

# CONSTRUCTION PLANS FOR SHADOW BAY PARK PLAYGROUND AND FITNESS AREA 5100 TURKEY LAKE ROAD ORLANDO, ORANGE COUNTY, FLORIDA 32819

**GOVERNING STANDARDS AND SPECIFICATIONS:**  
THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND GOVERNED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION'S DESIGN STANDARDS DATED 2015 AND THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2012, AS AMENDED BY CONTRACT DOCUMENTS.

**APPLICABLE DESIGN STANDARDS MODIFICATIONS:**

"Design Standards" web site: [www.dot.state.fl.us/rddesign/](http://www.dot.state.fl.us/rddesign/)

FLORIDA BUILDING CODE FIFTH EDITION (2014)



945 N. Pennsylvania Avenue  
Winter Park, Florida 32789  
Phone: 407.629.1188

## TEAM Engineering, LLC

Certificate of Authorization No. 26618  
2215 Wembley Place  
Oviedo, Florida 32765  
Phone: 407.677.1012

### BOARD OF COUNTY COMMISSIONERS

TERESA JACOBS	COUNTY MAYOR
BETSY VANDERLEY	DISTRICT 1
BRYAN NELSON	DISTRICT 2
PETE CLARKE	DISTRICT 3
JENNIFER THOMPSON	DISTRICT 4
EMILY BONILLA	DISTRICT 5
VICTORIA P. SIPLIN	DISTRICT 6
JON WEISS	COMMUNITY AND ENVIRONMENTAL SERVICE DIRECTOR
MATT SUEDEMEYER	PARKS AND RECREATION DEPARTMENT MANAGER

# BID/PERMIT DOCUMENTS

FITNESS AREA  
LOCATION

PLAYGROUND  
LOCATION



5100 TURKEY LAKE ROAD, ORLANDO FLORIDA 32819  
VICINITY MAP  
NOT TO SCALE

SCOPE: ADDITION OF ACCESSIBLE SIDEWALKS AND MODIFICATIONS AND REPLACEMENT TO EXISTING SHADOW BAY PARK PLAYGROUND AND FITNESS EQUIPMENT.

**NOTES:**

1. ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN CHANGED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

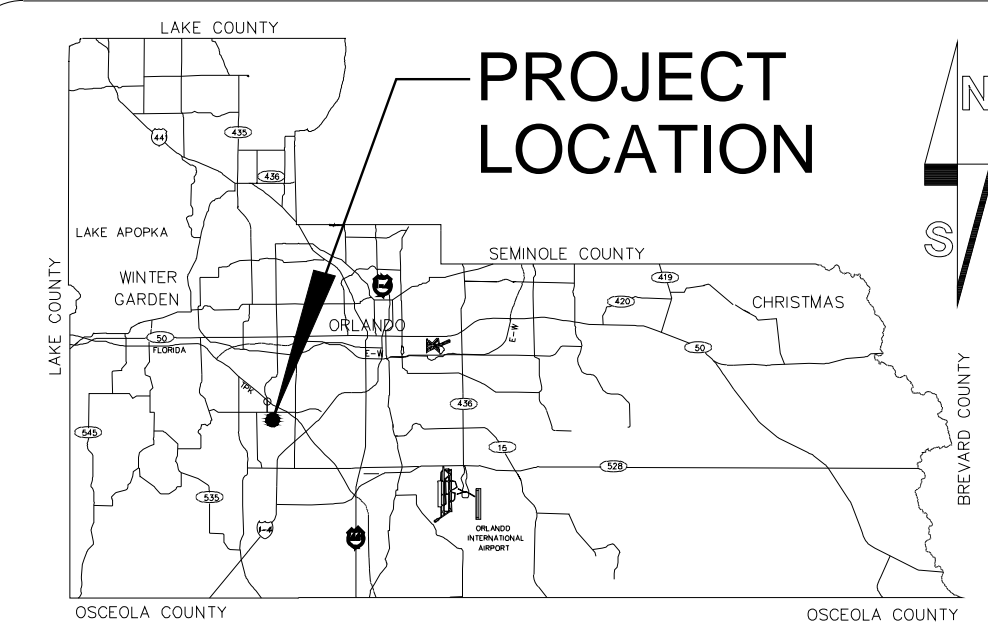
12" X 18" DRAWINGS ~ HALF SIZE  
24" X 36" DRAWINGS ~ TO SCALE

2. INFORMATION SHOWN WITHIN THESE PLANS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

**NOTE**

PLANS WERE PREPARED TO AVAILABLE INFORMATION TO ADEQUATELY ADDRESS CONDITIONS AS THEY EXISTED AT THE TIME OF PLANS PREPARATION. DEEDS, CONDITIONS AND OWNERSHIP OF PROPERTIES MAY HAVE CHANGED SINCE PROJECT DESIGN. THE COUNTY'S REPRESENTATIVE WILL ADDRESS CHANGES AND NEEDS WITH THE PROPERTY OWNER OR THEIR REPRESENTATIVES. CONTRACTOR SHALL WORK WITH THE COUNTY'S REPRESENTATIVE IN ADDRESSING AND MEETING NEEDS AND CONDITIONS THAT MAY HAVE CHANGED SINCE PLANS PREPARATION.

DATE: \_\_\_\_\_ ENGINEER: JEFFREY J. EARHART REG. NO. 49935



SECTION 14, TOWNSHIP 23 SOUTH, RANGE 28 EAST  
PARCEL NUMBER: 14-23-28-0000-00-001

LOCATION MAP

**INDEX OF SHEETS**

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4.4	PLAY EQUIPMENT FOOTING PLAN
4.5	FITNESS EQUIPMENT FOOTING PLAN
5.0	PLAY AREA GRADING AND DRAINAGE PLAN
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5.2	GRADING AND DRAINAGE DETAILS AND NOTES
6.0	HARDSCAPE DETAILS
7.0	PLAY AREA LANDSCAPE PLAN
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**UTILITIES ENCOUNTERED**

POTABLE WATER: ORANGE COUNTY UTILITIES	407-836-2777
RECLAIMED WATER: ORANGE COUNTY UTILITIES	407-836-2777
SANITARY SEWER: ORANGE COUNTY UTILITIES	407-836-2777
ELECTRIC: DUKE ENERGY	877-372-8477
PHONE: AT&T	866-620-6900

REVISIONS

DATE BY

REVISIONS	DATE	BY

DESIGNED BY: MS DATE: 12/2016  
DRAWN BY: MS DATE: 12/2016  
CHECKED BY: JE DATE: 12/2016  
BID SET: 02-01-2017  
PROJECT NO: SHADOW BAY PARK

SHEET 1  
OF 15





REVISIONS	DATE	BY

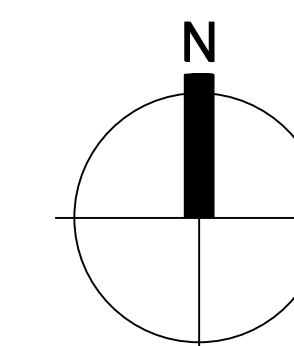
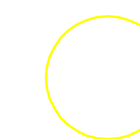
**TEAM Engineering, LLC**

GENERAL NOTES:

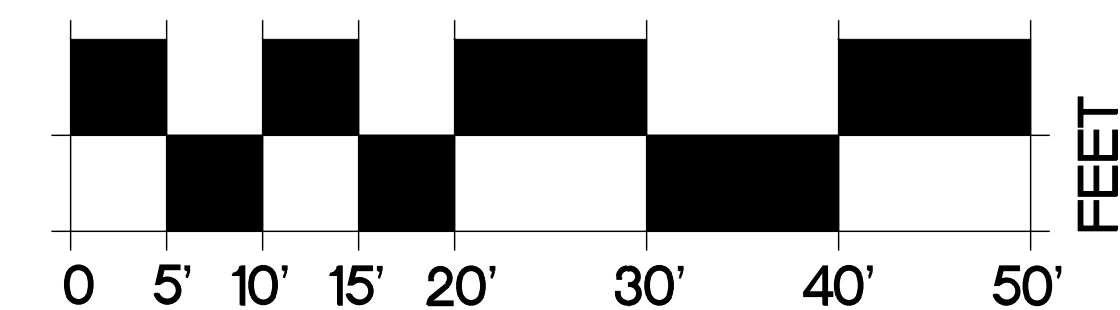
1. ALL ELEVATIONS SHOWN IN THESE PLANS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH AND CONFORM TO THE MOST STRINGENT REQUIREMENTS OF THE PROJECT SPECIFICATIONS, THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2012 EDITION), AND SUPPLEMENTS THERETO, AND ORANGE COUNTY ROAD CONSTRUCTION SPECIFICATIONS.
3. SUBSURFACE INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FOR USE IN ESTABLISHING TOPOGRAPHIC FEATURES FOR THE PROJECT. THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED AND IS NOT TO BE CONSTRUED AS PART OF THE PLAN GOVERNING CONSTRUCTION OF THE PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INQUIRE OF THE ENGINEER IF ADDITIONAL INFORMATION IS AVAILABLE, TO MAKE ARRANGEMENTS TO REVIEW SAME PRIOR TO BIDDING, AND TO MAKE HIS OWN DETERMINATION AS TO ALL SUBSURFACE CONDITIONS.
4. ALL PERSONAL PROPERTY, EXCEPT MAIL BOXES, WITHIN THE RIGHT-OF-WAY NOT RELOCATED BY THE PROPERTY OWNER SHALL BE REMOVED BY THE CONTRACTOR AS NECESSARY TO CONSTRUCT THE PROJECT IN ACCORDANCE WITH THE PLANS. MAIL BOXES SHALL BE RELOCATED BY THE CONTRACTOR IN ACCORDANCE WITH F.D.O.T. DESIGN STANDARD 532. PAYMENT WILL BE INCLUDED IN THE PRICE BID FOR ITEM NO. 110-1-1, CLEARING AND GRUBBING.
5. THE DISPOSAL OF EXCESS EARTHWORK MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. APPROVAL(S) OF THE DISPOSAL SITES SHALL BE OBTAINED FROM ORANGE COUNTY PRIOR TO DISPOSAL. ALL EXCESS MATERIALS ARE THE PROPERTY AND RESPONSIBILITY OF THE CONTRACTOR.
6. SOD ALL DISTURBED AREAS UNLESS OTHERWISE SHOWN ON THE PLANS. SOD SHALL MATCH EXISTING TYPE SOD UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
7. PEGGED SOD TO BE PLACED ON ALL SLOPES 1:2 OR STEEPER.
8. SAWCUT CONCRETE DRIVEWAYS AND WALKWAYS AS REQUIRED FOR CONSTRUCTION.
9. ALL PAVEMENT OFFSETS SHOWN ARE TO PROPOSED CENTERLINE OF CONSTRUCTION; ALL RADII AND DIMENSIONS ARE TO PROPOSED EDGE OF PAVEMENT.
10. THE CONTRACTOR SHALL PERFORM HIS WORK IN ACCORDANCE WITH REQUIREMENTS OF THE VARIOUS PERMITS INCLUDED IN THE BID SPECIFICATIONS. ENVIRONMENTAL CONTROLS SHALL BE USED AT LOCATIONS DESIGNATED IN THE STORMWATER POLLUTION PREVENTION PLAN AND/OR DESIGNATED BY THE ENGINEER.
11. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS BASED ON AVAILABLE RECORDS AND SURVEYS BUT IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO AND IS RESPONSIBLE FOR COORDINATING UTILITY RELOCATION WITH PROJECT CONSTRUCTION. PRIOR TO ORDERING DRAINAGE STRUCTURES, THE CONTRACTOR SHALL DETERMINE IF DRAINAGE/UTILITY CONFLICTS EXIST. INFORMATION ON CONFLICTS IS TO BE SUBMITTED TO THE ENGINEER AS SOON AS POSSIBLE AFTER DISCOVERY FOR RESOLUTION. SUNSHINE STATE ONE CALL MUST BE NOTIFIED FOR LOCATES AT 1-800-432-4770.
12. UTILITIES ARE TO BE ADJUSTED BY OTHERS OR AS DIRECTED BY THE ENGINEER.
13. THE CONTRACTOR SHALL NOTIFY ALL GAS UTILITY COMPANIES A MINIMUM OF TWO WORKING DAYS PRIOR TO EXCAVATION AS REQUIRED BY CHAPTER 77-153 OF THE FLORIDA STATUTES.
14. ALL EXISTING DRAINAGE STRUCTURES AND PIPES WITHIN THE LIMITS OF CONSTRUCTION SHALL REMAIN, UNLESS OTHERWISE SHOWN IN THE PLANS OR DIRECTED BY THE ENGINEER.
15. DESIGN CHANGES OF PIPE INVERTS NOT EXCEEDING PLUS OR MINUS ONE FOOT WILL NOT BE CONSIDERED AS A BASIS FOR ADDITIONAL COMPENSATION FOR THE PERTINENT PIPE BID ITEM OR FOR MODIFICATION OF PRECAST STRUCTURES.
16. CONTRACTOR IS TO MAINTAIN UNINTERRUPTED ACCESS TO ALL PARK DRIVEWAYS AND SIDE STREETS AT ALL TIMES AND IS TO NOTIFY PROPERTY OWNERS FIVE DAYS PRIOR TO STARTING CONSTRUCTION.
17. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL CALL SUNSHINE ONE TWO BUSINESS DAYS IN ADVANCE OF PERFORMING ANY UTILITY ADJUSTMENTS OR RELOCATIONS. SUNSHINE ONE PHONE NUMBER 1-(800)-432-4770.
18. CONTRACTOR TO VIDEOTAPE AND PHOTOGRAPH THE LIMITS OF CONSTRUCTION PRIOR CONSTRUCTION AND GIVE A COPY TO THE COUNTY. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM NO. 101-1, MOBILIZATION.
19. ALL EXISTING SPOT ELEVATIONS ARE AS A RESULT OF A FIELD SURVEY WITHOUT BENEFIT OF DATUM INFORMATION. ALL PROPOSED SPOT ELEVATIONS ARE RELATIVE TO THOSE FIELD SHOT EXISTING ELEVATIONS. THE DRAIN INLET RIM ELEVATION IS EXISTING AND THE BASE ELEVATION WAS BASED ON THE WATER LEVEL IN BOX AT THE TIME OF FIELD SURVEY. FOR QUESTIONS CONTACT ORANGE COUNTY PARKS AND RECREATION 407-836-6261, OR ENGINEER, JEFFERY EARHART, 407-677-1012.

# GENERAL NOTES SHADOW BAY PARK PLAY AND FITNESS AREA

TURKEY LAKE ROAD ORLANDO, FLORIDA 32819



NORTH



NO SCALE

SHEET 2.0

DATE: \_\_\_\_\_ ENGINEER: JEFFERY J. EARHART REG. NO. 49935

NOVEMBER 02, 2016 MS  
BID SET 02-01-2017

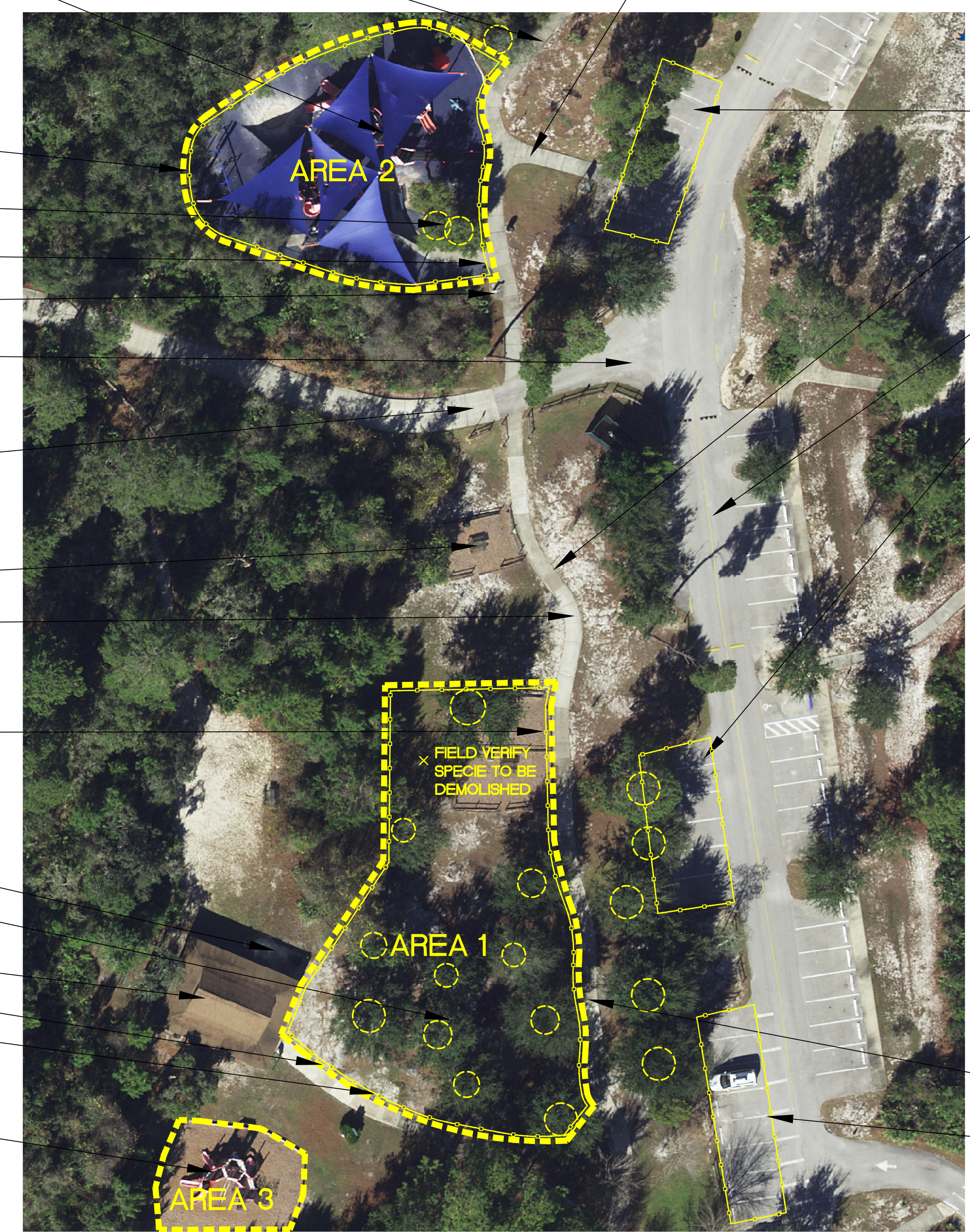




REVISIONS	DATE	BY



**AREA 2:**  
EXISTING PLAYGROUND AREA TO BE DEMOLISHED FOR PROPOSED FITNESS AREA



**AREA 3:**  
EXISTING PLAYGROUND AREA TO BE DEMOLISHED FOR PROPOSED OPEN SPACE AREA

EXISTING CONCRETE PAVING TO REMAIN. CONTRACTOR SHALL PROTECT EXISTING CONCRETE PAVING. CONTRACTOR SHALL REPAIR AT HIS EXPENSE AND AREAS DAMAGED BY HIS WORK OR THE WORK OF HIS SUBCONTRACTORS.

REMOVE ALL EXISTING PLAY EQUIPMENT AND ALL CONCRETE EQUIPMENT FOOTINGS. REMOVE POUR IN PLACE SAFETY SURFACE AND ALL 4" CONCRETE BASE. REMOVE ALL SHADE SAILS AND COLUMNS WITH FOOTINGS AS REQUIRED. REMOVE ALL BENCHES, BIKE RACK, EDGING, AND EXISTING CHAIN LINK FENCING AND REMOVE FROM SITE. FIELD VERIFY ALL REMOVAL QUANTITIES.

SILT FENCING AS REQUIRED, SEE SHEET 6.0. LOCATE APPROXIMATELY 5-10' OUTSIDE EXISTING CHAIN LINK FENCE WHERE POSSIBLE.

INSTALL TREE PROTECTION AROUND EXISTING OAKS TO REMAIN AS PER ORANGE COUNTY CODE AND DETAILS

SAWCUT EXISTING CONCRETE PAVING TO BE REMOVED, FIELD VERIFY QUANTITIES

EXISTING WATER FOUNTAIN TO REMAIN, CONTRACTOR SHALL PREP AND PAINT FOUNTAIN FOREST GREEN

EXISTING ASPHALTIC CONCRETE PAVING TO REMAIN. CONTRACTOR SHALL PROTECT EXISTING PAVING. CONTRACTOR SHALL REPAIR AT HIS EXPENSE AND AREAS DAMAGED BY HIS WORK OR THE WORK OF HIS SUBCONTRACTORS.

EXISTING CONCRETE PAVING TO REMAIN. CONTRACTOR SHALL PROTECT EXISTING CONCRETE PAVING. CONTRACTOR SHALL REPAIR AT HIS EXPENSE AND AREAS DAMAGED BY HIS WORK OR THE WORK OF HIS SUBCONTRACTORS.

EXISTING 3 RAIL FENCE AND PICNIC TABLE TO REMAIN

EXISTING CONCRETE PAVING TO REMAIN. CONTRACTOR SHALL PROTECT EXISTING CONCRETE PAVING. CONTRACTOR SHALL REPAIR AT HIS EXPENSE AND AREAS DAMAGED BY HIS WORK OR THE WORK OF HIS SUBCONTRACTORS.

3 RAIL FENCING AND PICNIC TABLES SHALL BE REMOVED BY SHADOW BAY PARK STAFF AND RELOCATED ONSITE AS REQUIRED AND DIRECTED BY PROGRAM MANAGER. THIS ITEM IS NOT IN CONTRACT.

EXISTING BBQ GRILLS TO REMAIN

ALL EXISTING OAK TREES WITHIN WORK AREA SHALL HAVE TREE PROTECTION FENCING AS PER ORANGE COUNTY CODE AND DETAILS

EXISTING PAVILION AND PICNIC TABLES TO REMAIN

SILT FENCING AS REQUIRED, SEE SHEET 6.0

LIMIT OF WORK, INSTALL TEMPORARY CHAIN FENCING AT PARKING AND WALKWAY AREAS

REMOVAL OF PLAY EQUIPMENT IN AREA 3 SHALL BE PROVIDED BY ORANGE COUNTY SUPPORT STAFF. ALL EQUIPMENT, FOOTINGS, MULCH, EDGING SHALL BE REMOVED AND DISPOSED OF AS PER ORANGE COUNTY COMPTROLLER REGULATIONS. OC SUPPORT SHALL IMPORT FILL, COMPACT AND GRADE IN PREPARATION FOR SODDING BY SEPARATE CONTINUING CONTRACT. ALL WORK HEREIN, NOT IN CONTRACT.

EXISTING WALK TO REMAIN

CONTRACTOR STORAGE AREA

EXISTING WALK TO REMAIN

EXISTING ASPHALT PAVING TO REMAIN

CONTRACTOR LAYDOWN AND MATERIAL STORAGE AND DUMPSTER AREA WITHIN ASPHALT PARKING AREA. STORAGE AREA MUST STAY OUTSIDE DRIVEWAY LANE AND SHALL BE ENCLOSED BY TEMPORARY CHAIN LINK FENCING. ADDITIONAL STORAGE AREA IS AVAILABLE TO THE SOUTH FOR PLAY EQUIPMENT AREA AND TO THE NORTH FOR THE FITNESS EQUIPMENT AREA. SECURITY FOR ALL EQUIPMENT, MATERIALS, TOOLS, AND CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR MAY REQUEST ADDITIONAL AREA FOR STORAGE AS REQUIRED. ALL REQUESTS MUST BE WRITTEN AND SUBMITTED TO CAPITAL PROJECTS PROJECT MANAGER FOR APPROVAL.

**SEQUENCE OF DEMOLITION AND CONSTRUCTION**

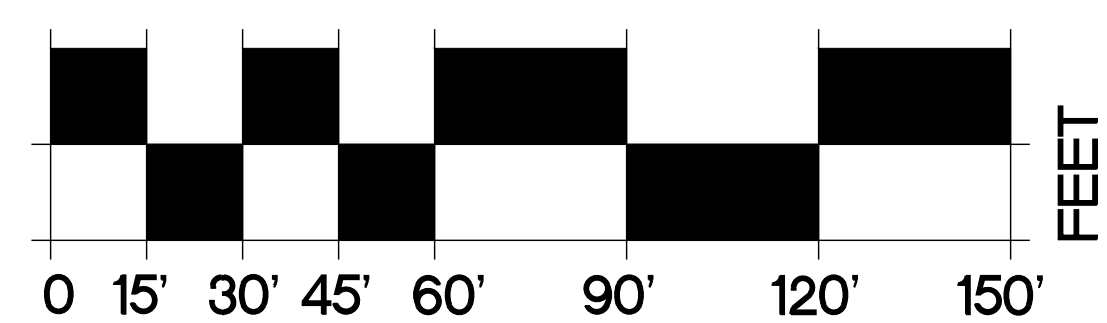
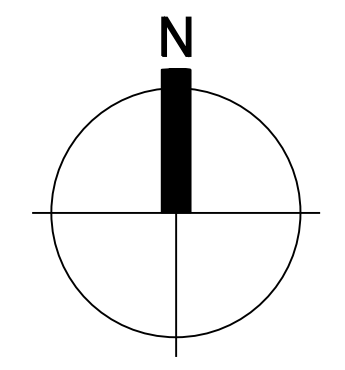
- DEMOLITION OF EXISTING SITE AS DESIGNATED ON PLAN AS AREA 1 AND PREPARE SITE FOR CONSTRUCTION OF NEW PLAYGROUND. DEMOLITION IN THIS AREA NOT IN CONTRACT. THIS WORK SHALL BE PERFORMED BY ORANGE COUNTY PARK SUPPORT STAFF. ALL TREE PROTECTION MEASURES ARE NOT IN CONTRACT, THIS WORK SHALL BE PERFORMED BY ORANGE COUNTY SUPPORT STAFF FOR AREAS 1 AND 2.
- CONSTRUCTION OF NEW PLAYGROUND IN AREA 1. INCLUDES ALL PLAY EQUIPMENT, SITE FURNISHINGS, POUR IN PLACE SAFETY SURFACING, GRADING AND DRAINAGE OF SURFACE BASE AS DETAILED, CONSTRUCTION OF NEW CONCRETE SIDEWALKS AND ANY OTHER ITEMS RELATED TO THE NEW PLAYGROUND SCOPE OF WORK.
- DEMOLITION OF EXISTING PLAYGROUND IN AREA 2. PREPARATION OF AREA 2 FOR CONSTRUCTION OF NEW FITNESS EQUIPMENT. DEMOLITION OF THIS AREA NOT IN CONTRACT. THIS WORK SHALL BE PERFORMED BY ORANGE COUNTY PARK SUPPORT STAFF AFTER COMPLETION OF THE NEW PLAYGROUND CONSTRUCTION IN AREA 1.
- DEMOLITION OF EXISTING PLAYGROUND IN AREA 3 NOT IN CONTRACT. DEMOLITION OF THIS AREA SHALL BE PERFORMED BY ORANGE COUNTY PARK SUPPORT STAFF AFTER COMPLETION OF THE NEW PLAYGROUND CONSTRUCTION IN AREA 1.
- CONSTRUCTION OF NEW FITNESS AREA AS SHOWN IN AREA 2. INCLUDES ALL FITNESS EQUIPMENT, GRADING AND DRAINAGE, CONCRETE PAVING, SITE FURNISHINGS AS REQUIRED.
- DEMOLITION OF EXISTING FITNESS EQUIPMENT NOT IN CONTRACT. DEMOLITION OF THIS AREA SHALL BE PERFORMED BY ORANGE COUNTY PARK SUPPORT STAFF AFTER COMPLETION OF THE FITNESS AREA CONSTRUCTION.

EXISTING WALK TO REMAIN

CONTRACTOR STORAGE AREA

**AREA 1:**  
EXISTING PICNIC AREA TO BE DEMOLISHED FOR PROPOSED PLAYGROUND AREA

**EXISTING CONDITIONS AND DEMOLITION PLAN  
SHADOW BAY PARK PLAY AND FITNESS AREA**



5100 TURKEY LAKE ROAD ORLANDO, FLORIDA 32819

NORTH

SCALE: 1" = 30'-0"

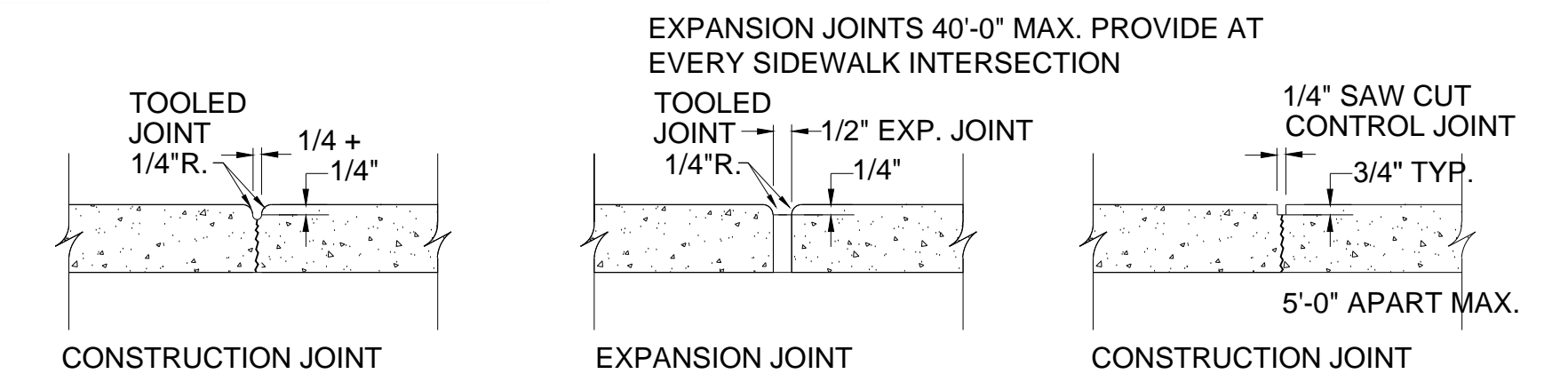
SHEET 3.0

DATE: \_\_\_\_\_ ENGINEER: JEFFREY J. EARHART REG. NO. 49935

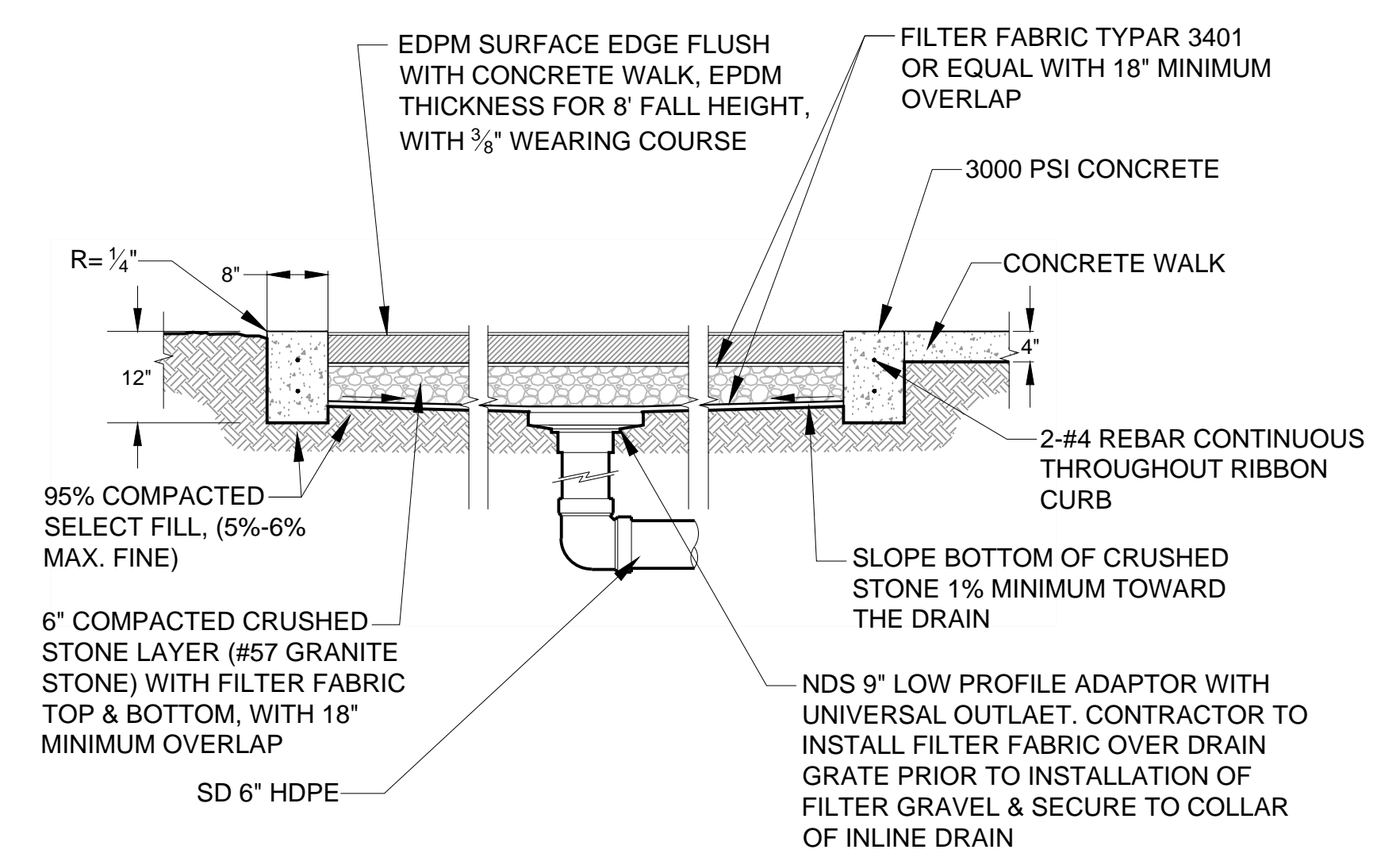
NOVEMBER 02, 2016 MS  
BID SET 02-01-2017



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01 CONCRETE WALK DETAILS NTS



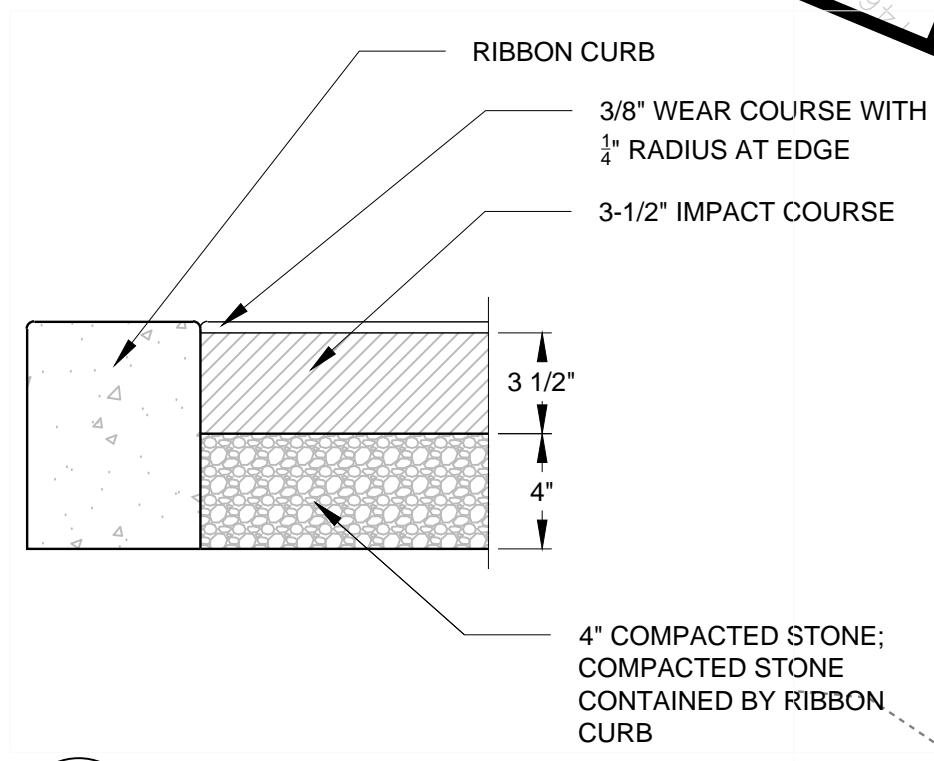
02 SAFETY SURFACE AT CURB NTS

NOTES:

- EXISTING TREE LOCATIONS ARE SURVEYED AND REPRESENT THE FIELD VERIFIED LOCATIONS. THIS LAYOUT IS BASED ON THESE EXISTING TREE LOCATIONS. CONTRACTOR SHALL UTILIZE THE EXISTING TREES SHOWN AS BENCHMARKS FOR THE RIBBON CURB LAYOUT. THE LAYOUT OF THE RIBBON CURB SHALL BE ONE FLUID CURVE TRANSITION AND CONSISTENT THROUGHOUT.
- ALL DRAIN AND DRAIN LINE LOCATIONS SHALL WORK WITH EXISTING TREE LOCATIONS AND PROTECTION AREAS FOR ROOT ZONES. SEE SHEET 5.0.
- THE RIBBON CURB FORMWORK SHALL BE REVIEWED FOR ACCEPTANCE BY THE ORANGE COUNTY PARKS AND RECREATION PRIOR TO POUR.
- DUE TO THE APPROXIMATE OF THE EXISTING TREES, PLAY AREA LAYOUT RADIUS CENTER POINTS ARE TO BE STAKED AND THE PLAY SURFACE AREA FIELD LOCATED AND PERIMETER EDGE PAINTED ON GROUND WITH MARKING PAINT FOR PARKS AND RECREATION REVIEW AND ACCEPTANCE PRIOR WORK COMMENCING.
- CONTACT ROAN WATERBURY AT 407-836-0034 FOR LAYOUT REVIEW AND ACCEPTANCE. ORANGE COUNTY CAPITAL PROJECTS SHALL HAVE 24 HOURS TO RESPOND TO REQUEST FOR FIELD REVIEW.
- FOR PLAY EQUIPMENT LAYOUT AND CALLOUTS SEE SHEETS 4.2 AND 4.3 OF THIS SET. SAFETY SURFACE FALL HEIGHT IS 8'-0", TYPICAL.
- ANY LAYOUT DISCREPANCIES SHALL BE SOLVED AT THE DISCRETION OF THE ORANGE COUNTY CAPITAL PROJECTS AND PARKS AND RECREATION DEPARTMENTS.

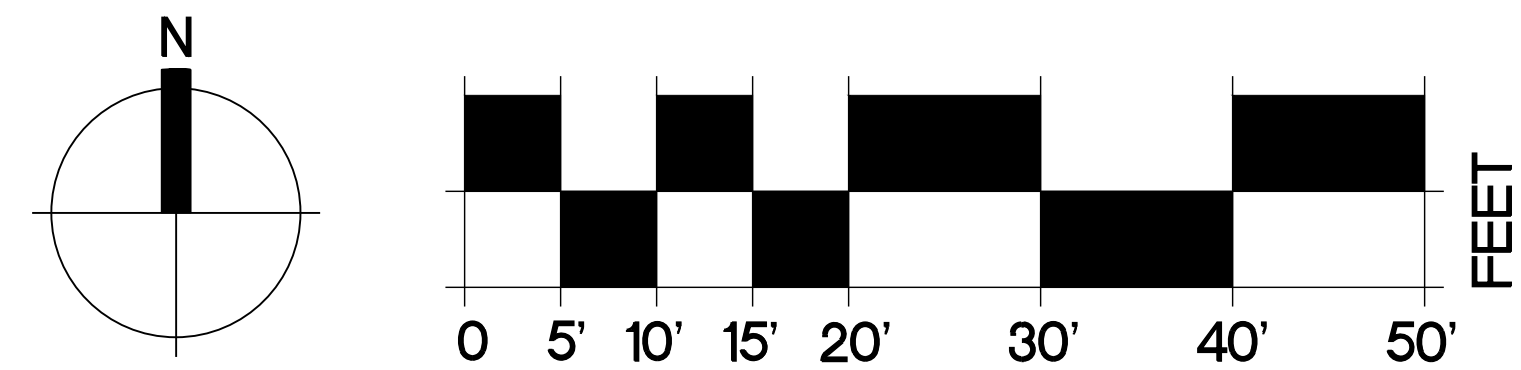
No Fault  
Critical Fall Heights

Depth	Height
1.75"	4'
2.25"	5'
2.50"	6'
3.00"	7'
3.50"	8'
4.5"	9'
5.00"	10'
6.50"	12'



03 SAFETY SURFACE NTS

PLAY ARE CONSTRUCTION LAYOUT PLAN  
SHADOW BAY PARK PLAY AND FITNESS AREA

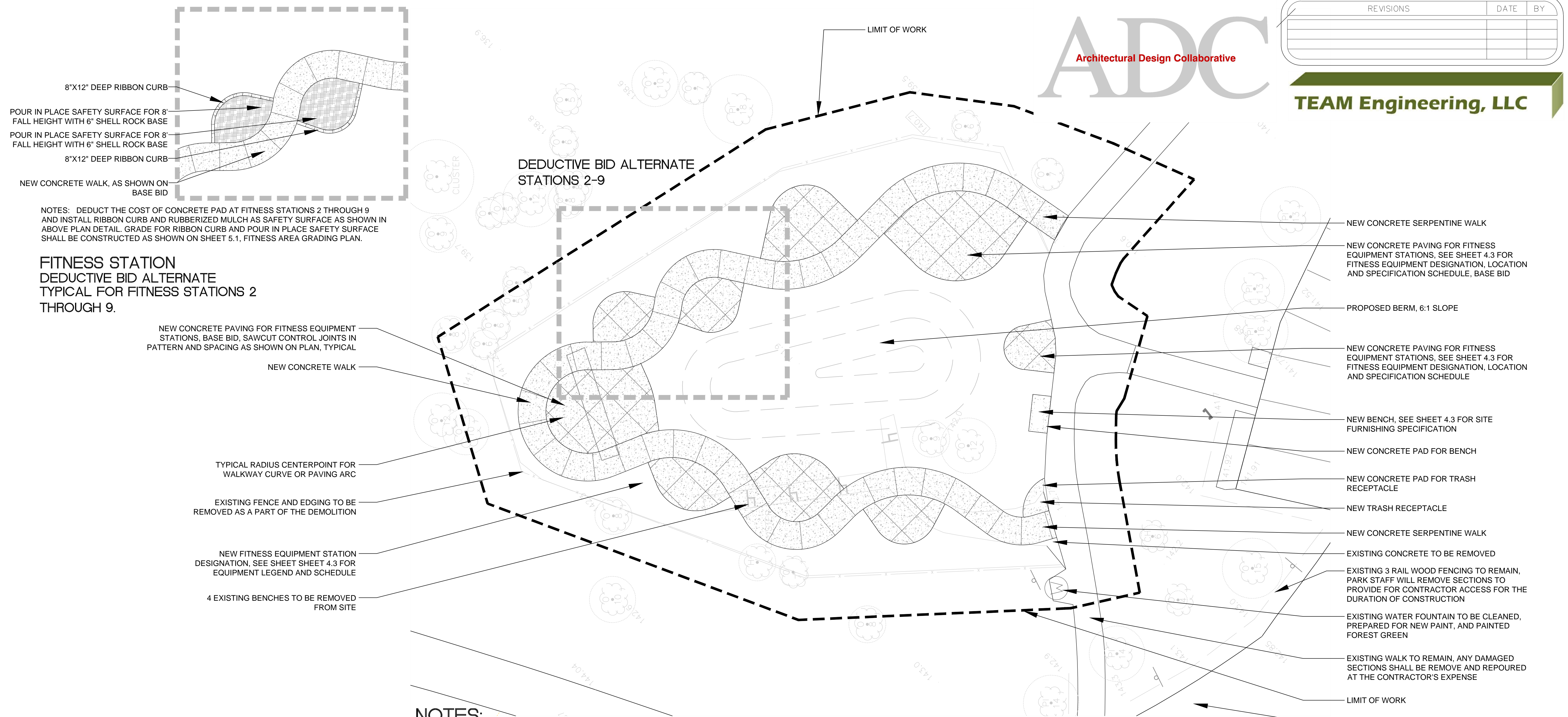




REVISIONS	DATE	BY



**TEAM Engineering, LLC**



8"X12" DEEP RIBBON CURB  
 POUR IN PLACE SAFETY SURFACE FOR 8' FALL HEIGHT WITH 6" SHELL ROCK BASE  
 POUR IN PLACE SAFETY SURFACE FOR 8' FALL HEIGHT WITH 6" SHELL ROCK BASE  
 8"X12" DEEP RIBBON CURB  
 NEW CONCRETE WALK, AS SHOWN ON BASE BID

NOTES: DEDUCT THE COST OF CONCRETE PAD AT FITNESS STATIONS 2 THROUGH 9 AND INSTALL RIBBON CURB AND RUBBERIZED MULCH AS SAFETY SURFACE AS SHOWN IN ABOVE PLAN DETAIL. GRADE FOR RIBBON CURB AND POUR IN PLACE SAFETY SURFACE SHALL BE CONSTRUCTED AS SHOWN ON SHEET 5.1, FITNESS AREA GRADING PLAN.

**FITNESS STATION DEDUCTIVE BID ALTERNATE TYPICAL FOR FITNESS STATIONS 2 THROUGH 9.**

NEW CONCRETE PAVING FOR FITNESS EQUIPMENT STATIONS, BASE BID, SAWCUT CONTROL JOINTS IN PATTERN AND SPACING AS SHOWN ON PLAN, TYPICAL

NEW CONCRETE WALK

TYPICAL RADIUS CENTERPOINT FOR WALKWAY CURVE OR PAVING ARC

EXISTING FENCE AND EDGING TO BE REMOVED AS A PART OF THE DEMOLITION

NEW FITNESS EQUIPMENT STATION DESIGNATION, SEE SHEET SHEET 4.3 FOR EQUIPMENT LEGEND AND SCHEDULE

4 EXISTING BENCHES TO BE REMOVED FROM SITE

NEW CONCRETE SERPENTINE WALK

NEW CONCRETE PAVING FOR FITNESS EQUIPMENT STATIONS, SEE SHEET 4.3 FOR FITNESS EQUIPMENT DESIGNATION, LOCATION AND SPECIFICATION SCHEDULE, BASE BID

PROPOSED BERM, 6:1 SLOPE

NEW CONCRETE PAVING FOR FITNESS EQUIPMENT STATIONS, SEE SHEET 4.3 FOR FITNESS EQUIPMENT DESIGNATION, LOCATION AND SPECIFICATION SCHEDULE

NEW BENCH, SEE SHEET 4.3 FOR SITE FURNISHING SPECIFICATION

NEW CONCRETE PAD FOR BENCH

NEW CONCRETE PAD FOR TRASH RECEPTACLE

NEW TRASH RECEPTACLE

NEW CONCRETE SERPENTINE WALK

EXISTING CONCRETE TO BE REMOVED

EXISTING 3 RAIL WOOD FENCING TO REMAIN, PARK STAFF WILL REMOVE SECTIONS TO PROVIDE FOR CONTRACTOR ACCESS FOR THE DURATION OF CONSTRUCTION

EXISTING WATER FOUNTAIN TO BE CLEANED, PREPARED FOR NEW PAINT, AND PAINTED FOREST GREEN

EXISTING WALK TO REMAIN, ANY DAMAGED SECTIONS SHALL BE REMOVE AND REPOURED AT THE CONTRACTOR'S EXPENSE

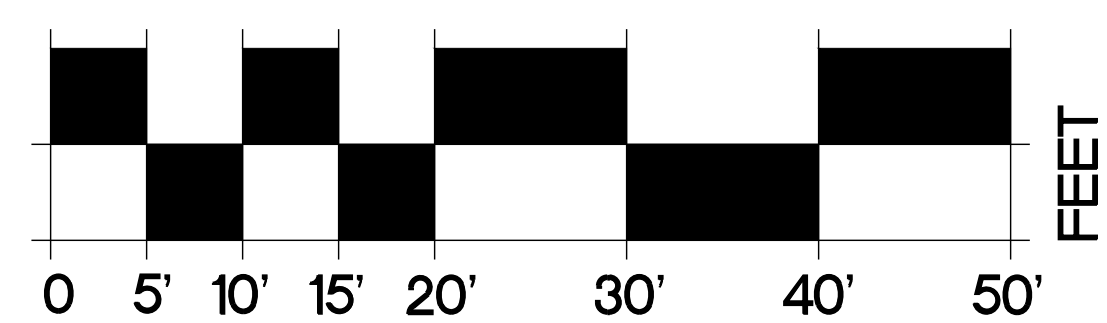
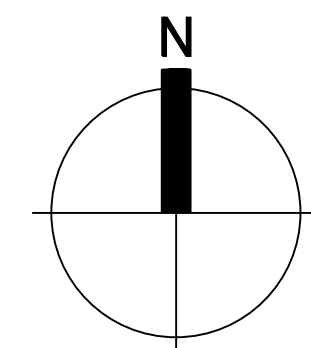
LIMIT OF WORK

EXISTING ASPHALT DRIVE

**NOTES:**

- EXISTING TREE LOCATIONS ARE SURVEYED AND REPRESENT THE FIELD VERIFIED LOCATIONS. THIS LAYOUT IS BASED ON A SERPENTINE WALK AS A SPINE WITH CONCRETE PAVING AREAS AS A BASE TO THE FITNESS EQUIPMENT STATION.
- ALL DRAIN AND DRAIN LINE LOCATIONS SHALL WORK WITH EXISTING TREE LOCATIONS AND PROTECTION AREAS FOR ROOT ZONES.
- THE WALKWAY AND EQUIPMENT PAVING FORMWORK SHALL BE REVIEWED FOR ACCEPTANCE BY THE ORANGE COUNTY PARKS AND RECREATION PRIOR TO POUR.
- CONTACT ROAN WATERBURY AT 407-836-0034 FOR LAYOUT REVIEW AND ACCEPTANCE. ORANGE COUNTY CAPITAL PROJECTS SHALL HAVE 24 HOURS TO RESPOND TO REQUEST FOR FIELD REVIEW.
- FOR FITNESS EQUIPMENT LAYOUT AND CALLOUT SCHEDULE SEE SHEET 4.3 OF THIS SET.
- ANY LAYOUT DISCREPANCIES SHALL BE SOLVED AT THE DISCRETION OF THE ORANGE COUNTY CAPITAL PROJECTS AND PARKS AND RECREATION DEPARTMENTS.

# FITNESS AREA CONSTRUCTION LAYOUT PLAN SHADOW BAY PARK PLAY AND FITNESS AREA



5100 TURKEY LAKE ROAD ORLANDO, FLORIDA 32819

NORTH

SCALE: 1" = 10'-0" PAGE

4.1

DATE: \_\_\_\_\_ ENGINEER: JEFFREY J. EARHART REG. NO. 49935

DECEMBER 01, 2016  
 BID SET 02-01-2017

MS





REVISIONS	DATE	BY

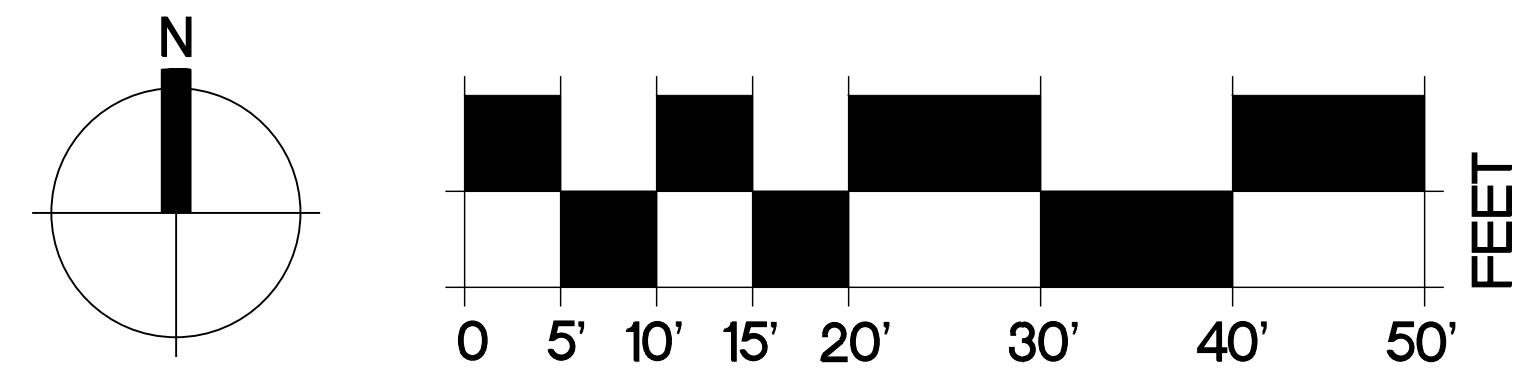
**PLAY EQUIPMENT LEGEND:**

ITEM DESCRIPTION	QTY	BASIS OF DESIGN
MOLECULE PLAYSTRUCTURE MODEL M-0312		XCENT PLAY
<b>SLIDES</b>		
96' SECTIONAL SLIDE	1	XCENT PLAY
48' SINGLE WAVY SLIDE	1	XCENT PLAY
<b>DECK CLIMBERS</b>		
96' SUPER LOOP CLIMBER	1	XCENT PLAY
56' DISC CLIMBER	1	XCENT PLAY
<b>OVERHEAD CLIMBERS</b>		
SNAKE OVERHEAD LADDER	1	XCENT PLAY
90 DEGREE TRAPEZE OVERHEAD BAR	1	XCENT PLAY
RING CLIMBER OVERHEAD BAR	1	XCENT PLAY
<b>GROUND LEVEL CLIMBERS</b>		
ARCH SOLID ROCK WALL	1	XCENT PLAY
ROCKET ROPE CLIMBER	1	XCENT PLAY
COMET CLIMBER	1	XCENT PLAY
WAVEFORM CLIMBER	1	XCENT PLAY
STEPPING PODS	3	XCENT PLAY
<b>SPINNERS</b>		
SPINNER POD	1	XCENT PLAY
CLASSIX PLAYSTRUCTURE MODEL C-4932		XCENT PLAY
<b>SLIDES</b>		
48' SINGLE WAVY SLIDE	2	XCENT PLAY
48' DOUBLE DIP SLIDE	1	XCENT PLAY
40' RIGHT CURVE SLIDE	1	XCENT PLAY
<b>DECK CLIMBERS</b>		
48' SNAKE CLIMBER	1	XCENT PLAY
48' SUPER LOOP CLIMBER	1	XCENT PLAY
<b>ACCESSORIES</b>		
UNDER DECK BENCH	1	XCENT PLAY
CLOCK TIME TELLER PANEL	1	XCENT PLAY
PORTAL PANEL	1	XCENT PLAY
BUBBLE PANEL	1	XCENT PLAY
BONGO DRUM (POST MOUNT)	1	XCENT PLAY
SINGLE POST SWING BAY WITH TWO BELT SEATS	1	XCENT PLAY
SINGLE POST SWING BAY WITH ONE INFANT SEAT AND ONE ADA SEAT	1	XCENT PLAY
6' BENCH	4	PILOT ROCK, GALVANIZED FRAME WITH PRESSURE TREATED YELLOW PINE SLATS ON SEAT AND BACK. SURFACE MOUNT TO CONCRETE PAVING PER MANUFACTURER'S SPECIFICATIONS.
TRASH RECEPTACLE	1	PILOT ROCK, GALVANIZED FRAME WITH PRESSURE TREATED YELLOW PINE SLATS WITH GALVANIZED DOME LID, GALVANIZED LINER. SURFACE MOUNT TO CONCRETE PAVING PER MANUFACTURER'S SPECIFICATIONS
BIKE RACK	1	PILOT ROCK, GALVANIZED SADDLEBACK BIKE RACK FOR 7 BIKES
WATER FOUNTAIN	1	MOST DEPENDABLE FOUNTAIN, WITH HOSE BIB, BOTTLE FILLER, ADA BOWL, ADULT BOWL, CHILDS BOWL
SITE HORIZONS AND XCENT PLAY IS PRIMARY BASIS FOR DESIGN, CONTACT MARY LANGLEY, 407-947-6318		
REP SERVICES INC. AND LANDSCAPE STRUCTURES IS AN "OR EQUAL" ALTERNATE 1 FOR BASIS OF DESIGN, CONTACT NATHAN ALMOND, 407-831-9658		
DOMINICA RECREATION PRODUCTS AND GAMETIME IS AN "OR EQUAL" ALTERNATE 2 FOR BASIS OF DESIGN, CONTACT FRANK HOUSE, 407-331-0101		
PILOT ROCK BY RJ TOMAS MFG. CO., INC.; 800-762-5002 IS BASIS FOR DESIGN FOR BENCHES AND TRASH RECEPTACLES		



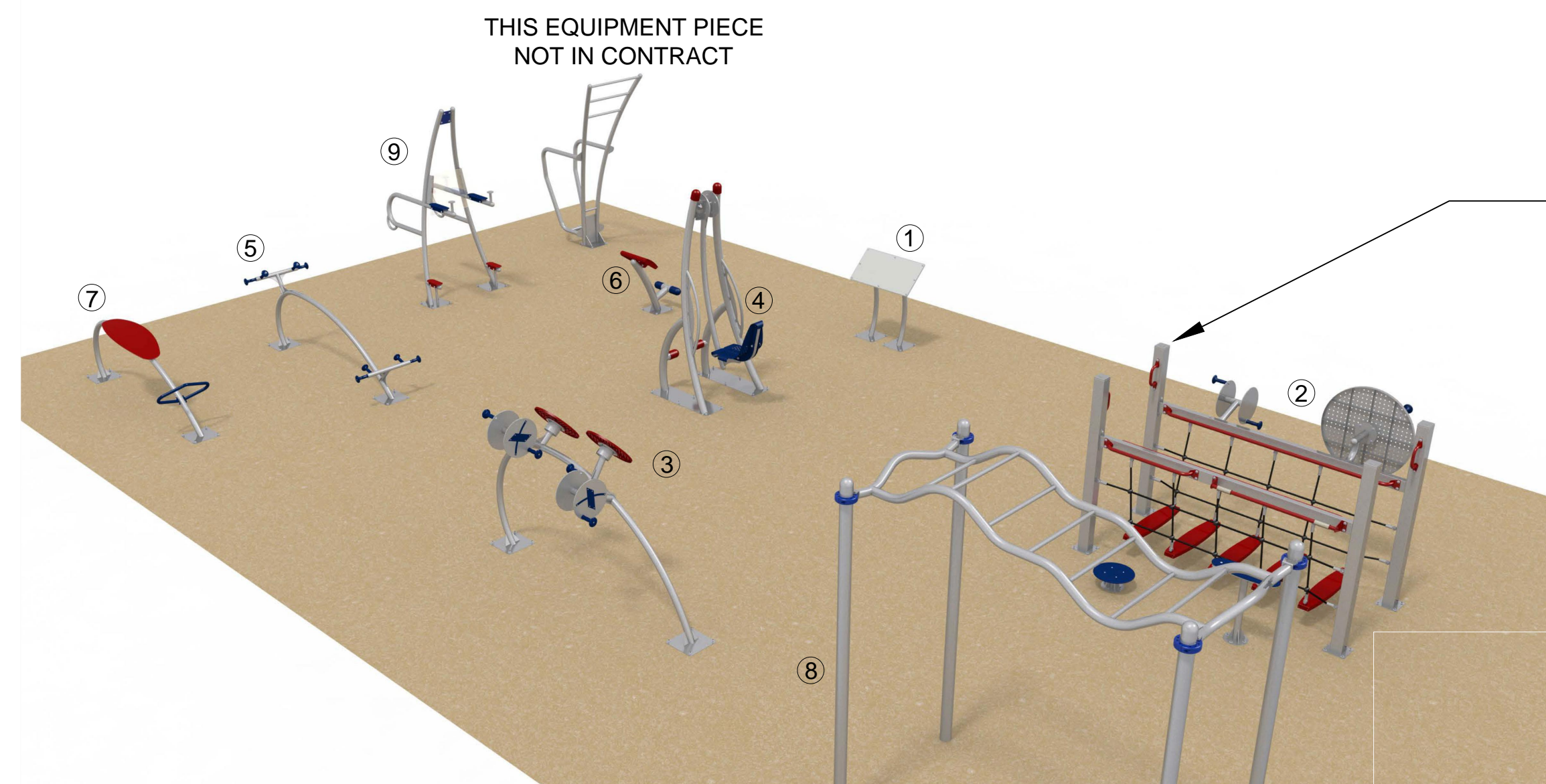
**PLAY EQUIPMENT PLAN  
SHADOW BAY PARK AND FITNESS AREA**

5100 TURKEY LAKE ROAD ORLANDO, FLORIDA 32819





REVISIONS	DATE	BY



FITNESS EQUIPMENT SHOWN HERE WITH PATRIOT COLOR SCHEME. FINAL SELECTION AS PER LEGEND NOTE. THE WOODLANDS COLOR SCHEME IN SLATE, LIME, AND BLUE

FITNESS STATION NUMBER, SEE FITNESS EQUIPMENT LEGEND FOR EQUIPMENT SPECIFICATION AND MODEL NUMBER

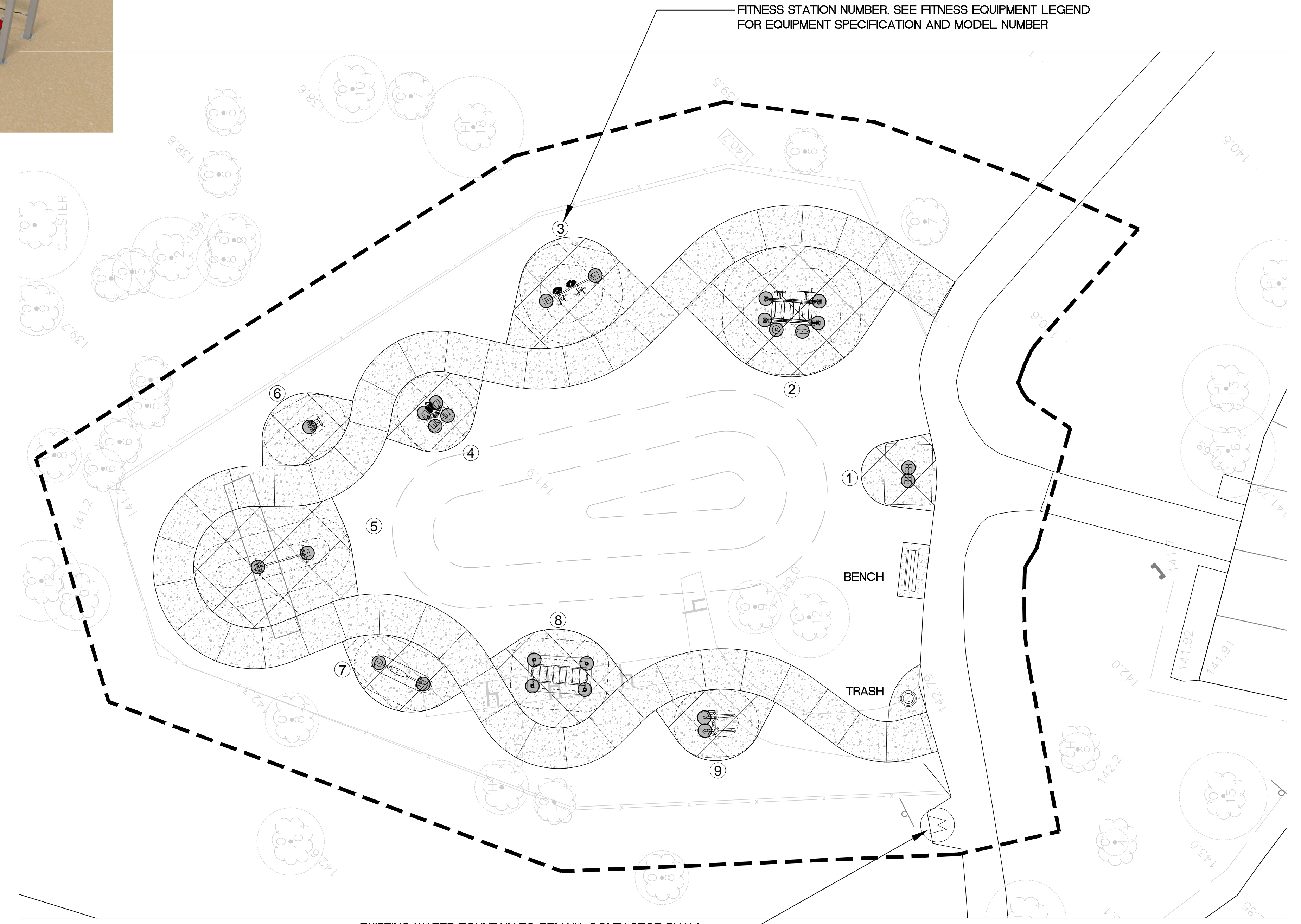
FITNESS EQUIPMENT LEGEND:

STATION	ITEM DESCRIPTION	QTY	BASIS OF DESIGN
1	INFORMATION BOARD, IN GROUND, 45237	1	XCENT PLAY
2	ROPE BRIDGE WELLNES STATION, IN GROUND, 53084	1	XCENT PLAY
3	TAI CHI DOUBBLE HAND BIKE COMBO, IN GROUND, 48978	1	XCENT PLAY
4	ARM AND LEG PRESS, INGROUND, 50471	1	XCENT PLAY
5	COMPOUND PUSH UP, IN GROUND, 48940	1	XCENT PLAY
6	SINGLE LOWER BACK TRAINER (SHORT) IN GROUND, 50488	1	XCENT PLAY
7	TORSO BENCH, IN GROUND, 45228	1	XCENT PLAY
8	WAVE LADDER, IN GROUND, 48972	1	XCENT PLAY
9	KNEE RAISE DIP COMBO, IN GROUND, 50421	1	XCENT PLAY

NOTE:  
COLOR SCHEME FOR ALL FITNESS STATIONS SHALL BE THE WOODLANDS COLOR SCHEME, SLATE, LIME, BLUE.

6' BENCH	1	PILOT ROCK, GALVANIZED FRAME WITH PRESSURE TREATED YELLOW PINE SLATS ON SEAT AND BACK, SURFACE MOUNT TO CONCRETE PAVING PER MANUFACTURER'S SPECIFICATIONS.
TRASH RECEPTACLE	1	PILOT ROCK, GALVANIZED FRAME WITH PRESSURE TREATED YELLOW PINE SLATS WITH GALVANIZED DOME LID, GALVANIZED LINER, SURFACE MOUNT TO CONCRETE PAVING PER MANUFACTURER'S SPECIFICATIONS

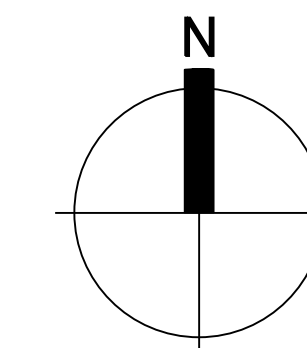
SITE HORIZONS AND XCENT PLAY IS PRIMARY BASIS FOR DESIGN, CONTACT MARY LANGLEY; 407-947-6318  
 REP SERVICES INC. AND LANDSCAPE STRUCTURES IS AN "OR EQUAL" ALTERNATE 1 FOR BASIS OF DESIGN, CONTACT NATHAN ALMOND, 407-831-9658  
 DOMINICA RECREATION PRODUCTS AND GAMETIME IS AN "OR EQUAL" ALTERNATE 2 FOR BASIS OF DESIGN, CONTACT FRANK HOUSE, 407-331-0101  
 PILOT ROCK BY RJ TOMAS MFG. CO., INC.; 800-762-5002 IS BASIS FOR DESIGN FOR BENCHES AND TRASH RECEPTACLES



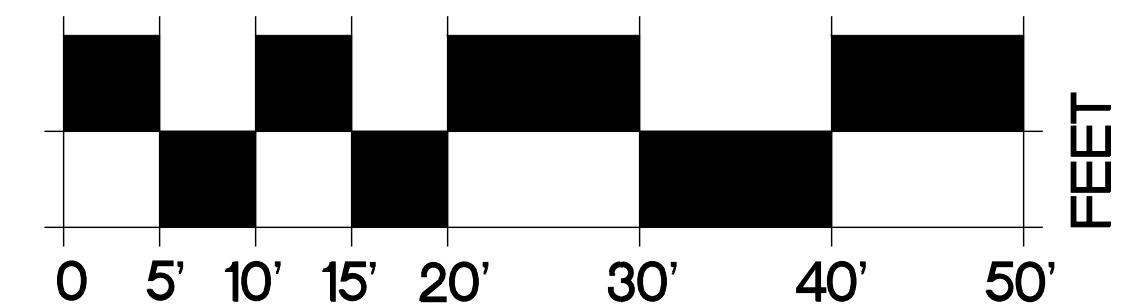
EXISTING WATER FOUNTAIN TO REMAIN. CONTACTOR SHALL PREPARE FOUNTAIN FOR PAINT AND PAINT TO MATCH FOUNTAIN COLOR AT PLAY EQUIPMENT AREA

# FITNESS EQUIPMENT PLAN SHADOW BAY PARK AND FITNESS AREA

5100 TURKEY LAKE ROAD ORLANDO, FLORIDA 32819



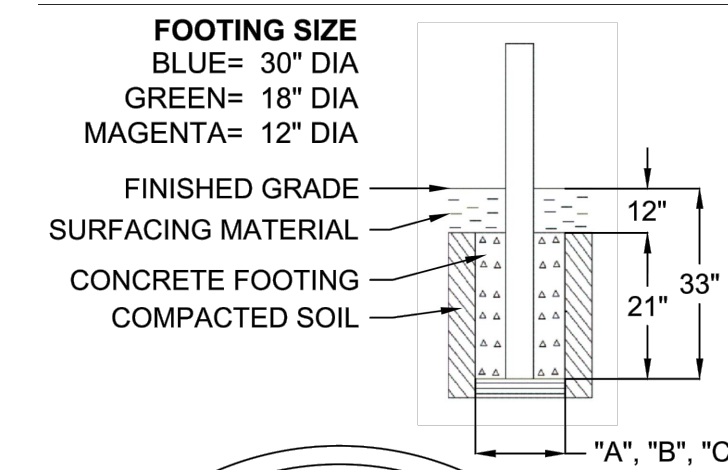
NORTH



SCALE: 1" = 10'-0" SHEET 4.3



REVISIONS	DATE	BY



NOTE:

ALL FITNESS AND PLAY EQUIPMENT SHALL BE IN GROUND MOUNTED IN FOOTINGS AS SHOWN ON PLANS.

ALL FOOTINGS SHOWN ARE FOR ILLUSTRATION AND PRICING ONLY, CONTRACTOR SHALL ENGINEER ALL FOOTING DIAMETERS AND DEPTHS FOR INGROUND MOUNTED EQUIPMENT AS PER MANUFACTURER'S RECOMENDATIONS.

USE XCSENT PLAY AS BASIS OF DESIGN MANUFACTURER'S RECOMENDATIONS FOR FOOTING ENGINEERING.

NO.	X (ft-in)	Y (ft-in)	Dist. to 0
B0	0'-0"	0'-0"	0'-0"
B1	2'-3"	7'-9"	8'-1"
B2	1'-3"	11'-9"	11'-9"
B3	5'-1"	12'-8"	13'-8"
B4	6'-2"	8'-10"	10'-9"
B5	2'-9"	14'-11"	16'-0"
B6	9'-7"	13'-11"	16'-10"
B7	9'-0"	11'-9"	14'-8"
B8	4'-8"	18'-9"	19'-4"
B9	8'-4"	17'-9"	19'-8"
B10	5'-10"	23'-3"	24'-1"
B11	9'-8"	22'-3"	24'-3"
B12	8'-4"	28'-11"	27'-9"
B13	11'-8"	3'-4"	12'-1"
B14	14'-6"	8'-2"	18'-9"
B15	37'-0"	-7'-7"	38'-2"
B16	39'-3"	-4'-2"	39'-6"
B17	41'-9"	-7'-5"	42'-9"
B18	42'-4"	-2'-5"	42'-9"
B19	44'-4"	-5'-11"	44'-8"
B20	45'-0"	-5'-5"	45'-9"
B21	47'-0"	-3'-11"	47'-11"
B22	38'-4"	4'-6"	38'-7"
B23	34'-10"	6'-6"	35'-5"
B24	34'-10"	10'-6"	36'-5"
B25	38'-4"	12'-9"	40'-4"
B26	41'-0"	10'-6"	43'-1"
B27	41'-0"	6'-6"	42'-9"
B28	38'-4"	8'-9"	39'-3"
B29	32'-10"	13'-11"	35'-8"
B30	38'-4"	15'-11"	39'-8"
B31	-5'-8"	14'-3"	15'-4"
B32	-13'-5"	18'-4"	21'-9"
B33	-15'-8"	24'-9"	29'-3"
B34	-19'-9"	26'-8"	30'-0"
B35	-25'-10"	6'-11"	24'-7"
B36	-21'-0"	24'-0"	31'-11"
B37	-16'-11"	28'-1"	34'-8"
B38	-8'-5"	25'-3"	26'-1"
B39	8'-4"	27'-8"	28'-9"
B40	43'-5"	1'-0"	43'-5"
B41	32'-10"	2'-11"	32'-11"
B42	19'-0"	-14'-3"	23'-11"
B43	27'-5"	-7'-7"	28'-5"
C1	2'-11"	13'-2"	13'-8"
C2	3'-8"	16'-5"	16'-10"
C3	15'-8"	17'-7"	23'-0"
C4	11'-9"	24'-3"	27'-1"
C5	2'-11"	2'-9"	22'-10"
C6	2'-3"	31'-2"	31'-3"
C7	3'-4"	-2'-5"	3'-9"
C8	52'-8"	1'-3"	52'-8"
C9	31'-4"	3'-6"	31'-8"
C10	32'-10"	8'-6"	33'-11"
C11	45'-7"	8'-8"	46'-5"
C12	31'-2"	25'-10"	37'-9"
C13	43'-9"	18'-0"	47'-4"
C14	1'-9"	14'-11"	14'-11"
C15	-1'-11"	16'-3"	16'-2"
C16	-3'-9"	15'-7"	16'-0"
C17	6'-9"	14'-5"	15'-8"
C18	-9'-7"	15'-4"	18'-1"
C19	-12'-11"	16'-3"	20'-9"
C20	-14'-3"	15'-11"	21'-11"
C21	-17'-8"	12'-1"	21'-5"
C22	-20'-8"	8'-1"	22'-7"
C23	15'-2"	32'-1"	35'-8"

CLASSIX & MOLECULE

SCALE: 3/16" = 1'

NOTE: DO NOT SCALE PLAN IF COPIED OR REPRODUCED. USE ORIGINAL PRINTS ONLY.

THE PLAY EQUIPMENT SHOWN IS DESIGNED FOR: 5-12



CONCRETE FOOTINGS ARE A REQUIREMENT FOR ALL IN-GROUND MOUNT PLAY COMPONENTS. ALL FOOTING SPECIFICATIONS ASSUME THE SOIL IS STABLE AND SECURE.

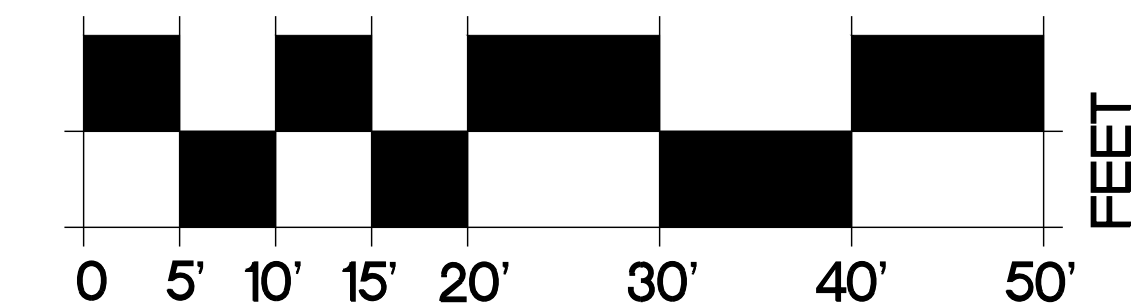
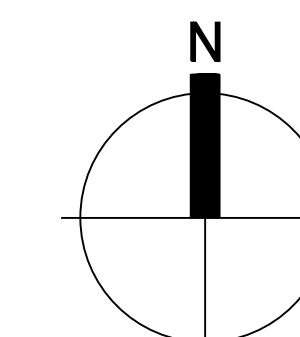
PROTECTIVE SAFETY SURFACING IS A REQUIREMENT FOR THE PLAY SYSTEM COMPONENTS SHOWN. A MATERIAL SHOULD BE CHOSEN THAT MEETS OR EXCEEDS THE MAXIMUM CRITICAL FALL HEIGHT OF THE INSTALLED EQUIPMENT. PLEASE REFER TO CONSUMER PRODUCT SAFETY COMMISSION (CPSC) SECTION 10: SURFACING.

DATE: 10/20/2016

PREPARED BY:

# PLAY AND FITNESS EQUIPMENT FOOTING PLAN SHADOW BAY PARK PLAY AND FITNESS AREA

5100 TURKEY LAKE ROAD ORLANDO, FLORIDA 32819



NORTH

NOT TO SCALE

SHEET

4.4



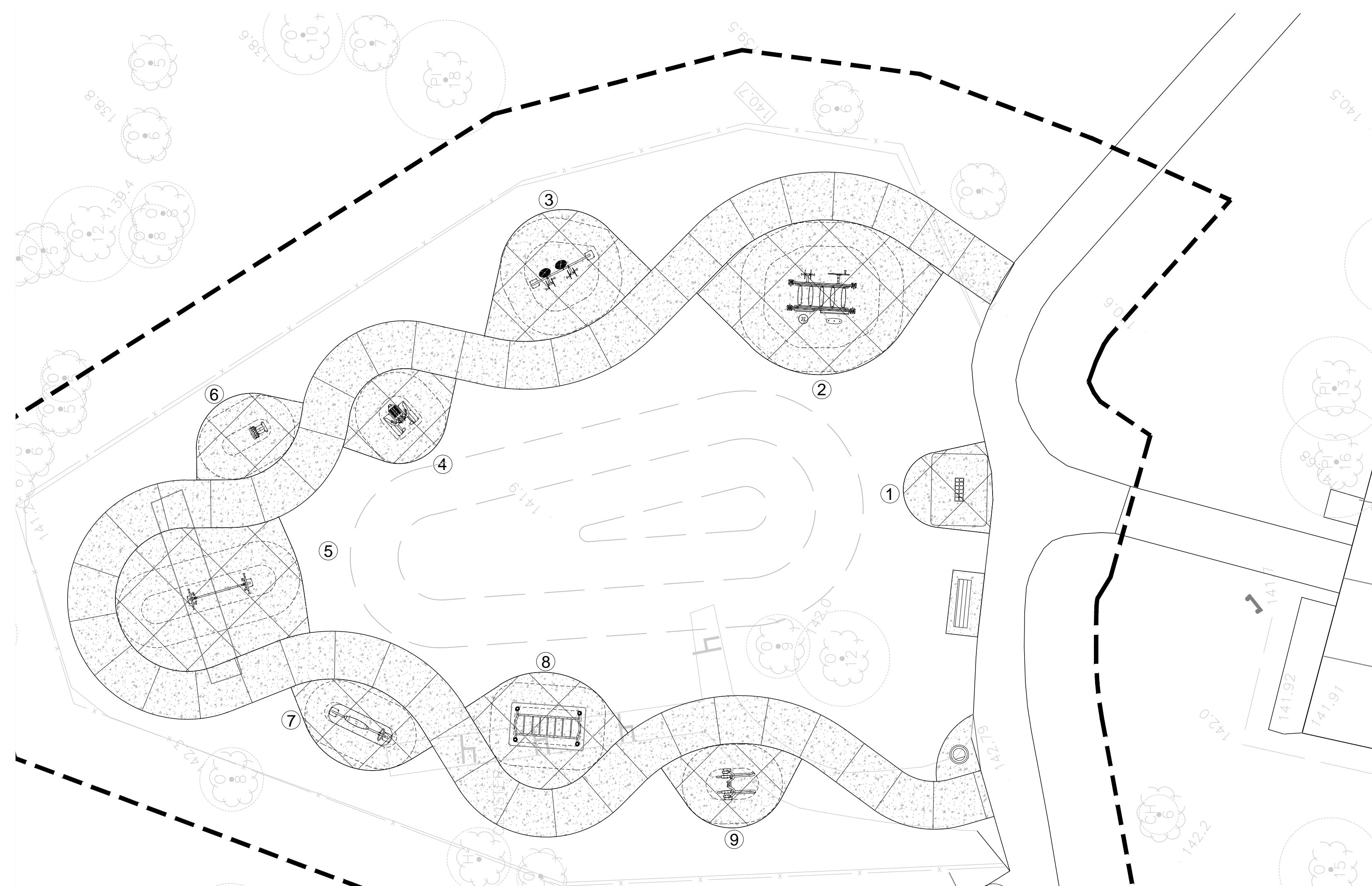
REVISIONS	DATE	BY

NOTE:

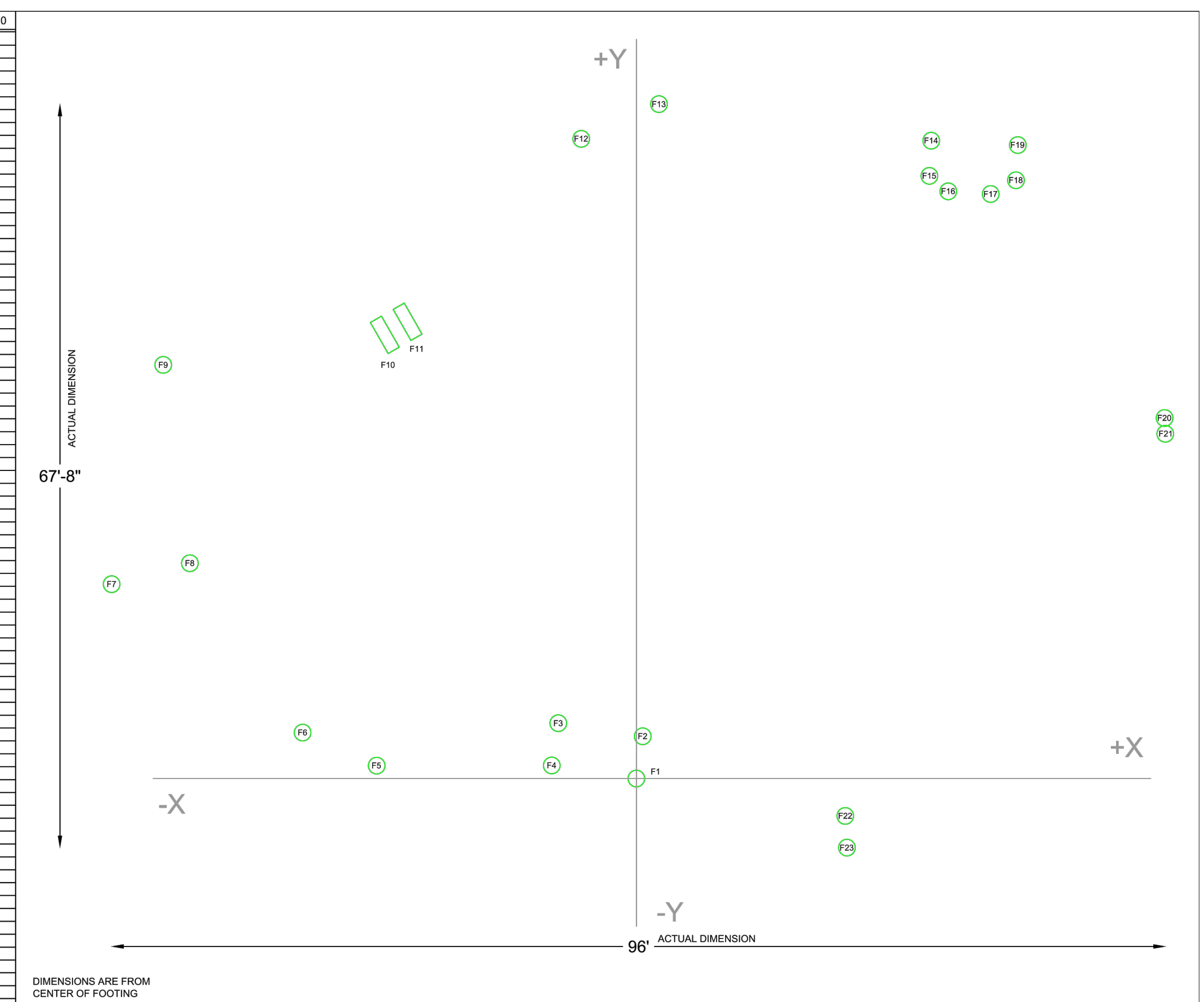
ALL FITNESS AND PLAY EQUIPMENT SHALL BE IN GROUND MOUNTED IN FOOTINGS AS SHOWN ON PLANS.

ALL FOOTINGS SHOWN ARE FOR ILLUSTRATION AND PRICING ONLY, CONTRACTOR SHALL ENGINEER ALL FOOTING DIAMETERS AND DEPTHS FOR INGROUND MOUNTED EQUIPMENT AS PER MANUFACTURER'S RECOMENDATIONS.

USE XCENT PLAY AS BASIS OF DESIGN MANUFACTURER'S RECOMENDATIONS FOR FOOTING ENGINEERING.



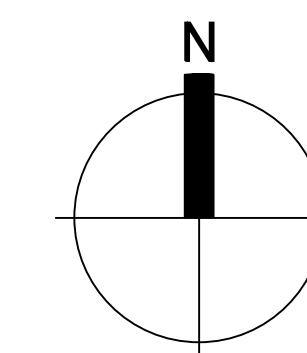
NO.	X (ft-in)	Y (ft-in)	Dist. to 0
F1	0'-0"	0'-0"	0'-0"
F2	0'-7"	3'-10"	3'-11"
F3	-7'-1"	5'-0"	8'-9"
F4	-7'-8"	1'-2"	7'-10"
F5	-23'-8"	1'-2"	23'-8"
F6	-30'-5"	4'-2"	30'-8"
F7	-47'-10"	17'-5"	51'-0"
F8	-40'-8"	19'-7"	45'-2"
F9	-35'-1"	37'-8"	57'-9"
F10	-22'-11"	40'-5"	46'-5"
F11	-20'-10"	41'-7"	46'-6"
F12	-5'-2"	58'-3"	58'-5"
F13	2'-1"	61'-5"	61'-5"
F14	28'-10"	58'-1"	64'-0"
F15	28'-5"	54'-10"	61'-0"
F16	28'-5"	53'-5"	59'-8"
F17	32'-0"	53'-2"	62'-8"
F18	34'-7"	54'-6"	64'-0"
F19	34'-9"	57'-8"	67'-4"
F20	48'-2"	32'-10"	56'-3"
F21	48'-2"	31'-5"	57'-6"
F22	19'-1"	-3'-5"	19'-4"
F23	19'-2"	-6'-4"	20'-2"



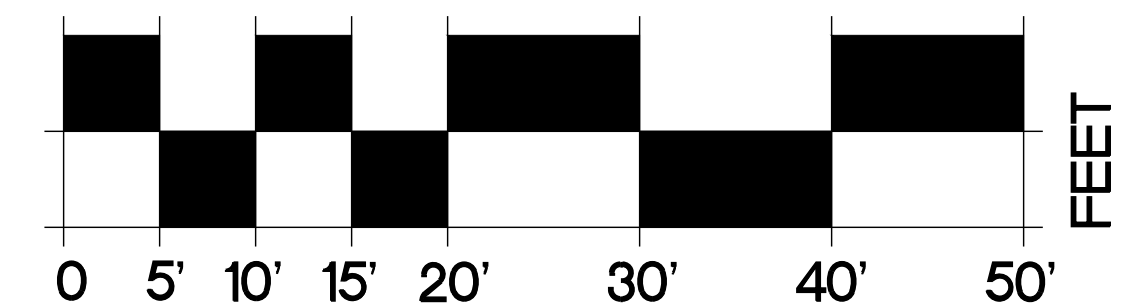
SCALE: 1"=10'-0"  
 PREPARED BY: 13+  
**IPEMA**  
 INTERNATIONAL PLAY EQUIPMENT MANUFACTURERS ASSOCIATION  
 MEMBER  
 THE PLAY COMPONENTS SHOWN ON THIS LAYOUT ARE IPEMA CERTIFIED UNLESS NOTED OTHERWISE. THE USE AND MAINTENANCE OF THESE COMPONENTS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM F1487 AND CANCOSA 2014.  
 CONCRETE FOOTINGS ARE A REQUIREMENT FOR ALL IN-GROUND MOUNT PLAY COMPONENTS. ALL FOOTING SPECIFICATIONS ASSUME THE SOIL IS STABLE AND SECURE.  
 PROTECTIVE SAFETY SURFACING IS A REQUIREMENT FOR THE PLAY SYSTEM COMPONENTS SHOWN. A MATERIAL SHOULD BE CHOSEN THAT MEETS OR EXCEEDS THE MAXIMUM CRITICAL FALL HEIGHT OF THE INSTALLED EQUIPMENT. PLEASE REFER TO CONSUMER PRODUCT SAFETY COMMISSION (CPSC) SECTION 10: SURFACING.  
 DATE: 10/14/2016

# FITNESS EQUIPMENT FOOTING PLAN SHADOW BAY PARK PLAY AND FITNESS AREA

5100 TURKEY LAKE ROAD ORLANDO, FLORIDA 32819



NORTH



SCALE: 1"=10'-0"

SHEET 4.5



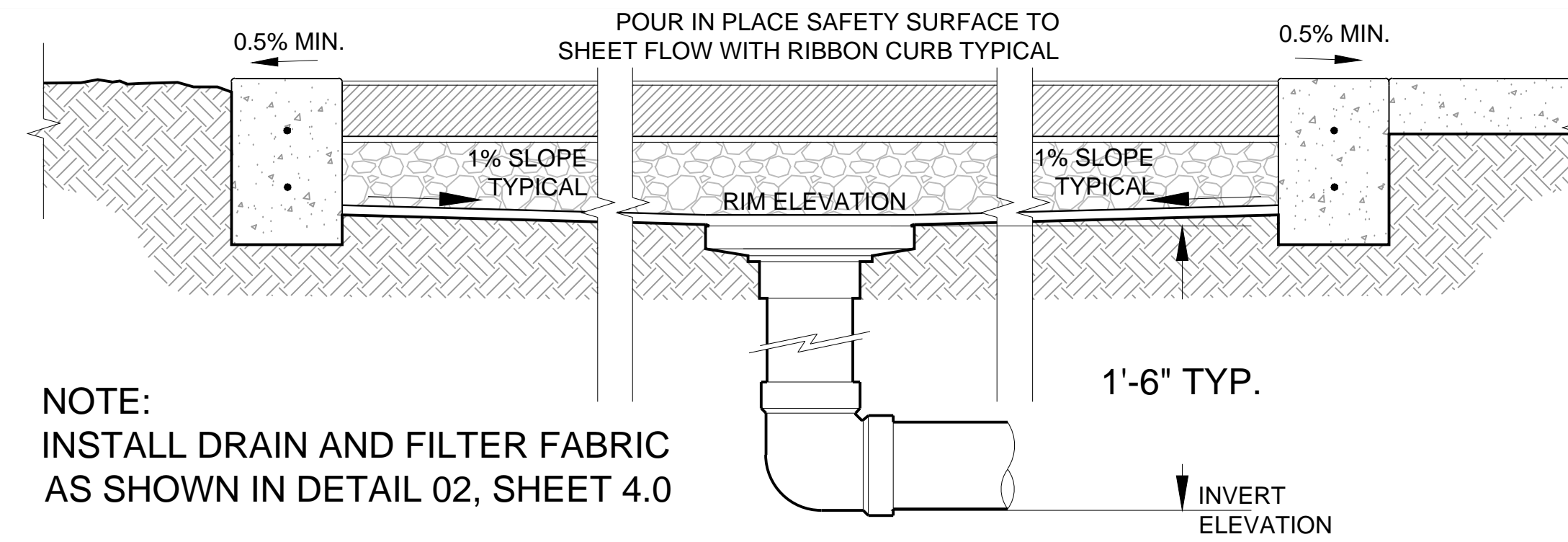
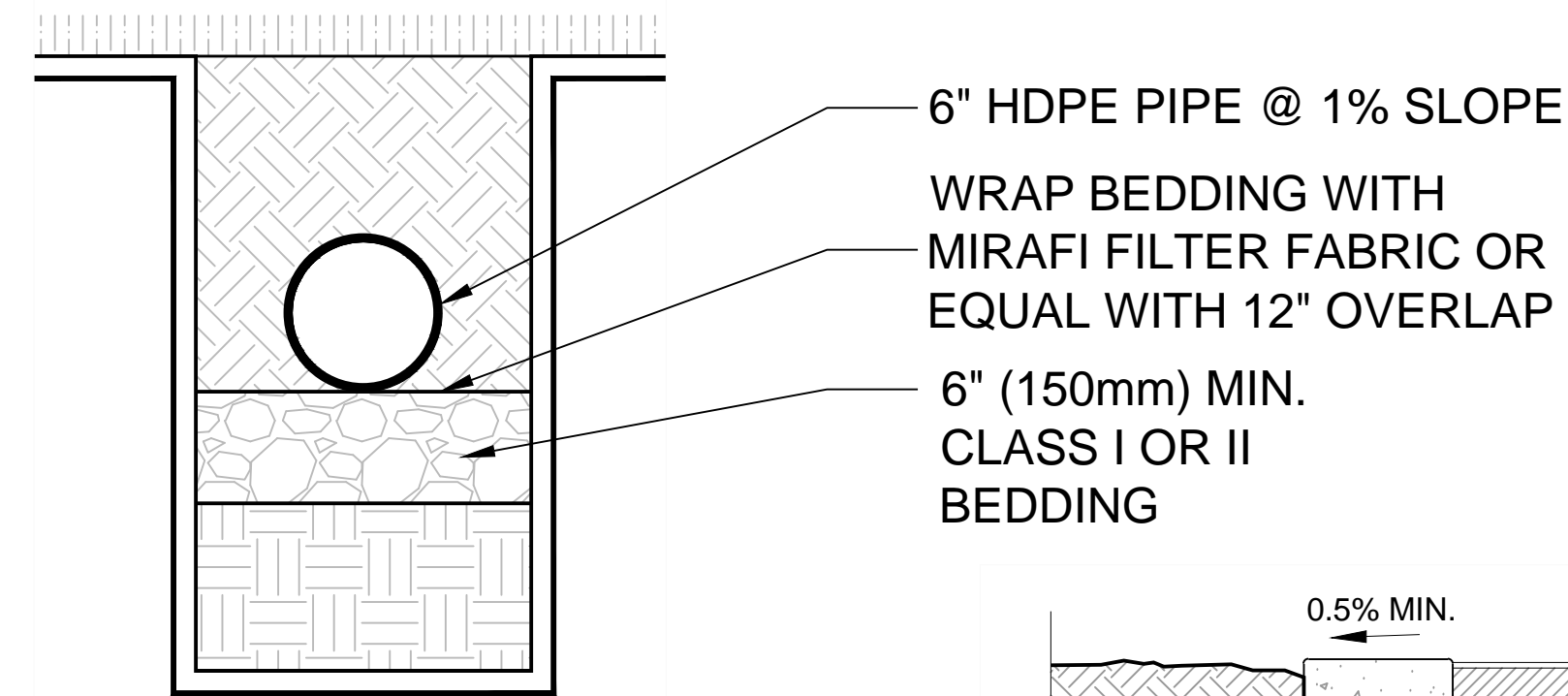
**GRADING LEGEND:**

- XFG EXISTING FINISH GRADE ELEVATION
- XFS EXISTING FINISH SURFACE ELEVATION
- XRIM EXISTING RIM ELEVATION
- [FG] PROPOSED FINISH GRADE ELEVATION
- [FS] PROPOSED FINISH SURFACE ELEVATION
- [UI] PROPOSED UPPER INVERT ELEVATION
- [LI] PROPOSED LOWER INVERT ELEVATION
- [RIM] PROPOSED RIM ELEVATION
- [TC] TOP OF CURB ELEVATION
- [FLUSH] PROPOSED CONSTRUCTION SETS FLUSH WITH EXISTING OR PROPOSED PAVING

**GRADING AND DRAINAGE NOTES:**

1. EXISTING CONCRETE AT PERIMETER TO REMAIN IN PLACE WITH THE EXCEPTION OF THE CUT AREA FOR THE DRAIN PIPE CROSSING. CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING AND DRAINAGE TAKE OFFS AND ANY REQUIRED MEANS AND METHODS TO PERFORM GRADING AND DRAINAGE FOR SITE REQUIREMENTS. CONCRETE CUT BY DEMOLITION CONTRACTOR.
2. PROPOSED CONCRETE PAVEMENT FINISH SURFACE GRADES SHOWN HERE. PROPOSED UNDERGROUND DRAINAGE AND SURFACE STRUCTURES SHOWN HERE. REFERENCE GRADE AT EXISTING DRAINAGE STRUCTURE IS SHOWN RELATIVE TO BALANCE OF FIELD SHOT GRADES.
3. CONTRACTOR SHALL FIELD VERIFY EXISTING GRADES AS SHOWN ON PLAN PRIOR TO INSTALLATION OF DRAINAGE STRUCTURES AND PIPING, AND ALL PROPOSED CONCRETE PAVING.
4. ALL EXCESS SOIL REQUIRED FOR REMOVAL SHALL BE PLACED AND GRADED ON-SITE AT A LOCATION DETERMINED BY PROJECT MANAGER.
5. ALL PIPE AND FITTINGS SHALL BE WATER TIGHT FITTINGS.
6. SEE THIS SHEET AND SHEET 6.0 FOR DRAINAGE DETAILS.

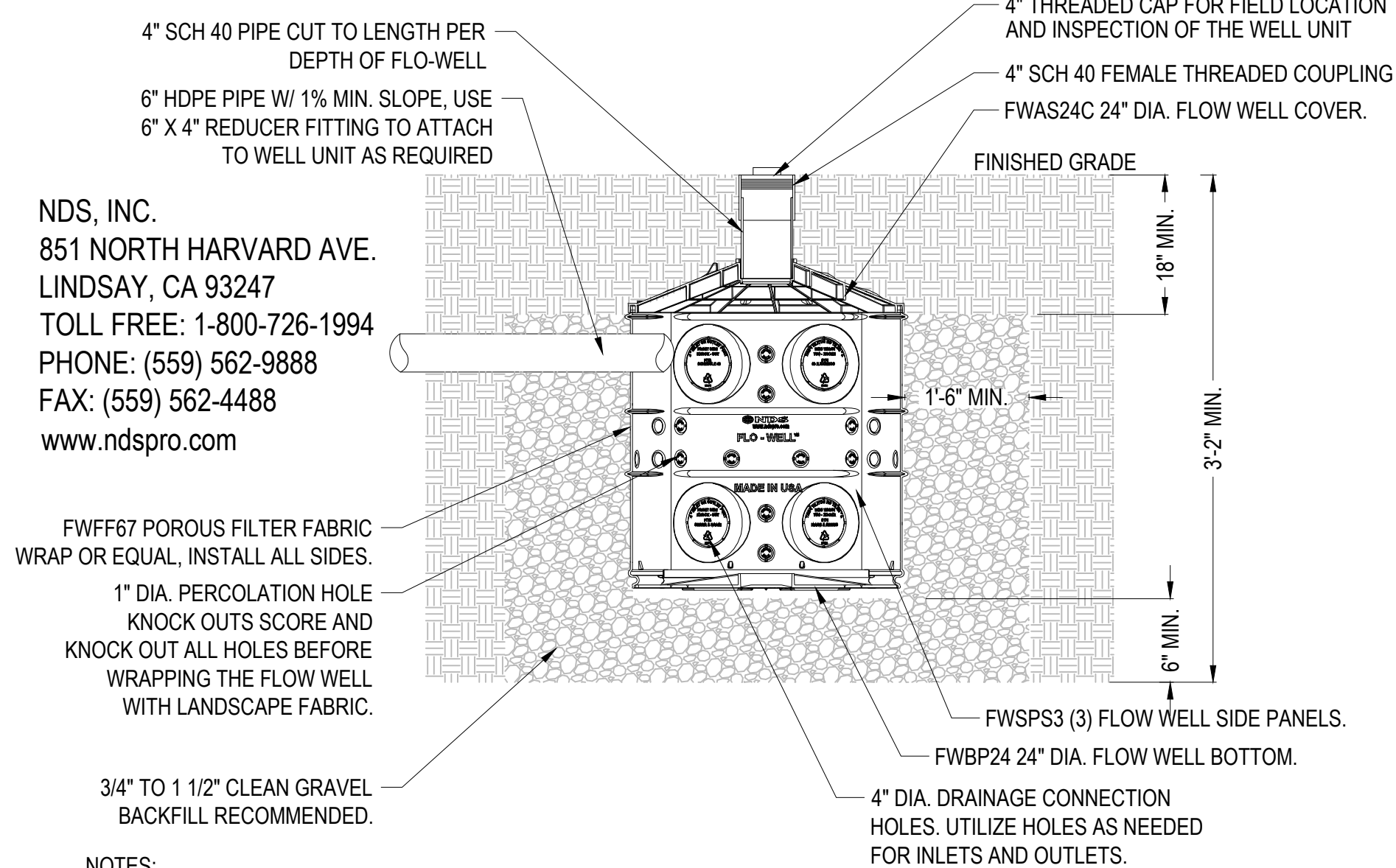
**03 TRENCH DETAIL**



**01 SAFETY SURFACE DRAINAGE DETAIL**

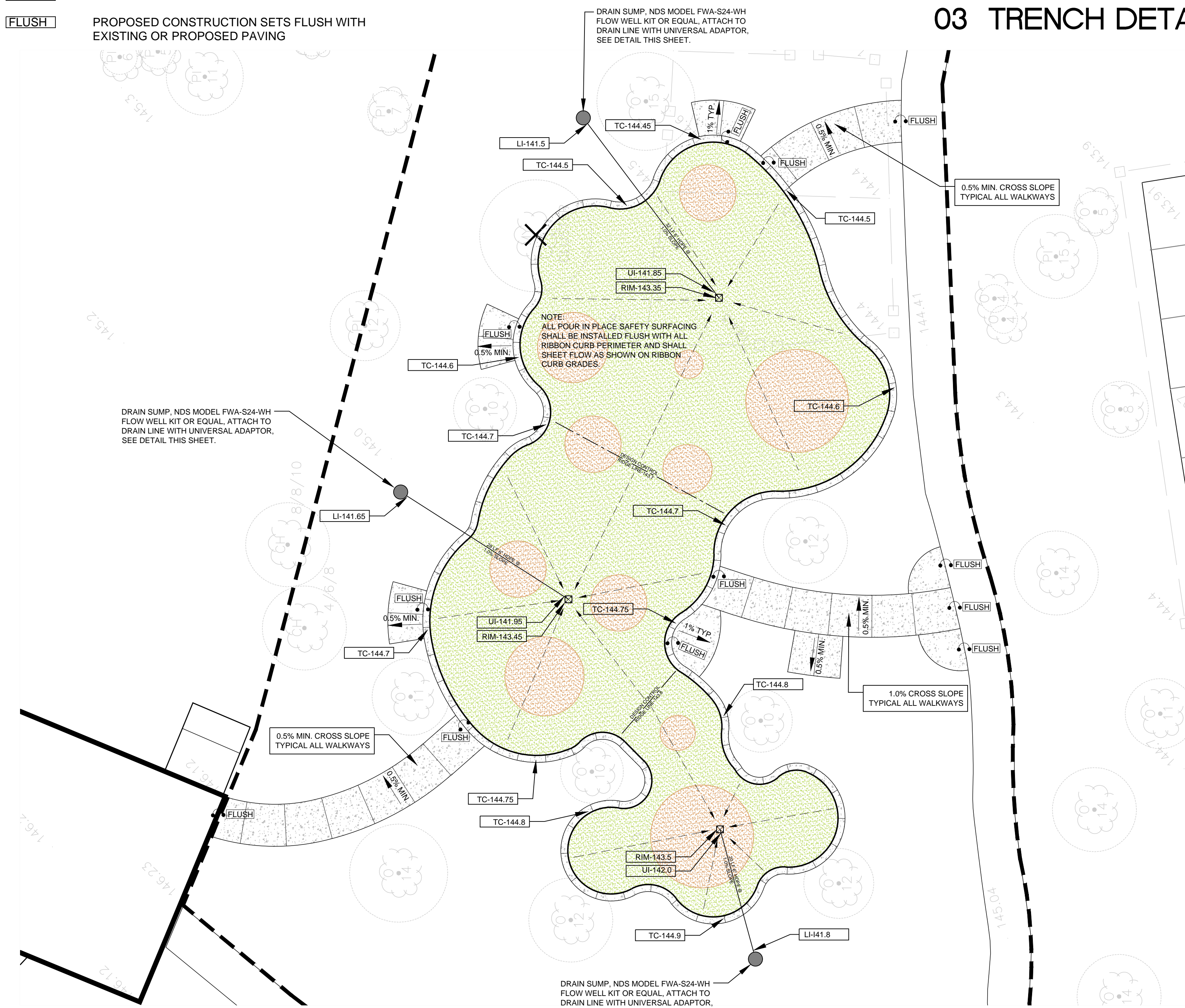
**FLO-WELL DRY WELL SYSTEM**

FLO-WELL INSTALLATION DETAIL - LOAD CLASS "A" & "B" - GRAVEL INSTALLATION DETAIL



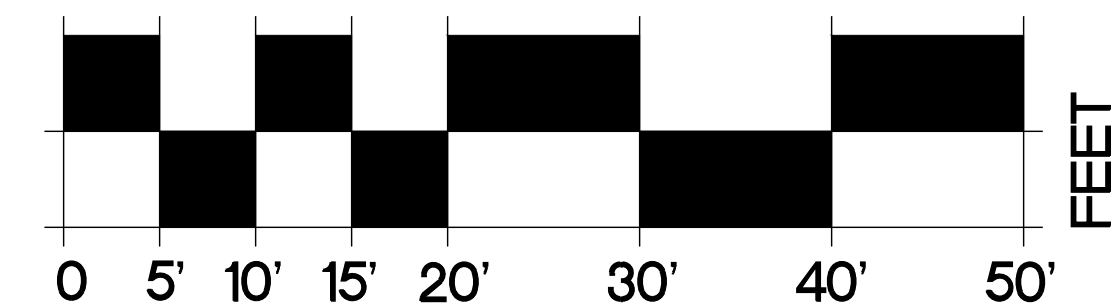
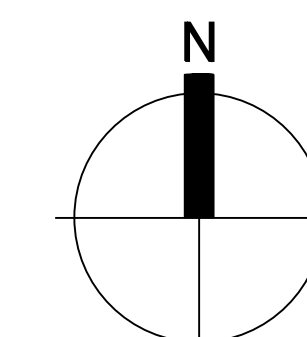
- NOTES:
1. MUST BE INSTALLED 10' AWAY FROM STRUCTURE OR FOUNDATION.
  2. FWAS24 KIT DOES NOT COME WITH FWBP24 BTM.
  3. REFERENCE FLO-WELL CALCULATOR ON NDSPRO.COM
  4. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
  5. DO NOT SCALE DRAWING.

**02 NDS FLOW WELL DRY WELL DRAINAGE DETAIL**



**PLAY AREA GRADING AND DRAINAGE PLAN  
SHADOW BAY PARK PLAY AND FITNESS AREA**

5100 TURKEY LAKE ROAD ORLANDO, FLORIDA 32819



SCALE: 1" = 10'-0" SHEET 5.0

DATE: \_\_\_\_\_ ENGINEER: \_\_\_\_\_ REG. NO. 49935  
JEFFREY J. EARHART

SEPTEMBER 30, 2016  
BID SET 02-01-2017

MS



REVISIONS	DATE	BY

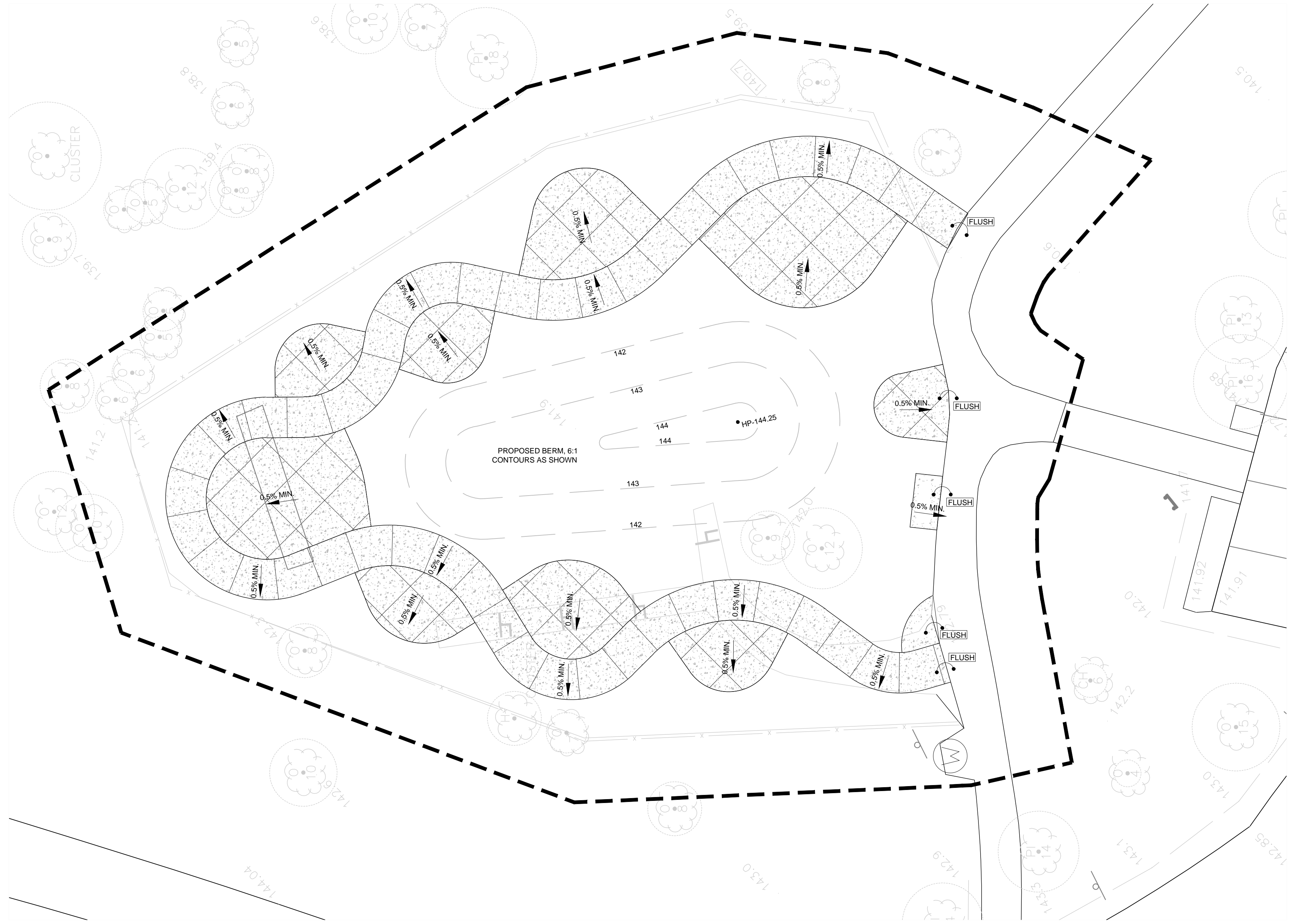
**TEAM Engineering, LLC**



REVISIONS	DATE	BY

**GRADING AND DRAINAGE NOTES:**

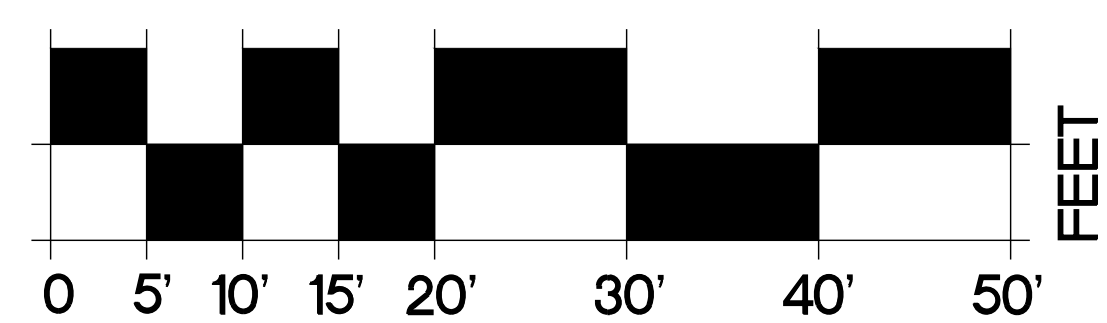
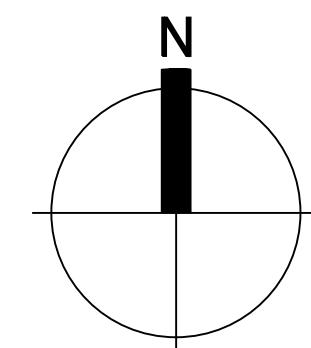
- EXISTING CONCRETE AT PERIMETER TO REMAIN IN PLACE WITH THE EXCEPTION OF THE CUT AREA FOR THE DRAIN PIPE CROSSING. CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING AND DRAINAGE TAKE OFFS AND ANY REQUIRED MEANS AND METHODS TO PERFORM GRADING AND DRAINAGE FOR SITE REQUIREMENTS. CONCRETE CUT BY DEMOLITION CONTRACTOR.
- PROPOSED CONCRETE PAVEMENT FINISH SURFACE GRADES SHOWN HERE. PROPOSED UNDERGROUND DRAINAGE AND SURFACE STRUCTURES SHOWN HERE. REFERENCE GRADE AT EXISTING DRAINAGE STRUCTURE IS SHOWN RELATIVE TO BALANCE OF FIELD SHOT GRADES.
- CONTRACTOR SHALL FIELD VERIFY EXISTING GRADES AS SHOWN ON PLAN PRIOR TO INSTALLATION OF DRAINAGE STRUCTURES AND PIPING, AND ALL PROPOSED CONCRETE PAVING.
- ALL EXCESS SOIL REQUIRED FOR REMOVAL SHALL BE PLACED AND GRADED ON-SITE AT A LOCATION DETERMINED BY PROJECT MANAGER.
- ALL PIPE AND FITTINGS SHALL BE WATER TIGHT FITTINGS.
- SEE THIS SHEET AND SHEET 6.0 FOR DETAILS.



**GRADING LEGEND:**

XFG	EXISTING FINISH GRADE ELEVATION
XFS	EXISTING FINISH SURFACE ELEVATION
XRIM	EXISTING RIM ELEVATION
FG	PROPOSED FINISH GRADE ELEVATION
FS	PROPOSED FINISH SURFACE ELEVATION
UI	PROPOSED UPPER INVERT ELEVATION
LI	PROPOSED LOWER INVERT ELEVATION
RIM	PROPOSED RIM ELEVATION
TC	TOP OF CURB ELEVATION
FLUSH	PROPOSED CONSTRUCTION SETS FLUSH WITH EXISTING OR PROPOSED PAVING

# FITNESS AREA GRADING AND DRAINAGE PLAN SHADOW BAY PARK PLAY AND FITNESS AREA



5100 TURKEY LAKE ROAD ORLANDO, FLORIDA 32819

NORTH SCALE: 1" = 10'-0" SHEET 5.1

DATE: \_\_\_\_\_ ENGINEER: JEFFREY J. EARHART REG. NO. 49935

DECEMBER 02, 2016 MS  
BID SET 02-01-2017



# 01 NDS FLOW WELL DRY WELL DRAINAGE SUMP SPECIFICATIONS



REVISIONS	DATE	BY

**TEAM Engineering, LLC**

**SECTION 33 49 23  
STORM DRAINAGE WATER RETENSION STRUCTURES**

Specifier Notes: This section covers NDS, Inc. "Flo-Well" manufactured dry wells. Consult NDS, Inc. for assistance in editing this section for the specific application.

Use of "Flo-Well" manufactured dry wells may contribute to LEED credits. Consult NDS, Inc. for more information.

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Manufactured dry wells.

**1.2 RELATED REQUIREMENTS**

Specifier Notes: Edit the following list of related sections as necessary. Limit the list to sections with specific information that the reader might expect to find in this section, but is specified elsewhere.

- A. Section 31 23 00 – Excavation and Fill.
- B. Section 33 41 00 – Storm Utility Drainage Piping.

**1.3 PREINSTALLATION MEETINGS**

Specifier Notes: Edit preinstallation meetings as necessary. Delete if not required.

- A. Convene preinstallation meeting [1 week] [2 weeks] before start of Work of this Section.
- B. Require attendance of parties directly affecting Work of this Section, including Contractor, Architect, installer, and manufacturer's representative.
- C. Review the Following:
  - 1. Materials.
  - 2. Installation.
  - 3. Adjusting.
  - 4. Protection.
  - 5. Coordination with other Work.

**1.4 SUBMITTALS**

Specifier Notes: Edit submittal requirements as necessary. Delete submittals not required.

- A. Comply with Division 1.
- B. Product Data: Submit manufacturer's product data, including installation instructions.
- C. Shop Drawings: Submit manufacturer's shop drawings, indicating layout, dimensions, materials, components, and accessories.
- D. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- E. Sustainable Design Submittals: Submit manufacturer's sustainable design submittals for manufactured dry wells.
  - 1. Recycled Content: Certify percentages of post-consumer and pre-consumer recycled content.
  - 2. Regional Materials: Certify distance between manufacturer and Project, in miles.
- F. Manufacturer's Project References: Submit manufacturer's list of successfully completed manufactured dry well projects, including project name and location, name of architect, and type and quantity of manufactured dry wells furnished.
- G. Installer's Project References: Submit installer's list of successfully completed manufactured dry well projects, including project name and location, name of architect, and type and quantity of manufactured dry wells installed.
- H. Warranty Documentation: Submit manufacturer's standard warranty.

**1.5 QUALITY ASSURANCE**

- A. Manufacturer's Qualifications: Manufacturer regularly engaged, for a minimum of 10 years, in the manufacturing of manufactured dry wells of similar type to that specified.
- B. Installer's Qualifications:
  - 1. Installer regularly engaged, for a minimum of 5 years, in installation of manufactured dry wells of similar type to that specified.
  - 2. Employ persons trained for installation of manufactured dry wells.

**1.6 DELIVERY, STORAGE, AND HANDLING**

- A. Delivery Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage and Handling Requirements:
  - 1. Store and handle materials in accordance with manufacturer's instructions.
  - 2. Keep materials in manufacturer's original, unopened containers and packaging until installation.
  - 3. Store materials in clean areas, protected from exposure to harmful weather conditions.
  - 4. Store materials out of direct sunlight.
  - 5. Protect materials during storage, handling, and installation to prevent damage.

**1.7 AMBIENT CONDITIONS**

- A. During Cold Weather:
  - 1. Do not use frozen materials.
  - 2. Do not use materials mixed or coated with ice or frost.
  - 3. Do not build on frozen Work.
- B. During Wet Weather: Do not build on wet, saturated, or muddy subgrade.

**PART 2 PRODUCTS**

**2.1 MANUFACTURERS**

- A. Manufacturer: NDS, Inc., 851 North Harvard Avenue, Lindsay, California 93247. Toll Free 800-726-1994. Phone 559-562-9888. Toll Free Fax 800-726-1998. Fax 559-562-4488. Website www.ndspro.com. Email nds@ndspro.com. OR APPROVED EQUAL

- B. Substitutions: [Not permitted] [Comply with Division 1].
- C. Single Source: Provide materials from single manufacturer.

**2.2 MATERIALS**

- A. Manufactured Dry Wells: "Flo-Well" manufactured dry wells.
  - 1. Description: Round dry well system, includes 3 side panels and 1 top component.
  - 2. Part Number: FWAS24WH.
  - 3. Material: Structural-foam polyolefin with UV inhibitors.
  - 4. Diameter: 24 inches.
  - 5. Height: 28.75 inches.
  - 6. Capacity: 50 gallons.
  - 7. Fits: 4-inch Schedule 40 pipe, 4-inch DWV pipe, and 4-inch sewer and drain pipe.
  - 8. Knockout Leaching Ports per Panel: Ten 1.5-inch diameter.
  - 9. Knockout Inlet/Outlet Ports per Panel: Four 4.5-inch diameter.
  - 10. Color: Black.
- B. Round Dry Well Covers:
  - 1. Part Number: FWAS24C.
  - 2. Material: Structural-foam polyolefin with UV inhibitors.
  - 3. Diameter: 24-1/4 inches.
  - 4. Height: 4-5/8 inches.
  - 5. Outer Lip: 3/4 inch.
  - 6. Center Knockout: 4.5-inch diameter.
  - 7. Color: Black.
- C. Dry Well Side Panels/Extensions:
  - 1. Includes: 3 side panels; makes 1 round dry well.
  - 2. Part Number: FWSPS3.
  - 3. Material: Structural-foam polyolefin with UV inhibitors.
  - 4. Height: 24 inches with recessed 0.75-inch lip for stacking.
  - 5. Knockout Leaching Ports per Panel: Ten 1.5-inch diameter.
  - 6. Knockout Inlet/Outlet Ports per Panel: Four 4.5-inch diameter.
  - 7. Color: Black.
- D. Round Dry Well Bottoms:
  - 1. Part Number: FWBP24.
  - 2. Material: Structural-foam polyolefin with UV inhibitors.
  - 3. Diameter: 24 inches.
  - 4. Leaching Ports: Six 1.5-inch diameter.
  - 5. Center Knockout for Strut Coupling: 4.5-inch diameter.
  - 6. Color: Black.
- E. Dry Well Surface Drain Inlets with Grate:
  - 1. Part Number: FWSD69.
  - 2. Material: Structural-foam polyolefin with UV inhibitors.
  - 3. Grate Diameter: 6 inches.
  - 4. Diameter at Inlet: 6 inches.
  - 5. Height: 9 inches.
  - 6. Outside Diameter at Bottom: 4.5 inches, fits Schedule 40 PVC fittings.
  - 7. ADA compliant.
  - 8. Color: Black.
- F. Filter Fabric Wrap to Surround Dry Wells:
  - 1. Part Number: FWFF67.
  - 2. Material: Porous, non-woven filter fabric.
  - 3. Length: 7 feet.
  - 4. Width: 2 feet.
  - 5. Weight: 1 ounce.
  - 6. Mullen Burst: 175 psi.
  - 7. Flow Through: 200 gpm.
  - 8. Color: Black.

**PART 3 EXECUTION**

**3.1 EXAMINATION**

- A. Examine areas to receive manufactured dry wells.
- B. Notify Architect of conditions that would adversely affect installation or subsequent use.
- C. Do not begin installation until unacceptable conditions are corrected.

**3.2 INSTALLATION**

- A. Install manufactured dry wells in accordance with manufacturer's instructions at locations indicated on the Drawings.
- B. Excavate hole for manufactured dry wells to dimensions and elevations indicated on the Drawings.
- C. Excavate trench to slope towards manufactured dry wells as indicated on the Drawings.
- D. Install manufactured dry wells level and plumb.
- E. Connect pipes to manufactured dry wells in accordance with manufacturer's instructions.
- F. Do not allow soil from entering manufactured dry wells or pipes.
- G. Backfill evenly around manufactured dry wells with specified material.
- H. Ensure no large stones or debris are in contact with manufactured dry wells.

**3.3 ADJUSTING**

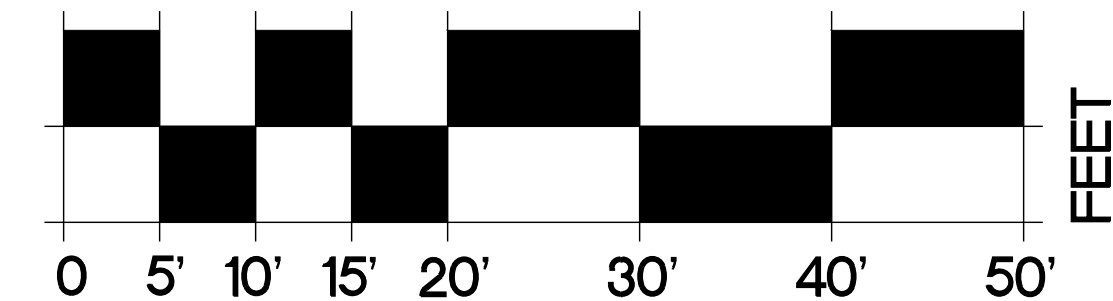
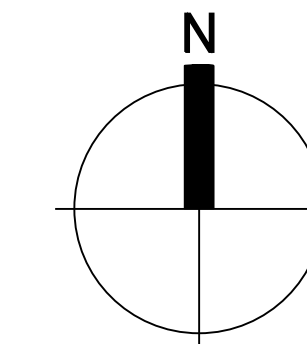
- A. Remove and replace with new material, damaged components that cannot be successfully repaired.

**3.4 PROTECTION**

- A. Protect Work of this Section to ensure that Work will be without damage or deterioration at time of Substantial Completion.

END OF SECTION

# GRADING AND DRAINAGE DETAILS AND NOTES SHADOW BAY PARK PLAY AND FITNESS AREA



5100 TURKEY LAKE ROAD ORLANDO, FLORIDA 32819

NORTH

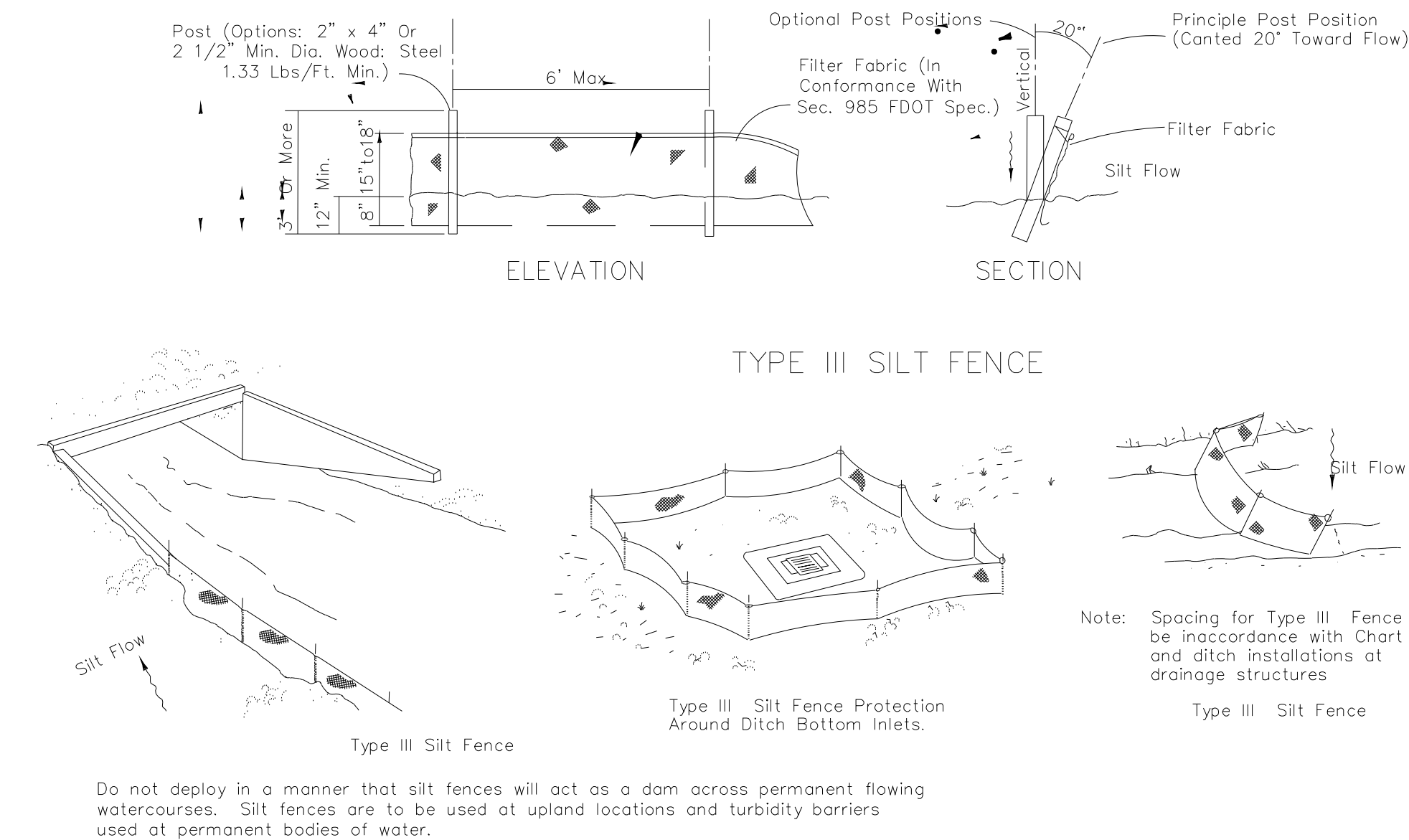
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DATE: \_\_\_\_\_ ENGINEER: JEFFREY J. EARHART REG. NO. 49935

DECEMBER 02, 2016 MS  
BID SET 02-01-2017

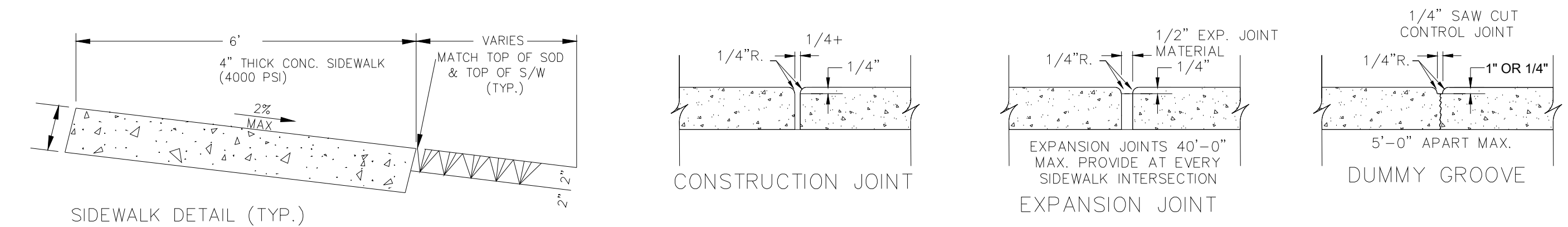


REVISIONS	DATE	BY



**01 SILT FENCE APPLICATION DETAILS**

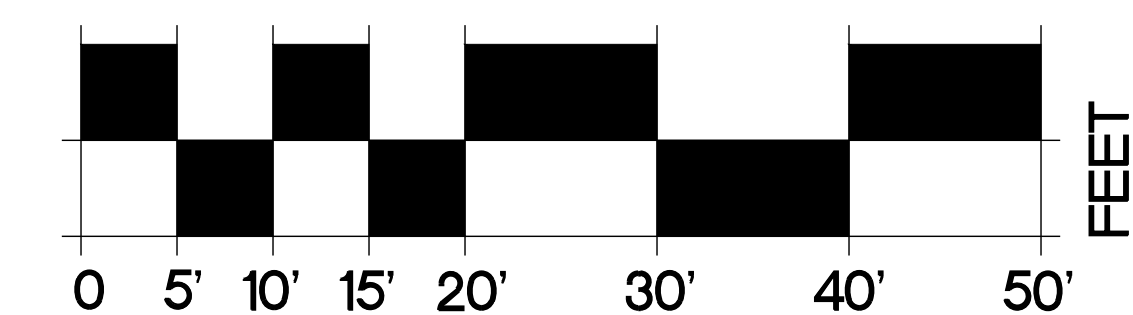
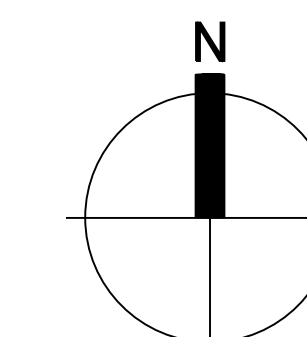
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**02 CONCRETE WALK DETAILS**

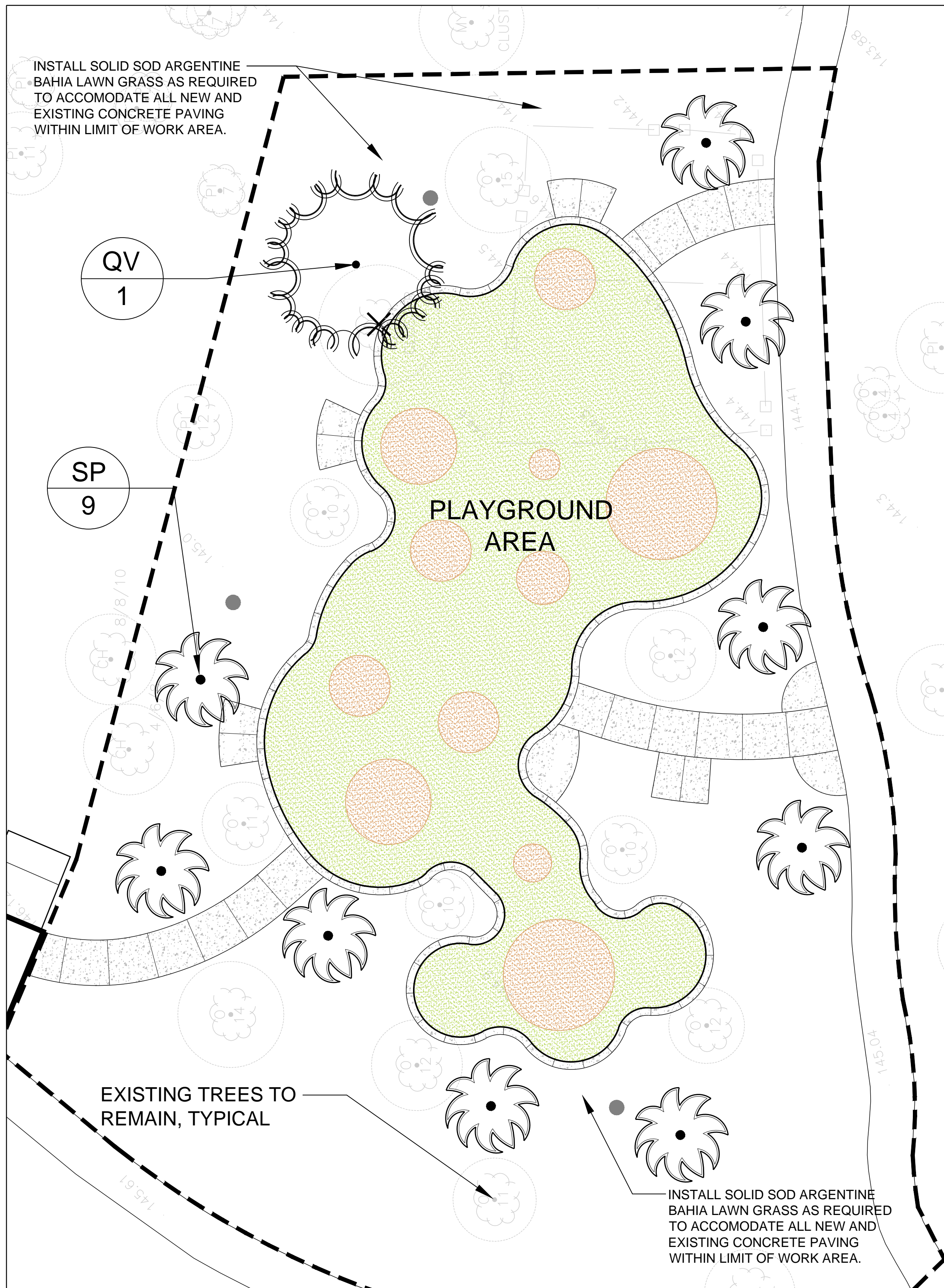
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# HARDSCAPE DETAILS SHADOW BAY PARK PLAY AND FITNESS AREA





# PLANTING PLAN



# PLANTING NOTES

**PART 1- GENERAL**  
**WORK INCLUDED**  
 1. INSTALLATION OF TREES, PALMS, SHRUBS, GROUNDCOVERS, AND GRASS SOD.  
 2. PERMITS PAID FOR BY ORANGE COUNTY.

**REFERENCES**  
 1. "GRADES AND STANDARDS FOR NURSERY PLANTS," FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.  
 2. "AMERICAN STANDARD FOR NURSERY STOCK," ANSI Z60.1-1986, AMERICAN ASSOCIATION OF NURSERYMEN.

**SUBMITTALS**  
 1. RECORD DRAWINGS: FURNISH ONE SET OF REPRODUCIBLE RECORD DRAWINGS, CLEARLY SHOWING ALL CHANGES MADE TO THE ORIGINAL CONTRACT DRAWINGS DURING THE COURSE OF THE WORK.

**DELIVERY, STORAGE AND HANDLING**  
 1. INSPECTION: UPON DELIVERY TO THE SITE, INSPECT ALL PLANT MATERIALS FOR CONFORMITY TO THE SPECIFICATIONS AND FOR HANDLING DAMAGE. REMOVE FROM THE SITE ALL NON-CONFORMING AND DAMAGED PLANT MATERIALS.  
 2. ON-SITE STORAGE: PROTECT ALL STORED PLANT MATERIALS FROM SUN AND WIND. WATER ALL STORED PLANT MATERIALS DAILY. OWNER TO INDICATE APPROPRIATE LOCATION FOR MATERIAL(S) AND EQUIPMENT STORAGE.

**GUARANTEE**  
 1. GUARANTEE ALL PLANTING WORK FOR A PERIOD OF ONE YEAR AFTER THE DATE OF SUBSTANTIAL COMPLETION OF THE WORK.  
 2. REPLACE AT NO COST TO THE OWNER ALL PLANT MATERIALS WHICH DIE OR ARE DETERMINED BY THE LANDSCAPE ARCHITECT TO BE UNACCEPTABLE, UNLESS THE DEATH OR UNACCEPTABLE CONDITION IS CLEARLY BEYOND THE CONTROL OF THE CONTRACTOR. UNACCEPTABLE PLANTS SHALL INCLUDE THOSE THAT SHOW SIGNIFICANT DIE-BACK OR FAILURE TO EXHIBIT THE HEALTHY CHARACTERISTICS INDICATIVE OF THE SPECIES.

**MAINTENANCE**  
 1. MAINTAIN ALL LANDSCAPING UNTIL FINAL COMPLETION OF THE WORK.  
 2. MAINTENANCE TO INCLUDE:  
 A. CULTIVATING AND WEEDING PLANT BEDS AND TREE PITTS.  
 B. APPLICATION OF HERBICIDES AND PESTICIDES.  
 C. IRRIGATION SUFFICIENT TO SATURATE ROOT SYSTEMS, APPLIED DAILY.  
 D. TRIMMING AND PRUNING, INCLUDING REMOVAL OF CLIPPINGS AND DEAD OR BROKEN BRANCHES, AND TREATMENT OF PRUNED AREAS OR OTHER WOUNDS.  
 E. DISEASE CONTROL.  
 F. MAINTAINING GUYS AND STAKES IN A TIGHT CONDITION.  
 G. MAINTAINED TREES IN A PLUMB CONDITION.  
 H. WEEKLY MOWING AFTER SOD IS SUFFICIENTLY ROOTED.

**PART 2- PRODUCTS**  
**PLANT MATERIALS**  
 1. TREES AND SHRUBS: ALL PLANT MATERIALS SHALL BE FLORIDA FANCY AS OUTLINED IN "GRADES AND STANDARDS FOR NURSERY PLANTS." PROVIDE ONLY NURSERY GROWN PLANT MATERIALS, GROWN IN CONTAINERS UNLESS OTHERWISE INDICATED ON THE DRAWINGS.  
 2. SOD: PROVIDE ONLY NURSERY GROWN, MACHINE CUT SOD OF THE TYPE INDICATED ON THE DRAWINGS. SOD SHALL BE WELL-WATERED WITH ROOTS, FREE OF EXCESSIVE WEEDS, AND SHALL BE GREEN, FRESH AND UNWOUND AT THE TIME OF PLANTING.

**SOIL MATERIALS**  
 1. TOPSOIL: FERTILE, AGRICULTURAL TOPSOIL, TYPICAL FOR PROJECT LOCALITY, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, TAKEN FROM DRAINED SITE; FREE OF SUBSOIL, CLAY, PLANTS, WEEDS AND ROOTS; PH RANGE OF 5.5 TO 7.0; MINIMUM 4 PERCENT, MAXIMUM 20 PERCENT ORGANIC MATTER.  
 2. PEAT MOSS: SHREDDED, LOOSE, SPHAGNUM MOSS; FREE OF LUMPS, ROOTS, INORGANIC MATERIALS; MINIMUM 85 PERCENT ORGANIC MATERIAL MEASURED BY OVEN DRY WEIGHTS; 4 TO 5 PH RANGE; MOISTURE CONTENT OF 30 PERCENT.  
 3. PLANTING SOIL MIXTURE: THOROUGHLY MIX 3 PARTS TOPSOIL WITH ONE PART PEAT MOSS BY VOLUME.

**OTHER MATERIALS**  
 1. MULCH: AS NOTED ON DRAWINGS.  
 2. FERTILIZER:  
 A. FLOWERING ANNUALS AND BEDDING PLANTS: SIERRABLEN 18-7-10 (4-IRON), RATE OF APPLICATION 2 LBS. PER 100 SQ. FT.  
 B. CONTAINER GROWN TREES, SHRUBS AND GROUNDCOVERS: AGRIFORM 21 GRAM TABLETS, RATE OF APPLICATION AS FOLLOWS:  
 1-2 GALLON PLANTS: 1 TABLET  
 3-5 GALLON PLANTS: 2 TABLETS  
 7-10 GALLON PLANTS: 3 TABLETS  
 10 GALLON PLANTS: 4 TABLETS  
 20 GALLON PLANTS: 6 TABLETS  
 45 GALLON PLANTS: 8 TABLETS  
 100 GALLON PLANTS: 10 TABLETS  
 200 GALLON PLANTS: 15 TABLETS  
 C. FIELD GROWN AND COLLECTED TREES: AGRIFORM 21 GRAM TABLETS, ONE TABLET PER 1/2 INCH OF CALIPER FOR STANDARD TREES AND/OR ONE TABLET PER FOOT SPREAD FOR MULTI-TRUNK TREES.  
 D. NEWLY PLANTED SOD: 6-6-6 APPLIED PER MANUFACTURER'S INSTRUCTIONS.

**TESTS**  
 A. PROVIDE ANALYSIS OF IMPORTED TOPSOIL INDICATING PH VALUE AND PERCENTAGE OF NITROGEN, PHOSPHORUS, POTASH, SOLUBLE SALT, AND ORGANIC MATTER.

**PART 3- EXECUTION**  
**PREPARATION**  
 1. FINE GRADING: FILL + FINE GRADE PLANTING AREA, AS INDICATED ON THE DRAWINGS, ELIMINATING LOW OR ROUGH AREAS, AND BUILDING DEBRIS, STONES AND RUBBLE. FINISH GRADES SHALL BE SLOPED IN THE SAME DIRECTION AS EXISTING DRAINAGE; NEW GRADES SHALL NOT PERMIT FLOODING OR STANDING WATER. SLOPED AREAS SHALL DRAIN DIRECTLY INTO RETENTION POINT OR INTO SURFACE PARKING LOT DRAINAGE.

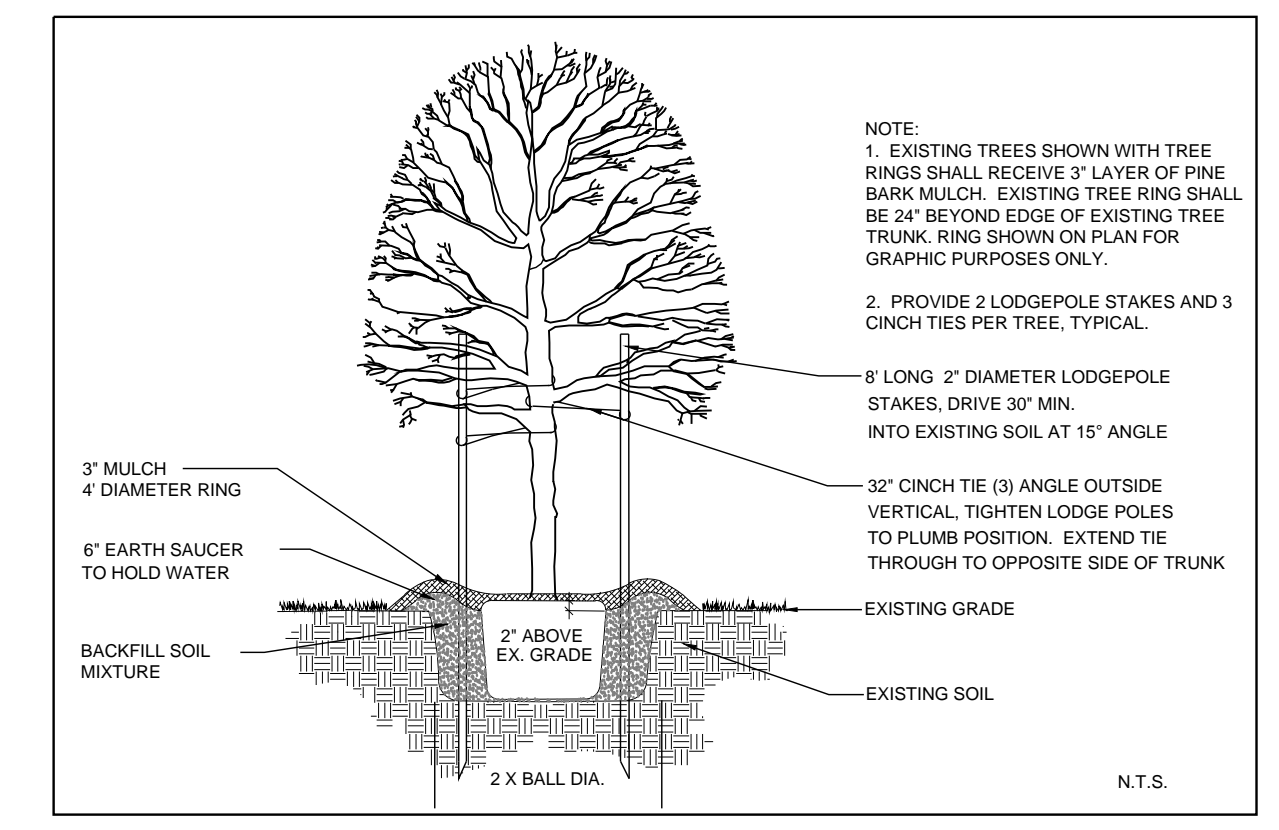
**PLANTING**  
 1. STAKE LOCATIONS OF ALL TREES AND SHRUBS. ALIGN WITH ARCHITECTURAL OR ENGINEERING REFERENCE FEATURES AS INDICATED ON THE DRAWINGS. INFORM LANDSCAPE ARCHITECT OF UNFORESEEN OBSTACLES WHICH MAY AFFECT THE LOCATIONS AS SHOWN ON THE DRAWINGS.  
 2. PLANT TREES AND SHRUBS, ROTATING AS NECESSARY FOR BEST APPEARANCE FROM THE PREDOMINANT VIEWPOINT.  
 3. LAY OUT SHRUB BEDS, SCALING THE LOCATIONS AND DIMENSIONS OF EACH BED, FOLLOWING THE CONFIGURATIONS INDICATED ON THE DRAWINGS. ADJUST THE BED DIMENSIONS TO THE QUANTITY AND SPACING OF PLANTS SHOWN ON THE PLANT LIST OR SCALED FROM THE DRAWINGS. INFORM LANDSCAPE ARCHITECT OF SIGNIFICANT DISCREPANCIES BETWEEN PLANT BED DIMENSIONS AND PLANT QUANTITIES.  
 4. PLANT SHRUBS AND ANNUALS, MAINTAINING UNIFORM SPACING AS INDICATED ON THE PLANT LIST OR SCALED FROM THE DRAWINGS.  
 5. DISTRIBUTE OR DISPOSE OF EXCAVATED SOIL FROM PLANTING HOLES, MAINTAINING THE DESIRED FINISH GRADES.  
 6. LAY SOD ON FINE-GRADED, MOISTENED SOIL, WITHOUT GAPS OR OVERLAPS. TAMP OR ROLL TO PROVIDE FIRM CONTACT WITH SOIL. SOD LINE AT PLANT BEDS SHALL BE CUT TO THE CONFIGURATION AND DIMENSIONS SHOWN ON THE DRAWINGS. A MINIMUM DIMENSION SHALL BE MAINTAINED BETWEEN PLANTS AND SOD EQUAL TO ONE-HALF THE PLANT SPACING, MEASURED FROM THE CENTER OF THE PLANT TO THE EDGE OF THE SOD. A CIRCULAR RING OF 12 INCH RADIUS SHALL BE MAINTAINED FREE OF GRASS AROUND TREES WITHIN SODDED AREAS.  
 7. APPLY FERTILIZER TABLETS, EQUALLY DISTRIBUTED AROUND ROOTBALL AT A DEPTH EQUAL TO ONE-HALF THE ROOTBALL DEPTH. APPLY GRANULAR FERTILIZERS TO SOD AND BEDDING PLANTS. SWEEP FERTILIZERS FROM WALKWAYS TO AVOID STAINING.  
 8. SATURATE SOIL THOROUGHLY DURING AND AFTER BACKFILLING OF PLANTS, AND AFTER LAYING SOD.  
 9. APPLY A LAYER OF MULCH, MINIMUM 3 INCHES AFTER SETTLEMENT, TO ALL PLANT BEDS AND TREE RINGS.  
 10. STAKE AND GUY ALL TREES SECURELY. ATTACH WHITE SURVEYOR'S RIBBON TO ALL GUY WIRES ADJACENT TO PEDESTRIAN AREAS.  
 11. QUANTITIES AS SHOWN ON THE PLANT LIST ARE FOR CONVENIENCE ONLY. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL PLANTS SHOWN ON THE PLANTING PLANS. IF DISCREPANCIES ARISE BETWEEN THE PLANT LIST AND PLANTING PLANS, THE PLANS ARE TO OVERRIDE THE PLANT LIST IN ALL CASES.  
 12. SPECIFIC PLANT MATERIAL LAYOUT MAY VARY DUE TO FIELD CONDITIONS.  
 13. ALL PLANT MATERIAL SIZES SPECIFIED ARE MINIMUM SIZES. CONTAINER SIZE SHALL BE INCREASED IF NECESSARY TO PROVIDE OVERALL PLANT SIZE SPECIFIED.



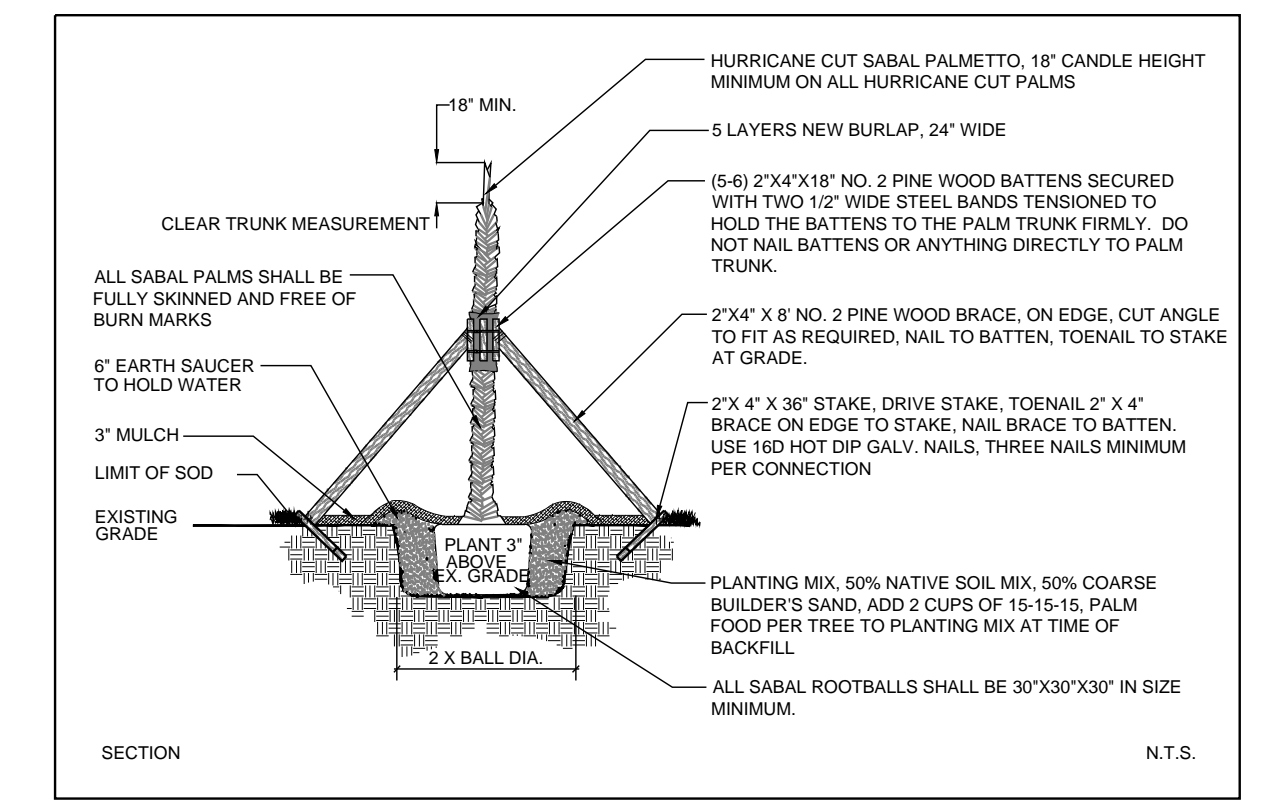
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**TEAM Engineering, LLC**

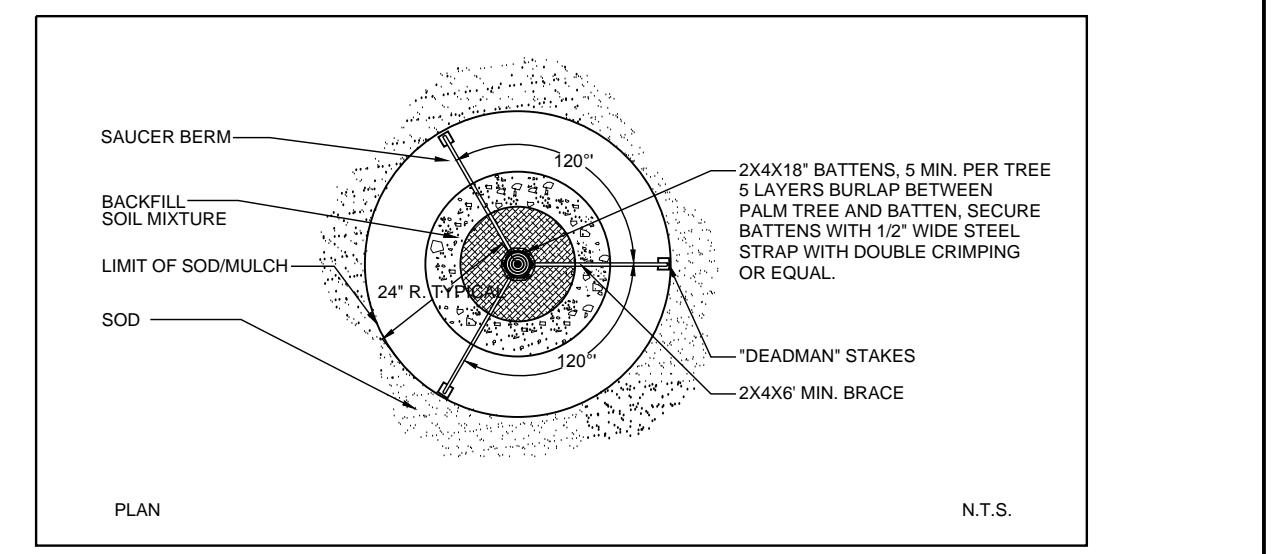
## TREE DETAIL



## PALM DETAIL



## PALM DETAIL



## PLANT LIST

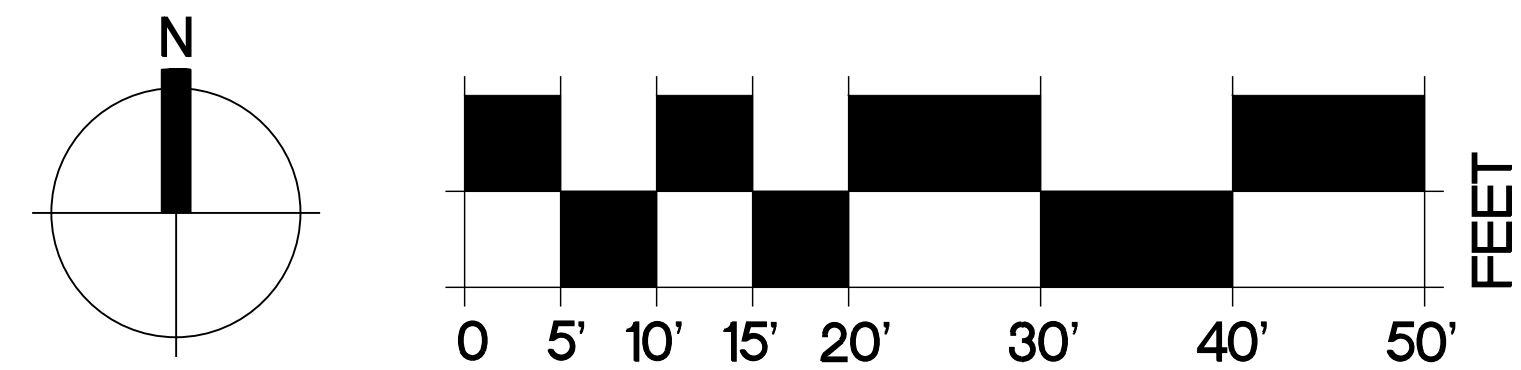
QTY	SYMBOL	BOTANICAL NAME	COMMON NAME	REMARKS
1	QV	QUERCUS VIRGINIANA	LIVE OAK	2" CALIPER, 30 GALLON, 10' HT. X 3' SPREAD, FLORIDA #1 MINIMUM, PLANT AND STAKE AS SHOWN IN DETAIL
9	SP	SABAL PALMETTO	CABBAGE PALM	8" CLEAR TRUNK, HURRICANE CUT, SKINNED TRUNK, PLANT AND STAKE AS SHOWN IN DETAILS

## IRRIGATION NOTES

- ALL ESTABLISHMENT IRRIGATION SHALL BE REQUIRED BY THE PROVISION OF "GATOR BAGS" OR APPROVED EQUAL. THE CONTRACTOR SHALL FILL BAGS BY HOSE ONCE DAILY FOR A PERIOD OF FOUR WEEKS. TWO BAGS PER TREE DELIVERING A MINIMUM OF 50 GALLONS OF WATER PER DAY TO EACH TREE AND PALM. HOSE BIB SHALL BE PROVIDED BY ORANGE COUNTY AT NEW WATER FOUNTAIN.
- IF AREA IRRIGATION IS AVAILABLE, ORANGE COUNTY SUPPORT STAFF SHALL PROVIDE AND INSTALL TWO BUBBLERS PER TREE OR PALM AND INSTALL 1" VALVE WITH SINGLE ZONE BATTERY OPERATED TIMER INSTALLED IN ONE 12" X 18" LOCKABLE VALVE BOX.
- IRRIGATION AVAILABILITY SHALL BE DETERMINED PRIOR TO BIDDING AND RESULTS SHALL BE AVAILABLE AT PRE-BID MEETING.

# PLAY AREA LANDSCAPE PLAN SHADOW BAY PARK PLAY AND FITNESS AREA

5100 TURKEY LAKE ROAD ORLANDO, FLORIDA 32819



NORTH SCALE: 1" = 10'-0" SHEET 7.0

DATE: \_\_\_\_\_ ENGINEER: JEFFREY J. EARHART REG. NO. 49935

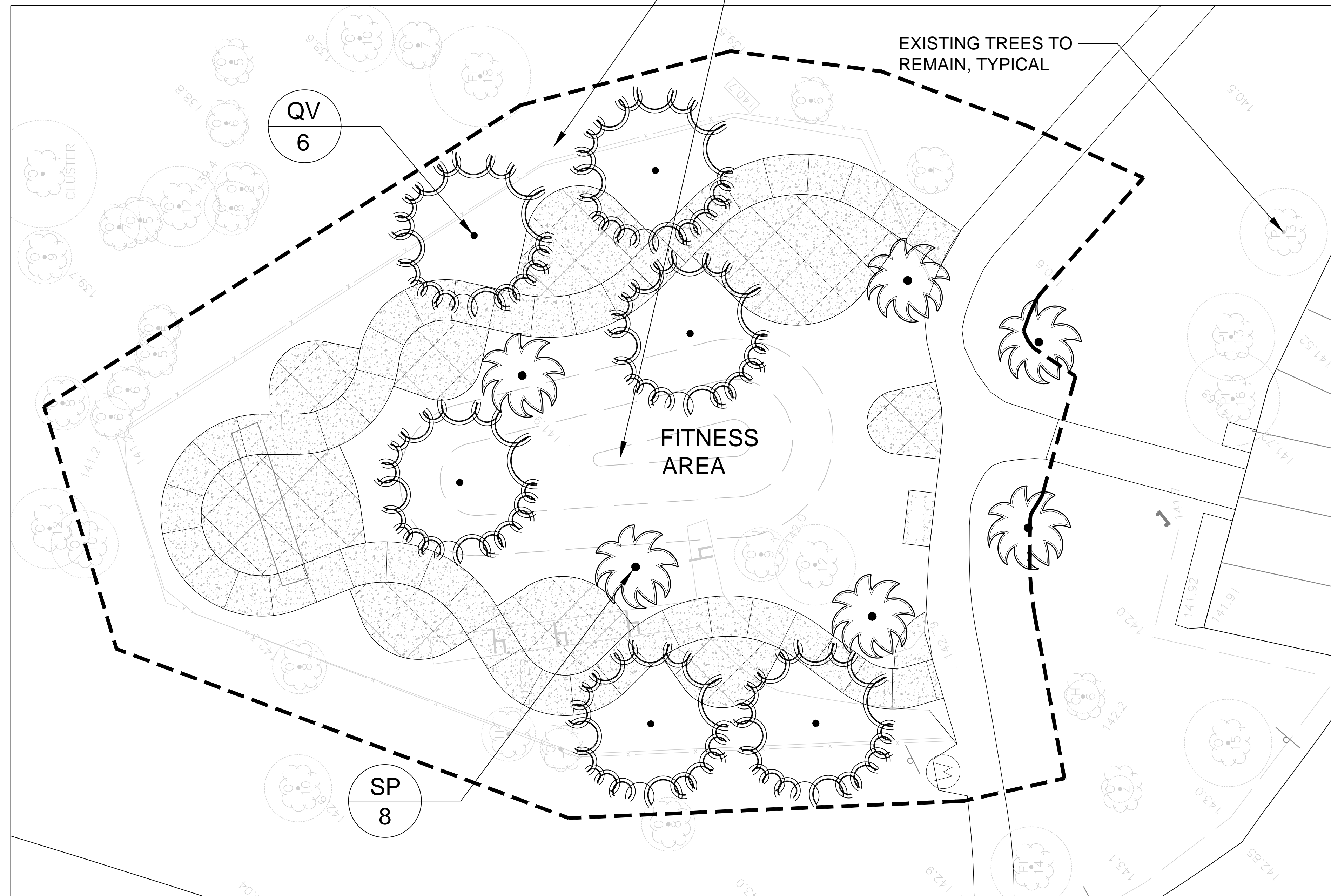
NOVEMBER 30, 2016 MS BID SET 02-01-2017





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PLANTING PLAN



PLANT LIST

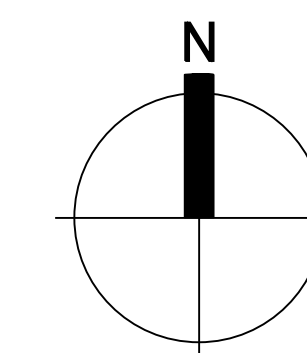
QTY	SYMBOL	BOTANICAL NAME	COMMON NAME	REMARKS
6	QV	QUERCUS VIRGINIANA	LIVE OAK	2" CALIPER, 30 GALLON, 10' HT. X 3' SPREAD, FLORIDA #1 MINIMUM, PLANT AND STAKE AS SHOWN IN DETAIL
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IRRIGATION NOTES

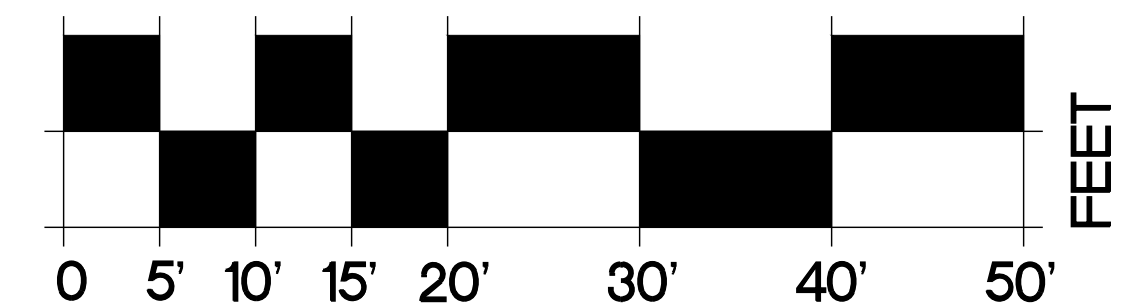
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FITNESS AREA LANDSCAPE PLAN  
SHADOW BAY PARK PLAY AND FITNESS AREA

5100 TURKEY LAKE ROAD ORLANDO, FLORIDA 32819



NORTH



SCALE: 1" = 10'-0" SHEET 7.1

