADA)
		Building Access (NON-ADA)
A-1 24' WIDE	A-1 24' WIDE	Driveway Turnout Identification (Per FDOT Index 515) w/ Drive Width
CR-A	CR-A	Sidewalk Curb Ramp (Per FDOT Index 304)
	A 45	Proposed Section Marker
		Flag Pole
		GPS Point
		Hay Bales
		Mail Box
5.00	5.00	Major Contour Elevation
5.20	5.20	Minor Contour Elevation
		Parking Meter
		Property Line
14.98	14.48	Grade Elevation
	14.98 14.48	Top Of Curb Elevation/Pavement Elevation
		Soil Test Boring Hole
B.M. NO. 112	B.M. NO. 112	Survey Bench Mark

Line Types

Existing	Proposed	Description
		County Bound
		Demolition Line
		Easement Line
		Property Line
		Limited Access Line/Non-Vehicular Access
		Railroad
		Right Of Way
		Canal Or Drainage Ditch
		Shore Line
		Tree Line
C_X	C	Aerial Communication Line
C_X	C	Underground Communication Line
SD_X	SD	Underground Storm Drain Line (Double Line 24" And Over
SS_X	SS	Underground Sanitary Line
E_X	E	Aerial Electric Line
E_X	E	Underground Electric
W_X	W	Underground Water Line
FM X	FM	Underground Force Main
12'	12'	Gate
X X	X X	Chain Link Fence
		Wood Fence
X X	X X	Metal Rail Fence
SF	SF	Silt Fence
		Staked Turbidity Barrier
		Turbidity Barrier
		Guard Rail
		Roadway Centerline
		2 - 4 Skip
		3 - 9 Skip
		6- 10 Skip
		10 - 30 Skip
		10 - 10 - 20 Skip
		Curb
		Curb And Gutter

Landscaping

Existing	Proposed	Description
		Bush
		Tree
		Palm Tree

Paving and Grading

Existing	Proposed	Description
		Flow Directional Arrow
		Pavement Marking Arrows
		Stop Bar
		Concrete Sidewalk
		Jogging Path
		Pavement Area
		Existing Pavement/Concrete/ Landscape Removal Area
		Milling And Resurfacing
		Detectable Warning (Truncated Domes) Per Florida Accessibility Code
		Soil Tracking Prevention Device

Drainage / Utilities

Existing	Proposed	Description
CB	CB	Catch Basin
		Yard Drain
CB	CB	Exfiltration Trench
CB	CB	Catch Basin With Filter Fabric Insert
		Curb Type 5
		Curb Type 6
		Pipe Culvert - Mitered End Section
		Pipe Culvert - Straight Endwall
		Pipe Culvert - U - Type Endwall
Ⓒ Ⓔ Ⓖ Ⓓ Ⓢ	Ⓒ Ⓔ Ⓖ Ⓓ Ⓢ	Manhole - Communication, Electric, Gas, Drn, San Sew
		Valve Box - Gas, San. Sew, Water, Non-Potable Water
		22.5 degree Bend
		45 degree Bend
		90 degree Bend
		Utility Crossing
		Fire Hydrant
		Proposed Bacteriological Sampling Point
PS#	PS#	Pump Station
GT	GT	Grease Trap
ST	ST	Septic Tank
DW	DW	Drainage Well
MW	MW	Monitoring Well
		Water Well
CO	CO	Sanitary Sewer Cleanout
BFP	BFP	Back Flow Preventor
J	J	Junction Box
E	E	Electric Handhole
ELEC	ELEC	Electric Meter
W	W	Water Meter
		Gate Valve
		Guy wire
		Light Pole
		Relocated Or Adjusted Light Pole
		Wood Power Pole
		Concrete Utility Pole
		Traffic Signal Pole (Concrete, Wood, Metal)
		Pedestrian Signal Head (Pole Or Pedestal Mounted)
		Post Mounted Sign
		Street Sign
		High Mast Lighting Tower
		Controller Cabinet (Base Mounted)
		Controller Cabinet (Pole Mounted)
		Traffic Signal Head (Span Wire Mounted)
		Traffic Signal Head (Pedestal Mounted)
		Traffic Signal Head (Mast Arm Mounted)
	N: 623025.4322	Coordinate values shown on proposed improvements are relative to the coordinate values indicated on the Right-of-Way, property corners or reference monument
	E: 850262.1786	

Abbreviations

General	
AADT	Annual Average Daily Traffic
ABAN	Abandon
ADJ	Adjust
APPROX.	Approximate
A.C.	Asphalt Concrete
ACCM PIPE	Asphalt Coated Corrugated Metal Pipe
BIT.	Bituminous
BC	Back Of Curb
BD.	Bound
BL	Baseline
BLDG	Building
BM	Benchmark
BO	By Others
BOS	Bottom Of Slope
BR.	Bridge
CAP	Corrugated Aluminum Pipe
CB	Catch Basin
CBCI	Catch Basin With Curb Inlet
CC	Cement Concrete
CCM	Cement Concrete Masonry
CEM	Cement
CI	Curb Inlet
CIP	Cast Iron Pipe
CLF	Chain Link Fence
CL	Centerline
CMP	Corrugated Metal Pipe
CO.	County
CONC	Concrete
CONT	Continuous
CONST	Construction
CR GR	Crown Grade
DHV	Design Hourly Volume
DI	Drop Inlet
DIA	Diameter
DIP	Ductile Iron Pipe
DWY	Driveway
ELEV (OR EL.)	Elevation
EMB	Embankment
EOP	Edge Of Pavement
EXIST (OR EX)	Existing
EXC	Excavation
F&C	Frame And Cover
F&G	Frame And Grate
FDN.	Foundation
FLDSTN	Fieldstone
GAR	Garage
GD	Ground
GI	Gutter Inlet
GIP	Galvanized Iron Pipe
GRAN	Granite
GRAV	Gravel
GRD	Guard
GV	Gate Valve
HDW	Headwall
HMA	Hot Mix Asphalt
HOR	Horizontal
HYD	Hydrant
INV	Invert
JCT	Junction
L	Length Of Curve
LB	Leach Basin
LP	Light Pole
LT	Left
MAX	Maximum
MB	Mailbox
MH	Manhole
MIN	Minimum
NIC	Not In Contract
NO.	Number
PC	Point Of Curvature
PCC	Point Of Compound Curvature
P.G.L.	Profile Grade Line

Abbreviations Continued

PI	Point Of Intersection
POC	Point On Curve
POT	Point On Tangent
PRC	Point Of Reverse Curvature
PROJ	Project
PROP	Proposed
PT	Point Of Tangency
PVC	Point Of Vertical Curvature
PVI	Point Of Vertical Intersection
PVT	Point Of Vertical Tangency
PVMT	Pavement
PWW	Paved Water Way
R	Radius Of Curvature
R&D	Remove And Dispose
RCP	Reinforced Concrete Pipe
RD	Road
RDWY	Roadway
REM	Remove
RET	Retain
RET WALL	Retaining Wall
ROW	Right Of Way
RR	Railroad
R&R	Remove And Reset
RT	Right
SHLD	Shoulder
SMH	Sewer Manhole
ST	Street
STA	Station
SSD	Stopping Sight Distance
SW	Sidewalk
T	Tangent Distance Of Curve/Truck %
TAN	Tangent
TEMP	Temporary
TC	Top Of Curb
TOS	Top Of Slope
TYP	Typical
UP	Utility Pole
VAR	Varies
VERT	Vertical
VC	Vertical Curve
WCR	Wheel Chair Ramp
WIP	Wrought Iron Pipe
WM	Water Meter/Water Main
X-SECT	Cross Section

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE

LEGEND

SHEET NUMBER

GI-001

SHEET 01 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cad\09675.00-GI-001.dwg Layout Name: GI-001 LEGEND Plotted by: MGrimbank Plotted on: Aug 24, 2017 - 2:03pm

CONSTRUCTION SPECIFICATIONS

Section 20 - General Specifications Paving Grading Drainage and Earthwork

20.General

20.1. It is the intent of these specifications to describe the minimum acceptable technical requirements for the materials and workmanship for construction of site improvements for this project. Such improvements may generally include, but not to be limited to, clearing, grading, paving, removal of existing pavement storm drainage, water lines and sanitary sewers.

20.2. It is the intent that the Florida Department of Transportation (FDOT) "Standard Specifications for Road and Bridge Construction: (current edition) together with "Supplemental Specifications to the Standard Specifications for Road and Bridge Construction" (current edition), and the FDOT Roadway and Traffic Design Standards (current edition) be used where applicable for the various work, and that where such wording therein refers to the State of Florida and its Department of Transportation and personnel, such wording is intended to be replaced with the wording which would provide proper terminology; thereby making such "Standard Specifications for Road and Bridge Construction" together with the "FDOT Roadway and Traffic Design Standards" as the "Standard Specifications" for this project. If within a particular section, another section, article or paragraph is referred to, it shall be part of the Standard Specifications also. The Contractor shall abide by all local and State laws, regulations and building codes which have jurisdiction in the area.

20.3. The Contractor shall furnish all labor, materials and equipment and perform all operations required to complete the construction of a paving and drainage system as shown on the plans, specified herein, or both. It is the intent to provide a complete and operating facility in accordance with these specifications and the construction drawings. The material and equipment shown or specified shall not be taken to exclude any other incidentals necessary to complete the work.

20.4. All labor, materials, and methods of construction shall be in strict accordance with the plans and construction specifications and the minimum engineering and construction standards adopted by the unit of government which has jurisdiction and responsibility for the construction. Where conflicts or omissions exist, the jurisdictional government Engineering Department's standards shall govern. Substitutions and deviations from plans and specifications shall be permitted only when written approval has been issued by the Engineer.

20.5. Guarantee - all materials and equipment to be furnished and/or installed by the Contractor under this contract, shall be guaranteed for a period of (l) one year from the date of final acceptance thereof, against defective materials, design and workmanship. Upon receipt of notice from the owner of failure of any part of the guaranteed equipment or materials, during the guarantee period, the affected part or materials shall be replaced promptly with new parts or materials by the contractor, at no expense to the owner. In the event the Contractor fails to make necessary replacement or repairs within (7) seven days after notification by the owner, the owner may accomplish the work at the expense of the contractor.

21.Earthwork

21.1. All areas within the project limits shall be cleared and grubbed prior to construction. This shall consist of the complete removal and disposal of all trees, brush, stumps, roots, grass, weeds, rubbish and all other obstructions resting on or protruding through the surface of the existing ground to a depth of 1'. All work shall be in accordance with section 110 of the Standard Specifications.

21.2. None of the existing limerock material from demolished pavement is to be incorporated in the new limerock base, unless noted in plans. The existing limerock material from demolished pavement may be incorporated into the stabilized subgrade / subbase, or stabilized shoulder.

21.3. Fill material shall be classified as A-l, A-3, or A-2-4 in accordance with AASHTO M--145 and shall be free from vegetation and organic material. Not more than 12% by weight of fill material shall pass the no. 200 sieve.

21.4. All fill material in areas not to be paved shall be compacted to 95% of the maximum density as determined by AASHTO T-99.

21.5. All material of construction shall be subject to inspection and testing to establish conformance with the specifications and suitably for the uses intended. The Contractor shall notify the Engineer at least 24 hours prior to the time he will be ready for an inspection or test. The Contractor shall follow City and County inspection procedures. The Contractor shall not proceed with any phase of work dependent on an inspection or test of an earlier phase of work, prior to that test or inspection passing. The Contractor shall be responsible for providing certified material test results to the Engineer of record prior to the release of final certification by the Engineer. Test results must include, but may not be limited to, densities for subgrade and limerock, utilities, excavation, asphalt gradation reports, concrete cylinders, etc.

21.6. When encountered, muck shall be completely removed from the center line (10) ten feet beyond the edge of pavement each side. All such material shall be replaced by approved granular fill.

21.7. When encountered within drainage swales, hardpan shall be removed to full depth for a width of (5) five feet at the invert and replaced with granular materials.

21.8. All underground utilities and drainage installations shall be in place prior to subgrade compaction and pavement construction.

21.9. Ground adjacent to roadway/pavement having runoff shall be graded (2) two inches lower than the edge of pavement to allow for the placement of sod.

21.10. Site grading elevations shall be within 0.1' of the required elevation for non paved areas and all areas shall be graded to drain without ponding.

21.11. The Contractor shall perform all excavation, fill, embankment and grading to achieve the proposed plan grades including typical road sections, side slopes and canal sections. All work shall be in accordance with section 120 of the Standard Specifications. If fill material is required in excess of that generated by the excavation, the Contractor shall supply this material as required from off-site.

21.12. A 2" blanket of top soil shall be placed over all areas to be sodded or seeded and mulched within the project limits unless otherwise indicated on the plans.

21.13. Sod shall be St. Augustine unless otherwise indicated on the plans, and shall be placed on the graded top soil and watered to insure satisfactory condition upon final acceptance of the project.

22.Drainage

22.1. Inlets - all inlets shall be the type designated on the plans, and shall be constructed in accordance with section 425 of the Standard Specifications. All inlets and pipe shall be protected during construction to prevent siltation in the drainage systems by way of temporary plugs and plywood or plastic covers over the inlets. The entire drainage system shall be cleaned of all debris prior to final acceptance.

22.2. Pipe specifications: the material type is shown on the drawings by one of the following designations:

- RCP = reinforced concrete pipe, ASTM designation C--76, section 941 of the Standard Specifications.
- CMP = corrugated metal (aluminum) pipe, ASTM designation M-196.
- CMP (smooth lined) = corrugated metal aluminum pipe, (smooth lined) ASTM designation M-196.
- SCP = slotted concrete pipe, sections 941 and 942, of the Standard Specifications.
- PVC = polyvinyl chloride pipe.
- PCMP = perforated cmp, section 945, of the Standard Specifications
- Corrugated High Density Polyethylene Pipe (HDPE) (12 Inches to 60 Inches), shall meet the requirements of FDOT Specification section 948-2.3.

22.3. Pipe backfill - requirements for pipe backfill crossing roads or parking areas shall be as defined in the section 125-8, of the Standard Specifications. Pipeline backfill shall be placed in 6 inch lifts and compacted to 100% of the standard proctor (AASHTO T--99 specifications)

22.4. Location of drainage structures shall govern, and pipe length may have to be adjusted to accomplish construction as shown on these plans.

22.5. Distance and lengths shown on plans and profile drawings are referenced to the center of structures.

22.6. Filter fabric shall be Mirafi, Typar or equal conforming to section 985 of the Standard Specifications.

23.Asphalt Paving

23.1. Where new asphalt meets existing asphalt, the existing asphalt shall be saw cut to provide a straight even line. Prior to removing curb or gutter, the adjacent asphalt shall be saw cut to provide a straight even line.

23.2. Internal asphalt paving constructed on existing sandy soils shall be constructed with a 12" subgrade, compacted to a minimum density of 100% maximum density as determined by AASHTO T-99. The compacted subgrade shall be constructed in the limits shown on the plans. All subgrade shall have an LBR of 40 unless otherwise noted.

23.3. Asphaltic concrete surface course shall be constructed to the limits shown on the plans. The surface course shall consist of the thickness and type asphaltic concrete as specified in the plans. All asphaltic concrete shall be in accordance with sections 320, 327, 330, 334, 336, 337, 337, 338, 339 and 341 of the Standard Specifications.

23.4. Limerock base shall be prepared, compacted and graded and shall be in accordance with section 200 of the Standard Specifications. All limerock shall be compacted to 98% per AASHTO T-180 and have not less than 70% of carbonates of calcium and magnesium unless otherwise designated. The Engineer shall inspect the completed base course and the Contractor shall correct any deficiencies and clean the base course prior to the placement of the prime coat. A tack coat will also be required if the Engineer finds that the primed base has become excessively dirty or the prime coat has cured to the extent of losing bounding effect prior to placement of the asphaltic concrete surface course. The prime and tack coats shall be in accordance with section 300 of the Standard Specifications.

23.5. Limerock base material shall be placed in maximum 6" lifts. Bases greater than 6" shall be placed in two equal lifts. If, through field tests, the Contractor can demonstrate that the compaction equipment can achieve density for the full depth of a thicker lift, and if approved by the engineer, the base may be constructed in successive courses of not more than 8 inches (200 mm) compacted thickness.

23.6. Asphalt edges that are not curbed shall be saw cut to provide a straight even line to the dimensions shown on plans.

24.Concrete Construction

24.1. Concrete sidewalk shall be in accordance with section 522 of the Standard Specifications and in accordance with F.D.O.T. Roadway and Traffic Design Standards, index no. 310. Concrete sidewalk shall be 4" thick, unless otherwise not and constructed on compacted subgrade, with 1/2" expansion joints placed at a maximum of 75', unless otherwise noted on plans. Crack control joints shall be 5' on center. All concrete sidewalks that cross driveways shall be 6" thick, unless otherwise noted on plans.

24.2. Sidewalk Curb ramps hall be in accordance with F.D.O.T. Roadway and Traffic Design Standards, index no. 304.

24.3. Concrete curb shall be constructed to the limits shown on the plans. The concrete shall have a minimum compressive strength of 4000 p.s.i. at 28 days and shall be in accordance with section 520 of the Standard Specifications. Concrete curbing shall be in accordance with F.D.O.T. Roadway and Traffic Design Standards, index no. 300.

Section 30 - Water distribution and sanitary sewer force mains.

30. Materials:

Note: If materials list here on are in conflict with utility owner, material owner requirements shall govern.

30.1. All water main pipe, including fittings, shall be color coded or marked using blue as a predominant color to differentiate drinking water from reclaimed or other water. Underground plastic pipe shall be solid-wall blue pipe, shall have a co-extruded blue external skin, or shall be white or black pipe with blue stripes incorporated into, or applied to, the pipe wall; and underground metal or concrete pipe shall have blue stripes applied to the pipe wall. Pipe striped during manufacturing of the pipe shall have continuous stripes that run parallel to the axis of the pipe, that are located at no greater than 90-degree intervals around the pipe, and that will remain intact during and after installation of the pipe. If tape or paint is used to stripe pipe during installation of the pipe, the tape or paint shall be applied in a continuous line that runs parallel to the axis of the pipe and that is located along the top of the pipe; for pipes with an internal diameter of 24 inches or greater, tape or paint shall be applied in continuous lines along each side of the pipe as well as along the top of the pipe.

30.2. Ductile iron pipe for water distribution mains shall conform to ANSI/AWWA standard C151/A21.51-xx latest revision, "ductile iron pipe centrifugally cast in metal molds or sand-lined molds" with a minimum wall thickness of class 51 (pressure class 350) unless otherwise noted in the plans. Ductile iron pipe shall be cement lined and seal coated in accordance with ANSI/AWWA standard C104/A21.4-xx latest revision. The pipe shall be adapted for use with class 250 fittings for all sizes. Water main shall be colored blue in accordance with Florida State Statutes.

30.3. Ductile iron pipe for sewage force mains shall conform to ANSI/AWWA standard C151/A21.51-xx latest revision, "ductile iron pipe centrifugally cast in metal molds or sand- lined molds" with a minimum wall thickness of class 51 (pressure class 350) unless otherwise noted in the plans. Ductile iron pipe shall be interior ceramic epoxy lined and exterior coated with the manufacturer's coating system (Protecto 401 ceramic epoxy with a minimum dry film thickness of 40 mils and an outside coating of either coal tar epoxy or asphalt). Cement mortared linings are not appropriate for this application.

30.4. All pipe & fittings on the lift station sites shall be ductile iron conforming to the same specifications as above for sewage force mains except that flanged ductile iron pipe & fittings shall be used inside valve pits and wet wells. Flanged pipe and fittings shall conform to ANSI/AWWA C115/a21.15-xx latest revision and ANSI/AWWA C110/A21.10-xx latest revision. The following thickness classes shall be adhered to: 4" - 12" - class 52, 14" & larger - class 51.

30.5. PVC pressure pipe for sizes 4" through 12" and shall conform to ANSI/AWWA standard C900-xx latest revision. PVC pressure pipe shall be made from class 12454-a or class 12454-b virgin material and conform with the outside diameter of cast iron pipe with a minimum wall thickness of dr series 18. Ultra violet degradation or sun bleached pipe will be cause for rejection. Water main shall be colored blue in accordance with Florida State Statutes. Force main shall be impregnated with green pigment. Reuse main shall be impregnated with purple pigment.

30.6. Ductile iron fittings for water distribution mains shall conform to ANSI/AWWA standard C110/A21.10-xx latest revision. Fittings 4" and larger shall be cement lined and seal coated in accordance with ANSI/AWWA standard C104/A21.4-xx latest revision. Water Main fitting shall be colored blue in accordance with florida state statutes.

30.7. Cast iron and ductile iron fittings for sewage force mains shall conform to ANSI/AWWA standard C110/A21.10-xx latest revision. Fittings 4" and larger shall be coated in accordance with the requirements of ductile iron pipe for sewage force mains.

30.8. Joints for bell and spigot ductile iron pipe and fittings shall conform to ANSI/AWWA standard C111/A21.11-xx latest revision. Mechanical joint or push-on joint to be rubber gasket compression-type. Special fittings and joints shall be considered for specific installation subject to the approval of the engineer.

30.9. Joints for PVC pressure pipe shall be bell and spigot push-on rubber gasket type only. No solvent weld or threaded joints will be permitted.

30.10. Water distribution system restraint: all fittings and specific pipe joints shall be restrained as outlined below:

- Joint restraint
- Push-on P.V.C. EBAA iron series 1600
- Push-on D.I.P. EBAA iron series 1700
- tr-flex by U.S. Pipe or
- flex ring by American
- Fittings w/ D.I.P. EBAA iron series 1100 megalug
- Fittings w/ P.V.C. EBAA iron series 2000 megalug
- Length of restrained pipe shall be as indicated on restrained joint pipe detail. (see water & sewer detail sheet)

30.11. Sewage force main system restraint: all fittings and specific pipe joints shall be restrained as outlined below

- Joint restraint
- Push-on P.V.C. EBAA iron series 1600
- Push-on D.I.P. EBAA iron series 1700
- tr-flex by U.S. Pipe or
- flex ring by American
- Fittings w/ D.I.P. EBAA iron series 1100 megalug
- Fittings w/ P.V.C. EBAA iron series 2000 megalug
- Length of restrained pipe shall be as indicated on restrained joint pipe detail. (see water & sewer detail sheet)

30.12. Water distribution valves shall be gate valves, iron body, fully resilient seat bronzed mounted non-rising stem, rated at 200 p.s.i. and conforming to ANSI/AWWA C509-xx latest revision, and shall have mechanical joints.

30.12.1. Gate valves 4" and larger shall be Mueller A-2360, American 250 line or Clow F-6100, conforming to ANSI/AWWA C500-xx latest revision or approved equal.

30.12.2. Tapping valves shall be Mueller T-2360 or approved equal.

30.12.3. Gate valves 3" or less shall be Nibco T-133 or T-136 with malleable hand wheels. No substitutions allowed.

30.13. Tapping sleeves shall be Mueller H615, Clow F- 2505 or approved equal.

30.14. Valve boxes shall be U.S. foundry 7500 or approved equal painted blue with the designation "water".

30.15. Retainer glands for D.I.P. shall conform to ANSI/AWWA C111/A21.11-xx latest revision. All glands shall be manufactured from ductile iron as listed by underwriters laboratories for 250 psi minimum water pressure rating. Clow corporation model f-1058, standard fire protection equipment company or approved equal.

30.16. Metallic tape shall be installed one (1) foot above installed PVC pressure pipe to ensure that the pipe can be located after burial.

30.17. Dresser couplings shall be regular black couplings with plain gaskets for galvanized steel pipe. They shall be dresser style 90. No substitutions allowed.

30.18. Fire hydrants shall be Mueller centurion traffic type A-423 with 5 1/4" internal valve opening or approved equal.. Pumper nozzle to be 18" from finished grade. All hydrants to be installed with control valve. Retainer glands are preferred for restraining. Fire hydrant shall comply with ANSI/AWWA C502-xx latest revision. Fire hydrants shall be painted in accordance with NFPA #291 or per agency standards having jurisdiction. Blue raised reflective pavement marker (rpm) shall be used to identify fire hydrant location. The placement of the rpm to be at the centerline of the outside roadway lane.

30.19. Sewage force main valves shall be plug valves which shall be of the non-lubricated, eccentric type with resilient faced plugs, port areas for valves 20 inches and smaller shall be at least 80% of full pipe area. Port area of valves 24 inches and larger shall be at least 70% of full pipe area. The body shall be of semi-steel (ASTM A-126 C1.b) and shall have bolted bonnet which gives access to the internals of the valve. Seats shall be welded overlay of high nickel content or a stainless steel plate locked in the body cavity. If a plate is used, it shall be replaceable through the bonnet access. Bearings shall be permanently lubricated of stainless steel, bronze or Teflon lined, fiber glass backed Duralon. Bearing areas shall be isolated from the flow with grit seals. Valves shall have packing bonnets where the shaft protrudes from the valve and the packing shall be self-adjusting chevron type which can be replaced without removing the bonnet. All nuts, bolts, springs and washers shall be stainless steel.

30.20. Plug valves shall be designed for a working pressure of 150 p.s.i. the valve and actuator shall be capable of satisfactory operation in either direction of flow against pressure drops up to and including 100 p.s.i. (for plug valves over 12" in diameter). Valves shall be bubble tight in both directions at 100 psi differential. Plug valves over 12" in diameter shall have worm gear operators. The operating mechanism shall be for buried service with a 2 inch square operating nut.

30.21. Plug valves are to be installed with the seat pointed towards the upstream flow, when specified.

30.22. Swing check valves for water, sewage, sludge, and general service shall be of the outside lever and spring or weight type, in accordance with ANSI/AWWA C 508-xx latest revision swing-check valves for waterworks service, 2" through 24" NPS, unless otherwise indicated, with full-opening passages, designed for a water-working pressure of 150 PSI they shall have a flanged cover piece to provide access to the disc.

30.23. High density polyethylene pipe (HDPE) for water distribution mains shall conform to AWWA C906 standard, latest revision. Pipes shall be color-coded blue, minimum 40 feet standard lengths.

31.Service connection:

31.1. Service saddles shall be fusion bonded plastic coated ductile iron (ASTM A536) with stainless steel straps, saddles shall be double strap type.

31.2. Service lines shall be polyethylene (PE 3408), 200 p.s.i rated, DR9. Pipe joints shall be of the compression type totally confined grip seal and coupling nut.

31.3. Corporation stops shall be manufactured of brass alloy in accordance with ASTM B-62 with threaded ends, as manufactured by Ford ballcorp, catalog # 1100 or approved equal.

31.4. Curb stops shall be Ford v63-44w-x" latest revision or approved equal.

31.5. Meter stops shall be 90 degree lockwing type and shall be of bronze construction in accordance FV63-777W-X" latest revision with ASTM B-62. Meter stops shall be closed bottom design and resilient "0" ring sealed against external leakage at the top. Stops shall be equipped with a meter coupling nut on the outlet sides, as manufactured by ford or approved equal.

32. Installation:

32.1. Where restrained pipe joints are required due to fittings, appurtenances, etc., pipe material shall be D.I.P.

32.2. All PVC pipe shall be installed in accordance with the uni-bell plastic pipe association "guide for installation of PVC pressure pipe for municipal water distribution system," and ANSI/AWWA C605-xx latest revision standard.

32.3. All dip shall be installed in accordance with ANSI/ C600-xx latest revision.

32.4. All water mains shall typically be laid with a minimum 36" cover for PVC and 30" cover for dip.

32.5. Detector tape shall be laid 18 inches above all water and sewer lines. A 14 gauge multi-strand wire shall be attached to all nonconductive water mains to facilitate location. An extra 4 feet of wire shall be provided at all valves, blow-offs, hydrants, etc. The wire shall be tested for continuity at the pressure test.

32.6. Pipe deflection shall not exceed 50% of the maximum deflection recommended by the manufacturer.

32.7. A continuous and uniform bedding shall be provided. Backfill material shall be placed in accordance with the plans and specifications.

32.8. All valves shall be installed with adjustable cast iron valve boxes with the word "water" or "sewer", as applicable, cast in the cover. U.S. foundry or approved equal.

33.Testing:

33.1. Before any physical connections and acceptance for operation to the existing water mains are made, the complete water system shall be flushed, pressure tested and disinfected. Copies of passing bacteriological results and pressure test results must be submitted to, and approved by, the engineer, utility owner, and health department. Hydrostatic testing of new mains shall be performed at a minimum starting pressure of 150 p.s.i. for two hours in accordance with ANSI/AWWA C600-05 (hydrostatic test). The pressure test shall not vary more than 5 p.s.i. during the test. The allowable leakage during the pressure test shall be less than the number of gallons per hour as determined by the formula:

L = (sd(p)1/2)/148,000.

In which L equals the allowable leakage in gallons per hour. S equals length of pipe (linear feet), d equals nominal diameter of pipe (inches) and p equals the average test pressure (pounds per square inch gauge). Maximum length of test pipe section should be 2000 feet. The water system shall be disinfected in accordance with the ANSI/AWWA C651-05 (water main bacteriological tests).

33.2. The pressure test shall be witnessed by a representative of the utility owner and the engineer of record.

33.3. For water distribution pipes, sampling points shall be provided by the contractor at the locations shown on the plans.

33.4. For water distribution pipes, disinfection and bacteriological testing shall be in accordance with ANSI/AWWA C651-14 (water main bacteriological tests). Maximum distance between sampling points shall be as follows:

- Transmission mains: every 1200 feet
- Branch mains: every 1000 feet
- Isolated mains < 1000 feet: 2 sample points
- Isolated mains > 1000 feet: 3 sample points

Section 40 - Gravity Sanitary Sewer Collection System

40.General:

40.1. Manhole, valve box, meter box and other structure rim elevations within the limits of construction are to be adjusted to conform to plan grades proposed in these plans. If no other individual cost item is included in the contract schedule for a particular structure adjustment.

40.2. Distance and lengths shown on plans and profile drawings are referenced to the center of structures.

41. Materials:

Note: If materials list here on are in conflict with utility owner, material owner requirements shall govern.

41.1. All PVC sewer pipe and fittings shall be non-pressure polyvinyl chloride (PVC) pipe conforming to ASTM D 3034, SDR 35, with push-on rubber gasket joints.

41.2. Ductile iron pipe shall conform to ANSI/AWWA C151/A21.51-xx latest revision, "ductile iron pipe centrifugally cast in metal molds or sand-lined molds" with wall thickness class 51 for 8" and above, class 52 for 4" and 6", unless otherwise directed by the engineer. Ductile iron pipe shall be epoxy lined or coated with the manufacturer's coating system as approved by the engineer of record and the local municipality or utility owner. In either case, the engineer's review and approval is required for either alternative prior to construction. Cement mortared linings are not appropriate for this application.

41.3. All ductile iron fittings shall conform to ANSI/AWWA standard C110/A21.10-xx latest revision. All fittings and accessories shall be epoxy lined and as manufactured or supplied by the pipe manufacturer or approved equal.

41.4. Manholes shall be precast per ASTM C 478 and in accordance with the plans and specifications.

41.5. Manholes are to be sealed with type II sulphate resistant cement or approved equal - no molding plaster.

41.6. Joints for bell and spigot ductile iron pipe and fittings shall conform to ANSI/AWWA standard C111/A21.11-xx latest revision. Mechanical joint or push-on joint to be rubber gasket compression- type.

41.7. PVC clean-outs to have screw type access plug. Long radius wye connections and fittings shall be used in order to access clean-out operations.

41.8. Cleanouts shall be installed at all sewer services exceeding 75' in length (every 75') with a clean out at the property line, easement line, or 5' from a building. The contractor shall coordinate the location of the building cleanout (5' from the building) and elevation of the end of the sewer service with the building plumbing contractor. Cleanouts shall be the same size as the service lateral in which they are installed.

42. Installation:

42.1. PVC sewer pipe shall be laid in accordance with ASTM D 2321 and the Uni-Bell plastic pipe association's "recommended practice for the installation of PVC sewer pipe."

42.2. D.I.P. shall be installed in accordance with ANSI/AWWA C-600-xx latest revision.

42.3. Pipe to manhole connection to be Fernco neoprene boot couplings with stainless steel accessories or approved equal.

42.4. Manholes shall be set plumb to line and grade on firm subgrade providing uniform bearing under the base.

42.5. All openings and joints shall be sealed watertight.

42.6. Two coats of Koppers 300-m, first red, second one black, shall be applied to the inside of all manholes and shall be applied in accordance with the manufacturer's specifications (16 mils per coat). Coating as required by utility owner or engineer shall be applied to the outside of the manhole. The interior coats shall be applied after sewer lamping of lines. After the application of each coat, the utility owner and engineer shall inspect the manholes. The inspection shall be scheduled a minimum of 48 hours prior to inspection.

43.Testing: Testing of gravity sewer mains and laterals shall be in accordance with the utility owner's minimum design and construction standards latest revision.

43.1. After construction of the sewer system, the engineer may require a visual infiltration and/or exfiltration test to be performed on the entire system or any part thereof.

43.2. An air test may be substituted for the water exfiltration test, upon approval of the engineer.

43.3. The allowable limits of sewer pipe leakage for gravity sewer mains shall not exceed 100 gallons per inch of inside pipe diameter per mile per day for any section tested. No visible leakage shall be allowed.

43.4. The installed sewers may require video inspections.

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER
HILLSBORO
STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE
CONSTRUCTION SPECIFICATIONS

SHEET NUMBER
GI-002

SHEET 02 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cadd\09675.00-GI-002K.dwg Layout Name: GI-002 SPECIFICATIONS Plotted by: MGrimbank Plotted on: Aug 24, 2017 - 2:02pm

General Notes

This construction project may or may not include all items covered by these notes and specifications, i.e. paving, grading, drainage lines, water lines, or sanitary sewer lines. See plans for detailed project scope. Notes and specifications on this sheet refer to paving, grading, drainage, water, and sanitary sewer, and are intended for this projects scope of work and for reference purposes for other work items that may be required due to unforeseen existing conditions or required remedial work.

1. Specific Site Notes

1.1. County and "City" in these notes refers to County and City in which project resides.

1.2. State in these notes refers to the State of Florida.

1.3. Existing topographic information in the plans is based on survey data and best available information. See project survey and notes on plan sheets regarding the source of the topographic information.

2. Applicable Codes

2.1. All construction and materials shall conform to the standards and specifications of the city, county, and all other jurisdictional, State and national codes where applicable.

2.2. In the event of a conflict between the general notes and construction specifications in these plans, and the contract documents and specifications in the specification booklet, the contractor shall submit written request for clarification.

2.3. All construction shall be done in a safe manner and in strict compliance with all the requirements of the Federal occupational safety and health act of 1970, and all State and jurisdictional safety and health regulations.

2.4. The contractor shall be required to comply with Federal, State, County, and City laws, codes, and regulations.

2.5. All handicap accessible areas to conform to the requirements of the Americans with Disabilities Act (ADA), State ADA codes, and Florida Building Code ADA codes latest edition.

2.6. Trench safety act

2.6.1. All trench excavation shall be performed in accordance with chapter 90-96 of the laws of Florida (the trench safety act).

2.6.2. All trench excavation in excess of 5 feet in depth shall be undertaken in accordance with O.S.H.A. standard 29 cfr. Section 1926.650 subpart p.

2.6.3. The contractor shall submit with his contract a completed, signed, and notarized copy of the trench safety act compliance statement. The contractor shall also submit a separate cost item identifying the cost of compliance with the applicable trench safety codes.

2.6.4. A trench safety system, if required, shall be designed by the excavation contractor utilizing a specialty engineer as required.

3. Construction Notes:

3.1. Contractor shall tie to existing grade by evenly sloping from closest proposed grade provided to existing grade at limits of construction, unless otherwise noted on the plans. If no limit of work line is indicated, slope to adjacent property line or right-of-way line, as applicable.

3.2. Unless otherwise indicated on the plans, all existing manholes, catch basins, meters and other structures, whether indicated on the plans or not shall be adjusted to match the new grade, by the contractor.

3.3. The curb shall be sloped to accommodate the new pavement, catch basin and grate, and the surface flow pattern.

3.4. The contractor shall use care when cutting the existing asphalt pavement and during excavations, so that the existing catch basins and grates that are to remain will not be damaged.

3.5. The contractor shall maintain the roadway slope when resurfacing the roadway. The edge of pavement shall match the new gutter lip per FDOT index 300.

3.6. The new sidewalk shall be constructed in accordance with the given elevations and at the proper slopes depicted in the specifications, details and standards. Existing driveways and other features shall be matched when possible as directed by the engineer.

3.7. Radii shown are to the edge of pavement.

3.8. All bench mark monuments within the limits of construction shall be protected and referenced by the contractor in the same way as public land corners.

3.9. All excess material is to be disposed by the contractor within 72 hours.

3.10. In areas where the base is exposed by the milling operation, the contractor shall restore the base to its original thickness and structural capacity before paving over such areas. This includes but is not limited to restoring original degree of compaction, moisture content, composition, stability, and intended slope. If paving will not take place the same day the base is exposed and reworked, the base shall be sealed according to the governing standards and specifications. Any additional work resulting from the contractor's failure to protect the exposed base as stated above in order to restore the original structural capacity shall be the contractor's cost.

3.11. The contractor is to maintain existing signage during construction operations, in order to facilitate emergency vehicle traffic.

3.12. The topographic survey included with this set of plans reflects pre-demolition conditions and does not reflect the site conditions after demolition. The contractor is fully and solely responsible in determining the required earthwork for the proposed development of the site. This includes, but is not limited to, any excavation/dredge and fill activities required at any phase of the project. The contractor shall use the final approved (released for construction) plans, surveys, geotechnical reports, and any other available information for determining the amount of excavation/dredging and filling required. Any quantities included in the approved permits were estimated by the engineer for purposes of obtaining the permit and under no circumstances shall be used by the contractor in lieu of performing their own earthwork calculations required for cost estimating and bidding the project.

3.13. The contractor shall be responsible for reading and familiarizing themselves with any and all available geotechnical reports prepared by others and/or any recommendations written or implied by the geotechnical engineer for this project. The geotechnical conditions and recommendations outlined in these reports are in force and in full effect as part of the proposed improvements. The contractor is responsible for ensuring that all the work associated with this project is in compliance with the geotechnical engineer's recommendations. Keith and associates, Inc. is not responsible for the suitability or unsuitability of the soils encountered. It is the contractor's responsibility to ensure that the means and methods of construction used can and will allow for the successful completion of the required site improvements.

3.14. The contractor shall ensure that the available geotechnical information is sufficient for his complete understanding of the soil conditions for the site. If additional geotechnical investigation is required by the contractor, this additional work shall be considered incidental to the contract and no additional compensation shall be allowed.

3.15. The contractor shall be responsible for the repair and restoration of existing pavement, pipes, conduits, sprinkler heads, cables, etc., and landscaped areas damaged as a result of the contractor's operations and/or those of his subcontractors and shall restore at no additional cost.

3.16. The contractor shall not bring any hazardous materials onto the project. Should the contractor require such for performing the contracted work, the contractor shall request, in writing, permission from the owner, city and engineer. The contractor shall provide the owner, city and engineer with a copy of the material safety data sheet (MSDS) for each hazardous material proposed for use. The project engineer shall coordinate with the owner and city prior to issuing written approval to the contractor.

3.17. Any known or suspected hazardous material found on the project by the contractor shall be immediately reported to the city and/or engineer, who shall direct the contractor to protect the area of known or suspected contamination from further access. The city and/or engineer are to notify the owner/engineer of the discovery. The owner/engineer will arrange for investigation, identification, and remediation of the hazardous material. The contractor shall not return to the area of contamination until approval is provided by the engineer.

3.18. The contractor shall contact the appropriate city engineering inspector and engineer 48 hours in advance of the event to notify the city of construction start up, or to schedule all required tests and inspections including final walk-throughs.

4. Preconstruction Responsibilities

4.1. All utility / access easements to be secured prior to construction.

4.2. No construction may commence until the appropriate permits have been obtained from all municipal, State, County, and Federal agencies.

4.3. All required governmental agency building permits to be obtained by the contractor prior to any construction activity.

4.4. Contractor to coordinate construction scheduling for connection to the existing water and sewer lines with the utility department that owns and/or maintains the water and sewer lines.

4.5. Prior to the start of construction, the owner shall submit an NPDES construction general permit (CGP) "notice of intent (N.O.I.) to use Generic Permit for storm water discharge from construction activities form (DEP form 62-621.300(4)(b)) to FDEP notices center. The contractor will be responsible for (1) implementation of the storm water pollution prevention plan (SWPPP) that was required to be developed prior to NOI submittal, and (2) retention of records required by the permit, including retention of a copy of the SWPPP at the construction site from the date of project initiation to the date of final site stabilization. A "notice of termination (N.O.T.) of generic permit coverage" form (DEP form 62-621.300(6)) must be submitted to FDEP to discontinue permit coverage, subsequent to completion of construction. For additional information see FDEP website: http://www.dep.state.fl.us/water/ storm water/npdes.

4.6. Prior to construction or installation, 5 sets of shop drawings shall be submitted for review as required for the following items listed below, but not limited to:

- Drainage: Catch basins, manholes, headwalls, grates/tops, yard drains.
- Water: Fire hydrants, valves, backflow preventer, DDCV, meter box.
- Sewer: Manholes, lift stations (wetwell, hatches, valves, pump data, electrical panel)

4.0.1. Catalogue literature shall be submitted for drainage, water and sewer pipes, fittings, and appurtenances.

4.0.2. Prior to submitting shop drawings to the engineer, the contractor shall review and approve the drawings, and shall note in red any deviations from the engineer's plans or specifications.

4.0.3. Individual shop drawings for all precast structures are required. Catalogue literature will not be accepted for precast structures.

4.1. Contractor to submit maintenance of traffic plan(s) in accordance with FDOT and Broward county requirements, and submit for approval prior to beginning construction.

5. Inspections / Testing:

5.1. The contractor shall notify in writing the owner, the County, the engineer of record, & any other governmental agencies having jurisdiction at least 48 hours prior to beginning construction and prior to required inspections of the following items, where applicable:

- Clearing and earthwork
- Storm drainage systems
- Sanitary sewer systems
- Water distribution systems
- Subgrade
- Limerock base
- Asphalt or concrete pavement
- Sidewalks, concrete flatwork/curbing
- Landscaping
- Pavement marking and signage
- Signalization
- Site lighting
- Electrical and communication lines
- Utility conduits
- Irrigation
- Final

5.1. The owner, engineer, and jurisdictional permitting agencies may make inspections of the work at any time. The contractor shall cooperate fully with all inspections.

5.3. Testing - all testing required by the plans and specifications shall be performed by a licensed / FDOT qualified testing company. Required test for asphalt and limerock shall be taken at the direction of the engineer or the jurisdictional governmental agency in accordance with the plans and specifications.

6. Temporary Facilities

6.1. It shall be the contractor's responsibility to arrange for or supply temporary water service, sanitary facilities, communications, and electricity, for his operations and works, cost included under mobilization.

6.2. Contractor shall construct temporary fencing to secure construction areas at all times, cost included in mobilization.

6.3. Contractor to obtain a secure staging area and obtain all necessary approvals from the owner.

6.4. Contractor shall construct and maintain temporary lighting as required to light the construction project limits at all times, to at least the same lighting intensity levels as the existing conditions.

6.5. The contractor shall maintain access to adjacent properties at all times.

7. Project Progress and Closeout

7.1. During construction, the project site and all adjacent areas shall be maintained in a neat and clean manner, and upon final clean-up, the project site shall be left clear of all surplus material or trash. The paved areas shall be broom swept clean.

7.2. The contractor shall restore or replace any public or private property (such as highway, driveway, walkway, and landscaping), damaged by his work, equipment, or employees, to a condition at least equal to that existing immediately prior to the beginning of construction. Suitable materials and methods shall be used for such restoration.

7.3. Material or debris shall be hauled in accordance with NPDES permit and jurisdictional laws.

7.4. All land survey property monuments or permanent reference markers, removed or destroyed by the contractor during construction shall be restored by a State of Florida registered land surveyor at the contractor's expense.

7.5. All unpaved surfaces disturbed as a result of construction activities shall be graded, sodded, & restored to a condition equal to or better than that which existed before the construction.

8. Project record documents:

8.1. During the daily progress of the job, the contractor shall record on his set of construction drawings the location, length, material and elevation of any facility not built according to plans. This copy of the "as-built" shall be submitted to engineer for project record.

8.2. Upon completion of drainage improvements and limerock base construction (at least 48 hours before placing asphalt pavement) the contractor shall furnish the engineer of record "as-built" plans for these improvements, showing the locations and pertinent grades of all drainage installations and the finished rock grades of the road crown and edges of pavement at 50 foot intervals, including locations and elevations of all high and low points.

8.3. Upon completion of construction, and prior to final acceptance, the contractor shall submit to the engineer of record one complete set of all "as-built" contract drawings. These drawings shall be marked to show "as-built" construction changes, dimensions, locations, and elevations of all improvements.

8.4. "As-built" drawings of water lines and force mains shall include the following information:

8.4.1. Top of pipe elevations every 100 LF.

8.4.2. Locations and elevations of all fittings including bends, tees, gate valves, double detector check valves, fire hydrants, and appurtenances.

8.4.3. All connections to existing lines.

8.4.4. Ends of all water services at the buildings where the water service terminates.

8.5. "As-built" drawings of gravity sanitary sewer lines shall include the following information:

8.5.1. Rim elevations, invert elevations, length of piping between structures, and slopes.

8.5.2. The stub ends and cleanouts of all sewer laterals shall be located horizontally and vertically.

8.6. "As-built" drawings of all drainage lines shall include the following information:

8.6.1. Rim elevation, invert elevation, length of piping between structures, and control structure elevations if applicable.

8.6.2. The size of the lines.

8.6.3. Drainage well structure shall include, but not be limited to, top of casing elevation, top and bottom elevations of the structure and baffle walls, rim elevations and pipe inverts.

8.7. "As-built" drawings of construction areas shall include the following:

8.7.1. Rock elevations at all high, and low points, and at enough intermediate points to confirm slope consistency.

8.7.2. Rock elevations and concrete base elevations shall be taken at all locations where there is a finish grade elevation shown on the design plans.

8.7.3. All catch basin and manhole rim elevations.

8.7.4. Finish grade elevations in island areas.

8.7.5. "As-built" elevations shall be taken on all paved and unpaved swales, at enough intermediate points to confirm slope consistency and conformance to the plan details.

8.7.6. Lake and canal bank "as-built" drawings shall include a key sheet of the lake for the location of cross sections. Lake and canal bank cross sections shall be plotted at a minimum of every 100 lf, unless otherwise specified. "as-built" drawings shall consist of the location and elevation of the top of bank, edge of water, and the deep cut line, with the distance between each shown on the drawing.

8.7.7. Retention area "as-built" elevations shall be taken at the bottom of the retention area and at the top of bank. If there are contours indicated on the design plans, then they shall be included in "as-built" drawings as well.

8.8. Upon completion of the work, the contractor shall prepare "as-built" drawings on full size, 24" x 36" sheets. All "as-built" information shall be put on the latest engineering drawings. Eight (8) sets of blue or black line drawings shall be submitted. These drawings shall be signed and sealed by a Florida registered professional engineer or land surveyor.

8.9. An electronic copy of these "as-built" drawings shall be submitted to the engineer of record in AutoCAD, version 2008 or later.

9. Utility Notes

9.1. Contractor is responsible for utility verification prior to fabrication.

9.2. The contractor is advised that properties adjacent to the project have electric, telephone, gas, water and/or sewer service laterals which may not be shown in plans. The contractor must request the location of these lateral services from the utility companies.

9.3. The contractor shall use hand digging when excavating near existing utilities. Extreme caution shall be exercised by the contractor while excavating, installing, backfilling or compacting around the utilities.

9.4. The contractor shall notify and obtain an underground clearance from all utility companies and governmental agencies at least 48 hours prior to beginning any construction. The contractor shall obtain a Sunshine811.com Certification clearance number and field markings at least 48 hours prior to beginning any excavation.

- Prior to commencement of any excavation, the contractor shall comply with Florida statute 553.851 for the protection of underground gas pipelines.

For street excavation or closing or for alteration of access to public or private property, the contractor shall notify:

- Roadway jurisdictional engineering / public works authority.
- County transit authority
- School board transportation authority
- Jurisdictional fire department dispatch
- Jurisdictional police department(s)

9.6. The contractor shall use extreme caution working under, over, and around existing electric lines. The contractor shall contact the electric provider company to verify locations, voltage, and required clearances, onsite, in right-of-ways, and in easements, prior to any construction in the vicinity of existing lines.

9.7. Location and size of all existing utilities and topography (facilities) as shown on construction drawings are drawn from available records. The engineer assumes no responsibility for the accuracy of the facilities shown or for any facility not shown. It is the contractor's responsibility to determine the exact location (vertical & horizontal) of any existing utilities and topography prior to construction. The contractor shall verify the elevations and locations of all existing facilities, in coordination with all utility companies, prior to beginning any construction operations. If an existing facility is found to conflict with the proposed construction, the contractor shall immediately notify the engineer so that appropriate measures can be taken to resolve the conflict.

9.8. The contractor shall coordinate the work with other contractors in the area and any other underground utility companies required. The contractor shall coordinate relocation of all existing utilities with applicable utility companies.

10. Signing and Pavement Markings

10.1. All signing and pavement markings installed as part of these plans shall conform to the Federal highway administration (FHWA) "manual on uniform traffic control devices" (MUTCD), County Traffic Design Standards and FDOT design standards as a minimum criteria.

10.2. Match existing pavement markings at the limits of construction.

10.3. Removal of the existing pavement markings shall be accomplished by water blasting or other approved methods determined by the engineer.

10.4. Incorrectly placed paint or thermoplastic pavement markings over friction course will be removed by milling and replacing the friction course a minimum width of 18 in at the contractor's expense. The engineer may approve an alternative method if it can be demonstrated to completely remove the markings without damaging the asphalt.

10.5. Place all retro-reflective pavement markers in accordance with standard index 17352 and / or as shown in the plans.

10.6. Caution should be exercised while relocating existing signs to prevent unnecessary damage to signs. If the sign is damaged beyond use, as determined by the engineer, signs shall be replaced by the contractor at his expense.

10.7. All existing signs that conflict with construction operations shall be removed, stockpiled, and relocated by the contractor. Sign removal shall be directed by the engineer.

10.8. Relocated sign support system must meet the current design standard.

10.9. The contractor shall provide an inventory of existing signs to remain or to be relocated prior to starting the job and forward this list to the engineer. Contractor shall notify if there are any missing or damage signs that the plans show to remain or to be relocated.

10.10. All roadway pavement markings shall be thermoplastic in accordance with FDOT specifications section 711.

10.11. Hand dig the first four feet of sign foundation.

10.12. All signs shall meet all of the following:

- Meet the criteria outlined in Section 2A.08 of the 2009 MUTCD
- Meet the specifications outlined in Section 700 and 994 of the latest FDOT Standard Specifications.
- Consist of materials certified to meet the retroreflective sheeting requirements outlined in the current version of ASTM D4956 for type-XI retroreflective sheeting materials made with prisims, except for school zone and pedestrian signs which shall be comprised of retroreflective fluorescent yellow-green sheeting certified to meet ASTM D4956 Type IV retroreflective sheeting materials.
- Consist of retroreflective sheeting materials that have a valid FDOT Approved Product List (APL) certification for specification 700 Highway Signing for FDOT sheeting Type XI (or type IV for school and pedestrian signs).

10.1. Patch attachment hardware, such as countersunk screws or rivet heads, with retro reflective buttons that match the color and sheeting material of the finished sign panel including the background, legend or border.

10.2. Ensure the outside corner of sign is concentric with border. Ensure white borders are mounted parallel to the edge of the sign. Ensure black borders are recessed from the edge of the sign.

10.3. Lay out permanent final striping that leaves no visible marks at time of final acceptance.

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER
HILLSBORO
STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

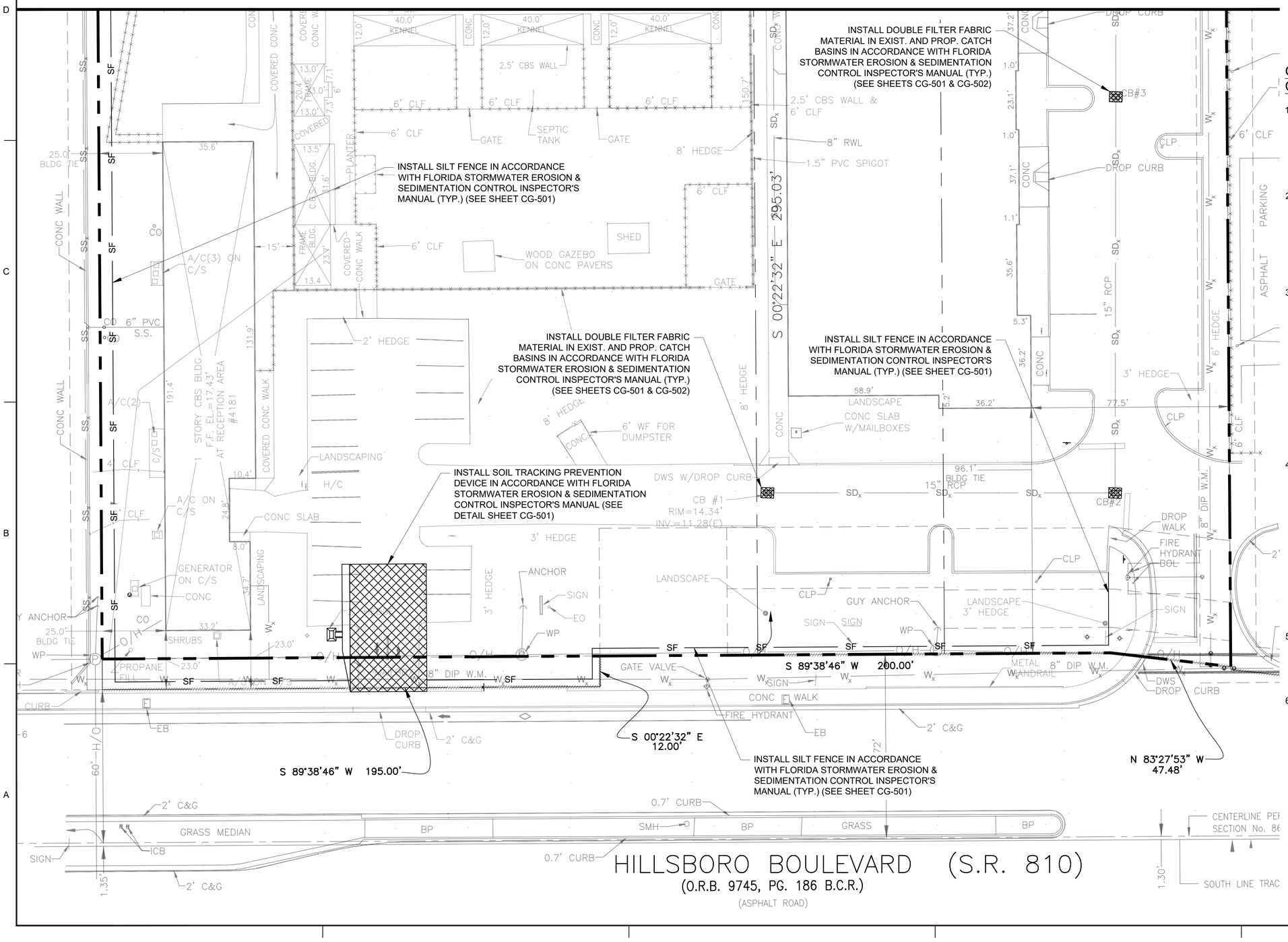
SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GI-003

SHEET 03 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cadd\09675.00-GI-GI0X.dwg Layout Name: GI-003 GENERAL NOTES Plotted by: MGmillanti Plotted on: Aug 24, 2017 - 2:02pm



N

GRAPHIC SCALE

0 20 40

SCALE: 1"=20'

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

GENERAL NOTES - EROSION CONTROL:

1. THE CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN FLORIDA (HEREAFTER REFERRED TO AS FL GUIDELINES).
2. MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, A VISUAL INSPECTION SHALL BE MADE OF ALL INSTALLED EROSION CONTROL MEASURES AND REPAIRS SHALL BE CONDUCTED TO ENSURE THEIR CONTINUING FUNCTION AS DESIGNED.
3. CATCH BASIN, INLETS, STORM SEWER MANHOLES STRUCTURES, ETC. SHALL BE PROTECTED DURING CONSTRUCTION OPERATIONS FROM SEDIMENT RUNOFF AND DEBRIS BY PLACING A FILTER FABRIC MATERIAL IN THE FRAME AND GRATE/MANHOLE COVER. PREVENTIVE METHODS MUST BE UTILIZED AROUND THESE STRUCTURES (DURING CONSTRUCTION OPERATIONS) BY GRADING TO DRAIN AWAY FROM STRUCTURES AND ANY OTHER METHODS APPROVED BY THE AGENCY HAVING JURISDICTION OR DESIGN ENGINEER OF RECORD.
4. THE CONTRACTOR SHALL INSTALL A SOIL TRACKING PREVENTION DEVICE AS PER THE FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL. THE CONTRACTOR SHALL TAKE MEASURES TO INSURE THE CLEANUP OF SEDIMENTS THAT HAVE BEEN TRACKED BY VEHICLES OR HAVE BEEN TRANSPORTED BY WIND OR STORM WATER ABOUT THE SITE OR ONTO NEARBY ROADWAYS. STABILIZED CONSTRUCTION ENTRANCES AND CONSTRUCTION ROADS, IF APPROPRIATE, SHALL BE IMPLEMENTED IN ORDER TO REDUCE OFFSITE TRACKING.
5. ALL AREAS OF DISTURBANCE THAT ARE NOT WITHIN BUILDING OR PAVEMENT LIMITS SHALL BE SODDED, REFER TO LANDSCAPE PLANS FOR SOD SPECIFICATION AND REQUIREMENTS.
6. REMOVE ALL EROSION CONTROL IMPROVEMENTS AFTER ALL DISTURBED AREAS ARE STABILIZED WITH THE FINAL GROUND COVER.

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN NOT FOR CONSTRUCTION

THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE

STORM WATER POLLUTION PREVENTION PLAN

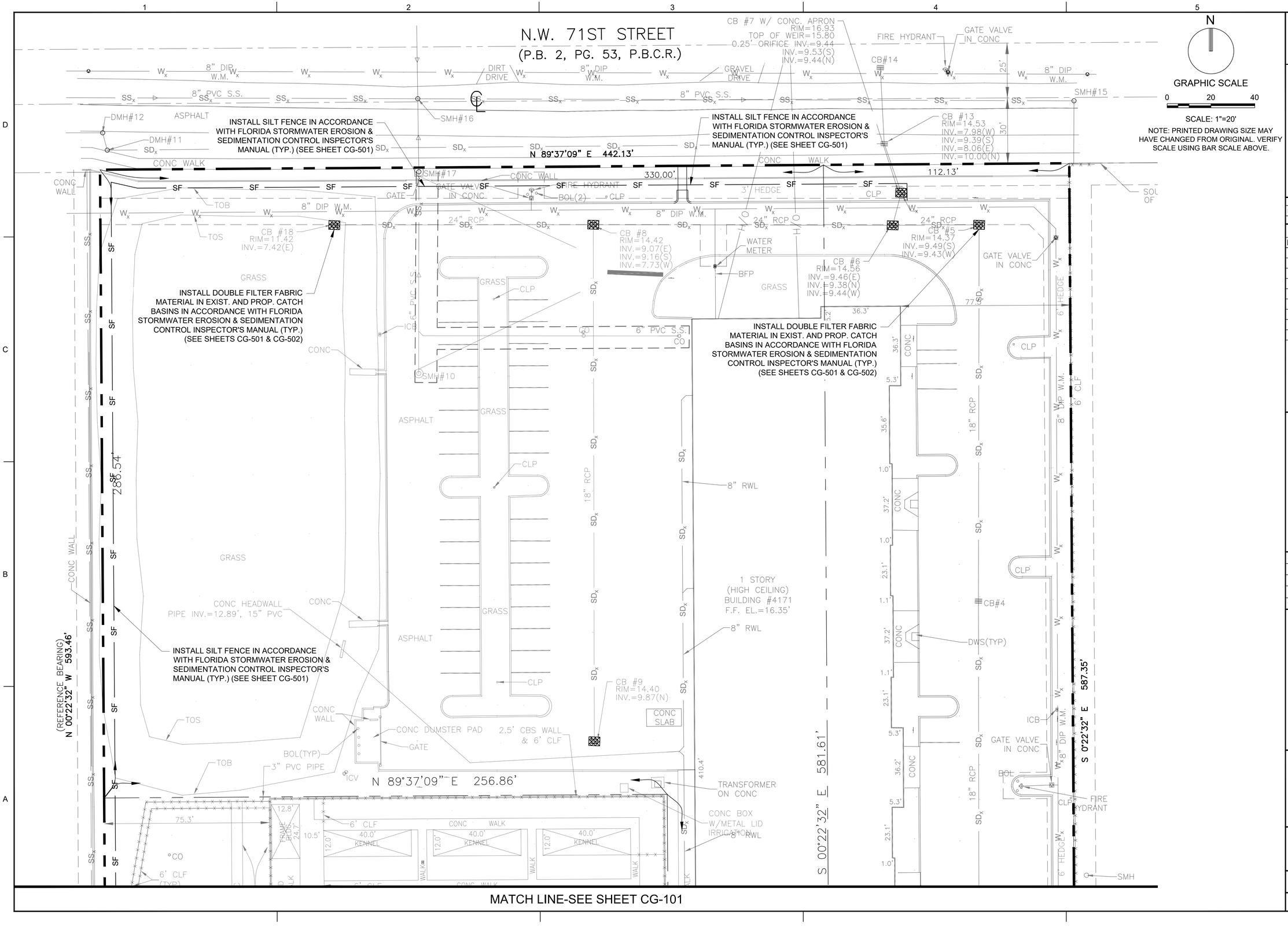
SHEET NUMBER

CG-101

SHEET 04 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cad\09675.04-CG-150X.dwg Layout Name: CG-101 Plotted by: MGohlbank Plotted on: Aug 24, 2017 - 2:03pm



MATCH LINE-SEE SHEET CG-101

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE
STORM WATER POLLUTION PREVENTION PLAN

SHEET NUMBER
CG-102

SHEET 05 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cadd\09675.00-CG-1XX.dwg Layout Name: CG-102 Plotted by: MGhirlando Plotted on Aug 24, 2017 - 2:03pm

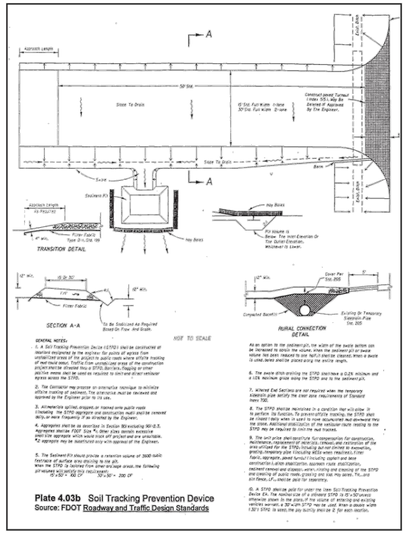


FIGURE 4.3b. SOIL TRACKING PREVENTION DEVICE
SOURCE: FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL

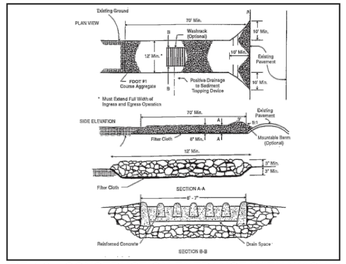


FIGURE 4.3c. CONSTRUCTION ENTRANCE WITH WASH RACK
SOURCE: FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL

Location

The entrance should be located to provide for maximum utility by all construction vehicles.

Construction Specifications

The entrance area should be cleared of all vegetation, roots, and other objectionable material. A geotextile should be laid down to improve stability and simplify maintenance when gravel is used. The gravel shall then be placed over the geotextile to the specified dimensions.



Maintenance

The stabilized construction exit shall be maintained in a condition that will prevent the tracking or flow of mud onto public rights of way. This may require periodic maintenance as conditions demand, and the repair and/or cleanout of any structures used to trap sediments. All materials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains must be removed immediately. Look for signs of trucks and trailered equipment "cutting corners" where the construction exit meets the roadway. Sweep the paved road as needed.

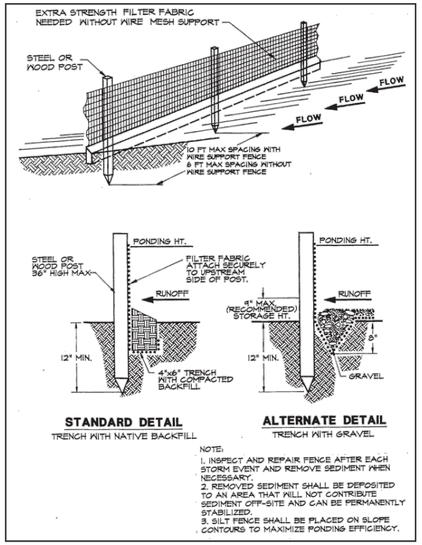


FIGURE 4.4a. SILT FENCE
SOURCE: FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL

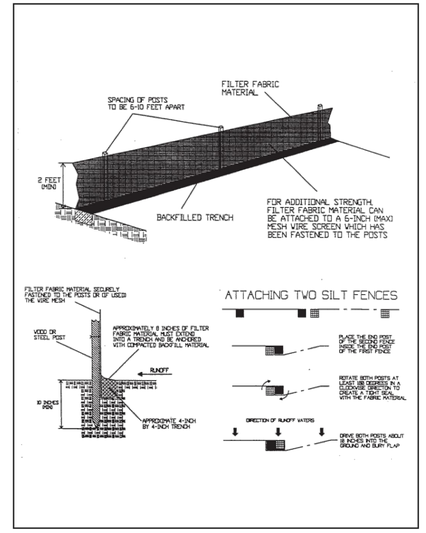


FIGURE 4.4b. INSTALLING A FILTER FABRIC SILT FENCE
SOURCE: FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL

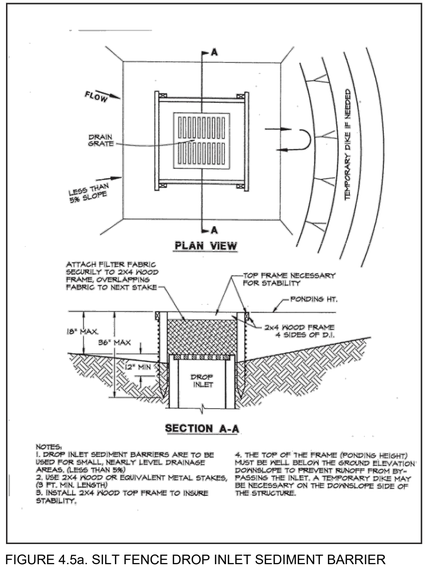


FIGURE 4.5a. SILT FENCE DROP INLET SEDIMENT BARRIER
SOURCE: FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL

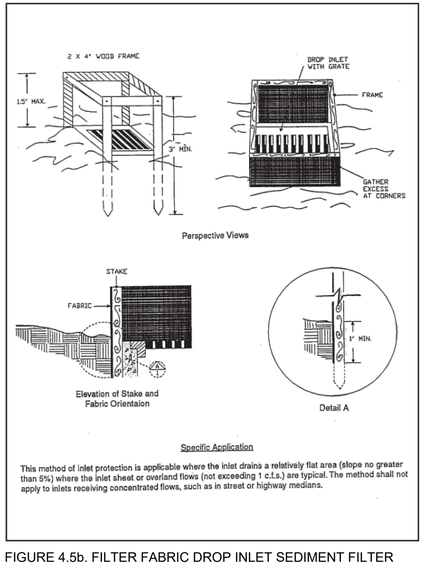


FIGURE 4.5b. FILTER FABRIC DROP INLET SEDIMENT FILTER
SOURCE: FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL

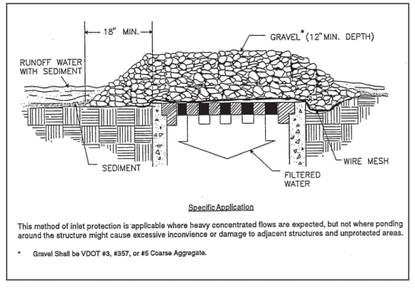


FIGURE 4.5c. GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER
SOURCE: FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL

Block and Gravel Drop Inlet Sediment Filter

1. *Place concrete blocks lengthwise on their sides in a single row around the perimeter of the inlet, with the ends of adjacent blocks abutting. The height of the barrier can be varied, depending on design needs, by stacking combinations of 4, 8, and 12 inch wide (10, 20, and 30 cm) blocks. The barrier of blocks shall be at least 12 inches (30 cm) high and no greater than 24 inches (60 cm) high.*
2. *Wire mesh shall be placed over the outside vertical face (webbing) of the concrete blocks to prevent stone from being washed through the holes in the blocks. Hardware cloth or comparable wire mesh with ½ inch (13 mm) openings shall be used (see **Figure 4.5d**).*
3. *Stone shall be piled against the wire to the top of the block barrier. Suitable coarse aggregate shall be used (see **Figure 4.5d**).*
4. *If the stone filter becomes clogged with sediment so that it no longer adequately performs its function, the stone must be pulled away from the blocks, cleaned, and replaced.*

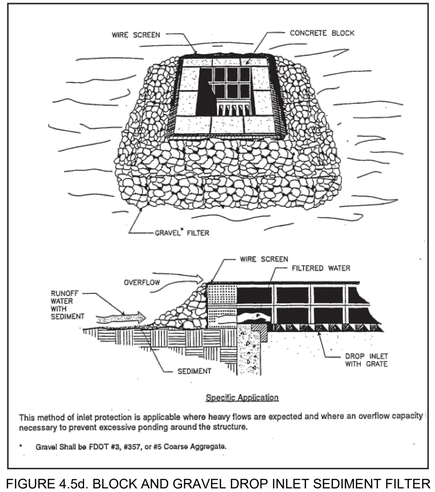


FIGURE 4.5d. BLOCK AND GRAVEL DROP INLET SEDIMENT FILTER
SOURCE: FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE
STORM WATER POLLUTION PREVENTION DETAILS

SHEET NUMBER
CG-501

SHEET 06 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cad\09675.00-CG-SXX.dwg Layout Name: CG-501 Plotted on: Aug 24, 2017 - 2:03pm Plotted by: MGrinbank

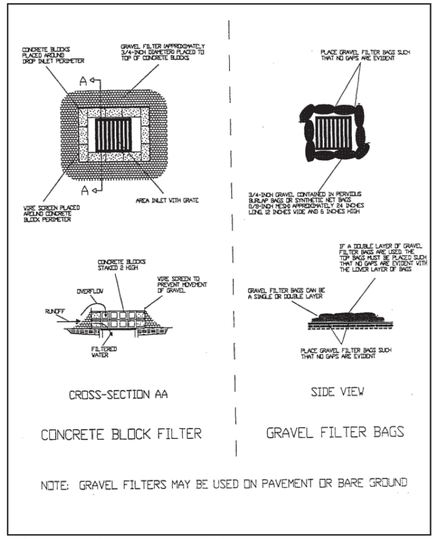


FIGURE 4.5e. GRAVEL FILTERS FOR AREA INLETS
SOURCE: FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL

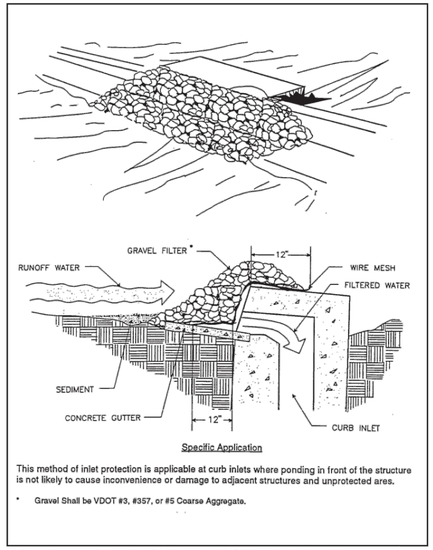


FIGURE 4.5g. GRAVEL CURB INLET SEDIMENT FILTER
SOURCE: FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL

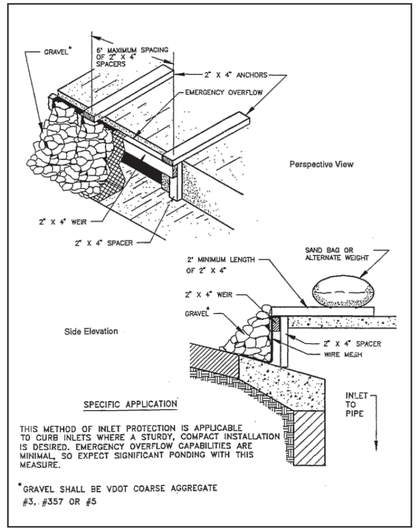


FIGURE 4.5h. GRAVEL CURB INLET SEDIMENT FILTER WITH OVERFLOW WEIR
SOURCE: FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL

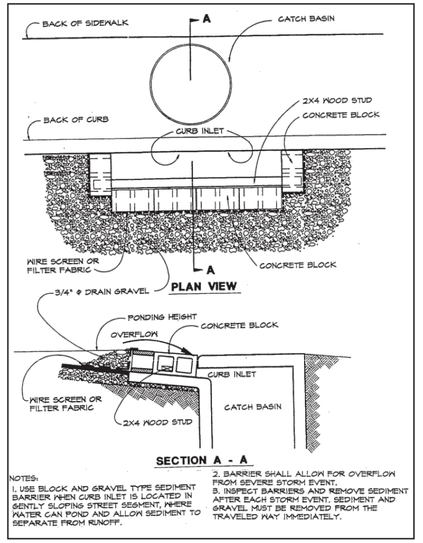


FIGURE 4.5i. BLOCK AND GRAVEL CURB INLET SEDIMENT BARRIER
SOURCE: FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL

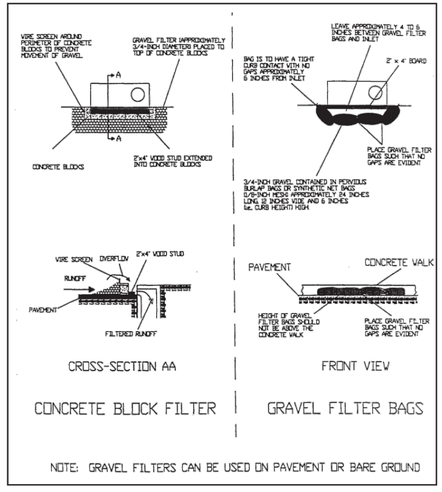


FIGURE 4.5j. CURB INLET GRAVEL FILTERS
SOURCE: FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL

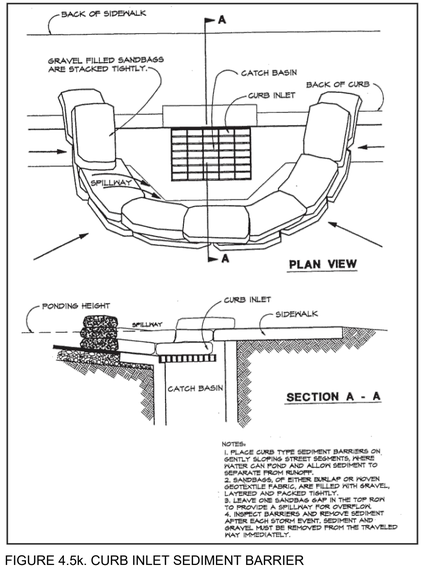


FIGURE 4.5k. CURB INLET SEDIMENT BARRIER
SOURCE: FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL

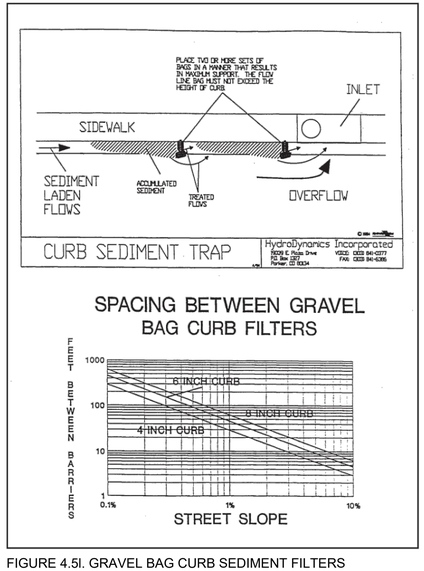


FIGURE 4.5l. GRAVEL BAG CURB SEDIMENT FILTERS
SOURCE: FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL

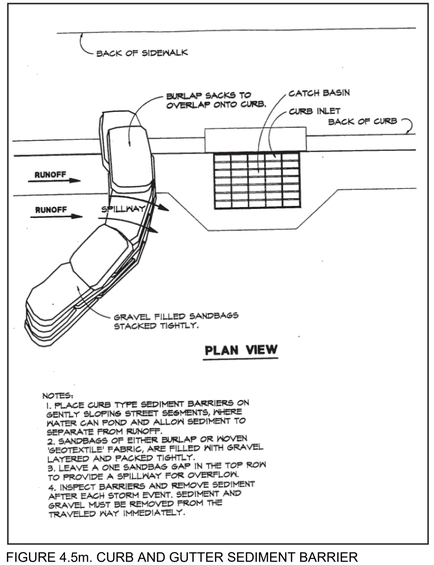


FIGURE 4.5m. CURB AND GUTTER SEDIMENT BARRIER
SOURCE: FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE
STORM WATER POLLUTION PREVENTION DETAILS

SHEET NUMBER
CG-502

SHEET 07 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cad\09675.00-CG-SXX.dwg Layout Name: CG-502 Plotted on: Aug 24, 2017 - 2:03pm Plotted by: MGrinbank

MATCH LINE-SEE SHEET CD-102

CONTRACTOR TO DEMOLISH EXIST. BUILDINGS (SEE ARCH. PLANS FOR DETAILS)

CONTRACTOR TO DEMOLISH EXIST. FENCES (TYP.)

CONTRACTOR TO DEMOLISH EXIST. BUILDING (SEE ARCH. PLANS FOR DETAILS)

12' UTILITY EASEMENT (P.B. 133, PG. 4, B.C.R.)

EXIST. SEWER SANITARY SERVICE TO REMAIN

CONTRACTOR TO REMOVE 20 LF - EXIST. CONC. WALL

CONTRACTOR TO DEMOLISH EXIST. SIDEWALKS (TYP.)

CONTRACTOR TO COORDINATE REMOVAL OF GENERATOR WITH OWNER

CONTRACTOR TO REMOVE 13 LF OF EXIST. CURB

FND CONC PRM 6" DIA. K&S #1856 WALK 1.4 SOUTH

CONTRACTOR TO REMOVE EXIST. WATER SERVICE AND CAP AT WATER MAIN

CONTRACTOR TO REMOVE 269 LF OF EXIST. STRIPING

CONTRACTOR TO REMOVE 269 LF OF EXIST. CURB AND GUTTER

CONTRACTOR TO DEMOLISH EXIST. BUILDINGS, WALLS, SIDEWALKS AND FENCES (TYP.)

CONTRACTOR TO DEMOLISH EXIST. SEPTIC SYSTEM IN ACCORDANCE WITH LOCAL REGULATIONS

CONTRACTOR TO DEMOLISH 231 LF OF EXIST. SIDEWALK

CONTRACTOR TO DEMOLISH EXIST. PARKING LOT, SIDEWALKS DUMPSTER ENCLOSURE AND CONC. PAD, FENCES AND WALLS

EXIST. CONC. SLAB AND MAILBOXES TO REMAIN

REMOVE EXIST. DRAINAGE STRUCTURE

CONTRACTOR TO REMOVE EXIST. SIGN

CONTRACTOR TO REMOVE STOP BAR AND 6-LF 6" DOUBLE YELLOW

CONTRACTOR TO REMOVE EXIST. CONC. SIDEWALK

CONTRACTOR TO REMOVE EXIST. HANDRAIL

REMOVE 123 S.F. OF EXIST. SIDEWALK AND ADA RAMP

CONTRACTOR TO REMOVE (2) EXIST. STOP BARS

EXIST. STOP SIGN TO REMAIN

CONTRACTOR TO REMOVE EXIST. CROSS WALK PAVEMENT MARKINGS

ALL WATER AND SEWER APPURTENANCES DEMOLISHED MUST BE COMPLETELY REMOVED.

CONTRACTOR TO COORDINATE REMOVAL OF MECHANICAL EQUIPMENT WITH OWNER

HILLSBORO BOULEVARD (S.R. 810)
(O.R.B. 9745, PG. 186 B.C.R.)
(ASPHALT ROAD)

N

GRAPHIC SCALE
0 20 40
SCALE: 1"=20'

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE
DEMOLITION PLAN

SHEET NUMBER
CD-101

SHEET 08 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cad\09675.00-CD-1XX.dwg Layout Name: CD-101 Plotted by: MGmbank Plotted on: Aug 24, 2017 - 2:24pm

N.W. 71ST STREET
(P.B. 2, PG. 53, P.B.C.R.)

12' UTILITY EASEMENT (ORB 35294, PG 1996)

CONTRACTOR TO REMOVE EXIST. DRAINAGE STRUCTURE

EXIST. WATER MAIN & FIRE HYD. TO REMAIN

CONTRACTOR TO REMOVE EXIST. STOP BAR

CONTRACTOR TO REMOVE 20 LF OF EXIST. CONC. WALL

N 89°37'09" E 442.13'

330.00'

112.13'

CONTRACTOR TO REMOVE 133 LF OF EXIST. DRAINAGE PIPE

CONTRACTOR TO REMOVE EXIST. SANITARY MANHOLE AND 56 LF-8" PVC

CONTRACTOR TO REMOVE EXIST. CONC. FLUME

CONTRACTOR TO DEMOLISH EXIST. PARKING LOT (TYP.)

CONTRACTOR TO DEMOLISH EXIST. PAVEMENT AND CONC. CURB (TYP.)

9 LF OF EXIST. SANITARY SEWER LATERAL AND CLEAN OUT TO REMAIN

MAINTAIN EXIST. SAN. SERVICE TO EXIST. BUILDING DURING CONSTRUCTION. CONTRACTOR TO REMOVE 111 LF-6" PVC SEWER LATERAL ONCE RELOCATED SAN. SERVICE IS OPERATIONAL.

REMOVE 235 LF- 18" RCP DRAINAGE PIPE AND (2) EXIST. CATCH BASINS

1 STORY (HIGH CEILING) BUILDING #4171 F.F. EL.=16.35'

CONTRACTOR TO REMOVE 203 LF OF EXIST. ROOF DRAIN. ROOF DRAINS FROM EXIST. BUILDING TO BE MAINTAINED THROUGHOUT CONSTRUCTION.

EXIST. ROOF DRAINS TO REMAIN

CONTRACTOR TO DEMOLISH EXIST. PARKING LOT, SIDEWALKS DUMPSTER ENCLOSURE AND CONC. PAD, FENCES AND WALLS

CONTRACTOR TO DEMOLISH EXIST. BUILDINGS (SEE ARCH. PLANS FOR DETAILS)

EXIST. CONC. PAD AND TRANSFORMER TO REMAIN

N 89°37'09" E 256.86'

S 0°22'32" E 581.61'

S 0°22'32" E 587.35'

(REFERENCE BEARING) N 0°22'32" W 593.46'

286.54'

CONTRACTOR TO REMOVE 20 LF OF EXIST. CONC. WALL

CONTRACTOR TO DEMOLISH EXIST. BUILDINGS, WALLS, SIDEWALKS AND FENCES (TYP.)

MATCH LINE-SEE SHEET CD-101

ALL WATER AND SEWER APPURTENANCES DEMOLISHED MUST BE COMPLETELY REMOVED.

CONTRACTOR TO COORDINATE REMOVAL OF MECHANICAL EQUIPMENT WITH OWNER

GRAPHIC SCALE
0 20 40
SCALE: 1"=20'

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

BUILDING DEMOLITION NOTES

BUILDING DEMOLITION IS SUBJECT TO FEDERAL, STATE AND COUNTY RULES RELATING TO THE DEMOLITION AND THE HANDLING OF ASBESTOS CONTAINING MATERIAL. THE BROWARD COUNTY STATEMENT OF RESPONSIBILITIES REGARDING ASBESTOS MUST BE FILLED OUT AND COMPLIED WITH PRIOR TO ANY BUILDING DEMOLITION.

THE CONTRACTOR MUST OBTAIN / PRODUCE THE FOLLOWING PRIOR TO ANY BUILDING DEMOLITION:

- PEST CONTROL INSPECTION REPORT INDICATING THAT PROPERTY IS FREE OF RODENTS
- GAS DISCONNECT LETTER FROM GAS SUPPLIER
- FPL DISCONNECT LETTER FROM FP&L
- WATER METER REMOVAL LETTER FROM UTILITY PROVIDER
- FIRE SERVICE WATER METER REMOVAL LETTER FROM UTILITY PROVIDER
- SEWER CAP OR SEPTIC TANK ABANDONMENT PERMIT REQUIRED WITH A PASSED BUILDING DEPARTMENT INSPECTION PERMIT
- COPY OF EPA LICENSE AND/OR LETTER FROM LICENSED CONTRACTOR RECOVERING REFRIGERANT FROM A/C UNITS
- NOTARIZED LETTER FROM DEMOLITION CONTRACTOR STATING FROM WHERE WATER WILL BE OBTAINED FOR DUST CONTROL
- DEMOLITION CONSTRUCTION DEBRIS MITIGATION PLAN SIGNED AND DATED BY OWNER AND CONTRACTOR
- BUILDING DEMOLITION DAILY WORK SCHEDULE - LIST OF ALL EQUIPMENT USED FOR DEMOLITION OF BUILDINGS MORE THAN ONE STORY
- NOTICE OF COMMENCEMENT
- ALL PORTIONS OF A PARCEL OF LAND SHALL BE PLANTED WITH GROUND COVER OR LAWN OR UTILIZE OTHER APPROVED TEMPORARY EROSION CONTROL MEASURES, IN ORDER TO PREVENT DUST OR SOIL EROSION.
- TREE PROTECTION PLAN:
  - O FOR EXISTING TREES ON SITE, INDICATE THE LOCATION OF TREES/PALMS ON THE SURVEY AND PROVIDE A CORRESPONDING LIST OF TREE NUMBER, BOTANICAL NAME, COMMON NAME, OVERALL HEIGHT, TRUNK DBH FOR TREES, CLEAR TRUNK FOR PALMS, CONDITION %, AND INDICATE THAT ALL EXISTING TREES/PALMS ARE TO BE PROTECTED AND WILL REMAIN ON SITE.
  - O PROVIDE TREE PROTECTION BARRICADE DETAIL FOR EXISTING TREES ON SITE TO REMAIN. THIS BARRICADE MUST BE INSTALLED PRIOR TO THE BEGINNING OF PROPOSED WORK.
  - O FOR TREES THAT MUST BE REMOVED TO ACCESS DEMO AREAS, OBTAIN PERMIT FOR TREE REMOVAL.

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN NOT FOR CONSTRUCTION

THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE
DEMOLITION PLAN

SHEET NUMBER
CD-102

SHEET 09 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cadd\09675.00-CD-1XX.dwg Layout Name: CD-102 Plotted by: MGrimbank Plotted on: Aug 24, 2017 - 2:04pm

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

N

GRAPHIC SCALE

0 20 40

SCALE: 1"=20'

MATCH LINE-SEE SHEET CP-102

B CP-504

D CP-504

C CP-504

CONST. 213 LF - 18" HDPE (190 LF EXFILT. TRENCH W/ PERF. HDPE) TRENCH SECTION #1

CONST. 5' WIDE CONC. SIDEWALK (TYP.)

12' UTILITY EASEMENT (P.B. 133, PG. 4, B.C.R.)

DRY RETENTION AREA #1

CONC WALL

PROP. BUILDING F.F.E. = 17.10 NAVD

ARTIFICIAL TURF

ARTIFICIAL TURF

CONST. 226 LF - 18" HDPE (201 LF EXFILT. TRENCH W/ PERF. HDPE) TRENCH SECTION #1

CONST. TYPE 'D' CURB (TYP.)

CONST. TYPE 'D' CURB (TYP.)

EXISTING BUILDING FFE = 16.35

8" RWL

CONST. CONC. SIDEWALK (TYP.)

CONST. 200 LF - 18" HDPE (186 LF EXFILT. TRENCH W/ PERF. HDPE) TRENCH SECTION #1

CONST. DROP CURB (TYP.)

11 CONST. TYPE 'D' CB W/ PRB (N,W,S) RIM EL.=14.29 EXIST. INV. EL.=7.42 (E) INV. EL.=9.50 (N,S,W)

CONST. TYPE 'D' CURB (TYP.)

CONST. CONC. FLUME

8 CONST. DITCH BOTTOM INLET GRATE EL.=13.20 INV. EL.=9.50 (E)

CONST. 20 LF - 18" HDPE

9 CONST. TYPE 'D' CB W/ PRB (N,E,W) GRATE EL.=14.15 INV. EL.=9.50 (N,E,W)

GUY ANCHOR

4:1 MAX. SLOPE

DRY RETENTION AREA #3

50' ACCESS OPENING (P.B. 125, PG. 31, B.C.R.)

CONST. THICKENED EDGE SIDEWALK (TYP.)

CONST. DITCH BOTTOM INLET GRATE EL.=13.50 INV. EL.=9.50 (N)

10

CONST. TYPE 'D' CURB (TYP.)

CONNCECT EXIST. 15" RCP TO PROP. CB W/ 6 LF-15" RCP

CONST. 44 LF - 18" HDPE

SAW CUT AND MATCH EXIST. PAVEMENT ELEV. (TYP.)

MATCH EXIST. CURB ELEV.

SAW CUT & MATCH EXIST. SIDEWALK ELEV.

24' ACCESS EASEMENT (P.B. 125, PG. 31, B.C.R.)

24' ACCESS EASEMENT (P.B. 166, PG. 43, B.C.

15" RCP

25' LANDSCAPE BUFFER (P.B. 166, PG. 43, B.C.

CB#2

CB#3

DROP CURB

LIGHT POLE

FENCE 0.9' EAST

6' CLF

PARKING

ASPHALT

ALUMINUM LIGHT

FIRE HYDRANT BOL

2' C&G

10' UTILITY EASEMENT (P.B. 166, PG. 43, B.C

DROP CURB

MATCH EXIST. CURB & SIDEWALK ELEV. (TYP.)

WALL CORNER 10.6' NORTH 4.6' WEST

INLET TYPE P-6 RIM=15.04 INV.=11.14(S)

CONST. 14 LF-18" RCP

CONST. TYPE 'F' CURB & GUTTER (TYP.)

12' UTILITY EASEMENT (P.B. 125, PG. 31, B.C.R.)

AREA OF PAVEMENT RESTORATION (TYP.)

CONST. DRAINAGE MH PER INDEX No. 201 GRATE EL.=15.62 INV. EL.=10.50 (S) INV. EL.=11.14 (W)

16

15 CONST. INLET TYPE P-5, PER INDEX No. 200, 211 GRATE EL.=15.17 INV. EL.=9.50 (S)

SAW CUT AND MATCH EXIST. PAVEMENT ELEV. (TYP.)

CONST. TYPE 'F' CURB & GUTTER (TYP.)

MATCH EXIST. CURB ELEV. (TYP.)

CONST. 8' x 40' x 6" CONCRETE EXPANDED SIDEWALK FOR BUS LANDING PAD

CONST. 12' WIDE CONC. SIDEWALK

CONST. 149 LF-24" RCP (35 LF-8'X4' EXFILT. TRENCH #3 W/ SLOTTED RCP) AND CONNECT TO EXIST INLET. INV. EL. =11.14 (E)

GRASS MEDIAN

SIGN

ICB

2' C&G

0.7' CURB

SMH

BP

GRASS

CENTERLINE PER F.D.O.T. R/W MAP SECTION No. 86120 SHEET 8 OF

SOUTH LINE TRACT 2, BLOCK 84

HILLSBORO BOULEVARD (S.R. 810)

(O.R.B. 9745, PG. 186 B.C.R.)

(ASPHALT ROAD)

CONTRACTOR TO VERIFY SIZE AND LOCATION OF ALL EXISTING UTILITIES

ALL EXISTING AND PROPOSED ELEVATIONS SHOWN ARE BASED ON NAVD 1988

KEITH & ASSOCIATES, INC. consulting engineers

301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643

2160 NW 82nd Avenue
Doral, Florida 33122

P: (954) 788-3400 F: (954) 788-3500

Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN NOT FOR CONSTRUCTION

THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE

PAVING, GRADING AND DRAINAGE PLAN

SHEET NUMBER

CP-101

SHEET 10 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cadd\09675.00-CP-1XX.dwg Layout Name: CP-101 Plotted on: Aug 24, 2017 - 2:04pm Plotted by: MGrimlaitk

N.W. 71ST STREET
(P.B. 2, PG. 53, P.B.C.R.)

12' UTILITY EASEMENT (ORB 35294, PG 1996)

CONST. 6' DIA. DMH #12 W/ PRB (E,S) GRATE EL.=14.10 INV. EL.=9.50 (E,S,SW) — 2

CONST. 49 LF-12" RCP W/ MITERED END SECTION INV. EL. = 13.20

CONST. TYPE 'D' CB W/ PRB (W,S) RIM EL.=14.50 EX. INV. EL.=9.07 (E) INV. EL.=9.50 (W,S) — 1

CB #7 W/ CONC. APRON RIM=16.93 TOP OF WEIR=15.80 0.25" ORIFICE INV.=9.44 INV.=9.53(S) INV.=9.44(N)

FIRE HYDRANT

GATE VALVE IN CONC

CB#14

8" DIP W.M.

8" PVC S.S.

SMH#16

SMH#15

DMH#11

DISMH#17

CB #13 RIM=14.53 INV.=7.98(W) INV.=9.39(S) INV.=8.06(E) INV.=10.00(N)

10' UTILITY EASEMENT (P.B. 166, PG. 43, B.C.R.)

ASPHALT

CONC WALK

CONC WALL

GATE VALVE IN CONC

FIRE HYDRANT

BOL(2)

CLP

REMOVE EXIST. WEIR AND CONST. WEIR W/ CREST ELEV.=16.28

SOUTH RIGHT OF WAY LINE

CONST. 4' DIA INLET W/ PRB (S) GRATE EL.=13.20 INV. EL.=9.50(S,SE) — 3

CONST. CONC. FLUME

CONST. 17 LF - 18" HDPE

CONST. 204 LF - 18" HDPE (161 LF EXFILT. TRENCH PERF. HDPE) TRENCH SECTION #1

CONST. TYPE 'D' CURB (TYP.)

CONST. 281 LF - 18" HDPE (246 LF EXFILT. TRENCH W/ PERF. HDPE) TRENCH SECTION #2

CONST. 7' CONC. SIDEWALK (TYP.)

CONST. RAILING PER FDOT INDEX No. 870 (TYP.)

CONST. 275 LF - 18" HDPE (260 LF EXFILT. TRENCH W/ PERF. HDPE) TRENCH SECTION #2

STEM WALL CONSTRUCTION (TYP.)

CONST. 10'x10' CONC. PAD (SEE ARCH. PLANS FOR DETAILS)

SAW CUT AND MATCH EXIST. PAVEMENT ELEV. (TYP.)

CONST. TYPE 'D' CURB (TYP.)

CONST. ASPHALT PAVEMENT (TYP.)

CONST. RETAINING WALL (TYP.) (SEE STRUCT. PLANS FOR DETAILS)

SAW CUT AND MATCH EXIST. PAVEMENT ELEV. (TYP.)

8" RWL

CONST. 249 LF - 18" HDPE (224 LF EXFILT. TRENCH PERF. HDPE) TRENCH SECTION #1

PROP. BUILDING F.F.E. = 17.10 NAVD

DRY RETENTION AREA #3 BOTTOM ELEV.=10.44

1 STORY (HIGH CEILING) BUILDING #4171 F.F. EL.=16.35'

8" RWL

EXISTING BUILDING FFE = 16.35

CONST. STAMPED PAVEMENT (TYP.) (SEE ARCH. PLANS FOR DETAILS)

CONST. 5' WIDE CONC. SIDEWALK (TYP.)

CONST. TYPE 'D' CURB (TYP.)

CONST. CURB RAMP PER FDOT INDEX 304

CONST. 14 LF - 18" HDPE

CONST. 12 LF- 18" HDPE

ARTIFICIAL TURF

CONST. CB W/ PRB (S) GRATE EL. = 15.32 INV. EL.=9.50(E,W,S) — 4

CONST. 8 LF - 18" HDPE

CONST. DMH W/ PRB (N,W) RIM EL. = 15.16 INV. EL.=9.50(N,E,W) — 5

CONST. DITCH BOTTOM INLET GRATE EL. = 13.20 INV. EL.=9.50(E) — 6

CONST. DMH W/ PRB (N) RIM EL.=15.48 INV. EL.=9.50(N,W) — 7

CONST. DITCH BOTTOM INLET GRATE EL. = 10.44 INV. EL.=5.90 (E) — 13

CONST. 45 LF - 18" HDPE

CONST. TYPE 'D' CB W/ PRB (N,W) GRATE EL. = 15.00 INV. EL.=9.50(N,W,S) INV. EL.=MATCH EXIST (E) — 14

CONNECT EXIST. RWL TO PROP. CATCH BASIN W/ 22 LF-8" PVC

TRANSFORMER ON CONC CONST. (3) BOLLARDS — 2

CONST. 44 LF - 18" HDPE

8" RWL

CONST. CB W/ PRB (S) GRATE EL. = 15.22 INV. EL.=9.50(S,NW) — 12

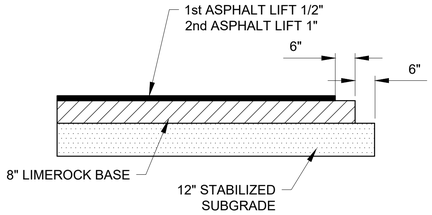
CONST. 8 LF - 18" HDPE

CONST. 2 LF - 18" HDPE

CONST. 1 LF - 18" HDPE

CONST. 1 LF - 18" HDPE

CONST. 1



ASPHALTIC CONCRETE VEHICULAR:
FIRST LIFT - 1/2" FDOT - SP 9.5 (FINE MIX)
SECOND (FINAL) LIFT - 1" FDOT - SP 9.5 (FINE MIX)
ASPHALT SURFACE COURSE SHALL CONFORM TO THE REQUIREMENTS OF FDOT STANDARDS SPECIFICATIONS SECTIONS 330 AND 331.
SECOND LIFT OF ASPHALT SHALL NOT BE PLACED UNTIL FINAL LANDSCAPE/HARDSCAPE HAS BEEN INSTALLED.

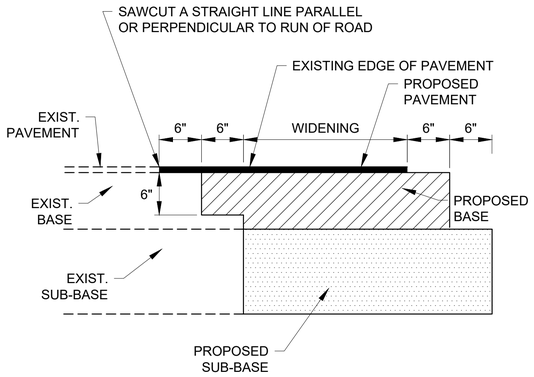
PRIME AND TACK COAT:
LIMEROCK BASE COURSE SHALL CONFORM TO THE REQUIREMENTS OF FDOT STANDARDS SPECIFICATIONS SECTION 300.
APPLICATION RATES:
PRIME COAT - 0.10 GALLONS PER SQ. YD.
TACK COAT - 0.08 GALLONS PER SQ. YD.

BASE:
8" LIMEROCK BASE COMPACTED TO 98% OF MAXIMUM DENSITY (AASHTO T-180), LIMEROCK BASE TO CONFORM WITH THE REQUIREMENTS OF FDOT SPECIFICATIONS SECTIONS 200 AND 911.

SUBGRADE:
12" STABILIZED SUBGRADE COMPACTED TO 98% OF MAXIMUM DENSITY (AASHTO T-180); MINIMUM LBR = 40.

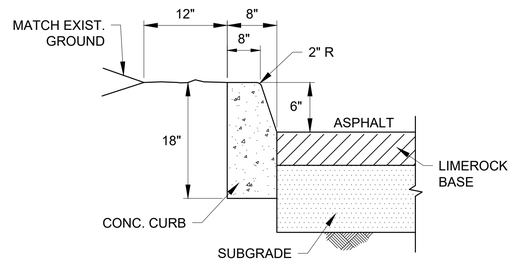
1 ASPHALT PAVEMENT DETAIL

SCALE: NOT TO SCALE



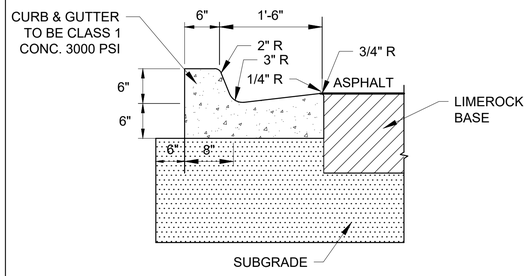
6 SAWCUT / WIDENING DETAIL

SCALE: NOT TO SCALE



4 TYPE 'D' CURB

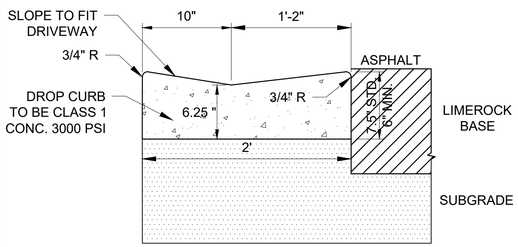
SCALE: NOT TO SCALE



NOTE:
ALL TYPE "F" CURB SHALL BE IN ACCORDANCE WITH THE STANDARD REQUIREMENTS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT).

5 TYPE 'F' CURB

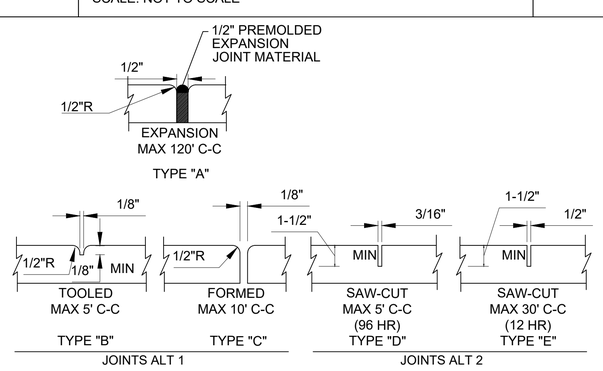
SCALE: NOT TO SCALE



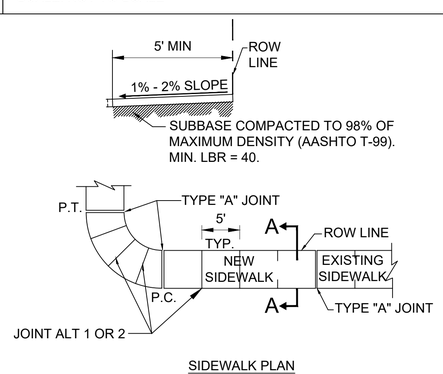
NOTE:
ALL DROP CURB SHALL BE IN ACCORDANCE WITH THE STANDARD REQUIREMENTS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT).

5A DROP CURB

SCALE: NOT TO SCALE



CONCRETE PAVEMENT & SIDEWALK JOINTS

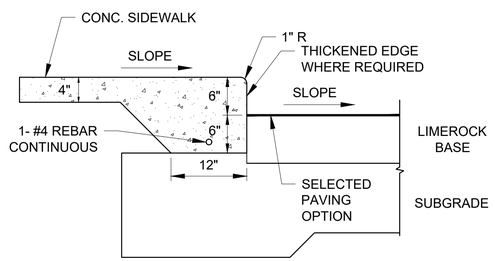


SIDEWALK PLAN

NOTES:
1. Sidewalk construction is to comply with the latest FDOT standards for sidewalks and ADA curb ramps, per FDOT index 304 and 310.
2. Provide either joint alternate 1 or 2. If using joint alternate 2: construct type "E" joints at not more than 30' intervals - within 12 hours after finishing, construct 1/2" expansion, provide joint type "A", with non-rising performed joint filler at not more than 120' intervals, construct remaining joints within 96 hours after finishing.
3. Provide 1/2" expansion joint type "A", with non-rising performed joint filler where concrete pavement abuts concrete curbs, driveways and other fixed objects.
4. Sidewalk thickness shall be 4" thick unless otherwise noted. Thickness shall be 6" through driveways and on all commercial sidewalk applications.
5. The use of steel reinforcement is not permitted.
6. Concrete to be 2,500 psi in 28 days.
7. Cure all concrete with clean sand, plastic membrane or other approved method.
8. Sidewalk foundation shall be compacted to a firm, even surface, true to grade and cross section, and shall be moist at the time concrete is placed.
9. All construction shall conform to local construction codes and standards.
10. Sidewalk slopes shall meet the requirements of the Americans with Disabilities Act. Minimum transverse slope 0.01 ft./ft. And maximum transverse slope 0.02 ft./ft. toward swale or gutter. Longitudinal slope shall conform to ADA requirements.
11. The vertical deviation for a new sidewalk shall not be more than ½".
12. The vertical deviation for a new maintenance access structure cover shall not be more than ¼".
13. Where truncated domes are used, stamped concrete is not permitted.
14. Sidewalk shall have a transverse hair broom finish.

7 SIDEWALK DETAIL

SCALE: NOT TO SCALE



18 THICKENED EDGE SIDEWALK

SCALE: NOT TO SCALE

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

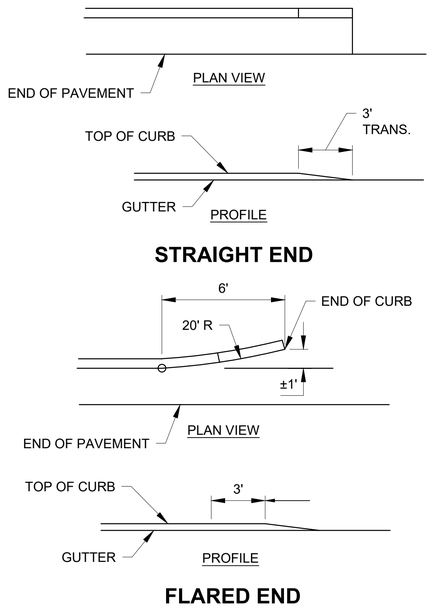
SHEET TITLE
PAVING, GRADING AND DRAINAGE DETAILS

SHEET NUMBER
CP-501

SHEET 12 of 24

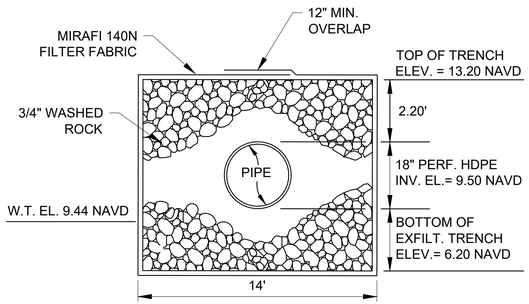
PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cadd\09675.00-CP-SXX.dwg Layout Name: CP-501 Plotted by: MGhirbank Plotted on: Aug 24, 2017 - 2:04pm



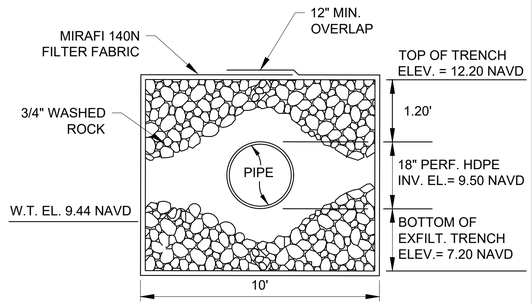
8 CURB & GUTTER FLARED AND STRAIGH ENDS

SCALE: NOT TO SCALE



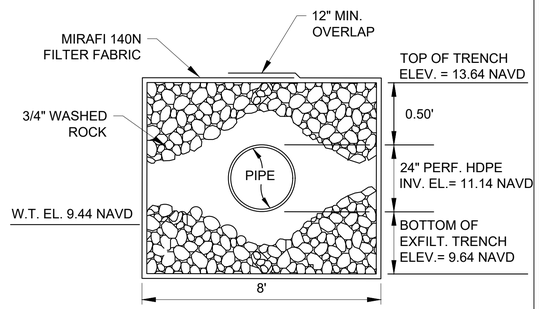
11A EXFILTRATION TRENCH DETAIL SECTION #1

SCALE: NOT TO SCALE



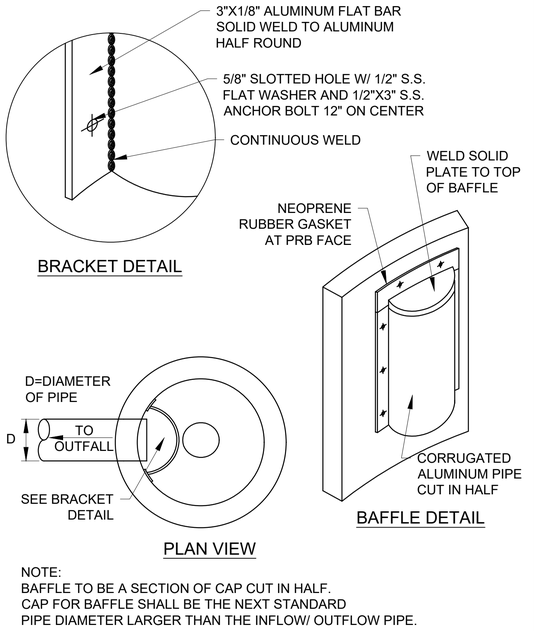
11B EXFILTRATION TRENCH DETAIL SECTION #2

SCALE: NOT TO SCALE



11C EXFILTRATION TRENCH DETAIL SECTION #3

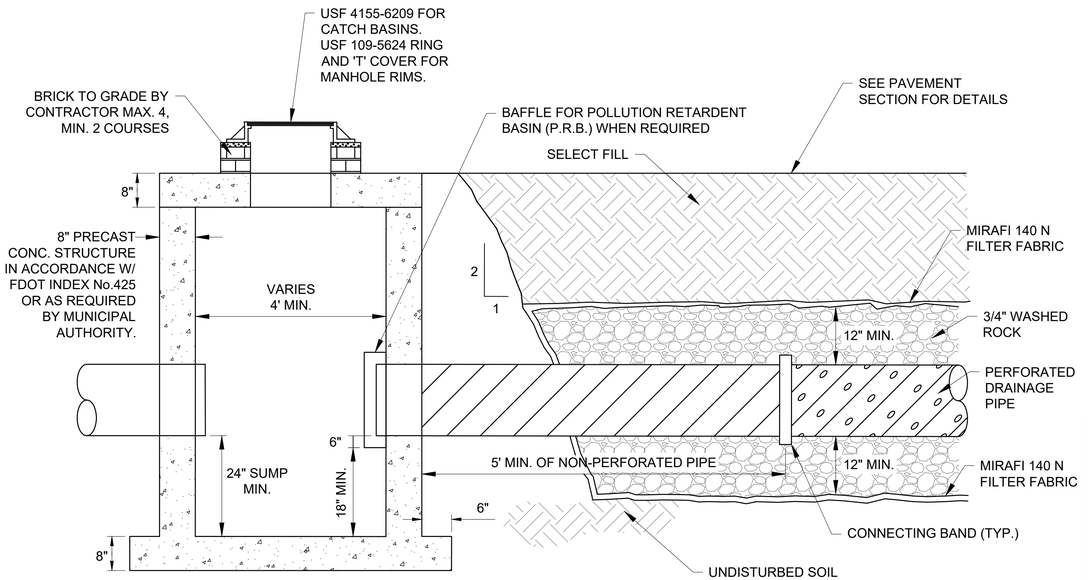
SCALE: NOT TO SCALE



NOTE:
BAFFLE TO BE A SECTION OF CAP CUT IN HALF.
CAP FOR BAFFLE SHALL BE THE NEXT STANDARD
PIPE DIAMETER LARGER THAN THE INFLOW/ OUTFLOW PIPE.

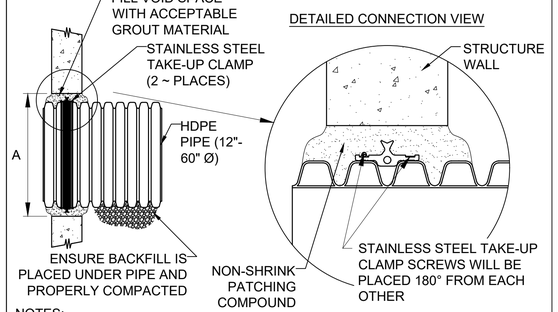
12 POLLUTION RETARDANT BAFFLE DETAIL

SCALE: NOT TO SCALE



13 CATCH BASIN W/ P.R.B. ABD EXFILTRATION TRENCH

SCALE: NOT TO SCALE



NOTES:
PERFORMANCE HIGHLY DEPENDENT ON INSTALLATION. CONTRACTOR MUST ENSURE MANHOLE GASKET IS UNIFORMLY SEATED AROUND STRUCTURE ADAPTER. EXTRA PRECAUTIONS MUST BE TAKEN TO PREVENT DIFFERENTIAL SETTLEMENT BETWEEN THE PIPE AND MANHOLE.

SEE ADS STANDARD DETAIL STD-201 AND ADS INSTALLATION GUIDE 1.05: WATERSTOP INSTALLATION FOR INSTALLATION RECOMMENDATIONS.

PIPE SIZE	PIPE OD		"A" MIN. HOLE DIA.	MIN. DISTANCE PIPE INVERT TO STRUCTURE INVERT
	A-PROFILE	H-PROFILE		
12"	14.5"	N/A	19.5"	3.7"
15"	17.6"	N/A	23.00"	4.0"
18"	21.2"	N/A	26.50"	4.2"
24"	27.8"	N/A	33.25"	4.5
30"	35.1"	N/A	40.50"	5.2"
36"	41.1"	41.1"	47.00"	5.5"
42"	47.7"	48.0"	53.00"	5.7"
48"	53.6"	54.0"	59.00"	5.7"
60"	66.3"	67.3"	72.00"	6.4"

15 GROUTED MANHOLE CONNECTION (HDPE PIPE) DETAIL

SCALE: NOT TO SCALE

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

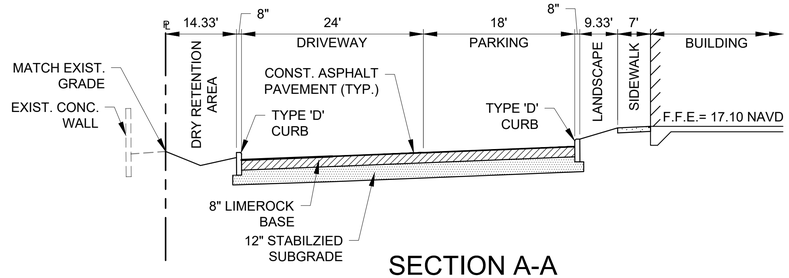
SHEET TITLE
PAVING, GRADING AND DRAINAGE DETAILS

SHEET NUMBER
CP-502

SHEET 13 of 24

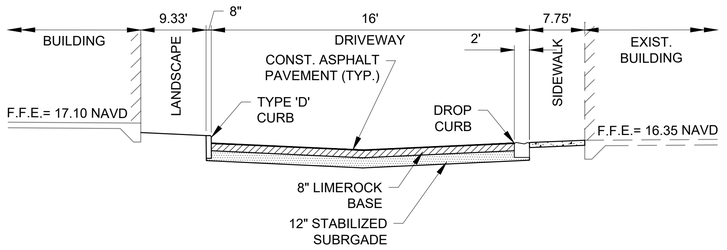
PROJECT NO. 09675.00

Drawing name: N:\09675\05.00 - Pre Lodge - Leder Group\Engineering\Cadd\09675.00-CP-SKX.dwg Layout Name: CP-502 Plotted by: MGrimbank Plotted on: Aug 24, 2017 - 2:04pm



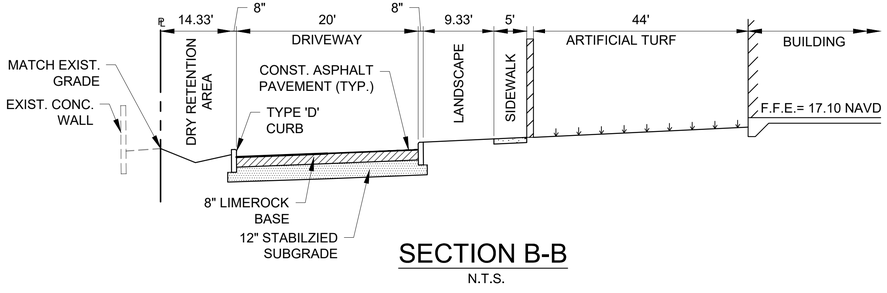
SECTION A-A

N.T.S.



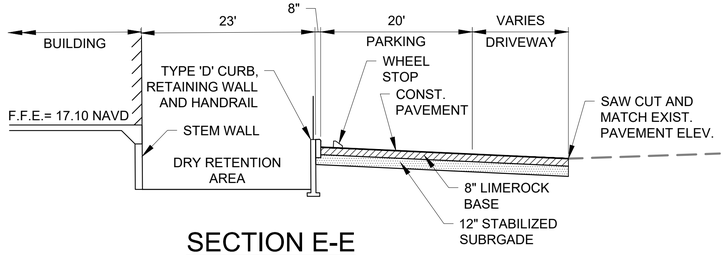
SECTION D-D

N.T.S.



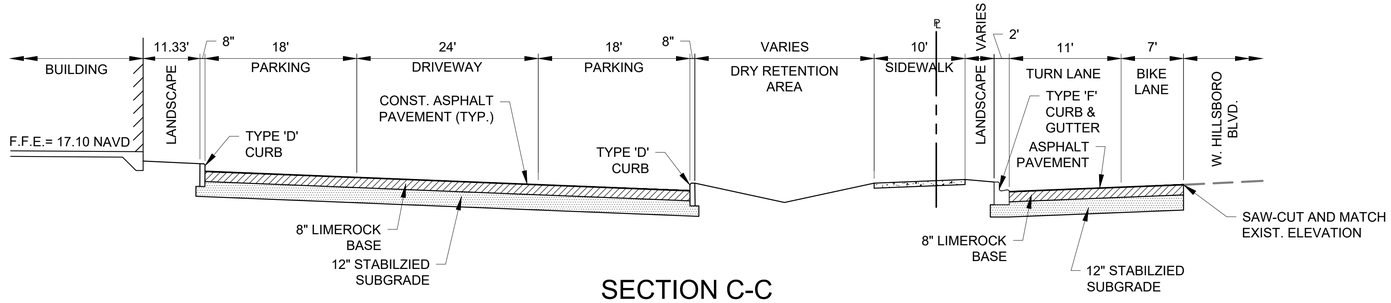
SECTION B-B

N.T.S.



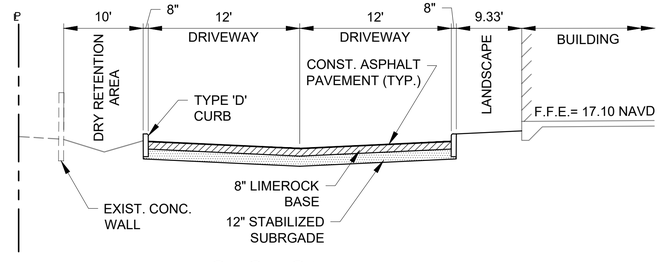
SECTION E-E

N.T.S.



SECTION C-C

N.T.S.



SECTION F-F

N.T.S.

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION

THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE

PAVING, GRADING AND DRAINAGE DETAILS

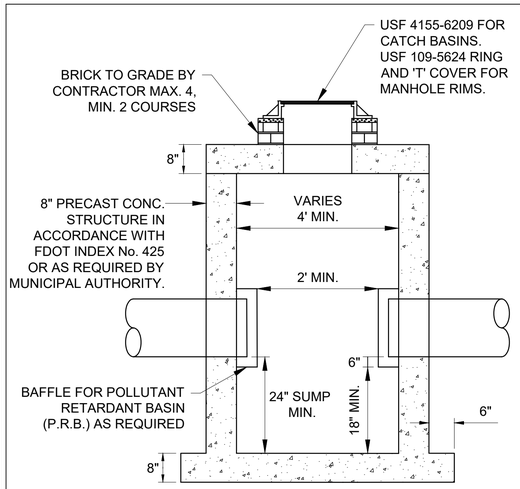
SHEET NUMBER

CP-504

SHEET 15 of 24

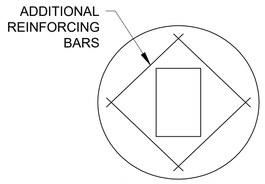
PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cad\09675.00-CP-SXX.dwg Layout Name: CP-504 Plotted by: MGrimbank Plotted on: Aug 24, 2017 - 2:04pm

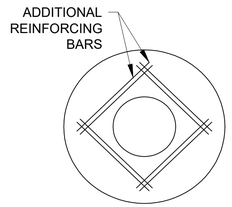


NOTE:
1. STRUCTURE MANUFACTURER AND/OR CONTRACTOR SHALL CONFIRM ALL STEEL REINFORCEMENT MEETS FDOT STANDARDS PER INDEX 200, SECTION 415 AND 425 PRIOR TO SUBMITTING ANY SHOP DRAWINGS FOR APPROVAL.
2. LOCKING GRATES TO BE PROVIDED AS REQUIRED BY CITY OF POMPANO BEACH

9	CATCH BASIN / MANHOLE DETAIL
	SCALE: NOT TO SCALE

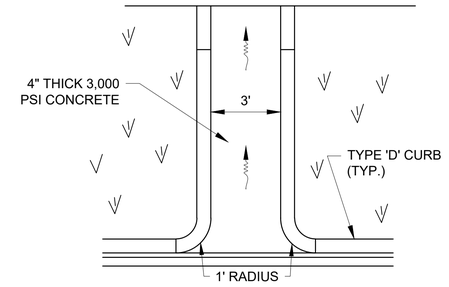


PLAN VIEW
TOP SLAB
FOR CATCH BASINS

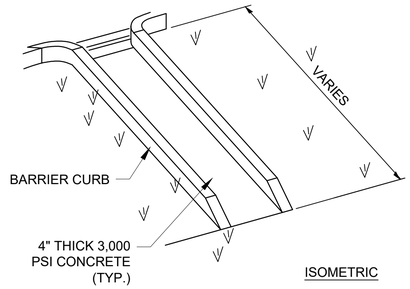


PLAN VIEW
TOP SLAB
FOR MANHOLES

10	CATCH BASIN / MANHOLE FRAME DETAIL
	SCALE: NOT TO SCALE



PLAN



ISOMETRIC

14	CONCRETE FLUME DETAIL
	SCALE: NOT TO SCALE

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER
HILLSBORO
STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE
PAVING, GRADING AND DRAINAGE DETAILS

SHEET NUMBER
CP-503

SHEET 14 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cad\09675.00-CP-SXX.dwg Layout Name: CP-503 Plotted by: MGrotsank Plotted on: Aug 24, 2017 - 2:04pm

MATCH LINE-SEE SHEET CU-101

PROP. BUILDING
F.F.E. = 17.10 NAVD

EXISTING BUILDING
FFE = 16.35

CONNECT PROP. 6" PVC SAN. SEWER SERVICE TO EXIST. 6" SAN. SEWER SERVICE @ 1.00% MIN. SLOPE

CONST. FIRE HYDRANT ASSEMBLY AND SAMPLE POINT #2

CONST. 6"-11.25° BEND

CONST. 3" G.V. AND 3"x2"x2" WYE

CONST. (2) - 2" WATER SERVICES W/ 1 ½" POTABLE METER & 1 ½" RPZ AND 1 ½" IRRIGATION METER & 1 ½" RPZ. SAMPLE POINT #3

PROP. 12' WATER EASEMENT (TYP.) (2)

CONSTRUCT 6" DIP W.M.

CONST. 8"x6" REDUCER AND 8"-11.25° BEND

CONST. (2) 3"- 90° BEND

CONST. 3"-11.25° BEND

CONST. 8" DIP W.M.

PROP. 12' WATER EASEMENT (TYP.) (2)

CONNECT TO EXIST. 8" DIP W.M. WITH 8"x3" TAPPING SADDLE AND 3" G.V.

CONNECT TO EXIST. 8" DIP W.M. WITH 8"x8" TAPPING SLEEVE & VALVE, AND 8" GATE VALVE

12' UTILITY EASEMENT (P.B. 125, PG. 31, B.C.R.)

50' ACCESS OPENING (P.B. 125, PG. 31, B.C.R.)

24' ACCESS EASEMENT (P.B. 125, PG. 31, B.C.R.)

24' ACCESS EASEMENT (P.B. 166, PG. 43, B.C.R.)

10' UTILITY EASEMENT (P.B. 166, PG. 43, B.C.R.)

25' LANDSCAPE BUFFER PARCEL (P.B. 166, PG. 43)

8" RWL

15" RCP

CB#3

CB#2

CLP

DROP CURB

LIGHT POLE

FENCE 0.9' EAST

6' CLF

ASPHALT PARKING

ALUMINUM LIGHT POLE

FIRE HYDRANT BOL

EXIST. FIRE HYDRANT

DROP WALK

2' C&G

DWS

8" DIP W.M.

GATE VALVE

SIGN

CONC WALL

GUY ANCHOR

ANCHOR

WALL CORNER 10.6' NORTH 4.6' WEST

96.1' BLDG TIE

58.9'

36.2'

77.5'

72'

60'

1345.17'

GRASS MEDIAN

ICB

0.7' CURB

SMH

BP

GRASS

CENTERLINE PER F.D.O.T. R/W MAP SECTION No. 86120 SHEET 8 OF 19

SOUTH LINE TRACT 2, BLOCK 84

1.30'

1.35'

HILLSBORO BOULEVARD (S.R. 810)

(O.R.B. 9745, PG. 186 B.C.R.)

(ASPHALT ROAD)

CONTRACTOR TO VERIFY SIZE AND LOCATION OF ALL EXISTING UTILITIES

ALL EXISTING AND PROPOSED ELEVATIONS SHOWN ARE BASED ON NAVD 1988

N

GRAPHIC SCALE

0 20 40

SCALE: 1"=20'

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

KEITH & ASSOCIATES, INC.
consulting engineers

301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643

2160 NW 82nd Avenue
Doral, Florida 33122

P: (954) 788-3400 F: (954) 788-3500

Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION

THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE

WATER AND SEWER PLAN

SHEET NUMBER

CU-101

SHEET 16 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cadd\09675.00-CU-1XX.dwg Layout Name: CU-101 Plotted by: MGrimbeck Plotted on: Aug 24, 2017 - 2:05pm

N.W. 71ST STREET
(P.B. 2, PG. 53, P.B.C.R.)

12' UTILITY EASEMENT (ORB 35294, PG 1996)

CONNECT (2)-6" SAN. SEWER SERVICE TO EXIST. PVC SAN. SEWER WITH (2) WYE CONNECTIONS

CONST. 2" POTABLE WATER SERVICE W/ 2" METER AND RPZ

EXIST. FIRE HYDRANT

CONNECT TO EXIST. 8" DIP W.M. WITH 8"x2" TAPPING SADDLE AND CORPORATION STOP

CONNECT TO EXIST. 8" DIP W.M. W/ 8"x8" TAPPING SLEEVE & VALVE, 8" GATE VALVE & 45° BEND

SOUTH RIGHT OF WAY LINE

10' UTILITY EASEMENT (P.B. 166, PG. 43, B.C.R.)

PROP. 12' WATER EASEMENT (TYP.)

CONST. 37 LF-6" PVC SAN. SEWER SERVICE W/ CLEAN OUT @ 1.00% MIN. SLOPE, INV. EL. = 6.50 (N) (SEE PLUMBING PLANS FOR CONTINUATION)

CONST. WALL MOUNTED FDC (SEE PLUMBING PLANS FOR CONTINUATION)

CONST. 8"-25° BEND

CONST. SMH AND CONNECT TO EXIST. SAN. SEWER RIM EL.=15.16 EX. INV. EL.=5.94(N) INV. EL.=6.04(E)

CONST. 8" FIRE SERVICE W/ 8" BACKFLOW PREVENTER AND SAMPLE POINT #1 (SEE PLUMBING PLANS FOR CONTINUATION)

CONST. 148 LF-6" SAN. SEWER @ 1.00% MIN. SLOPE. CONNECT TO EXIST. 6" SAN. SEWER LATERAL AT EXIST. CLEANOUT EXIST. CLEANOUT INV. EL. = ±8.33

RELOCATE EXIST. WATER METER & RPZ

PROP. BUILDING F.F.E. = 17.10 NAVD

1 STORY (HIGH CEILING) BUILDING #4171 F.F. EL.=16.35'

EXISTING BUILDING FFE = 16.35

8" RWL

TRANSFORMER ON CONC

CONC SLAB

CB#4

DWS(TYP)

ICB

EXIST. FIRE HYDRANT

SMH

MATCH LINE-SEE SHEET CU-102

CONTRACTOR TO VERIFY SIZE AND LOCATION OF ALL EXISTING UTILITIES

ALL EXISTING AND PROPOSED ELEVATIONS SHOWN ARE BASED ON NAVD 1988

N

GRAPHIC SCALE
0 20 40
SCALE: 1"=20'

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN NOT FOR CONSTRUCTION

THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE

WATER AND SEWER PLAN

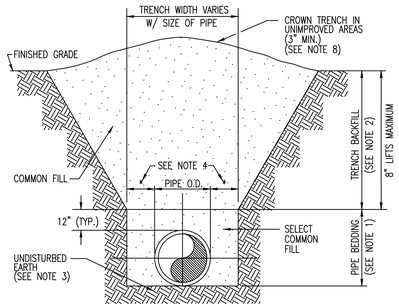
SHEET NUMBER

CU-102

SHEET 17 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cad\09675.00-CU-XX.dwg Layout Name: CU-102 Plotted by: MGmbank Plotted on: Aug 24, 2017 - 2:25pm



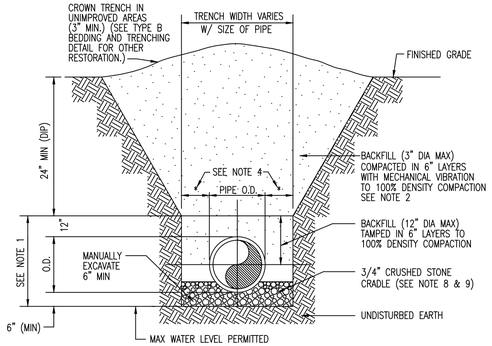
NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 100% OF THE MAXIMUM DENSITY AS PER ASHTO T-99-C.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 100% OF THE MAXIMUM DENSITY AS PER ASHTO T-99-C.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY THE CITY OF COCONUT CREEK.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. REFER TO SECTION 2.18-E OF THE MANUAL FOR SHEETING AND BRACING IN EXCAVATIONS.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY OR COUNTY RIGHT-OF-WAY SHALL COMPLY WITH THE APPLICABLE REGULATIONS.

CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

TYPE B BEDDING
AND TRENCHING DETAIL

Date	Revisions	Appr. by	Date: Nov. 1999	Scale: N.T.S.	Dwg: F010	Fig: 010



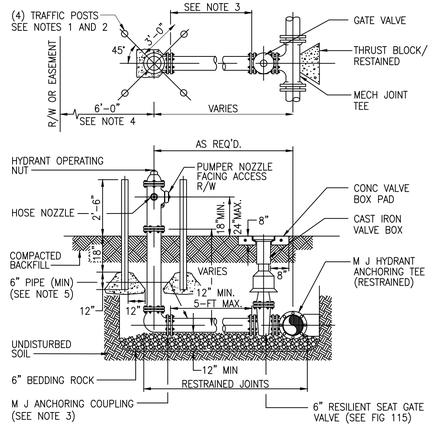
NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 100% OF THE MAXIMUM DENSITY AS PER AASHTO T-99-C.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 100% OF THE MAXIMUM DENSITY AS PER AASHTO T-99-C.
3. USE TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CITY OF COCONUT CREEK.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. REFER TO SECTION 2.18-E OF THE MANUAL FOR SHEETING AND BRACING IN EXCAVATIONS.
8. GRAVITY SEWERS SHALL UTILIZE TYPE A BEDDING, IF REQUIRED BY THE CITY. BEDDING DEPTH SHALL BE 6" MINIMUM FOR ANY DIAMETER PIPE.
9. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. APPLICABLE GOVERNING AGENCY SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.

CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

TYPE A BEDDING
AND TRENCHING DETAIL

Date	Revisions	Appr. by	Date: Nov. 1999	Scale: N.T.S.	Dwg: F020	Fig: 020



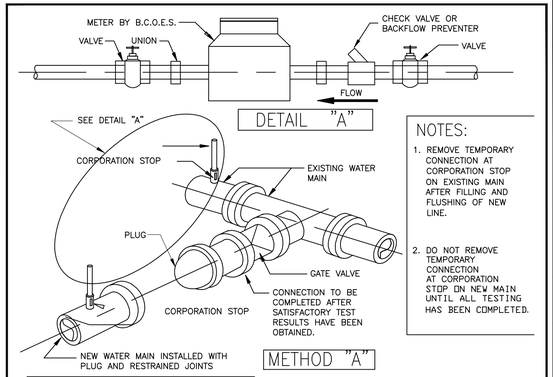
NOTES:

1. HYDRANT GUARDS TO BE 4" DIAMETER GALVANIZED STEEL PIPE FILLED WITH CONCRETE AND TO BE PLACED AT LOCATION AS REQUESTED BY THE CITY ENGINEER.
2. OMIT REAR GUARDS IN LOCATION WHERE SIDEWALKS EXIST.
3. USE MECHANICAL JOINT RETAINER GLAND CLOW MODEL NO. F1058 OR APPROVED EQUAL.
4. HYDRANT SETBACK SHALL BE SET TO A DISTANCE OF 7-FT MAXIMUM AND 4-FT MINIMUM FROM THE EDGE OF PAVEMENT OR CONFORM TO D.O.T. REQUIREMENTS WHERE APPLICABLE.
5. SERVICE LINES FOR FIRE HYDRANTS TO BE SIZED TO ALLOW A MINIMUM OF 20 PSI RESIDUAL PRESSURE AT THE HYDRANT UNDER FIRE FLOW CONDITIONS.
6. TWO BLUE REFLECTIVE PAVEMENT MARKERS FOR IDENTIFICATION OF THE HYDRANT AND ITS VALVE LOCATION SHALL BE INSTALLED ON THE CENTER OF THE ADJACENT PAVED DRIVE LANE TO THE HYDRANT; MARKERS SHALL BE SPACED 1-FT APART, PERPENDICULAR TO THE ROAD CENTERLINE.

CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

FIRE HYDRANT ASSEMBLY DETAIL

Date	Revisions	Appr. by	Date: Nov. 1999	Scale: N.T.S.	Dwg: F103	Fig: 103



NOTES:

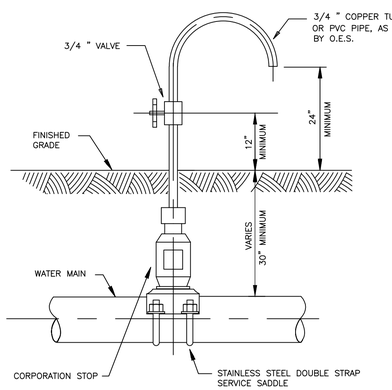
1. REMOVE TEMPORARY CONNECTION AT CORPORATION STOP ON NEW MAIN AFTER FILING AND FLUSHING HAS BEEN COMPLETED.
2. DO NOT REMOVE TEMPORARY CONNECTION AT CORPORATION STOP ON NEW MAIN UNTIL ALL TESTING HAS BEEN COMPLETED.

CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

FILLING AND FLUSHING DETAIL

Date	Revisions	Appr. by	Date: Nov. 1999	Scale: N.T.S.	Dwg: F104	Fig: 104

A CORPORATION STOP SHALL BE INSTALLED WITH A LENGTH OF COPPER TUBING EXTENDING ABOVE THE GROUND. THE TUBING SHALL BE INSTALLED WITH A 180° BEND AND A VALVE.

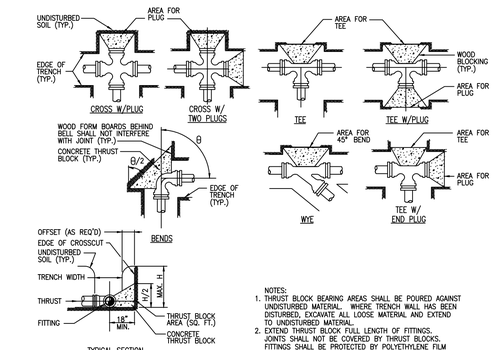


NOTES:
SAMPLING POINTS SHALL BE LOCATED AND LATER REMOVED AS REQUIRED BY BROWARD COUNTY HEALTH DEPARTMENT. CORPORATION STOP SHALL BE REMOVED AND SADDLE PLUGGED WITH A BRASS FITTING.

CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

BACTERIOLOGICAL DETAIL

Date	Revisions	Appr. by	Date: Nov. 1999	Scale: N.T.S.	Dwg: F106	Fig: 106



TYPICAL SECTION

SCHEDULE FOR THRUST BLOCK AREAS *

PIPE SIZE (INCHES)	90 BEND (SQ FT)	45 BEND (SQ FT)	22-1/2 BEND (SQ FT)	11-1/4 BEND (SQ FT)	TEE & PLUG (SQ FT)	DESIGN PRESS (PSI)
4						150
6						150
8						150
10						150
12						150
14						150
16						150
18						150
20						150
24						150

NOTE: THRUST BLOCK AREAS TO BE COMPUTED ON BASIS OF LBS. PER SQ. FT. SOIL RESTRAINT BEARING. (1,500 MIN) SEE NOTE 5
* TO BE COMPLETED BY ENGINEER.

NOTES:

1. THRUST BLOCK BEARING AREAS SHALL BE POURED AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE ALL LOOSE MATERIAL AND EXTEND TO UNDISTURBED MATERIAL.
2. EXTEND THRUST BLOCK FULL LENGTH OF FITTINGS. JOINTS SHALL NOT BE COVERED BY THRUST BLOCKS. FITTINGS SHALL BE PROTECTED BY POLYETHYLENE FILM (8 MIL.) PRIOR TO PLACING CONCRETE THRUST BLOCK.
3. ROUGH BLOCKING FORMS SHALL BE USED ALONG SIDES OF THRUST BLOCKS, AS REQUIRED.
4. THRUST BLOCKS SHALL BE USED IN COMBINATION, AS REQUIRED, TO SUIT THE SPECIFIC FITTING ARRANGEMENT.
5. ALTERNATE DESIGNED RESTRAINING SYSTEMS SHALL BE PROVIDED WHERE STANDARD THRUST BLOCKING IS NOT SUITABLE AND/OR SOIL RESISTANCE BEARING IS LESS THAN 1500 PSF.
6. ALL WOOD BLOCKING SHALL BE PRESSURE TREATED WITH PRESERVATIVE.
7. RESTRAINT: ALL FITTINGS AND PIPE JOINTS 8" OR SMALLER MAY BE RESTRAINED USING THRUST BLOCKS. ALL OTHERS MUST BE RESTRAINED AS FOLLOWS:

JOINT	RESTRAINT
PUSH-ON PVC	EBBA IRON SERIES 2800 HARNESS
PUSH-ON DIP	TR-FLEX BY U.S. PIPE OR FLEX RING BY AMERICAN
FITTINGS WITH DIP	EBBA IRON SERIES 1100 MEGALUG
FITTINGS WITH PVC	EBBA IRON SERIES 2000 MEGALUG

8. SOIL TYPE: GOOD SAND
9. LAYING CONDITIONS: TYPE 2, STANDARD ANSI/AWWA C150/A21.50
10. HYDROSTATIC TEST PRESSURE: 150 PSI
11. DEPTH OF COVER: 2.5 FT.
12. LENGTHS LISTED HERE ARE BASED ON CLASS 50 D.I.P.

CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

THRUST BLOCK DETAIL

Date	Revisions	Appr. by	Date: Nov 1999	Scale: N.T.S.	Dwg: F107	Fig: 107

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S). *

	PIPE SIZE							
	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND									
45° BEND									
22-1/2° BEND									
11-1/4° BEND									
PLUG OR BRANCH OF TEE									

* SEE NOTE 7.

NOTES:

1. FITTINGS SHALL BE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN SHOWN IN THE TABLE.
3. WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
4. IN LINE VALVES AND THROUGH RUN OF TEES OUTSIDE LIMITS OF RESTRAINED JOINTS FROM OTHER FITTINGS NEED NOT BE RESTRAINED UNLESS OTHERWISE INDICATED.
5. LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AS PUBLISHED BY DIPRA, WITH THE FOLLOWING ASSUMPTIONS:

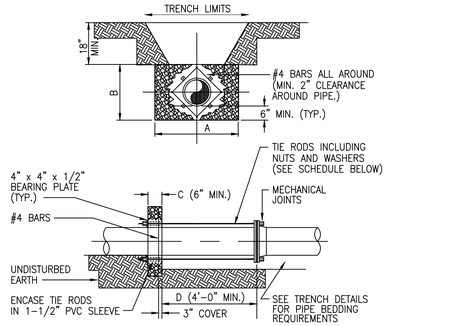
   WORKING PRESSURE: _____ P.S.I.*
   SOIL DESIGNATION: _____ *
   LAYING CONDITIONS: _____ *

6. FOR PIPE ENCASED IN POLYETHYLENE, USE VALUES GIVEN IN PARENTHESES OR INCREASE THE GIVEN VALUE BY A FACTOR OF 1.5.
7. TO BE COMPLETED BY THE DESIGN ENGINEER.

CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

RESTRAINED PIPE DETAIL

Date	Revisions	Appr. by	Date: Nov 1999	Scale: N.T.S.	Dwg: F108	Fig: 108



SCHEDULE OF DIMENSIONS AND MATERIALS *

PIPE SIZE (INCHES)	DIMENSIONS				TIE RODS REQ'D	
	A	B	C	D	DIA.	NO.

NOTE: THRUST BLOCK AREAS TO BE COMPUTED ON BASIS OF _____ LBS. PER SQ. FT. SOIL RESTRAINT BEARING. (1,500 MIN) SEE NOTE 5
* TO BE COMPLETED BY ENGINEER.

NOTES:

1. ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
2. MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 2500 PSI.
3. BEDDING, BACKFILL, AND COMPACTION SHALL BE AS SPECIFIED ELSEWHERE IN THE STANDARD DRAWINGS.
4. ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILL.
5. NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL AND THE THRUST COLLAR.
6. DESIGN PRESSURE:_____ P.S.I.*

CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

WATER MAIN
THRUST COLLAR DETAIL

Date	Revisions	Appr. by	Date: Nov 1999	Scale: N.T.S.	Dwg: F109	Fig: 109

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of
Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE

WATER AND SEWER DETAILS

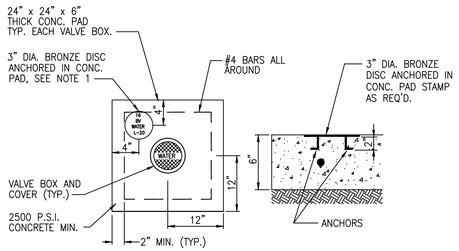
SHEET NUMBER

CU-501

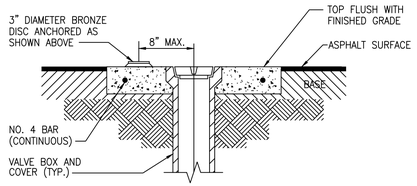
SHEET 18 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cadd\09675.00-CU-SXX.dwg Layout Name: CU-501 Plotted by: MGrimbeck Plotted on: Aug 24, 2017 - 2:05pm



UNIMPROVED CONDITION



ALTERNATIVE FOR IMPROVED CONDTITION

NOTES:

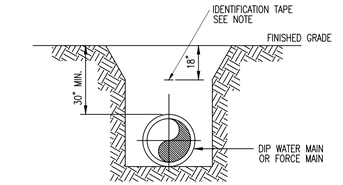
1. BRONZE DISC TO BE SUPPLIED BY CITY.
2. AMERICAN FLOW CONTROL TRENCH ADAPTER VALVE BOX AND EXTENSION IS PREFERRED.

Date	Revisions	Appr. by

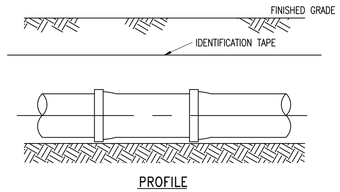
CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

VALVE COLLAR DETAIL

Date: Nov. 1999 | Scale: N.T.S. | Dwg: F111 | Fig: 111



SECTION



PROFILE

NOTE:

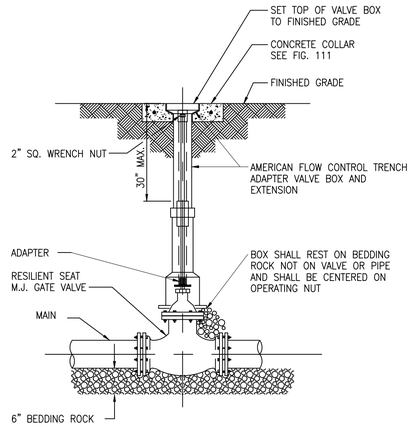
DETECTABLE IDENTIFICATION TAPE SHALL BE INSTALLED DIRECTLY OVER CENTERLINE OF THE PIPE AT 18-INCHES BELOW FINISHED GRADE.

Date	Revisions	Appr. by

CITY OF COCONUT CREEK
UTILITIES DEPARTMENT

LOCATING TAPE DETAIL

Date: Nov. 1999 | Scale: N.T.S. | Dwg: F112 | Fig: 112



NOTES:

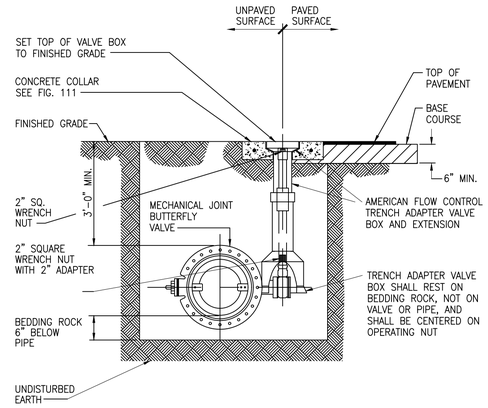
WHEN VALVE IS NOT LOCATED IN PAVEMENT, PLACE A WHITE PAVEMENT REFLECTOR MARKER IN THE DRIVE LANE, ADJACENT TO THE VALVE.

Date	Revisions	Appr. by

CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

GATE VALVE AND BOX DETAIL

Date: Nov. 1999 | Scale: N.T.S. | Dwg: F115 | Fig: 115



NOTES:

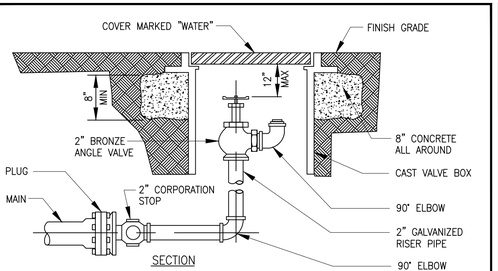
WHEN WATER VALVE IS NOT LOCATED IN PAVEMENT, PLACE A WHITE PAVEMENT REFLECTOR MARKER IN THE DRIVE LANE, ADJACENT TO THE VALVE.

Date	Revisions	Appr. by

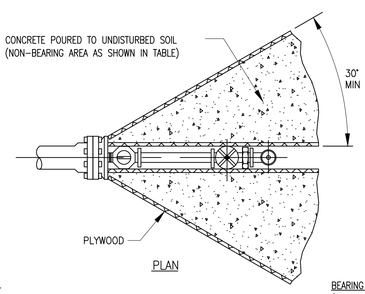
CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

BUTTERFLY VALVE AND BOX DETAIL

Date: Nov 1999 | Scale: N.T.S. | Dwg: F116 | Fig: 116



SECTION



PLAN

BEARING AREAS FOR BLOW OFF THRUST BLOCKS	
PLUG SIZE (INCHES)	BEARING AREA IN SQ. FT.
4	1.0
6	2.1
8	3.8
10	5.9
12	8.5
14	11.5
16	15.0
18	19.0
20	23.5
24	34.0

NOTES:

1. PIPE JOINT COMPOUND SHALL BE APPLIED TO MALE THREADS ONLY.
2. COAT ALL EXPOSED THREADS WITH BITUMASTIC BEFORE BACKFILLING.
3. 2" TOP IN BOTTOM OF PLUG.
4. PLYWOOD AND CONCRETE TO HAVE A HEIGHT EQUAL TO THE DIAMETER OF THE PIPE.

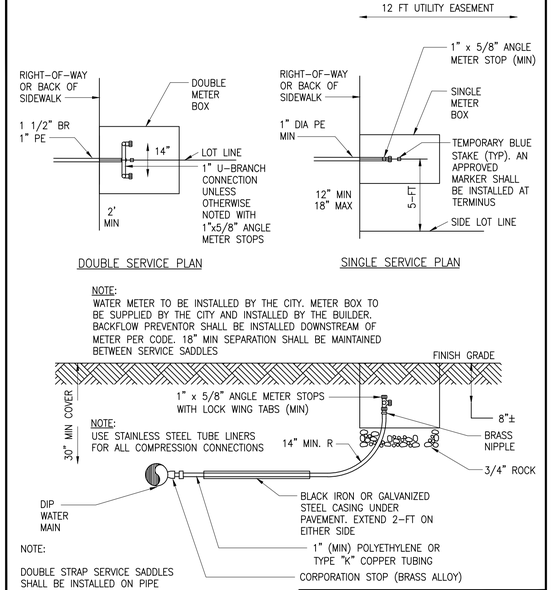
BEARING AREA = (TEST PRESSURE/150) x (2000/SOIL BEARING STRESS) x (TABLE VALUE)

Date	Revisions	Appr. by

CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

BLOW OFF VALVE DETAIL

Date: Nov. 1999 | Scale: N.T.S. | Dwg: F117 | Fig: 117



DOUBLE SERVICE PLAN

SINGLE SERVICE PLAN

NOTE:

WATER METER TO BE INSTALLED BY THE CITY. METER BOX TO BE SUPPLIED BY THE CITY AND INSTALLED BY THE BUILDER. BACKFLOW PREVENTOR SHALL BE INSTALLED DOWNSTREAM OF METER PER CODE. 18" MIN SEPARATION SHALL BE MAINTAINED BETWEEN SERVICE SADDLES

NOTE:

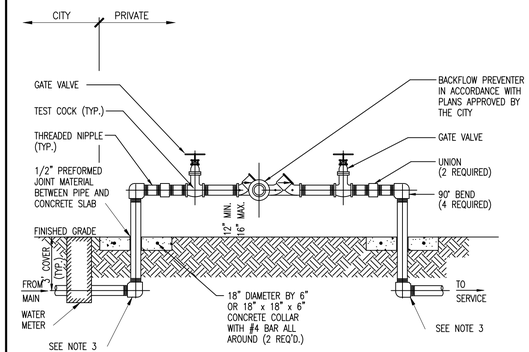
DOUBLE STRAP SERVICE SADDLES SHALL BE INSTALLED ON PIPE OTHER THAN DIP

Date	Revisions	Appr. by

CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

WATER SERVICE CONNECTION DETAILS

Date: Nov. 1999 | Scale: N.T.S. | Dwg: F119 | Fig: 119



NOTES:

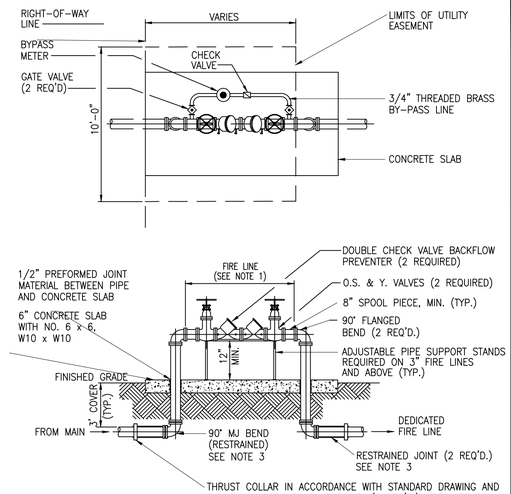
1. ALL PIPE AND FITTINGS 2" AND SMALLER SHALL BE THREADED BRASS, AS SHOWN. ALL 3" PIPE TO BE GALVANIZED STEEL.
2. ALL PIPE FITTINGS LARGER THAN 4" SHALL BE CEMENT-LINED DUCTILE IRON WITH FLANGED FITTINGS FOR ABOVEGROUND USE. MECHANICAL JOINT FITTINGS SHALL BE USED UNDERGROUND WITH RESTRAINED JOINTS AND THRUST COLLARS.
3. MEGALUGS, OR EQUAL, CAN BE USED IN PLACE OF RESTRAINED JOINTS ON ALL UNDERGROUND DUCTILE IRON PIPING (4" AND LARGER).
4. PAINT ALL ABOVEGROUND DUCTILE PIPING, FITTINGS AND VALVES.

Date	Revisions	Appr. by

CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

REDUCED PRESSURE BACKFLOW PREVENTER

Date: Nov. 1999 | Scale: N.T.S. | Dwg: F120 | Fig: 120



NOTES:

1. ALL PIPE AND FITTINGS 2" AND SMALLER SHALL BE THREADED BRASS.
2. ALL PIPE FITTINGS 4" DIA. AND LARGER SHALL BE CEMENT-LINED DUCTILE IRON WITH FLANGED FITTINGS FOR ABOVEGROUND USE. MECHANICAL JOINT FITTINGS SHALL BE USED UNDERGROUND.
3. MEGALUGS, OR EQUAL, CAN BE USED IN PLACE OF RESTRAINED JOINTS ON ALL UNDERGROUND PIPING.
4. PAINT ALL ABOVEGROUND DUCTILE PIPING, FITTINGS AND VALVES.

Date	Revisions	Appr. by

CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

FIRELINE DOUBLE DETECTOR CHECK VALVE ASSEMBLY

Date: Nov. 1999 | Scale: N.T.S. | Dwg: F121 | Fig: 121

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE

WATER AND SEWER DETAILS

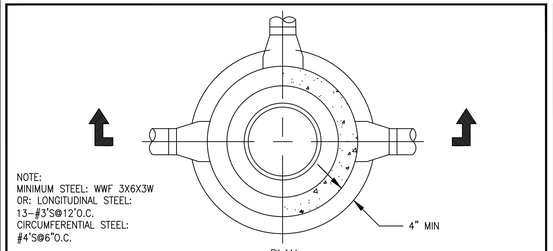
SHEET NUMBER

CU-502

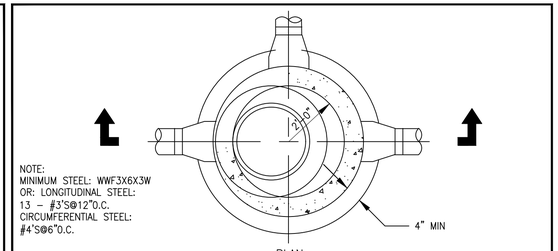
SHEET 19 of 24

PROJECT NO. 09675.00

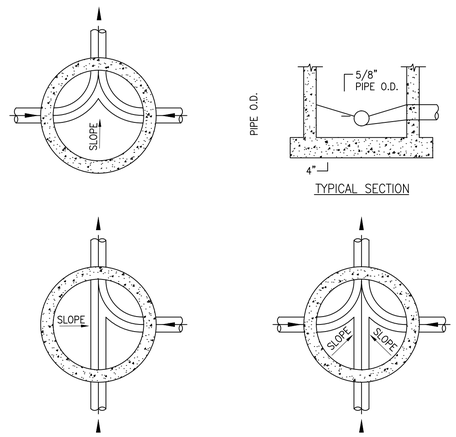
Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cadd\09675.00-CU-SXX.dwg Layout Name: CU-502 Plotted by: MGrimbank Plotted on: Aug 24, 2017 - 2:05pm



CITY OF COCONUT CREEK UTILITIES AND ENGINEERING DEPARTMENT						
CONCENTRIC PRECAST MANHOLE DETAIL (6'-0" AND UNDER)						
Date	Revisions	Appr. by	Date: Nov. 1999	Scale: N.T.S.	Dwg: F200	Fig: 200



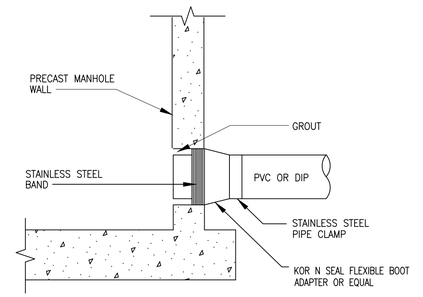
CITY OF COCONUT CREEK UTILITIES AND ENGINEERING DEPARTMENT						
ECCENTRIC PRECAST MANHOLE DETAIL (6'-0" DEPTH AND GREATER)						
Date	Revisions	Appr. by	Date: Nov. 1999	Scale: N.T.S.	Dwg: F200A	Fig: 200A



NOTES:

1. INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS.
2. SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS PROVIDING FOR SMOOTH FLOWS.
3. CHANNELS TO BE FORMED IN ALL MANHOLES TO ACCEPT T.V. CAMERA.
4. WHEN DIRECTIONAL CHANNELS EXCEEDING 45-DEGREES OCCUR, AN EXTRA FLOW LINE ELEVATION DROP OF 0.05-FT ACROSS THE MANHOLE SHALL BE PROVIDED.

CITY OF COCONUT CREEK UTILITIES AND ENGINEERING DEPARTMENT						
MANHOLE FLOW CHANNEL DETAIL						
Date	Revisions	Appr. by	Date: Dec. 1999	Scale: N.T.S.	Dwg: F200B	Fig: 200B

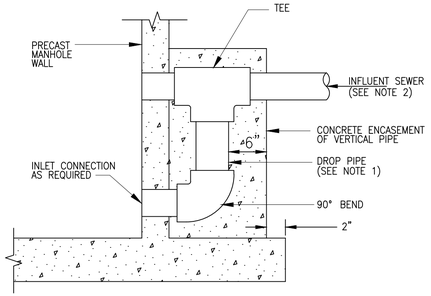


STANDARD PRECAST MANHOLE PIPE CONNECTION

NOTES:

1. THE CITY MAY APPROVE ALTERNATE WATER TIGHT CONNECTION DETAILS FOR CONNECTION OF 24" DIAMETER PIPES AND LARGER.
2. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT PIPES WHICH HAVE AN INVERT 2' OR MORE ABOVE THE MANHOLE BOTTOM.

CITY OF COCONUT CREEK UTILITIES AND ENGINEERING DEPARTMENT						
MANHOLE CONNECTION DETAIL (WITH BUILT-IN RUBBER BOOT)						
Date	Revisions	Appr. by	Date: Nov. 1999	Scale: N.T.S.	Dwg: F201	Fig: 201

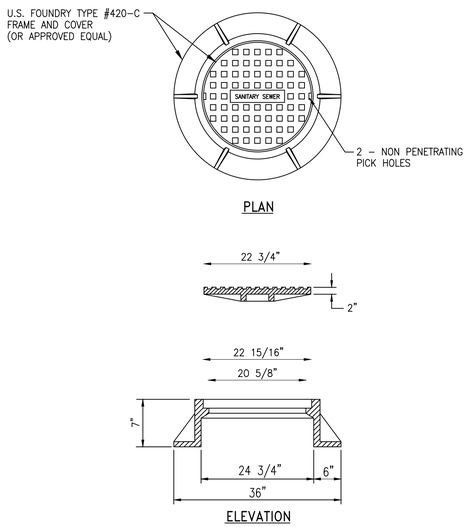


STANDARD DROP DETAIL

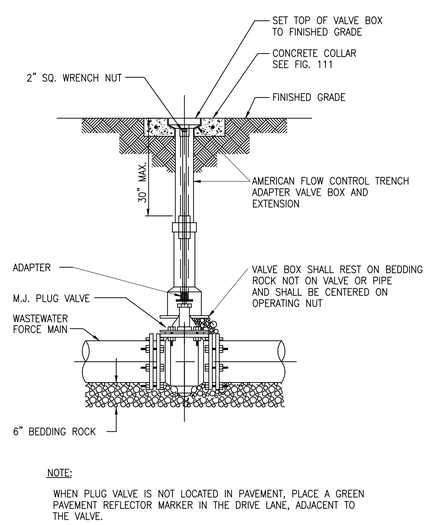
NOTES:

1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT WHICH HAVE AN INVERT 2' OR MORE ABOVE THE MANHOLE INVERT.

CITY OF COCONUT CREEK UTILITIES AND ENGINEERING DEPARTMENT						
DROP MANHOLE DETAIL						
Date	Revisions	Appr. by	Date: Dec. 1999	Scale: N.T.S.	Dwg: F202	Fig: 202



CITY OF COCONUT CREEK UTILITIES AND ENGINEERING DEPARTMENT						
SANITARY MANHOLE COVER						
Date	Revisions	Appr. by	Date: Nov. 1999	Scale: N.T.S.	Dwg: F203	Fig: 203



NOTE:

WHEN PLUG VALVE IS NOT LOCATED IN PAVEMENT, PLACE A GREEN PAVEMENT REFLECTOR MARKER IN THE DRIVE LANE, ADJACENT TO THE VALVE.

CITY OF COCONUT CREEK UTILITIES AND ENGINEERING DEPARTMENT						
PLUG VALVE AND BOX DETAIL						
Date	Revisions	Appr. by	Date: Nov. 1999	Scale: N.T.S.	Dwg: F204	Fig: 204

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE

WATER AND SEWER DETAILS

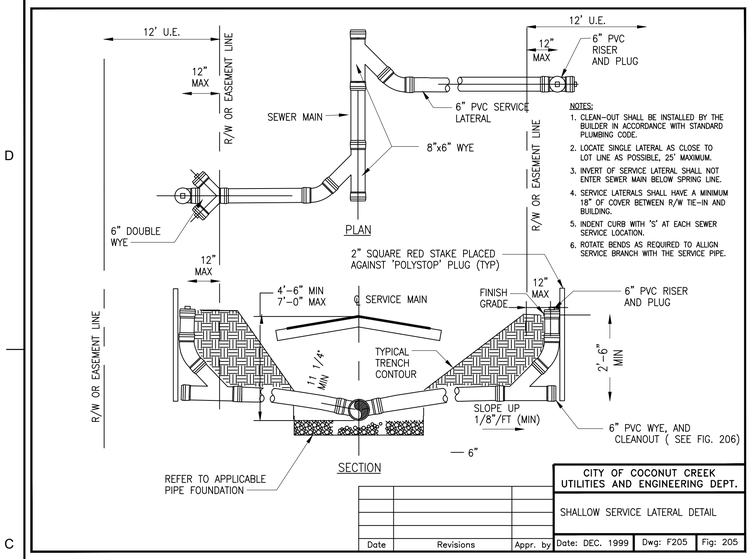
SHEET NUMBER

CU-503

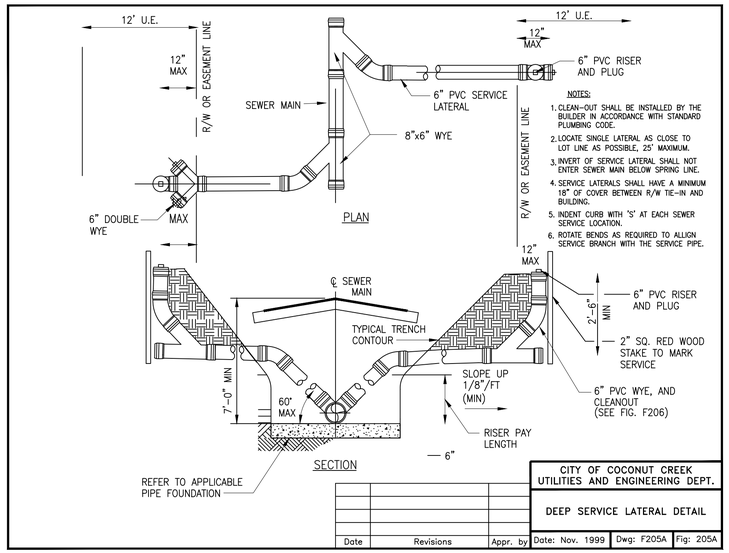
SHEET 20 of 24

PROJECT NO. 09675.00

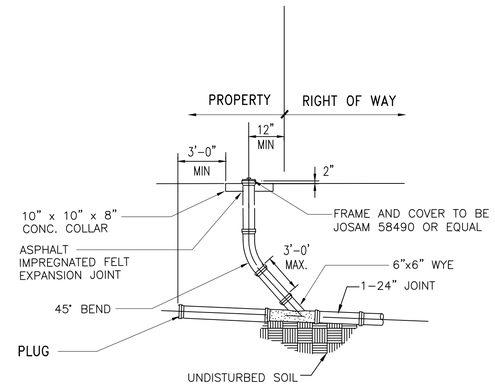
Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cadd\09675.00-CU-SXX.dwg Layout Name: CU-503 Plotted by: MGrimbank Plotted on: Aug 24, 2017 - 2:05pm



Date	Revisions	Appr. by	CITY OF COCONUT CREEK UTILITIES AND ENGINEERING DEPT.		
			SHALLOW SERVICE LATERAL DETAIL		
			Date: DEC. 1999	Dwg: F205	Fig: 205



Date	Revisions	Appr. by	CITY OF COCONUT CREEK UTILITIES AND ENGINEERING DEPT.		
			DEEP SERVICE LATERAL DETAIL		
			Date: Nov. 1999	Dwg: F205A	Fig: 205A



Date	Revisions	Appr. by	CITY OF COCONUT CREEK UTILITIES AND ENGINEERING DEPARTMENT			
			SANITARY SERVICE CLEANOUT DETAIL			
			Date: Dec. 1999	Scale: N.T.S.	Dwg: F206	Fig: 206

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER
HILLSBORO
STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

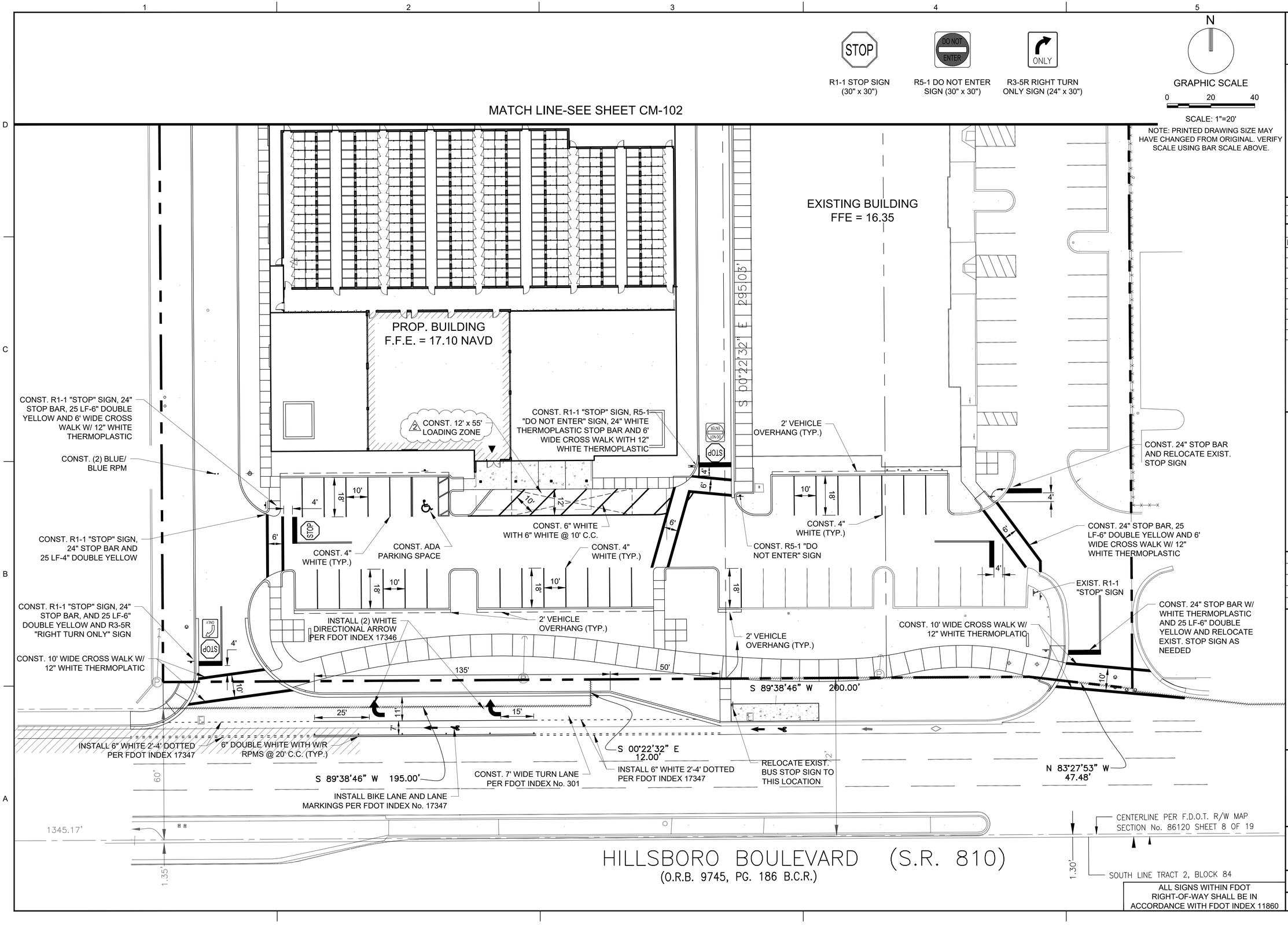
SHEET TITLE
WATER AND SEWER DETAILS

SHEET NUMBER
CU-504

SHEET 21 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cad\09675.00-CU-SXX.dwg Layout Name: CU-504 Plotted by: MGrinbank Plotted on: Aug 24, 2017 - 2:05pm



KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

SHEET TITLE
PAVEMENT MARKING AND SIGNAGE PLAN

SHEET NUMBER
CM-101

SHEET 22 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cad\09675.00-CM-XXX.dwg Layout Name: CM-101 Plotted on: Aug 24, 2017 - 2:26pm Plotted by: MGimbark

N.W. 71ST STREET
(P.B. 2, PG. 53, P.B.C.R.)

N

GRAPHIC SCALE
0 — 20 — 40
SCALE: 1"=20'

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

25'
30'

N 89°37'09" E 442.13'

330.00'

112.13'

SOUTH RIGHT OF WAY LINE

CONST. 6' WIDECROSS WALK W/ 12" WHITE THERMOPLATIC

CONST. 6' WIDECROSS WALK W/ 12" WHITE THERMOPLATIC

CONST. R1-1 "STOP" SIGN, 24" STOP BAR AND 25 LF-4" DOUBLE YELLOW

6'

6'

STOP

CONST. 4" WHITE (TYP.)

10'

18'

2' VEHICLE OVERHANG (TYP.)

CONST. 4" WHITE (TYP.)

CONST. 4" WHITE (TYP.)

2' VEHICLE OVERHANG (TYP.)

20'

10'

18'

10'

286.54'

CONST. 4" WHITE (TYP.)

PROP. BUILDING
F.F.E. = 17.10 NAVD

42'

12.50'

CONST. ADA PARKING SPACE

CONST. 4" WHITE (TYP.)

20'

10'

EXISTING BUILDING
FFE = 16.35

(REFERENCE BEARING)
N 00°22'32" W 593.46'

18'

10'

N 89°37'09" E 256.86'

S 00°22'32" E 581.61'

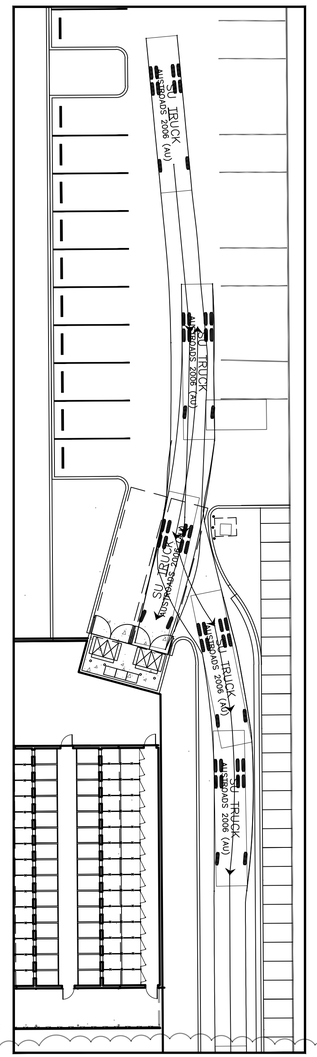
S 0°22'32" E 587.35'

CONST. 4" WHITE (TYP.)

R1-1 STOP SIGN (30" x 30")

R3-5R RIGHT TURN ONLY SIGN (24" x 30")

R5-1 DO NOT ENTER SIGN (30" x 30")



MATCH LINE-SEE SHEET CM-101

2 REFUSE TRUCK ACCESS EXHIBIT

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

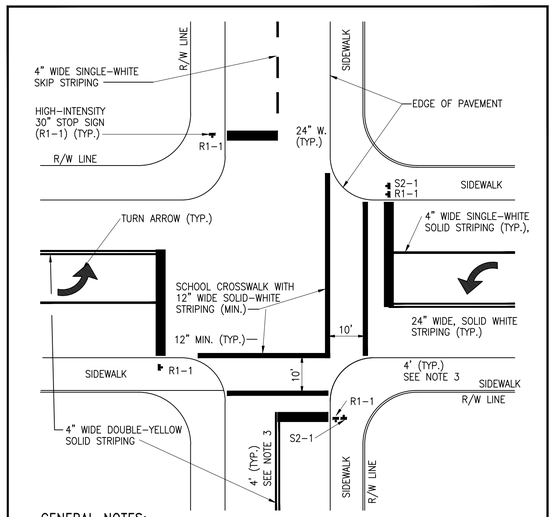
SHEET TITLE
PAVEMENT MARKING AND SIGNAGE PLAN

SHEET NUMBER
CM-102

SHEET 23 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cadd\09675.00-CM-1XX.dwg Layout Name: CM-102 Plotted by: MGrimbank Plotted on: Aug 24, 2017 - 2:56pm



GENERAL NOTES:

1. ALL PAVEMENT MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS," UNLESS SPECIFIED OTHERWISE.
2. SEE FIGURE 307 FOR ADDITIONAL SIGNAGE, MARKING AND CROSSWALK DETAILS.
3. 4-FEET DISTANCE ACROSS TWO-LANE RESIDENTIAL STREETS; 40-FEET DISTANCE FOR FOUR TO SIX-LANE HIGHWAY.
4. DOUBLE-SIGNING SHALL BE INSTALLED BY WORK ORDER REQUEST.

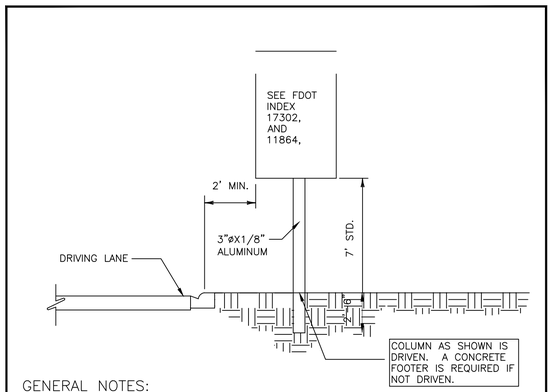
SOURCE: BROWARD COUNTY PUBLIC WORKS ENGINEERING DIVISION MINIMUM STANDARDS, APRIL 1995

Date	Revisions	Appr. by

CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

PAVEMENT SIGNING AND MARKING DETAILS

Date: Dec. 1999	Scale: N.T.S.	Dwg: F306	Fig: 306



GENERAL NOTES:

1. The typical section shown here serves as a guide for locating the traffic signs required under various roadside conditions. For size and details of sign construction and footing, refer to the appropriate FDOTstandard index drawing for roadside sign.
2. It shall be the CONTRACTORS respon - sibility to verify the length of sign supports in the field prior to fabrication.
3. Roadside signs shall be installed at an angle of 1 to 4 degrees away from the traffic flow(see illustration). Shoulder mounted signs shall be rotated counterclockwise and median mounted signs rotated clockwise. Signs on curves shall be mounted as noted above from the perpendicular to the motorists line of sight.



4. The setback for stop and yield signs may be reduced to 3' minimum from the driving lane if required for visibility inbusiness or residential sections with no curb and speeds of 30 MPH or less.
5. The mounting heights are measured from the bottom of the sign panel to a horizontal line extended from the edge of the driving lane. If the standard heights cannot be met, the minimum heights are as follows:

Expressway & Freeway Systems	7'
Other Roadway Systems Rural	5'
Urban (including residential with parking and/or pedestrian activity)	7'

If a secondary sign is mounted below the major sign,the major sign shall be at least 8' and the secondary sign at least 5' for expressway & freeway systems and for other systems the height to the secondary sign shall be at least 4' for rural and 6' for urban sections.

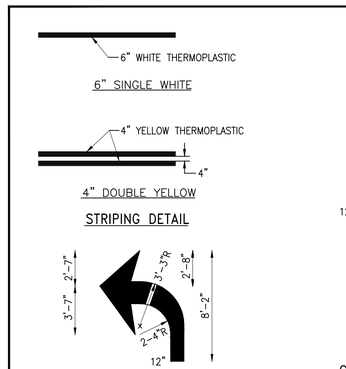
6. Sign supports should never be placed in ditches where erosion might affect the proper operation of the breakaway feature. It is also possible that a vehicle entering the ditch might be guided into the support.

Date	Revisions	Appr. by

CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

TYPICAL ROADSIDE SIGN PLACEMENT DETAIL

Date: Feb. 2000	Scale: N.T.S.	Dwg: F313A	Fig: 313A



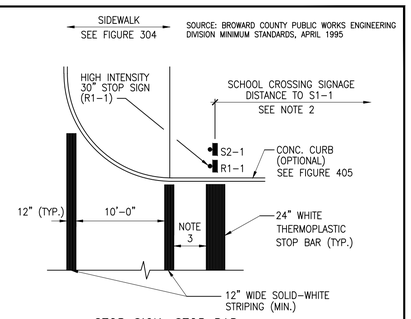
Date	Revisions	Appr. by

FIGURE 307

CITY OF COCONUT CREEK
UTILITIES AND ENGINEERING DEPARTMENT

Date: Dec. 1999	Scale: N.T.S.	Dwg: F307

PAVEMENT MARKING DETAILS



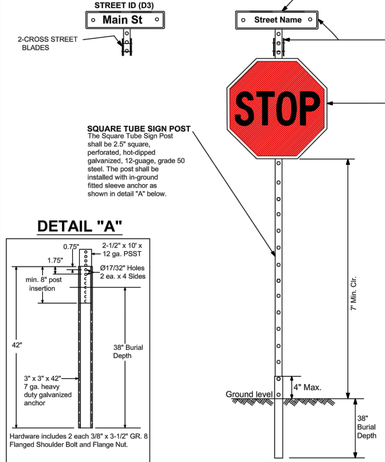
STOP SIGN, STOP BAR, AND SCHOOL CROSSING DETAIL

GENERAL NOTES:

1. ALL PAVEMENT MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM CONTROL DEVICES FOR STREET AND HIGHWAYS," UNLESS SPECIFIED OTHERWISE.
2. SCHOOL CROSSING SIGNAGE S1-1 TO BE PLACED AT THE FOLLOWING DISTANCE FROM S2-1, ON APROACH TO THE CROSSWALK: 25-35 MPH = 200'; 35-45 MPH = 350'; 45-55 MPH = 500'.
3. 4-FEET DISTANCE ACROSS TWO-LANE RESIDENTIAL STREETS; 40-FEET DISTANCE FOR FOUR TO SIX-LANE HIGHWAYS.

FOR SIGN ASSEMBLIES WITH MAXIMUM 8.75 SQUARE FOOT PANEL AREA

Typical Details



STREET ID MATERIALS:

BORDER AND LETTERS
SILVER DIAMOND GRADE
TYPE XI SHEETING
LETTERING OF STREET NAME SIGNS SHALL BE COMPOSED OF A COMBINATION OF LOWERCASE LETTERS WITH INITIAL UPPERCASE LETTERS

GREEN BACKGROUND
GREEN TRANSLUSCENT INK SILK-SCREENED CLEAR-COATED OR ELECTRO-CUT (EC) FILM 1177 GREEN OR EQUIVALENT

SIZE
SEE MUTCD TABLE 2D-2 (PG 183) FOR MINIMUM LETTER HEIGHTS LENGTH VARIES BY STREET NAME

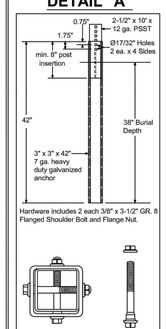
HARDWARE
#18 THREADED STEEL ZINC BOLTS, GRADE 5, 5/16" X 3/4", W/NYLON WASHERS.

REGULATORY SIGN
R1-1 DEPICTED. THE TOP OF THE STOP SIGN SHALL BE MOUNTED FLUSH TO THE TOP OF THE POST WHEN NO STREET ID IS PRESENT. ANY SIGN INSTALLED BACK TO BACK WITH THE STOP SIGN SHALL BE SMALLER THAN THE STOP SIGN.

STOP, DO NOT ENTER OR YIELD
WHITE DIAMOND-GRADE, TYPE XI SHEETING PRESSURE-SENSITIVE RED TRANSLUCENT INK SILK-SCREENED CLEAR-COATED OR EC FILM 1172 RED OR EQUIVALENT OVER DIAMOND GRADE.

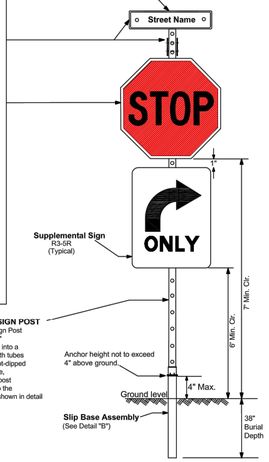
NOTE: ALL TYPE XI SHEETING UTILIZED MUST BE ON THE FDOT APL LIST.

DETAIL "A"



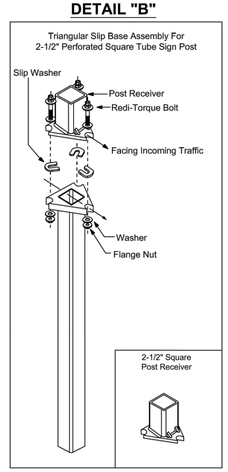
FOR SIGN ASSEMBLIES WITH GREATER THAN 8.75 SQUARE FOOT PANEL AREA WITH SUPPLEMENTAL SIGN

Typical Details



DETAIL "B"

Triangular Slip Base Assembly For 2-1/2" Perforated Square Tube Sign Post



Notes:
1. Dimensions and certain details for the parts used to assemble the slip base connections are intentionally not shown. Slip base connections are patented manufactured products that are in compliance with NCHRP 350 crash test criteria. The base connection details are only shown on this plan to illustrate how the parts are assembled. The complete assembly must be designed to withstand 150 mph Base Wind Speed per 2013 AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 6th edition and interims.
2. For standard ground sign installation, see detail entitled " Ground Sign Assembly Details".

REVISIONS	
DATE	DESCRIPTION
06-07-2016	N/A
03-21-2017	UPDATED POST SIZE

BROWARD COUNTY FLORIDA

PUBLIC WORKS DEPARTMENT
TRAFFIC ENGINEERING DIVISION

DESIGN BY: CARMELO CARATOZZOLO, P.E.	SCALE: NTS
DRAWN BY: STEPHON RAMOUTAR	
CHECKED BY: ANDREW SEBO, P.E., PTOE	

STOP SIGN AND STREET IDENTIFICATION ASSEMBLY TYPICAL DETAILS

SHEET NO. 1 OF 1

ALL ON-SITE SIGNS SHALL BE IN ACCORDANCE WITH BROWARD COUNTY "STOP SIGN AND STREET IDENTIFICATION ASSEMBLY TYPICAL DETAILS".

ALL SIGNS WITHIN FDOT RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH FDOT INDEX 11860

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	MG
DESIGNED BY:	MG
CHECKED BY:	SW

STEPHEN D. WILLIAMS, P.E.
FLORIDA REG. NO. 32090
(FOR THE FIRM)

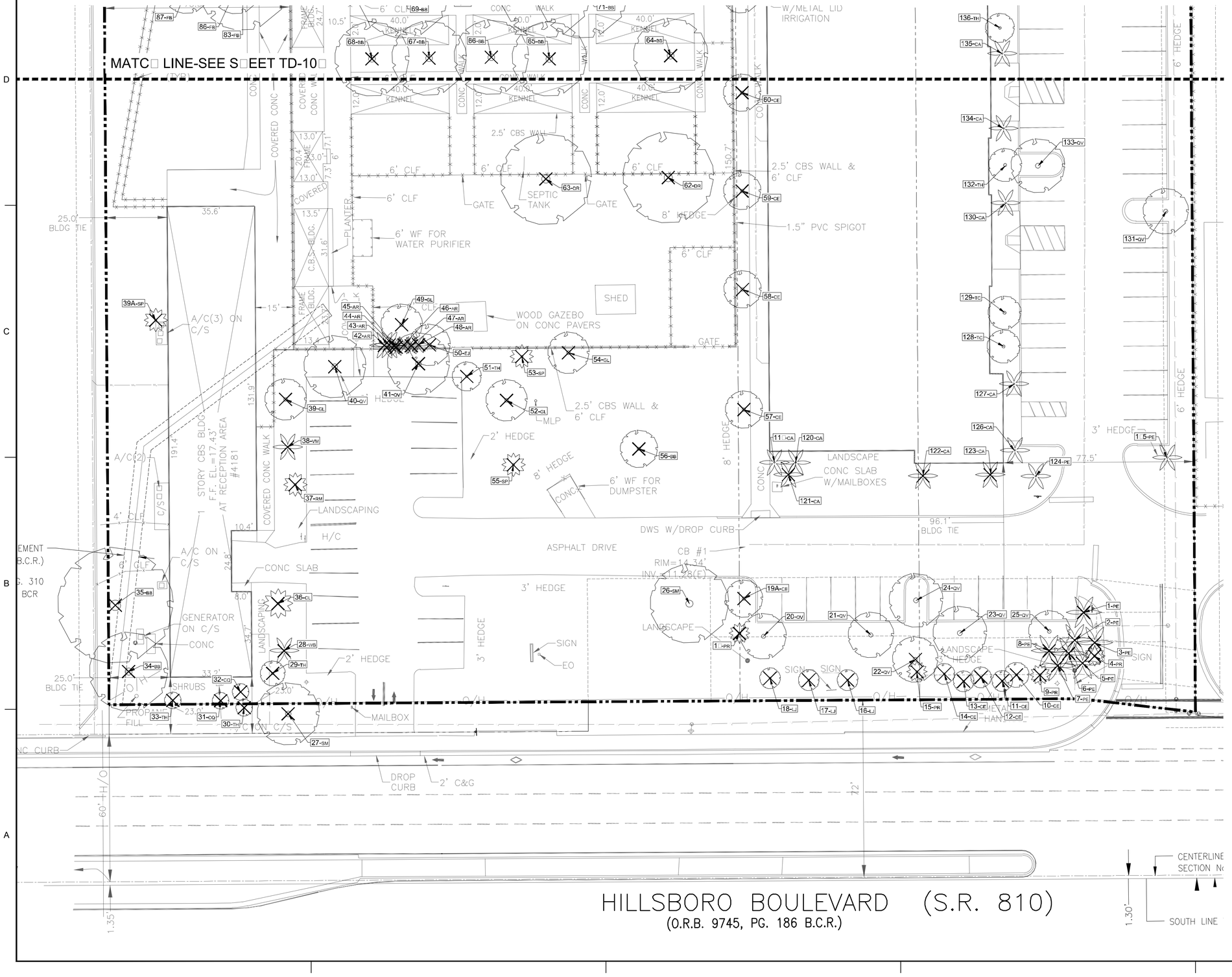
SHEET TITLE
PAVEMENT MARKING AND SIGNAGE DETAILS

SHEET NUMBER
CM-501

SHEET 24 of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Engineering\Cad\09675.00-CM-SXX.dwg Layout Name: CM-501 Plotted by: MGrzebank Plotted on: Aug 24, 2017 - 2:50pm



TREE DISPOSITION LEGEND

	Ex□□□□ Tr□□P□□□ □□ R□□ □□□ □□□□□□d □□□□□□□ □□□ □□□ Tr□□□P□□ □ □□ □□□ r□□□□□d d□r□□□ □□□□r□□□□□
△	Ex□□□□ Tr□□P□□□ □□ R□□□□□□ R□□r □□ □□□d□□□□□ □□□□ □□r □□□ □□□□□□
X	Ex□□□□ Tr□□P□□□ □□ R□□ □□□ R□□ □□□□ □□C□1 □□□□□□□□ x□□□□□ □x□Br□□ P□□□□r□
001	Ex□□□□ Tr□□P□□□ □□□ □□r R□□r □□ Tr□□d□□□□□□□□□ □d Tr□□ □□r□□□ □□□□

NOTES

1. Ex□□□□ r□□□□ □□ r□□ □□□ □□□□□□□ r□□□□d □□r □□□□:300 □□□ d□rd□□r□ □□□□□ □□□□□□□ r□□□□□□ □r□□□□□□ □□d d□□d r□□□□□□□□□ r□□□□□□□ □0□ □□ □□□□□□□. L□r□□ r□□□□ □□□□□ □□□□ □□□□ r□r□□□□□□□□□□r□d □□ □□ □□.
2. S□□□ □□□□ □□□□□ □□□□□ □□□□□r□□ □□□□□□□□r□□ □□□□□□□□□ □r □□□r□□.
3. C□□□□□□L□r□d□□□□□ Ar□□□□□□□ISA C□r□□□d Ar□r□□□□r □r□□□□□□□□ □□ □□□d d□r□□□□□□□□.
4. Tr□□ □□□□ 3□d □□□ □□□□□□□□r□ r□□□□ r□□□□□ □□□□□ □□ □□r□r□□d □r □□□□r□□□d □□□ C□r□□d Ar□r□□□.
5. A□□□□□ □r□□r□□□□□ □□r□ □□□□□ □□ □□ r□□□□□r□d C□□□□□r□□ r□□ □ □r.
6. B□□□□□r□ □□□□ □□ r□□□d□d □r □□□ r□□□□□□d r□□□□ □□d □□□□ □.
7. R□□ □□□□□□□□□□ r□□□□ r□ □□□□ □r□□□□□□□ □□ r□□□□□"r□□□ r□□ □□□□□□r□□ r□□ □□□ □□□□□□□□□□r□□□ □□□□□□□□ r□□r □□ r□□ □□□□ C□□□□ □□□ □□□□□□□□□□ r□□□□ □□□□□□□□□□ □□□□□□□□ □□ □□□□□□□□□□x□□□ □□□□□□□□ □□ □□ □□ □x□ □□.
8. A□r□□□□ □d □□□□□ □□□□□□□□ r□□□ □□□□ □□□□□□□□□ r□□□□□□d d□r□□□ □□□□□□□□□□. R□□r □□ r□□□ r□□□□□□□d □□□□T□□ □□□□□□□□ r□□□□ □□□□ □x□r□ □□□□□□□□ □□ r□□□□□□□□□d □□□□ □□□□ □□□ r□□□□□□□□□□□□□□d □r□d□.

TREE DISPOSITION PLAN

NORTH

GRAP□IC SCALE

0 □0 □0

SCALE□1"=□0□

NOTE□PRINTED DRA□ ING SI□E MA□ □AVE C□ANGED FROM ORIGINAL. VERIF□ SCALE USING BAR SCALE ABOVE.

KEITH
AN ATKINS COMPANY
consulting engineers
301 E□□□A□□□□□□ B□□□□□rd
P□□ □□□□ B□□□□□F□rd□ 330□0-□□□3
□1□0 N□ □□d A□□□□□
D□r□□F□rd□331□□
P□□□5□□7□□-3□00 F□□□5□□7□□-3500
F□rd□C□r□□□□□□ □□
A□□□r□□□□□ □ - 7□□□

BID □CONTRACT NO. □

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	0□0□□017
□	PER DRC COMMENTS	0□□□□017

PRELIMINAR□ PLAN
NOT FOR CONSTRUCTION

T□ESE PLANS ARE NOT FULL□ PERMITTED AND ARE SUB□ECT TO REVISIONS MADE DURING T□E PERMITTING PROCESS. RESPONSIBILIT□ FOR T□E USE OF T□ESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES □AVING □URISDICTION OVER T□E PRO□ECT □ILL FALL SOLEL□ UPON T□E USER.

LEDER □ILLSBORO STORAGE

SCALE□	AS NOTED
DATE ISSUED□	MARC□ □□□017
DRA□ N B□□	DG
DESIGNED B□□	MP
C□EC□ED B□□	MP

MIC□AEL □ P□ILLIPS, RLA
FLORIDA REG. NO. LA0001500
FOR T□E FIRM□

SHEET TITLE

TREE DISPOSITION PLAN

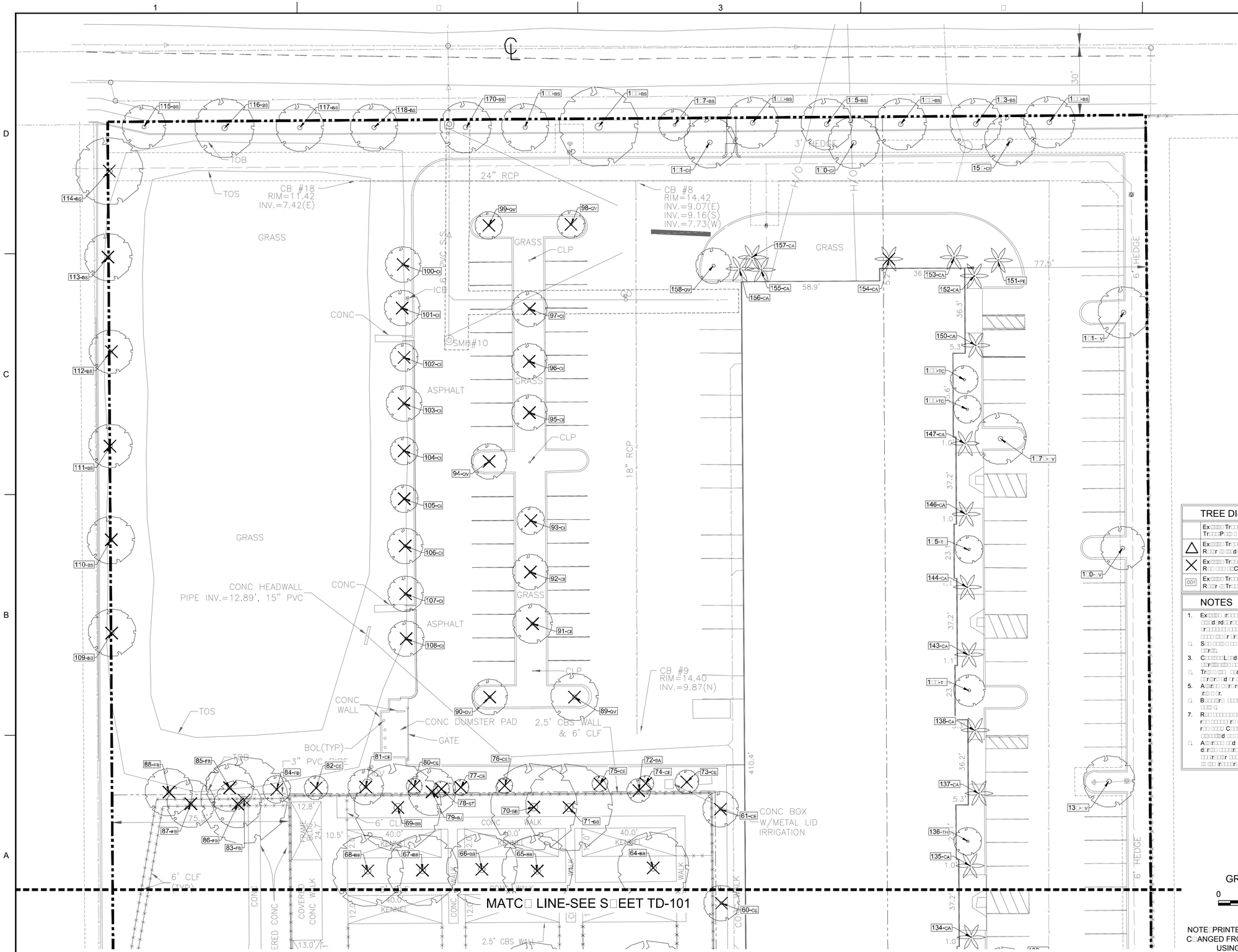
SHEET NUMBER

TD-101

S□EET □□ □□

PRO□ECT NO. 0□□75.00

Dr□□□□□□□□ N□D□ 0□75.00- P□L□d□-□Gr□L□d□ r□□□□□ Ar□□□□□r□C□dd□d□ 0□75.00- TD-101.d□□ L□□□□□N□□□TD-101 Pl□□d□□: DG□□r□□ P□□□d□□: A□□□□□□ 017-110□□



TREE DISPOSITION LEGEND

	Existing Tree to Remain. Root Protection Zone and Tree Protection Fencing required per Tree Protection Detail
△	Existing Tree to Remain. Root Protection Zone required
✕	Existing Tree to be removed. Stump to be ground 1 inch below grade. Backfill with topsoil.
001	Existing Tree to be Removed. Root Protection Zone required for Tree to remain.

NOTES

1. Existing trees on the site and within 300 feet of the site boundaries shall be surveyed by a Florida registered land surveyor. The survey shall show the location, size, species, and condition of all trees. Trees to be removed shall be clearly identified.
2. Site clearing shall not commence until tree protection barriers are installed and approved by the city.
3. Construction activities, including storage of materials, shall not occur within the drip line of any tree to be preserved.
4. Trees damaged during construction shall be treated by a certified arborist within 24 hours of damage.
5. Any tree removed without permission shall be replaced with trees of equivalent caliper inches.
6. Replacement trees shall be planted within the site boundaries.
7. Removal of trees in violation of this ordinance shall result in a fine of $500 per tree, plus the cost of replacement trees.

NORTH

GRAPHIC SCALE

0 10 20

SCALE: 1"=20'

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

KEITH
an Atkins company
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6759
(954) 788-3400
Fax (954) 788-3500
Florida Certificate of Authorization No. 00001670

BID / CONTRACT NO.

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	07/2017
2	PER DRC COMMENTS	09/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION

THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT SHALL FALL SOLELY UPON THE USER.

LEDER
HILLSBORO
STORAGE

SCALE	AS NOTED
DATE ISSUED	MARCH 2017
DRAWN BY	DG
DESIGNED BY	MP
CHECKED BY	MP

MICHAEL P. PHILLIPS, RLA
FLORIDA REG. NO. LA0001570
FOR THE FIRM

SHEET TITLE

TREE DISPOSITION PLAN

SHEET NUMBER

TD-102

SHEET

PROJECT NO. 07075.00

TREE DISPOSITION TABLE

PROJECT #: 09675.00 **PROJECT NAME:** Pet Lodge

TREE #	COMMON NAME	SCIENTIFIC NAME	DBH IN.	HT. FT.	CNPY. FT.	TREE % CONDITION	TREE DISPOSITION	CANOPY LOSS Sq Ft	COMMENTS
1	Alexander palm	*"Ptychosperma elegans"*		32'c.t.	10	65%	REMOVE	79	Double
2	Alexander palm	*"Ptychosperma elegans"*		32'c.t.	10	65%	REMOVE	79	
3	Alexander palm	*"Ptychosperma elegans"*		32'c.t.	10	65%	REMOVE	79	Double
4	Pygmy date palm	*"Phoenix roebelenii"*		3'c.t.	6	40%	REMOVE		Shrub
5	Alexander palm	*"Ptychosperma elegans"*		32'c.t.	10	65%	REMOVE	79	Double
6	Alexander palm	*"Ptychosperma elegans"*		32'c.t.	10	65%	REMOVE	79	Double
7	Alexander palm	*"Ptychosperma elegans"*		32'c.t.	10	65%	REMOVE	79	Double
8	Alexander palm	*"Ptychosperma elegans"*		32'c.t.	10	65%	REMOVE	79	Double
9	Pygmy date palm	*"Phoenix roebelenii"*		3'c.t.	6	40%	REMOVE		Shrub, Triple
10	Buttonwood	*"Conocarpus erectus"*	6	20	8	45%	REMOVE	50	
11	Buttonwood	*"Conocarpus erectus"*	6	15	10	50%	REMOVE	79	Cluster, Overgrown hedge
12	Buttonwood	*"Conocarpus erectus"*	6	15	10	50%	REMOVE	79	Cluster, Overgrown hedge
13	Buttonwood	*"Conocarpus erectus"*	6	15	10	50%	REMOVE	79	Cluster, Overgrown hedge
14	Buttonwood	*"Conocarpus erectus"*	6	15	10	50%	REMOVE	79	Cluster, Overgrown hedge
15	Pygmy date palm	*"Phoenix roebelenii"*		3'c.t.	6	60%	REMOVE		Shrub, Triple
16	Ligustrum	*"Ligustrum japonicum"*	6	14	10	65%	REMOVE	79	ML
17	Ligustrum	*"Ligustrum japonicum"*	6	14	10	65%	REMOVE	79	ML
18	Ligustrum	*"Ligustrum japonicum"*	6	14	10	65%	REMOVE	79	ML
19	Pygmy date palm	*"Phoenix roebelenii"*		3'c.t.	6	25%	REMOVE		Shrub, Triple
19a	Buttonwood	*"Conocarpus erectus"*	8	35	15	40%	REMOVE	177	BD, TC
20	Live oak	*"Quercus virginiana"*	14	30	20	75%	**REMAIN**		DL
21	Live oak	*"Quercus virginiana"*	11	25	18	65%	**REMAIN**		
22	Live oak	*"Quercus virginiana"*	11	24	18	60%	REMOVE	254	
23	Live oak	*"Quercus virginiana"*	14	30	25	65%	**REMAIN**		DL, OC
24	Live oak	*"Quercus virginiana"*	12	30	25	60%	**REMAIN**		
25	Live oak	*"Quercus virginiana"*	10	20	10	65%	**REMAIN**		
26	Mahogany	*"Swietenia mahagoni"*	25	45	50	75%	**REMAIN**		IB, ML
27	Mahogany	*"Swietenia mahagoni"*	19	35	25	50%	REMOVE	491	UP, DL, IB
28	Foxtail palm	*"Wodyetia bifurcata"*		12'c.t.	10	20%	REMOVE	79	
29	Pink Tab	*"Tabebuia heterophylla"*	16	20	10	15%	REMOVE	79	CD, ML, OHW
30	Pink Tab	*"Tabebuia heterophylla"*	5	18	5	10%	REMOVE	20	UP, OHW
31	Starburst	*"Clerodendron quadriloculare"*	4	10	5	15%	REMOVE		Shrub, Cluster
32	Starburst	*"Clerodendron quadriloculare"*	4	10	5	15%	REMOVE		Shrub, Cluster
33	Pink Tab	*"Tabebuia heterophylla"*	14	20	10	10%	REMOVE	79	CD
34	Black olive	*"Bucida buceras"*	18	50	35	70%	REMOVE	$ 2,140.00	Specimen, BD
35	Black olive	*"Bucida buceras"*	36	50	50	65%	REMOVE	$ 7,700.00	Specimen, BD
36	Areca palm	*"Chrysalidocarpus lutescens"*		18'c.t.	18	55%	REMOVE	254	Cluster
37	Bird of paradise	*"Strelitzia nicolai"*		5'c.t.	6	20%	REMOVE		Shrub, Double
38	Christmas palm	*"Veitchia merrillii"*		12'c.t.	12	75%	REMOVE	113	Triple
39	Gumbo limbo	*"Bursera simaruba"*	10	20	18	30%	REMOVE	254	CD
39a	Cabbage palm	*"Sabal palmetto"*		16'c.t.	14	65%	REMOVE	154	
40	Live oak	*"Quercus virginiana"*	20	35	30	70%	REMOVE	$ 3,530.00	Specimen, DL, IB
41	Live oak	*"Quercus virginiana"*	23	50	25	65%	REMOVE	$ 4,400.00	Specimen, TD
42	Queen palm	*"Arecastrum romanzoffianum"*		8'c.t.	10	65%	REMOVE	79	
43	Queen palm	*"Arecastrum romanzoffianum"*		8'c.t.	10	65%	REMOVE	79	
44	Queen palm	*"Arecastrum romanzoffianum"*		3'c.t.	4	40%	REMOVE		Shrub
45	Queen palm	*"Arecastrum romanzoffianum"*		3'c.t.	4	40%	REMOVE		Shrub
46	Queen palm	*"Arecastrum romanzoffianum"*		3'c.t.	4	40%	REMOVE		Shrub
47	Queen palm	*"Arecastrum romanzoffianum"*		3'c.t.	4	40%	REMOVE		Shrub
48	Queen palm	*"Arecastrum romanzoffianum"*		3'c.t.	4	40%	REMOVE		Shrub
49	Gumbo limbo	*"Bursera simaruba"*	10	20	15	10%	REMOVE	177	CD, OC
50	Loquat	*"Eriobotrya japonica"*	10	18	18	75%	REMOVE	254	
51	Pink Tab	*"Tabebuia heterophylla"*	8	20	10	55%	REMOVE	79	
52	Gumbo limbo	*"Bursera simaruba"*	16	20	18	45%	REMOVE	254	CD
53	Cabbage palm	*"Sabal palmetto"*		8'c.t.	8	70%	REMOVE	50	
54	Gumbo limbo	*"Bursera simaruba"*	12	20	18	65%	REMOVE	254	
55	Cabbage palm	*"Sabal palmetto"*		16'c.t.	8	40%	REMOVE	50	
56	Black olive	*"Bucida buceras"*	15	35	15	65%	REMOVE	177	
57	Buttonwood	*"Conocarpus erectus"*	10	25	15	25%	REMOVE	177	CD
58	Buttonwood	*"Conocarpus erectus"*	8	25	15	65%	REMOVE	177	
59	Buttonwood	*"Conocarpus erectus"*	8	25	15	65%	REMOVE	177	
60	Buttonwood	*"Conocarpus erectus"*	8	25	15	65%	REMOVE	177	
61	Buttonwood	*"Conocarpus erectus"*	6	15	15	35%	REMOVE	177	DL
62	Royal poinciana	*"Delonix regia"*	22	35	35	70%	REMOVE	$ 3,280.00	Specimen, TC
63	Royal poinciana	*"Delonix regia"*	18	35	30	65%	REMOVE	$ 2,020.00	Specimen, TC, DL
64	Black olive	*"Bucida buceras"*	20	40	35	50%	REMOVE	962	
65	Black olive	*"Bucida buceras"*	15	40	25	50%	REMOVE	491	
66	Black olive	*"Bucida buceras"*	24	50	40	50%	REMOVE	1256	Dual leader
67	Black olive	*"Bucida buceras"*	18	50	25	45%	REMOVE	491	Dual leader
68	Black olive	*"Bucida buceras"*	20	45	40	40%	REMOVE	1256	Dual leader, Trunk damage
69	Black olive	*"Bucida buceras"*	22	45	30	60%	REMOVE	$ 2,710.00	Specimen
70	Black olive	*"Bucida buceras"*	18	45	25	55%	REMOVE	491	DL, DB
71	Black olive	*"Bucida buceras"*	20	40	30	70%	REMOVE	$ 2,630.00	Specimen
72	Umbrella tree	*"Schefflera actinophylla"*	12	25	15	50%	REMOVE		Cat. 1 exotic invasive
73	Buttonwood	*"Conocarpus erectus"*	4	20	10	10%	REMOVE	79	Overgrown hedge
74	Buttonwood	*"Conocarpus erectus"*	10	20	10	10%	REMOVE	79	Overgrown hedge
75	Buttonwood	*"Conocarpus erectus"*	4	20	10	10%	REMOVE	79	Overgrown hedge
76	Buttonwood	*"Conocarpus erectus"*	4	20	10	10%	REMOVE	79	Overgrown hedge
77	Buttonwood	*"Conocarpus erectus"*	4	20	10	10%	REMOVE	79	Overgrown hedge
78	Brazilian pepper	*"Schinus terebinthifolius"*	6	20	10	10%	REMOVE		Cat. 1 exotic invasive
79	Bishopwood	*"Bischofia javanica"*	8	40	25	25%	REMOVE		Cat. 1 exotic invasive
80	Buttonwood	*"Conocarpus erectus"*	4	20	10	10%	REMOVE	79	Overgrown hedge

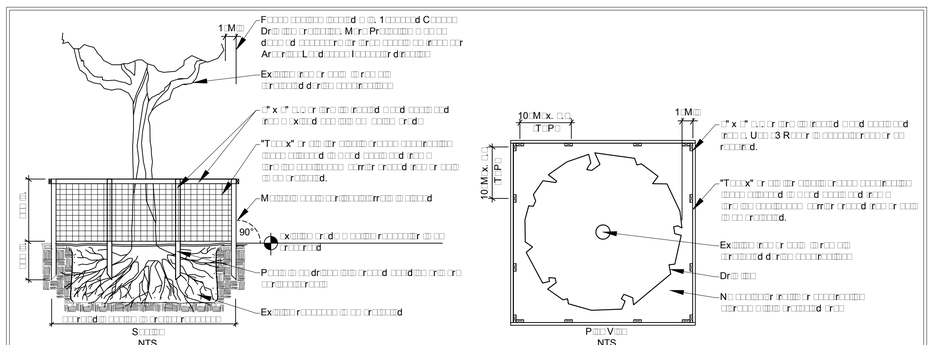
TREE #	COMMON NAME	SCIENTIFIC NAME	DBH IN.	HT. FT.	CNPY. FT.	TREE % CONDITION	TREE DISPOSITION	CANOPY LOSS Sq Ft	COMMENTS
81	Buttonwood	*"Conocarpus erectus"*	5	20	10	10%	REMOVE	79	Overgrown hedge
82	Buttonwood	*"Conocarpus erectus"*	4	20	10	10%	REMOVE	79	Overgrown hedge
83	Ficus benjamina	*"Ficus benjamina"*	30	50	40	65%	REMOVE	1257	Not a specimen per city code
84	Ficus benjamina	*"Ficus benjamina"*	8	25	10	10%	REMOVE	79	
85	Ficus benjamina	*"Ficus benjamina"*	8	25	20	55%	REMOVE	314	
86	Ficus benjamina	*"Ficus benjamina"*	8	25	15	45%	REMOVE	177	
87	Ficus benjamina	*"Ficus benjamina"*	8	25	15	45%	REMOVE	177	
88	Ficus benjamina	*"Ficus benjamina"*	10	25	20	55%	REMOVE	314	
89	Live oak	*"Quercus virginiana"*	15	25	20	75%	REMOVE	314	
90	Live oak	*"Quercus virginiana"*	12	22	15	60%	REMOVE	177	
91	Brazilian beauty leaf	*"Calophyllum brasiliense"*	10	22	18	70%	REMOVE	254	mold
92	Brazilian beauty leaf	*"Calophyllum brasiliense"*	10	18	15	65%	REMOVE	177	mold
93	Brazilian beauty leaf	*"Calophyllum brasiliense"*	7	18	10	70%	REMOVE	79	DL
94	Live oak	*"Quercus virginiana"*	8	20	12	70%	REMOVE	113	
95	Brazilian beauty leaf	*"Calophyllum brasiliense"*	12	30	15	60%	REMOVE	177	IB, ML
96	Brazilian beauty leaf	*"Calophyllum brasiliense"*	8	20	15	70%	REMOVE	177	
97	Brazilian beauty leaf	*"Calophyllum brasiliense"*	7	18	15	75%	REMOVE	177	TC
98	Live oak	*"Quercus virginiana"*	6	15	7	60%	REMOVE	38	
99	Live oak	*"Quercus virginiana"*	7	15	10	65%	REMOVE	79	OC
100	Brazilian beauty leaf	*"Calophyllum brasiliense"*	10	20	15	75%	REMOVE	177	
101	Brazilian beauty leaf	*"Calophyllum brasiliense"*	9	15	15	70%	REMOVE	177	
102	Brazilian beauty leaf	*"Calophyllum brasiliense"*	6	15	10	75%	REMOVE	79	
103	Brazilian beauty leaf	*"Calophyllum brasiliense"*	9	18	15	80%	REMOVE	177	
104	Brazilian beauty leaf	*"Calophyllum brasiliense"*	8	15	8	65%	REMOVE	50	IB, ML
105	Brazilian beauty leaf	*"Calophyllum brasiliense"*	8	16	6	45%	REMOVE	28	Decay
106	Brazilian beauty leaf	*"Calophyllum brasiliense"*	8	18	15	75%	REMOVE	177	
107	Brazilian beauty leaf	*"Calophyllum brasiliense"*	7	18	15	75%	REMOVE	177	
108	Brazilian beauty leaf	*"Calophyllum brasiliense"*	11	22	16	65%	REMOVE	201	TC
109	Gumbo limbo	*"Bursera simaruba"*	12	22	18	30%	REMOVE	254	CD
110	Gumbo limbo	*"Bursera simaruba"*	12	18	18	50%	REMOVE	254	
111	Gumbo limbo	*"Bursera simaruba"*	12	18	15	10%	REMOVE	177	CD
112	Gumbo limbo	*"Bursera simaruba"*	14	15	15	50%	REMOVE	177	OC
113	Gumbo limbo	*"Bursera simaruba"*	10	25	18	15%	REMOVE	254	TC, BD
114	Gumbo limbo	*"Bursera simaruba"*	16	25	30	50%	REMOVE	707	BD
115	Gumbo limbo	*"Bursera simaruba"*	12	18	12	75%	REMAIN		
116	Gumbo limbo	*"Bursera simaruba"*	17	22	25	75%	REMAIN		ML
117	Gumbo limbo	*"Bursera simaruba"*	13	20	20	75%	REMAIN		
118	Gumbo limbo	*"Bursera simaruba"*	13	20	20	70%	REMAIN		OC
119	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
120	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
121	Carpenteria palm	*"Carpentaria acuminata"*		25'c.t.	15	65%	REMOVE	177	
122	Carpenteria palm	*"Carpentaria acuminata"*		25'c.t.	15	65%	REMOVE	177	
123	Carpenteria palm	*"Carpentaria acuminata"*		25'c.t.	15	65%	REMOVE	177	
124	Alexander palm	*"Ptychosperma elegans"*		18'c.t.	12	70%	REMAIN		Triple
125	Alexander palm	*"Ptychosperma elegans"*		18'c.t.	12	70%	REMAIN		Triple
126	Carpenteria Palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
127	Carpenteria Palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
128	Yellow tab	*"Tabebuia caraiba"*	11	15	10	50%	REMAIN		Heavily leaning
129	Yellow tab	*"Tabebuia caraiba"*	8	15	10	55%	REMAIN		Heavily leaning
130	Carpenteria Palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double, Constricted
131	Live oak	*"Quercus virginiana"*	13	20	18	70%	REMAIN		
132	Pink Tab	*"Tabebuia heterophylla"*	10	20	20	50%	REMAIN		
133	Live oak	*"Quercus virginiana"*	13	20	25	70%	REMAIN		
134	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
135	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
136	Pink Tab	*"Tabebuia heterophylla"*	5	25	8	40%	REMAIN		
137	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
138	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
139	Live oak	*"Quercus virginiana"*	16	25	20	60%	REMAIN		Unbalanced
140	Live oak	*"Quercus virginiana"*	12	20	16	55%	REMAIN		Unbalanced, understory
141	Live oak	*"Quercus virginiana"*	16	25	20	70%	REMAIN		Understory
142	Pink Tab	*"Tabebuia heterophylla"*	8	25	12	40%	REMAIN		Co-dominant
143	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
144	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
145	Pink Tab	*"Tabebuia heterophylla"*	6	20	16	60%	REMAIN		
146	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
147	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
147a	Live oak	*"Quercus virginiana"*	12	20	16	65%	REMAIN		Dual leader, Included bark
148	Yellow tab	*"Tabebuia caraiba"*	6	15	8	40%	REMAIN		Leaning
149	Yellow tab	*"Tabebuia caraiba"*	10	15	8	40%	REMAIN		Leaning
150	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
151	Alexander palm	*"Ptychosperma elegans"*		20'c.t.	15	65%	REMAIN		Double
152	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
153	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
154	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMOVE	177	Double
155	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
156	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		Double
157	Carpenteria palm	*"Carpentaria acuminata"*		30'c.t.	15	65%	REMAIN		
158	Live oak	*"Quercus virginiana"*	10	18	12	65%	REMAIN		Trunk damage
159	Brazilian beauty leaf	*"Calophyllum brasiliense"*	13	20	20	70%	REMAIN		Dual leader
160	Brazilian beauty leaf	*"Calophyllum brasiliense"*	12	20	18	70%	REMAIN		Dual leader
161	Brazilian beauty leaf	*"Calophyllum brasiliense"*	10	20	18	70%	REMAIN		
162	Gumbo limbo	*"Bursera simaruba"*	13	20	18	60%	REMAIN		
163	Gumbo limbo	*"Bursera simaruba"*	10	18	18	20%	REMAIN		Dual leader, Open canopy
164	Gumbo limbo	*"Bursera simaruba"*	16	18	20	50%	REMAIN		Dual leader
165	Gumbo limbo	*"Bursera simaruba"*	10	16	20	60%	REMAIN		
166	Gumbo limbo	*"Bursera simaruba"*	19	20	20	55%	REMAIN		Dual leader, Leaning
167	Gumbo limbo	*"Bursera simaruba"*	10	12	12	40%	REMAIN		Open canopy, dieback
168	Gumbo limbo	*"Bursera simaruba"*	17	30	18	50%	REMAIN		Branch damage
169	Gumbo limbo	*"Bursera simaruba"*	13	35	20	60%	REMAIN		
170	Gumbo limbo	*"Bursera simaruba"*	13	20	20	65%	REMAIN		Dual leader, included bark

18866	TOTAL SQ. FT. CANOPY LOSS
$ 28,410.00	TOTAL APPRAISED VALUE OF SPECIMEN TREES TO BE REMOVED

TREE ANALYSIS ABBREVIATIONS	
BD	BRANCH DAMAGE
CD	CO-DOMINANT
DL	DUAL LEADER
IB	INCLUDED BARK
ML	MULTI LEADER
OC	OPEN CANOPY
OHW	OVERHEAD WIRES
TC	TRUNK CAVITY
UP	UTILITY PRUNED

PROPOSED TREES

64	TOTAL CAT 1 TREES **PROVIDED** FOR MITIGATION (300 sq ft) **Includes**: 12' Green Buttonwood, 14' Slash Pines, 12' Wild Tamarinds, & 12' Live Oaks
54	TOTAL CAT 2 TREES **PROVIDED** FOR MITIGATION (150 sq ft) **Includes**: 10 ' Dahoon Hollies, 10' Crape Myrtles, & 8' Simpson Stoppers
48	TOTAL CAT 4 PALMS **PROVIDED** FOR MITIGATION (50 sq ft) **Includes**: Sabal, Montgomery, & Solitaire Palms
29,700 SF	**TOTAL** CANOPY **PROVIDED** FOR MITIGATION



TEMPORARY TREE PROTECTION DETAIL

KEITH & ASSOCIATES, INC.
consulting engineers
301 E. Atlantic Blvd.
Pompano Beach, Florida 33060-6613
(954) 788-3500 FAX (954) 788-3501

BID / CONTRACT NO.

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	07/10/2017
2	PER DRC COMMENTS	08/15/2017

PRELIMINARY PLAN NOT FOR CONSTRUCTION

THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER
HILLSBORO
STORAGE

SCALE: AS NOTED
DATE ISSUED: MARCH 2017
DRAWN BY: DG
DESIGNED BY: MP
CHECKED BY: MP

MICHAEL P. PHILLIPS, FLA
FLORIDA REG. NO. LA0001510
FOR THE FIRM

SHEET TITLE

TREE DISPOSITION LIST

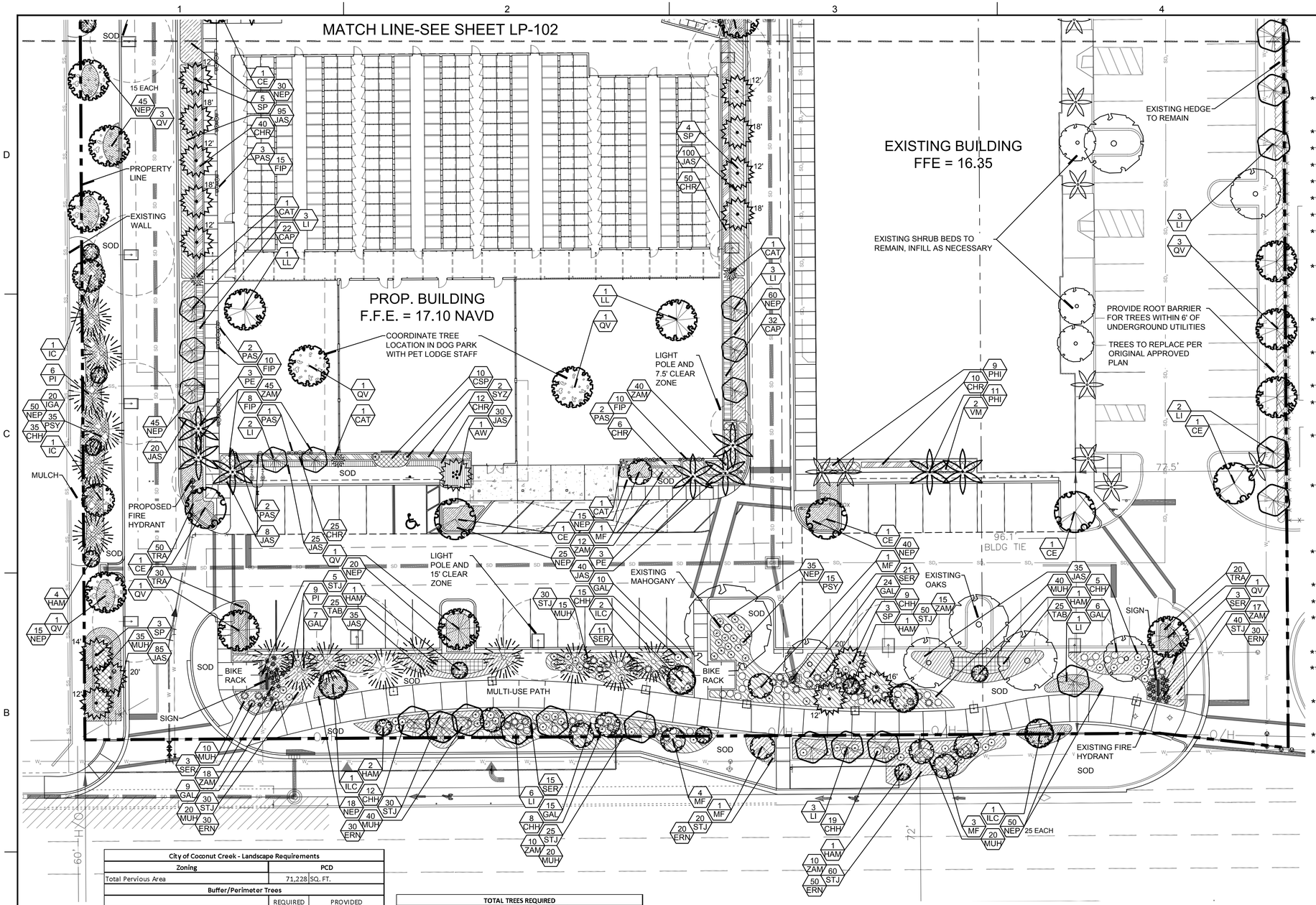
SHEET NUMBER

TD-103

SHEET

PROJECT NO. 09675.00

Drawings: N:\09675.00 - Pet Lodge\Drawings\Arch\09675.00 - TD-103.dwg Plotted: 08/15/2017 - 11:02:00 AM By: DG



PLANT LIST

TREES AND PALMS

	KEY	QUANTITY	PLANT NAME AND SPECIFICATION
N	AW	1	Acoelorrhaphe wrightii (Paurotis Palm) 12' ht., 6' spr., full, 5 stem minimum
**	N	CE	9	Conocarpus erectus (Green Buttonwood) 12' ht., 6' spr., 2" c., full canopy
N	IC	6	Ilex cassine (Dahoon Holly) 10' ht., 5' spr., full canopy
**		LI	34	Lagerstroemia indica (Crape Myrtle) 10' ht., 5' spr., 2" c., full canopy
**	N	LL	4	Lysiloma latisiliqua (Wild Tamarind) 12' ht., 6' spr., full canopy
**	N	MF	14	Myrcianthes fragrans (Simpson's Stopper) 8' ht., 5' spr., full canopy
**	N	PI	27	Pinus elliottii (Slash Pine) 14' ht., 7' spr., full canopy
**		PE	6	Ptychosperma elegans (Solitaire Palm) 8' c.t. hts., 16' o.a. hts., single
**	N	QV	24	Quercus virginiana (Live Oak) 12' ht., 6' spr., 2" c., full canopy
**	N	SP	30	Sabal palmetto (Cabbage Palm) 12-28' staggered c.t. hts., slick, see plan for heights
N	TD	6	Taxodium distichum (Bald Cypress) 12' ht., 6' spr., full canopy
** | | VM | 12 | Veitchia montgomeryana (Montgomery Palm) 8 & 12' c.t. hts., 16-20' o.a. hts., heavy |

SHRUBS & GROUNDCOVERS

	KEY	QUANTITY	PLANT NAME AND SPECIFICATION
**	N	ACR	105	Acrostichum daneifolium (Leather Fern) 24" ht., 24" spr., full, 3' o.c.
		ALT	125	Alternanthera dentata 'Little Ruby' (Alternanthera) 18" ht., 18" spr., 18" o.c., full
**	N	CAP	54	Capparis cynophallophora (Jamaican Caper) 24" ht., 24" spr., full, 2' o.c.
		CAT	4	Chamaedorea cataractum (Cat Palm) 36" ht., 36" spr., full
**	N	CHH	173	Chrysobalanus icaco 'Horizontal' 18" ht., 20" spr., full, 2' o.c.
**	N	CHR	156	Chrysobalanus icaco (Cocoplum) 24" ht., 24" spr., full, 2' o.c.
		CSP	10	Codiaeum v. 'Sloppy Painter' (Yellow Croton) 20" ht., 20" spr., full, 2' o.c.
**	N	ERN	160	Ernodea littoralis (Golden creeper) 12" ht., 14" spr., full, 12" o.c.
		FIP	43	Ficus pumila (Creeping Fig) 4' ht., 1 gal, vine support provided by others
		GAL	71	Galphimia gracilis (Thryallis) 24" ht., 24" spr., full, 2' o.c.
**	N	HAM	15	Hamelia patens (Firebush) 4'-5' ht., 3' spr., full, tree form
N	IGA	60	Ilex glabra (Gallberry) 24" ht., 18" spr., full, 2' o.c.
N	ILC	4	Ilex cassine (Dahoon Holly) 6' ht., 3' spr., full canopy
	JAS	584	Jasminum volubile (Wax Jasmine) 12" ht., 16" spr., full, 2' o.c.
**		JUN	110	Juniperus c. 'Parsonii' (Parson's Juniper) 12" ht., 16" spr., full, 2' o.c
N	MUH	200	Muhlenberghia capillaris (Muhly Grass) 2-3' spr., full, 3' o.c.
**	N	NEP	651	Nephrolepis exalta (Sword Fern) 12" ht., 14" spr., 2' o.c.
**	N	PAS	10	Passiflora incarnata (Purple Passionflower) 4' ht., 1 gal, vine support provided by others
**		PHI	82	Philodendron selloum 24" ht., 24" spr., full, 3' o.c.
N	PSY	120	Psychotria nervosa (Wild Coffee) 24" ht., 24" spr., full, 2' o.c.
**	N	SER	53	Serenoa repens (Saw palmetto) 18" ht., 18" spr., full, 3' o.c.
**	N	STJ	290	Stachytarpheta jamaicensis (Native Porterweed) 12" ht., 16" spr., full, 2' o.c.
	SYZ	7	Syzygium p. 'myrtifolia' (Myrtifolia) 36" ht., 18" spr., full, 18" o.c.
**		TRA	180	Trachelospermum asiaticum 'minima' (Asiatic Jasmine) 12" ht., 14" spr., 18" o.c.
	TAB	58	Tabernaemontana spp. (Pinwheel Jasmine) 24" ht., 24" spr., full, 2' o.c.
** | N | VIB | 30 | Viburnum suspensum (Viburnum) 24" ht., 24" spr., full, 2' o.c. |
** | N | ZAM | 317 | Zamia floridana (Coontie) 20" ht., 20" spr., full, 2' o.c. |

N DENOTES NATIVE SPECIES
** DENOTES HIGH DROUGHT TOLERANT SPECIES

NOTES

Sod to be St. Augustine 'Floratam' unless otherwise noted on plan, contractor to determine quantity.

All sod and landscape to recieve 100% coverage with 50% overlap from an automatic irrigation system using an approved water source.

Bubblers to be provided for large trees and palms.

Contractor is responsible for all conditions and landscape specification attached to this plan and plant list. Plan and specifications shall be considered Contract Documents.

Pre-Construction meeting with is required before any plant material is installed on site.

All road rock, concrete, asphalt and other non-natural material be removed and be replaced with planting soil prior to landscape installation.

Any remodeling work to the existing east building that damages or destroys any existing landscape material, it is the responsibility of the contractor to replace to like or better condition per city code requirements.

Provide root barrier for trees within 6' of any underground utilities.

City of Coconut Creek - Landscape Requirements		
Zoning	**PCD**	
Total Pervious Area	71,228	SQ. FT.
Buffer/Perimeter Trees		
	REQUIRED	PROVIDED
West (582') 1 tree per 40 LF	15	**32**
East (582') 1 tree per 40 LF	15	**15**
Roadway Buffer Requirement		
1 tree per 2000 SF of total land area	REQUIRED	PROVIDED
North - 7,516 SF/2000 SF =	4	**4 ***
South- 14,605/2000 SF =	7	**16 ***
Street Trees		
North (442') 1 tree per 40 LF	11	**12 ***
South (442') 1 tree per 30 LF (overhead wires)	15	**18**
VUA Requirement		
VUA Imperious Area	97,922	SQ. FT.
	REQUIRED	PROVIDED
1 SF of Landscape area required per 100 SF of paved area	979 SF	**10,218 SF**
Parking Islands - 1 tree per island	27	**27 ***
Minimum Landscape Requirements		
1 Tree per 1000 SF (Min.) 71,228/1000 =	71	**45 ***
5 shrubs per 1000 SF (Min.) 71 X 5 =	356	**1,346**
*** Includes Existing Trees**		

TOTAL TREES REQUIRED		
Includes buffer trees, street trees, parking island trees, and minimum tree code requirements	165	**171 (118 proposed trees, 16 proposed palms, and 37 existing trees)**
Native Requirement		
	REQUIRED	PROVIDED
Trees - 50% of required trees	36	**89**
Shrubs - 50% of required shrubs	178	**1,091**
Plant Diversity		
No more than 25% of proposed plant material can be the same species: Total trees and palms proposed = 132	5 species min.	**12 species**
Mitigation		
Total Catergory 1 trees proposed	64	
Total Catergory 2 trees proposed	54	
Total Catergory 4 palms proposed	48	
Total Square Feet of Canopy Replacement		
(64 trees x 300 SF + 54 trees x 150 SF + 48x 50 SF) =	29, 700 SF of proposed canopy replacement	

NORTH

GRAPHIC SCALE

0 20 40

SCALE: 1"=20'

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	SR
DESIGNED BY:	MP
CHECKED BY:	MP

MICHAEL J. PHILLIPS, RLA
FLORIDA REG. NO. LA0001540
(FOR THE FIRM)

SHEET TITLE

LANDSCAPE PLAN

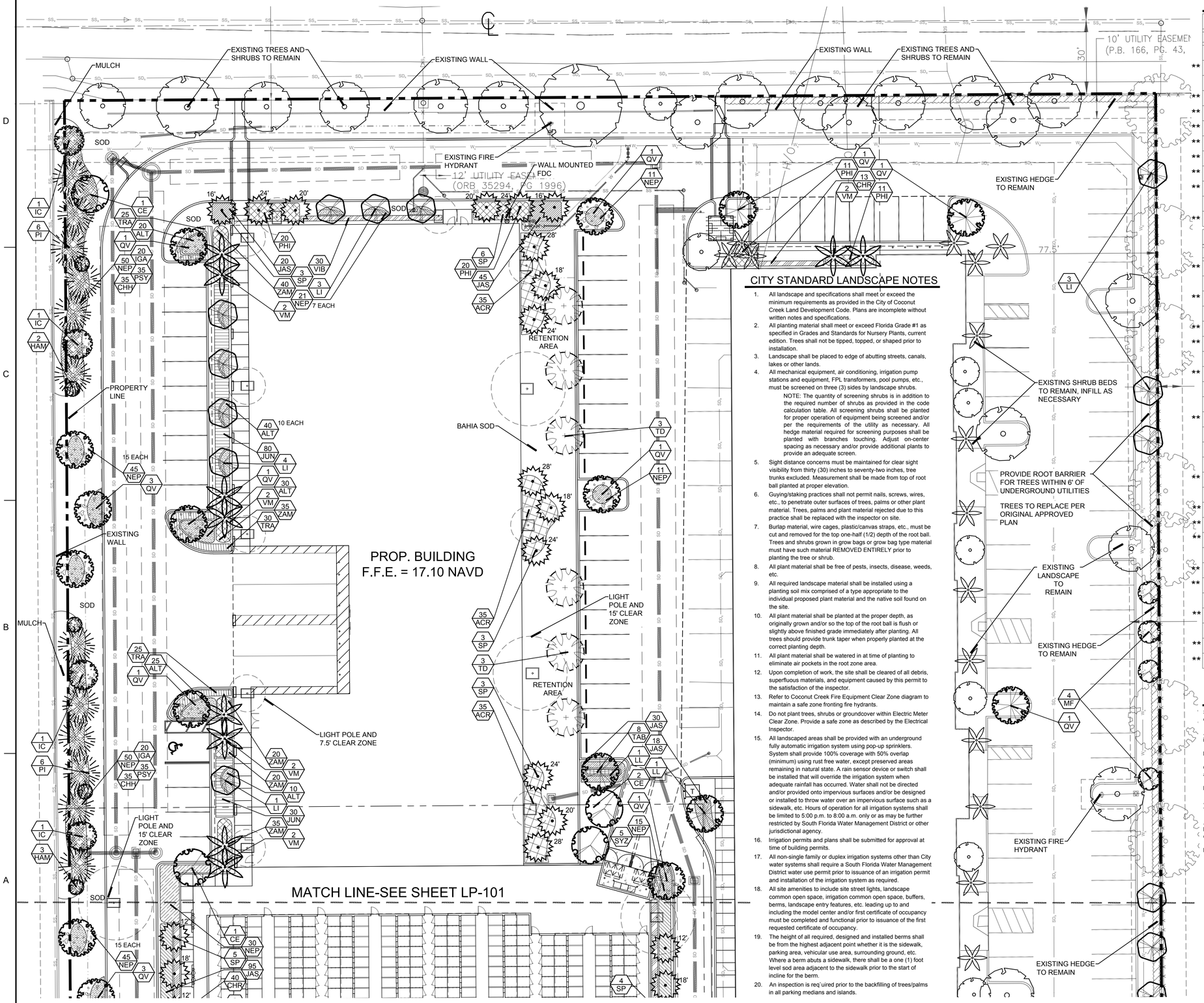
SHEET NUMBER

LP-101

SHEET of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Landscape Architecture\Cadd\dwg\09675.00 - LP-101.dwg Layout Name: LP-101 Plotted by: jonsen Plotted on: Aug 24, 2017 - 10:37am



CITY STANDARD LANDSCAPE NOTES

1. All landscape and specifications shall meet or exceed the minimum requirements as provided in the City of Coconut Creek Land Development Code. Plans are incomplete without written notes and specifications.
2. All planting material shall meet or exceed Florida Grade #1 as specified in Grades and Standards for Nursery Plants, current edition. Trees shall not be tipped, topped, or shaped prior to installation.
3. Landscape shall be placed to edge of abutting streets, canals, lakes or other lands.
4. All mechanical equipment, air conditioning, irrigation pump stations and equipment, FPL transformers, pool pumps, etc., must be screened on three (3) sides by landscape shrubs.
   NOTE: The quantity of screening shrubs is in addition to the required number of shrubs as provided in the code calculation table. All screening shrubs shall be planted for proper operation of equipment being screened and/or per the requirements of the utility as necessary. All hedge material required for screening purposes shall be planted with branches touching. Adjust on-center spacing as necessary and/or provide additional plants to provide an adequate screen.
5. Sight distance concerns must be maintained for clear sight visibility from thirty (30) inches to seventy-two inches, tree trunks excluded. Measurement shall be made from top of root ball planted at proper elevation.
6. Guying/staking practices shall not permit nails, screws, wires, etc., to penetrate outer surfaces of trees, palms or other plant material. Trees, palms and plant material rejected due to this practice shall be replaced with the inspector on site.
7. Burlap material, wire cages, plastic/canvas straps, etc., must be cut and removed for the top one-half (1/2) depth of the root ball. Trees and shrubs grown in grow bags or grow bag type material must have such material REMOVED ENTIRELY prior to planting the tree or shrub.
8. All plant material shall be free of pests, insects, disease, weeds, etc.
9. All required landscape material shall be installed using a planting soil mix comprised of a type appropriate to the individual proposed plant material and the native soil found on the site.
10. All plant material shall be planted at the proper depth, as originally grown and/or so the top of the root ball is flush or slightly above finished grade immediately after planting. All trees should provide trunk taper when properly planted at the correct planting depth.
11. All plant material shall be watered in at time of planting to eliminate air pockets in the root zone area.
12. Upon completion of work, the site shall be cleared of all debris, superfluous materials, and equipment caused by this permit to the satisfaction of the inspector.
13. Refer to Coconut Creek Fire Equipment Clear Zone diagram to maintain a safe zone fronting fire hydrants.
14. Do not plant trees, shrubs or groundcover within Electric Meter Clear Zone. Provide a safe zone as described by the Electrical Inspector.
15. All landscaped areas shall be provided with an underground fully automatic irrigation system using pop-up sprinklers. System shall provide 100% coverage with 50% overlap (minimum) using rust free water, except preserved areas remaining in natural state. A rain sensor device or switch shall be installed that will override the irrigation system when adequate rainfall has occurred. Water shall not be directed and/or provided onto impervious surfaces and/or be designed or installed to throw water over an impervious surface such as a sidewalk, etc. Hours of operation for all irrigation systems shall be limited to 5:00 p.m. to 8:00 a.m. only or as may be further restricted by South Florida Water Management District or other jurisdictional agency.
16. Irrigation permits and plans shall be submitted for approval at time of building permits.
17. All non-single family or duplex irrigation systems other than City water systems shall require a South Florida Water Management District water use permit prior to issuance of an irrigation permit and installation of the irrigation system as required.
18. All site amenities to include site street lights, landscape common open space, irrigation common open space, buffers, berms, landscape entry features, etc. leading up to and including the model center and/or first certificate of occupancy must be completed and functional prior to issuance of the first requested certificate of occupancy.
19. The height of all required, designed and installed berms shall be from the highest adjacent point whether it is the sidewalk, parking area, vehicular use area, surrounding ground, etc. Where a berm abuts a sidewalk, there shall be a one (1) foot level sod area adjacent to the sidewalk prior to the start of incline for the berm.
20. An inspection is req`uired prior to the backfilling of trees/palms in all parking medians and islands.

PLANT LIST

	KEY	QUANTITY	PLANT NAME AND SPECIFICATION
TREES AND PALMS			
N	AW	1	Acoelorrhaphe wrightii (Paurotis Palm) 12' ht., 6' spr., full, 5 stem minimum
N	CE	9	Conocarpus erectus (Green Buttonwood) 12' ht., 6' spr., 2" c., full canopy
N	IC	6	Ilex cassine (Dahoon Holly) 10' ht., 5' spr., full canopy
	LI	34	Lagerstroemia indica (Crape Myrtle) 10' ht., 5' spr., 2" c., full canopy
N	LL	4	Lysiloma latisiliqua (Wild Tamarind) 12' ht., 6' spr., full canopy
N	MF	14	Myrcianthes fragrans (Simpson's Stopper) 8' ht., 5' spr., full canopy
N	PI	27	Pinus elliottii (Slash Pine) 14' ht., 7' spr., full canopy
	PE	6	Ptychosperma elegans (Solitaire Palm) 8' c.t. hts., 16' o.a. hts., single
N	QV	24	Quercus virginiana (Live Oak) 12' ht., 6' spr., 2" c., full canopy
N	SP	30	Sabal palmetto (Cabbage Palm) 12-28' staggered c.t. hts., slick, see plan for heights
N	TD	6	Taxodium distichum (Bald Cypress) 12' ht., 6' spr., full canopy
N	VM	12	Veitchia montgomeryana (Montgomery Palm) 8 & 12' c.t. hts., 16-20' o.a. hts., heavy
SHRUBS & GROUNDCOVERS			
N	ACR	105	Acrostichum daneifolium (Leather Fern) 24" ht., 24" spr., full, 3' o.c.
	ALT	125	Alternanthera dentata 'Little Ruby' (Alternanthera) 18" ht., 18" spr., 18" o.c., full
N	CAP	54	Capparis cynophallophora (Jamaican Caper) 24" ht., 24" spr., full, 2' o.c.
	CAT	4	Chamaedorea cataractum (Cat Palm) 36" ht., 36" spr., full
N	CHH	173	Chrysobalanus icaco 'Horizontal' 18" ht., 20" spr., full, 2' o.c.
N	CHR	156	Chrysobalanus icaco (Cocoplum) 24" ht., 24" spr., full, 2' o.c.
	CSP	10	Codiaeum v. 'Sloppy Painter' (Yellow Croton) 20" ht., 20" spr., full, 2' o.c.
N	ERN	160	Ernodea littoralis (Golden creeper) 12" ht., 14" spr., full, 12" o.c.
	FIP	43	Ficus pumila (Creeping Fig) 4" ht., 1 gal, vine support provided by others
	GAL	71	Galphimia gracilis (Thryallis) 24" ht., 24" spr., full, 2' o.c.
N	HAM	15	Hamelia patens (Firebush) 4'-5' ht., 3' spr., full, tree form
N	IGA	60	Ilex glabra (Gallberry) 24" ht., 18" spr., full, 2' o.c.
N	ILC	4	Ilex cassine (Dahoon Holly) 6' ht., 3' spr., full canopy
	JAS	584	Jasminum volubile (Wax Jasmine) 12" ht., 18" spr., full, 2' o.c.
	JUN	110	Juniperus c. 'Parsonii' (Parson's Juniper) 12" ht., 16" spr., full, 2' o.c
N	MUH	200	Muhlenberghia cappilaris (Muhly Grass) 2-3' spr., full, 3' o.c.
N	NEP	651	Nephrolepis exalta (Sword Fern) 12" ht., 14" spr., 2' o.c.
N	PAS	10	Passiflora incarnata (Purple Passionflower) 4' ht., 1 gal, vine support provided by others
	PHI	82	Philodendron selloum 24" ht., 24" spr., full, 3' o.c.
N	PSY	120	Psychotria nervosa (Wild Coffee) 24" ht., 24" spr., full, 2' o.c.
N	SER	53	Serenoa repens (Saw palmetto) 18" ht., 18" spr., full, 3' o.c.
N	STJ	290	Stachytarpheta jamaicensis (Native Porterweed) 12" ht., 16" spr., full, 2' o.c.
	SYZ	7	Syzygium p. 'myrtifolia' (Myrtifolia) 36" ht., 18" spr., full, 18" o.c.
	TRA	180	Trachelospermum asiaticum 'minima' (Asiatic Jasmine) 12" ht., 14" spr., 18" o.c.
	TAB	58	Tabernaemontana spp. (Pinwheel Jasmine) 24" ht., 24" spr., full, 2' o.c.
N	VIB	30	Viburnum suspensum (Viburnum) 24" ht., 24" spr., full, 2' o.c.
N	ZAM	317	Zamia floridana (Coontie) 20" ht., 20" spr., full, 2' o.c.

N DENOTES NATIVE SPECIES
** DENOTES HIGH DROUGHT TOLERANT SPECIES

NOTES

Sod to be St. Augustine 'Floratam' unless otherwise noted on plan, contractor to determine quantity.

All sod and landscape to recieve 100% coverage with 50% overlap from an automatic irrigation system using an approved water source.

Bubblers to be provided for large trees and palms.

Contractor is responsible for all conditions and landscape specification attached to this plan and plant list. Plan and specifications shall be considered Contract Documents.

Pre-Construction meeting with is required before any plant material is installed on site.

All road rock, concrete, asphalt and other non-natural material be removed and be replaced with planting soil prior to landscape installation.

Any remodeling work to the existing east building that damages or destroys any existing landscape material, it is the responsibility of the contractor to replace to like or better condition per city code requirements.

Provide root barrier for trees within 6' of any underground utilities.

NORTH

GRAPHIC SCALE

0 20 40

SCALE: 1"=20'

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	SR
DESIGNED BY:	MP
CHECKED BY:	MP

MICHAEL J. PHILLIPS, RLA
FLORIDA REG. NO. LA0001540
(FOR THE FIRM)

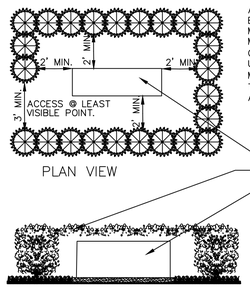
SHEET TITLE
LANDSCAPE PLAN

SHEET NUMBER
LP-102

SHEET of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Landscape Architecture\Cadd\dwg\09675.00 - LP-101.dwg Layout Name: LP-102 Plotted by: snixen Plotted on: Aug 24, 2017 - 10:41am



PLAN VIEW

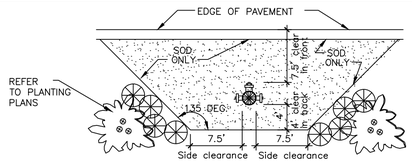
ALL EXISTING AND PROPOSED UTILITIES MUST BE SCREENED PER CODE. UTILITIES OR MECHANICAL EQUIP. NOT SHOWN ON PLANS MUST BE SCREENED AS WELL. SCREEN WITH COCOPLUM (CHRYSOBALANUS ICACO) HEDGE UNLESS OTHERWISE NOTED. THE SCREENING MATERIAL SHALL BE MAINTAINED 6" ABOVE THE HEIGHT OF THE EQUIP. LEAVE 36" ACCESS TO UTILITY IN LESS VISIBLE SIDE

SECTION VIEW

IF DOMESTIC BACKFLOW PREVENTER AND FIRE SERVICE ARE GOING TO BE USED TOGETHER, THE LANDSCAPE HEDGE SHALL SCREEN BOTH DEVICES.

TYPICAL SCREEN FOR UTILITIES/MECHANICAL EQUIP.

PLAN AND SECTION — NOT TO SCALE



REQUIREMENTS APPLY TO FIRE HYDRANTS, SIAMESE CONNECTIONS AND ANY OTHER FIRE EQUIPMENT FOR UTILIZING FIRE HOSE, ON PUBLIC OR PRIVATE PROPERTY.

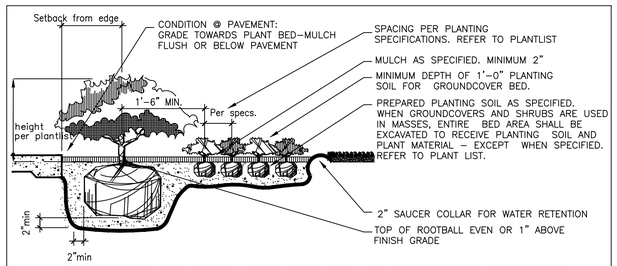
BY THE AUTHORITY OF THE FLORIDA BUILDING CODE.

THE CLEAR ZONE SHALL BE FREE OF LANDSCAPE (EXCEPT SOD), MAILBOXES, PARKING, LAMP-POSTS AND ALL OTHER OBJECTS.

EXCEPTIONS: OTHER FIRE FIGHTING EQUIPMENT OR TRAFFIC POSTS TO PREVENT FIRE FIGHTING EQUIPMENT BEING BLOCKED.

FIRE HYDRANT CLEAR ZONE

PLAN — NOT TO SCALE

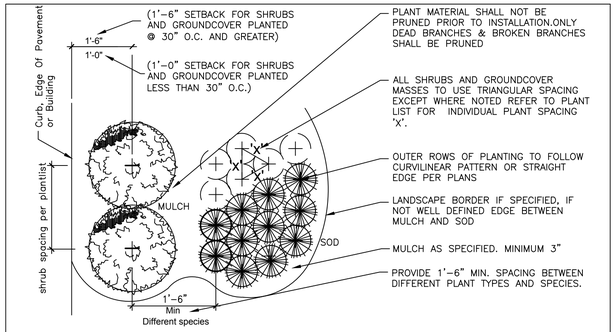


NOTE: CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS/BEDS PRIOR TO INSTALLATION.

PLANT MATERIAL SHALL NOT BE PRUNED PRIOR TO INSTALLATION, AFTER PLANTS HAVE BEEN INSTALLED, EACH PLANT SHALL BE PRUNED FOR UNIFORMITY OR AT THE DIRECTION OF THE PROJECT LANDSCAPE ARCHITECT.

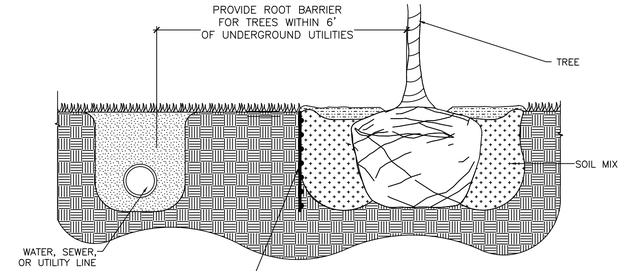
SHRUB AND GROUNDCOVER DETAIL

SECTION — NOT TO SCALE



SHRUB AND GROUNDCOVER DETAIL

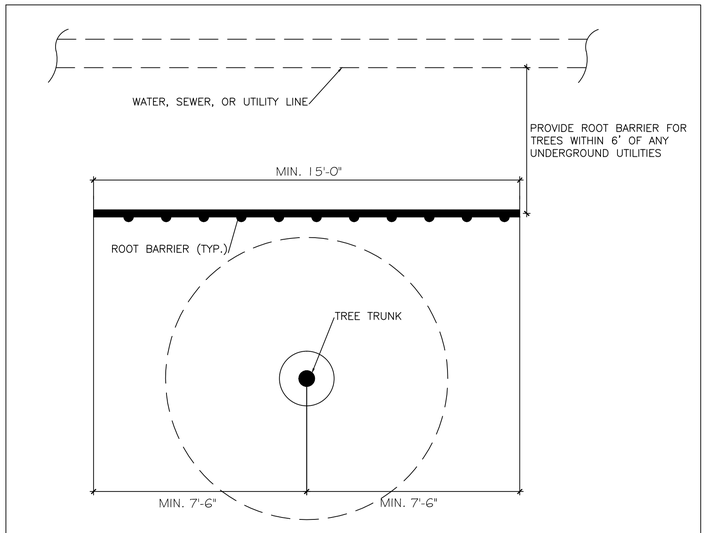
PLAN — NOT TO SCALE



NOTE:
FOR TREES WITHIN 6' OF UNDERGROUND UTILITIES, PROVIDE 3' DEEP "BIO BARRIER" OR PLASTIC ROOT BARRIER. BARRIER TO BE A MIN. OF 15' LONG AND CENTERED ON TRUNK OF TREE. INSTALL PER MANUFACTURE'S RECOMMENDATIONS.

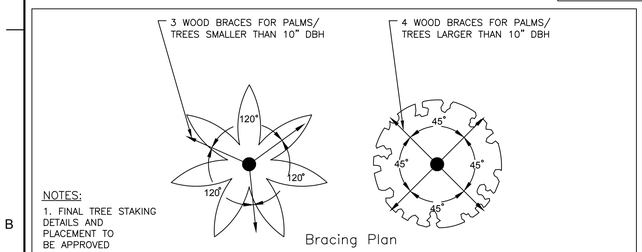
ROOT BARRIER DETAIL

PLAN — NOT TO SCALE



ROOT BARRIER DETAIL

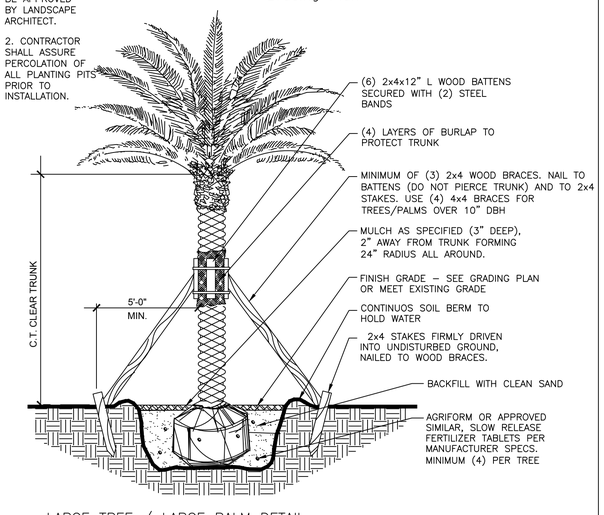
PLAN — NOT TO SCALE



Bracing Plan

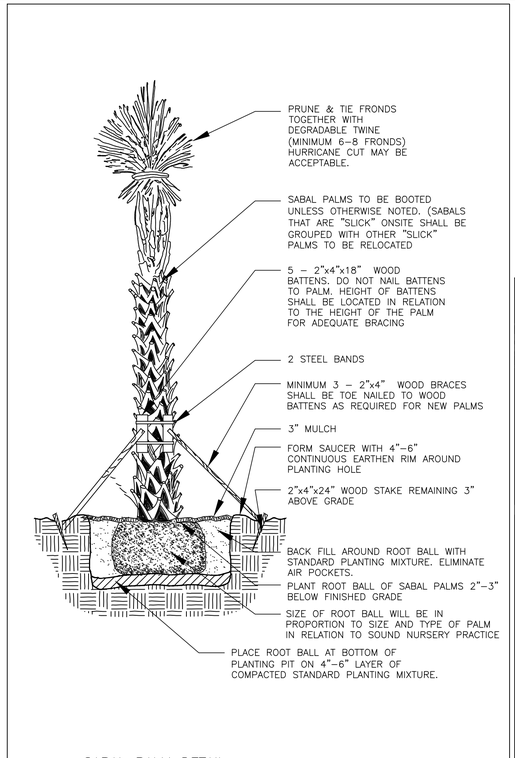
NOTES:

1. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY LANDSCAPE ARCHITECT.
2. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.



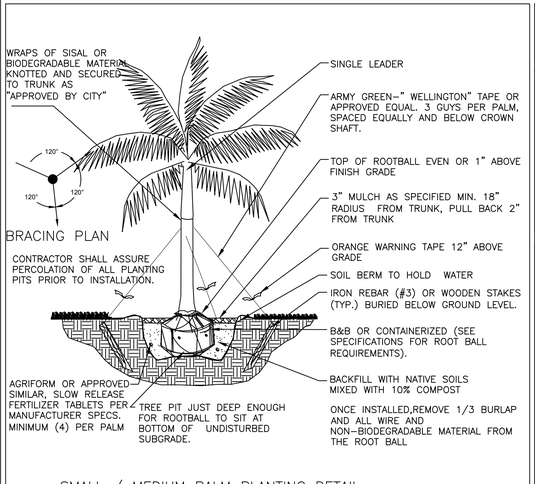
LARGE TREE / LARGE PALM DETAIL

SECTION — NOT TO SCALE



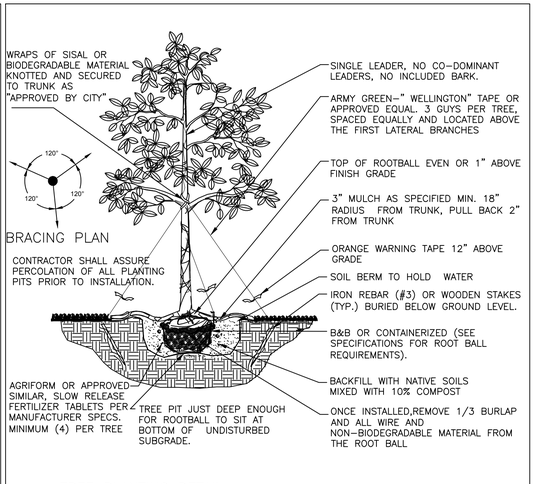
SABAL PALM DETAIL

SECTION — NOT TO SCALE



SMALL / MEDIUM PALM PLANTING DETAIL

SECTION — NOT TO SCALE



TREE PLANTING DETAIL

SECTION — NOT TO SCALE

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION

THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	DG
DESIGNED BY:	MP
CHECKED BY:	MP

MICHAEL J. PHILLIPS, RLA
FLORIDA REG. NO. LA0001540
(FOR THE FIRM)

SHEET TITLE

LANDSCAPE DETAILS

SHEET NUMBER

LD-101

SHEET of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Landscape Architecture\Cadd\dwg\09675.00 - LD-101.dwg Layout Name: LD-101 Plotted by: sosen Plotted on: Aug 23, 2017 - 10:19am

A. SCOPE

1. The location of plants, as shown on the plans, is approximate. The final locations may be adjusted slightly to accommodate unforeseen field conditions, to comply with safety setback criteria, to avoid creating unsafe sight conditions, or as otherwise directed or approved by the Landscape Architect / owner in writing. All other location adjustments to the layout are to be approved in advance in writing by the Landscape Architect and owner.
2. Contractor understands that an important element of the design of this project is meeting landscape ordinances with a design flare that includes symmetry, alignment, focal points and / or smooth curvilinear forms where applied and contractor shall follow and instruct the working crews accordingly. In the event of any doubt as to how to execute the plans, Contractor shall immediately consult with Architect and/or Owner.
3. Landscape Contractor shall fine grade, prepare site as outlined in the following notes and per plans; furnish and install all plants, shrubs, trees and / or palms meeting minimum requirements and brace them per details provided. Furnish and install soil, gravel, boulders, sod and mulch as specified in plans and notes below.
4. Landscape contractor shall furnish and install all trees, palms, shrubs, groundcover, sod, planting soil, fertilizer, herbicide, pre-emergence herbicide, seed, and mulch.

B. BIDDING

1. Contractor to have liability insurance including Owner and Landscaper as insured's in excess of $10,000 as well as Worker's Compensation.
2. Contractors and Subs must ensure they are doing take offs from Bldg Dep. Revised sets and / or Bid Set documents. Verify with this Office that you are bidding from latest available plans.
3. Submit Landscape / Hardscape RFI directly to Keith & Associates Landscape Architect/Project Manager in writing. T. 954.788.3400
4. Read ALL notes and typical planting details sheets prior to submitting RFIs and prior to bidding.
5. When submitting an RFI reference sheet number, detail number and/or note category and number.
6. Landscape contractor shall verify all estimated quantities of material shown on the drawings prior to submitting their bid. Plant list pricing if shown is for permitting / mitigation comparison purposes only, any prices shown are to be disregarded by Landscape Contractor.
7. All Plant Material shall meet or exceed height and spread requirement. Heights are City code requirement and / or design intent related and always governs over container size. Container size given for reference only and must be sized-up to meet height requirements of plant list. Plant material available with excessive height beyond specifications must be consulted with Landscape Architect for design intent.
8. All landscape material was confirmed to be available at time of design landscape contractor understands that some material may not be available in the same City, however available in Tri-County Region. Plant material supply is the responsibility of the Landscape Contractor that is awarded the contract and he/she shall take steps to ensure availability at the time of installation. Bring to the attention of Landscape Architect if specific material availability is no longer the case at the time of bidding and / or prior to actual construction for approval of substitutions that meet City ordinances and / or owner requirements and design intent.
9. Pre-inspections of site required prior to bidding.
10. The plant list is intended only as an aid to bidding. Any discrepancies found between the quantities on the plan and the quantities on the plant list shall be held valid, but in any event, Landscape Architect shall be contacted for clarification.
11. All labor and material for soil amendments and fertilizer that is required to ensure the successful establishment and survival of the proposed vegetation, as well as all the cost for the removal of unsuitable or excess backfill material from plantbeds, in addition to fine grading and mulching all plantbeds and individual trees shall be included in the contractor's bid to perform the work represented in this plan set.
12. Bid shall be itemized for possible value engineering.
13. Sod and Rocks (if specified) shall be estimated by scaling plans. Include price per square foot for sod. Rocks (include price per ton). Small rocks and gravel beds shall have landscape fabric material and minimum 2" depth. Boulders to be bid by unit.
14. All S.F. if noted is approximate and shall not be considered all inclusive; it is the contractor's responsibility to do his or her take off, submit price per S.F. and in the end sod all areas that are not covered either by plants, mulch and/or rocks. It shall be the responsibility of the contractor to include in the bid, the repair of any existing sod which may be damaged during construction.
15. Final payment to the Contractor shall be for actual plants installed on the project.
16. Contractor shall be responsible for obtaining and paying for costs of all permits described in bid whether permit costs are reimbursable by owner or included in bid. Research permit status and research all permits and additional documentation and certifications required such as separate tree removal permit for example, and consider prior to bidding.
17. General / Landscape Contractor shall leave a 5% unforeseen conditions allowance such as for additional root barriers determined to be needed on site and as job progresses.
18. Refer to T.Watering for supplemental watering requirement.
19. Landscape contractor is responsible for verifying all plant quantities prior to bidding and within 7 calendar days of receipt of these plans shall notify the landscape architect in writing of any and all discrepancies. In case of discrepancies planting plans shall take precedence over plant list. No substitutions are to be made without prior consent of the Landscape Architect.

C. GENERAL LANDSCAPE NOTES

1. Plants grown in containers prior to installation shall be removed from their containers before they are planted in the ground and have circling roots removed. All screening shrubs shall be planted for proper operation of equipment being screened and/or per the requirements of the utility as necessary. All hedge material required for screening purposes shall be planted with branches touching. Adjust spacing as necessary and/or provide additional plants to provide an adequate screen as required by code. Leave access to utility or clearance as required.
2. All landscaping shall be installed according to sound nursery practices. Contractor shall comply with federal, state and local laws and regulations pertaining to the inspection for plant disease and insect infestation.
3. All ideas, designs and plans indicated or represented by this drawing are owned by and are the exclusive property of Keith and Associates and may not be duplicated without authorization or used for other projects than the intended.
4. The Landscape Contractor shall exercise caution to protect any existing sod, electrical and irrigation. Any damage to the sod, electrical or irrigation shall be replaced or repaired to the original state by the Landscape Contractor at no additional cost to the owner.
5. Tree, palm, accent shrubs and bed lines are to be located in the field and approved by the Landscape Architect / owner prior to planting. Landscape Contractor acknowledges that material planted without approval of location may be subject to relocation by Landscape Architect to maintain design intent if not followed properly.
6. All trees must be pruned as per Landscape Architect's direction.
7. In areas where asphalt is removed in order to receive landscape material, the lime rock sub-base material must also be removed and replaced with approved planting soil mix.
8. Landscape contractor is responsible for sending photographs to the landscape architect to pre-approve all trees, palms, and shrubs prior to delivery to project site.
9. Landscape contractor shall coordinate his or her work with that of the irrigation, landscape lighting, and hardscape contractor if different.
10. The landscape contractor shall treat plant areas with pre-emergence herbicide after weeds and grass has been removed. Landscape contractor shall wait 7 days after pre-emergence treatment prior to planting.

D. PERMITS & REGULATIONS

1. Contractor(s) must obtain separate landscape, irrigation and tree relocation/removal permits from the city prior to the issuance of the first building permit for the project.
2. Landscape contractor to call the city Landscape Inspector to schedule a pre-construction meeting prior to installation if required.
3. All mandatory requirements by City Landscape Departments and their inspectors shall govern and landscape contractor commits by accepting contract to comply promptly for builder/owner to obtain C.O.

E. TREE REMOVAL

1. Removal of any trees or palms will require a written "tree removal permit" from the local governing agency prior to removal. Non-native trees classified as "prohibited" trees may be exempt from the permit if listed as Category 1 by Florida Exotic Pest Plant Council. Confirm with Local Municipality.
2. Landscape Contractor is responsible to remove ALL invasive nuisance trees such as Brazilian Pepper, Melaleuca, Australian Pine and all invasive trees as categorized by the governing agencies, whether listed on plans or not.
3. The Landscape Contractor is responsible for coordinating tree and palm removals and transplants shown on the tree/palm Disposition Plan. The Landscape Contractor is to remove and discard from site existing unwanted trees, palms, shrubs, ground covers, sod and weeds within landscape areas.

F. EXISTING TREES

1. Existing trees designated to remain shall be protected during all construction phases. Any trees or shrubs scarred or destroyed designated to remain will be replaced at the contractor's expense, with same species, size and quality.
2. Existing plant material not shown on the plan and in conflict with new planting shall be evaluated at the time of new planting installation by the Landscape Architect. Trees and plant material indicated to be relocated with no new location provided in plans shall be moved to a location on site designated as a nursery holding area with the root ball protected from direct sunlight, maintained and irrigated until new location is determined.
3. Prune trees to remove damaged branches and improve natural shape and thin out structure. Do not remove more than 15% of branches. Do not prune back terminal leader.
4. Prune existing shrubs to remove damaged branches and improve natural shape.
5. Existing trees to remain shall be trimmed per Ansi-A300 standards. Supervision of the trimming shall be performed by an ISA Certified Arborist to ensure quality work.
6. All existing trees shall be "lifted and thinned" to provide an 8' minimum clearance for sidewalks and pedestrian walkways and a 14' minimum clearance for roadways, driveways and all vehicular use areas.
7. Selective canopy and root pruning of existing trees can be conducted (only as necessary and in no event more than 35%) to accommodate for new approved construction. Pruning shall be conducted / supervised by an ISA Arborist.
8. If plans call for relocation of trees, palms or plants. High level of care should be exercised to assure that they are not damaged in the process and that they are promptly replanted upon being dug up.
9. All underground utilities and drain or irrigation lines shall be routed outside the tree protection zone. If lines must traverse the protection area, they shall be tunneled or bored under the tree.
10. Erosion control devices such as silt fencing, debris basins, and water diversion structures shall be installed to prevent siltation and/or erosion within the tree protection zone.
11. Roots shall be cut manually by digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root pruning equipment.

G. TREE RELOCATION (These notes for relocation trees only and if applicable)

1. Flag all trees and palms to be transplanted with differentiating color than those to be saved or removed.
2. Tree Relocation process must be performed or supervised by ISA Certified Arborist.
3. Water the root zones to field capacity for 5 continuous days before root pruning. At a minimum soak the soil to a 4'-0" depth within a 6' radius.
   Root prune a minimum of six weeks before relocation. Prune away all dead or damaged limbs or fronds. For trees, prune out 1/3 of the existing canopy by selectively trimming small internal branches. For palms, gather fronds above the bud and tie them loosely with jute twine to avoid damage.
4. Brace root pruned trees awaiting relocation.
5. Root prune 1/2rd of the root system, irrigate daily for 2 weeks then root prune another
   1/2 rd, irrigate daily and prune last 1/2 rd on actual relocation date, no less than two weeks (six weeks total minimum root pruning by stages). ISA Arborist on staff shall observe for intense shock. Canopy pruning may be deemed necessary by Arborist on staff to balance for intense root ball loss, canopy shall be trimmed only as necessary to increase survival.
6. Root prune with proper clean equipment to sever roots. Ensure roots are not torn or pulled apart.
7. With hand tools, dig a 2'-0" wide by 3'-0" deep trench at a minimum distance as determined by the consulting arborist to expose roots. Cut all roots 1.5" and larger in diameter with a clean, sharp pruning saw. Treat all cuts with a fungicidal barrier. Backfill the trench, within 4 hours of digging, with a 1:1 mixture of site soil and sawdust or other fine organic material. Do not compact.
8. Form a rootball size in compliance with Florida grades and Florida standards number 1 or better.
9. Maintain the soil moisture at field capacity throughout the six weeks.
10. Allow the plant to regenerate roots over a period of six weeks.
11. At the end of six weeks, prepare the planting pit at the new location. Overdig the hole diameter by 2' beyond the root ball at a minimum, but it is recommended that transplanting hole to be at least 1/3 larger than the area that was trenched for transplanting.
12. With the consulting arborist present, undercut the entire root ball of the plants to be transplanted at a depth specified by the arborist. The undercutting method may be a choker cable drawn through the root ball with heavy equipment.
13. At the direction of a professional rigger, assemble slings, padding, guiding ropes and cables for attachment to the crane or backhoe. The professional rigger shall determine the size of machinery necessary to execute the lifting and moving operation.
14. Install trees within 24 hours of removal from their original location to locations provided by Landscape Architect or Developer with approval of City / Landscape Inspector.
15. Experimented Tree Spade operator shall move tree or experimented tree mover shall choose best means and methods to strap and rig tree for transporting safely without damage to new location.
16. Maintain trees in a healthy and vigorous condition during installation and throughout the plant establishment period. Replace trees that do not meet this requirement with the same species, size, and quality or per mitigation requirements specific to the city with jurisdiction.
17. Fertilize the plant as directed by the consulting arborist.
18. When the plant is placed in the new location, backfill the planting pit with topsoil and water thoroughly to eliminate air pockets and compact the soil. Set the tree no deeper than its original condition.
19. Cover the root ball area with 3" depth of organic mulch.
20. Provide fungicide and fertility applications at the direction of the consulting arborist.
21. Post transplant watering to provide moisture and reduce any excessive stress due to root desiccation. Watering to be adjusted according to conditions and at the supervision and direction of the ISA certified arborist.
22. The diameter of the root--pruning or transplanting circle shall be at a distance away from the trunk equal to 12 times each inch of trunk diameter at breast height.
23. For all palms except Sabal palmetto, the lower fronds shall be pruned leaving 9-11 fronds that can be tied without an extensive amount of weight that may damage the heart of the palm. The Sabal palmetto shall have all fronds cut without damaging the bud.
24. Transplanting must occur within 24 hours after being dug for relocation. Trees/palms should be kept in shade and the canopy kept moist.
25. Digging and preparation of the new hole for the transplant shall be done prior to removing the tree from the existing location.
26. The landscape Contractor is to verify that all new holes have appropriate percolation.
27. Padding the sling may be necessary so that the trunk or "boots" are not damaged.
28. A 6" saucer shall be created around the edge of the plant pit to help hold water, see planting detail for additional information.
29. Over the guarantee period the Landscape contractor shall be responsible for resetting any trees/palms that are not vertical when caused by winds less than 74 mph.
30. After transplanting trees and palms, the landscape contractor shall be responsible for obtaining water and watering to maintain soil moisture during the guarantee period at a minimum of: First month- daily, Second month - three times per week, Third and Fourth months - two times per week, Last eight months - one time per week.
31. For trees over 4" in caliper at the time of planting, the schedule should be: First six weeks, daily, one and a half months to six months - three times per week, last six months - one time per week.

H. SITE PREPARATION & GRADING

1. Landscape contractor shall loosen and till compacted soils that are overly compacted in all planting areas of the project to provide for proper soil aeration for plant establishment.
2. Planted areas shall be cleared of underground rocks, construction debris and other materials detrimental to the health of the plants. Lime rock base material shall be removed within planting pits and adjacent to pavement. The planting areas should be clean to a depth equal to the root ball of the trees/palms proposed for the area. Planting area soils shall be tested for ph before planting. Soils showing high (alkaline) ph (over 7.5) shall be amended or replaced with native soil having a ph range of 6.5 - 7.5, as approved by Landscape Architect.
3. All planting areas and planting pits shall be tested for sufficient percolation prior to final planting and irrigation installation to ensure proper drainage. Plant beds in parking lots and in areas compacted by heavy equipment shall be de-compacted so that drainage is not impeded.
4. Landscape Contractor shall treat plant areas with pre-emergence herbicide after weeds and grass have been removed. Landscape Contractor shall wait (7) seven days after pre-emergence treatment prior to planting.
5. Site preparation shall include the eradication and removal of any weeds, clean-up of any dead material, debris, and rubbish.
6. General site and berm grading to +/- 1 inch (1") shall be provided by the general contractor. All finished site grading shall be provided by the Landscape Contractor. All planting beds shall be free of all rocks 1/2" or larger, sticks, and objectionable material including weeds and weed seeds. All lime rock shall be removed/cleaned down to the native soils.
7. The Landscape contractor shall ensure the planting areas are at finish grade prior to installing plant materials.
8. All trees and plant material to remain shall be protected during construction. Contractor shall install protective barriers such as "Tenax" orange safety fencing or similar, to be installed before the beginning of the project. Barriers shall be located to include the drip line of the trees, palms and plant material. The contractor shall take extra caution to prevent any damage to the trunk, root zones and grade.
9. Final grade within planting areas to be 4" below adjacent paved areas or top of curb. Sod areas to be 2" below.
10. All planting beds shall be shaped and sloped to provide proper drainage away from building and structures and to swales, if applicable.

I. IRRIGATION

1. Any Irrigation Notes and specifications included in Irrigation Sheets govern over the following Irrigation Notes.
2. The Landscape Contractor shall coordinate with the irrigation contractor if not the same and leave provisions for all individual trees in turf areas and all planting beds.
3. Irrigation / Landscape contractor to guarantee 100% coverage and 50% overlap (head to head coverage) to all landscaped areas and furnish and install a rain sensor.
4. Irrigation Contractor to adapt design to onsite conditions adjusting heads and changing nozzles as required to avoid overspray onto buildings or paved areas.
5. The contractor shall ensure that the irrigation system is operational and free of leaks prior to any planting being finalized. Plant material that is installed prior to the irrigation system being operational shall be watered by the contractor at his or her expense. Water for plant establishment should be included in the cost of the plant.
6. All guidelines as outlined by the South Florida Water Management District (SFWMD) or water management district with jurisdiction shall be strictly adhered to.
7. Any existing irrigation system shall be retrofitted to comply with the specifications as outlined above.

J. HARDSCAPE & OTHER MATERIALS

1. Face of trees and palms to be located a minimum of 2' setback from all fences, walkways, walls, and paved surfaces, unless otherwise indicated on the plans. Refer to details.

K. UTILITIES / CLEARANCES

1. The contractor shall be responsible for determining the location of and avoid and protect utility lines, buried cables, and other utilities. The owner or Landscape Architect shall not be responsible for damage to utility or irrigation lines.
2. Trees shall be placed a minimum of 5 ft. from underground utilities, unless otherwise approved in writing by Landscape Architect and Owner.
3. All canopy trees to be planted min. of 15' from light source/poles. Unless otherwise approved by the City / Landscape Architect and Owner.
4. Landscape contractor shall contact the county, city and/or utility companies to locate all underground utilities or structures prior to digging. Landscape contractor shall repair all damage to underground utilities, and/or construction caused by utility damage, at no cost to the owner.
5. All plant material symbols shown on landscape plan shall be considered diagrammatic and should be adjusted in the field by contractor to avoid all utilities, and all other obstructions.
6. Iff When digging in right of way needed: Two (2) full business days before digging, call toll free 1-800-432-4770, or 811. Sunshine State One Call of Florida, inc. Notification Center. In addition, call the City's Utilities/Public Works Department. Contractors are responsible for coordinating with the owners and appropriate public agencies to assist in locating and verifying all underground utilities prior to excavation. All existing utilities shown on the plans are to be considered approximate and should be verified by the contractor prior to the start of work operations.
7. Above and below ground utilities shall be verified and located in the field by the contractor prior to commencing work in the project area. The contractor shall examine available utility plans and confirm conflicts between indicated or located utilities and landscape work. The contractor shall then notify the Project Engineer of said conflicts and the Engineer will coordinate any necessary adjustments with the utility provider. Tree locations will be adjusted as necessary when in conflict with existing utilities.
8. The final plant locations may be adjusted, as approved / directed by the Landscape Architect in writing, to accommodate utilities compliance. Excavations within 5' of known utilities should be done by hand.
9. Contractor shall familiarize himself with the location of and avoid and protect utility lines, buried cables, and all other utilities, noted or not, on plans.
10. Leave clearance and access to all above ground or at grade meters and equipment.
11. Landscape planting shall be in conformance with FPL guidelines for setbacks from overhead utility lines.
12. Landscaping shall not interfere with light poles, fire hydrants, electrical/mechanical equipment access, signs, drainage structures, etc. Bring to the attention of Landscape Architect any conflicts.

L. ROOT BARRIERS

1. Root barriers will be installed to protect building foundations, curbing, walkways, paved areas, roadway base material and utilities from existing large trees or proposed new trees that are within 5' of existing or new approved construction or as may be deemed necessary as job progresses.
2. Mechanical Root barriers will be used for large existing Canopy Trees and chemical type barriers will be used for new trees.
3. Mechanical Root barriers will be "DeepRoot" and Chemical Root barriers will be "Biobarrier". Substitutions must be of approved equal or better quality.
4. Root barriers will be installed per manufacturer specifications.
5. Root barrier depth will be determined by manufacturer recommended depth chart (http://www.geo-synthetics.com/pdf/BioBarrier/BiobarrierApplicationManual.pdf) and as required by on-site conditions in a case by case basis as deemed necessary by Landscape Architect Architect / ISA Arborist and City Landscape Inspector.

M. LANDSCAPE BACKFILL & SOIL AMENDMENT

1. All building construction material and foreign material shall be removed from the planting areas and replaced with 70/30 mix of organic planting soil and/or amend the existing soils per section H.2.
2. Planting soil mix shall be delivered to the site in a clean loose and friable condition and is required around the root ball of all trees and shrubs, the top 6" of all shrubs and ground cover beds and top 2" of all grassed areas. This soil shall be tilled into the existing soil after the existing soil has been cleaned of all undesirable foreign materials. Recycled compost is encouraged as a soil amendment alternative. Planting soil to be weed free.
3. Planting backfill for palms shall be clean coarse native sand unless specified elsewhere.
4. Do not allow air pockets to form when backfilling. All trees shall be watered-in utilizing water probe or a tree bar.

N. PLANT SIZE & QUALITY

1. All plant material must meet or exceed the minimum size requirements as specified on the plant list. Height specification governs over container size if both specifications given cannot be met. Any other requirements for specific shape or effect as noted on the plan shall also be required for acceptance.
2. Material specified as Balled and Burlapped (B&B) can be accepted in container if not available as B&B at the discretion of Landscape Architect; if not root bound and/or circling roots removed and root ball is proportionate to Tree / Palm.
3. U.O.N, All trees designated as single trunk shall have a single, relatively straight, dominant leader, proper structural branching and even branch distribution. Trunks on palms shall be uniform in thickness for the entire length of the palm and shall not taper off to disproportionate thinness towards the crown. Trees with bark inclusion, tipped branches, and co-dominant trunks will not be accepted. Trees with girdling, circling and/or plunging roots will be rejected.
4. Use nursery grown plant materials that complies with all required inspection, grading standards, and plant regulations in accordance with the latest edition of Florida Department of Agriculture, "Grade & Standards for Nursery Plants".
5. All trees and palms shall be free of open wounds and unsightly visible scars.
6. All substitutions must be approved by the City if it is required Canopy and by Landscape Architect / Owner if supplementary accent material.
7. Contractor shall comply with Federal, State, and Local laws and regulations pertaining to the inspection for plant disease and insect infestation.
8. Trees, palms, shrubs, ground covers:
   Plant species and sizes shall conform to those indicated on the drawings. All nursery stock shall be in accordance with grades and standards for nursery plants parts 1 and 2, latest edition published by the Florida Department of Agriculture and Consumer Services, unless specified otherwise. All plants shall be Florida grade number 1 or better as determined by the Florida Division of Plant Industry and tightly knit plant, so trained or favored in its development that first appearance is unquestionable and it is outstandingly superior in form, number of branches, compactness and symmetry. All plants shall be freshly dug, sound, healthy, vigorous, well branched and free of disease and insect eggs and larvae and shall have adequate root systems. Trees and palms shall be uniform in size and shape. All materials shall be subject to approval by the Landscape architect. Plants shall be pruned prior to delivery only upon the approval of the Landscape Architect.
9. All containers grown material shall be healthy, vigorous, well-rooted plants and established in the container in which they are sold. The plants shall have tops of good quality and be in a healthy growing condition. An established container grown plant shall be transplanted into a container and grown in that container sufficiently long enough for the new fibrous roots to have developed so that the root mass will retain its shape and hold together when removed from the container.
10. Field grown trees and palms previously root pruned shall obtain a root ball with sufficient roots for continued growth without resulting shock.
11. Root suckers on any tree are not acceptable and must be properly pruned.
12. Contractor shall coordinate with Landscape Architect and Owner to obtain prior approval for the selection of the specific specimens of all palms and any trees of more than six feet in height. Contractor to supply photograph of trees prior to purchase and installation.

O. PLANTING NOTES

1. At the discretion of the Landscape Architect, plants are subject to review for approval for size, variety, condition and appropriateness to the design intent.
2. All synthetic burlap, synthetic string or cords, or wire baskets shall be removed before any trees are planted. All synthetic tape (i.e. tagging tape, nursery tape) shall be removed from trunks, branches, etc. before inspection. The top 1/3 of any natural burlap shall be removed or tucked into the planting hole before the trees are back filled.
3. All "groundcover" requires 75% coverage and 100% within 3 months of installation. Bring to the attention of Landscape Architect in writing before commencing if this is not achievable with the design.
4. Set tree no deeper than it was in its original growing condition with the top of the root ball even with, or slightly higher (+/- 1") than the finished grade.
5. All trees/palms shall be planted so the top of the root ball, root flair are slightly above final grade. Shrub material shall be planted such that the top of the plant ball is flush with the surrounding grade.
6. All trees and palms shall be braced / staked per accepted standards by the Florida Nursery, Growers & Landscape Association (FNGLA). Nailing into trees and palms for any reason is prohibited and the material will be rejected. Please refer to the planting details.
7. All trees, new or relocated, to be staked and guyed as detailed.
8. Layout shrubs to create a continuous smooth front line and fill in behind.
9. Excavate pit or trench to 1-1/2 times the diameter of the balls or containers or 1' wider than the spread of roots and 3" deeper than required for positioning at proper height . Compact a layer of topsoil in bottom before placing plants. Backfill around plants with planting mixture, compacted to eliminate voids and air pockets. Form grade slightly dished and bermed at edges of excavation. Apply 3" of mulch.
10. Groundcover and shrubs to be spaced in a uniform and consistent pattern per planting details.
11. All mechanical equipment, irrigation pumps, FPL transformers, pool pumps, etc. shall be screened on a minimum of three sides by landscape shrubs.
12. Contractor shall not mark or scar trunks in any fashion.
13. When requested by Landscape Architect, demonstration of healthy root system if not previously approved, can include tree removal and re-installation for inspection at no additional cost to the owner.
14. Remove rejected Plant material from the Site immediately and replace with acceptable plants.

P. FERTILIZATION

1. All Fertilization shall comply with state fertilization laws. Fertilization shall be Agriform "20-10-5 Plus minors" or similar approved slow-release tablets applied per manufacturer suggested application rate chart:

Agriform® 21-gm Tablets (SKU# 90026*; 500 tablets/case)

NEW **Tree / Shrub Container Size**

	1 Gal	2 Gal	3 Gal	5 Gal	7 Gal	15 Gal	24" Box
Installation:	1	1 to 2	2 to 3	2 to 3	3 to 5	7 to 10	15 to 24

- Place plant in the hole and backfill to halfway point.
- Do not place tablets in the bottom of the planting hole.
- Place Agriform Tablets in the hole about 1to 2 inches away from root tips.
- Finish filling the hole around the plant to grade level.

SCOTTS: 1-800-492-8255 or visit www.scottspro.com

Q. SOD

1. All areas disturbed during construction shall be sodded with St. Augustine 'Seville' unless otherwise noted. These disturbed areas shall have proper irrigation established or re-established if they were disrupted or non-functional.
   Landscape Contractor to supply and install 2" soil layer 50/50 mix blanket for all new sod areas.
2. All open areas not covered by trees, palms, shrubs, vines, ground covers or existing sod in good condition to remain, shall receive Stenotaphrum Secundatum, St. Augustine 'Seville' sod, whether labeled on the plans or not, unless a different species is indicated on the planting plan. Sod shall be strongly rooted, free from weed, fungus, insects and disease. Contractor shall be paid by the total sodded area x the unit price submitted (field verified).
3. Sod shall be machine stripped no more than 24 hours prior to laying.
4. Lay sod strips with tight joints, do not overlap, stagger strips to offset joints in adjacent courses. Work sifted soil mix into minor cracks between pieces of sod and remove excess soil deposits from sodded areas. Sod on slopes greater than 3:1 shall be immediately staked after planting.

R. INSPECTION & ACCEPTANCE

1. Notify the governing Agency if required and Landscape Architect of commencement.
2. Onsite plant deliveries shall occur on Monday through Friday only unless otherwise directed by the Landscape Architect / Owner. The contractor shall ensure that plant material is delivered undamaged from transportation or digging operations. The Landscape Architect may reject material that has been damaged or rendered unacceptable due to relocation or transportation from the point of origin. All plant material shall be available for inspection and approval by the Landscape Architect prior to final installation.
3. There shall be one final inspection for approval by each of the presiding governing agency, Landscape Architect and owner. Contractor shall ensure that the plans, details, specifications and notes have been adhered to and that the landscape and irrigation installation is compliant to all items as directed on the plans prior to scheduling of the final inspection.
4. Upon completion of the work, the Landscape Contractor shall notify the Landscape Architect and request a final inspection. Any items that are judged incomplete or unacceptable by the Landscape Architect or owner shall be promptly corrected by the Landscape Contractor.
5. No substitution of plant material, type or sizes will be permitted without prior written authorization from the Landscape Architect and owner.
6. To obtain final payment, Contractor must provide release of all mechanic's liens and material liens.

S. MULCH

1. All planting beds shall be mulched to a depth of 3" with an organic mulch approved by Landscape Architect. No heavy metals, such as arsenic, etc. are to be contained in the mulch. The contractor shall provide certification if requested or proof that all mulch is free of heavy metals or similar environmental contaminants.
2. Shredded approved organic mulch to be used beyond trunk in all directions and throughout all hedges and plant material.
3. All trees in sodded areas shall have a clean cut 4' diameter mulch ring.
4. Preferred mulch is shredded melaleuca. Cypress, red, gold and green mulch is prohibited.
5. All mulch shall have a minimum 3" separation from the trunk of the tree/palm trunk to avoid rotting.

T. WATERING

1. All plant material shall be watered in thoroughly at the time of planting.
2. It is the sole responsibility of the Landscape Contractor to ensure that all new plantings receive adequate water during the installation and until completion of contract. Deep watering of all new trees and palms and any supplemental watering that may be required to augment natural rainfall and site irrigation is mandatory to ensure proper plant establishment and development and shall be provided by Contractor as a part of this contract.

U. CLEAN UP

1. The Landscape Contractor is responsible for maintaining all landscape planting areas until final acceptance of the owner.
2. The contractor is responsible for mowing the entire project during planting and establishment periods, based on mowing project once a month from October to April, and twice a month from April to October (During installation and plant establishment only and until final inspection and owner accepts and takes ownership).
3. Any excess soil, undesired stones or debris resulting from landscape operations shall be removed promptly, keeping the site clean as work progresses.
4. The Landscape Contractor shall at all times keep the premises free from accumulation of waste material or debris caused by their crews during the performance of the work. Upon completion of the work, the contractor shall promptly remove all waste materials, debris, unused plant material, empty plant containers, and all equipment from the project site.

V. MAINTENANCE

1. Landscape Contractor to return to job site 12 months after tree bracing and remove all tree braces. Owner may choose to retain 5% of payment to ensure compliance.
2. The Landscape Contractor shall water, mulch, weed, prune, and otherwise maintain all plants, including sod, until completion of contract or acceptance by landscape architect. Settled plants shall be reset to proper grade, planting saucers restored, and defective work corrected.
3. Trees and shrubs shall be maintained to keep clearance of stop signs and safety clearance for visibility at traffic intersection.

W. GUARANTEE & REPLACEMENT

1. By accepting the contract, the Contractor is thereby guaranteeing all plant materials and design for a period of not less than one (1) year from the time of final acceptance by the owner. Contractor shall replace any plants which die or wither within such period with healthy plants that meet specifications of the same species and size without additional cost to the owner unless such death or withering is due to Owner's failure to do ordinary maintenance on such plants after final acceptance in accordance with any maintenance instructions given by Landscape Architect for such plants. Such replacement shall include all plants and labor to plant the replacement plants. Any plant materials damaged by lightning, storms, freeze damage or other "acts of God" as well plants damaged by vehicles, vandalism or neglect are not included in this replacement agreement. If requested, the Landscape Architect may act as a mediator between owner and Landscape Contractor on a time material basis. "Plants" includes all trees, palms, shrubs, grass and other plants provided or planted by Contractor.

X. MISCELLANEOUS.

1. All work to be done in a professional manner.
2. No change order shall be valid, due or paid unless it is approved by Owner in writing in advance.
3. These notes shall be an integral part of the contract of Contractor and shall be deemed incorporated therein by reference. In the event of a conflict among the terms among the plans and these notes, the terms of this document shall control.

Y. ABBREVIATIONS IN NOTES AND PLANS

U.O.N = Unless Otherwise Noted
L.A = Landscape Architect
S.F = Square Feet
STD = Standard (single trunk)
B&B = Balled and Burlaped
BLDG DEP = Building Department
RFI = Request for Information
FPL= Florida Power & Light
C.O. = Certificate of Occupancy
ISA CA or ISA Arborist = International Society of Arboriculture Certified Arborist

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643

2160 NW 82nd Avenue
Doral, Florida 33122

P: (954) 788-3400 F: (954) 788-3500

Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	DG
DESIGNED BY:	MP
CHECKED BY:	MP

MICHAEL J. PHILLIPS, RLA
FLORIDA REG. NO. LA0001540
(FOR THE FIRM)

SHEET TITLE

LANDSCAPE NOTES

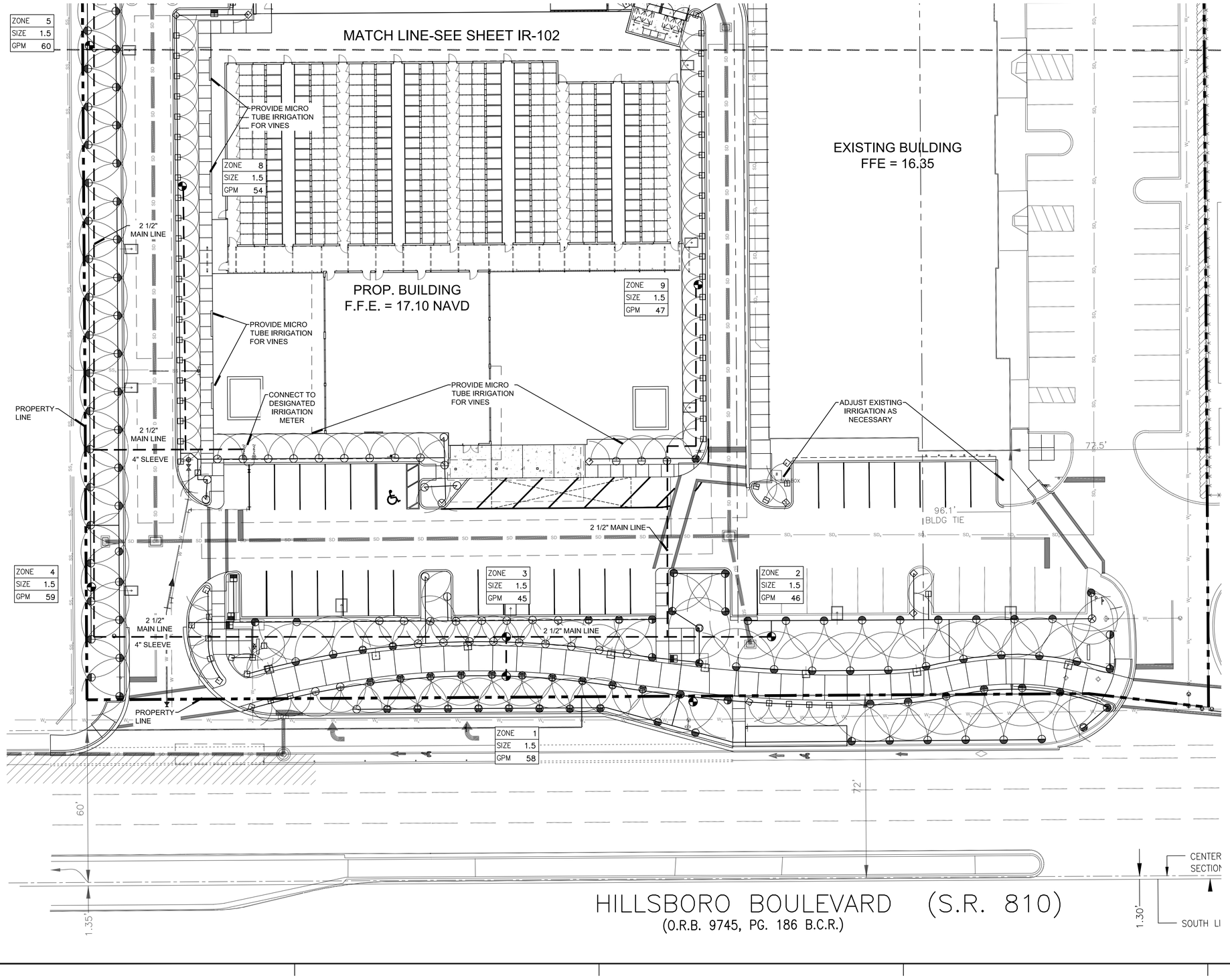
SHEET NUMBER

LN-101

SHEET of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Landscape Architecture\Cadd\dwg\09675.00 - LN-101.dwg Layout Name: TD-101 Plotted by: jossen Plotted on: Mar 24, 2017 - 4:42pm



NORTH

GRAPHIC SCALE

0 20 40

SCALE: 1"=20'

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION

THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	DG
DESIGNED BY:	MP
CHECKED BY:	MP

MICHAEL J. PHILLIPS, RLA
FLORIDA REG. NO. LA0001540
(FOR THE FIRM)

SHEET TITLE

IRRIGATION PLAN

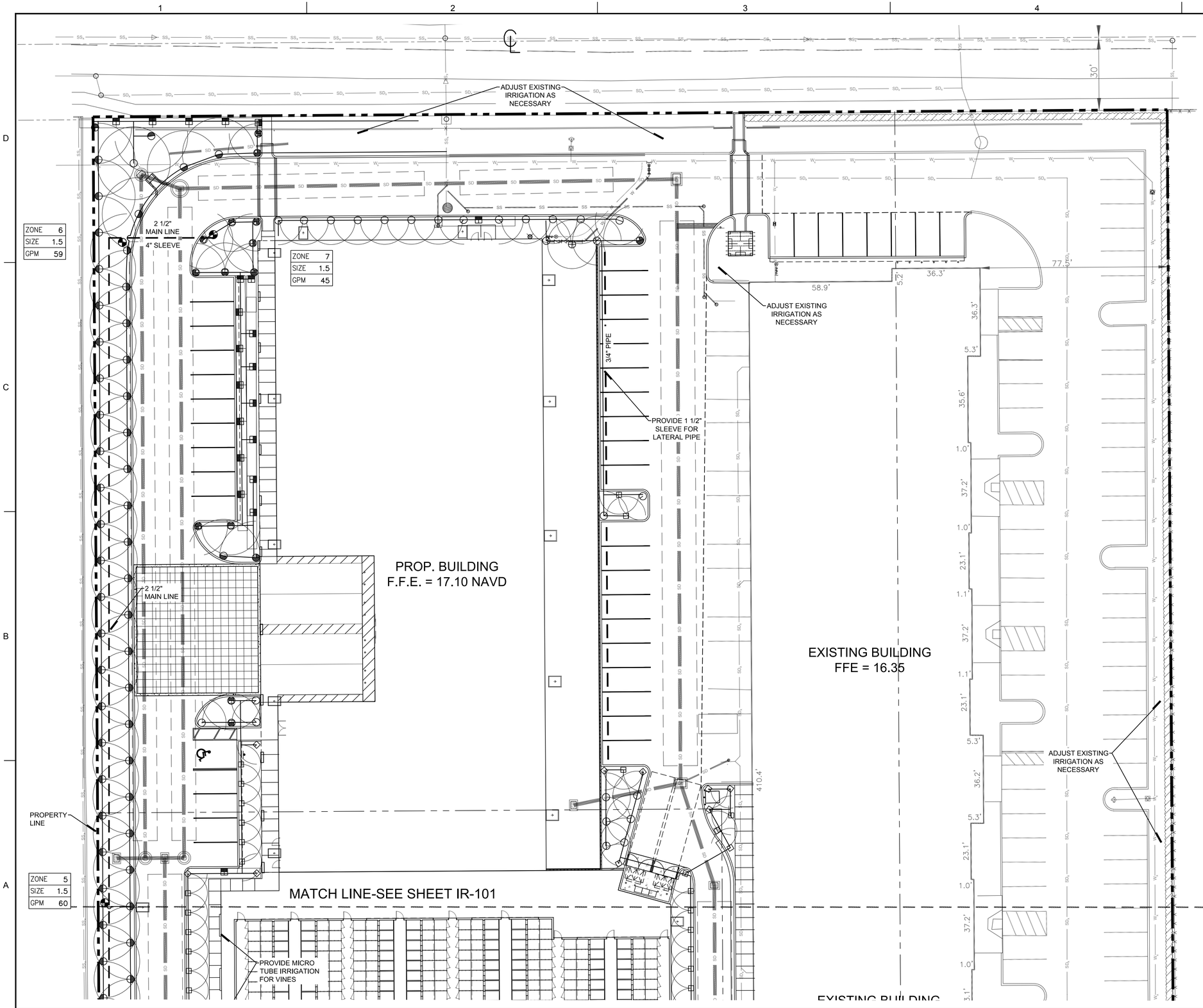
SHEET NUMBER

IR-101

SHEET of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Landscape Architecture\Cadd\dwg\09675.00 - IR-101.dwg Layout Name: IR-101 Plotted by: snolan Plotted on Aug 24, 2017 - 1:21pm



NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION

THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	DG
DESIGNED BY:	MP
CHECKED BY:	MP

MICHAEL J. PHILLIPS, RLA
FLORIDA REG. NO. LA0001540
(FOR THE FIRM)

SHEET TITLE

IRRIGATION PLAN

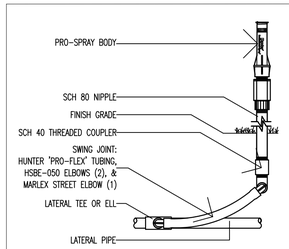
SHEET NUMBER

IR-102

SHEET of 24

PROJECT NO. 09675.00

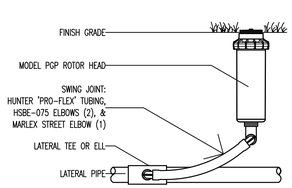
Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Landscape Architecture\Cadd\dwg\09675.00 - IR-101.dwg Layout Name: IR-102 Plotted by: srosen Plotted on: Aug 24, 2017 - 1:20pm



SPRAY HEAD ON RISER

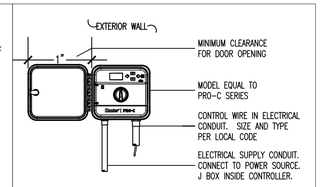
NOT TO SCALE — Hunter IRRIGATION DETAIL

*When using larger GPM nozzles, beware of high friction loss in swing joints.



PGP ROTOR HEAD

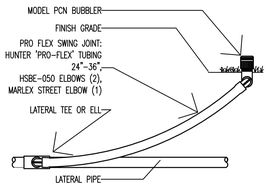
NOT TO SCALE — Hunter IRRIGATION DETAIL



NOTE
SPECIFY 4, 7, 10, 13, 16 STATION MODEL CONTROLLER. MOUNT CONTROLLER WITH LCD SCREEN AT EYE LEVEL. CONTROLLER SHALL BE HARD-WIRED TO GROUNDED 110 VAC SOURCE.

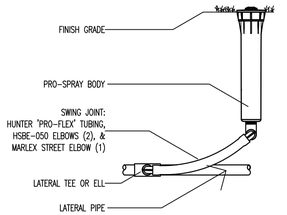
PRO-C CONTROLLER

NOT TO SCALE — Hunter IRRIGATION DETAIL



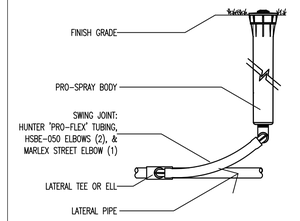
PCN BUBBLER

NOT TO SCALE — Hunter IRRIGATION DETAIL



12" POP-UP SPRAY HEAD

NOT TO SCALE — Hunter IRRIGATION DETAIL



6" POP-UP SPRAY HEAD

NOT TO SCALE — Hunter IRRIGATION DETAIL

IRRIGATION LEGEND

SYMBOL	DESCRIPTION
	HUNTER PGP 6" POP-UP ROTOR HEADS
	HUNTER SPRAY NOZZLES: 15' RADIUS, WITH PRO SPRAY BODY
	HUNTER SPRAY NOZZLES: 12' RADIUS, WITH PRO SPRAY BODY
	HUNTER SPRAY NOZZLES: 10' RADIUS, WITH PRO SPRAY BODY
	HUNTER SPRAY NOZZLES: 8' RADIUS WITH, WITH PRO SPRAY BODY
	HUNTER END SPRAY: ES515, WITH PRO SPRAY BODY
	HUNTER SIDE SPRAY: SS515, WITH PRO SPRAY BODY
	HUNTER MULTI-STREAM BUBBLERS: MSBN SERIES
	HUNTER BUBBLERS: PCN SERIES
	ZONE VALVE: ELECTRONIC, EQUAL TO IRRITROL, SIZE PER PLAN, IN AMETEK OR CARSON 12"X18" VALVE BOX
	AMES BRASS GATE VALVE, SAME SIZE AS MAINLINE, IN 6" SCH 40 PVC COLLAR EXTENSION AND VALVE BOX
	HUNTER MODULAR IRRIGATION CONTROLLER EQUAL TO PRO-C SERIES WITH SOLAR SYNC, TO BE LOCATED PER OWNER'S PREFERENCE
	SLEEVES: SCH 40 PVC OR RATED EQUAL CLASS SLEEVES TO BE MIN. 24" AND MAX. 36" DEEP
	MAIN LINE: SCH 40 PVC WITH SCH 80 PVS FITTINGS THRUST BLOCKS AT STRESS POINTS, SITE PER PLAN
	LATERAL PIPING: PVC CLASS 200 PVC FITTINGS AND GLUE JOINTS, PER SPECIFICATIONS

IRRIGATION NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR ALL MATERIAL REQUIRED TO MAKE THE SYSTEM FUNCTION PROPERLY. ALL IRRIGATION SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND ALSO STATE AND/OR LOCAL CODES.
2. IRRIGATION PLANS ARE SCHEMATIC AND DRAWN FOR GRAPHIC CLARITY. ALL PIPING BELOW PAVEMENT SHALL BE SLEEVED. LAYOUT OF IRRIGATION SYSTEM SHALL BE COORDINATED WITH CORRESPONDING LANDSCAPE PLAN.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING LOCAL UNDERGROUND UTILITY PROVIDERS TO VERIFY LOCATIONS. THE CONTRACTOR IS ENCOURAGED TO VISIT THE SITE PRIOR TO INSTALLATION AND BECOME FAMILIAR WITH EXISTING CONDITIONS.
4. VALVE LOCATIONS ARE SCHEMATIC ONLY AND WILL BE ADJUSTED FOR SITE CONDITIONS. EACH VALVE SHALL BE INSTALLED IN A AMETEK OR CARSON VALVE BOX. THE FLOW ADJUSTMENT FEATURE WILL BE USED TO BALANCE PRESSURE THROUGHOUT THE SYSTEM.
5. PIPING SHALL BE SIZED TO MINIMIZE FRICTION LOSS AND MAINTAIN FLOW VELOCITY BELOW 5 FPS.
6. THE IRRIGATION CONTROLLER SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS. PROPER GROUNDING EQUIPMENT AND SURGE PROTECTION SHALL BE PROVIDED. A RAIN SENSOR SHALL BE INSTALLED TO OVER-RIDE THE CONTROLLER.
7. ALL HEADS ON RISERS SHALL BE SET AT THE HEIGHT OF ADJACENT PLANT MATERIAL.
8. SPRINKLER LOCATIONS ADJACENT TO PAVEMENT, STRUCTURES, FENCES, ETC. SHALL BE OFFSET AS FOLLOWS: 12" MIN FOR POP-UP MIST HEADS, 18" FOR SHRUB RISERS, 18" FOR ROTOR HEADS, AND TYPICALLY 5 FEET FOR ROTORS ALONG UNCURBED ROADWAYS.
9. ALL SLEEVING SHALL BE SCH 40 PVC TO SIZE INDICATED ON PLAN, OR IF NOT INDICATED, A MIN. OF 2 PIPE SIZES LARGER THAN SUPPLY LINE CONTAINED. ALL SLEEVES SHALL BE INSTALLED A MIN. OF 24" BELOW FINISH GRADE.
10. CONTROL WIRES SHALL BE UL APPROVED PE IRRIGATION CONTROL WIRE. USE 14 GAGE CONTROL WIRE AND 12 GAGE GROUND WIRE. WIRE SHALL BE BUNDLED AND ATTACHED TO THE MAIN LINE IN TRENCH OR THROUGH WIRE SLEEVES AT PAVEMENT CROSSINGS 24" BELOW FIN. GRADE. ALL SPLICES SHALL BE MADE WITH WATERPROOF DIRECT-BURIAL SPLICE KITS AND CONTAINED IN VALVE BOXES. TWO EXTRA CONTROL WIRES SHALL BE INSTALLED TO THE FURTHEST VALVES IN EACH DIRECTION FROM THE CONTROLLER.
11. PIPING IN NARROW PLANTING AREAS, PARKING ISLANDS AND PLANTERS SHALL BE SET TO ONE SIDE TO ALLOW ROOM FOR ROOT BALLS. PIPE AS INDICATED ON PLAN IS SCHEMATIC AND SHOULD BE ADJUSTED FOR FIELD CONDITIONS.
12. ALL GLUE JOINTS SHALL BE CLEANED, SANDED, AND TREATED WITH A COLORED HIGH ETCH PRIMER AND JOINED USING A SOLVENT CONFORMING WITH ASTM D2564.
13. SYSTEM PIPE SIZE 3/4" SHALL BE CLASS 200 PVC; SYSTEM PIPE SIZE 1" OR GREATER SHALL BE CLASS 160 PVC. SYSTEM MAIN WILL BE SCH. 40 PVC TO SIZE INDICATED ON PLAN. ALL FITTINGS WILL BE SOLVENT WELD SCH 40 PVC. MAIN LINE SHALL HAVE 24" MINIMUM COVER; ALL OTHER PIPING WILL HAVE 12" MIN. COVER. ALL BACKFILL FOR PIPE TRENCHES SHALL BE CLEAN AND FREE OF FOREIGN DEBRIS AND SHARP OBJECTS; BACKFILLED TRENCHES SHALL BE PROPERLY COMPACTED. ALL MAIN LINES WILL BE INSTALLED A MIN. OF 3' FROM ANY TREE OR PALM.
14. WATERING TIME PER STATION WILL BE DETERMINED IN THE FIELD AND PER LOCAL REQUIREMENTS. REFER TO MANUFACTURER'S INSTRUCTIONS FOR PRECIPITATION RATES OF SPRINKLERS SPECIFIED.
15. IRRIGATION SYSTEM TO PROVIDE 100% COVERAGE WITH 50% OVERLAP MIN. PROVIDE BUBBLERS FOR ALL NEW AND RELOCATED TREES AND PALMS.
16. RUST CONTROL SYSTEM TO BE INSTALLED WITH PUMP STATION (IF FROM WELL).
17. THE IRRIGATION SYSTEM IN THE RIGHT-OF-WAY IS TO INCORPORATE LOW TRAJECTORY SPRAY HEADS TO MINIMIZE OVERSPRAY.
18. AS-BUILT DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR AND GIVEN TO THE OWNER PRIOR TO FINAL ACCEPTANCE.

KEITH & ASSOCIATES, INC.
consulting engineers
301 East Atlantic Boulevard
Pompano Beach, Florida 33060-6643
2160 NW 82nd Avenue
Doral, Florida 33122
P: (954) 788-3400 F: (954) 788-3500
Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO.	DESCRIPTION	DATE
1	PER DRC COMMENTS	06/08/2017
2	PER DRC COMMENTS	08/24/2017

PRELIMINARY PLAN
NOT FOR CONSTRUCTION
THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

LEDER HILLSBORO STORAGE

SCALE:	AS NOTED
DATE ISSUED:	MARCH 28, 2017
DRAWN BY:	DG
DESIGNED BY:	MP
CHECKED BY:	MP

MICHAEL J. PHILLIPS, RLA
FLORIDA REG. NO. LA0001540
(FOR THE FIRM)

SHEET TITLE
IRRIGATION DETAILS AND LEGEND

SHEET NUMBER
IR-103

SHEET of 24

PROJECT NO. 09675.00

Drawing name: N:\09\09675.00 - Pet Lodge - Leder Group\Landscape Architecture\Cadd\dwg\09675.00 - IR-101.dwg Layout Name: IR-103 Plotted by: snolen Plotted on Aug 24, 2017 - 8:18am