JAMES A. CARR
LICENSE
No. 51318
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

James A Carr

Digitally signed by James A Carr
Date: 2025.09.30 15:41:01-04'00'

This item has been electronically signed and sealed by James A. Carr, PE. on 09/30/2025 using a Digital Signature.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

REVIEWING AGENCIES

COLLIER COUNTY
COLLIER COUNTY COMMUNITY DEVELOPMENT SERVICES
2800 NORTH HORSESHOE DRIVE NAPLES, FL. 34104
TEL: [239] 643-8400

TELEPHONE:
CENTURY LINK
P.O. BOX 2477
NAPLES, FLA. 34104
TEL: [239] 263-6319

ENVIRONMENTAL:
DEPARTMENT OF ENVIRONMENTAL PROTECTION
2295 VICTORIA AVENUE No. 364
FT. MYERS, FLA. 34113
TEL: [239] 332-6975

SEWER:
COLLIER COUNTY WASTEWATER DEPARTMENT
3301 TAMIAMI TRAIL EAST
NAPLES, FLA. 34113
TEL: [239] 732-2575

WATER MANAGEMENT:
SOUTH FLORIDA WATER MANAGEMENT DISTRICT
2301 MCGREGOR BOULEVARD
FORT MYERS, FLA. 33901
TEL: [239] 338-2929

POWER:
FLORIDA POWER AND LIGHT COMPANY
4105 15TH AVENUE SOUTHWEST
NAPLES, FLA. 34116
[239] 353-6090

TELEVISION:
COMCAST
301 TOWER ROAD
NAPLES, FLA. 34113
TEL:[239] 793-3577

FIRE DISTRICT:
NORTH NAPLES FIRE RESCUE DISTRICT
1885 VETERANS PARK DRIVE
NAPLES, FL. 34109
TEL: [239] 597-3222

WATER:
COLLIER COUNTY WATER DEPARTMENT
3301 TAMIAMI TRAIL EAST
NAPLES, FLA. 34113
TEL: [239] 732-2575

ABBREVIATIONS

P/L	PROPERTY LINE
C/L	CENTER LINE
±	APPROXIMATE
ELEC	ELECTRIC
ARV	AIR RELEASE VALVE
BOC	BACK OF CURB
TBA	TO BE ABANDONED
TBR	TO BE REMOVED
PBSP	PERMANENT BACTERIAL SAMPLE POINT
TBSP	TEMPORARY BACTERIAL SAMPLE POINT
CV	CHECK VALVE
GV	GATE VALVE
PV	PLUG VALVE
D.E.	DRAINAGE EASEMENT
C.U.E	COUNTY UTILITY EASEMENT
P.U.E.	PUBLIC UTILITY EASEMENT
L.B.E	LANDSCAPE BUFFER EASEMENT
L.M.E	LAKE MAINTENANCE EASEMENT
R.O.W.	RIGHT-OF-WAY
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FM	FORCE MAIN
WM	WATER MAIN
EFF	EFFLUENT LINE
S.S.M.	GRAVITY SANITARY SEWER MAIN
W.S.	WATER SERVICE
S.S.L.	GRAVITY SANITARY SEWER LATERAL
PIV	POINT INDICATOR VALVE
FDC	FIRE DEPARTMENT CONNECTION
FH	FIRE HYDRANT
ML	MANHOLE
DL	STORM DRAINAGE STRUCTURE
RD	ROOF DRAIN
YD	YARD DRAIN
PS	PUMP STATION
CS	CONTROL STRUCTURE
HW	HEADWALL
C.O	CLEAN OUT
F.F.E	FINISHED FLOOR ELEVATION
L.S.P.A	LITTORAL SHELF PLANTING AREA
BLDG	BUILDING
RED.	REDUCER

SITE DEVELOPMENT PLANS (PL20240001457) FOR:

NORTH COLLIER FIRE STATION 49

LOCATED IN SECTION 16, TOWNSHIP 48 SOUTH, RANGE 26 EAST, COLLIER COUNTY, FLORIDA.

PREPARED FOR:
NORTH COLLIER FIRE CONTROL & RESCUE DISTRICT
1885 VETERANS PARK DR
NAPLES, FL 34109

PROPERTY ZONING: COCOHATCHEE BAY RPUD ORD. 2023-46
AMENDING ORD. 2000-88

2008 SETTLEMENT AGREEMENT O.R. 4368, PG 2345
AMENDMENT TO SETTLEMENT AGREEMENT AND RELEASE O.R. BOOK 6297, PG 417

PUDEX-05-AR-7909 ORD. 05-397

PROPERTY FOLIO NUMBER: 00155884304

LEGAL DESCRIPTION: 16 48 25 POR OF NE 1/4 AS DESC IN OR 6376 PG 1606

FIRE PROTECTION BUILDING INFORMATION (PER 2018 NFPA)

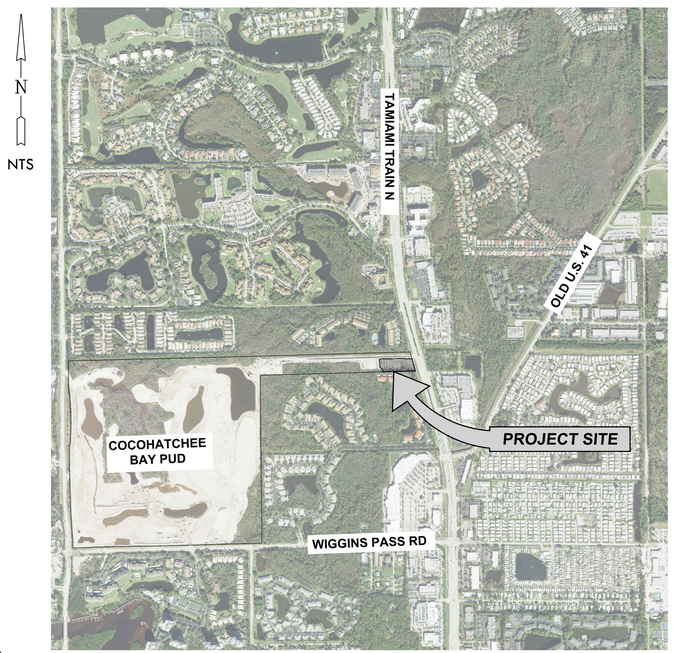
Name	Maximum Area Under Roof	Construction Type	Occupancy Classification	Sprinklered	Flow Required (GPM) *
Fire Station	15,880	II-B	R-3/S-2	Yes	2,750 (1,000)

Notes:
*** "Flow required before reduction (after reduction)"**
Flow requirement can be reduced by 75% if it has a fire sprinkler system but the required flow shall not be less than 1,000 gpm.

SHEET INDEX

SHEET NO.	SHEET TITLE
01	COVER
02	NOTES
03	EXISTING CONDITIONS
04	SITE PLAN
05	SFWMD BASIN MAP
06	PAVING, GRADING & DRAINAGE
07	UTILITIES
08	EROSION CONTROL
09	SECTIONS
10	CONSTRUCTION DETAILS
11	UTLITY DETAILS (1)
12	UTILITY DETAILS (2)
13	AERIAL

VICINITY MAP



LOCATION MAP

LJA
EMPLOYEE-OWNED.
CLIENT FOCUSED.
Engineering Firm Number: 31200
Surveying Firm License: LB8569

Collier County:
3400 Tamiami Boulevard, Suite 200
Naples, FL 34103
P: 2392972831
F: 2395643205

CLIENT NAME: NORTH COLLIER FIRE CONTROL & RESCUE DISTRICT
1885 VETERANS PARK DR
NAPLES, FL 34109

PROJECT NAME: NORTH COLLIER FIRE STATION 49

DRAWING TITLE: COVER

DESIGNED BY: LJA
DRAWN BY: AGC
CHECKED BY: AGC
REVIEWED BY: JAC
DATE: September 2025
DATUM: NAVD

NO.	DATE	REVISIONS	BY

ACAD FILE NAME: 13771 - CVR

LJA PROJECT # 23-0161

PLOT VIEW \ LAYOUT: CVR

SHEET 01
OF 13

ACAD FILE # 13771

= IRRIGATION VALVE
= FIRE HYDRANT
= WATER METER
= WATER VALVE
= YARD DRAIN
= STORM MANHOLE
= SEWER MANHOLE
= ELECTRIC HANDHOLE
= LIGHT POLE
BENCH = BENCH
= SIGN
= CABBAGE PALM
= FICUS TREE
= OAK TREE

STRM = STORM
IRR = IRRIGATION
SSWR = SANITARY SEWER
WATR = WATERMAIN
FIRE = FIREMAIN
= HEDGE/ LANDSCAPE/ VEGETATION

GENERAL NOTES:

1. THE APPROVAL OF THESE CONSTRUCTION PLANS DOES NOT AUTHORIZE CONSTRUCTION OF REQUIRED IMPROVEMENTS WHICH ARE INCONSISTENT WITH EASEMENTS OF RECORD.

2. ALL HANDICAP PARKING, RAMPS, SIGNING AND STRIPING SHALL COMPLY WITH THE MOST RECENT ACCESSIBILITY REQUIREMENTS MANUAL BY THE DEPARTMENT OF COMMUNITY AFFAIRS, FLORIDA BOARD OF BUILDING CODES AND STANDARDS.

3. PLACEMENT OF ALL ROADWAY SIGNS AND STRIPING SHALL CONFORM WITH THE LATEST M.U.T.C.D. STANDARDS.

4. ALL DIMENSIONS SHOWN REFERENCE THE EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.

5. REFER TO FDOT INDEX 522-001,002 FOR DETECTABLE WARNINGS AND SIDEWALK CURB RAMP DETAIL - SPECIFICATIONS. ADA DETECTION MATERIALS SHALL BE ON THE FDOT APPROVED QUALIFIED PRODUCTIONS LIST.

6. EXPANSION JOINTS IN ALL CURBS AND CONCRETE SIDEWALKS PER FDOT STANDARD SPECIFICATIONS BOOK SECTIONS 520 AND 522.

7. THE DISTANCE EXTENDING 5 FEET FROM THE ENTRY DOORS SHALL SLOPE AWAY FROM THE BUILDING AND SUCH SLOPE SHALL NOT EXCEED 2 PERCENT.

8. UNLESS OTHERWISE INDICATED, ALL SIDEWALKS SHALL HAVE A MINIMUM CROSS SLOPE OF 1 PERCENT, MAXIMUM 2 PERCENT, A MAXIMUM 5 PERCENT SLOPE IN DIRECTION OF TRAVEL, AND THE SLOPE SHALL SHED WATER AWAY FROM THE BUILDING.

9. A RIGHT-OF-WAY PERMIT IS REQUIRED FOR ANY PROPOSED WORK OR MAINTENANCE WITHIN THE PUBLIC RIGHT-OF-WAY.

10. ALL PROHIBITED EXOTIC VEGETATION SHALL BE REMOVED FORM THE SITE AND IT SHALL BE MAINTAINED FREE OF EXOTICS IN PERPETUITY.

11. PAVEMENT MARKINGS IN PUBLIC R.O.W. SHALL BE THERMOPLASTIC.

CLEARING NOTES:

1. EXOTIC VEGETATION AS DEFINED BY THE COLLIER COUNTY LAND DEVELOPMENT CODE (LDC), SECTION 03.05.08, SHALL BE REMOVED FROM THE SITE AND SUBSEQUENT ANNUAL EXOTIC REMOVAL (IN PERPETUITY) SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.

2. THE PROPERTY OWNER IS RESPONSIBLE FOR REPLACEMENT OF ALL DEAD LANDSCAPE MATERIAL AND FOR MAINTENANCE OF THE REQUIRED IRRIGATION SYSTEM.

3. SEE LANDSCAPE AND IRRIGATION PLANS FOR ADDITIONAL INFORMATION REGARDING NATIVE TREES TO REMAIN AND/OR REVEGETATION OF NATIVE SPECIES.

4. PRIOR TO COMMENCEMENT OF CONSTRUCTION THE APPLICANT SHALL INSTALL TEMPORARY CONSTRUCTION FENCE (e.g. ENVIROFENCE) ALONG THE LIMITS OF CLEARING OF THE EXISTING VEGETATION TO REMAIN ON SITE. THIS FENCE SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF CONSTRUCTION.

UTILITIES NOTES:

1. THE LOCATION OF EXISTING UTILITIES HAS BEEN PREPARED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THE INFORMATION IS NOT GUARANTEED, THEREFORE THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES IN THE FIELD.
2. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN THE AREA 48 HOURS MINIMUM PRIOR TO START OF CONSTRUCTION, AND SHALL HAVE ALL SERVICE LINES (UTS, FPL, WATER, CABLE, SANITARY SEWER AND FORCE MAIN, ETC.) LOCATED AND FLAGGED PRIOR TO EXCAVATION.
3. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL UTILITY LINES AND SERVICES DAMAGED DURING CONSTRUCTION, INCLUDING IRRIGATION LINES AND SERVICES. THE APPROPRIATE UTILITY SHALL BE NOTIFIED OF ALL DAMAGED LINES PRIOR TO REPAIR. ALL NECESSARY REPAIRS SHALL BE PERFORMED IMMEDIATELY.
4. ALL EXISTING DRIVEWAYS, LANDSCAPING, SIGNS, GRASS, ETC. SHALL BE RESTORED TO EQUIVALENT PRECONSTRUCTION CONDITION UNLESS OTHERWISE APPROVED BY THE ENGINEER AND COLLIER COUNTY.
5. THE CONTRACTOR IS REQUIRED TO OBTAIN WRITTEN APPROVAL FROM THE ENGINEER FOR ANY DEVIATIONS FROM THE PLANS AND/OR SPECIFICATIONS.
6. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY REQUIRED PLAN DEVIATIONS.
7. ALL WATER MAINS ARE 8" PVC C900 DR-14 WITH 8"X6" TEES AT ALL HYDRANTS AND SHALL BE PREDOMINANTLY BLUE IN COLOR.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC AND USAGE OF EXISTING STREETS ADJACENT TO PROJECT AREA. ALL TRAFFIC MAINTENANCE CONTROL SHALL BE IN ACCORDANCE WITH THE FLORIDA MANUAL OF TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS.
9. ALL UTILITY CONNECTIONS SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE AGENCIES, COLLIER COUNTY PUBLIC UTILITIES HAVING JURISDICTION OF EACH INDIVIDUAL UTILITY LINE.
10. THE UNDERGROUND CONTRACTOR SHALL MINIMIZE THE WORK AREA AND WIDTH OF TRENCHES TO AVOID DISTURBANCES OF NATURAL VEGETATION. SPOIL FROM TRENCHES SHALL BE PLACED ONLY ON PREVIOUSLY CLEARED AREAS. THE CONTRACTOR SHALL NOT REMOVE ANY TREES OR SHRUBS WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
11. THE 30" MINIMUM TO 48" MAXIMUM COVER REQUIREMENT FOR PROPOSED UTILITIES SHALL BE MEASURED FROM FINISHED GRADES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE COVER REGARDLESS OF EXISTING GRADE.
12. THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE TO THE ENGINEER AND COUNTY AND/OR CITY PRIOR TO THE FOLLOWING ACTIVITIES:
    A. COMMENCEMENT OF CONSTRUCTION
    B. CHANGES TO APPROVED SCHEDULES
    C. CONNECTION TO EXISTING UTILITY SYSTEMS
    D. THRUST BLOCK INSPECTION
    E. UTILITY MAIN PRESSURE TESTING
    F. TRENCH AND BACKFILL COMPACTION AND DENSITY TESTING
    G. CURB INSTALLATION
    H. SUBBASE, BASE AND PAVING OPERATIONS
    I. WATER MAIN FLUSHING, CHLORINATION AND BACTERIOLOGICAL TESTING
    J. FINAL INSPECTION
13. ALL SANITARY SEWER LATERALS SHALL BE 6" PVC SDR-26 AND HAVE A SLOPE OF 1.04% MINIMUM.
14. ALL GRAVITY SEWER MAINS SHALL BE 8" PVC SDR-26.
15. CONTRACTOR TO CONSTRUCT UTILITIES TO WITHIN 5 FEET OF BUILDING.
16. IF THERE ARE ANY NEW OR RELOCATED WATER MAINS THAT CROSS ANY SANITARY SEWERS, STORM SEWERS, FORCE MAINS, OR RECLAIMED WATER LINES, THE WATER MAINS CROSS ABOVE SUCH PIPELINES WITH A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAINS AND THE OUTSIDE OF SUCH PIPELINES, OR SUCH CROSSINGS ARE ARRANGED SO THAT ALL PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN TEN FEET BETWEEN ANY TWO JOINTS (OR, ALTERNATIVELY, THE SANITARY SEWERS, STORM SEWERS, FORCE MAINS, AND RECLAIMED WATER LINES AT SUCH CROSSINGS ARE PLACED IN SLEEVES OR ENCASED IN CONCRETE TO OBTAIN THE EQUIVALENT OF THE TEN FOOT SEPARATION ON BETWEEN JOINTS); OR DATA JUSTIFYING AN EXCEPTION TO THESE SEPARATION REQUIREMENTS IS ATTACHED IN ACCORDANCE WITH RULE 62-555.314(4), F.A.C.
17. CONTRACTOR SHALL INSTALL 4" 3M ELECTRONIC BALL MARKERS, OR APPROVED EQUAL EVERY 200 LF AND AT EACH PIPE ELBOW LOCATION.
18. FITTINGS SHALL BE USED TO MAINTAIN PLAN ALIGNMENT OF PROPOSED UTILITIES. DEVIATIONS FROM PLAN ALIGNMENT SHALL NOT BE MORE THAN 12". THE CONTRACTOR SHALL PREPARE RECORD DRAWINGS OF ALL FITTINGS, VALVES AND OTHER APPURTENANCES NOT SHOWN ON THESE PLANS.
19. SEE ENCLOSED DETAIL SHEETS FOR COLLIER COUNTY UTILITY CONSTRUCTION REQUIREMENTS.
20. REFER TO MECHANICAL ENGINEER'S PLAN FOR CONNECTION OF FIRE LINE, WATER SERVICE & SANITARY SEWER LATERAL TO BUILDING.
21. WATER SERVICE CONNECTIONS 2" DIAMETER AND LESS SHALL BE MADE USING TAPPING SADDLES.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REQUESTING COUNTY AND/OR CITY INSPECTIONS. WRITTEN REQUESTS SHALL BE PROVIDED TO THE COUNTY AND/OR CITY AT LEAST 48 HOURS PRIOR TO THE FOLLOWING:
    A. HOT TAPS TO WATER AND SEWER FACILITIES *
    B. MASTER METER AND BYPASS PIPING
    C. JACK AND BORE CASINGS
    D. PRESSURE TESTS *
    E. INFILTRATION/ EXFILTRATION TESTS
    F. LIFT STATION INSTALLATION, PRIOR TO COVER-UP AND START-UP
    G. LIFT STATION START-UP *
    H. LAMPING OF SEWER LINES
    I. FLUSHING OF SEWER LINES, FORCE MAINS, WATER MAINS AND EFFLUENT LINES *
    J. TELEVISION VIDEO TAPING OF SEWER LINES AT END OF CONSTRUCTION AND THE WARRANTY PERIOD ("IN-OFFICE REVIEW")
    K. CONFLICT BOX CONSTRUCTION *
    L. CONNECTIONS TO EXISTING WATER AND SEWER FACILITIES *
    M. CASING INSTALLATIONS
    N. OTHER SPECIAL REQUIREMENTS AS SPECIFIED BY THE COUNTY AT THE TIME OF CONSTRUCTION DOCUMENT APPROVAL
    O. JACK AND BORES AND DIRECTIONAL BORES. THE COUNTY MUST BE PRESENT AT THE INSPECTIONS NOTED WITH "*" ABOVE.
24. PER UO 8.2.5.1, THE OPERATING ENTITY OF NORTH COLLIER FIRE STATION 49 SHALL OWN AND MAINTAIN ALL WATER, SEWER AND IRRIGATION SYSTEMS ON SITE.
25. PER DC 1.6.2, THE CONTRACTOR SHALL INSTALL SERVICE LEAD, METER BOX AND METER FOR METERS LARGER THAN 3 INCHES. FOR METERS SMALLER THAN 3 INCHES, COLLIER COUNTY SHALL INSTALL SERVICE LEAD, METER BOX AND METER.
26. PER UO 7.7.2, ALL COSTS AND EXPENSES OF ANY AND ALL REPAIRS, REPLACEMENTS, MAINTENANCE AND RESTORATIONS OF ABOVEGROUND IMPROVEMENTS PERMITTED WITHIN A C.U.E. SHALL BE THE SOLE FINANCIAL RESPONSIBILITY OF THE GRANTOR, ITS SUCCESSORS OR ASSIGNS.
27. PER TS 330520 3.3, EXISTING UTILITY IMPROVEMENTS TO BE ABANDONED IN PLACE SHALL BE PARTIALLY REMOVED, CAPPED OR PLUGGED, FLUSHED CLEAN, AND FILLED WITH GROUT OR FLOWABLE FILL, AS REQUIRED.
28. FIRE LINE (TO BE SIZED BY FIRE SPRINKLER ENGINEER).
29. CONTRACTOR SHALL COORDINATE EXISTING UTILITIES WITH COLLIER COUNTY DURING CONSTRUCTION AND SHALL REVIEW THE PULLBOXES FOR ELEVATION ADJUSTMENTS IF NECESSARY.

FIRE PROTECTION NOTES:

1. THE FIRE PROTECTION WATER SUPPLY, INCLUDING FIRE HYDRANTS, SHALL BE INSTALLED AND IN SERVICE PRIOR TO PLACING COMBUSTIBLE BUILDING MATERIALS ON SITE.
2. FIRE HYDRANTS SHALL BE MARKED IN A UNIFORM MANNER APPROVED BY THE LOCAL FIRE DISTRICT.
3. FIRE HYDRANTS SHALL BE INSTALLED WITHIN THREE FEET OF THE CURB LINE OF A FIRE LANE, STREET, OR PRIVATE STREET WHEN INSTALLED ALONG SUCH ACCESS WAYS.
4. FIRE HYDRANTS SHALL NOT BE OBSTRUCTED VISUALLY OR FUNCTIONALLY BY VEGETATION. CLEARANCE OF 3 FEET TO SIDES AND REAR AND CLEAR TO STREET SHALL BE MAINTAINED.
5. A SEPARATE PERMIT IS REQUIRED PRIOR TO INSTALLATION OF ANY FIRE LINE.
6. INSTALLATION OF ALL UNDERGROUND FIRE LINES SHALL COMPLY WITH THE 2025 EDITION OF NFPA 24.
7. UNDERGROUND FIRE LINES SHALL BE INSTALLED BY AN APPROPRIATELY CERTIFIED FIRE SPRINKLER CONTRACTOR OR A TYPE V UNDERGROUND CONTRACTOR AS DEFINED AND OUTLINED IN 633.021, 633.521 AND 633.539 F.S. PRIOR TO ACCUMULATION OF COMBUSTIBLE BUILDING MATERIALS ON SITE, PROPOSED FIRE HYDRANTS MUST BE OPERABLE AND ABLE TO PROVIDE MINIMUM FIRE FLOWS, AND IMPROVED STABILIZED EMERGENCY APPARATUS ACCESS WAYS (MIN. 20' WIDE) MUST BE AVAILABLE TO WITHIN 100' OF STRUCTURES.
8. PER NFPA 24 (2022 ED.) 10.4.4, PIPE UNDER DRIVEWAYS SHALL BE BURIED AT A MINIMUM DEPTH OF 3 FT (0.9 M).

DRAINAGE NOTES:

1. ALL SWALES AND RETENTION AREAS TO BE SODDED WITHIN SEVEN DAYS OF FINAL GRADING.
2. ALL FINAL DRAINAGE STRUCTURE LOCATIONS TO BE APPROVED IN THE FIELD BY THE ENGINEER.
3. ALL PAVEMENT AND SIDEWALKS ADJACENT TO BUILDING AREA SHALL BE CONSTRUCTED WITH SLOPE WHICH WILL SHED WATER AWAY FROM THE BUILDING.
4. SEE ENCLOSED DETAIL SHEET FOR COLLIER COUNTY EROSION CONTROL REQUIREMENTS.
5. THE LOCATION OF EXISTING UTILITIES HAS BEEN PREPARED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THIS INFORMATION IS NOT GUARANTEED, THEREFORE THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES IN THE FIELD.
6. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITY COMPANIES BEFORE BEGINNING CONSTRUCTION AND SHALL HAVE ALL SERVICE LINES LOCATED AND FLAGGED PRIOR TO EXCAVATION.
7. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL UTILITY LINES AND SERVICES DAMAGED DURING CONSTRUCTION, INCLUDING IRRIGATION LINES, AND SERVICES.
8. THE APPROPRIATE UTILITY SHALL BE NOTIFIED OF ALL DAMAGED LINES PRIOR TO REPAIR. ALL NECESSARY REPAIRS SHALL BE PERFORMED IMMEDIATELY.
9. ALL ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM (1988) . CONVERSION FROM NAVD (88) TO NGVD (29) AS FOLLOWS: NGVD (29) - 1.26' = NAVD (88)
10. THE OPERATING ENTITY OF NORTH COLLIER FIRE STATION 49 SHALL BE RESPONSIBLE FOR OWNERSHIP AND MAINTENANCE OF ALL ON-SITE DRAINAGE AND WATER MANAGEMENT FACILITIES.
11. THE OPERATING ENTITY NORTH COLLIER FIRE STATION 49 SHALL BE RESPONSIBLE FOR OWNERSHIP AND MAINTENANCE OF OF ALL ON-SITE INFRASTRUCTURE, I.E. OPEN SPACE, PAVED AREAS, ETC.

SEDIMENT CONTROL NOTES:

1. PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY, APPROPRIATE EROSION CONTROL DEVICES SHALL BE INSTALLED TO CONTROL AND REDUCE SOIL EROSION AND SEDIMENT TRANSPORT TO OFF SITE AREAS. THE CONTRACTOR SHALL MAINTAIN THESE DEVICES THROUGHOUT THE DURATION OF CONSTRUCTION. ALL DEVICES SHALL REMAIN IN PLACE UNTIL THE SURROUNDING AREAS ARE ESTABLISHED.
2. THE FOLLOWING MINIMUM REQUIREMENTS ARE RECOMMENDED: (REFERENCE FLORIDA DEVELOPMENT MANUAL, FDER, PPS 6-301 TO 6-500).
   A) BMP 1.01 - TEMPORARY CONSTRUCTION ENTRANCE
   B) BMP 1.06 - SILT FENCE
   C) BMP 1.08 - STORM INLET DRAIN PROTECTION
3. THESE BEST MANAGEMENT PRACTICES (BMP) ARE TYPICAL OF THE REQUIREMENTS FOR SOIL EROSION CONTROL PER DIVISION 3.7 OF THE COLLIER COUNTY LAND DEVELOPMENT CODE. THEY MAY NOT CONSTITUTE COMPLETE REQUIREMENTS FOR COMPLIANCE WITH REGULATORY AGENCIES AND SPECIFIC PERMIT CONDITIONS.

TREE AND VEGETATION PROTECTION NOTES:

1. AREAS TO BE PRESERVED SHALL BE PROTECTED DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES BY PLACING A CONTINUOUS BARRIER AROUND THE PERIMETER OF THE AREA OF VEGETATION TO BE PRESERVED. THIS BARRIER SHALL BE HIGHLY VISIBLE AND CONSTRUCTED OF WOOD STAKES SET A MAXIMUM OF TEN (10) FEET APART, AT A HEIGHT RANGE OF TWO (2) TO FOUR (4) FEET, ALL COVERED CONTINUOUSLY WITH BRIGHTLY COLORED, ALL-WEATHER MESH MATERIAL OR EQUAL TYPE BARRIER METHOD. AN EQUIVALENT METHOD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE COUNTY MANAGER OR DESIGNEE.
2. WHEN THE RETENTION OF SINGLE TREES IS REQUIRED BY THE COLLIER COUNTY LAND DEVELOPMENT CODE, A PROTECTIVE BARRIER, SIMILAR TO THAT REQUIRED IN SECTION 3.05.04 E. OF SAID CODE, SHALL BE PLACED AROUND THE TREE AT A DISTANCE FROM THE TRUNK OF SIX (6) FEET OR BEYOND THE DRIP LINE, WHICHEVER IS GREATER, OR AS OTHERWISE APPROVED BY THE COUNTY MANAGER OR DESIGNEE.
3. PROTECTIVE BARRIERS SHALL BE INSTALLED AND MAINTAINED FOR THE PERIOD OF TIME BEGINNING WITH THE COMMENCEMENT OF ANY PHASE OF LAND CLEARING OR BUILDING OPERATIONS, AND ENDING WITH THE COMPLETION OF THAT PHASE OF THE CONSTRUCTION WORK ON THE SITE, UNLESS OTHERWISE APPROVED TO BE REMOVED BY THE COUNTY MANGER OR DESIGNEE. ALL PROTECTIVE BARRIERS SHALL BE INSTALLED PURSUANT TO THE TREE PROTECTION MANUAL FOR BUILDERS AND DEVELOPERS, DIVISION OF FORESTRY, STATE OF FLORIDA OR OTHER METHODS APPROVED BY THE COUNTY MANAGER OR DESIGNEE.

LJA
EMPLOYEE-OWNED. CLIENT FOCUSED.
Engineering Firm Number: 31200
Surveying Firm license: LB8569
Collier County:
7400 Trail Boulevard, Suite 200
Naples, FL 34108
P: 239.597.3111
F: 239.566.2203

CLIENT NAME: NORTH COLLIER FIRE CONTROL & RESCUE DISTRICT
1885 VETERANS PARK DR
NAPLES, FL 34109

PROJECT NAME: NORTH COLLIER FIRE STATION 49

DRAWING TITLE: NOTES

DESIGNED BY: LJA
DRAWN BY: AGC
CHECKED BY: AGC
REVIEWED BY: JAC
DATE: September 2025
DATUM: NAVD

NO.	DATE	REVISIONS	BY

ACAD FILE NAME: 13771 - CVR
LJA PROJECT # 23-0161
PLOT VIEW \ LAYOUT NOTES

ACAD FILE # 13771

FALLING WATERS VILLAGE PLACE PUD (PRESERVE)

PUD BOUNDARY

SDP-PL20220006236 KINSALE GOLF COURSE

KINSALE SDP BOUNDARY

PRESERVE

CONSERVATION EASEMENT (BUFFER INCLUDED IN THE CONSERVATION EASEMENT AS PER PUD SECTION 6.9.C)

100' POSSIBLE FUTURE R.O.W.

SDP-PL20220006236 KINSALE GOLF COURSE

10' FPL EASEMENT

TAMIAMI TRAIL N (U.S. 41) (FDOT R.O.W.)

SDP-PL20220006236 KINSALE GOLF COURSE

COCOHATCHEE ROAD (PRIVATE DRIVEWAY)

10' FPL EASEMENT

10' FPL EASEMENT

SDP-PL20220006236 KINSALE GOLF COURSE

EXISTING DRY DETENTION

EXISTING DRY DETENTION

TARPON COVE PUD (RESIDENTIAL)

1" = 20' MAP

N

LJA

EMPLOYEE-OWNED. CLIENT FOCUSED.

Engineering Firm Number: 31200
Surveying Firm license: LB8569

Collier County:
3400 Tamiami Trail North, Suite 200
Naples, FL 34103
P: 2392972823
F: 2392642503

CLIENT NAME:
NORTH COLLIER FIRE CONTROL & RESCUE DISTRICT
1885 VETERANS PARK DR
NAPLES, FL 34109

PROJECT NAME:
NORTH COLLIER FIRE STATION 49

DRAWING TITLE:
EXISTING CONDITIONS

DESIGNED BY: LJA
DRAWN BY: AGC
CHECKED BY: AGC
REVIEWED BY: JAC
DATE: September 2025
DATUM: NAVD

REVISIONS

NO.	DATE	BY

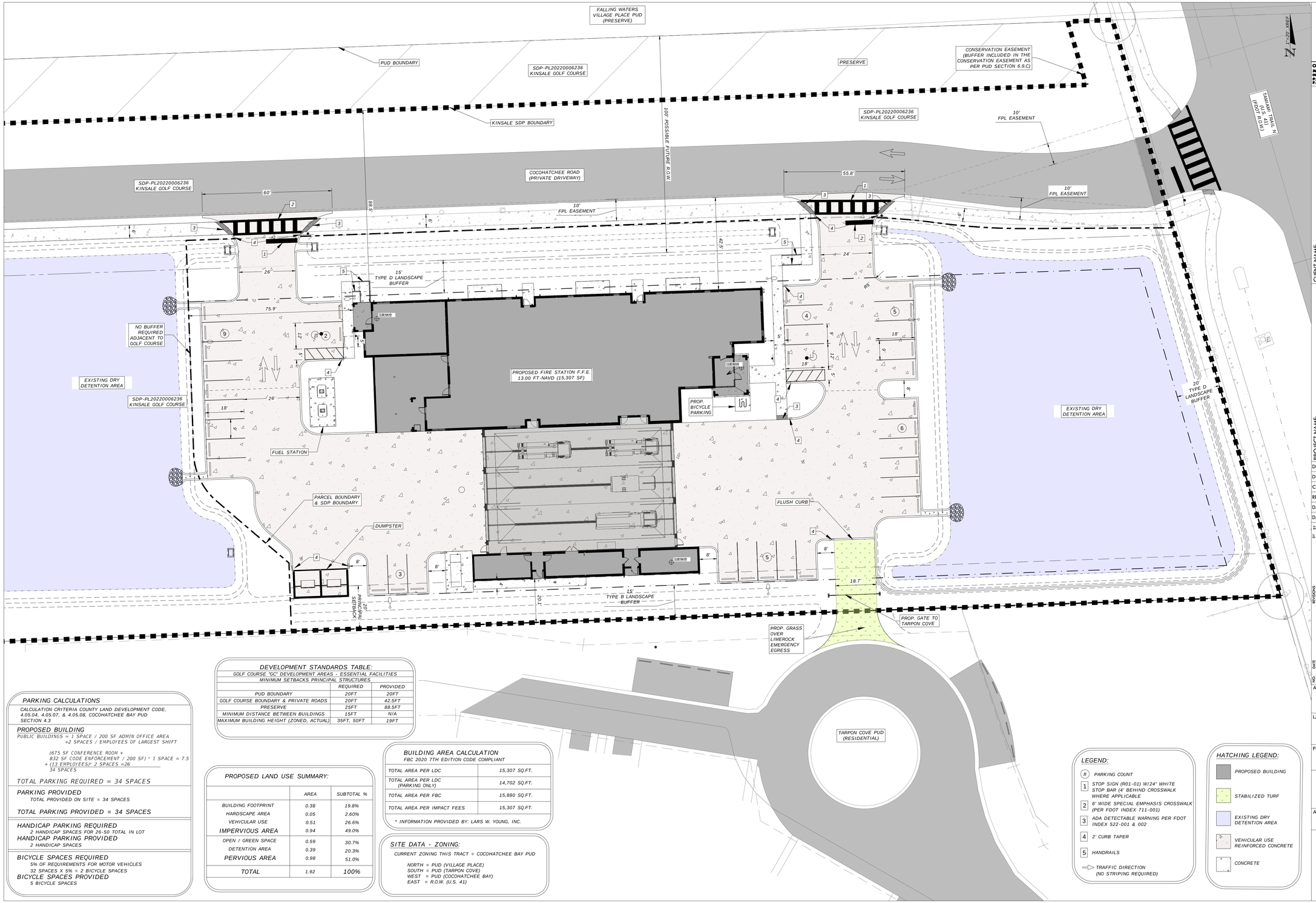
ACAD FILE NAME:
13771 - ME

LJA PROJECT #
23-0161

PLOT VIEW \ LAYOUT
EXCON

SHEET 03
OF 13

ACAD FILE #
13771



PARKING CALCULATIONS

CALCULATION CRITERIA COUNTY LAND DEVELOPMENT CODE, 4.05.04, 4.05.07, & 4.05.08, COCOHATCHEE BAY PUD SECTION 4.3

PROPOSED BUILDING
PUBLIC BUILDINGS = 1 SPACE / 200 SF ADMIN OFFICE AREA
+2 SPACES / EMPLOYEES OF LARGEST SHIFT

(675 SF CONFERENCE ROOM +
832 SF CODE ENFORCEMENT / 200 SF) * 1 SPACE = 7.5
+ (13 EMPLOYEES)* 2 SPACES =26
34 SPACES

TOTAL PARKING REQUIRED = 34 SPACES

PARKING PROVIDED
TOTAL PROVIDED ON SITE = 34 SPACES

TOTAL PARKING PROVIDED = 34 SPACES

HANDICAP PARKING REQUIRED
2 HANDICAP SPACES FOR 26-50 TOTAL IN LOT
HANDICAP PARKING PROVIDED
2 HANDICAP SPACES

BICYCLE SPACES REQUIRED
5% OF REQUIREMENTS FOR MOTOR VEHICLES
32 SPACES X 5% = 2 BICYCLE SPACES
BICYCLE SPACES PROVIDED
5 BICYCLE SPACES

DEVELOPMENT STANDARDS TABLE:

GOLF COURSE "GC" DEVELOPMENT AREAS - ESSENTIAL FACILITIES
MINIMUM SETBACKS PRINCIPAL STRUCTURES

	REQUIRED	PROVIDED
PUD BOUNDARY	20FT	20FT
GOLF COURSE BOUNDARY & PRIVATE ROADS	20FT	42.5FT
PRESERVE	25FT	88.5FT
MINIMUM DISTANCE BETWEEN BUILDINGS	15FT	N/A
MAXIMUM BUILDING HEIGHT (ZONED, ACTUAL)	35FT, 50FT	19FT

PROPOSED LAND USE SUMMARY:

	AREA	SUBTOTAL %
BUILDING FOOTPRINT	0.38	19.8%
HARDSCAPE AREA	0.05	2.60%
VEHICULAR USE	0.51	26.6%
IMPERVIOUS AREA	0.94	49.0%
OPEN / GREEN SPACE	0.59	30.7%
DETENTION AREA	0.39	20.3%
PERVIOUS AREA	0.98	51.0%
TOTAL	1.92	100%

BUILDING AREA CALCULATION

FBC 2020 7TH EDITION CODE COMPLIANT

TOTAL AREA PER LDC	15,307 SQ.FT.
TOTAL AREA PER LDC (PARKING ONLY)	14,702 SQ.FT.
TOTAL AREA PER FBC	15,880 SQ.FT.
TOTAL AREA PER IMPACT FEES	15,307 SQ.FT.

* INFORMATION PROVIDED BY: LARS W. YOUNG, INC.

SITE DATA - ZONING:

CURRENT ZONING THIS TRACT = COCOHATCHEE BAY PUD

NORTH = PUD (VILLAGE PLACE)
SOUTH = PUD (TARPON COVE)
WEST = PUD (COCOHATCHEE BAY)
EAST = R.O.W. (U.S. 41)

LEGEND:

(#) PARKING COUNT
1 STOP SIGN (R01-01) W/24" WHITE STOP BAR (4' BEHIND CROSSWALK WHERE APPLICABLE
2 6' WIDE SPECIAL EMPHASIS CROSSWALK (PER FDOT INDEX 711-001)
3 ADA DETECTABLE WARNING PER FDOT INDEX 522-001 & 002
4 2' CURB TAPER
5 HANDRAILS
TRAFFIC DIRECTION (NO STRIPING REQUIRED)

HATCHING LEGEND:

PROPOSED BUILDING
STABILIZED TURF
EXISTING DRY DETENTION AREA
VEHICULAR USE REINFORCED CONCRETE
CONCRETE

LJA
EMPLOYEE-OWNED. CLIENT FOCUSED.
Engineering Firm Number: 31200
Surveying Firm license: LB8569
Collier County:
3600 Tamiami Trail N, Suite 200
Naples, FL 34103
P: 2392972535
F: 2392662205

CLIENT NAME: NORTH COLLIER FIRE CONTROL & RESCUE DISTRICT
1885 VETERANS PARK DR
NAPLES, FL 34109

PROJECT NAME: NORTH COLLIER FIRE STATION 49

DRAWING TITLE: SITE PLAN

DESIGNED BY: LJA
DRAWN BY: AGC
CHECKED BY: AGC
REVIEWED BY: JAC
DATE: September 2025
DATUM: NAVD

NO.	DATE	REVISIONS

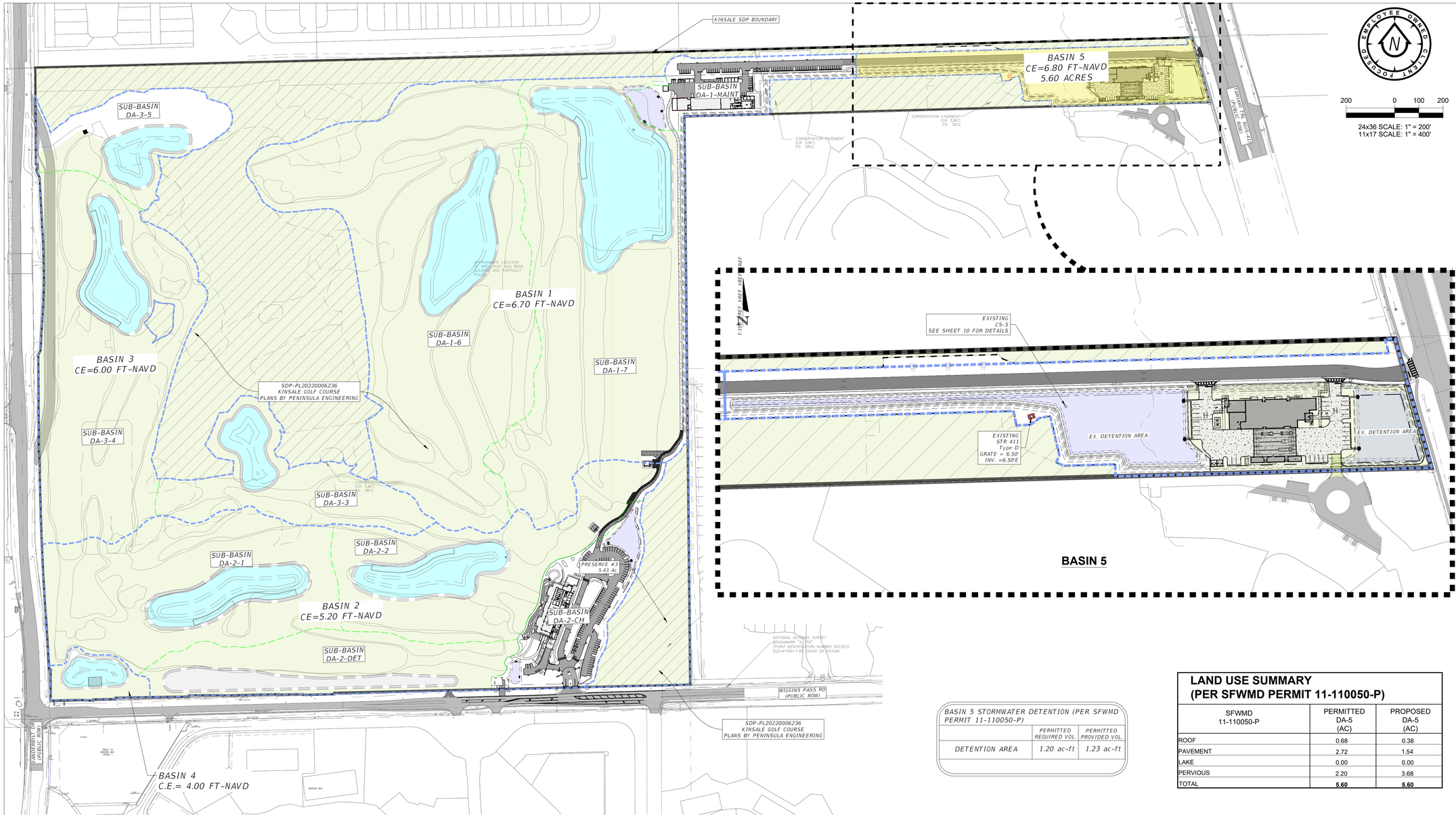
ACAD FILE NAME: 13771 - ME

LJA PROJECT # 23-0161

PLOT VIEW \ LAYOUT: SITE PLAN

SHEET 04 OF 13

ACAD FILE # 13771



LEGEND:

- BASIN BOUNDARY
- SUBBASIN BOUNDARY
- PRESERVE AREA

WATER MANAGEMENT SUMMARY (PER SFWMD PERMIT 11-110050-P)

WATER MANAGEMENT PARAMETER	DRAINAGE AREAS				
	DA-1	DA-2	DA-3	DA-4	DA-5
CONTROL ELEVATION (FT-NAVD)	6.7	5.2	6.0	4.0	6.8
5-YEAR, 3-DAY RAINFALL (INCHES)*	7.7				
10-YEAR, 1-DAY RAINFALL (INCHES)*	6.8				
25-YEAR, 3-DAY RAINFALL (INCHES)*	11.3				
100-YEAR, 3-DAY RAINFALL (INCHES)*	14.0				
PEAK 5-YEAR, 3-DAY STORM STAGE (FT-NAVD)	N/A	N/A	N/A	N/A	N/A
PEAK 10-YEAR, 1-DAY STORM STAGE (FT-NAVD)	8.4	7.8	7.8	7.6	8.9
PEAK 25-YEAR, 3-DAY STORM STAGE (FT-NAVD)	8.6	8.5	8.5	8.2	9.3
PEAK 100-YEAR, 3-DAY ZERO DISCHARGE STORM STAGE (FT-NAVD)	9.1	9.0	9.0	9.0	9.8
FEMA ELEVATION (FT-NAVD)	9.0 / AE				9.5 / AE
MINIMUM REQUIRED PARKING LOT ELEVATION (FT-NAVD)	8.5	7.9	7.9	7.7	9.0
MINIMUM REQUIRED ROAD ELEVATION (FT-NAVD)	8.6	8.5	8.5	8.2	9.3
MINIMUM REQUIRED FINISHED FLOOR ELEVATION (FT-NAVD)	10.0	10.0	10.0	N/A	10.5
MINIMUM PERIMETER BERM ELEVATION 25-YEAR, 3-DAY PEAK STAGE (FT-NAVD)	8.6	8.5	8.5	8.2	9.3

*PER SFWMD AH VOL II, APPENDIX C - ISOHEYTAL MAPS.

BASIN 5 STORMWATER DETENTION (PER SFWMD PERMIT 11-110050-P)

	PERMITTED REQUIRED VOL.	PERMITTED PROVIDED VOL.
DETENTION AREA	1.20 ac-ft	1.23 ac-ft

LAND USE SUMMARY (PER SFWMD PERMIT 11-110050-P)

SFWMD 11-110050-P	PERMITTED DA-5 (AC)	PROPOSED DA-5 (AC)
ROOF	0.68	0.38
PAVEMENT	2.72	1.54
LAKE	0.00	0.00
PERVIOUS	2.20	3.68
TOTAL	**5.60**	**5.60**

LJA
EMPLOYEE-OWNED. CLIENT FOCUSED.
Engineering Firm Number: 31200
Surveying Firm license: LB8569
Collier County:
3400 Tamiami Trail North, Suite 300
Naples, FL 34103
P: 239.392.0090
F: 239.261.3090

CLIENT NAME: NORTH COLLIER FIRE CONTROL & RESCUE DISTRICT
1885 VETERANS PARK DR
NAPLES, FL 34109

PROJECT NAME: NORTH COLLIER FIRE STATION 49

DRAWING TITLE: SFWMD BASIN MAP

DESIGNED BY: LJA
DRAWN BY: AGC
CHECKED BY: AGC
REVIEWED BY: JAC
HOR. SCALE: 1" = XXX'
VERT SCALE: 1" = XXX'
DATE: September 2025
DATUM: NAVD

REVISIONS

NO.	DATE	BY
----	----	----

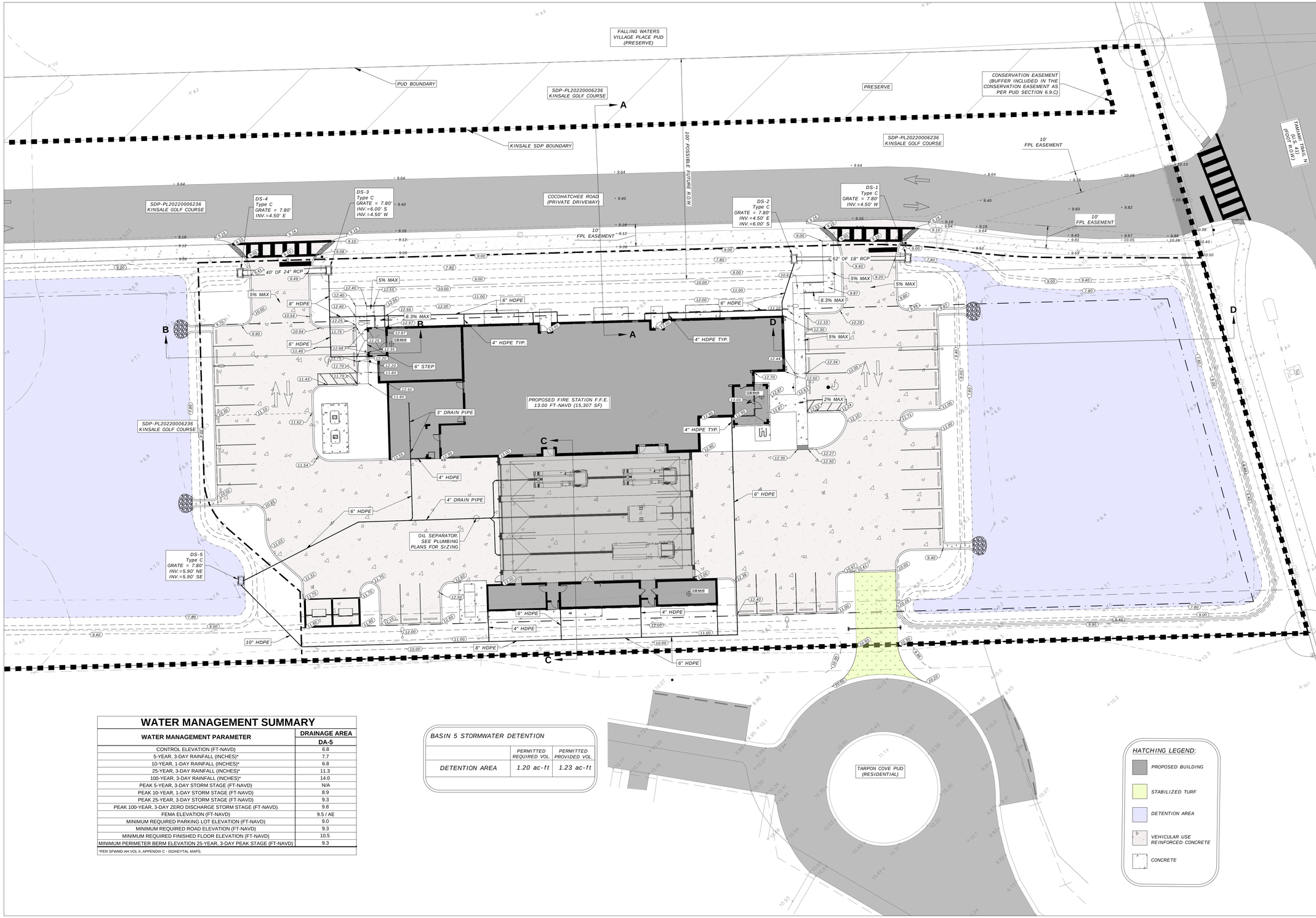
ACAD FILE NAME: 13771 - BASIN

ABB PROJECT # 23-0161

PLOT VIEW \ LAYOUT: STRM-BASIN

SHEET 05
OF 13

ACAD FILE # 13771



WATER MANAGEMENT SUMMARY

WATER MANAGEMENT PARAMETER	DRAINAGE AREA DA-5
CONTROL ELEVATION (FT-NAVD)	6.8
5-YEAR, 3-DAY RAINFALL (INCHES)*	7.7
10-YEAR, 1-DAY RAINFALL (INCHES)*	6.8
25-YEAR, 3-DAY RAINFALL (INCHES)*	11.3
100-YEAR, 3-DAY RAINFALL (INCHES)*	14.0
PEAK 5-YEAR, 3-DAY STORM STAGE (FT-NAVD)	N/A
PEAK 10-YEAR, 1-DAY STORM STAGE (FT-NAVD)	8.9
PEAK 25-YEAR, 3-DAY STORM STAGE (FT-NAVD)	9.3
PEAK 100-YEAR, 3-DAY ZERO DISCHARGE STORM STAGE (FT-NAVD)	9.8
FEMA ELEVATION (FT-NAVD)	9.5 / AE
MINIMUM REQUIRED PARKING LOT ELEVATION (FT-NAVD)	9.0
MINIMUM REQUIRED ROAD ELEVATION (FT-NAVD)	9.3
MINIMUM REQUIRED FINISHED FLOOR ELEVATION (FT-NAVD)	10.5
MINIMUM PERIMETER BERM ELEVATION 25-YEAR, 3-DAY PEAK STAGE (FT-NAVD)	9.3

*PER SFWMD AH VOL II, APPENDIX C - ISOHEYTAL MAPS.

BASIN 5 STORMWATER DETENTION

	PERMITTED REQUIRED VOL.	PERMITTED PROVIDED VOL.
DETENTION AREA	1.20 ac-ft	1.23 ac-ft

LJA
EMPLOYEE-OWNED. CLIENT FOCUSED.
Engineering Firm Number: 31200
Surveying Firm license: LB8569

Collier County:
3800 Tamiami Boulevard, Suite 200
Naples, FL 34108
P: 239.597.3111
F: 239.566.2208

CLIENT NAME: NORTH COLLIER FIRE CONTROL & RESCUE DISTRICT
1885 VETERANS PARK DR
NAPLES, FL 34109

PROJECT NAME: NORTH COLLIER FIRE STATION 49

DRAWING TITLE: PAVING, GRADING & DRAINAGE

DESIGNED BY: LJA
DRAWN BY: AGC
CHECKED BY: AGC
REVIEWED BY: JAC
DATE: September 2025
DATUM: NAVD

NO.	DATE	REVISIONS	BY	BY

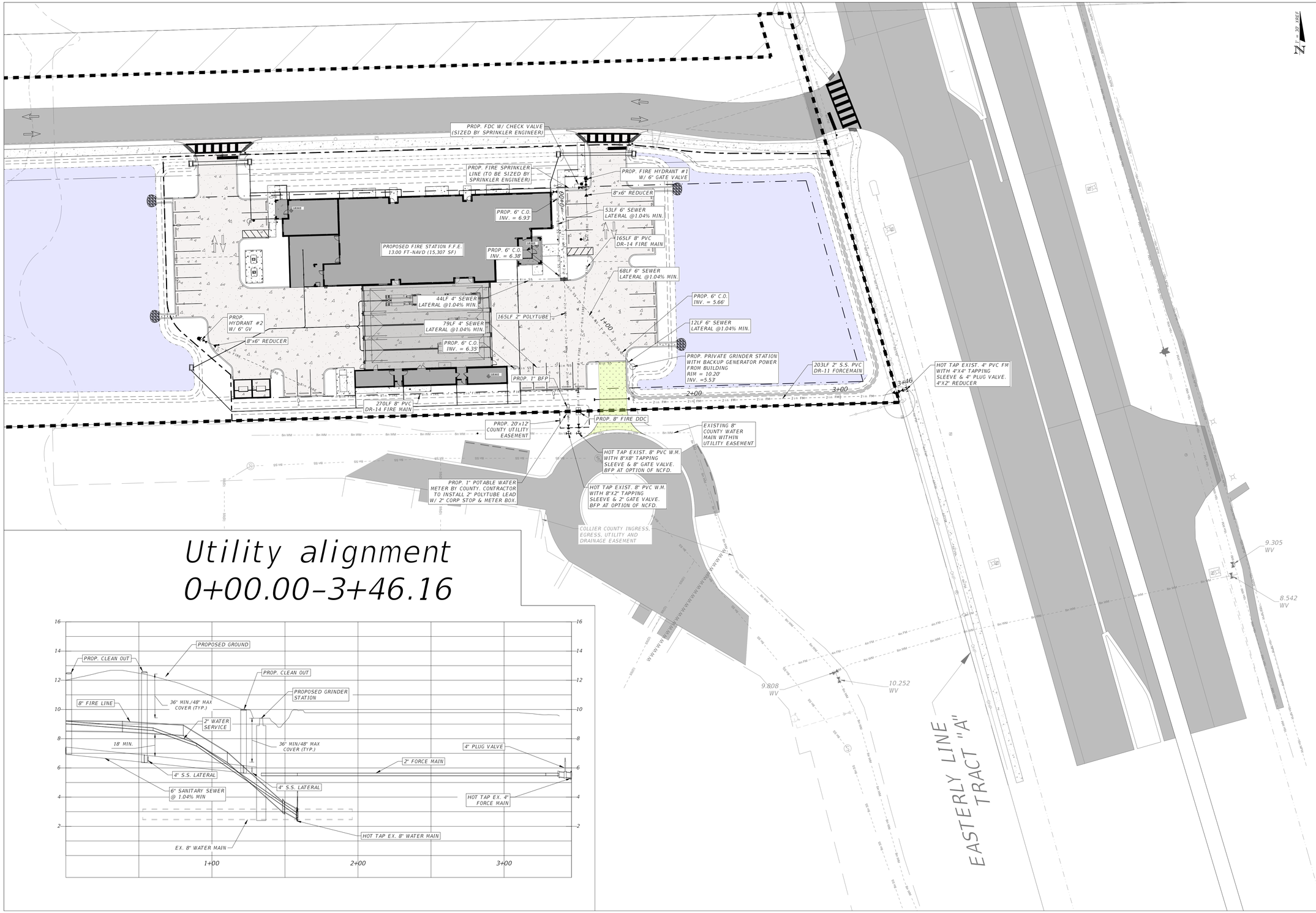
ACAD FILE NAME: 13771 - ME

LJA PROJECT # 23-0161

PLOT VIEW \ LAYOUT PGD

SHEET 06 OF 13

ACAD FILE # 13771



Utility alignment
0+00.00-3+46.16

LJA
EMPLOYEE-OWNED. CLIENT FOCUSED.
Engineering Firm Number: 31200
Surveying Firm license: LB8569

Collier County:
2400 Trail Boulevard, Suite 200
Naples, FL 34108
P: 2395972111
F: 2395662203

CLIENT NAME:
NORTH COLLIER FIRE CONTROL & RESCUE DISTRICT
1885 VETERANS PARK DR
NAPLES, FL 34109

PROJECT NAME:
NORTH COLLIER FIRE STATION 49

DRAWING TITLE:
UTILITIES

DESIGNED BY: LJA
DRAWN BY: AGC
CHECKED BY: AGC
REVIEWED BY: JAC
DATE: September 2025
DATUM: NAVD

NO.	DATE	REVISIONS	BY	BY

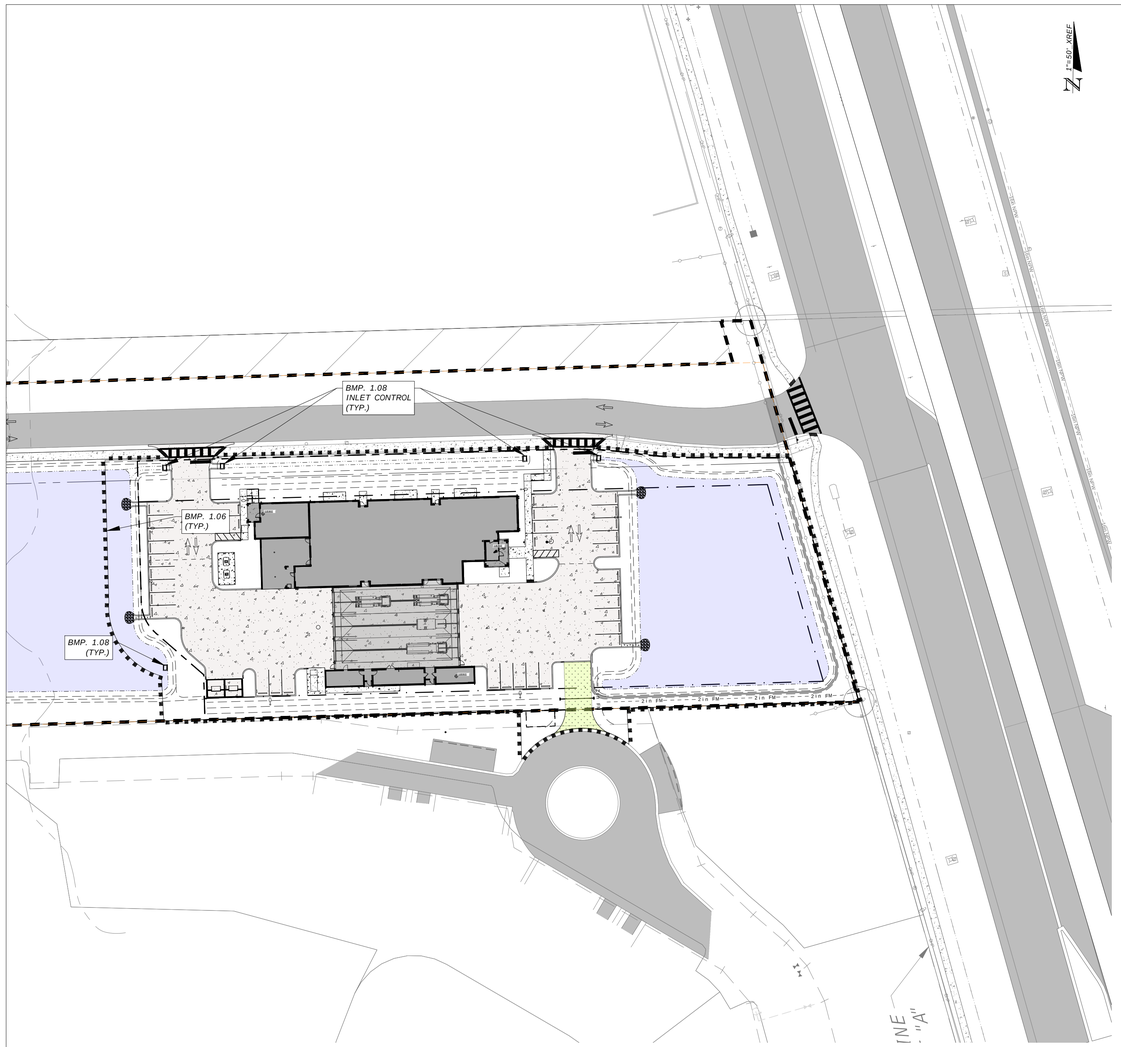
ACAD FILE NAME:
13771 - ME

LJA PROJECT #
23-0161

PLOT VIEW \ LAYOUT
UTILITIES

SHEET 07
OF 13

ACAD FILE #
13771



SEDIMENT CONTROL PLAN

SEDIMENT CONTROL NOTES:

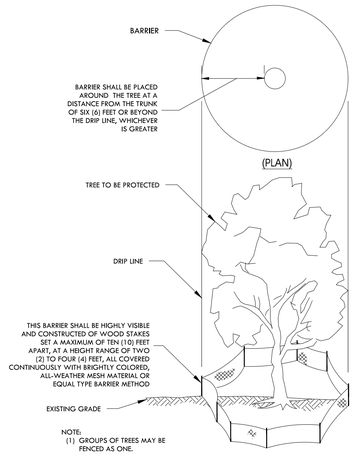
1. PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY, APPROPRIATE EROSION CONTROL DEVICES SHALL BE INSTALLED TO CONTOL AND REDUCE SOIL EROSION AND SEDIMENT TRANSPORT TO OFF SITE AREAS. THE CONTRACTOR SHALL MAINTAIN THESE DEVICES THROUGHOUT THE DURATION OF CONSTRUCTION. ALL DEVICES SHALL REMAIN IN PLACE UNTIL THE SURROUNDING AREAS ARE ESTABLISHED.
2. THE FOLLOWING MINIMUM REQUIREMENTS ARE RECOMMENDED: (REFERENCE FLORIDA DEVELOPMENT MANUAL, FDER, PPS 6-301 TO 6-500).
   A) BMP 1.01 - TEMPORARY CONSTRUCTION ENTRANCE
   B) BMP 1.05 - STRAW BALE BARRIER
   C) BMP 1.06 - SILT FENCE
   D) BMP 1.08 - STORM INLET DRAIN PROTECTION
3. THESE BEST MANAGEMENT PRACTICES (BMP) ARE TYPICAL OF THE REQUIREMENTS FOR SOIL EROSION CONTROL PER DIVISION 3.7 OF THE COLLIER COUNTY LAND DEVELOPMENT CODE. THEY MAY NOT CONSTITUTE COMPLETE REQUIREMENTS FOR COMPLIANCE WITH REGULATORY AGENCIES AND SPECIFIC PERMIT CONDITIONS.

TREE AND VEGETATION PROTECTION NOTES:

1. AREAS TO BE PRESERVED SHALL BE PROTECTED DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES BY PLACING A CONTINUOUS BARRIER AROUND THE PERIMETER OF THE AREA OF VEGETATION TO BE PRESERVED. THIS BARRIER SHALL BE HIGHLY VISIBLE AND CONSTRUCTED OF WOOD STAKES SET A MAXIMUM OF TEN (10) FEET APART, AT A HEIGHT RANGE OF TWO (2) TO FOUR (4) FEET, ALL COVERED CONTINUOUSLY WITH BRIGHTLY COLORED, ALL-WEATHER MESH MATERIAL OR EQUAL TYPE BARRIER METHOD. AN EQUIVALENT METHOD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE COUNTY MANAGER OR DESIGNEE.

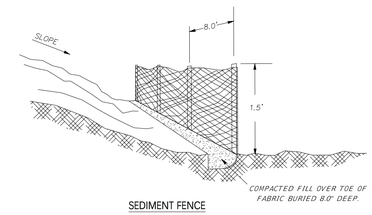
2. WHEN THE RETENTION OF SINGLE TREES IS REQUIRED BY THE COLLIER COUNTY LAND DEVELOPMENT CODE, A PROTECTIVE BARRIER, SIMILAR TO THAT REQUIRED IN SECTION 3.05.04 E. OF SAID CODE, SHALL BE PLACED AROUND THE TREE AT A DISTANCE FROM THE TRUNK OF SIX (6) FEET OR BEYOND THE DRIP LINE, WHICHEVER IS GREATER, OR AS OTHERWISE APPROVED BY THE COUNTY MANAGER OR DESIGNEE.

3. PROTECTIVE BARRIERS SHALL BE INSTALLED AND MAINTAINED FOR THE PERIOD OF TIME BEGINNING WITH THE COMMENCEMENT OF ANY PHASE OF LAND CLEARING OR BUILDING OPERATIONS, AND ENDING WITH THE COMPLETION OF THAT PHASE OF THE CONSTRUCTION WORK ON THE SITE, UNLESS OTHERWISE APPROVED TO BE REMOVED BY THE COUNTY MANGER OR DESIGNEE. ALL PROTECTIVE BARRIERS SHALL BE INSTALLED PURSUANT TO THE TREE PROTECTION MANUAL FOR BUILDERS AND DEVELOPERS, DIVISION OF FORESTRY, STATE OF FLORIDA OR OTHER METHODS APPROVED BY THE COUNTY MANAGER OR DESIGNEE.

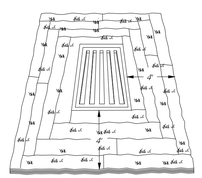


TEMPORARY TREE PROTECTION DETAIL

NTS

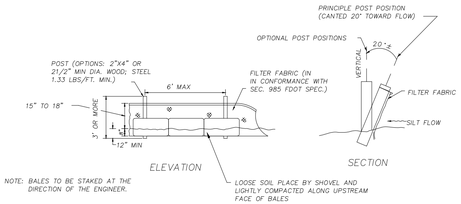


SEDIMENT FENCE

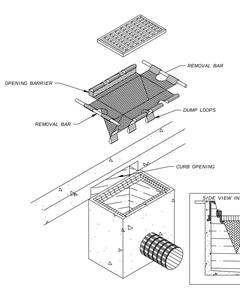


FOUR 1' WIDE STRIPS OF TALL FESCUE SOD ON EACH SIDE OF THE DROP INLET.

SOD DROP INLET PROTECTION

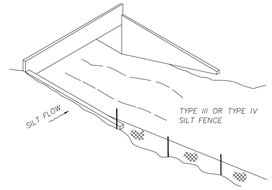


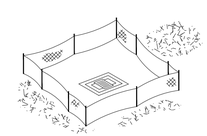
BALES BACKED BY TYPE IV SILT FENCE



INLET INSERT SEDIMENT CONTAINMENT SYSTEM

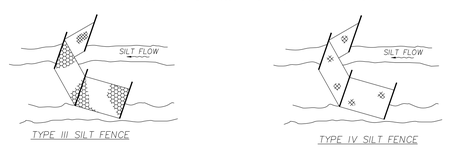
BMP 1.08





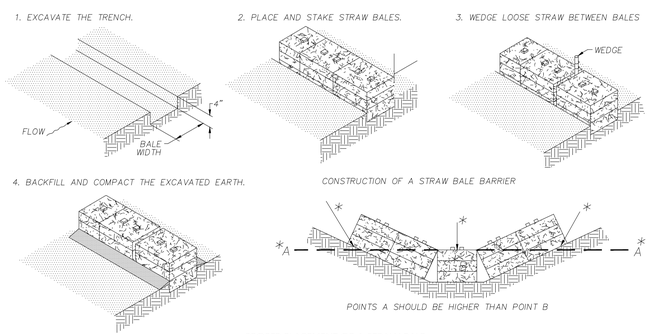
TYPE III OR TYPE IV SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS

DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.



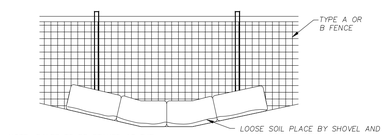
NOTE:
SPACING FOR TYPE III AND TYPE IV FENCES TO BE IN ACCORDANCE WITH CHART I, SHEET 1 OF 3 AND DITCH INSTALLATIONS AT DRAINAGE STRUCTURES SHEET 2 OF 3.

SILT FENCE APPLICATIONS

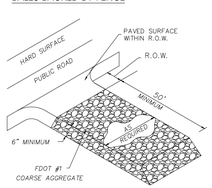


PROPER PLACEMENT OF A STRAW BALE BARRIER IN DRAINAGE WAY BMP 1.05

LAYER: STBL-BAR



BALES BACKED BY FENCE



CONSTRUCTION ENTRANCE

BMP 1.01

LJA

EMPLOYEE-OWNED.
CLIENT FOCUSED.

Engineering Firm Number: 31200
Surveying Firm License: LB8569

Collier County:
3400 Tamiami Boulevard, Suite 200
Naples, FL 34103
P: 2392972331
F: 2392662205

CLIENT NAME:
NORTH COLLIER FIRE CONTROL & RESCUE DISTRICT
1885 VETERANS PARK DR
NAPLES, FL 34109

PROJECT NAME:
NORTH COLLIER FIRE STATION 49

DRAWING TITLE:
EROSION CONTROL

DESIGNED BY: LJA

DRAWN BY: AGC

CHECKED BY: AGC

REVIEWED BY: JAC

DATE: September 2025

DATUM: NAVD

NO.	DATE	REVISIONS	BY

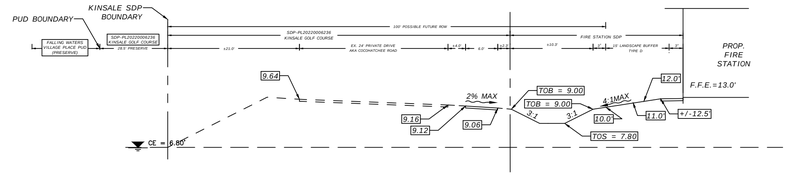
ACAD FILE NAME:
13771 - ME

LJA PROJECT #
23-0161

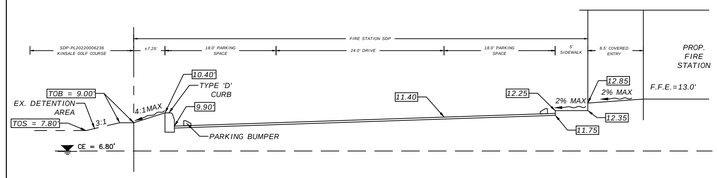
PLOT VIEW \ LAYOUT
EROSN CTRL

SHEET 08
OF 13

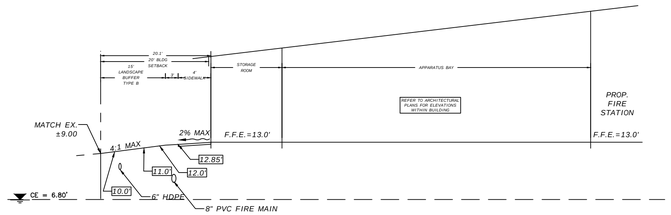
ACAD FILE #
13771



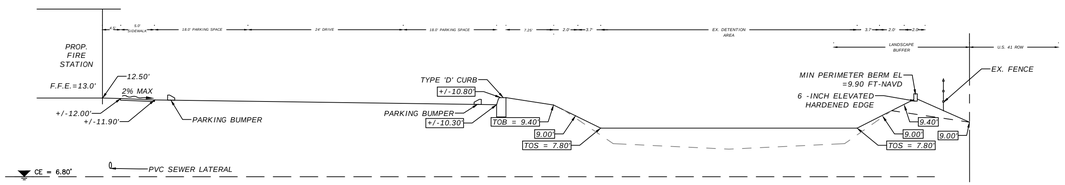
SECTION A-A
NTS



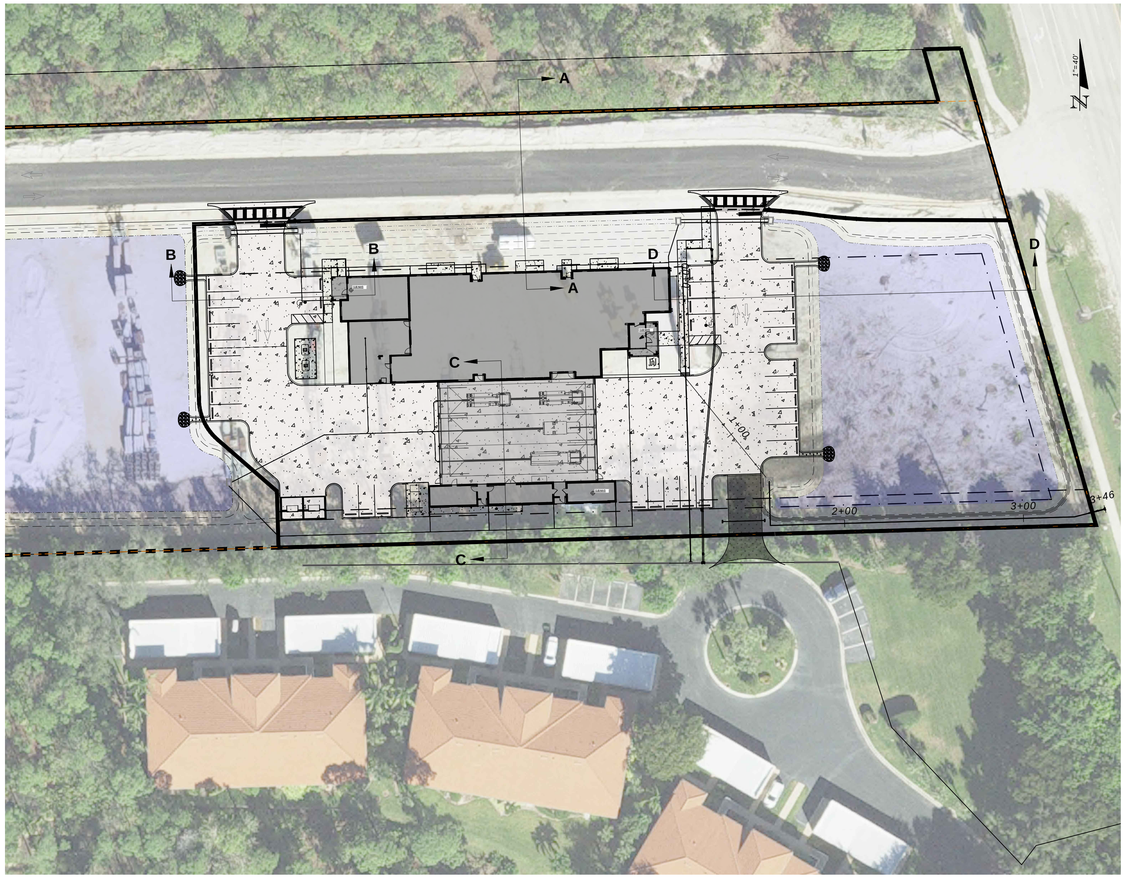
SECTION B-B
NTS



SECTION C-C
NTS



SECTION D-D
NTS



LJA
EMPLOYEE-OWNED. CLIENT FOCUSED.
Engineering Firm Number: 31200
Surveying Firm License: LB8569
Collier County:
3400 Tamiami Trail North, Suite 200
Naples, FL 34103
P: 2392972831
F: 2392642909

CLIENT NAME:
NORTH COLLIER FIRE CONTROL & RESCUE DISTRICT
1885 VETERANS PARK DR
NAPLES, FL 34109

PROJECT NAME:
NORTH COLLIER FIRE STATION 49

DRAWING TITLE:
SECTIONS

DESIGNED BY: LJA
DRAWN BY: AGC
CHECKED BY: AGC
REVIEWED BY: JAC
DATE: September 2025
DATUM: NAVD

NO.	DATE	REVISIONS	BY

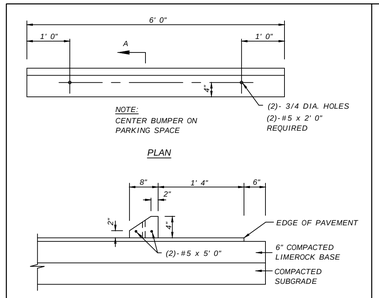
ACAD FILE NAME:
13771 - CVR

LJA PROJECT #
23-0161

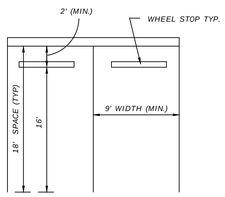
PLOT VIEW \ LAYOUT
SECT

SHEET 09
OF 13

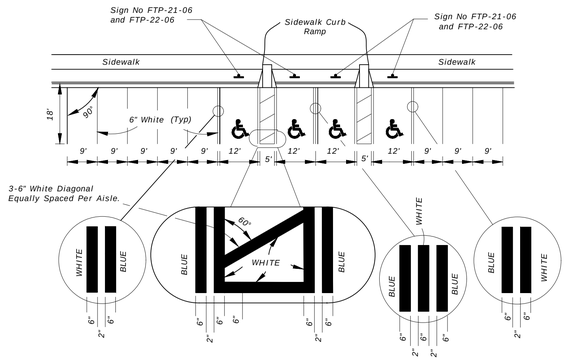
ACAD FILE #
13771



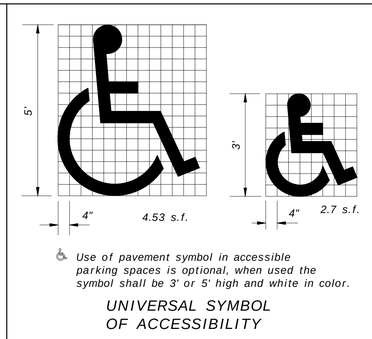
PARKING BUMPER DETAILS
N.T.S.



STANDARD CAR PARKING SPACE
N.T.S.

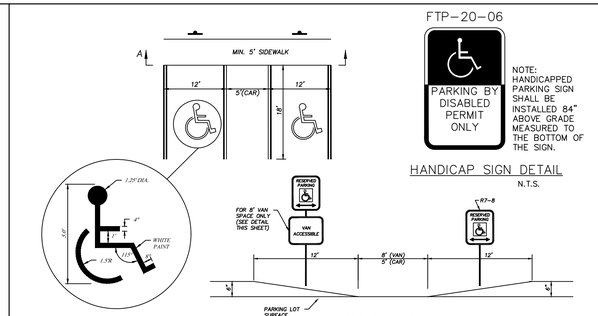


HANDICAP PARKING SPACE DETAIL



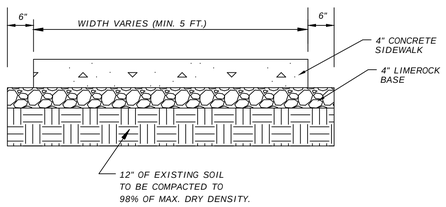
Use of pavement symbol in accessible parking spaces is optional, when used the symbol shall be 3' or 5' high and white in color.

UNIVERSAL SYMBOL
OF ACCESSIBILITY



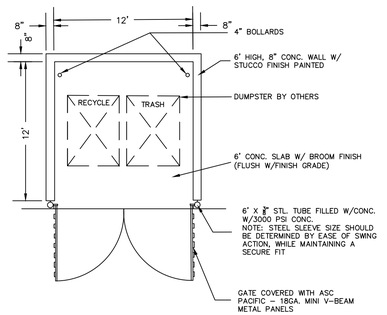
HANDICAP SIGN DETAIL
N.T.S.

HANDICAPPED RAMP DETAIL
LAYER: HC-RAMP

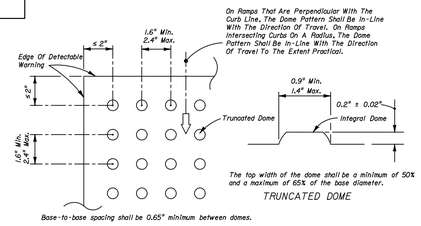


CONCRETE SIDEWALK*
NTS

*NOTE: CONTRACTOR HAS OPTION OF 6" THICK CONCRETE SIDEWALK W/O LIMEROCK BASE REQUIREMENT, 12" STABILIZED SOIL STILL APPLIES



DUMPSTER ENCLOSURE FLOOR PLAN
NTS

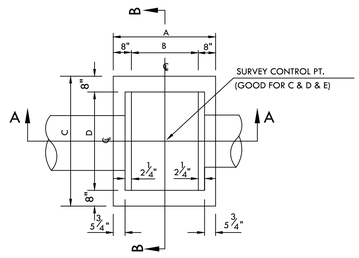


TRUNCATED DOME

PLAN VIEW

All Sidewalk Curb Ramps Shall Have Detectable Warning Surfaces That Extend The Full Width Of The Ramp And In The Direction Of Travel 24 inches (610 mm) From The Back Of Curb.

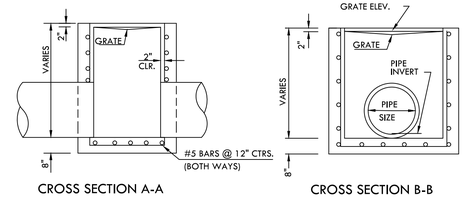
ADA DETECTABLE WARNING DETAIL
N.T.S.



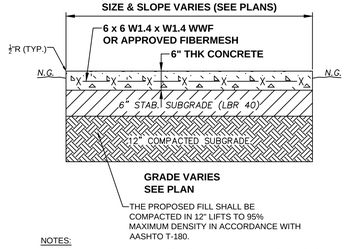
PLAN VIEW

CATCH BASIN DATA					USF GRATE	USF FRAME*
TYPE	A	B	C	D	NO. OR A.E.	NO.
C	3'-4"	2'-0"	4'-3"	3'-1"	6210	4155
E	4'-4"	3'-0"	5'-10"	4'-6"	6300	

* REQUIRED FOR INLETS SUBJECT TO TTDBFIC LOADING

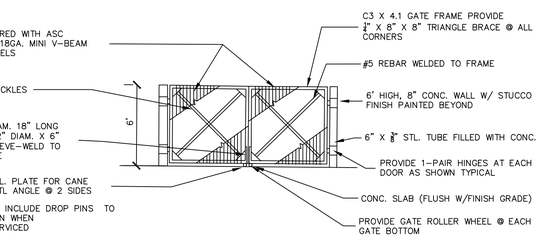


CATCH BASIN TYPE C AND E
N.T.S.

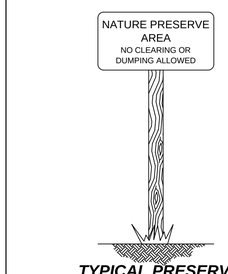


NOTES:
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 5000 PSI IN 28 DAYS. REINFORCING SHALL BE 6"x6" WELDED WIRE MESH.
2. SUBGRADE SHALL BE SAND, COMPACTED TO A FIRM EVEN SURFACE, TRUE TO GRADE AND CROSS-SECTION, AND BE MOIST WHEN CONCRETE IS PLACED.

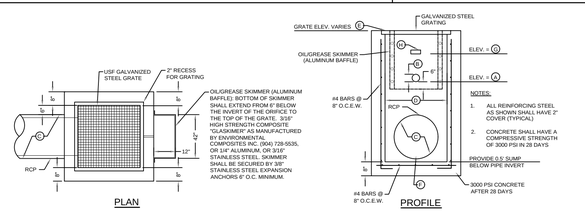
HEAVY DUTY CONCRETE



DUMPSTER ENCLOSURE ELEVATION
NTS



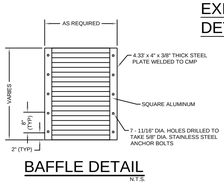
TYPICAL PRESERVE SIGNAGE



PLAN

PROFILE

EXISTING CONTROL STRUCTURE
DETAIL CS-5

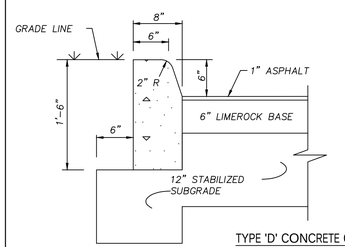


BAFFLE DETAIL
N.T.S.

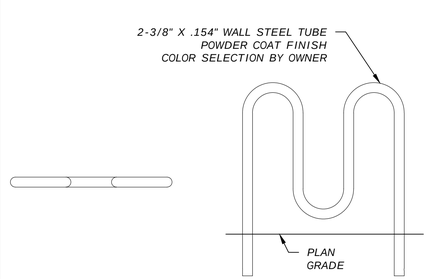
CONTROL STRUCTURE PARAMETERS	
A	INVERT OF BLEED-DOWN ORIFICE (FT-NAVD)
B	DIAMETER OF CIRCULAR ORIFICE (INCHES)
C	PIPE DIAMETER (INCHES)
D	STRUCTURE TYPE
E	GRATE ELEVATION (FT-NAVD)
F	DISCHARGE PIPE INVERT (FT-NAVD)
G	INVERT OF WEIR (FT-NAVD)
H	WEIR DIMENSIONS (INCHES)

CONTROL STRUCTURE SCHEDULE:

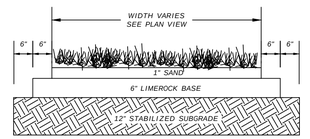
	A	B	C	D	E	F	G	H
CS-5	6.80	3.0"	24"	TYPE 'D'	9.30	4.00	8.30	4.8"H X 2.76"W



TYPE 'D' CONCRETE CURB
NTS



BIKE RACK DETAIL



1) *LIMEROCK BASE MUST BE COMPACTED TO A MINIMUM OF 98% OF MAXIMUM DRY DENSITY AND HAVE A MINIMUM LBR OF 100 (MAX. 800 PSI).*
2) *STABILIZED SUBGRADE MUST BE COMPACTED TO A MINIMUM OF 98% OF MAXIMUM DRY DENSITY AND HAVE A MINIMUM LBR OF 40 AFTER MIXING.*
3) *LIMEROCK SHALL EXTEND PAST EDGE OF DRIVE. SUBGRADE SHALL EXTEND 12" PAST EDGE OF DRIVE*

TYPICAL GRASS DRIVE SECTION
N.T.S.

LJA
EMPLOYEE-OWNED.
CLIENT FOCUSED.
Engineering Firm Number: 31200
Surveying Firm License: LB8569
Collier County:
3400 Tamiami Trail North, Suite 200
Naples, FL 34103
P: 2392972823
F: 2392642503

CLIENT NAME:
NORTH COLLIER FIRE CONTROL
& RESCUE DISTRICT
1885 VETERANS PARK DR
NAPLES, FL 34109

PROJECT NAME:
NORTH COLLIER FIRE STATION 49

DRAWING TITLE:
CONSTRUCTION DETAILS

DESIGNED BY: LJA
DRAWN BY: AGC
CHECKED BY: AGC
REVIEWED BY: JAC
DATE: September 2025
DATUM: NAVD

NO.	DATE	REVISIONS	BY

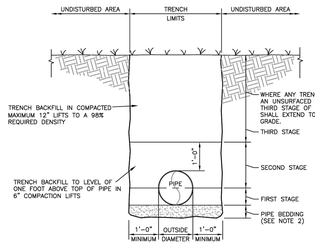
ACAD FILE NAME:
13771 - CVR

LJA PROJECT #
23-0161

PLOT VIEW \ LAYOUT
CSDETAIL

SHEET 10
OF 13

ACAD FILE #
13771

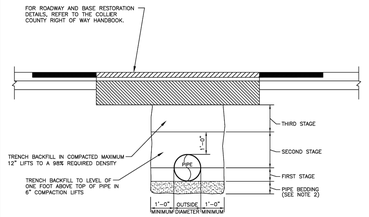


NOTES:

1. BACKFILL SHALL BE OF SUITABLE MATERIAL REMOVED FROM EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. BACKFILL MATERIAL SHALL CONSIST OF EARTH, LOAM, SANDY CLAY, GRAVEL, CRUSHED LIMESTONE, OR OTHER APPROVED MATERIAL. REFER TO TECHNICAL SPECIFICATIONS FOR DETAIL REQUIREMENTS.
2. IF TRENCH BOTTOM CONTAINS ROCK, THEN A MINIMUM OF A 6" PIPE BEDDING SHALL BE USED.

UNPAVED AREA TRENCH BACKFILL DETAIL
NTS

G-1
REVISED: APRIL 2006



NOTES:

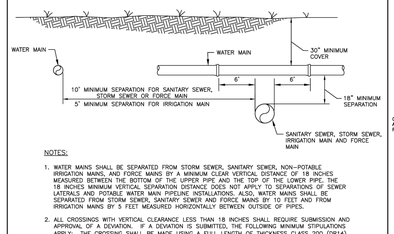
1. BACKFILL SHALL BE OF SUITABLE MATERIAL REMOVED FROM EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. BACKFILL MATERIAL SHALL CONSIST OF EARTH, LOAM, SANDY CLAY, GRAVEL, CRUSHED LIMESTONE, OR OTHER APPROVED MATERIAL. REFER TO TECHNICAL SPECIFICATIONS FOR DETAIL REQUIREMENTS.
2. IF TRENCH BOTTOM CONTAINS ROCK, THEN A MINIMUM OF A 6" PIPE BEDDING SHALL BE USED.

PAVED AREA TRENCH RESTORATION DETAIL FOR PRIVATE ROADS
NTS

REVISION	DATE:
	JULY 2018

Collier County Public Utilities Division

SHEET NO. G-2



NOTES:

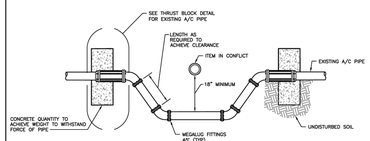
1. WATER MAINS SHALL BE SEPARATED FROM STORM SEWER, SANITARY SEWER, NON-POTABLE IRRIGATION MAINS, AND FORCE MAINS BY A MINIMUM CLEAR VERTICAL DISTANCE OF 18 INCHES MEASURED BETWEEN THE BOTTOM OF THE UPPER PIPE AND THE TOP OF THE LOWER PIPE. THE 18 INCHES MINIMUM VERTICAL SEPARATION DISTANCE DOES NOT APPLY TO SEPARATIONS OF SEWER LATERALS AND POTABLE WATER MAIN PIPELINE INSTALLATIONS. ALSO, WATER MAINS SHALL BE SEPARATED FROM STORM SEWER, SANITARY SEWER AND FORCE MAINS BY 10 FEET AND FROM IRRIGATION MAINS BY 5 FEET MEASURED HORIZONTALLY BETWEEN OUTSIDE OF PIPES.
2. ALL CROSSINGS WITH VERTICAL CLEARANCE LESS THAN 18 INCHES SHALL REQUIRE SUBMISSION AND APPROVAL OF A DEVIATION. IF A DEVIATION IS SUBMITTED, THE FOLLOWING MINIMUM STIPULATIONS APPLY: THE CROSSING SHALL BE MADE USING A FULL LENGTH OF THICKNESS CLASS 200 (DR14) AWWA C-900 PVC OR CLASS 235 (DR18) AWWA C-905 PVC PIPE CENTERED ON THE CROSSING.
3. 18 INCHES CLEAR DISTANCE SHALL NOT BE REDUCED IN CASES WHERE WATER CROSSES UNDER SEWER LINE.
4. WATER MAINS, SANITARY SEWER, STORM SEWER, AND NON-POTABLE IRRIGATION MAINS SHALL BE IN SEPARATE TRENCHES.
5. WATER MAINS CROSSING ANY TYPE OF SANITARY SEWER, INCLUDING FORCE MAIN, OR STORM SEWER SHALL HAVE THE ONE FULL LENGTH OF WATER MAIN CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THAT THE WATER JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS WILL BE AT LEAST 6 FEET FROM ALL JOINTS IN SANITARY SEWER, STORM SEWER, IRRIGATION MAINS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, FAC, AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY-, OR PRESSURE-TYPE SANITARY SEWERS, FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610.
6. IF THE VERTICAL SEPARATION BETWEEN GRAVITY SANITARY SEWER AND STORMWATER LINES IS LESS THAN 18 INCHES, THEN 57 STONE SHALL BE UTILIZED BETWEEN THE TWO LINES.
7. SEE SECTION 1- DESIGN CRITERIA FOR ADDITIONAL REQUIREMENTS.

PIPE SEPARATION DETAIL
NTS

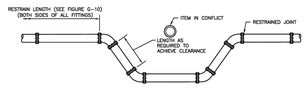
REVISION	DATE:
	JULY 2018

Collier County Public Utilities Division

SHEET NO. G-3



EXISTING A/C PIPE - HEADWALL



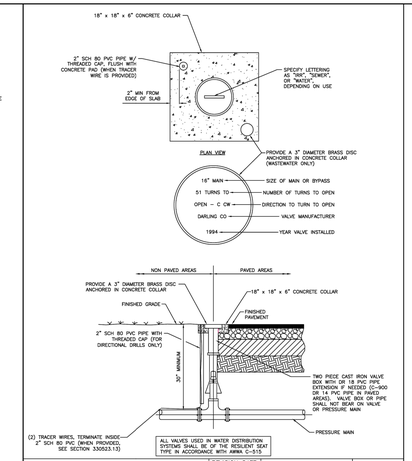
NEW & EXISTING PIPE - RESTRAINED JOINT

NOTES

1. SEE SECTION 1 - DESIGN CRITERIA FOR AIR RELEASE VALVE REQUIREMENTS.

PIPE CONFLICT DETAILS
NTS

G-4
REVISED: APRIL 2006



TYPICAL VALVE SETTING DETAIL
NTS

REVISION	DATE:
	JULY 2018

Collier County Public Utilities Division

SHEET NO. G-7

PIPE SIZE IN INCHES	RESTRAINED PIPE LENGTH IN FEET (1)						
	HORIZONTAL BENDS				DEAD ENDS (2)	45° VERTICAL BENDS	
	90°	45°	22-1/2°	11-1/4°		UPPER	LOWER
4	23	9	5	2	55	23	8
6	32	13	6	3	77	32	11
8	40	17	8	4	100	41	14
10	48	20	10	5	120	50	17
12	56	23	11	6	141	58	20
16	71	29	14	7	181	75	25
18	77	32	15	8	200	83	28
20	84	35	17	8	218	90	30
24	98	40	19	10	253	105	35
30	112	47	22	11	303	125	41
36	127	53	25	13	350	145	47

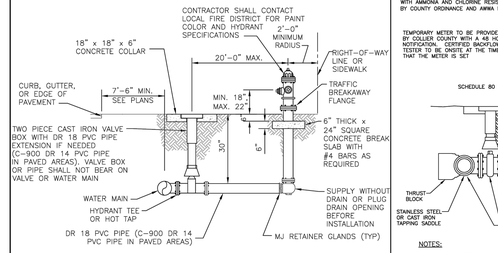
PIPE SIZE IN INCHES	RESTRAINED PIPE LENGTH IN FEET (1)	
	TEE (3)	REDUCER (4)
6 x 4	0	40
6 x 6	34	
8 x 4	0	72
8 x 8	55	
10 x 6	3	74
10 x 10	75	
12 x 4	0	122
12 x 8	31	75
12 x 12	95	
16 x 6	0	153
16 x 10	44	107
16 x 16	134	
18 x 6	0	157
18 x 12	68	108
18 x 18	152	
20 x 10	20	161
20 x 16	120	77
20 x 20	170	
24 x 12	37	187
24 x 18	132	109
24 x 24	204	
30 x 16	78	213
30 x 20	138	165
30 x 30	252	
36 x 18	84	259
36 x 24	170	191
36 x 36	298	

NOTES:

1. RESTRAIN ALL PIPE JOINTS WITHIN THE DISTANCE SHOWN ON THE TABLES MEASURED FROM THE POINT OF CONNECTION.
2. ISOLATION VALVES SHALL BE TREATED AS DEAD ENDS. WITH RESTRAINT ON BOTH SIDES OF THE VALVE.
3. RESTRAINT IS FOR BRANCH OF TEE. IF BRANCH SIZE IS NOT ON TABLE, USE NEXT LARGEST BRANCH.
4. RESTRAINT IS FOR LARGE DIAMETER SIDE OF REDUCER. IF REDUCER SIZE IS NOT ON TABLE, USE NEXT SMALLER REDUCER (SMALL END).
5. THIS SCHEDULE IS TO BE USED FOR DUCTILE IRON AND PVC PIPE.

PIPE RESTRAINT SCHEDULE
NTS

G-10
REVISED: APRIL 2006



NOTES:

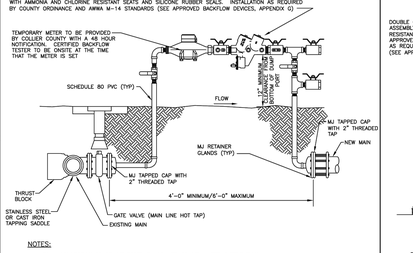
1. HYDRANT MUST BE CURRENT YEAR MANUFACTURE AND YEAR OF MANUFACTURE MUST BE CAST ON BARREL.
2. ALL EXISTING MAINS WHERE FIRE HYDRANTS ARE TO BE INSTALLED SHALL BE HOT TAPPED.
3. TAPPING SADDLES MAY BE EITHER STAINLESS STEEL OR DUCTILE IRON. ALL TAPPING SADDLES FOR ASBESTOS CEMENT PIPE SHALL BE STAINLESS STEEL.
4. ALL FIRE HYDRANT BARRELS SHALL BE A MINIMUM 5-1/4" IN DIAMETER.
5. ALL FIRE HYDRANTS INSTALLED SHALL BE OF THE BREAK AWAY FLANGE TYPE AND SHALL MEET THE REQUIREMENTS OF THE LOCAL FIRE CONTROL DISTRICT.
6. HYDRANT SHALL CONFORM WITH AWWA C-502.
7. THRUST RESTRAINT SHALL BE BY MJ RETAINER GLANDS.
8. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.

FIRE HYDRANT DETAIL
NTS

REVISION	DATE:
	JULY 2018

Collier County Public Utilities Division

SHEET NO. W-3



NOTES:

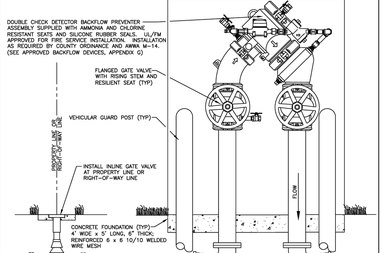
1. FINAL CONNECTION TO BE WITNESSED BY COLLIER COUNTY WATER DISTRIBUTION.
2. MJ TAPPED CAPS TO BE PROPERLY RESTRAINED.
3. INSTALL JUMPER TAP SYSTEM FOR TEMPORARY METER DOWNSTREAM OF BLIND FLANGE FOR CONSTRUCTION WATER.
4. TAPPING SADDLES MAY BE EITHER STAINLESS STEEL OR DUCTILE IRON. ALL TAPPING SADDLES FOR ASBESTOS CEMENT PIPE SHALL BE STAINLESS STEEL.
5. JUMPER ASSEMBLY MUST BE MINIMUM OF 18" ABOVE FINISHED GRADE.
6. BACKFLOW ASSEMBLY REQUIRES INITIAL CERTIFICATION BY CERTIFIED BACKFLOW TESTER.
7. THIS ASSEMBLY SHALL ONLY BE USED IF NO COMBUSTIBLES WILL BE ON SITE. IF COMBUSTIBLES ARE BROUGHT ON SITE, THEN THE TEMPORARY BACKFLOW PREVENTERS AND FIRE PROTECTION METER TIE-IN ASSEMBLY SHALL BE USED.
8. THIS ASSEMBLY IS NOT APPROVED TO PROVIDE FIRE PROTECTION WATER TO THE SITE DURING CONSTRUCTION. ASSEMBLY NOT TO BE REMOVED AND SPOOL PIECE INSTALLED FOR FINAL CONNECTION UNTIL AFTER TESTING, BACTERIAL CLEARANCE, FINAL INSPECTION AND COUNTY ACCEPTANCE.
9. GAP CONFIGURATION TO BE INSTALLED WITHIN 24 HOURS OR LESS AT THE DISCRETION OF THE WATER DISTRIBUTION DEPARTMENT.
10. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.
11. FOR INSTALLATIONS WHERE LESS THAN 20' OF NEW WATER MAIN IS BEING CONSTRUCTED BETWEEN THE PERMANENT BACKFLOW ASSEMBLY AND THE EXISTING MAIN, NO TEMPORARY JUMPER IS REQUIRED.

CONNECTION TO EXISTING WATER MAIN DETAIL (GAP CONFIGURATION)
NTS

JULY 2018

Collier County Public Utilities Division

SHEET NO. W-4

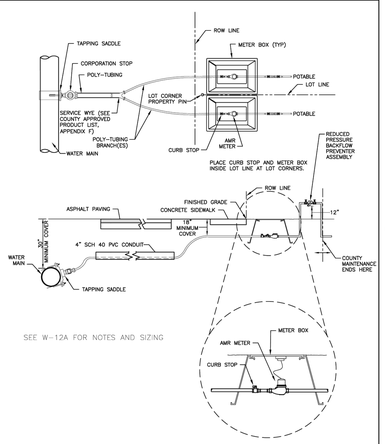


NOTES:

1. ALL ABOVE GROUND PIPE WILL HAVE FLANGED END DUCTILE IRON PIPE, PRESSURE CLASS 350. ALL NUTS AND BOLTS SHALL BE STAINLESS STEEL.
2. (4) VEHICULAR GUARD POSTS TO BE INSTALLED AROUND ASSEMBLY. CONFIGURATION TO BE ILLUSTRATED ON CONSTRUCTION DOCUMENTS SUBMITTED FOR REVIEW AND APPROVAL.
3. AS THIS UNIT WILL REQUIRE PERIODIC TESTING, FACILITIES REQUIRING CONTINUOUS WATER SERVICE MAY WISH TO INSTALL PARALLEL UNITS TO PREVENT SERVICE INTERRUPTIONS.
4. ASSEMBLY WILL BE OWNED AND MAINTAINED BY PROPERTY OWNER, STARTING AFTER THE INLINE GATE VALVE AT THE PROPERTY LINE OR RIGHT-OF-WAY LINE.
5. COUNTY WILL REQUIRE DEDICATION OF MATERIAL UP TO AND INCLUDING THE INLINE GATE VALVE FROM THE COUNTY'S WATER MAIN.
6. BACKFLOW DEVICE REQUIRES INITIAL CERTIFICATION BY AN APPROVED CERTIFIED TESTER WITH RESULTS AND ANNUAL TEST RESULTS SUBMITTED TO THE COUNTY WATER DEPARTMENT.
7. ALL PLANTING SHALL BE A MINIMUM OF 1.5' FROM THE EDGE OF SLAB, AND SHALL PROVIDE A 3' ACCESS OPENING.
8. THIS ASSEMBLY SHALL BE PAINTED WITH RED EPOXY PAINT.
9. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.
10. A REDUCED PRESSURE DETECTOR BACKFLOW ASSEMBLY SHALL BE USED WHEN HIGH HAZARDS, AS DEFINED BY AWWA M-14 (e.g., RISK OF CHEMICAL ADDITION, MEDICAL FACILITIES, INDUSTRIAL FACILITIES, PROPERTIES USING RECLAIMED WATER, ETC.), EXIST.

4" THROUGH 10" ONLY COMPACT FIRE SYSTEM DETECTOR CHECK ASSEMBLY DETAIL
NTS

W-11A
REVISED: JULY 2011



TYPICAL SHORT AND LONG SIDE WATER SERVICE METER SETTING DETAIL FOR CONNECTION TO WATER MAIN
NTS

REVISION	DATE:
	JULY 2018

Collier County Public Utilities Division

SHEET NO. W-12

SERVICE CONNECTION SIZING CHART				
SINGLE SERVICE	CONNECTION TO MAIN	DOUBLE SERVICE	CONNECTION TO MAIN	BRANCH SIZE
¾" METER	1-¾"	(2) ¾" METERS	1-¾"	1"
1" METER	1-¾"	(2) 1" METERS	1-¾"	1"
1-½" METER	1-¾"			
2" METER	2"			

NOTES:

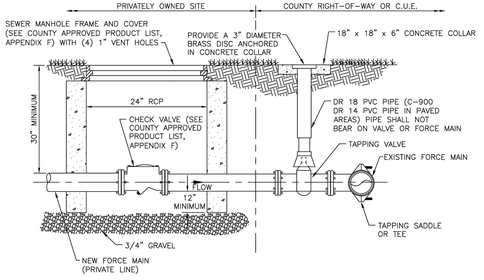
1. 1-¾" AND LARGER METERS SHALL BE SERVED BY SINGLE SERVICES ONLY.
2. WYE CONNECTIONS (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F) SHALL BE USED FOR MULTI-SERVICE. SUCCESSIVE TAPS INTO WATER MAIN WILL BE NO CLOSER THAN 24" APART.
3. ALL CASING PIPE SHALL EXTEND A MINIMUM OF 5' BEYOND THE EDGE OF PAVEMENT, WITH A CASING DIAMETER TO BE NO LESS THAN 4". CONDUIT SHALL BE MARKED WITH A ELECTRONIC MARKER (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F).
4. TAPPING SADDLE, CORPORATION STOP, POLY TUBING, CURB STOP, AND METER BOXES SHALL BE INSTALLED BY UNDERGROUND UTILITY CONTRACTOR AT THE TIME OF WATER MAIN INSTALLATION.
5. MATERIAL SPECIFICATIONS:
   A. TAPPING SADDLES SHALL BE DOUBLE STRAP BRASS OR DUCTILE IRON (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F).
   B. CORPORATION STOPS (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F) SHALL BE BALL TYPE AND MADE OF RED BRASS. OUTLET SHALL BE COMPRESSION TYPE POLYETHYLENE TUBE. COMPRESSION INSERT SHALL BE STAINLESS STEEL.
   C. CURB STOPS (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F) SHALL BE BALL TYPE AND MADE OF RED BRASS. INLET SHALL BE COMPRESSION JOINT. OUTLET SHALL BE SWIVEL NUT FOR METER CONNECTION.
   D. TUBING SHALL BE POLYETHYLENE, PE4710, (AWWA C-901, DR 9) AND BLUE IN COLOR.
6. ALL PLANTINGS SHALL BE A MINIMUM 3' FROM METER BOX, AND SHALL PROVIDE A 3' ACCESS OPENING.
7. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61 AND THE REDUCTION OF LEAD IN DRINKING WATER ACT AMENDING THE SAFE DRINKING WATER ACT.

SERVICE CONNECTION SIZING CHART AND NOTES

REVISION	DATE:
	JULY 2018

Collier County Public Utilities Division

SHEET NO. W-12A



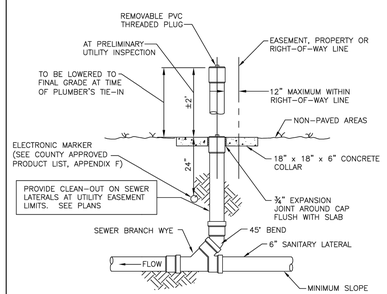
PRIVATE FORCE MAIN CONNECTION TO COUNTY FORCE MAIN DETAIL
NTS

REVISION	DATE:
	MAY 2013

Collier County Public Utilities Division

COLLIER COUNTY PUBLIC UTILITIES DIVISION 3301 E. TAMIAMI TRAIL NAPLES, FLORIDA 34112

SHEET NO. WW-2



ELEVATION

SEWER CLEAN-OUT DETAIL NON PAVED AREAS
NTS

REVISION	DATE:
	MAY 2013

Collier County Public Utilities Division

COLLIER COUNTY PUBLIC UTILITIES DIVISION 3301 E. TAMIAMI TRAIL NAPLES, FLORIDA 34112

SHEET NO. WW-12

LJA

EMPLOYEE-OWNED. CLIENT FOCUSED.

Engineering Firm Number: 31300
Surveying Firm License: LB8569

Collier County:
2400 Trail Boulevard, Suite 200
Naples, FL 34108
P: 2392972831
F: 2395643293

CLIENT NAME:
NORTH COLLIER FIRE CONTROL & RESCUE DISTRICT
1885 VETERANS PARK DR
NAPLES, FL 34109

PROJECT NAME:
NORTH COLLIER FIRE STATION 49

DRAWING TITLE:
UTILITY DETAILS (1)

DESIGNED BY: LJA
DRAWN BY: AGC
CHECKED BY: AGC
REVIEWED BY: JAC
DATE: September 2025
DATUM: NAVD

NO.	DATE	REVISIONS	BY
1	----	----	----
2	----	----	----
3	----	----	----
4	----	----	----
5	----	----	----
6	----	----	----
7	----	----	----
8	----	----	----
9	----	----	----
10	----	----	----

ACAD FILE NAME:
13771 - CVR

LJA PROJECT #
23-0161

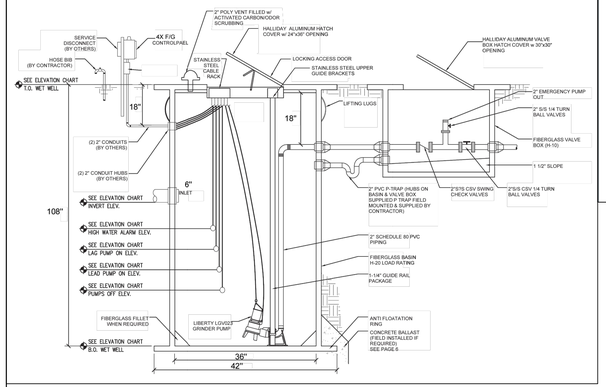
PLOT VIEW \ LAYOUT
UTILITY DETAILS (1)

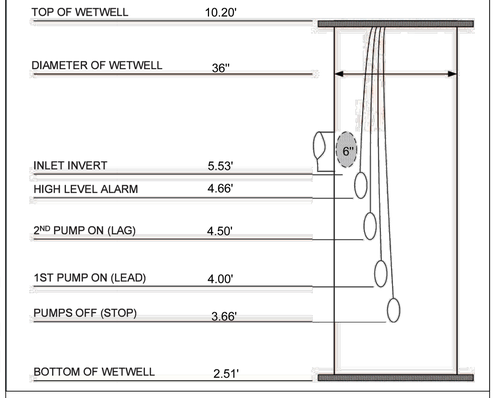
SHEET 11 OF 13

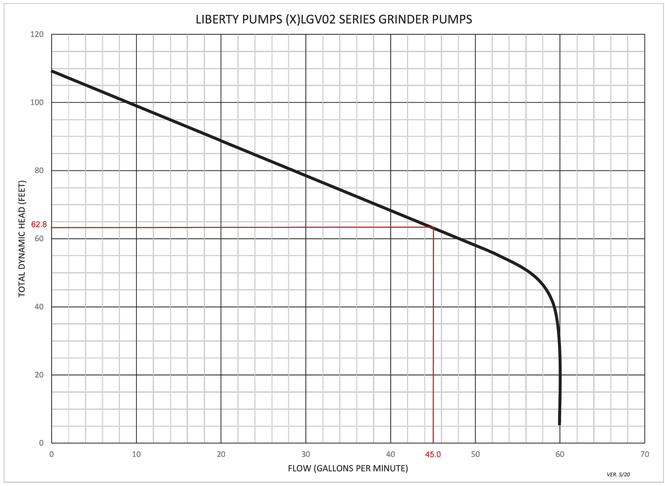
ACAD FILE #
13771

PREPACKAGED FIBERGLASS DUPLEX GRINDER LIFT STATION

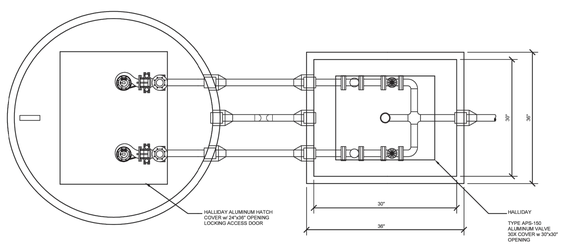
HORSEPOWER	2.5 HP					
VOLTAGE	X	208 V	X	230 V		460 V
PHASE		SINGLE	X	THREE		
POWER CABLE	35'					
FIBERGLASS BASIN	H-20 LOAD RATING FIBERGLASS BASIN. 36"x108" WITH ANTI-FLOTATION COLLAR.					
INLET HUB	6" INLET HUB w/ 2" DISCHARGE PIPING & (2) 2" CONDUIT HUBS					







PREPACKAGED FIBERGLASS DUPLEX GRINDER LIFT STATION



SERIES C1R ACCESS DOOR

HALLIDAY PRODUCTS

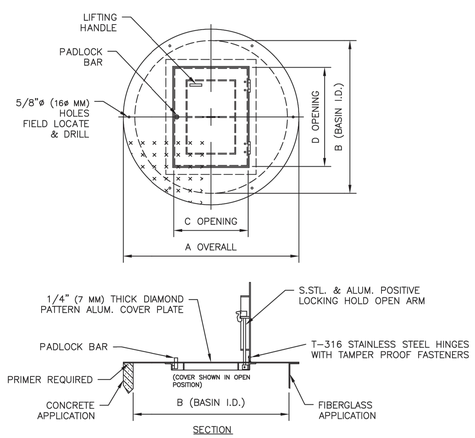
www.HalldayProducts.com
Phone 800-298-1027
Fax 407-298-4534
Sales@HalldayProducts.com

STANDARD FEATURES:

- AUTO-LOCK T-316 STAINLESS STEEL HOLD OPEN ARM WITH RELEASE HANDLE
- T-316 STAINLESS STEEL HINGES AND ATTACHING HARDWARE
- NON-CORROSIVE PADLOCK LOCKING BAR
- VENT COUPLING ON REQUEST
- LARGER SIZES AVAILABLE FOR CONCRETE APPLICATIONS
- SINGLE LEAF CONSTRUCTION
- 300 LBS. PER SQ. FT. LOAD RATING (1464 KG. PER SQ. METER LOAD RATING)
- RECESSED HANDLE
- LIFETIME GUARANTEE

STANDARD SIZES

QTY.	MODEL NO.	A DIM. INCHES (MM)	B DIM. INCHES (MM)	C DIM. INCHES (MM)	D DIM. INCHES (MM)	UNIT WT. LBS. (KG.)
X	C1R40	40 (1016)	36 (914)	20"	24"	45 (20)
	C1R52	52 (1320)	48 (1219)			80 (36)
	C1R64	64 (1626)	60 (1524)			125 (57)
	C1R76	76 (1930)	72 (1829)			180 (82)



LJA
EMPLOYEE-OWNED. CLIENT FOCUSED.
Engineering Firm Number: 31200
Surveying Firm License: LB8569
Collier County:
3400 Tamiami Trail North, Suite 200
Naples, FL 34103
P: 2392972831
F: 2392642909

CLIENT NAME:
NORTH COLLIER FIRE CONTROL & RESCUE DISTRICT
1885 VETERANS PARK DR
NAPLES, FL 34109

PROJECT NAME:
NORTH COLLIER FIRE STATION 49

DRAWING TITLE:
UTILITY DETAILS (2)

DESIGNED BY: LJA
DRAWN BY: AGC
CHECKED BY: AGC
REVIEWED BY: JAC
DATE: September 2025
DATUM: NAVD

NO.	DATE	REVISIONS	BY

ACAD FILE NAME:
13771 - CVR

LJA PROJECT #
23-0161

PLOT VIEW \ LAYOUT
UTILITY DETAILS (2)

SHEET 12
OF 13

ACAD FILE #
13771

LJA

EMPLOYEE-OWNED.
CLIENT FOCUSED.

Engineering Firm Number: 31200
Surveying Firm license: LB8569

Collier County:
3400 Tamiami Trail North, Suite 200
Naples, FL 34103
P: 2392972823
F: 2392642503

CLIENT NAME:
NORTH COLLIER FIRE CONTROL & RESCUE DISTRICT
1885 VETERANS PARK DR
NAPLES, FL 34109

PROJECT NAME:
NORTH COLLIER FIRE STATION 49

DRAWING TITLE:
AERIAL

DESIGNED BY: LJA
DRAWN BY: AGC
CHECKED BY: AGC
REVIEWED BY: JAC
DATE: September 2025
DATUM: NAVD

NO.	DATE	BY
REVISIONS		

ACAD FILE NAME:
13771 - CVR

LJA PROJECT #
23-0161

PLOT VIEW \ LAYOUT
AERIAL

SHEET 13
OF 13

ACAD FILE #
13771