

INDIAN RIVER COUNTY HOUSEHOLD HAZARDOUS WASTE AND RECYCLING FACILITY Indian River County, FL

PROJECT INFORMATION

SUMMARY OF WORK:

- CONSTRUCT NEW HOUSEHOLD HAZARDOUS WASTE AND SINGLE-STREAM RECYCLING FACILITY.
- CONSTRUCT SITE IMPROVEMENTS INCLUDING PAVING, DRAINAGE, UTILITIES AND LANDSCAPING.

CODES IN EFFECT:

- WORK SHALL BE DESIGNED IN FULL COMPLIANCE WITH THE LATEST EDITION OF THE APPLICABLE SECTIONS OF THE FOLLOWING CODES, STANDARDS AND GUIDELINES. IN CASE OF A CONFLICT BETWEEN CODES, THE MOST STRINGENT CONDITION SHALL APPLY. ADDITIONAL CODE REFERENCES MAY BE FOUND IN EACH OF THE ENGINEERING DISCIPLINES.
- FLORIDA BUILDING CODE, SEVENTH EDITION (2020)
 - FLORIDA MECHANICAL CODE, SEVENTH EDITION (2020)
 - FLORIDA ELECTRICAL CODE, SEVENTH EDITION (2020)
 - FLORIDA PLUMBING CODE, SEVENTH EDITION (2020)
 - FLORIDA FIRE PREVENTION CODE, SEVENTH EDITION (2020)
 - NFPA 70 - NATIONAL ELECTRIC CODE 2017

FLORIDA PRODUCT APPROVALS

THE FOLLOWING PRODUCTS ARE TO BE CONSIDERED THE BASIS OF DESIGN AND SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AS SPECIFIED IN THE APPLICABLE FLORIDA APPROVAL CODE DOCUMENTATION. ANY PROPOSED CHANGE OF PRODUCTS SHALL BE SUBMITTED FOR CONSIDERATION WITH FLORIDA APPROVAL CODE INFORMATION.

STOREFRONT (FIXED) WINDOWS

- KAWNEER IR501, FLORIDA APPROVAL NO.: 8787.2.

EXTERIOR SWINGING METAL DOORS

- TELL MANUFACTURING OUT-SWINGING STEEL DOOR SYSTEM, FLORIDA APPROVAL NO.: FL 22211.2

EXTERIOR COILING DOORS

- BEST ROLLING DOOR, INC.
- MIAMI-DADE N.O.A. NO.: 17-1031.07
- FLORIDA APPROVAL NO.: 10706-R3

METAL ROOFING AND SIDING PANELS

- 26 GA. PBR ROOF PANELS, FLORIDA APPROVAL NO.: FL 6617.2
- 26 GA. PBR WALL PANELS, FLORIDA APPROVAL NO.: 7548.1

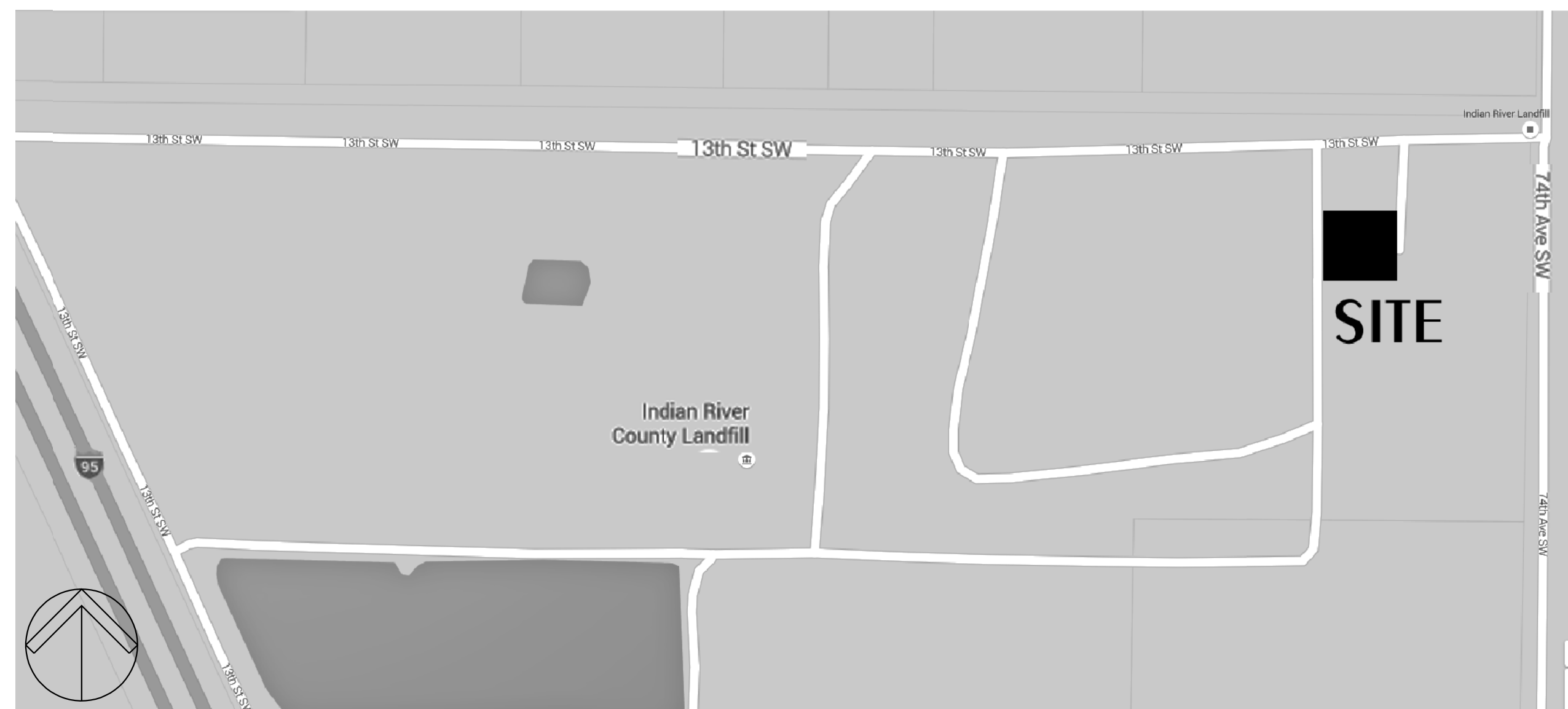
TRANSLUCENT PANELS

- TRANSLUCENT ROOF PANELS BY GLASTEEL, FLORIDA APPROVAL NO.: FL15531-R4
- TRANSLUCENT WALL PANELS BY GLASTEEL, FLORIDA APPROVAL NO.: FL5614-R6

METAL LOUVERS

- GREENHECK EVH-501D STATIONARY LOUVER
- MIAMI-DADE N.O.A. NO.: 15-0415.05
- APPROVAL NO.: FL 19277.1

VICINITY MAP



CONTACT INFORMATION

CIVIL ENGINEER OF RECORD
LANDSCAPE ARCHITECT
STRUCTURAL ENGINEER OF RECORD:
KIMLEY-HORN AND ASSOCIATES, INC.
355 ALHAMBRA CIRCLE, SUITE 1400
CORAL GABLES, FL 33134
PHONE: (305) 673-2025

ARCHITECT OF RECORD:
MARCOS IBARGUEN, RA
CMK DESIGN STUDIO, INC.
6822 22ND AVE. N. #148
ST. PETERSBURG, FL 33710
PHONE: (813) 362-6381

M/E/P/FP ENGINEER OF RECORD:
TODD WILSON & JOE GIRGENTI
WILSON & GIRGENTI, LLC
PO BOX 1377
SAFETY HARBOR, FL 34695
PHONE: (813) 855-3330

BUILDING AND FIRE CODE ANALYSIS

Based on the Florida Building Code (FBC), 2020 (Seventh) Edition and the Florida Fire Prevention Code (FFPC), 2020 (Seventh) Edition, and NFPA 101, Life Safety Code, 2018 Edition.

OCCUPANCY
GROUP S-1, STORAGE, MODERATE HAZARD PER FBC 311.2
MIXED STORAGE AND OFFICE PER FFPC/NFPA 101: 6.1.13.1.

CONSTRUCTION TYPE
VB, NON-COMBUSTIBLE, PER FBC SECTION 602.2; FULLY SPRINKLED

ALLOWABLE AREA (FBC SECTION 506.2)
UNLIMITED

PROPOSED AREA
28,750 SF COMPLIES

ALLOWABLE HEIGHT (FBC TABLE 503)
UNLIMITED

PROPOSED HEIGHT
HEIGHT PROPOSED: 35 FEET AT RIDGE. COMPLIES

REQUIRED SEPARATION OF OCCUPANCIES (FBC TABLE 508.4 AND FFPC/NFPA 101:6.1.14.1 EXCEPTION 3)
GROUP B TO GROUP S-1 - NO SEPARATION REQUIRED

PROPOSED SEPARATION OF OCCUPANCIES
NO SEPARATION PROPOSED BETWEEN GROUP B AND GROUP S-1. COMPLIES

REQUIRED SEPARATION FOR H-2 STORAGE ROOM (NFPA 30: 9.9.1)
2-HOUR SEPARATION WALL; 90-MINUTE "B" LABEL DOORS

PROPOSED SEPARATION FOR H-2 STORAGE ROOM.
2-HOUR SEPARATION WALL; 90-MINUTE "B" LABEL DOORS. COMPLIES

OCCUPANT LOAD (TABLE 1004.5)
SEE LIFE SAFETY PLAN LS101. MAX. COMBINED OCCUPANT LOAD = 100

REQUIRED MEANS OF EGRESS:
ALL EXIT DOORS SHALL COMPLY WITH FFPC/NFPA 101:7.2.1.
ALL HANDRAILS, GUARDRAILS AND RAMPS SHALL COMPLY WITH FFPC/NFPA 101:7.2.2.

REQUIRED NUMBER AND PLACEMENT OF EXITS PER FBC SECTION 1006.2 AND FFPC/NFPA 101 SECTIONS 7.4.1 AND 7.5.1.3.2: TWO EXITS PLACED A DISTANCE APART NOT LESS THAN ONE-HALF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED.

REQUIRED EGRESS WIDTH PER OCCUPANT (FBC SECT. 1005, FFPC/NFPA 101:7.3), SPRINKLED:
DOORS: 0.2 INCHES
0.2 X 100 = 20 INCHES

PROPOSED EXITS
FIRST FLOOR: 4 EXITS, 136 INCHES, COMPLIES
PROPOSED PLACEMENT OF EXITS COMPLIES - SEE LIFE SAFETY PLANS

MAXIMUM ALLOWABLE TRAVEL DISTANCE TO EXITS (FBC TABLE 1016.1, FFPC/NFPA 101:42.2.6)
GROUP S-1, SPRINKLED: 400 FEET
NOTE: MAX. TRAVEL DISTANCE N/A IF FLAMMABLE LIQUIDS ARE STORED IN ACCORDANCE WITH NFPA 30.

PROPOSED MAXIMUM TRAVEL DISTANCE TO EXITS
GROUP S-1, SPRINKLED: 114 FEET COMPLIES: SEE LIFE SAFETY PLANS
NOTE: FLAMMABLE LIQUIDS SHALL BE STORED IN ACCORDANCE WITH NFPA 30, COMPLIES.

MAXIMUM COMMON PATH OF TRAVEL TO EXITS (FBC TABLE 1016.1, FFPC/NFPA 101:42.2.5)
GROUP S-1, SPRINKLED: 100 FEET

PROPOSED COMMON PATH OF TRAVEL TO EXITS:
NOT APPLICABLE - NO COMMON PATH OF TRAVEL PROPOSED. COMPLIES: SEE LIFE SAFETY PLANS

PLUMBING FIXTURES REQUIRED PER F.P.C. 403.1:
PER FPC TABLE 403.1: 1 WC (WOMEN), 1 LAV (WOMEN), 1 WC (MEN), 1 LAV (MEN), 1 DF, 1 SERVICE SINK
FIXTURES PROVIDED: 1 WC (WOMEN), 1 LAV (WOMEN), 1 WC 1 (MEN), 1 LAV (MEN), 2 DF, 2 SERVICE SINKS

ADDITIONAL FFPC CODE ANALYSIS

Previous Use:
• Vacant.

Proposed Use:
• Collection and transfer of household hazardous waste and single-stream recycling.

Hazard Classification per FFPC 101:6.2.2.3
• Ordinary Hazard, all areas

Fire Alarm requirement
• Per FFPC 101:40.3.4.1, a fire alarm system is required.
• See Electrical drawings for fire alarm system proposed.

Fire Sprinkler System requirement
• Per NFPA, facility must be fully sprinklered. See Fire Protection drawings for compliance.

SHEET INDEX

G000	COVER SHEET
C100	CIVIL COVER SHEET
C110	GENERAL NOTES
C200	DEMOLITION NOTES
C210	DEMOLITION PLAN I
C211	DEMOLITION PLAN II
C300	EROSION CONTROL NOTES
C310	EROSION CONTROL PLAN I
C311	EROSION CONTROL PLAN II
C320	EROSION CONTROL DETAILS
C400	OVERALL SITE PLAN
C410	SITE PLAN I
C411	SITE PLAN II
C412	SITE PLAN DETAILS
C420	MANEUVERABILITY
C450	FIRE ACCESS PLAN
C510	PAVING, GRADING AND DRAINAGE PLAN
C511	PAVING, GRADING AND DRAINAGE PLAN II
C512	PAVING, GRADING AND DRAINAGE DETAILS
C513	PAVING, GRADING AND DRAINAGE DETAILS II
C514	PAVING, GRADING AND DRAINAGE DETAILS III
C515	PAVING, GRADING AND DRAINAGE DETAILS IV
C520	RETENTION AREAS CROSS SECTION
C521	RETENTION AREAS CROSS SECTION
C710	WATER AND SEWER PLANS I
C711	WATER AND SEWER PLANS II
C712	INDIAN RIVER COUNTY WATER DETAILS
C713	INDIAN RIVER COUNTY WATER DETAILS
C714	INDIAN RIVER COUNTY WATER DETAILS
C715	INDIAN RIVER COUNTY WATER DETAILS
C800	LIGHTING PLAN
L000	LANDSCAPE COVER SHEET
L100	TREE DISPOSITION PLAN
L150	TREE DISPOSITION NOTES & DETAILS
L200	LANDSCAPE PLAN
L201	LANDSCAPE REQUIREMENTS
L250	LANDSCAPE DETAILS
L251	LANDSCAPE NOTES & SPECIFICATIONS
L300	IRRIGATION PLANS
L350	IRRIGATION SPECIFICATIONS
L351	IRRIGATION SPECIFICATIONS
L352	IRRIGATION DETAILS
L353	IRRIGATION DETAILS
LS101	LIFE SAFETY PLAN
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A101	FLOOR PLAN
A102	ROOF PLAN
A103	CEILING PLAN
A201	ELEVATIONS
A202	ELEVATIONS
A203	SECTIONS
A401	DETAILS
A601	ENLARGED PLANS & INTERIOR ELEVATIONS
A602	ENLARGED PLANS & INTERIOR ELEVATIONS
A701	WINDOW TYPES, DOOR & FINISH SCHEDULE
A702	WINDOW SCHEDULE AND DETAILS
S000	GENERAL NOTES AND SCHEDULES
S101	ELEVATION WIND PRESSURE DIAGRAMS
S102	ROOF WIND PRESSURE DIAGRAM
S200	FOUNDATION AND SLAB ON GRADE PLAN
S201	ROOF FRAMING PLAN
S300	FOUNDATION SECTIONS
S301	FOUNDATION SECTIONS
S400	MASONRY AND ROOF SECTIONS
M101	MECHANICAL NOTES
M102	MECHANICAL PLAN
M103	MECHANICAL SCHEDULES
M104	MECHANICAL DETAILS
P101	PLUMBING LEGEND AND NOTES
P102	OVERALL PLUMBING PLAN
P103	OVERALL SUPPLY RISER
P104	OVERALL SANITARY RISER
P105	PARTIAL PLUMBING SUPPLY PLAN
P106	PARTIAL PLUMBING SANITARY PLAN
P107	PLUMBING SCHEDULES AND DETAILS
P108	PLUMBING DETAILS
E000	ELECTRICAL NOTES & DETAILS
E101	LIGHTING PLAN
E201	ELECTRICAL PLAN
E300	RISER DIAGRAM & PANEL SCHEDULES
FP100	DETAILS & NOTES
FP101	FIRE PROTECTION PLAN - SECTION A
FP102	FIRE PROTECTION PLAN - SECTION B
FP103	HYDRAULIC SITE REFERENCE PLAN

PRE-ENGINEERED METAL BUILDING DRAWINGS
SUBMITTED SEPARATELY

CMK
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Indian River County, Florida

NO.	REVISIONS	DATE
1	PLAN REVIEW & OWNER CHANGES	10/19/21

JOB NO.

2016

ISSUE DATE:

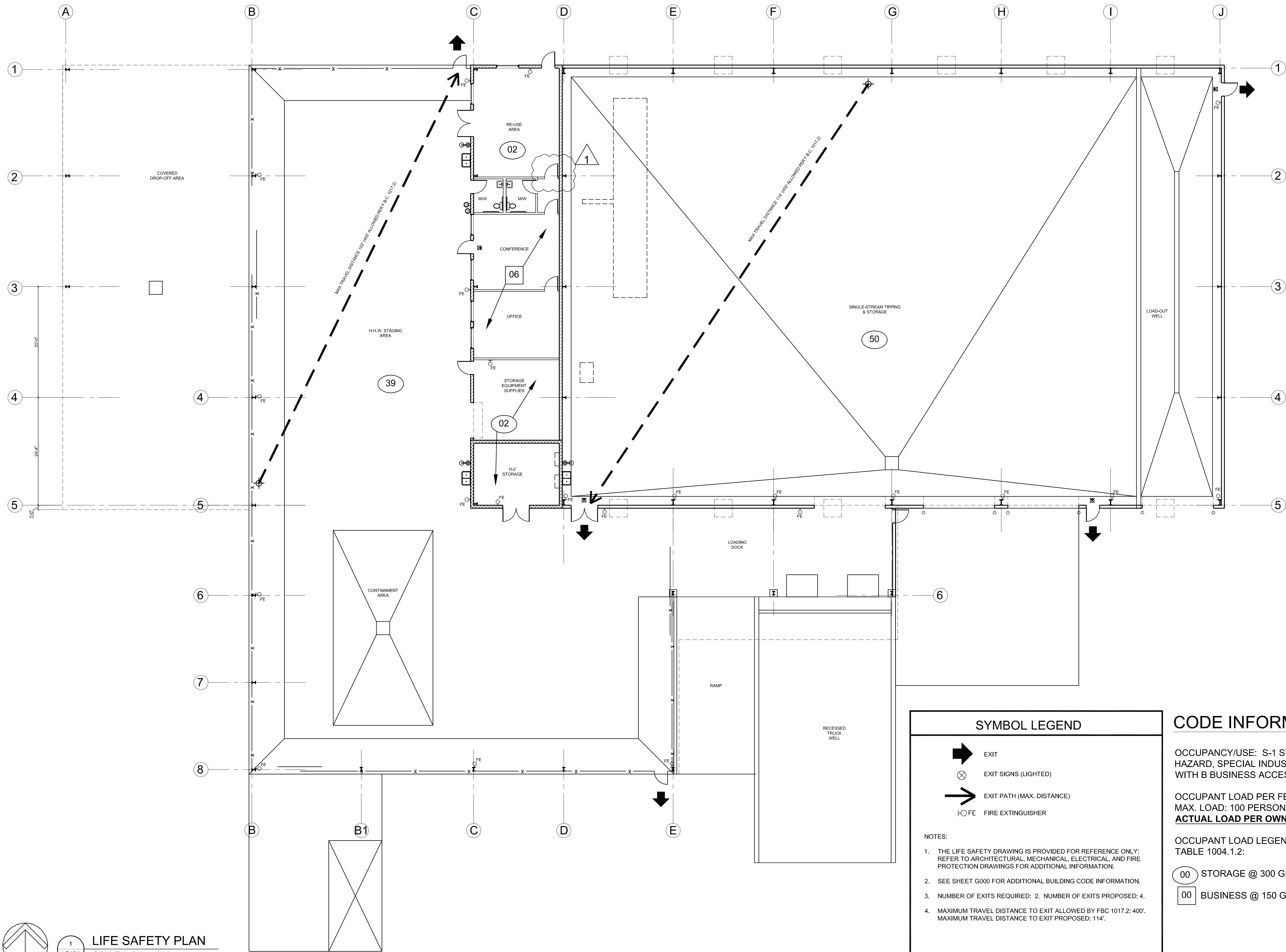
7/2/2021

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SHEET TITLE
**COVER
SHEET**
SHEET NO.
G000

PERMIT SET



1
LS101
LIFE SAFETY PLAN
SCALE: 3/32" = 1'-0"

SYMBOL LEGEND

- EXIT
- EXIT SIGNS (LIGHTED)
- EXIT PATH (MAX. DISTANCE)
- FIRE EXTINGUISHER

NOTES:

- THE LIFE SAFETY DRAWING IS PROVIDED FOR REFERENCE ONLY; REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
- SEE SHEET G000 FOR ADDITIONAL BUILDING CODE INFORMATION.
- NUMBER OF EXITS REQUIRED: 2. NUMBER OF EXITS PROPOSED: 4.
- MAXIMUM TRAVEL DISTANCE TO EXIT ALLOWED BY FBC 1017.2: 400'. MAXIMUM TRAVEL DISTANCE TO EXIT PROPOSED: 114'.

CODE INFORMATION

OCCUPANCY/USE: S-1 STORAGE - MODERATE HAZARD, SPECIAL INDUSTRIAL OCCUPANCY, WITH B BUSINESS ACCESSORY USE

OCCUPANT LOAD PER FBC 1004.5:
MAX. LOAD: 100 PERSONS
ACTUAL LOAD PER OWNER: 10 PERSONS

OCCUPANT LOAD LEGEND W/LOADS PER FBC TABLE 1004.1.2:

- 00 STORAGE @ 300 GROSS, 28,200/300 = 94
- 00 BUSINESS @ 150 GROSS, 790/150 = 6

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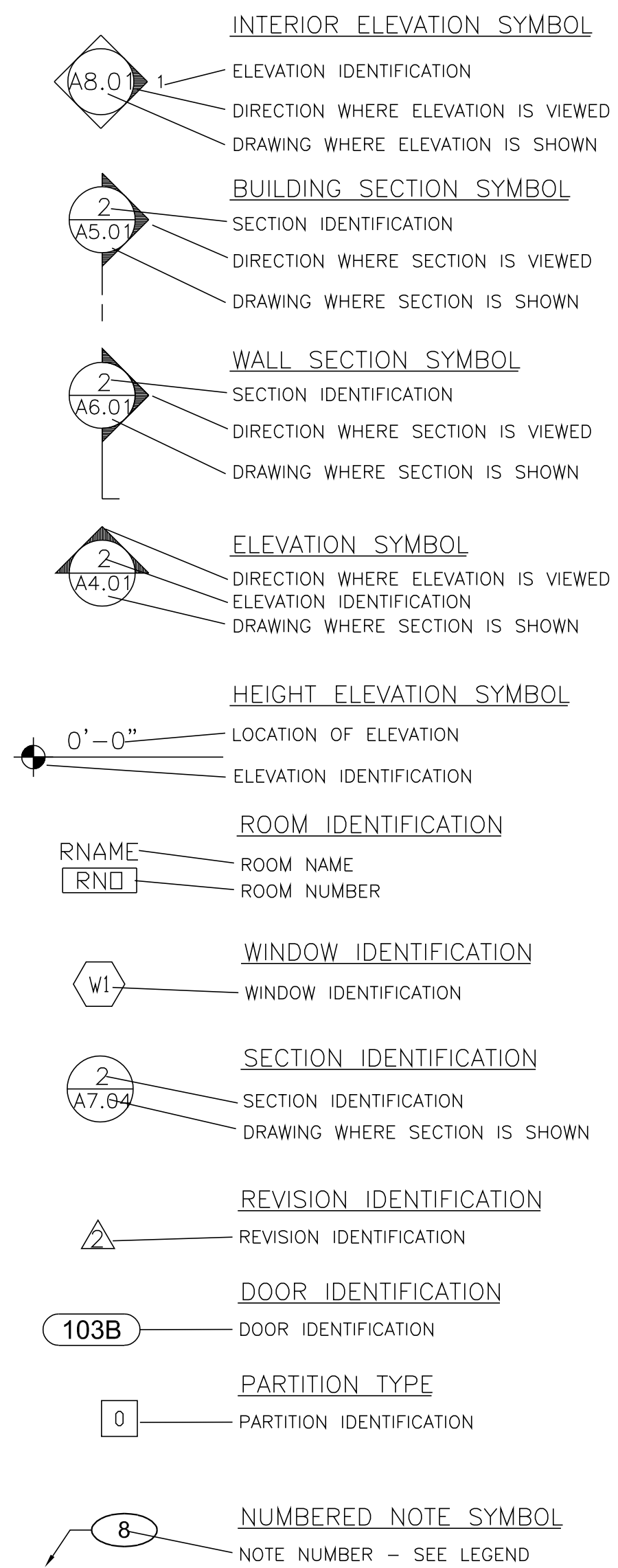
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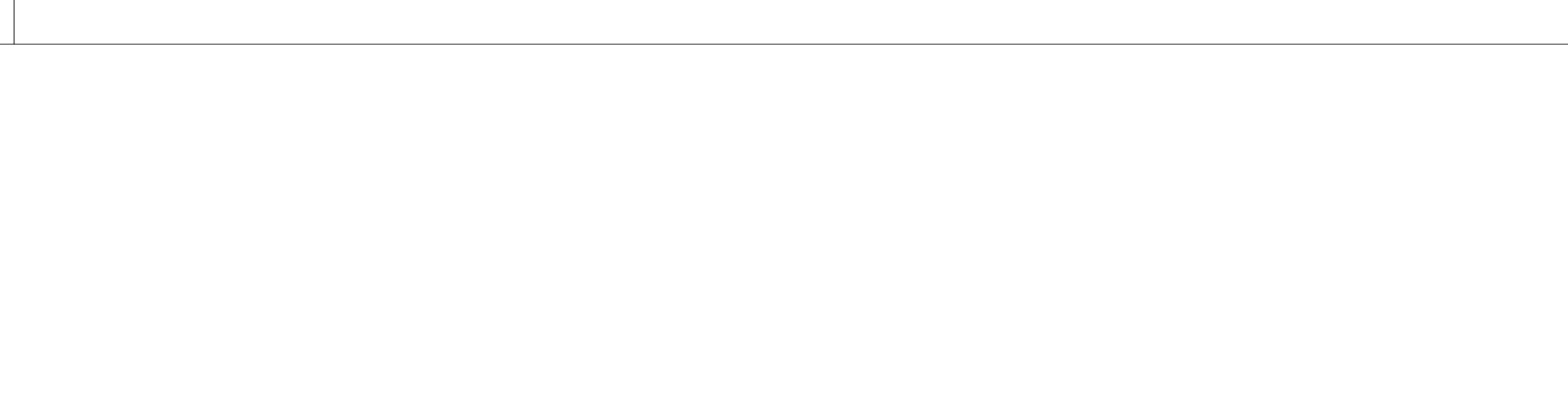
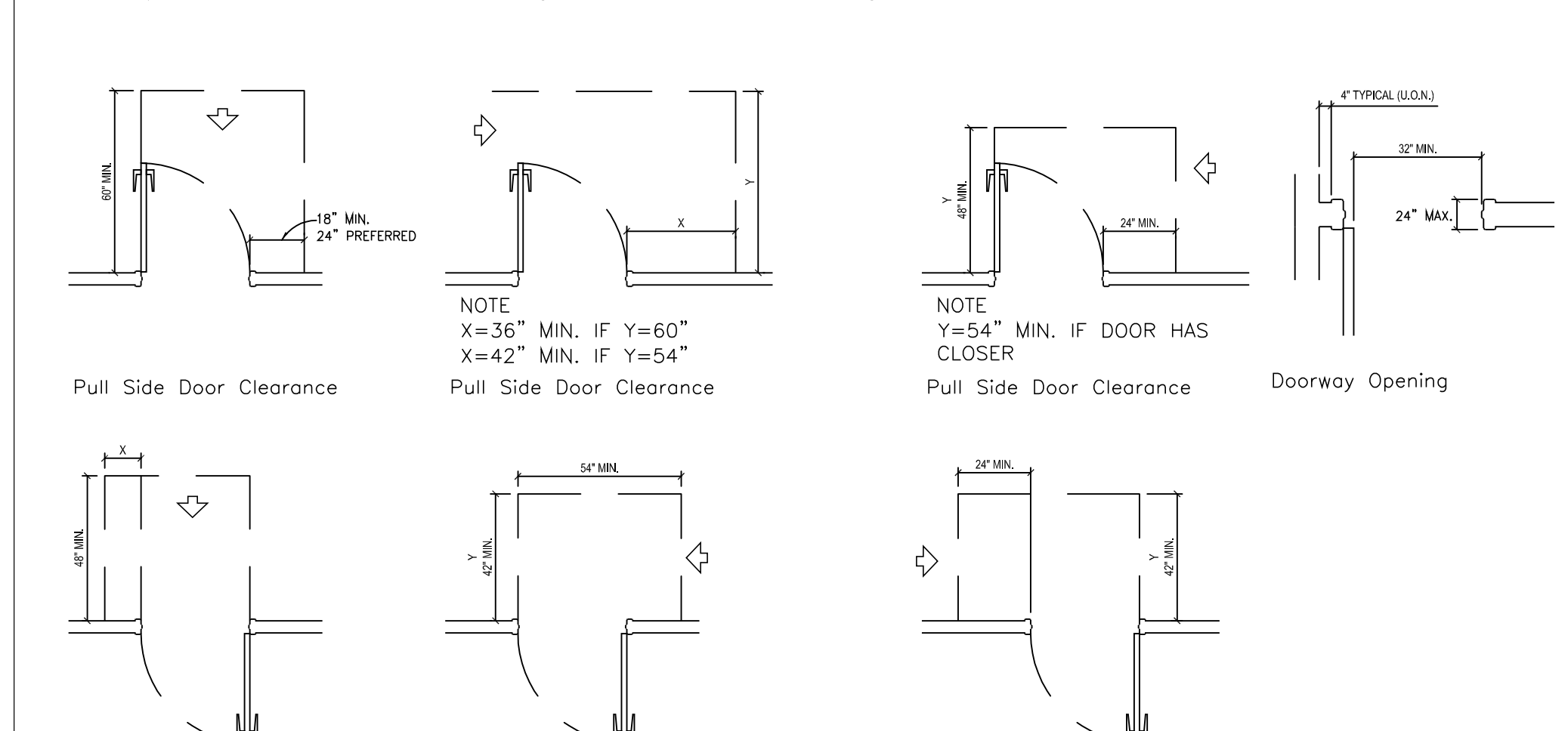
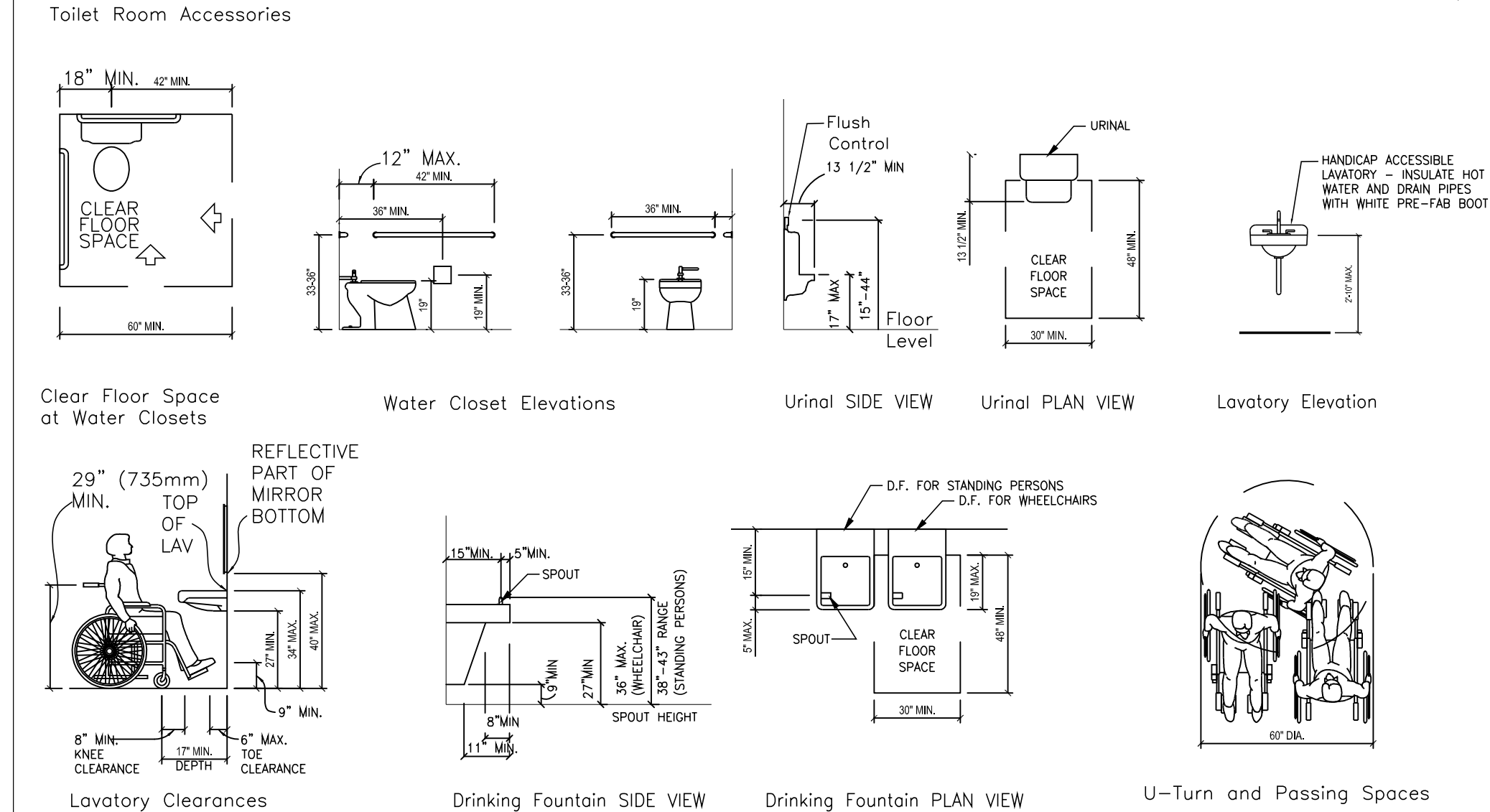
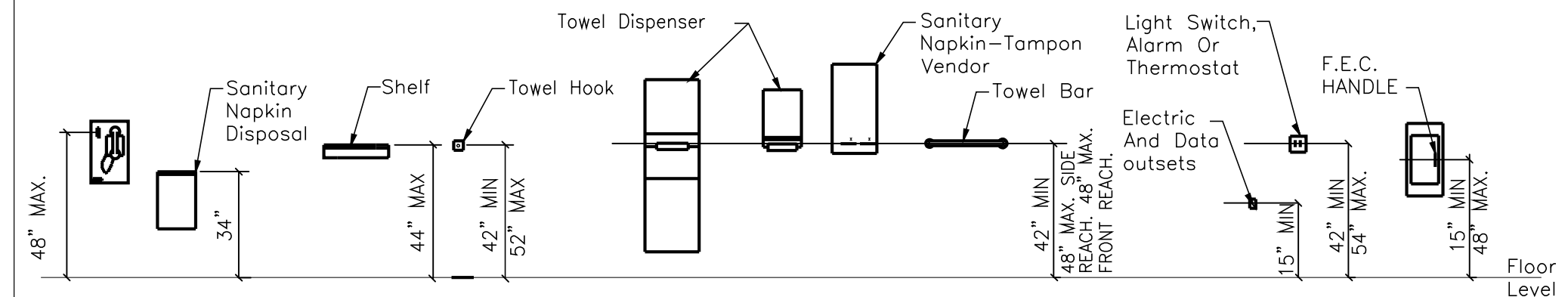
GENERAL NOTES

- 1. ALL LABOR, MATERIALS, FINISH REQUIREMENTS AND FINAL FINISHED PRODUCT AS OUTLINED AND REQUIRED BY THE PLANS, SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS SHALL CONFORM WITH THE CURRENT STANDARD EDITION OF LOCAL CODES AND REQUIREMENTS.
- 2. CONTRACTOR SHALL SECURE ALL BUILDING PERMITS AND INSPECTIONS NECESSARY FOR CONSTRUCTION.
- 3. DRAWINGS ARE NOT TO BE SCALED FOR INFORMATION.
- 4. DISCREPANCIES BETWEEN ARCHITECTURAL AND ENGINEERING DOCUMENTS ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY UPON DISCOVERY AND PRIOR TO CONTINUING WITH THE WORK.
- 5. ALL NEW DOOR HARDWARE DEPICTED HEREIN SHALL BE HEAVY-DUTY EXTERIOR GRADE STAINLESS STEEL HARDWARE. NEW DOOR HANDLES SHALL BE HEAVY-DUTY EXTERIOR GRADE LEVER-TYPE HANDLES. NEW CLOSERS SHALL BE HEAVY-DUTY EXTERIOR GRADE PARALLEL ARM CLOSERS. COORDINATE ALL LOCKING REQUIREMENTS DIRECTLY WITH OWNER.
- 6. ALL DIMENSIONS ARE TO FACE OF STEEL STRUCTURE OR CENTERLINE OF PARTITION UNLESS NOTED OTHERWISE. DIMENSIONS NOTED AS "CLEAR" REFER TO FINISHED FACE OF CONSTRUCTION.
- 7. DOOR FRAMES OCCURRING ADJACENT TO INTERSECTING PARTITIONS SHALL BE INSTALLED FOUR INCHES FROM THE PARTITION UNLESS OTHERWISE NOTED.
- 8. ALL PARTITION EXTERIOR CORNERS SHALL HAVE SCREW ATTACHED METAL CORNER BEADS UNLESS NOTED OTHERWISE.
- 9. WALL SURFACES SHALL BE PROPERLY PREPARED TO RECEIVE NEW FINISHES. JOINTS SHALL NOT BE VISIBLE AFTER NEW FINISH HAS BEEN APPLIED.
- 10. GYPSUM WALLBOARD ON PARTITIONS SHALL BE TAPED AND THE SCREWS SPOTTED WHETHER OR NOT WALL TREATMENT IS SCHEDULED.
- 11. BLOCKING/BACKING IS REQUIRED IN WALLS AT THE FOLLOWING LOCATIONS:
 - a. WALL MOUNTED CABINETS
 - b. WALL MOUNTED ACCESSORIES OR EQUIPMENT
 - c. WALL MOUNTED DOOR STOPS
 - d. WALL MOUNTED DOOR HOLD-OPEN DEVICES AND/OR CLOSERS
 - e. TOILET ROOM ACCESSORIES
 - f. OTHER LOCATIONS AS INDICATED OR REQUIRED FOR PROPER INSTALLATION OF DEPICTED ITEMS
- 15. GENERAL CONTRACTOR TO VERIFY ALL OWNER-PROVIDED EQUIPMENT AND APPLIANCE DIMENSIONS AND INSTALLATION REQUIREMENTS WITH OWNER PRIOR TO PROCEEDING WITH CONSTRUCTION.
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- 17. REFER TO CIVIL ENGINEERING DRAWINGS FOR SIDEWALKS, RAMPS AND OTHER EXTERIOR FEATURES NOT SHOWN. NOTE: MAXIMUM LEVEL CHANGE AT ALL EXTERIOR DOORS SHALL NOT EXCEED 1/2".
- 18. PROVIDE BRACKET-MOUNTED FIRE EXTINGUISHERS AS SHOWN ON PLANS AFTER VERIFICATION OF REQUIREMENTS WITH LOCAL FIRE PROTECTION AUTHORITIES.

SYMBOLS LEGEND



ADA CLEARANCES



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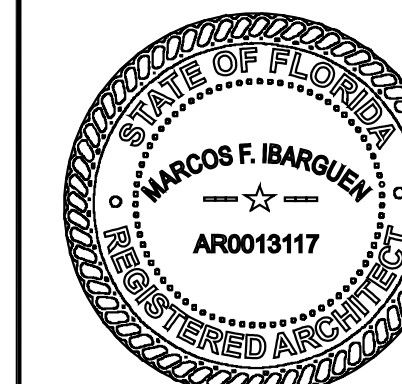
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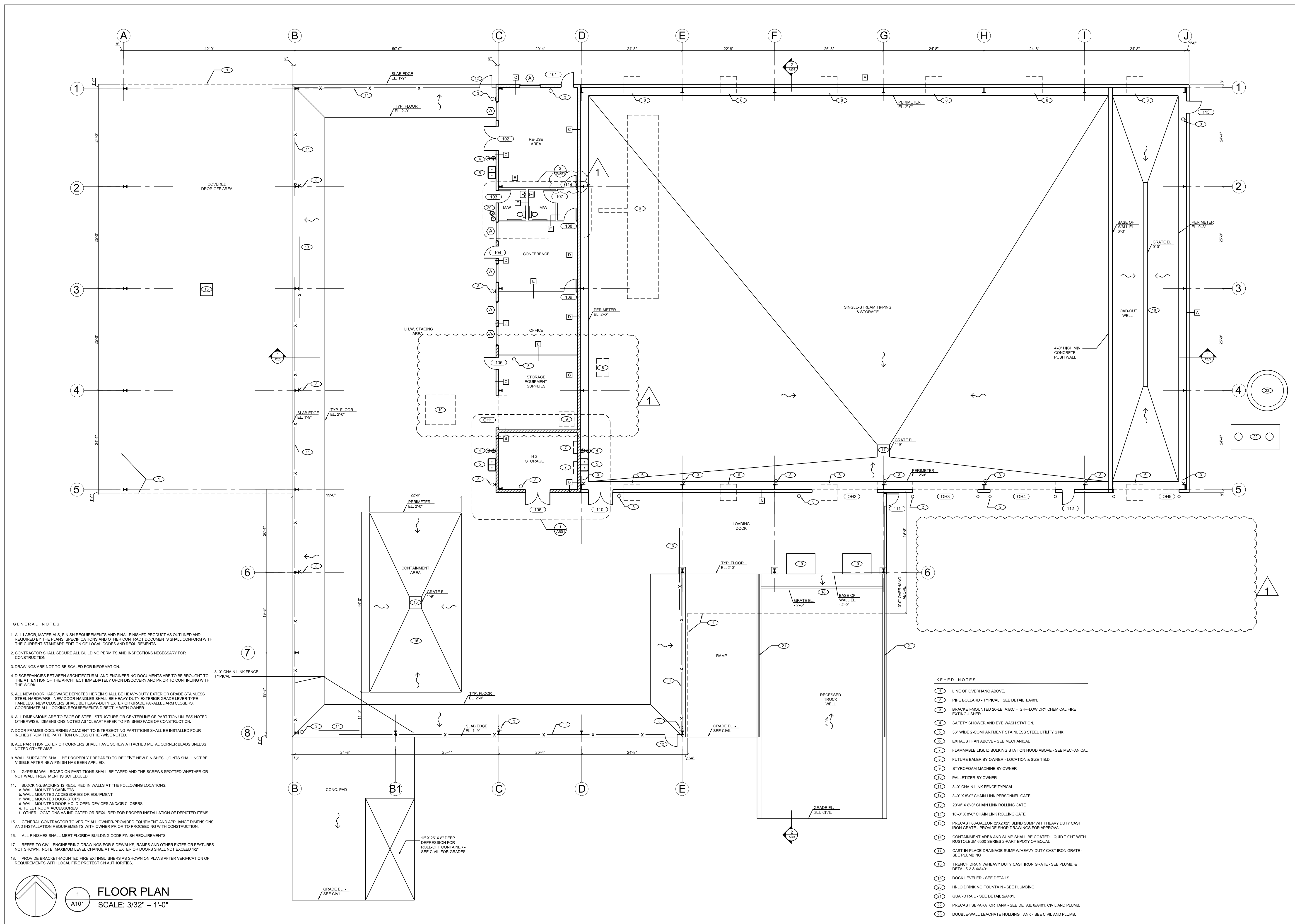
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SHEET TITLE
FLOOR PLAN
SHEET NO.
A101

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GENERAL NOTES

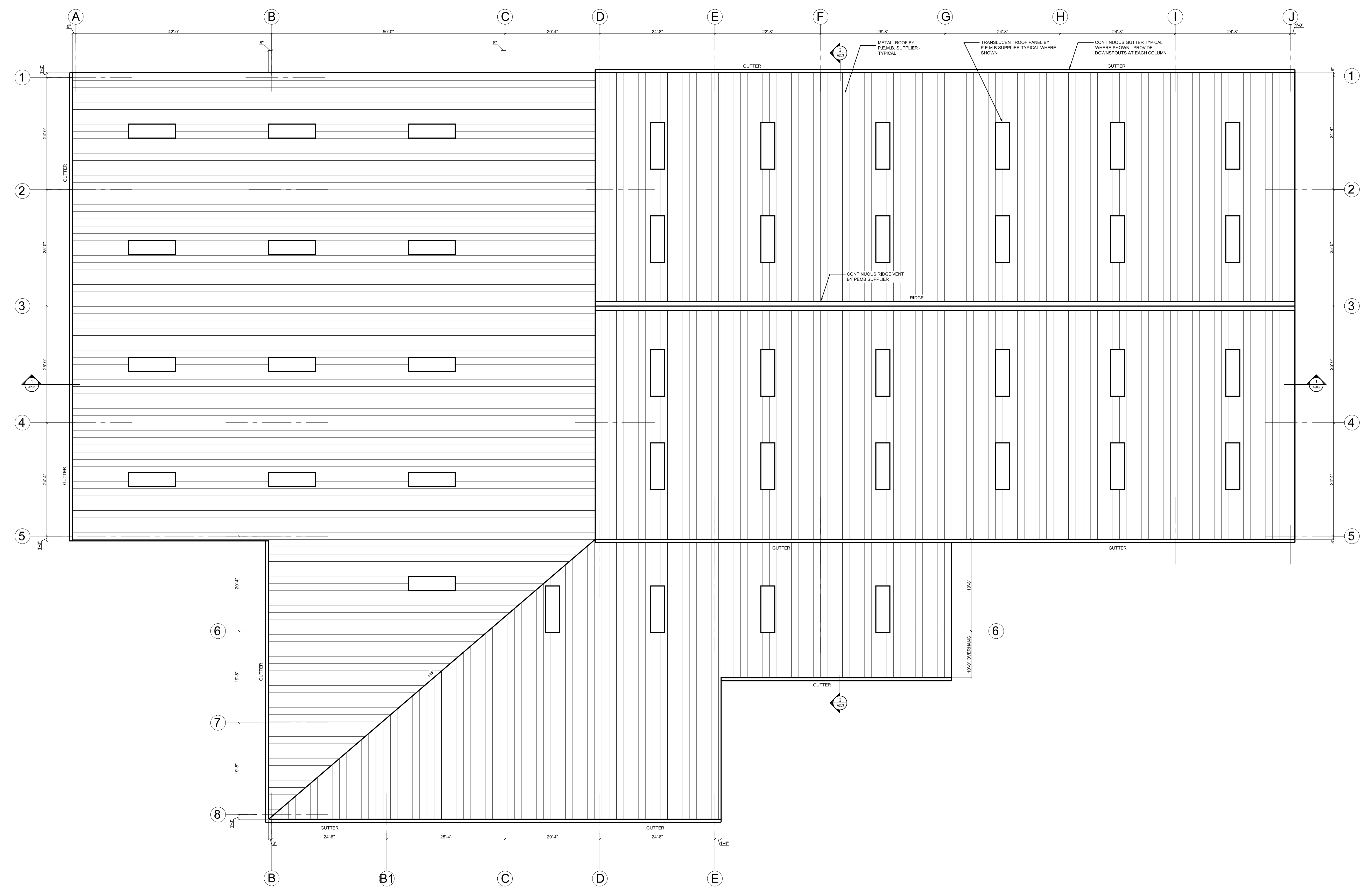
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KEYED NOTES

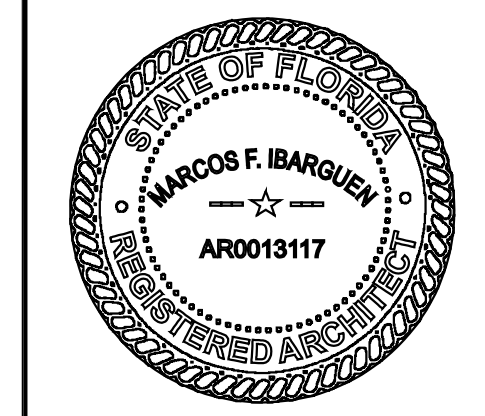
- LINE OF OVERHANG ABOVE.
- PIPE BOLLARD - TYPICAL. SEE DETAIL 1/A401.
- BRACKET MOUNTED 20-LB. A/B/C HIGH-FLOW DRY CHEMICAL FIRE EXTINGUISHER.
- SAFETY SHOWER AND EYE WASH STATION.
- 36" WIDE 2-COMPARTMENT STAINLESS STEEL UTILITY SINK.
- EXHAUST FAN ABOVE - SEE MECHANICAL.
- FLAMMABLE LIQUID BULKING STATION HOOD ABOVE - SEE MECHANICAL.
- FUTURE BALER BY OWNER - LOCATION & SIZE T.B.D.
- STYROFOAM MACHINE BY OWNER.
- PALLETIZER BY OWNER.
- 8'-0" CHAIN LINK FENCE TYPICAL.
- 3'-0" X 8'-0" CHAIN LINK PERSONNEL GATE.
- 20'-0" X 8'-0" CHAIN LINK ROLLING GATE.
- 10'-0" X 8'-0" CHAIN LINK ROLLING GATE.
- PRECAST 60-GALLON (2'X2'X2') BLIND SLUMP WITH HEAVY DUTY CAST IRON GRATE - PROVIDE SHOP DRAWINGS FOR APPROVAL.
- CONTAINMENT AREA AND SLUMP SHALL BE COATED LIQUID TIGHT WITH RUSTOLEUM 6500 SERIES 2-PART EPOXY OR EQUAL.
- CAST-IN-PLACE DRAINAGE SUMP W/HEAVY DUTY CAST IRON GRATE - SEE PLUMBING.
- TRENCH DRAIN W/HEAVY DUTY CAST IRON GRATE - SEE PLUMB. & DETAILS 3 & 4/A401.
- DOCK LEVELER - SEE DETAILS.
- H2O DRINKING FOUNTAIN - SEE PLUMBING.
- GUARD RAIL - SEE DETAIL 2/A401.
- PRECAST SEPARATOR TANK - SEE DETAIL 6/A401. CIVIL AND PLUMB.
- DOUBLE-WALL LEACHATE HOLDING TANK - SEE CIVIL AND PLUMB.

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

1 ROOF PLAN
 A102 SCALE: 3/32" = 1'-0"



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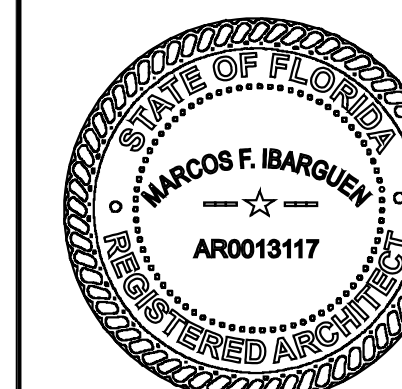
INDIAN RIVER COUNTY LANDFILL
 HOUSEHOLD HAZARDOUS WASTE
 AND RECYCLING FACILITY
 Indian River County, Florida

NO.	REVISIONS	DATE

JOB NO.
2016
 ISSUE DATE:
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SHEET TITLE
 ROOF PLAN
 SHEET NO.
A102

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Indian River County, Florida

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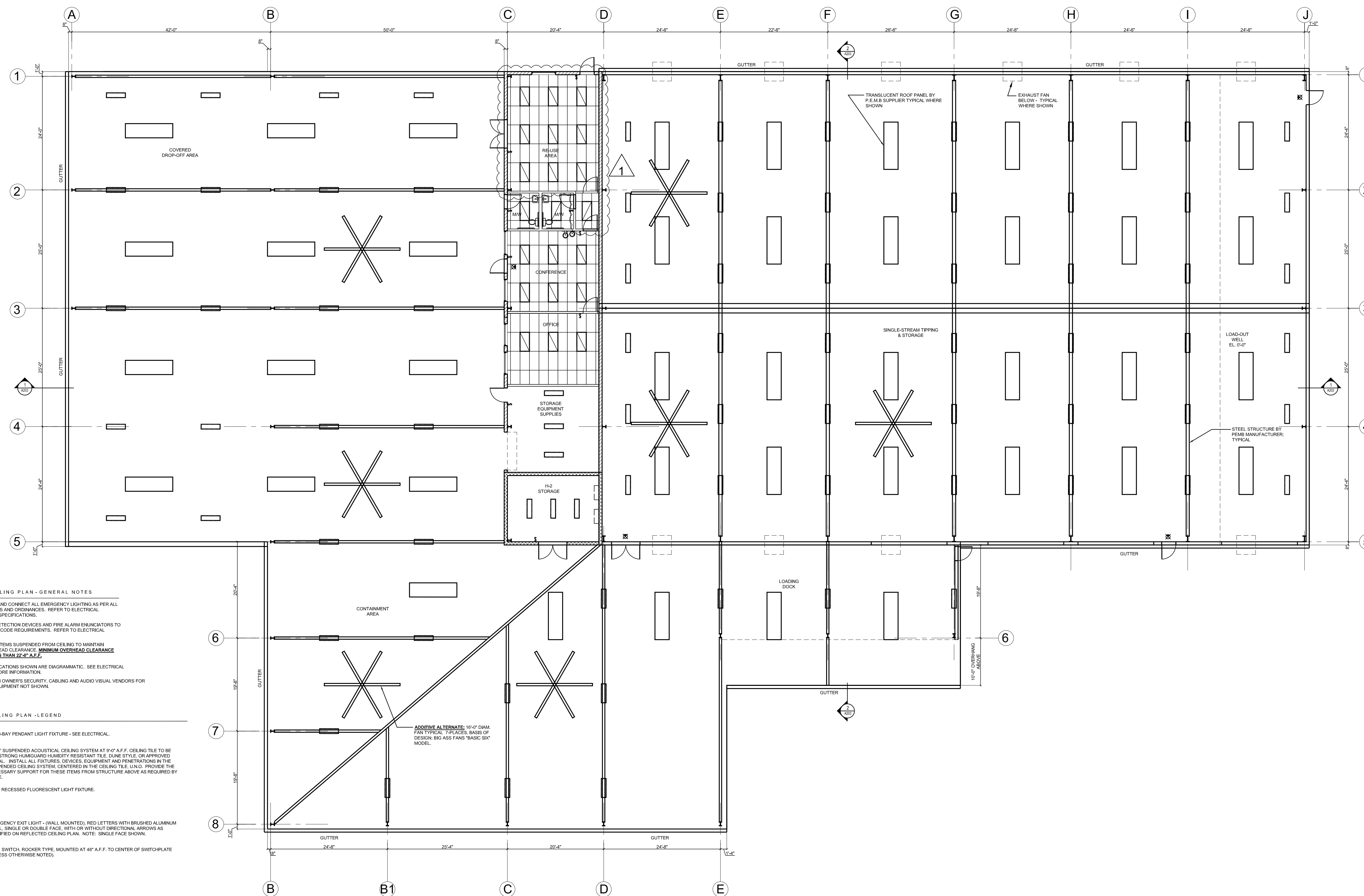
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SHEET TITLE

CEILING PLAN

SHEET NO.

A103



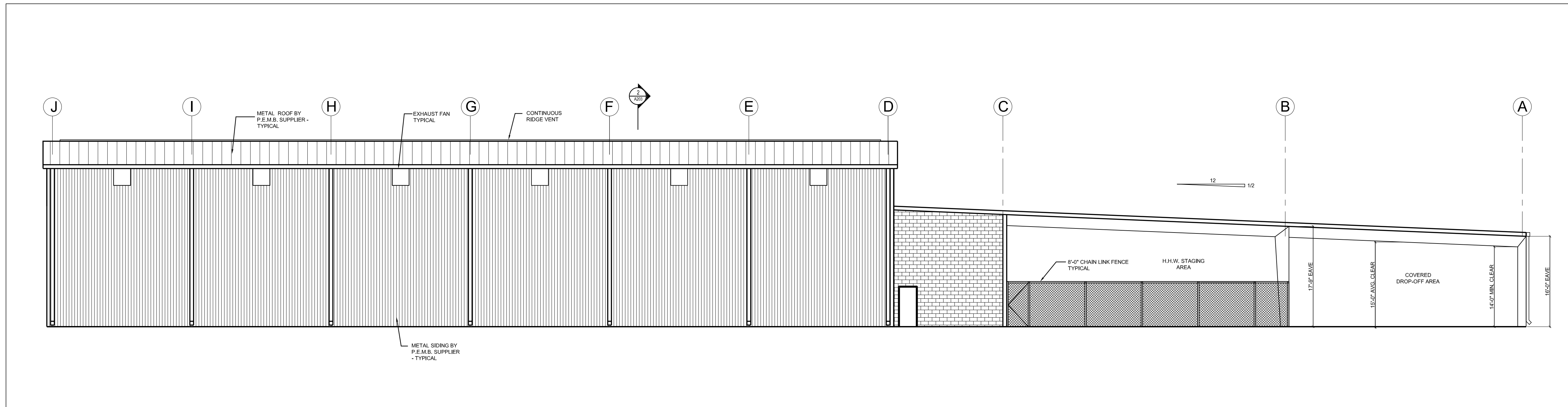
REFLECTED CEILING PLAN - GENERAL NOTES

- SUPPLY, INSTALL AND CONNECT ALL EMERGENCY LIGHTING AS PER ALL APPLICABLE CODES AND ORDINANCES. REFER TO ELECTRICAL DOCUMENTS FOR SPECIFICATIONS.
- INSTALL SMOKE DETECTION DEVICES AND FIRE ALARM INDICATORS TO COMPLY WITH ALL CODE REQUIREMENTS. REFER TO ELECTRICAL DOCUMENTS.
- COORDINATE ALL ITEMS SUSPENDED FROM CEILING TO MAINTAIN REQUIRED OVERHEAD CLEARANCE. **MINIMUM OVERHEAD CLEARANCE SHALL BE NO LESS THAN 22'-0" A.F.F.**
- LIGHT FIXTURE LOCATIONS SHOWN ARE DIAGRAMMATIC. SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION.
- COORDINATE WITH OWNER'S SECURITY, CABLING AND AUDIO VISUAL VENDORS FOR LOCATIONS OF EQUIPMENT NOT SHOWN.

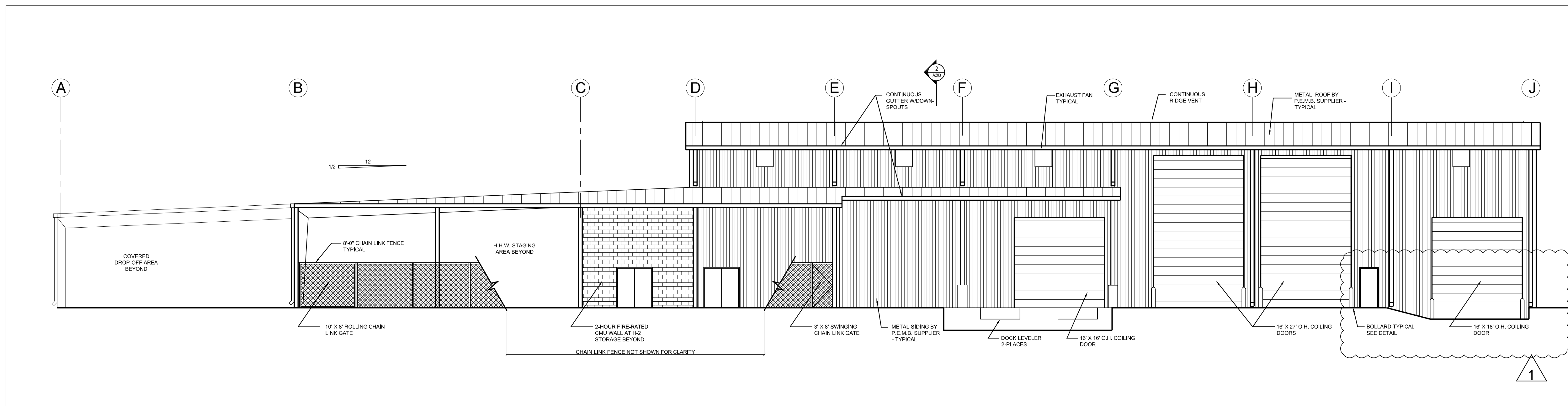
REFLECTED CEILING PLAN - LEGEND

- HIGH-BAY PENDANT LIGHT FIXTURE - SEE ELECTRICAL.
- 2' x 4' SUSPENDED ACOUSTICAL CEILING SYSTEM AT 9'-0" A.F.F. CEILING TILE TO BE ARMSTRONG HURRICANE HURDLE RESISTANT TILE, DUNE STYLE, OR APPROVED EQUAL. INSTALL ALL FIXTURES, DEVICES, EQUIPMENT AND PENETRATIONS IN THE SUSPENDED CEILING SYSTEM, CENTERED IN THE CEILING TILE UNLESS OTHERWISE NOTED. PROVIDE THE NECESSARY SUPPORT FOR THESE ITEMS FROM STRUCTURE ABOVE AS REQUIRED BY CODE.
- 2' x 4' RECESSED FLUORESCENT LIGHT FIXTURE.
- EMERGENCY EXIT LIGHT - (WALL MOUNTED), RED LETTERS WITH BRUSHED ALUMINUM PANEL, SINGLE OR DOUBLE FACE, WITH OR WITHOUT DIRECTIONAL ARROWS AS SPECIFIED ON REFLECTED CEILING PLAN. NOTE: SINGLE FACE SHOWN.
- WALL SWITCH, ROCKER TYPE, MOUNTED AT 48" A.F.F. TO CENTER OF SWITCHPLATE (UNLESS OTHERWISE NOTED).

1
A103 **CEILING PLAN**
SCALE: 3/32" = 1'-0"



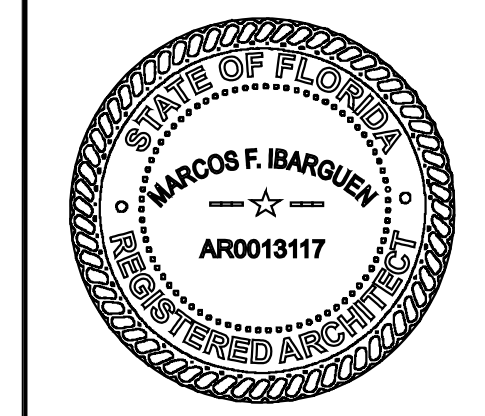
1 NORTH ELEVATION
SCALE: 3/32" = 1'-0"



2 SOUTH ELEVATION
SCALE: 3/32" = 1'-0"



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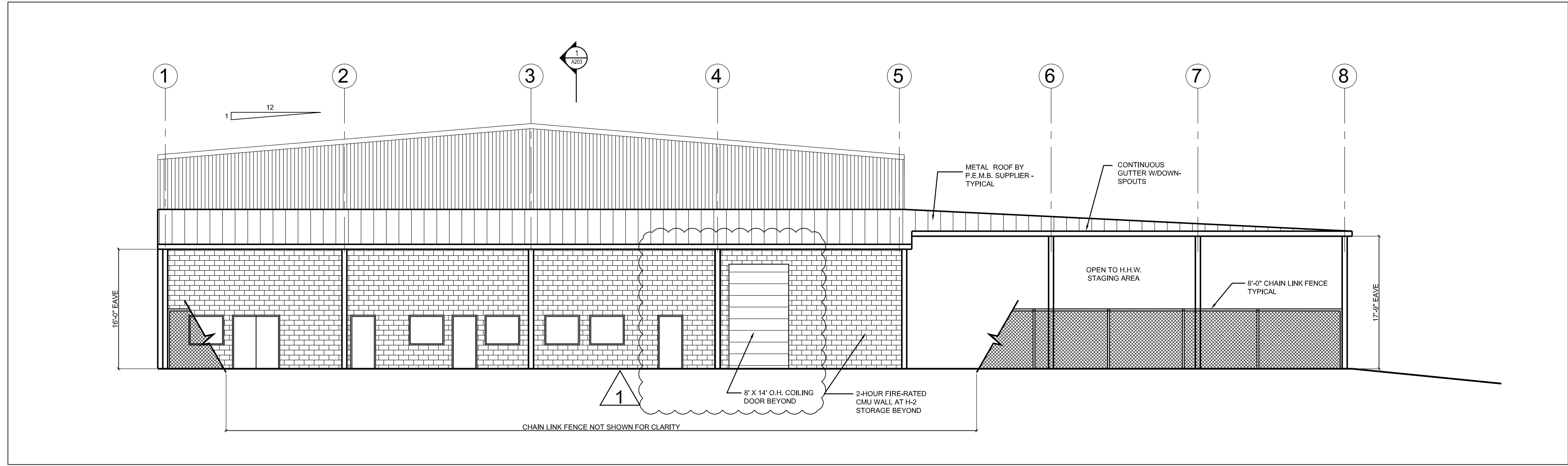
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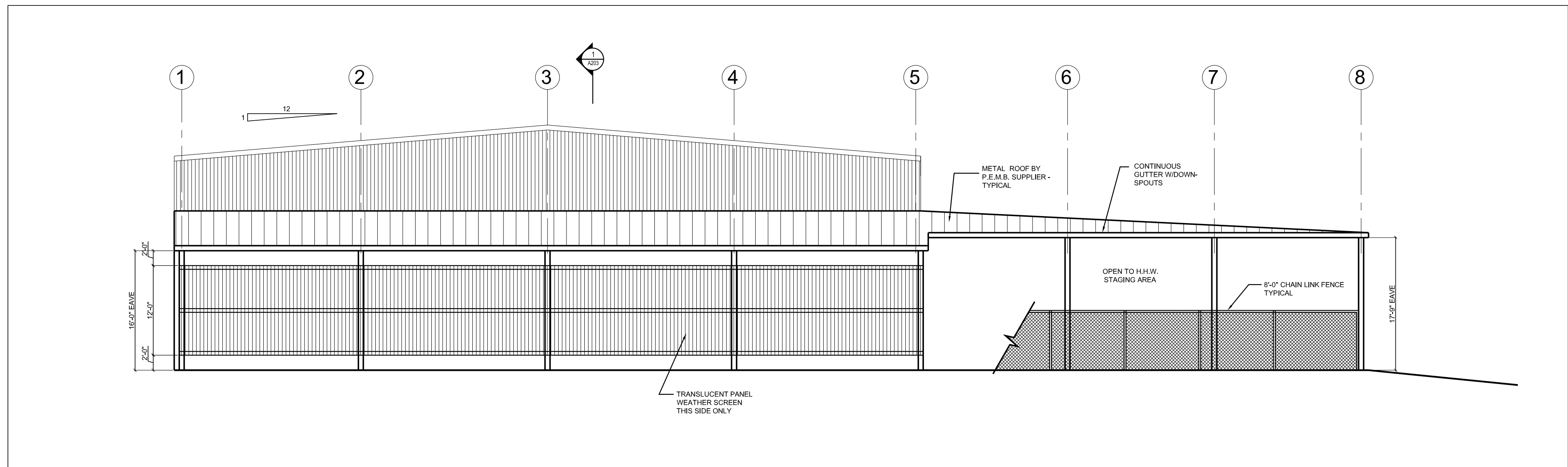
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SHEET TITLE
ELEVATIONS
SHEET NO.
A201

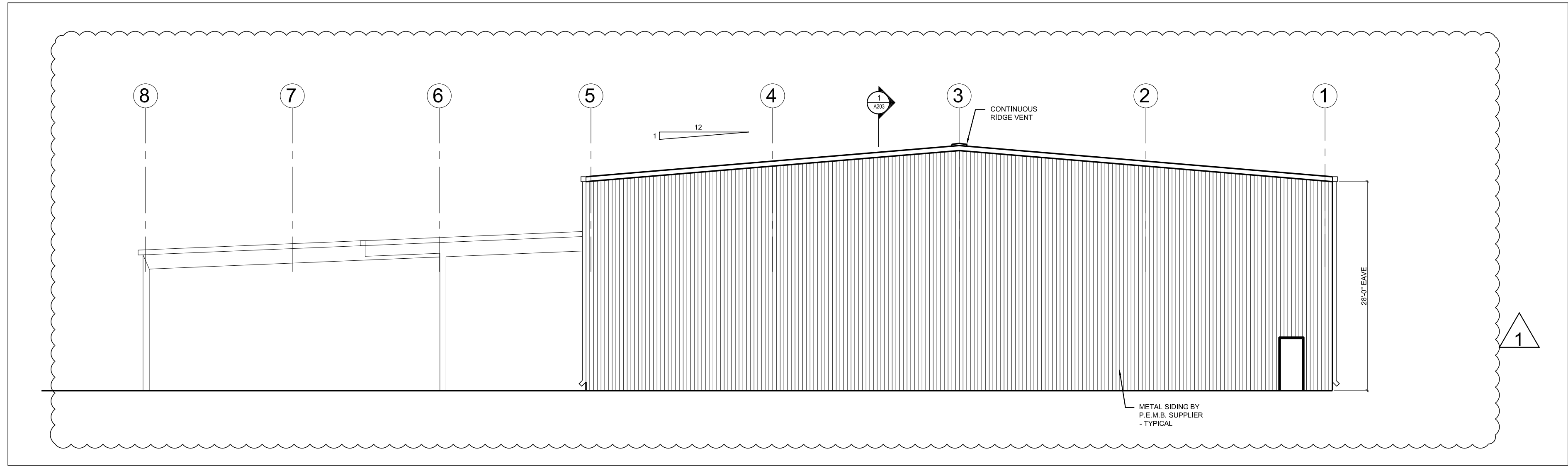
PERMIT SET



1 WEST ELEVATION (WEATHER SCREEN NOT SHOWN)
SCALE: 3/32" = 1'-0"



2 WEST ELEVATION (WITH WEATHER SCREEN)
SCALE: 3/32" = 1'-0"



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



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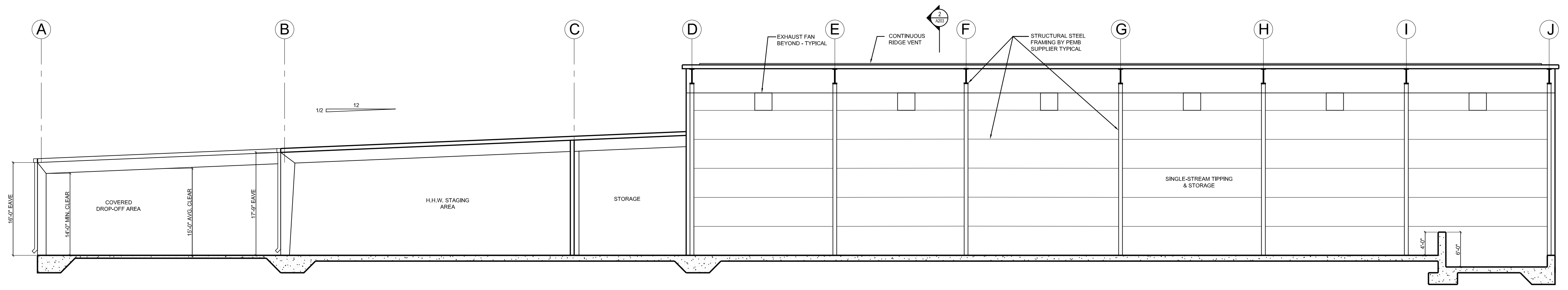
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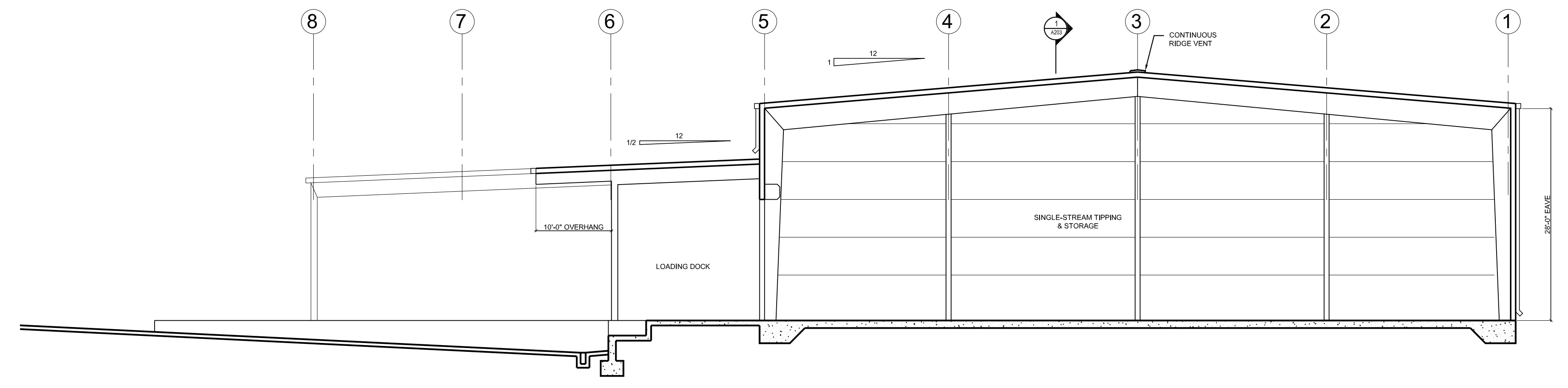
SHEET TITLE
ELEVATIONS

SHEET NO.
A202

PERMIT SET



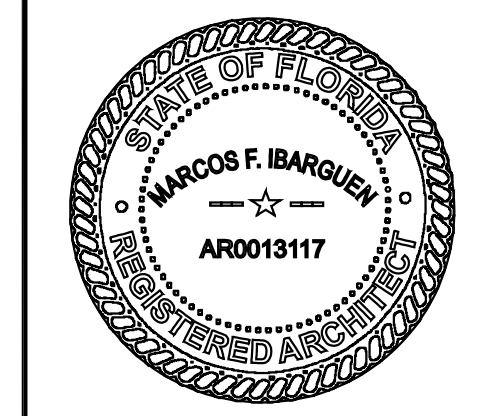
1 LONGITUDINAL BUILDING SECTION
SCALE: 3/32" = 1'-0"



2 BUILDING CROSS SECTION
SCALE: 3/32" = 1'-0"



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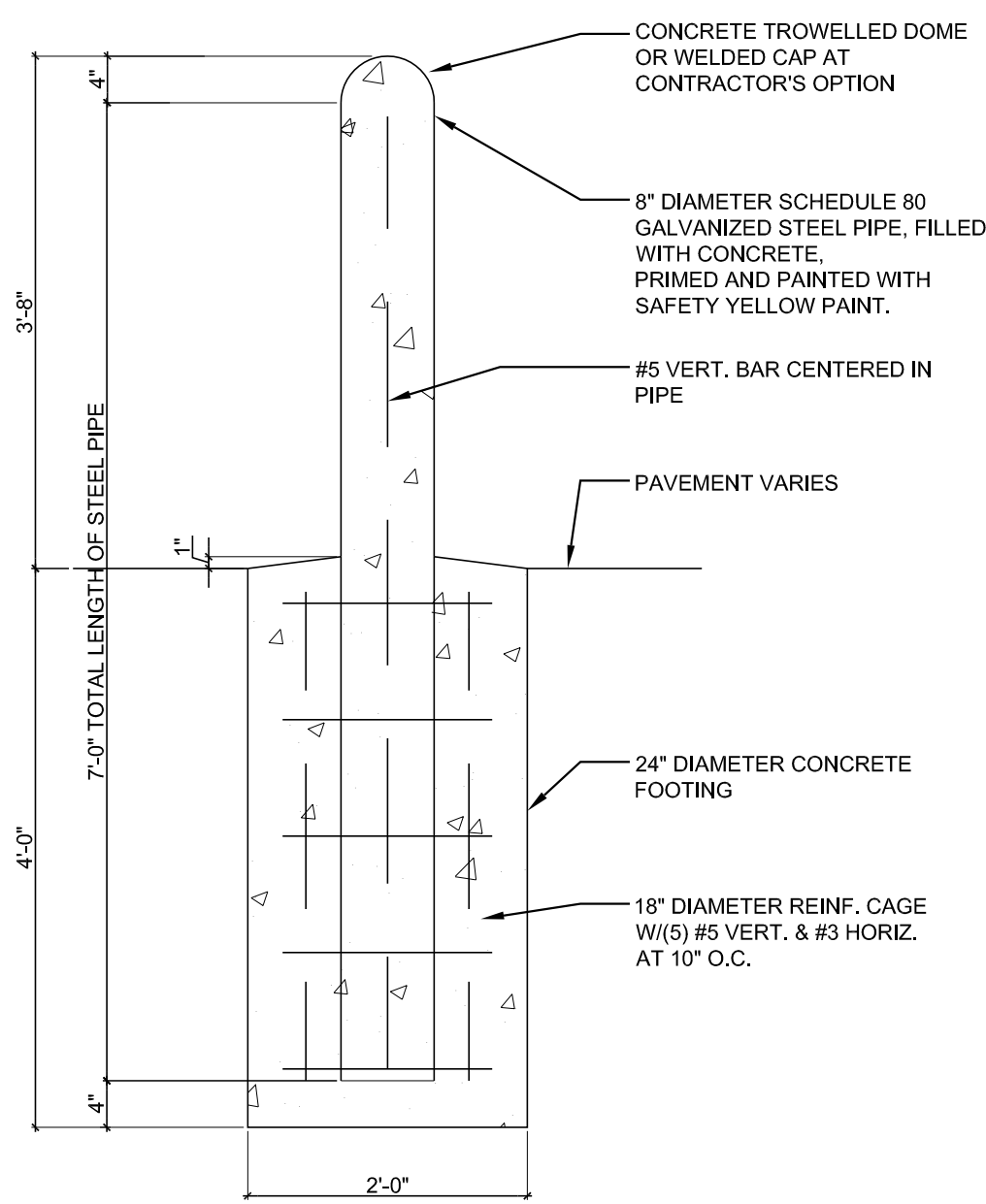
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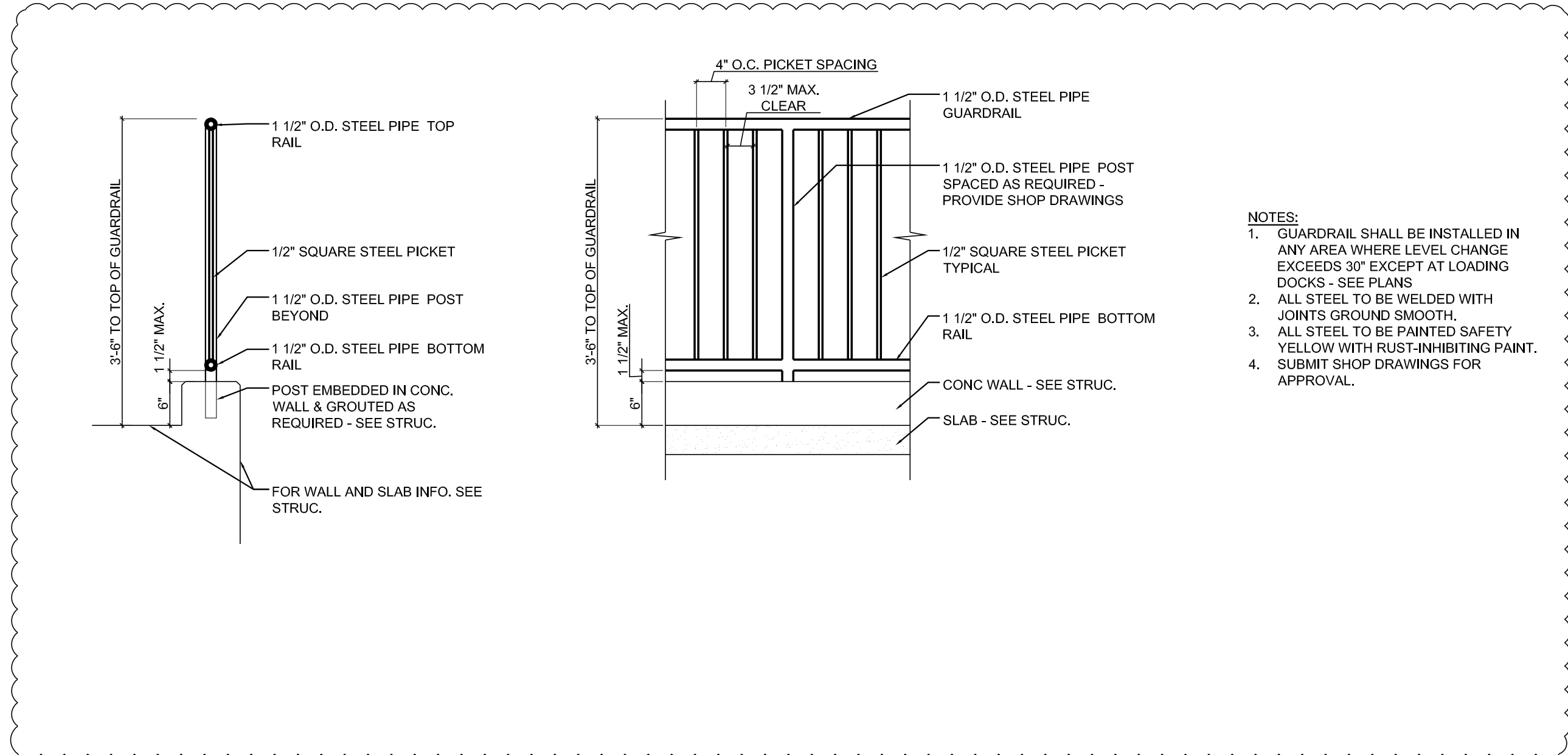
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SHEET TITLE
BUILDING SECTIONS
SHEET NO.
A203

PERMIT SET

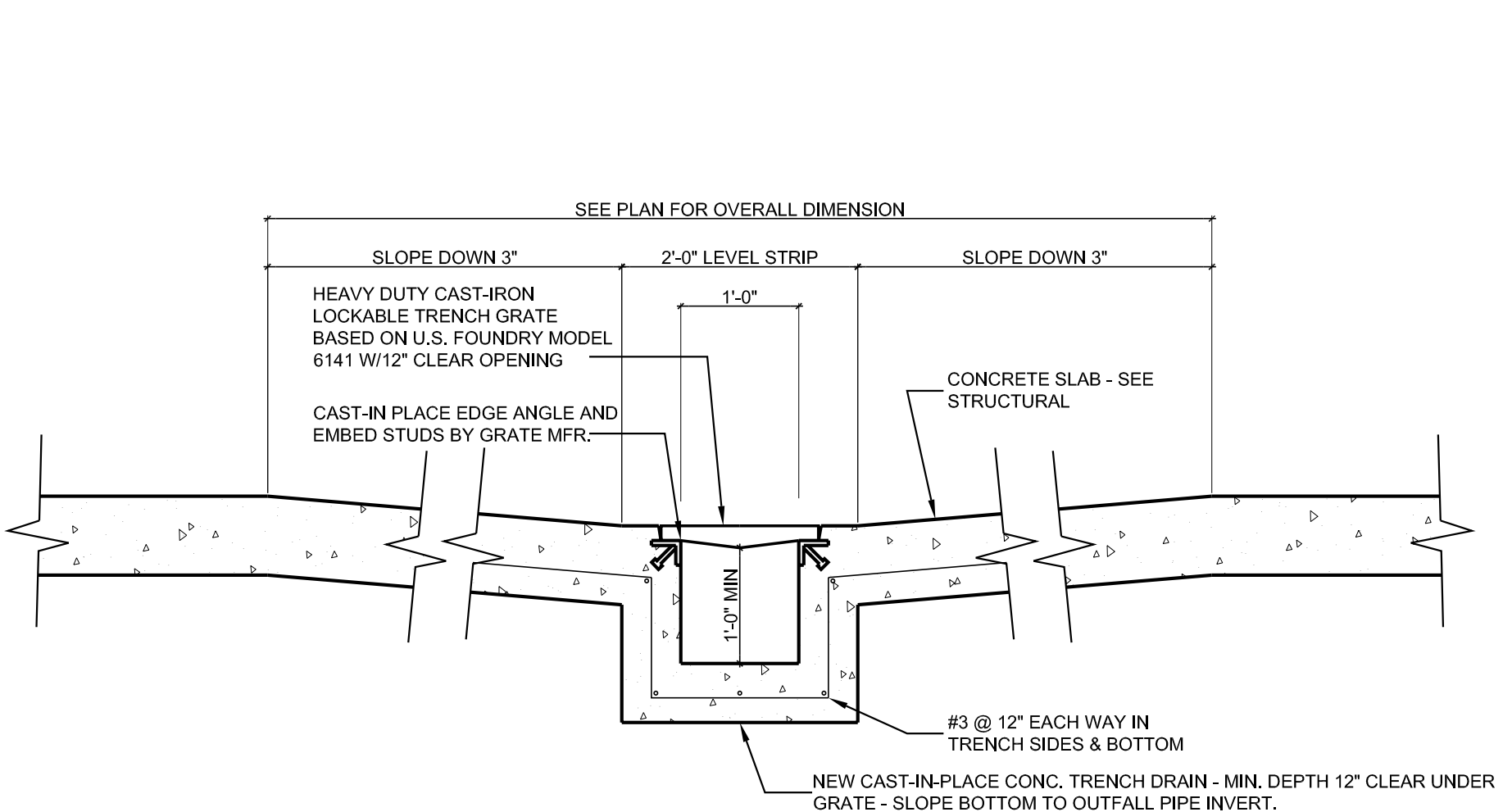


1 TYPICAL BOLLARD DETAIL
SCALE: 3/4" = 1'-0"

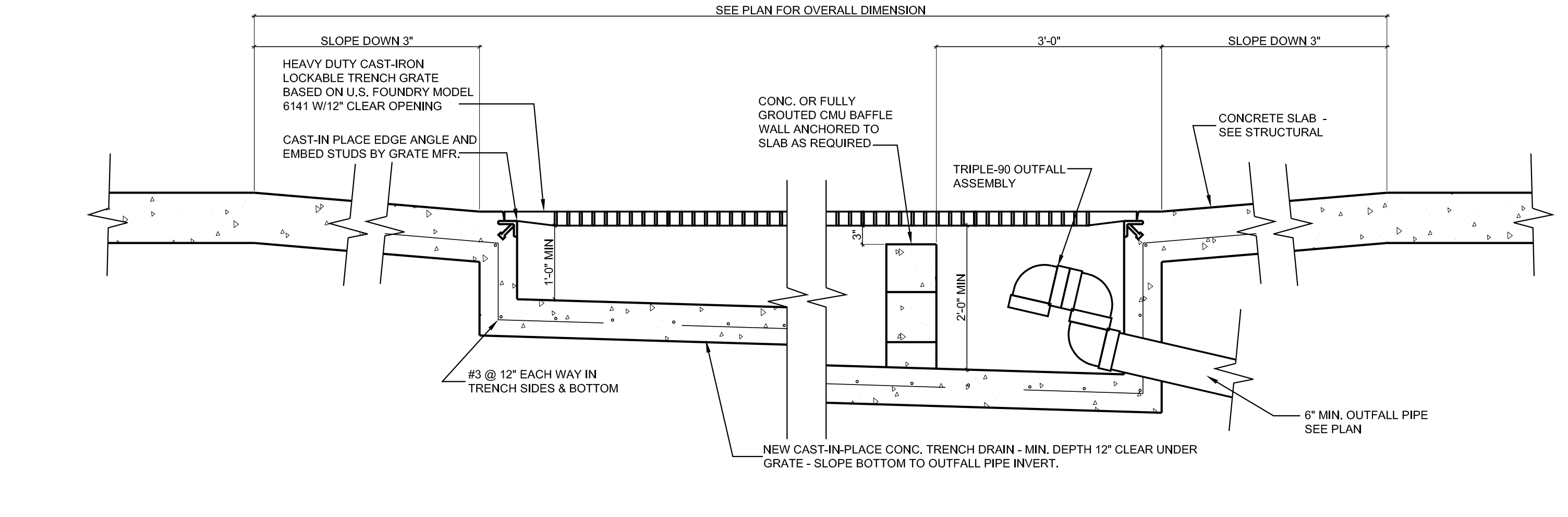


2 GUARD RAIL DETAIL
SCALE: 3/4" = 1'-0"

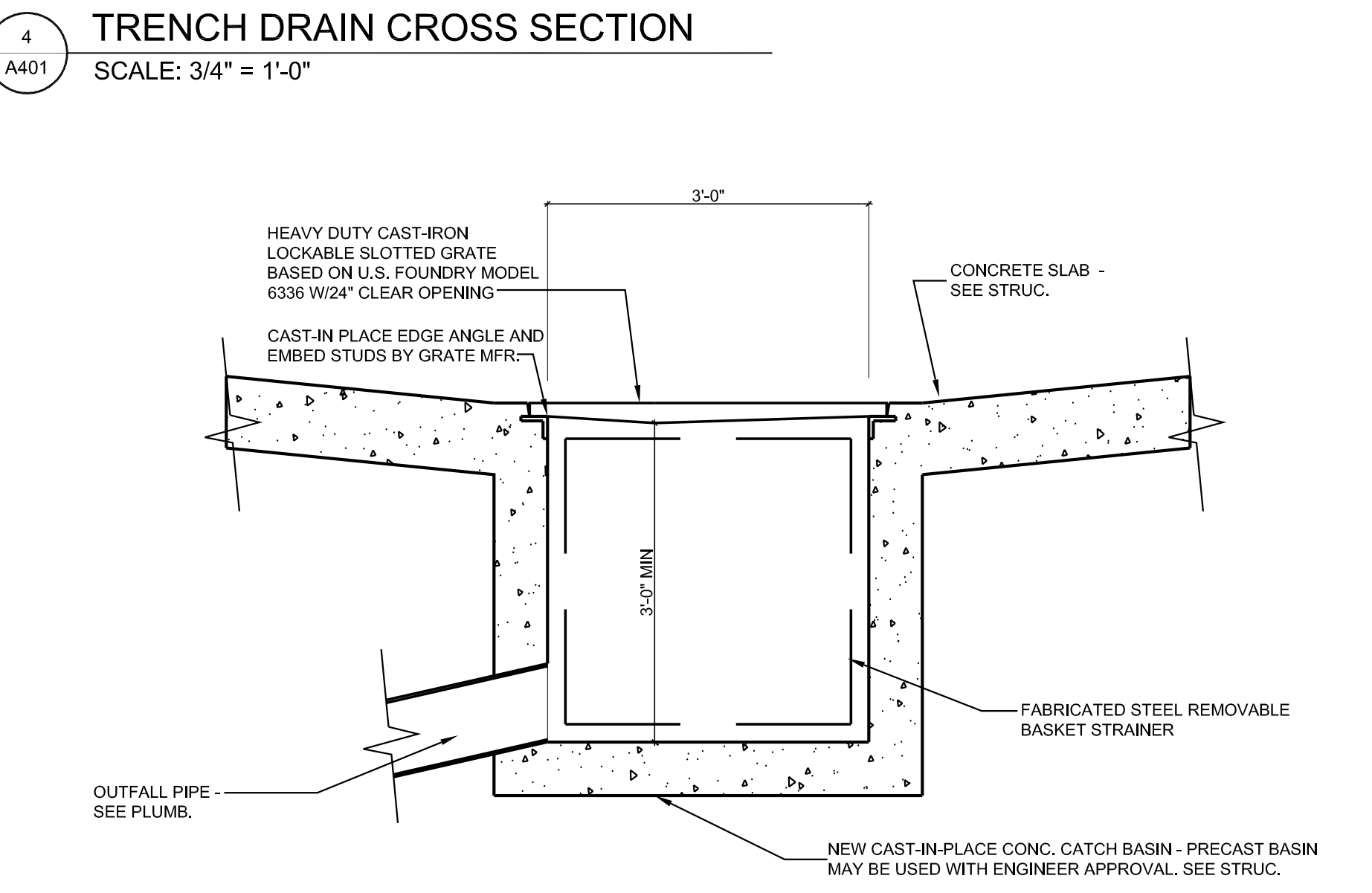
- NOTES:
1. GUARDRAIL SHALL BE INSTALLED IN ANY AREA WHERE LEVEL CHANGE EXCEEDS 30" EXCEPT AT LOADING DOCKS - SEE PLANS
 2. ALL STEEL TO BE WELDED WITH JOINTS GROUND SMOOTH.
 3. ALL STEEL TO BE PAINTED SAFETY YELLOW WITH RUST-INHIBITING PAINT.
 4. SUBMIT SHOP DRAWINGS FOR APPROVAL.



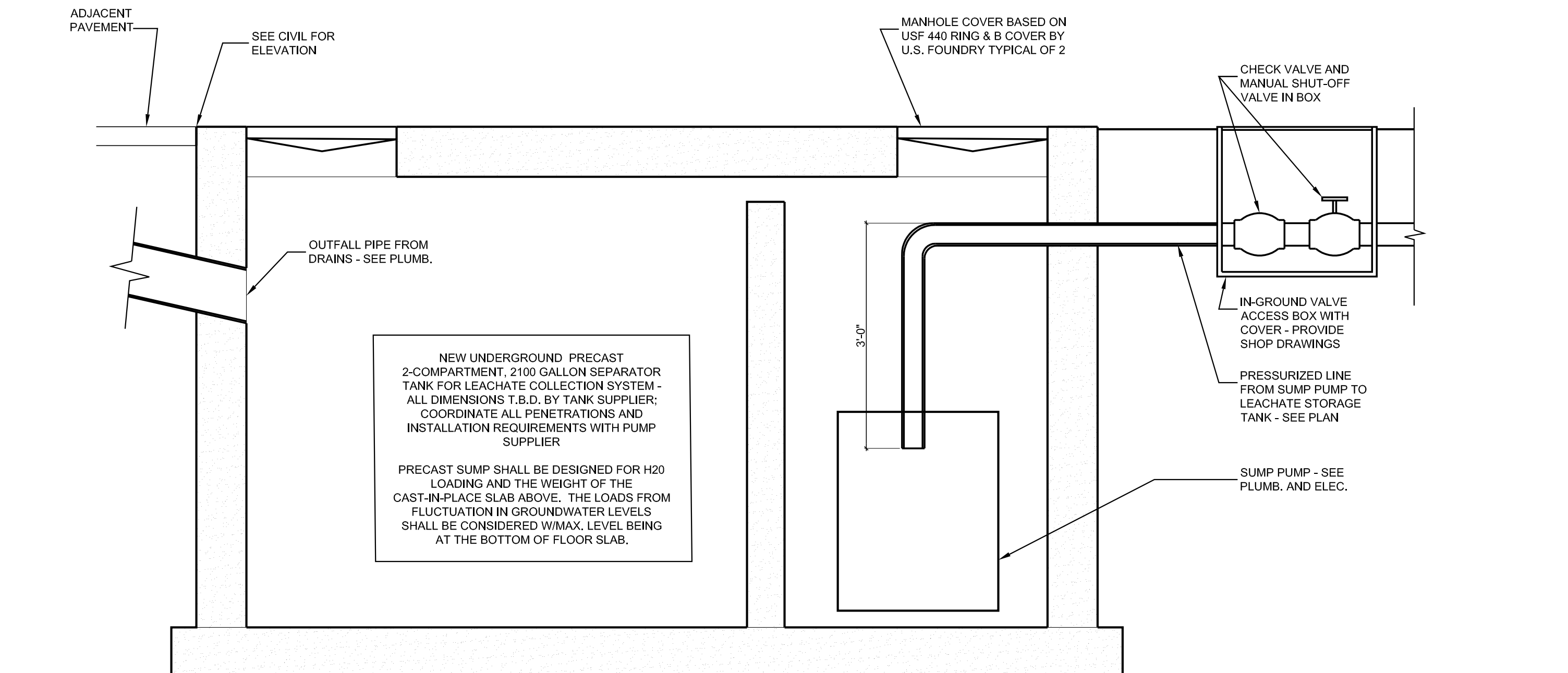
4 TRENCH DRAIN CROSS SECTION
SCALE: 3/4" = 1'-0"



3 TRENCH DRAIN LONG. SECTION
SCALE: 3/4" = 1'-0"



5 CATCH BASIN DETAIL
SCALE: 3/4" = 1'-0"



6 LEACHATE SEPARATOR TANK
SCALE: 3/4" = 1'-0"



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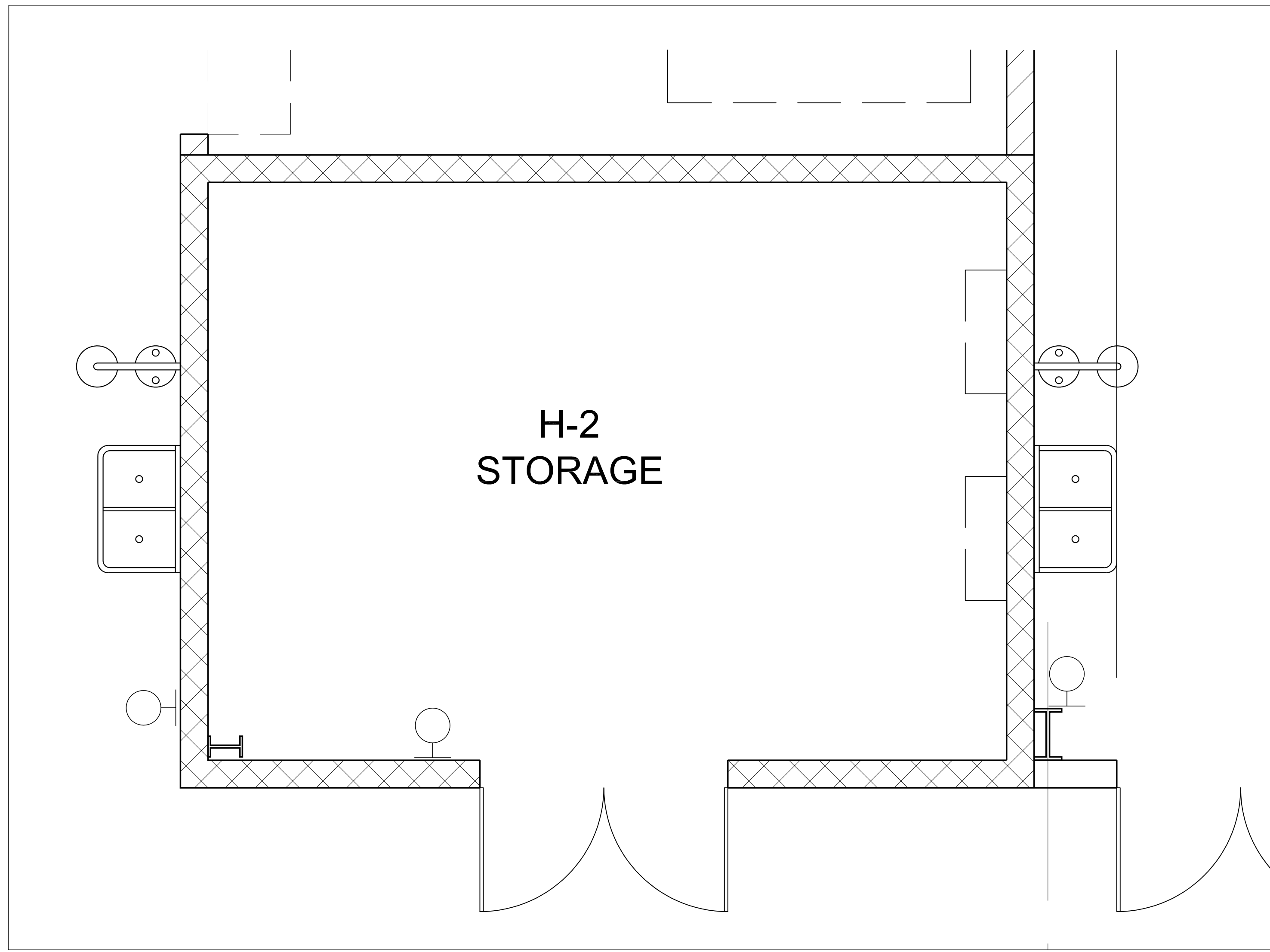
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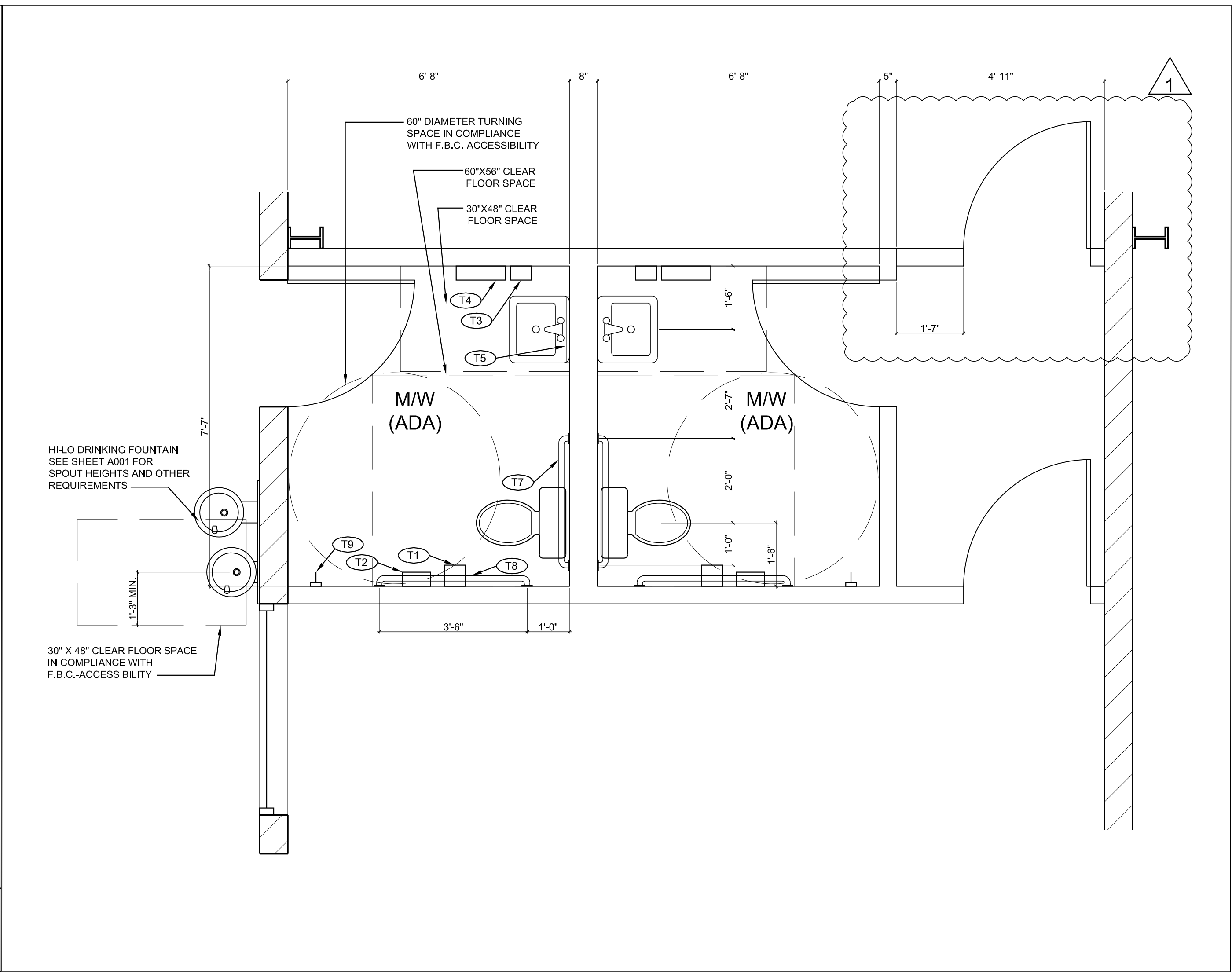
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SHEET TITLE
SECTIONS & DETAILS
SHEET NO.
A401

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1 ENLARGED PLAN AT H2 STORAGE
SCALE: 1/2" = 1'-0"



2 ENLARGED PLAN AT RESTROOMS
SCALE: 1/2" = 1'-0"

TOILET ACCESSORY SCHEDULE				
MARK	MANUF./MODEL #	ACCESSORY	MOUNTING HEIGHT (A.F.F.)	REMARKS
T1	ASI 0030	SURFACE MOUNTED DOUBLE ROLL TOILET TISSUE DISPENSER	29" A.F.F. TO TOP OF PART	
T2	ASI 0852	SURFACE MOUNTED NAPKIN DISPOSAL CABINET	30" A.F.F. TO OPERABLE PART	(1)
T3	ASI 9343	SURFACE MOUNTED SOAP DISPENSER		
T4	ASI 0462-AD9	SURFACE MOUNTED COMPACT TOWEL DISPENSER & WASTE	46" A.F.F. TO OPERABLE PART	
T5	ASI 0600 - 20 X 30	STAINLESS STEEL FRAMED MIRROR	CENTER OVER SINK	
T6	NOT USED			
T7	ASI 3801-36"	GRAB BAR	33" - 36" A.F.F.	
T8	ASI 3801-42"	GRAB BAR	33" - 36" A.F.F.	
T9	ASI 0751	HEAVY DUTY CLOTHES HOOK		

NOTES:
-REFER TO FLOOR PLAN FOR ADDITIONAL LOCATIONS.
-MODEL NUMBERS ARE BASED ON ASI (AMERICAN SPECIALTIES, INC.)
-WASHROOM ACCESSORIES. ACCEPTABLE PRODUCTS INCLUDE BOBRICK.
-SEE SHEET A001 FOR ADDITIONAL INFORMATION ON MOUNTING REQUIREMENTS.

REMARKS:
(1) MOUNT ADJACENT TO TOILET PAPER HOLDER

DIMENSIONING NOTE:
ALL DIMENSIONS ON THIS SHEET ARE "CLEAR" DIMENSIONS. COORDINATE WITH CENTERLINE DIMENSIONS SHOWN ELSEWHERE AND WITH WALL CONSTRUCTION DETAILS ON DRAWING A701 AND A.D.A. CLEARANCES ON DRAWING A001.

A.D.A. NOTE:
SEE DRAWING A001 FOR MOUNTING HEIGHTS, CLEARANCES AND OTHER INFORMATION REQUIRED FOR COMPLIANCE WITH A.D.A. AND THE FLORIDA BUILDING CODE - ACCESSIBILITY.



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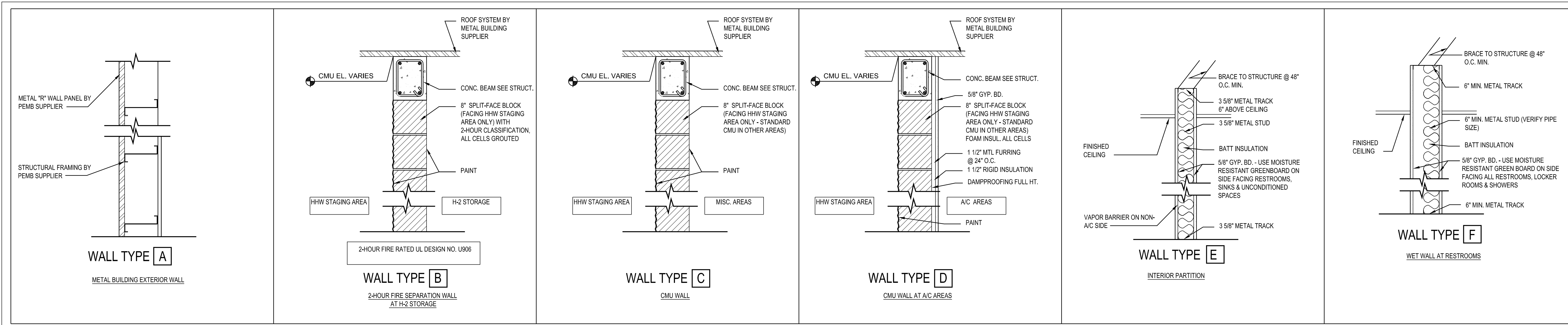
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SHEET TITLE
ENLARGED PLANS AND INTERIOR ELEVATIONS
SHEET NO.
A601

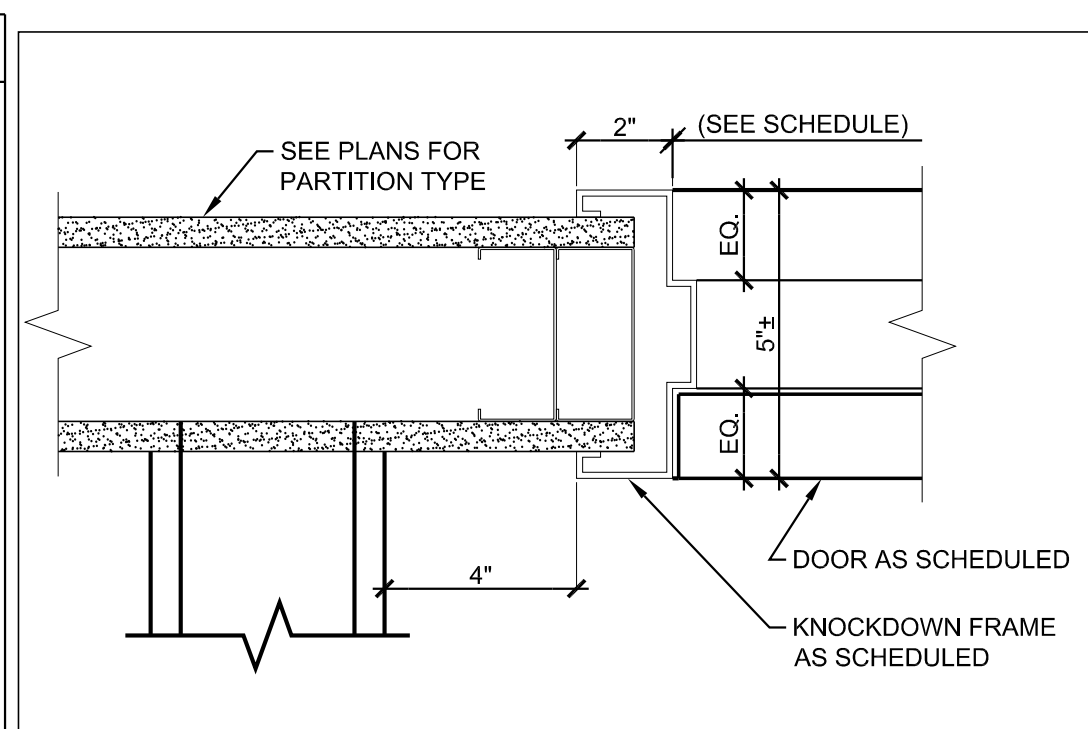
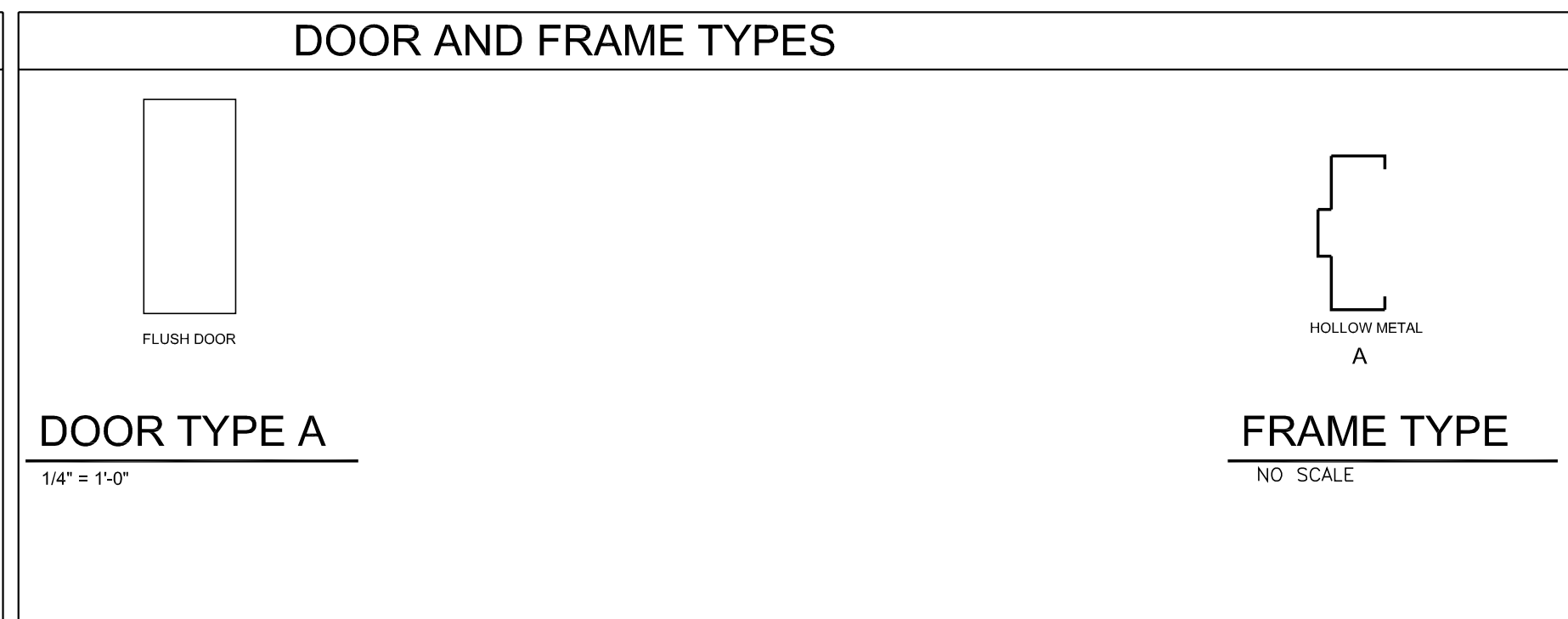
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1 WALL TYPES
SCALE: 1" = 1'-0"

DOOR SCHEDULE															
ROOM NAME	ROOM NUM.	DOOR SYMB.	SIZE	TYPE	MAT.	FRAME	FINISH DOOR/FRAME	DETAILS			HDW/GRP	FIRE LABEL	FLORIDA PRODUCT APPVL.	REMARKS	
								HEAD	SILL	JAMB					
RE-USE AREA		101	3'-0" X 7'-0"	A	HM	A	P	5/A702	6/A702	5/A702	1		22211.2		
RE-USE AREA		102	PR. 3'-0" X 7'-0"	A	HM	A	P	5/A702	6/A702	5/A702	1A		22211.2		
M/W		103	3'-0" X 7'-0"	A	HM	A	P	5/A702	6/A702	5/A702	4		22211.2		
CONF		104	3'-0" X 7'-0"	A	HM	A	P	5/A702	6/A702	5/A702	1		22211.2		
STORAGE		105	3'-0" X 7'-0"	A	HM	A	P	5/A702	6/A702	5/A702	1	1	22211.2		
H-2 STORAGE		106	PR. 3'-0" X 7'-0"	A	HM	A	P	5/A702	6/A702	5/A702	3	90-MIN"B"	22211.2		
M/W		107	3'-0" X 7'-0"	A	HM	A	P	3/A701	--	3/A701	4				
CONF		108	3'-0" X 7'-0"	A	HM	A	P	3/A701	--	3/A701	2				
OFFICE		109	3'-0" X 7'-0"	A	HM	A	P	3/A701	--	3/A701	2				
SINGLE STREAM		110	PR. 3'-0" X 7'-0"	A	HM	A	P	SEE P.E.M.B. DRAWINGS			1A		22211.2		
LOADING DOCK		111	3'-0" X 7'-0"	A	HM	A	P	SEE P.E.M.B. DRAWINGS			1		22211.2		
SINGLE STREAM		112	3'-0" X 7'-0"	A	HM	A	P	SEE P.E.M.B. DRAWINGS			1		22211.2		
LOAD-OUT WELL		113	3'-0" X 7'-0"	A	HM	A	P	SEE P.E.M.B. DRAWINGS			1	1	22211.2		
RE-USE AREA		114	3'-0" X 7'-0"	A	HM	A	P	3/A701	--	3/A701	2	1			
OVERHEAD DOORS															
STORAGE		OH1	8'-0" X 14'-0"										10706-R3	MOTOR OP.	
SINGLE-STREAM		OH2	16'-0" X 16'-0"										10706-R3	MOTOR OP.	
SINGLE-STREAM		OH3	16'-0" X 27'-0"										10706-R3	MOTOR OP.	
SINGLE-STREAM		OH4	16'-0" X 27'-0"										10706-R3	MOTOR OP.	
LOAD-OUT WELL		OH5	16'-0" X 18'-0"										10706-R3	MOTOR OP.	

DOOR NOTES & LEGEND	
MATERIAL	NOTES
HM HOLLOW METAL, INSULATED	1. ALL THRESHOLDS SHALL BE A.D.A. COMPLIANT WITH MAX ELEVATION CHANGE OF 1/2".
FINISH	2. VERIFY ALL LOCKING REQUIREMENTS WITH OWNER.
P PAINTED	



2 DOOR SCHEDULE
SCALE: N/A

3 DOOR JAMB/HEAD DETAIL
SCALE: 3" = 1'-0"

FINISH NOTES:

- FIELD CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO ORDERING MATERIALS.
- FINISH SCHEDULE PROVIDED AS "BASIS OF DESIGN" AND FOR PRICING PURPOSES. PROVIDE SAMPLES OF ALL SELECTIONS TO OWNER FOR APPROVAL PRIOR TO PROCEEDING WITH THE WORK.
- ADHERE TO ALL CURRENT MANUFACTURER WRITTEN SPECIFICATIONS FOR APPROVED INSTALLATION METHODS (INCLUDING, BUT NOT LIMITED TO, ADHESIVE TYPES, CUTTING METHODS, SEALERS AND PRIMERS)
- ALL PAINT SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN SPECIFICATIONS FOR THE PARTICULAR SURFACE. TWO (2) FINISH COATS MINIMUM APPLICATION AFTER ONE PRIME COAT MINIMUM.
- ALL CHANGES IN FLOOR FINISH MATERIALS OCCURRING AT DOORWAYS SHALL BE AT THE CENTERLINE OF THE DOORWAY. PROVIDE TRANSITION ACCESSORIES AS REQUIRED.
- PATCH ALL HOLES IN SURFACES TO BE PAINTED PRIOR TO PRIMING.

FINISH SCHEDULE:

- ALL AIR-CONDITIONED ROOMS:
- FLOORS: VINYL TILE TO BE SELECTED FROM STANDARD PRODUCTS SUBMITTED BY CONTRACTOR.
 - TYPICAL WALLS: PAINT P-1
 - RESTROOM WALLS: F.R.P. PANELING TO 48" A.F.F., PAINT P-1 ABOVE
 - BASE: VINYL BASE
 - DOORS AND DOOR FRAMES: PAINT P-1
 - CEILINGS: SEE CEILING PLAN

- HHW STAGING, H-2 STORAGE AND SINGLE-STREAM BUILDING:
- FLOORS: SEALED CONCRETE, LIGHT BROOM FINISH
 - CMU WALLS: PAINT P-2
 - METAL BUILDING WALLS: N/A
 - BASE: N/A
 - DOORS AND DOOR FRAMES: PAINT P-2
 - CEILINGS: N/A

FINISH SCHEDULE BASIS OF DESIGN:

- VINYL WALL BASE:
BURKE FLOORING 502 BROWN 4" COVE
- PAINT P-1:
COLOR MATCH: BENJAMIN MOORE LINEN SAND 2151-60
EPOXY COATING
- PAINT P-2:
EXTERIOR GRADE LATEX T.B.D. COLOR MATCH TO PEMB PANELS OR AS DIRECTED BY OWNER.

4 FINISH SCHEDULE AND NOTES
SCALE: N/A



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SHEET TITLE
WALL TYPES, DOOR &
FINISH SCHEDULE
SHEET NO.
A701

PERMIT SET



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INDIAN RIVER COUNTY LANDFILL
HOUSEHOLD HAZARDOUS WASTE
AND RECYCLING FACILITY
Indian River County, Florida

NO.	REVISIONS	DATE

JOB NO.
2016
ISSUE DATE:
7/2/2021
DRAWN BY:
MI

SHEET TITLE
WINDOW SCHEDULE
AND DETAILS
SHEET NO.
A702

PERMIT SET

WINDOW TYPE A
1/4" = 1'-0"

WINDOW NOTES & LEGEND

- ALL EXTERIOR GLAZING SHALL BE IMPACT RESISTANT IN ACCORDANCE WITH FLORIDA BUILDING CODE AND PRODUCT APPROVALS. EXTERIOR GLAZING CHARACTERISTICS SHALL BE AS FOLLOWS (SEE ALSO GLAZING DIAGRAM ON THIS SHEET):
 - DOUBLE-GLAZED WINDOWS: LAMINATED GLASS OUTER PANE W/P.V.B. INTERLAYER; TOTAL THICKNESS 1 5/16".
 - ALL VISION GLAZING SHALL HAVE TINTED INTERLAYER.
 - INTERLAYER TINT SHALL BE SELECTED FROM MANUFACTURER'S STANDARD COLORS.
- BASIS OF DESIGN FOR STOREFRONT WINDOW SYSTEM IS KAWNEER IR501. SEE SHEET G000 FOR APPLICABLE FLORIDA PRODUCT APPROVAL NUMBERS. NO SUBSTITUTION OF ALTERNATE PRODUCTS WILL BE PERMITTED WITHOUT DOCUMENTATION OF EQUIVALENT PERFORMANCE AND SUBMISSION OF FLORIDA PRODUCT APPROVAL INFORMATION FOR THE PROPOSED ALTERNATE PRODUCTS.
- ALL STOREFRONT FRAMES SHALL BE ALUMINUM WITH A POWDER-COAT FINISH; COLOR TO BE SELECTED FROM MANUFACTURER'S STANDARD COLORS.
- SEE STRUCTURAL DRAWINGS FOR WIND LOAD INFORMATION.
- DIMENSIONS SHOWN REFER TO MASONRY ROUGH OPENINGS. SUPPLIER SHALL VERIFY REQUIRED MEASUREMENTS AND SUBMIT FULL SHOP DRAWINGS FOR REVIEW PRIOR TO MANUFACTURING WINDOWS.

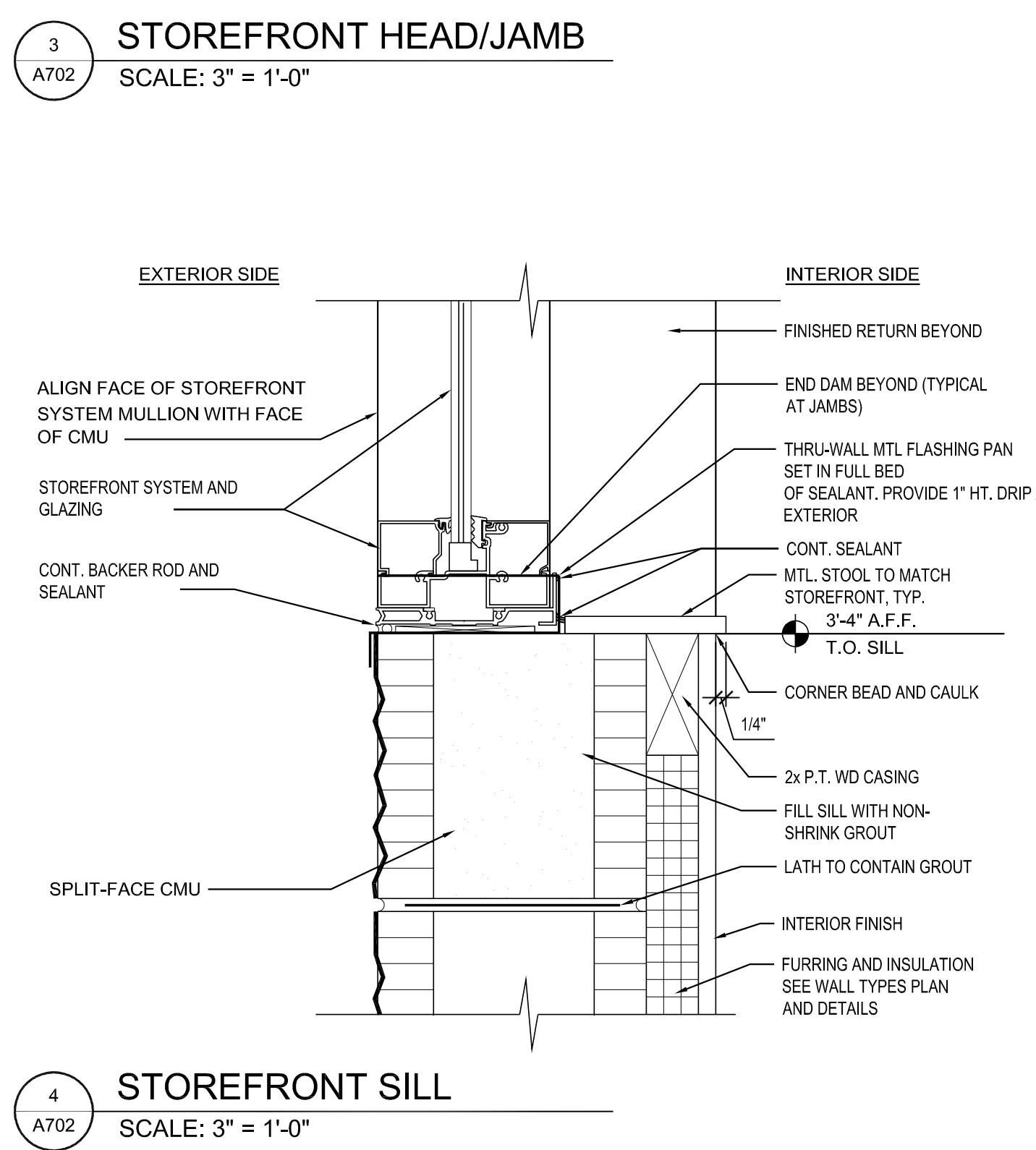
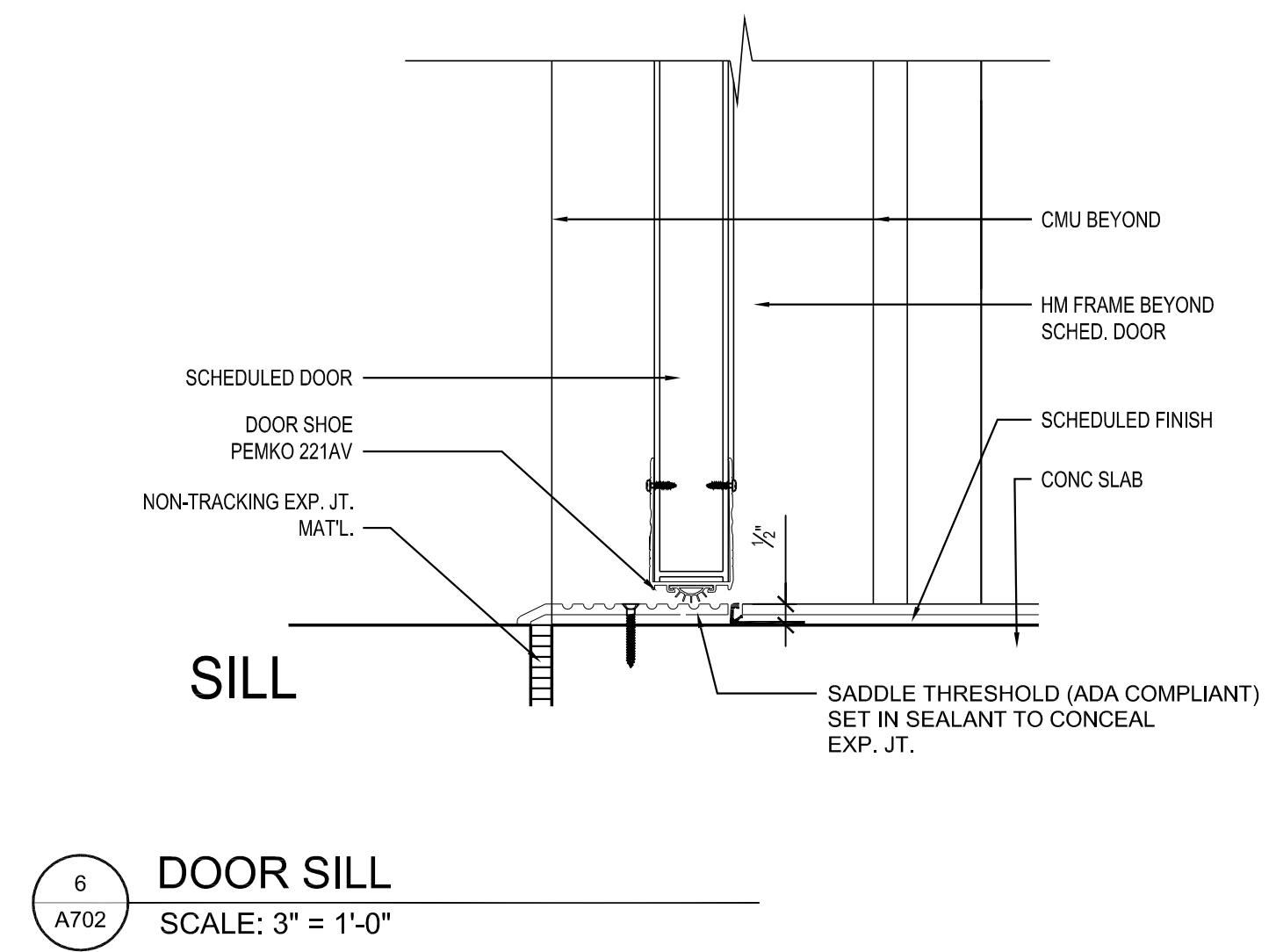
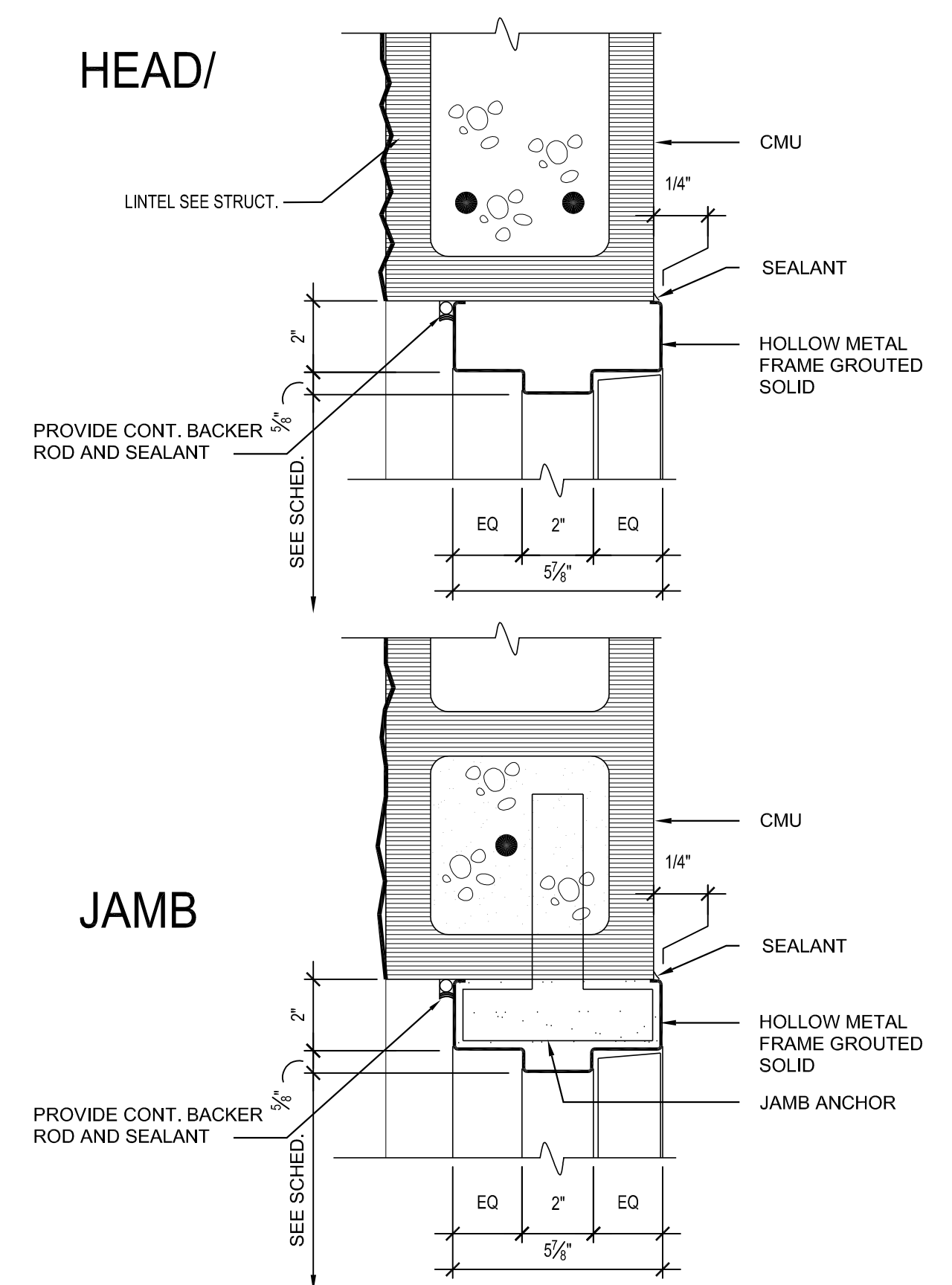
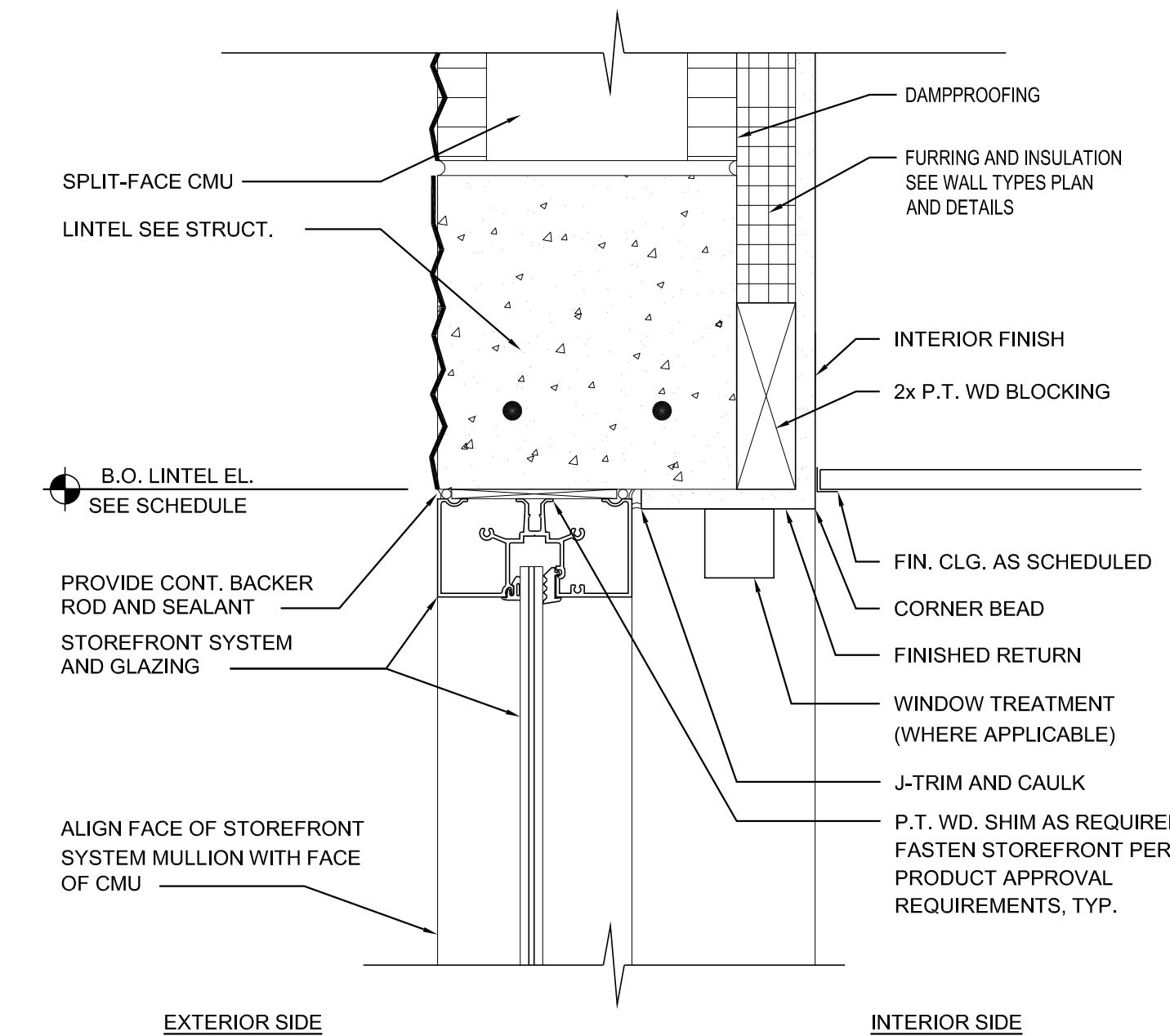
WINDOW SCHEDULE

WINDOW TYPE	LOCATION ZONE	DESIGN PRESSURE	FLORIDA PRODUCT APPROVAL	APPROVAL DATE	NOA #	MANUFACTURER	MODEL #	OPENING SIZE	FRAME DETAILS		
									HEAD	SILL	JAMB
A	5	+ / - 65 psf	FL 8787.2	11 / 02 / 2017	11-0915.06	KAWNEER	IR501	5'-0" X 4'-0"	3/A702	4/A702	3/A702

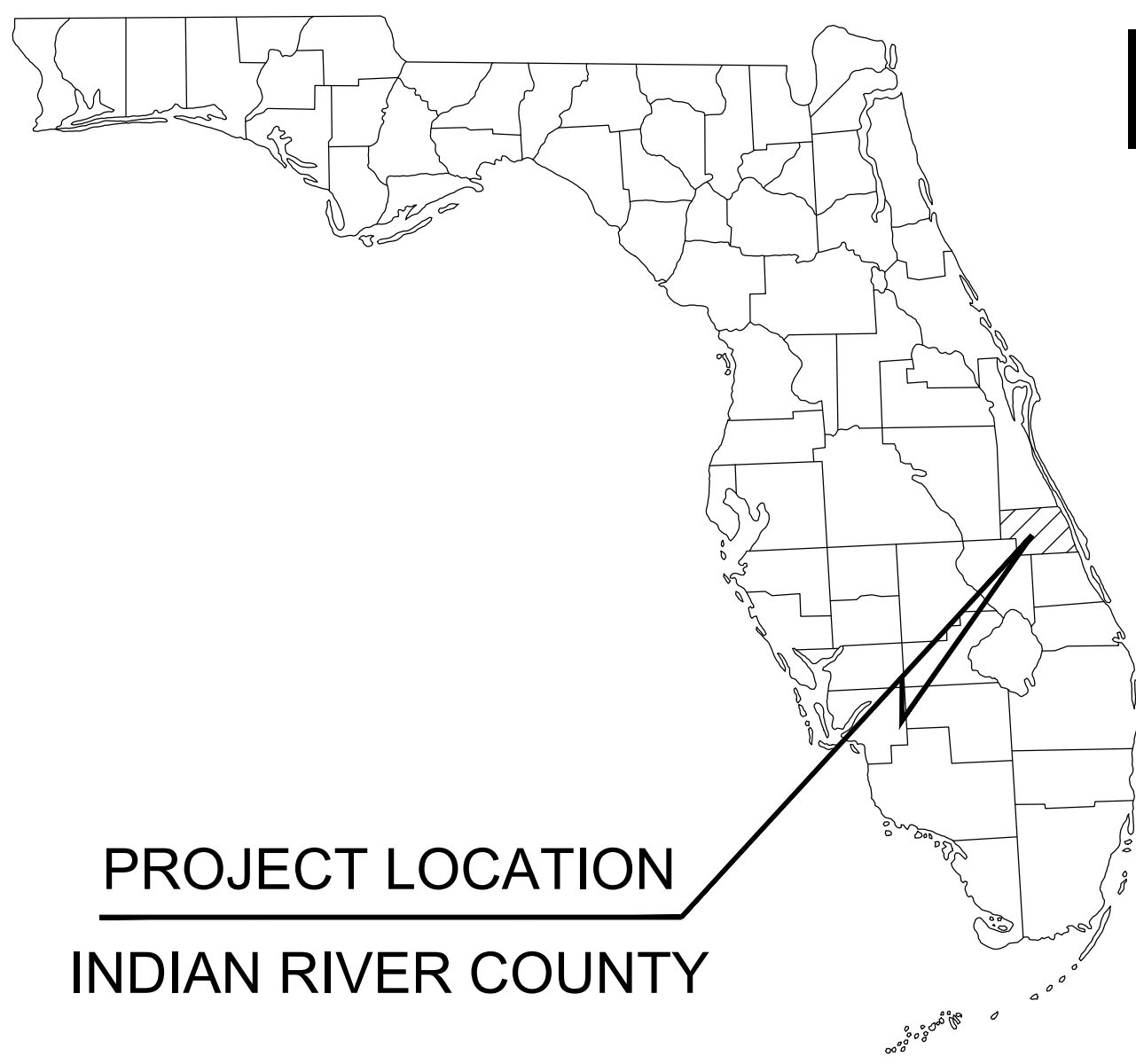
GLAZING CHARACTERISTICS

1 WINDOW TYPES
SCALE: 1/4" = 1'-0"

2 WINDOW SCHEDULE
SCALE: N/A



Plotted By: Rodriguez, Rebecca - Sheet Set: IRC LANDFILL - Layout: C-100 COVER SHEET - November 17, 2021 - ID: 45:41:0m - K:\vmb-civil\143228000 - irc hhw and recycling facility\CIVIL\CADD\plansheets\C-100 COVER SHEET.dwg
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IRC HHW AND RECYCLING FACILITY

1327 74TH AVENUE SW, VERO BEACH, FL 32968

INDIAN RIVER COUNTY

TAX PARCEL ID: 33-28-25-00001-0090-00001.0

JULY 2021

BUILDING DEPARTMENT SUBMITTAL

PROJECT LOCATION
INDIAN RIVER COUNTY

LIST OF CONTACTS:

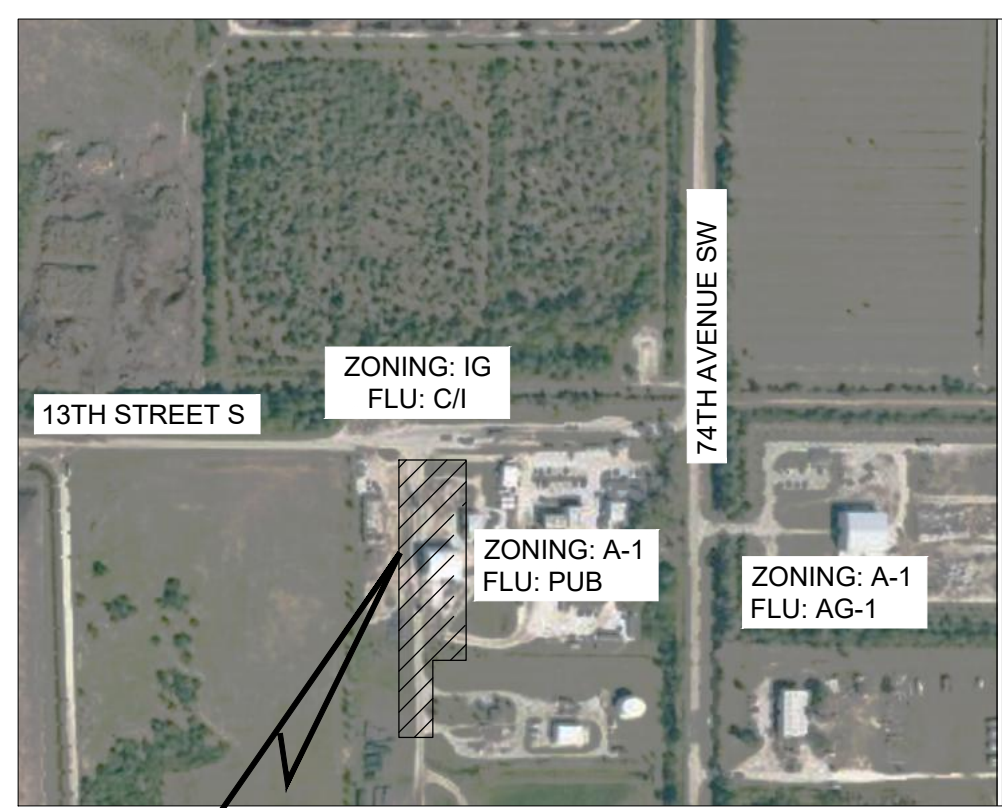
- | | |
|---|---|
| SURVEYOR
DAVID TAYLOR P.S.M.
MASTELLER, MOLER & TAYLOR, INC.
1655 27TH STREET, SUITE 2
VERO BEACH, FL 32960
PHONE: 772-564-8050 | CIVIL ENGINEER
BARTON FYE, P.E.
KIMLEY-HORN AND ASSOCIATES, INC.
355 ALHAMBRA CIRC #1400
CORAL GABLES, FL 33134
PHONE: 305-535-7712 |
| LANDSCAPE ARCHITECT
MATT WISNIEWSKI
KIMLEY-HORN AND ASSOCIATES, INC.
355 ALHAMBRA CIRC #1400
CORAL GABLES, FL 33134
PHONE: 305-535-7775 | GEOTECHNICAL ENGINEER
DAVID ANDRE, P.E.
ANDERSEN ANDRE CONSULTING ENGINEERS, INC.
834 SW SWAN AVENUE
PORT ST. LUCIE, FL 34983
PHONE: 772-807-9191 |
| | ARCHITECT
MARCOS IBARGUEN
CMK DESIGN STUDIO, INC.
6822 22ND AVENUE, #148
ST. PETERSBURG, FL 33710
PHONE: 813-362-6381 |

LIST OF CONTACTS:

- | | |
|--|---|
| STORMWATER
ST. JOHN RIVER
WATER MANAGEMENT DISTRICT
525 COMMUNITY COLLEGE PARKWAY
PALM BAY, FL 32909
321-676-6602
CONTACT: MARK CROSBY | PLANNING AND ZONING
INDIAN RIVER COUNTY
PLANNING DEPARTMENT
1801 27TH STREET
VERO BEACH, FL 32960
772-226-1235
CONTACT: JOHN MCCOY |
| WATER AND SEWER
INDIAN RIVER COUNTY
DEPARTMENT OF UTILITY SERVICES
1801 27TH STREET
VERO BEACH, FL 32960
772-226-1824
CONTACT: KEVIN OSTHUS | BUILDING DIVISION
INDIAN RIVER COUNTY
BUILDING DEPARTMENT
1801 27TH STREET
VERO BEACH, FL 32960
772-226-1268
CONTACT: SCOTT MCADAMS |
| FIRE PREVENTION
INDIAN RIVER COUNTY FIRE DEPARTMENT
1800 27TH STREET
VERO BEACH, FL 32960
772-567-3160 X109
CONTACT: LT. SANDRA SEELEY, FIRE CHIEF | TELEPHONE PROVIDER
AT&T DISTRIBUTION
600 NW 79th AVE
ROOM 336
MIAMI, FL 33126
305-260-8243
CONTACT: DINNO FARRUGGIO |
| ENGINEERING
INDIAN RIVER COUNTY PUBLIC WORKS DEPARTMENT
1800 27TH STREET
VERO BEACH, FL 32960
3772-226-1283 | ELECTRIC PROVIDER
FLORIDA POWER AND LIGHT
425 N WILLIAMSON BLVD.
DAYTONA BEACH, FL 32114
386-586-6403
CONTACT: JOEL BRAY |
| NATURAL GAS PROVIDER
CITY GAS COMPANY FLORIDA
4180 S. U.S. HWY 1
ROCKLEDGE, FLORIDA 32955
321-638-3419
CONTACT: HOLLY COOMBS | FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT FOUR
3400 WEST COMMERCIAL BLVD
FT. LAUDERDALE, FL 33309
954-777-4377
CONTACT: CHRISTINE NABONG BACOMO |

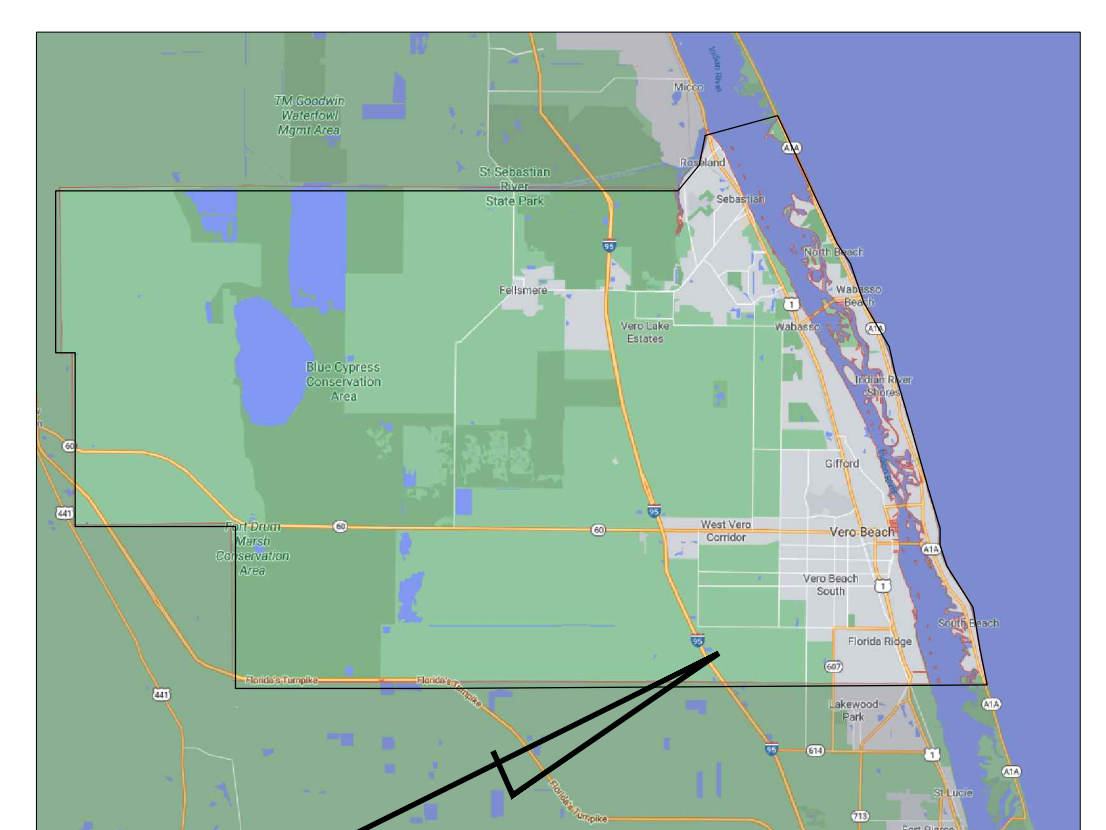
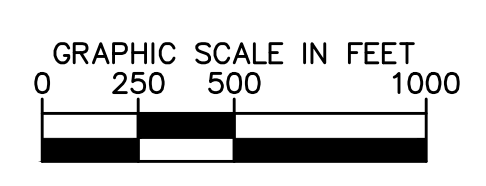
OWNER:

INDIAN RIVER COUNTY
 1325 75TH AVENUE SW
 VERO BEACH, FLORIDA 32968
 772-226-3211

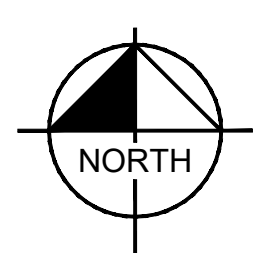


VICINITY MAP

SUBJECT PROPERTY



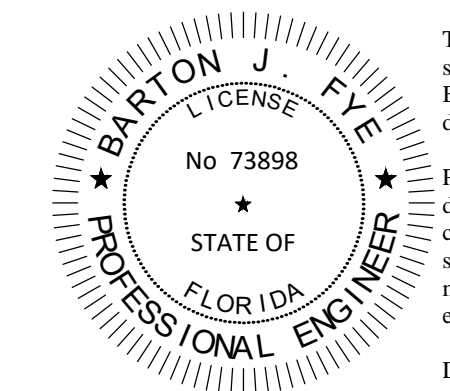
SITE LOCATION MAP
N.T.S.



Sheet List Table	
Sheet Number	Sheet Title
C-100	COVER SHEET
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C-200	DEMOLITION NOTES
C-210	DEMOLITION PLAN I
C-211	DEMOLITION PLAN II
C-300	EROSION CONTROL NOTES
C-310	EROSION CONTROL PLAN I
C-311	EROSION CONTROL PLAN II
C-320	EROSION CONTROL DETAILS
C-400	OVERALL SITE PLAN
C-410	SITE PLAN I
C-411	SITE PLAN II
C-412	SITE PLAN DETAILS
C-420	MANEUVERABILITY
C-450	FIRE ACCESS PLAN
C-500	OVERALL DRAINAGE PLAN
C-510	PAVING, GRADING AND DRAINAGE PLAN
C-511	PAVING, GRADING AND DRAINAGE PLAN II
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C-520	RETENTION AREAS CROSS SECTION
C-521	RETENTION AREAS CROSS SECTION
C-710	WATER AND SEWER PLANS I
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C-714	INDIAN RIVER COUNTY SEWER DETAILS
C-715	INDIAN RIVER COUNTY SEWER DETAILS
C-800	LIGHTING PLAN



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 355 ALHAMBRA CIRCLE, SUITE 1400, CORAL GABLES, FL 33134
 PHONE: 305-673-2025
 WWW.KIMLEY-HORN.COM REGISTRY 696



This item has been digitally signed and sealed by Barton J. Fye, P.E. on the date adjacent to the seal.

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

Date: 11/17/2021



Call 811 or www.sunshine811.com two full business days before digging to have utilities located and marked.

Check positive response codes before you dig!

OWNER CHANGES	No.	REVISIONS	DATE	BY

Kimley-Horn
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 355 ALHAMBRA CIRCLE, SUITE 1400, CORAL GABLES, FL 33134
 PHONE: 305-673-2025
 WWW.KIMLEY-HORN.COM REGISTRY 696

LICENSED PROFESSIONAL	
KHA PROJECT	14-3228000
DATE	JULY 2021
SCALE AS SHOWN	MRC
DESIGNED BY	RMR
DRAWN BY	BF
CHECKED BY	BF
DATE:	

COVER SHEET

IRC LANDFILL
 PREPARED FOR
 INDIAN RIVER COUNTY
 INDIAN RIVER COUNTY

SHEET NUMBER
C-100

Plotted By: Rodriguez, Rebecca - Sheet Set: IRC LANDFILL_L04004-C-110_GENERAL NOTES, November 17, 2021, 10:38:47 AM - K:\mb-ctm\143228000 - IRC LHW and recycling facility\CAD\DWG\plansheets\C-110_GENERAL NOTES.dwg
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I. GENERAL NOTES AND SPECIFICATIONS

- ALL MATERIALS AND CONSTRUCTION UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE INDIAN RIVER COUNTY PUBLIC WORKS MANUAL, THE FLORIDA BUILDING CODE, FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN STANDARDS AND SPECIFICATIONS AND ALL OTHER LOCAL, STATE AND FEDERAL REQUIREMENTS.
 - LOCATIONS, SIZE AND MATERIAL OF EXISTING UTILITIES HAVE BEEN DETERMINED FROM AVAILABLE RECORDS. NEITHER THE DEVELOPER, CLIENT, OWNER NOR THE ENGINEER OF RECORD GUARANTEES THE ACCURACY OF THIS DATA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HORIZONTALLY AND VERTICALLY LOCATE AND PROTECT ALL EXISTING UTILITIES AND STRUCTURES ENCOUNTERED DURING CONSTRUCTION. THE CONTRACTOR SHALL PHYSICALLY FIELD VERIFY BOTH THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BEAR ALL COSTS FOR THIS WORK.
 - ALL EXISTING UNDERGROUND OR ABOVEGROUND UTILITY PIPES, CABLES, DUCTS, EQUIPMENT, DEVICES, ETC. WITHIN OR OUTSIDE THE PROJECT CONSTRUCTION LIMITS WHICH ARE DAMAGED OR DISRUPTED AS A RESULT OF THE CONTRACTOR'S OPERATION, SHALL BE IMMEDIATELY REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE UTILITY OWNER. REGARDLESS OF WHETHER THEY WERE SHOWN OR NOT SHOWN ON THE PLANS OR LOCATED OR NOT BY THE OWNER'S REPRESENTATIVE, THE UTILITY COMPANY, SUNSHINE STATE ONE-CALL OF FLORIDA, ETC.
 - ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO COMMENCING ANY CONSTRUCTION WORK.
 - NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
 - ALL DEFECTIVE WORK NOT ACCEPTED BY THE ENGINEER OF RECORD, BY THE OWNER'S REPRESENTATIVE, OR BY ANY GOVERNMENTAL PERMITTING REGULATORY AGENCY SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
 - ALL STAGING AREAS SHALL BE PROPERLY FENCED AND SECURED BY THE CONTRACTOR.
 - ALL AREAS WHICH ARE BEING EXCAVATED SHALL BE PROPERLY PROTECTED AND BARRICADED BY THE CONTRACTOR. ALL TRENCH WORK SHALL COMPLY WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION EXCAVATION SAFETY STANDARDS, 29 C.F.R.S. 1926.650 SUBPART P AND THE FLORIDA TRENCH SAFETY ACT.
 - ALL EXISTING CONCRETE AND/OR ASPHALT PAVEMENT, CURB AND GUTTERS, CURBS AND WALKS, SOD, LANDSCAPING, FENCE, ETC. DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ITS ORIGINAL CONDITIONS, AT NO ADDITIONAL COST TO THE OWNER OR CLIENT.
 - TEMPORARY ASPHALT PAVEMENT SHALL BE APPLIED TO ALL TRENCHES, WITHIN AN EXISTING PAVED RIGHT OF WAY, AT THE END OF EACH WORKDAY. PLATING MAY BE USED WITH THE RIGHT-OF-WAY OWNER'S PRIOR CONSENT.
 - PROVIDE FILL TO ENSURE THAT THE FINISH GRADE (INCLUDING SOD) IN LANDSCAPE AREAS ARE AT LEVEL OF CURBS AND/OR EDGE OF SIDEWALKS.
 - WHERE NEW GRADES BLEND INTO EXISTING GRADES IN LANDSCAPE AREAS PROVIDE A UNIFORM TRANSITION. PROTECT ALL EXISTING PAVEMENT AND LANDSCAPE AREAS THAT ARE TO REMAIN.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING UNINTERRUPTED WATER AND SEWER SERVICE DURING THE CONSTRUCTION OF THE TIE-IN CONNECTION OF ALL PROPOSED WATER OR SANITARY SEWER SYSTEMS. TO ANY EXISTING WATER OR SANITARY MAINS AND SERVICE LINES. ABANDONMENT SHALL NOT OCCUR UNTIL THE PROPOSED WORK HAS BEEN APPROVED AND ACCEPTED FOR OPERATION BY THE ENGINEER OF RECORD AND INDIAN RIVER COUNTY PUBLIC WORKS DEPARTMENT. ALL EXISTING FIRE HYDRANTS SHALL BE RECONNECTED TO THE PROPOSED WATER MAIN. INDIAN RIVER COUNTY PUBLIC WORKS DEPARTMENT FIELD OPERATIONS SECTION WILL COORDINATE IN THE FIELD WITH THE WATER DISTRIBUTION DIVISION TO DETERMINE IF AN EXISTING FIRE HYDRANT SHALL BE REPLACED AS NEEDED OR REQUIRED.
 - THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE PUBLIC HEALTH AND ENSURE JOB SAFETY. THE CONTRACTOR SHALL CONFORM TO ALL APPLICABLE OCCUPATIONAL SAFETY & HEALTH AGENCY (OSHA) STANDARDS AND FEDERAL, STATE AND LOCAL GOVERNMENT SAFETY REQUIREMENTS.
 - THE CONTRACTOR SHALL ENSURE THAT OVERFLOWS OR RAW SEWAGE SPILLS DO NOT OCCUR DURING CONSTRUCTION OF PROPOSED SANITARY SEWER TIE-IN CONNECTIONS.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMPLEMENT STORM WATER POLLUTION PREVENTION AND EROSION CONTROL MEASURES AND PRACTICES DURING CONSTRUCTION IN ACCORDANCE WITH THE EROSION CONTROL PLAN/DETAILS AND THE CURRENT FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (N.P.D.E.S.) PERMIT FOR CONSTRUCTION ACTIVITIES REQUIREMENTS.
 - CONTRACTOR SHALL ENSURE THAT ALL STORM WATER RUN-OFF WITHIN THE CONSTRUCTION AREA IS CONTAINED ON-SITE.
 - WHEN POWER POLES ARE ADJACENT TO ANY PROPOSED UTILITY, THE CONTRACTOR SHALL PROVIDE PROPER SHORING OR OTHER SUITABLE SUPPORT DURING CONSTRUCTION. THE SHORING AND SUPPORT METHODS SHALL BE APPROVED BY THE UTILITY COMPANY'S ENGINEERING DEPARTMENT.
 - DUE TO FEDERAL REGULATIONS, THE CONTRACTOR MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES AND MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE WITHIN THE PROJECT AREA.
 - LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER EXISTING SITE IMPROVEMENTS, FEATURES AND CONDITIONS SHOWN ON THE DRAWINGS WERE OBTAINED FROM THE FOLLOWING TOPOGRAPHIC BOUNDARY SURVEY SPECIFICALLY PREPARED FOR THIS PROJECT:
- TITLE: "MAP OF SURVEY"
 DATE: 8/21/20
 MASTELLER, MOLER & TAYLOR, INC.
 1655 27TH STREET, SUITE 2
 VERO BEACH, FL 32960
 (772) 564-8050 PHONE
 (772) 794-0647 FAX
- ALL ELEVATIONS SHOWN ARE BASED ON THE 1988 NORTH AMERICAN VERTICAL DATUM (NAVD88), ELEVATION CONVERSION FACTOR FOR THE SITE: NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) = NAVD88 + 1.43'
 - ALL UTILITY CONNECTIONS TO THE BLDG. SHALL BE CONSTRUCTED AND CAPED OR PLUGGED 18 FEET FROM THE PROPOSED BUILDING. CONTRACTOR SHALL PERFORM TIE-INS TO THE BUILDING. THE COST ASSOCIATED WITH THE TAPPING/PLUGGING OF THE UTILITIES SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.
 - CONTRACTOR SHALL COORDINATE WORK WITH OTHER UTILITY AND BUILDING TRADES WORKING ON THIS OR ADJACENT PROJECTS.
 - THE CONTRACTOR SHALL TAKE SPECIAL NOTE OF THE EXISTING SOIL CONDITIONS THROUGHOUT THIS PROJECT. ANY SPECIAL SHORING, SHEETING AND/OR OTHER PROCEDURES NECESSARY TO PROTECT ADJACENT PROPERTY, EITHER PUBLIC OR PRIVATE, DURING CONSTRUCTION ACTIVITIES. ALL COST ASSOCIATED WITH SUCH WORK SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
 - AFTER LOCATING AND VERIFYING EXISTING UTILITY TIE IN POINTS, CONTRACTOR IS TO VERIFY THAT DESIGN COMPONENTS SUCH AS, BUT NOT LIMITED TO, PERCENT SLOPE, INVERT, TAP LOCATIONS, PIPE RUNS, INFRASTRUCTURE DEPTH, ETC. WILL STILL BE IN ACCORDANCE WITH THE ENGINEERING PLANS.
 - IF IT SHOULD BECOME NECESSARY TO STOP WORK FOR INDEFINITE PERIODS, THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PREVENT DAMAGE OR DETERIORATION OF THE WORK ALREADY PERFORMED.

1

II. PRE-CONSTRUCTION RESPONSIBILITIES

- THE INFORMATION PROVIDED IN THESE PLANS IS TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT ANY INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED AND UPON WHICH THEIR BIDS WILL BE BASED.
- CONTRACTOR MUST CONTACT THE ARCHITECT/ENGINEER OF RECORD TO ARRANGE FOR A PRE-CONSTRUCTION MEETING, A MINIMUM 2 BUSINESS DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE-CALL OF FLORIDA (1-800-432-4770) AND ALL KNOWN EXISTING UTILITY OWNERS AT LEAST 2 BUSINESS DAYS BEFORE DIGGING TO ALLOW FOR FIELD LOCATION OF UNDERGROUND UTILITIES. CONTRACTOR SHALL ASSIST THE UTILITY COMPANIES IN THEIR EFFORTS TO FIELD VERIFY UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BEAR ALL COSTS FOR THIS WORK.
- THE CONTRACTOR SHALL APPLY FOR AND PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES, TAXES, ROYALTIES & FEES, AND GIVE ALL NOTICES NECESSARY TO COMPLETE THIS PROJECT.
- THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO ARRANGE FOR ANY REMOVAL, RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURES, ETC. AS NECESSARY TO COMPLETE THE WORK, IF APPLICABLE.

III. OBSERVATIONS AND TESTING

- THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST 2 BUSINESS DAYS IN ADVANCE OF PERFORMING ALL CIVIL RELATED TESTS. UNLESS AUTHORIZED BY THE ENGINEER OF RECORD, THE CONTRACTOR SHALL NOT PROCEED WITH TESTING UNLESS THE ENGINEER OR A DESIGNATED REPRESENTATIVE IS PRESENT TO WITNESS THE TESTS.
- THE ENGINEER OF RECORD WILL REQUIRE THAT THE FOLLOWING TESTS BE PERFORMED WITH ACCEPTABLE RESULTS:
 - A. SANITARY SEWAGE COLLECTION SYSTEM:
 - I. LAMPING TEST FROM MANHOLE TO MANHOLE, INCLUDING CONNECTING MANHOLE
 - II. INFILTRATION/EXFILTRATION TEST UP TO THE CONNECTING MANHOLE
 - III. PRESSURE TEST AS REQUIRED BY DRER
 - B. STORM DRAINAGE-(EXFILTRATION TRENCH DEPTH)
 - I. EXFILTRATION TRENCH DEPTH
 - II. LAMPING TEST FROM MANHOLE TO MANHOLE, INCLUDING CONNECTING MANHOLE (IF APPLICABLE)
 - C. DRAINAGE WELL SPECIFIC CAPACITY TEST.
 - D. WATER SYSTEM-(PRESSURE TEST AND BACTERIOLOGICAL TEST)
 - E. SUBGRADE - SUBMIT AND HAVE APPROVED DENSITIES PRIOR TO PLACEMENT OF ROCK.
 - F. LIME ROCK BASE - SUBMIT AND HAVE APPROVED DENSITIES AND AS-BUILTS PRIOR TO THE PLACEMENT OF ANY ASPHALT. (FLAT BOARDING ALSO REQUIRED.)
 - G. ASPHALT PAVEMENT
 - H. FINAL WALK-THROUGH INSPECTION - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL APPLICABLE REGULATORY AGENCIES FOR INSPECTION REQUIREMENTS.
 - I. CONCRETE FORMWORK AND ADA SLOPE VERIFICATIONS.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE FOLLOWING EVENTS:
 - A. PRIOR TO PLACING BALLAST ROCK WITHIN EXFILTRATION TRENCH AND PIPE RUNS TO MEASURE DEPTH AND WIDTH, AS WELL AS DIRECTIONS RESPECTIVELY.
 - B. PRIOR TO BACKFILLING WATER MAINS AND SERVICES
 - C. PRIOR TO BACKFILLING SANITARY SEWER MAINS AND SERVICES
 - D. AFTER COMPACTION OF LIMEROCK BASE AND PRIOR TO PLACEMENT OF FIRST LIFT OF ASPHALT
 - E. AFTER 2ND LIFT AND CONCRETE PLACEMENT OF PEDESTRIAN PATHWAYS
 - F. INSTALLING CONNECTIONS TO EXISTING WATER AND SEWER MAINS/SERVICES AFTER SECOND LIFT AND CONCRETE PLACEMENT OF PEDESTRIAN PATHWAYS.
 - G. AT SUBSTANTIAL COMPLETION
 - H. FINAL INSPECTION

UNLESS AUTHORIZED BY THE ENGINEER OF RECORD, THE CONTRACTOR SHALL NOT PROCEED WITH THESE ACTIVITIES, UNLESS THE ENGINEER OR A DESIGNATED REPRESENTATIVE IS PRESENT TO PERFORM AN INSPECTION.

4. SHOULD THE CONTRACTOR FAIL TO GIVE THE ENGINEER OF RECORD ADVANCE NOTICE OF TESTING AND INSPECTIONS AS SPECIFIED ABOVE, THE ENGINEER SHALL RESERVE THE RIGHT TO REFUSE ISSUANCE OF ANY CERTIFICATIONS OF COMPLETION AND FINAL INSPECTIONS, AND RESERVES THE RIGHT TO RECOMMEND THAT ANY CONTRACT AMOUNTS STILL HELD IN RETAINAGE NOT BE RELEASED. CITY INSPECTOR REPORTS SHALL NOT BE ACCEPTED AS A SUBSTITUTE FOR THE ENGINEER'S PRESENCE AT THE TESTING AND INSPECTION INTERVALS SPECIFIED ABOVE.

IV. SHOP DRAWINGS

- PRIOR TO CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD FOR THE FOLLOWING ITEMS:
 - A. DRAINAGE STRUCTURES, INCLUDING CATCH BASINS, WELL BOXES, PUMPS, MANHOLES/INLET FRAMES/GRATES, BAFFLES, ETC.
 - B. ALL DRAINAGE PIPES.
 - C. TRENCH DRAINS.
 - D. EXFILTRATION FILTER FABRIC
 - E. ALL WATER AND SEWER SYSTEM COMPONENTS
 - F. ASPHALT PAVEMENT MIX DESIGN
 - G. LIMEROCK MATERIAL
 - H. CONCRETE MIX FOR PAVEMENT
 - I. MATERIAL SUBSTITUTION REQUESTS
 - J. EROSION CONTROL MATERIALS
 - K. FILL MATERIAL.
- ALL PRECAST STRUCTURAL DRAWINGS MUST BE SIGNED AND SEALED BY A STATE OF FLORIDA LICENSED ENGINEER OF RECORD STATING THAT THE STRUCTURE(S) MEETS THE H20 LOAD RATING REQUIREMENTS. STRUCTURAL SHOP DRAWINGS WILL BE REJECTED AND NOT REVIEWED IF NOT SEALED BY A FLORIDA LICENSED ENGINEER.

IN ADDITION, SOME CITIES, COUNTIES, STATE AND/OR NATIONAL REGULATORY AGENCIES REQUIRE THEIR OWN INDIVIDUAL REVIEW AND APPROVAL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY SHOP DRAWING APPROVALS AS REQUIRED.

V. TEMPORARY FACILITIES

- TEMPORARY FACILITIES
 - A. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, AND ELECTRICITY, DURING CONSTRUCTION.
 - B. THE CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION, IF APPLICABLE.
 - C. CONTRACTOR SHALL OBTAIN THE ENGINEERING DESIGN AND PERMIT FOR SUCH FACILITIES AT THE CONTRACTOR'S SOLE COST.
- TRAFFIC REGULATION
 - A. THE CONTRACTOR SHALL PROVIDE ALL MAINTENANCE OF TRAFFIC DURING CONSTRUCTION. TO INCLUDE BUT IS NOT LIMITED TO WARNING SIGNALS, SIGNS, LIGHTS AND FLAG PERSONS AS NECESSARY WITHIN PUBLIC RIGHT-OF-WAYS IN ACCORDANCE WITH M.U.T.C.D. AND INDIAN RIVER COUNTY WORKS DEPARTMENT.
 - B. CONTRACTOR SHALL DIRECT ENTERING AND EXITING RECYCLING TRUCKS TO EXISTING 80' X 240' CONCRETE PAD FOR MATERIAL DROP OFF.
 - C. CONTRACTOR SHALL DIRECT ENTERING AND EXITING SEMI TRUCKS LOADED FOR DELIVERY AT THE EXISTING 80' X 240' CONCRETE PAD. SEMI TRUCKS LOADED AT THE EXISTING 80' X 240' CONCRETE PAD ARE ROUTED FOR DELIVERY TO ST. LUCIE COUNTY. A TEMPORARY TRAFFIC PLAN FOR THESE ACTIVITIES SHALL BE PROVIDED BY THE CONTRACTOR.
 - D. ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE PROPERLY MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC AT ALL TIMES. SPECIAL PRECAUTION IS TO BE TAKEN IN PATHS OF EGRESS.
 - E. NO TRENCHES OR HOLES NEAR WALKWAYS, IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE INDIAN RIVER COUNTY PUBLIC WORKS DEPARTMENT

VI. PROJECT CLOSE OUT

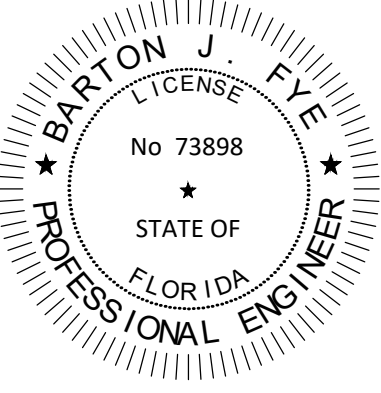
- CLEANING UP
 - A. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER AND THE PAVED AREAS SHALL BE SWEEPED BROOM CLEAN. UPON FINAL CLEANUP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH, AND THE PAVED AREAS SHALL BE BROOMED AND PRESSURE CLEANED.
 - B. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS/HER WORK, EQUIPMENT AND/OR EMPLOYEES TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE COMMENCEMENT OF OPERATIONS AND TO THE OWNER'S SATISFACTION.
 - C. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZED EARTH, CURBS, DRIVEWAYS, SIDEWALKS, FENCES, MAILBOXES, SIGNS AND ANY OTHER IMPROVEMENTS REMOVED DURING CONSTRUCTION WITH THE SAME TYPE OF MATERIAL AND TO THE CONDITION WHICH EXISTED PRIOR TO THE COMMENCEMENT OF OPERATIONS AND TO THE OWNER'S SATISFACTION.
 - D. WHERE MATERIAL OR DEBRIS HAVE WASHED OR FLOWED INTO, OR HAVE BEEN PLACED IN WATER COURSES, DITCHES, DRAINS, CATCH BASINS, OR ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF DURING THE PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION. ANY ADVERSE EFFECTS OR BUILDUP IN PUBLIC INFRASTRUCTURE WILL BE CLEANED AND REDUCED BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.
 - E. ALL DISPOSAL OF EXCESS AND UNSUITABLE EXCAVATED MATERIAL, DEMOLITION VEGETATION, RUBBISH AND DEBRIS SHALL BE MADE OUTSIDE THE LIMITS OF CONSTRUCTION AT A LEGAL DISPOSAL SITE PROVIDED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE, WITH THE PRIOR APPROVAL OF THE ENGINEER OF RECORD. MATERIAL CLEARED FROM THE SITE SHALL NOT BE DEPOSITED ON ADJACENT AND/OR NEARBY PROPERTY.
- PROPERTY MONUMENTS OR PERMANENT SURVEY REFERENCES, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- PROJECT RECORD DOCUMENTS
 - A. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE EXACT LOCATION, LENGTH AND ELEVATION OF ANY FACILITY NOT BUILT EXACTLY ACCORDING TO PLANS. PRIOR APPROVAL FROM THE ENGINEER OF RECORD IS REQUIRED FOR SAID FACILITIES.
 - B. AT THE COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL SUBMIT THREE (3) SIGNED & SEALED AS-BUILT DRAWINGS, SIGNED & SEALED BY A REGISTERED LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA. ADDITIONAL AS-BUILT DRAWINGS REQUIRED BY THE CITY, COUNTY, STATE AND/OR FEDERAL REGULATORY AGENCIES SHALL ALSO BE SUBMITTED ONCE REQUIRED. THE AS-BUILT DRAWINGS SHALL INDICATE LOCATION, SIZE, ELEVATION, MATERIAL, ETC., OF ALL WORK COMPLETED UNDER THIS CONTRACT AND OF ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION.

VII. STORM DRAINAGE

- WHEN EXISTING MANHOLE RINGS, CATCH BASIN GRATE AND FRAMES, VALVE BOXES, PULL BOXES OR OTHER UTILITY CASTINGS ARE ENCOUNTERED WITHIN THE PROPOSED LIMITS OF WORK THE CONTRACTOR SHALL FIELD ADJUST THE EXISTING RINGS AND FRAME, GRATE AND FRAME, VALVE BOXES OR PULL BOXES TO MATCH THE PROPOSED ELEVATION. SUCH WORK SHALL BE INCLUDED IN THE BID PRICE.
- ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS OTHERWISE INDICATED.
- UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL DRAINAGE PIPE SHALL BE HDPE DOUBLE WALLED SMOOTH INTERIOR PIPE AND SHALL MEET THE REQUIREMENTS OF AASHTO M294 TYPE S, MPT AND ASTM D2321, D3212, F1417, F477, F667 OR AS NOTED ON THE CONSTRUCTION DRAWINGS.
- CONTRACTOR SHALL VACUUM CLEAN AND REMOVE ALL SILT, SEDIMENT AND DEBRIS FROM ALL OF THE EXISTING AND PROPOSED DRAINAGE STRUCTURES AND PIPE NETWORK WITHIN THE PROJECT LIMITS PRIOR TO FINAL ACCEPTANCE OF DRAINAGE SYSTEM. ALL COST OF SUCH WORK SHALL BE INCLUDED IN THE BID PRICE.
- ALL DRAINAGE WORK SHALL CONFORM TO THE GOVERNING JURISDICTIONAL AGENCY REGULATIONS AND STANDARDS
- UNLESS OTHERWISE SPECIFIED ON THE PLANS, MINIMUM COVER OVER ALL STORM DRAINAGE PIPE SHALL BE 36-INCHES. CONTRACTOR SHALL AVOID ALL UNNECESSARY CROSSINGS BY HEAVY CONSTRUCTION EQUIPMENT DURING CONSTRUCTION.
- UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL CATCH BASINS, MANHOLES, FRAMES AND GRATES, RINGS AND COVERS, WITHIN PRIVATE PROPERTY, SHALL BE DESIGNED TO WITHSTAND AN AASHTO AND FDOT H20 LOAD RATING AND SHALL BE OBTAINED FROM PLAN SPECIFIED MANUFACTURERS OR APPROVED EQUIVALENT MANUFACTURER.
- CONTRACTOR SHALL PROVIDE A COPY OF CCTV VIDEO OF WORK PERFORMED.

VIII. EARTHWORK AND PAVING

- ALL UNDERGROUND UTILITY WORK SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF SUB BASE. ANY SUBGRADE RE-WORK DUE TO UNDERGROUND INFRASTRUCTURE INCONSISTENCIES WILL BE DONE AT THE CONTRACTOR'S EXPENSE.
- PROPOSED ASPHALT PAVEMENT SHALL BE CONNECTED TO EXISTING AS INDIAN RIVER COUNTY PUBLIC WORKS STANDARD DETAILS. CONTRACTOR SHALL MATCH EXISTING ELEVATIONS ON NEW SIDEWALK OR NEW PAVEMENT.
- SAW CUT EXISTING CONCRETE WALKS, CURB AND GUTTERS, AND ASPHALT OR CONCRETE PAVEMENT CAREFULLY AND IN A STRAIGHT LINE WHERE UNDERGROUND WORK IS REQUIRED. WHERE PROPOSED ASPHALT OR CONCRETE PAVEMENT, CURB, SIDEWALK, ETC. WILL MEET AN EXISTING LOCATION CUT CONCRETE WALKS, CONCRETE PAVEMENT, CURB AND GUTTERS AT NEAREST EXISTING JOINT.



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 Date: 11/17/2021

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OWNER CHANGES	11/16/2021	IF
	No.	
REVISIONS		DATE BY
 © 2021 KIMLEY-HORN AND ASSOCIATES, INC. 355 ALHAMBRA CIRCLE, SUITE 1400, CORAL GABLES, FL 33134 PHONE: 305-673-2025 WWW.KIMLEY-HORN.COM REGISTRY 696		
LICENSED PROFESSIONAL	KHA PROJECT 14-3228000	DATE JULY 2021
	SCALE AS SHOWN	DESIGNED BY MRG
	DRAWN BY RMR	CHECKED BY BF
		DATE:

GENERAL NOTES

IRC LANDFILL
PREPARED FOR
INDIAN RIVER COUNTY
FL

SHEET NUMBER
C-110

Plotted By:ReedRodriguez, Rebecca - Sheet Set:IRC LANDFILL - Layout C-200 DEMOLITION NOTES - November 17, 2021 10:38:54am K:\vmb-civil\14-3228000 - irc lrh and recycling facility\CIVIL\CADD\plansheets\C-200 DEMOLITION NOTES.dwg
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DEMOLITION NOTES AND SPECIFICATIONS:

SHOULD ANY SECTION OF THESE DEMOLITION NOTES BE IN DIRECT CONFLICT WITH THE PROVISIONS OR TECHNICAL SPECIFICATIONS CONTAINED IN THE CONTRACT DOCUMENTS FOR THIS PROJECT, THE MORE STRINGENT OF THE TWO SHALL GOVERN.

I. GENERAL

- 1. FOR THIS PROJECT, "OWNER" SHALL MEAN INDIAN RIVER COUNTY. "SURVEY" SHALL MEAN THE BOUNDARY SURVEY PREPARED BY MASTELLER, MOLER & TAYLOR, INC. AND "ENGINEER" SHALL MEAN THE ENGINEER OF RECORD.
- 2. EXISTING CONDITIONS, UTILITIES, STRUCTURES AND OTHER IMPROVEMENTS, AS SHOWN ON THE DEMOLITION DRAWINGS, WERE TAKEN FROM THE SURVEY (PREPARED BY MASTELLER, MOLER & TAYLOR, INC. LAST AMENDED ON 8/21/20), AND FROM INFORMATION PROVIDED BY UTILITY COMPANIES. AN ATTEMPT HAS BEEN MADE TO SHOW ALL EXISTING STRUCTURES, UTILITIES, DRIVES, WALKS, ETC., IN THEIR APPROXIMATE LOCATION. OTHERS MAY EXIST AND MAY BE FOUND UPON VISITING THE SITE. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ACCURATELY LOCATE ALL FACILITIES AND TO DETERMINE THEIR EXTENT. IF SUCH FACILITIES OBSTRUCT THE PROGRESS OF THE WORK AND ARE NOT INDICATED TO BE REMOVED OR RELOCATED, THEY SHALL BE REMOVED OR RELOCATED ONLY AS DIRECTED BY THE OWNER, ARCHITECT, OR ENGINEER OF RECORD, AT NO ADDITIONAL COST TO THE OWNER.
- 3. ORGANIZE AND PERFORM DEMOLITION WORK TO AVOID DAMAGE TO CONSTRUCTION INTENDED TO REMAIN. ANY COMPONENTS INTENDED TO REMAIN BUT DAMAGED DURING DEMOLITION WILL BE REPLACED, NEW, BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE
- 4. DEMOLITION AND REMOVAL OPERATIONS SHALL BE CONDUCTED IN AN EXPEDIENT MANNER, WITH PRECAUTIONS TAKEN TO PREVENT THE DEMOLITION SITE FROM BEING A NUISANCE.
- 5. PERFORM REMOVAL AND DEMOLITION IN ACCORDANCE WITH DEMOLITION SCHEDULE (REFER TO SECTION IV.) AND TAKE NECESSARY PRECAUTIONS TO PROTECT EXISTING ADJACENT BUILDINGS, FURNISHINGS, AND EQUIPMENT. NOTIFY THE ENGINEER OF ANY CONDITIONS THAT MAY AFFECT THE SAFETY OF OCCUPANTS OF ADJACENT BUILDINGS, THE NORMAL USE OF THESE FACILITIES, OR THE PHYSICAL CONDITION OF THE STRUCTURES.
- 6. ALL EXISTING UTILITIES OUTSIDE THE PROPERTY BOUNDARIES ARE TO REMAIN, UNLESS OTHERWISE NOTED. ALL DEMOLITION WORK SHALL BE VERIFIED AGAINST PROPOSED WORK.
- 7. PRIOR TO DEMOLITION ACTIVITIES, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL AFFECTED UTILITY COMPANIES IN ORDER TO COORDINATE THE DEACTIVATION OF ALL EXISTING UTILITY LINES WITHIN THE PROPERTY. ONCE ALL ONSITE UTILITIES HAVE BEEN DEACTIVATED, ALL LINES SHALL BE CUT AND CAPPED INSIDE THE PROPERTY LINE, AND REMOVED (UNLESS OTHERWISE INDICATED).
- 8. THE CONTRACTOR SHALL USE EXTREME CAUTION IN REMOVING ANY STRUCTURES AND UTILITIES ABOVE AND BELOW GRADE TO PREVENT DAMAGE TO EXISTING UTILITIES WHICH ARE TO REMAIN IN SERVICE. ANY DAMAGE TO EXISTING PIPELINES, UTILITIES, ETC., CAUSED BY THE CONTRACTOR SHALL BE REPAIRED, AT THE CONTRACTOR'S EXPENSE, IN A MANNER ACCEPTABLE TO THE PARTY IN OWNERSHIP OF THE DAMAGED PROPERTY. THE CONTRACTOR SHALL REPORT ANY EXISTING DAMAGE PRIOR TO BEGINNING WORK. IN THE EVENT OF ACCIDENTAL DISRUPTION OF UTILITIES OR THE DISCOVERY OF PREVIOUSLY UNKNOWN UTILITIES, CONTRACTOR MUST NOTIFY THE AFFECTED UTILITY COMPANY AND THE ENGINEER, THE UTILITY COMPANY, ENGINEER, AND CONTRACTOR MUST FIRST AGREE ON A PLAN TO CORRECT THE SITUATION OR IDENTIFY THE UTILITY SERVICE LINE. ALL ASSOCIATED COSTS SHALL BE INCURRED AT THE CONTRACTOR'S EXPENSE.
- 9. NO LIGHTING MAY BE REMOVED FROM PUBLIC STREETS UNTIL PROPOSED LIGHTING IS FULLY IN PLACE. OTHERWISE CONTRACTOR SHALL INSTALL A TEMPORARY LIGHTING SYSTEM, SO THAT NO AREA USED BY THE PUBLIC WILL HAVE LESS LIGHTING THAN CURRENTLY EXISTS.
- 10. EXISTING WORK NOT SPECIFIED FOR REMOVAL WHICH IS TEMPORARILY REMOVED, DAMAGED, EXPOSED, OR IN ANY WAY DISTURBED OR ALTERED BY REMOVAL WORK SHALL BE REPAIRED, PATCHED OR REPLACED, AT THE CONTRACTOR'S EXPENSE, TO THE ENGINEER'S SATISFACTION.
- 11. TITLE AND RESPONSIBILITY OF MATERIALS AND EQUIPMENT TO BE REMOVED, EXCEPT SALVAGEABLE EQUIPMENT TO BE RETAINED BY THE OWNER, IS VESTED TO THE CONTRACTOR UPON RECEIPT OF NOTICE TO PROCEED. THE OWNER WILL NOT BE RESPONSIBLE FOR THE CONDITION, LOSS OR DAMAGE TO SUCH MATERIALS AND EQUIPMENT AFTER NOTICE TO PROCEED.
- 12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO:
 - A. PROTECT ALL EXISTING STRUCTURAL ELEMENTS TO REMAIN DURING DEMOLITION
 - B. IF APPLICABLE, PROVIDE A TEMPORARY PATCH AND REPAIR TO ALL SURFACES AFFECTED BY DEMOLITION WHICH ARE TO BE RECONSTRUCTED AS PART OF THIS PROJECT.
 - C. EXIST. CONC. OR ASPHALT PAVEMENT TO BE REMOVED SHALL BE SAW-CUT IN NEAT, STRAIGHT LINES.
 - D. EXIST. IRRIGATION LINES WITHIN THE LIMITS OF DEMOLITION TO BE REMOVED.
 - E. ALL EXISTING WIRE, IRON, CHAIN LINK, WOOD FENCES ARE TO REMAIN UNLESS OTHERWISE SPECIFIED.
 - F. NO ELECTRIC POLE, STREET LIGHT, WATER MET/VALVE, FIRE HYDRANT ETC. WILL BE REMOVED WITHIN THE ROADWAY RIGHT OF WAY LINES.
 - G. REFER TO LANDSCAPE PLANS FOR ALL EXIST. TREES.
 - H. EXIST. MONITORING WELLS TO REMAIN AND BE PROTECTED AT ALL TIMES.
 - I. ALL EXISTING SURVEY REFERENCES AND MARKERS SHALL REMAIN IN PLACE OR BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.

II. DESCRIPTION

- 1. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, SERVICES, ETC., NECESSARY AND INCIDENTAL TO THE COMPLETION OF ALL SITE DEMOLITION AND CLEARING WORK AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING THE LEGAL TRANSPORT AND OFF-SITE DISPOSAL OF DEMOLITION DEBRIS.
- 2. ALL ONSITE WORK INCLUDED CONSISTS OF, BUT IS NOT LIMITED TO, THE FOLLOWING:
 - A. FULL-DEPTH REMOVAL OF EXISTING SIDEWALKS, DRIVES, CURBS, PAVEMENT, ETC.
 - B. CLEARING SITE OF DEMOLITION DEBRIS.
 - C. REMOVAL FROM SITE AND DISPOSAL OF ALL EXCESS AND UNUSABLE MATERIAL.
 - D. COORDINATION WITH ALL UTILITY COMPANIES/OWNERS PRIOR TO DEACTIVATION.

III. APPLICABLE CODES

- 1. DEMOLITION AND TRANSPORTATION OF DEBRIS SHALL COMPLY WITH APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND REGULATIONS GOVERNING THESE OPERATIONS. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ANY PERMITS, BONDS, LICENSES, ETC., REQUIRED FOR DEMOLITION AND CLEARING WORK.
- 2. ANY WORK WITHIN PUBLIC RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE INDIAN RIVER COUNTY PUBLIC WORKS DEPARTMENT, FLORIDA DEPARTMENT OF TRANSPORTATION, AND OTHER GOVERNMENTAL AGENCIES HAVING JURISDICTION, AND SHALL NOT BEGIN UNTIL THE CONTRACTOR HAS NOTIFIED, AND ALL REQUIRED PERMITS HAVE BEEN OBTAINED FROM, THESE GOVERNING AUTHORITIES.

IV. SEQUENCING AND SCHEDULING

- 1. AREAS ADJACENT TO DEMOLITION AND REMOVAL WORK MAY BE OCCUPIED BUT THE ACTIVITIES IN THOSE AREAS CANNOT BE INTERRUPTED OR DISTURBED DURING NORMAL WORKING HOURS. DEMOLITION SCHEDULE SHALL BE COORDINATED WITH ALL ADJACENT PROPERTY OWNERS AND ANY OTHER PARTIES WHOSE DAILY ACTIVITIES WOULD BE AFFECTED BY THE DEMOLITION WORK.
- 2. COORDINATE WITH APPLICABLE UTILITY COMPANIES FOR UTILITY LINE REMOVAL, CAPPING AND UTILITY SHUTDOWNS NECESSITATED BY REMOVAL WORK.

V. ENVIRONMENTAL PROTECTION

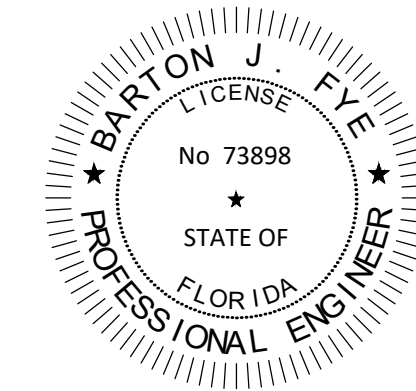
- 1. CONTROL AMOUNT OF DUST RESULTING FROM CONSTRUCTION OR DEMOLITION TO PREVENT SPREAD OF DUST TO OTHER BUILDINGS AND TO AVOID CREATION OF A NUISANCE IN SURROUNDING AREAS. USE OF WATER TO CONTROL DUST WILL NOT BE PERMITTED WHEN IT WILL RESULT IN, OR CREATE, HAZARDOUS OR OBJECTIONABLE CONDITIONS SUCH AS FLOODING.
- 2. NOISE PRODUCING ACTIVITIES SHALL BE HELD TO A MINIMUM. INTERNAL COMBUSTION ENGINES AND COMPRESSORS, ETC., SHALL BE EQUIPPED WITH MUFFLERS TO REDUCE NOISE TO A MINIMUM. COMPLY WITH ALL NOISE ABATEMENT ORDINANCES.
- 3. THE USE OF EXPLOSIVES WILL NOT BE PERMITTED.
- 4. DISPOSITION OF DEMOLISHED MATERIALS BY BURNING IS NOT PERMITTED.
- 5. ALL CLEARING SHALL BE PERFORMED IN A MANNER SUCH AS TO PREVENT ANY WASH-OFF OF SOILS AND DEBRIS FROM THE SITE INTO PUBLIC RIGHT-OF-WAY STREAMS, AND/OR STORM DRAINAGE SYSTEMS. APPROPRIATE SEDIMENTATION PONDS, DIKES, COLLARS, AND FILTER MEDIA SHALL BE EMPLOYED IN ACORDANCE WITH THE EROSION CONTROL PLANS TO INSURE COMPLIANCE WITH THESE REQUIREMENTS, WHERE A SPECIFIC STATUTE GOVERNS THESE PROCEDURES, SUCH STATUTE SHALL BE COMPLIED WITH IN ITS ENTIRETY.
- 6. DURING THE ENTIRE COURSE OF OPERATIONS, ALL EXISTING DRAINAGE WAYS, BOTH INTO AND FROM THE PROJECT AREA SHALL BE MAINTAINED IN A FUNCTIONAL CONDITION, AND BE CLEANED AS NECESSARY.
- 7. AT ALL TIMES DURING THE CLEARING OPERATION, THE EXPOSED AREAS OF SUBGRADE SHALL BE MAINTAINED IN A CONDITION COMPATIBLE WITH POSITIVE DRAINAGE OF THE WORK AREA. NO WATER WILL BE PERMITTED TO STAND IN OPEN EXCAVATIONS. ALL STORMWATER RUNOFF SHALL BE CONTAINED WITHIN THE SITE. FAILURE TO MAINTAIN SUCH DRAINAGE SHALL BE CONSIDERED ADEQUATE CAUSE FOR THE ENGINEER, OWNER, OR INSPECTOR TO ORDER TEMPORARY SUSPENSION OF THE WORK. ALL ASSOCIATED COSTS SHALL BE INCURRED AT THE CONTRACTOR'S EXPENSE.
- 8. PROVIDE SUITABLE AND FUNCTIONAL DRAINAGE BY OPENING DITCHES, FILTER DRAINS, TEMPORARY CUT-OFF LINES, ETC., AND ERECT TEMPORARY PROTECTIVE STRUCTURES WHERE NECESSARY. ALL EMBANKMENTS SHALL BE BACK-BLADED AND SUITABLY SEALED TO PROTECT AGAINST ADVERSE WEATHER CONDITIONS.
- 9. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS WHEN REMOVING ABANDONED AND DE-ENERGIZED MATERIALS. IF ASBESTOS PIPES ARE ENCOUNTERED, THE CONTRACTOR WILL TAKE ALL NECESSARY ABATEMENT STEPS AS REQUIRED BY GOVERNING REGULATIONS TO SAFELY REMOVE AND DISPOSE OF SAID FACILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY UPON DISCOVERY OF SAID MATERIALS.

VI. TRAFFIC MAINTENANCE

- 1. CONTRACTOR SHALL FOLLOW THE MORE STRINGENT AND APPLICABLE PROCEDURE OUT OF THE FLORIDA DEPARTMENT OF TRANSPORTATION AND/OR INDIAN RIVER COUNTY PUBLIC WORKS MAINTENANCE OF TRAFFIC PROCEDURES DURING DEMOLITION IN PUBLIC RIGHT-OF-WAYS AND PRIVATE DRIVEWAYS, PEDESTRIANS PATHS, AND ROADWAYS (FDOT INDEX 600 SERIES).
- 2. THE CONTRACTOR SHALL PROVIDE ADEQUATE BRACING, SHORING, TEMPORARY CROSSOVER FOR PEDESTRIAN AND VEHICULAR TRAFFIC INCLUDING PLATING, GUARDRAILS, LAMPS, WARNING SIGNS, FLAGS, ETC. AS REQUIRED BY AGENCIES HAVING JURISDICTION, AND SHALL NOT REMOVE THESE UNTIL THE NEED FOR PROTECTION CEASES.
- 3. THE CONTRACTOR MAY NOT CLOSE ANY SIDEWALKS WITHOUT PROVIDING ALTERNATE ROUTES IN ACCORDANCE WITH FDOT INDEX 660 AND AUTHORIZATION FROM AGENCIES HAVING JURISDICTION.
- 4. CONDUCT REMOVAL OPERATIONS SO THAT TRAFFIC IS MAINTAINED ALONG EXISTING STREETS AND WALKS. KEEP PAVED STREETS AND WALKWAYS CLEAN AND FREE OF DEBRIS. REMOVE MATERIAL AND OTHER MATTER TRACKED OR FALLEN ONTO TRAFFIC SURFACES.

VII. CLEAN UP

- 1. REMOVE DEMOLISHED CONSTRUCTION MATERIALS AND RELATED DEBRIS FROM THE SITE ON A REGULAR BASIS. ACCUMULATION OF DEBRIS ON THE SITE WILL NOT BE PERMITTED. SELLING OF SALVAGEABLE MATERIALS IS NOT PERMITTED AT THE SITE. LEED RELATED SALVAGEABLE MATERIALS MUST BE DOCUMENTED BY THE CONTRACTOR.
- 2. REMOVE MATERIALS, INCLUDING DEBRIS AND DUST, AND DISPOSE OF LEGALLY OFF SITE. NO DEBRIS SHALL BE BURNED OR BURIED ON THE SITE AS A MEANS OF DISPOSAL. USE METHODS APPROVED BY THE REGULATORY AGENCIES PRIOR TO BEGINNING CLEANUP OPERATIONS. USE OF BLOWERS TO DISTRIBUTE DUST WILL NOT BE PERMITTED.
- 3. MATERIAL DESIGNATED FOR REMOVAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR.



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DEMOLITION NOTES

IRC LANDFILL
PREPARED FOR
INDIAN RIVER COUNTY
INDIAN RIVER COUNTY
FL

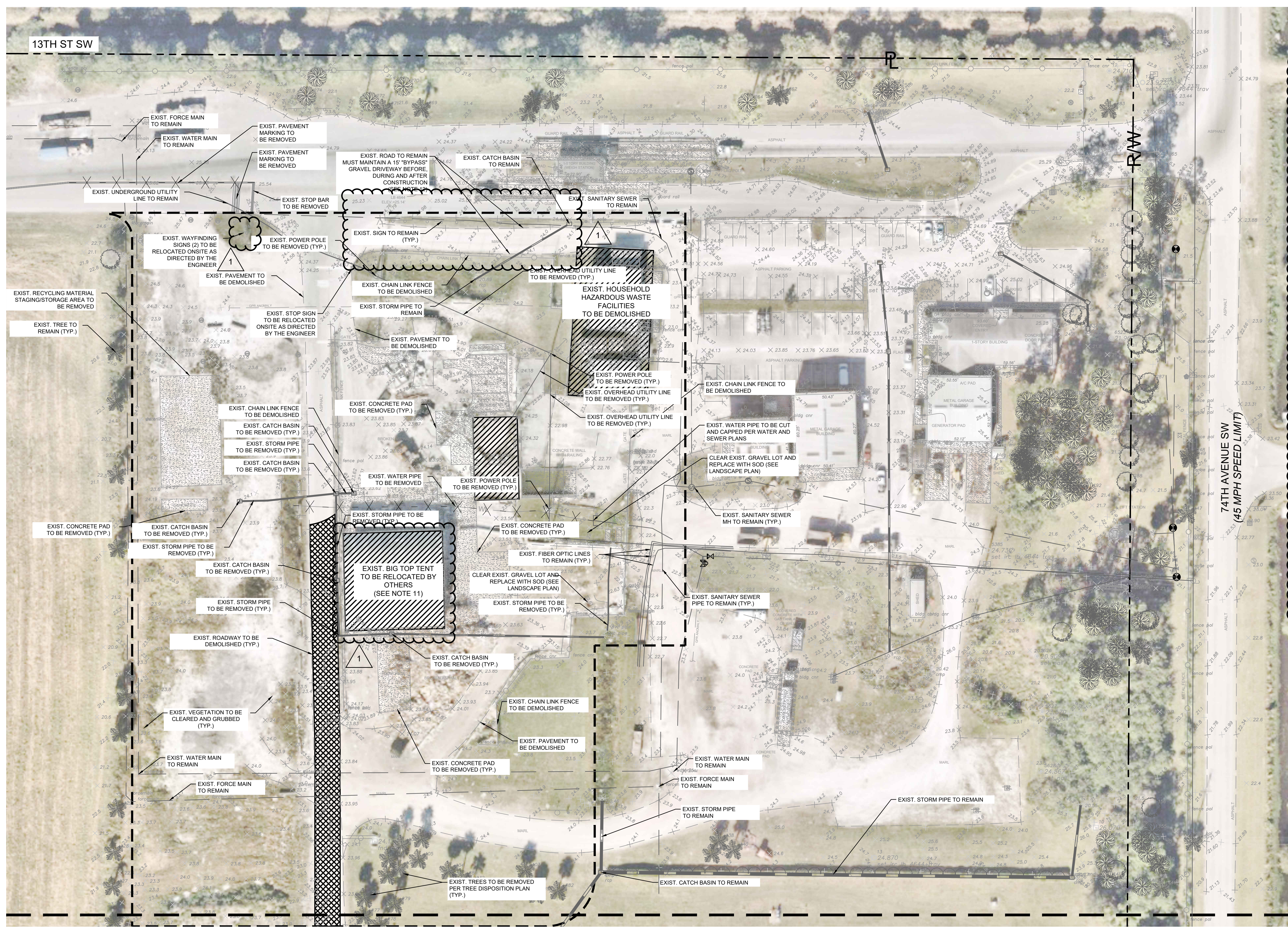
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No.	REVISIONS	DATE	BY

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355 ALHAMBRA CIRCLE, SUITE 1400, CORAL GABLES, FL 33134
PHONE: 305-673-2025
WWW.KIMLEY-HORN.COM REGISTERED 696

LICENSED PROFESSIONAL	_____	DATE:
KHA PROJECT	14-3228000	DATE
DATE	JULY 2021	SCALE
DESIGNED BY	MRC	RMR
DRAWN BY	RMR	BF
CHECKED BY		

Plotted By: Rebecca Sheet Set: IRC LANDFILL Layout: C-210 DEMOLITION PLAN November 17, 2021 10:38:12am K:\mb_civil\143228000 - rc_hrw and recycling facility\CADD\plansheets\C-210 DEMOLITION PLAN.dwg
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LEGEND

- RIGHT-OF-WAY LINE / PROPERTY LINE
- LIMITS OF DEMOLITION AREA
- EXIST. FIRE HYDRANT ASSEMBLY
- EXIST. LIGHT POLES
- EXIST. SAN. SEWER MANHOLE
- EXIST. STORM MANHOLE
- EXIST. WATER GATE VALVE
- EXIST. GRAVEL ROAD

- NOTES**
1. THE INTENT OF THE DEMOLITION PLAN IS TO DEPICT ALL EXISTING FEATURES THAT ENCUMBER THE PROPOSED CONSTRUCTION AREA AND ARE SCHEDULED FOR REMOVAL. SOME INCIDENTAL ITEMS MAY HAVE BEEN INADVERTENTLY OMITTED FROM THE PLAN. THE CONTRACTOR IS ENCOURAGED TO THOROUGHLY INSPECT THE SITE AS WELL AS REVIEW THE PLANS AND SPECIFICATIONS PRIOR TO SUBMITTING PRICING. CONTRACTOR WILL NOT RECEIVE ADDITIONAL COMPENSATION FOR INCIDENTAL ITEMS NOT SHOWN ON THIS DEMOLITION PLAN.
 2. SEE SHEET C-510 FOR LIMITS AND GRADING OF RESURFACED DRIVEWAYS AND ENTRANCES. ADDITIONAL DEMOLITION MAY BE REQUIRED.
 3. SEE SHEET C-310 FOR INLET PROTECTION AND EROSION PREVENTION MEASURES TO BE IN PLACE PRIOR TO DEMOLITION ACTIVITIES.
 4. CONTRACTOR TO CONFIRM EXISTING DEMO LIMITS AND SITE GRADING PRIOR TO CONSTRUCTION.
 5. CONTRACTOR TO SAWCUT WHEN REMOVING EXIST. PAVEMENT THAT IS ADJACENT TO EXIST. PAVEMENT THAT IS TO REMAIN. CONTRACTOR IS RESPONSIBLE FOR REPAIRS TO EXISTING CONCRETE OR ASPHALT TO REMAIN IF DAMAGED DURING CONSTRUCTION.
 6. EXISTING TREES TO BE REMOVED SEE LANDSCAPE PLANS FOR TREE DISPOSITION (TYP.)
 7. EVERYTHING WITHIN THE DEMOLITION AREA IS TO BE REMOVED INCLUDING UNDERGROUND UTILITIES UNLESS NOTED OTHERWISE.
 8. ALL DEMOLITION IN THE PUBLIC RIGHT-OF-WAY WILL REQUIRE A SEPARATE RIGHT-OF-WAY CONSTRUCTION PERMIT.
 9. IF MONITORING WELLS ARE ENCOUNTERED, THE ENGINEER OF RECORD IS TO BE NOTIFIED OF THE LOCATION(S).
 10. EXIST. BIG TOP TENT TO BE RELOCATED SOUTH TO EXISTING 80' X 240' CONCRETE PAD BY OTHERS. ANY REMAINING FACILITIES, FOUNDATIONS OR OTHER EXISTING APURTANCES AFTER RELOCATION SHALL BE DEMOLISHED.
 11. CONTRACTOR SHALL COORDINATE FINAL GRAVEL ROAD LAYOUT WITH ENGINEER IN THE FIELD DURING CONSTRUCTION.

SEE SHEET C-211 FOR CONTINUATION

Professional Engineer Seal for Barton J. Fye, No. 73898, State of Florida.

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Date: 11/17/2021
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11/16/2021 JF

No.	REVISIONS	DATE	BY

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PHONE: 305-673-2025
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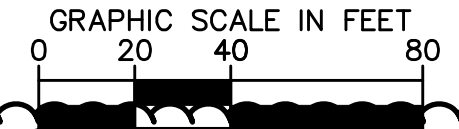
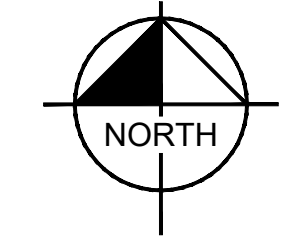
14-3228000
DATE: JULY 2021
SCALE: AS SHOWN
DESIGNED BY: MRC
DRAWN BY: RMR
CHECKED BY: BF
DATE:

DEMOLITION PLAN I

IRC LANDFILL PREPARED FOR INDIAN RIVER COUNTY INDIAN RIVER COUNTY FL

SHEET NUMBER **C-210**

SEE SHEET C-210 FOR CONTINUATION



1



LEGEND

- RIGHT-OF-WAY LINE / PROPERTY LINE
- LIMITS OF DEMOLITION AREA
- EXIST. FIRE HYDRANT ASSEMBLY
- EXIST. LIGHT POLES
- EXIST. SAN. SEWER MANHOLE
- EXIST. STORM MANHOLE
- EXIST. WATER GATE VALVE
- EXIST. GRAVEL ROAD

NOTES

1. THE INTENT OF THE DEMOLITION PLAN IS TO DEPICT ALL EXISTING FEATURES THAT ENCUMBER THE PROPOSED CONSTRUCTION AREA AND ARE SCHEDULED FOR REMOVAL. SOME INCIDENTAL ITEMS MAY HAVE BEEN INADVERTENTLY OMITTED FROM THE PLAN. THE CONTRACTOR IS ENCOURAGED TO THOROUGHLY INSPECT THE SITE AS WELL AS REVIEW THE PLANS AND SPECIFICATIONS PRIOR TO SUBMITTING PRICING. CONTRACTOR WILL NOT RECEIVE ADDITIONAL COMPENSATION FOR INCIDENTAL ITEMS NOT SHOWN ON THIS DEMOLITION PLAN.
2. SEE SHEET C-510 FOR LIMITS AND GRADING OF RESURFACED DRIVEWAYS AND ENTRANCES. ADDITIONAL DEMOLITION MAY BE REQUIRED.
3. SEE SHEET C-310 FOR INLET PROTECTION AND EROSION PREVENTION MEASURES TO BE IN PLACE PRIOR TO DEMOLITION ACTIVITIES.
4. CONTRACTOR TO CONFIRM EXISTING DEMO LIMITS AND SITE GRADING PRIOR TO CONSTRUCTION.
5. CONTRACTOR TO SAWCUT WHEN REMOVING EXIST. PAVEMENT THAT IS ADJACENT TO EXIST. PAVEMENT THAT IS TO REMAIN. CONTRACTOR IS RESPONSIBLE FOR REPAIRS TO EXISTING CONCRETE OR ASPHALT TO REMAIN IF DAMAGED DURING CONSTRUCTION.
6. EXISTING TREES TO BE REMOVED SEE LANDSCAPE PLANS FOR TREE DISPOSITION (TYP.)
7. EVERYTHING WITHIN THE DEMOLITION AREA IS TO BE REMOVED INCLUDING UNDERGROUND UTILITIES UNLESS NOTED OTHERWISE.
8. ALL DEMOLITION IN THE PUBLIC RIGHT-OF-WAY WILL REQUIRE A SEPARATE RIGHT-OF-WAY CONSTRUCTION PERMIT.
9. IF MONITORING WELLS ARE ENCOUNTERED, THE ENGINEER OF RECORD IS TO BE NOTIFIED OF THE LOCATION(S).
10. EXIST. BIG TOP TENT TO BE RELOCATED SOUTH TO EXISTING 80' X 240' CONCRETE PAD BY OTHERS. ANY REMAINING FACILITIES, FOUNDATIONS OR OTHER EXISTING APPURTENANCES AFTER RELOCATION SHALL BE DEMOLISHED.
11. CONTRACTOR SHALL COORDINATE FINAL GRAVEL ROAD LAYOUT WITH ENGINEER IN THE FIELD DURING CONSTRUCTION.

74TH AVENUE SW
(45 MPH SPEED LIMIT)

Plotted By: Rodriguez, Rebecca Sheet Set: IRC LANDFILL Layout: C-211 DEMOLITION PLAN November 17, 2021 10:39:17am K:\vmb_civil\143228000 - irc_lhw and recycling_facility\CIVIL\CADD\plansheets\C-210 DEMOLITION PLAN.dwg This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

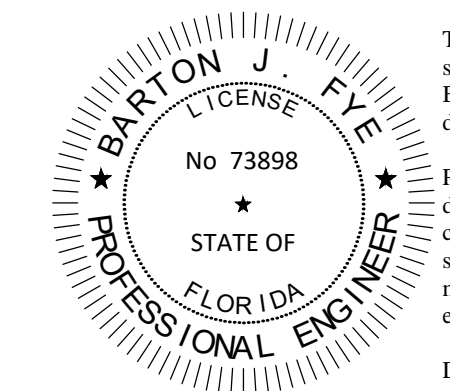
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KHA PROJECT	143228000
DATE	JULY 2021
SCALE	AS SHOWN
DESIGNED BY	MRC
DRAWN BY	RMR
CHECKED BY	BF
DATE:	

DEMOLITION PLAN II

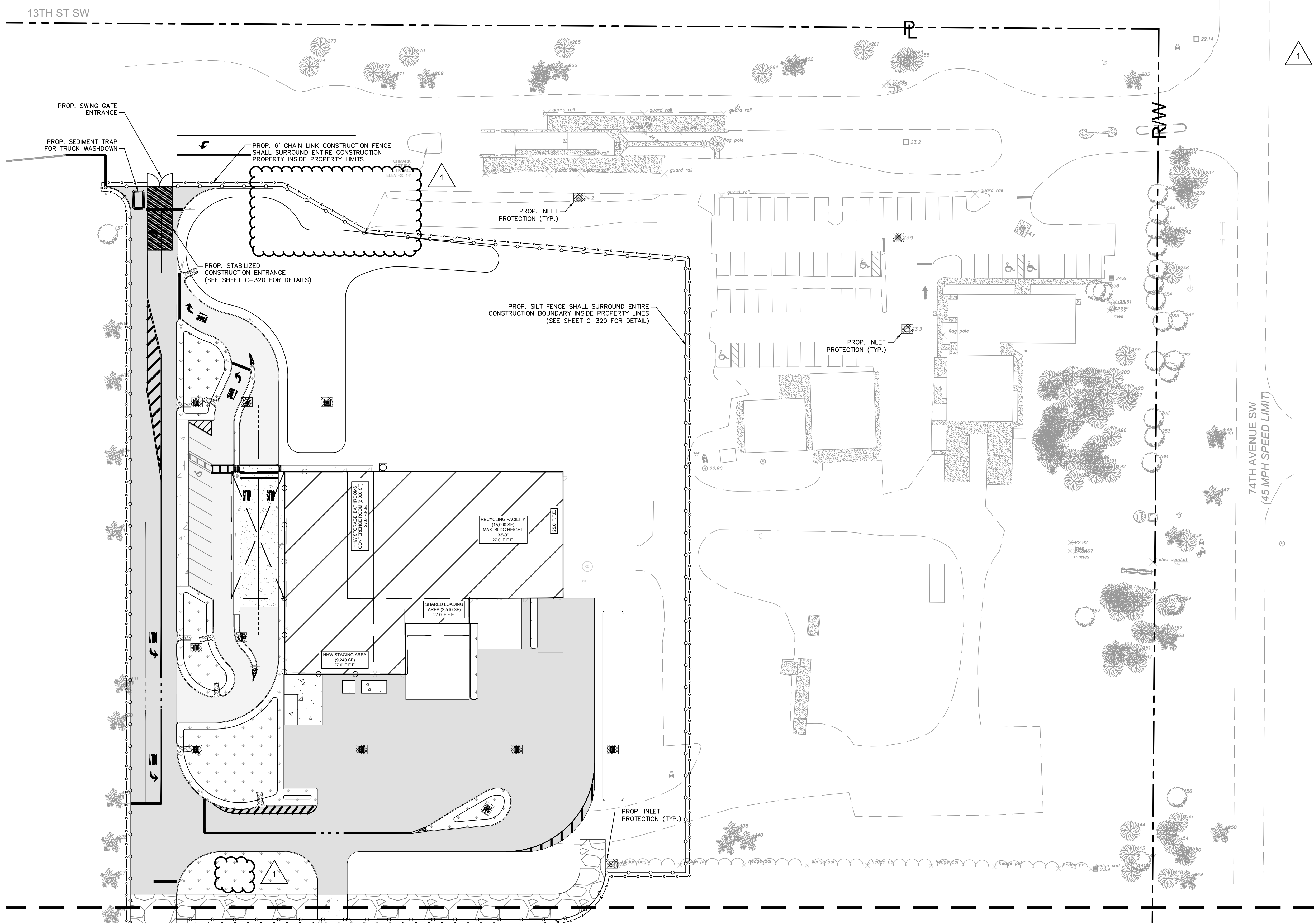
IRC LANDFILL
 PREPARED FOR
 INDIAN RIVER COUNTY
 INDIAN RIVER
 COUNTY
 SHEET NUMBER
C-211



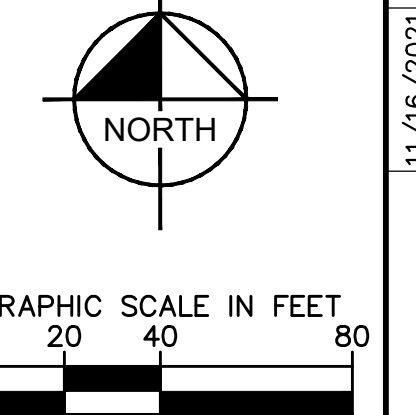
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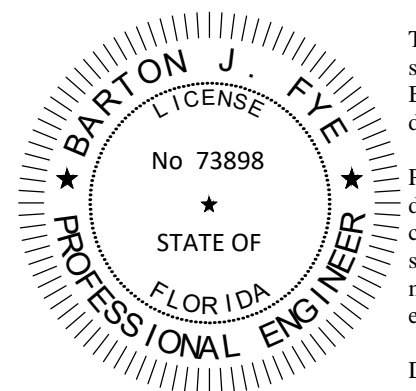
SEE SHEET C-311 FOR CONTINUATION



LEGEND

- RIGHT-OF-WAY LINE / PROPERTY LINE
- PROP. BUILDING
- PROP. HEAVY DUTY ASPHALT
- PROP. STANDARD DUTY ASPHALT
- PROP. LANDSCAPE AREA
- PROP. CONC. SIDEWALK
- PROP. STANDARD DUTY CONC.
- PROP. HEAVY DUTY CONC.
- EXIST. GRAVEL ROAD
- SEDIMENT BARRIER CONTROL FOR STORM STRUCTURE (SEE SHEET C-320 FOR DETAIL)
- PROP. STABILIZED CONSTRUCTION ENTRANCE
- PROP. GRAVEL ROAD
- PROP. 6' CHAIN LINK CONSTRUCTION FENCE WITH DUST SCREEN
- PROP. 6' CHAIN LINK CONSTRUCTION FENCE WITH DUST SCREEN

74TH AVENUE SW
(45 MPH SPEED LIMIT)



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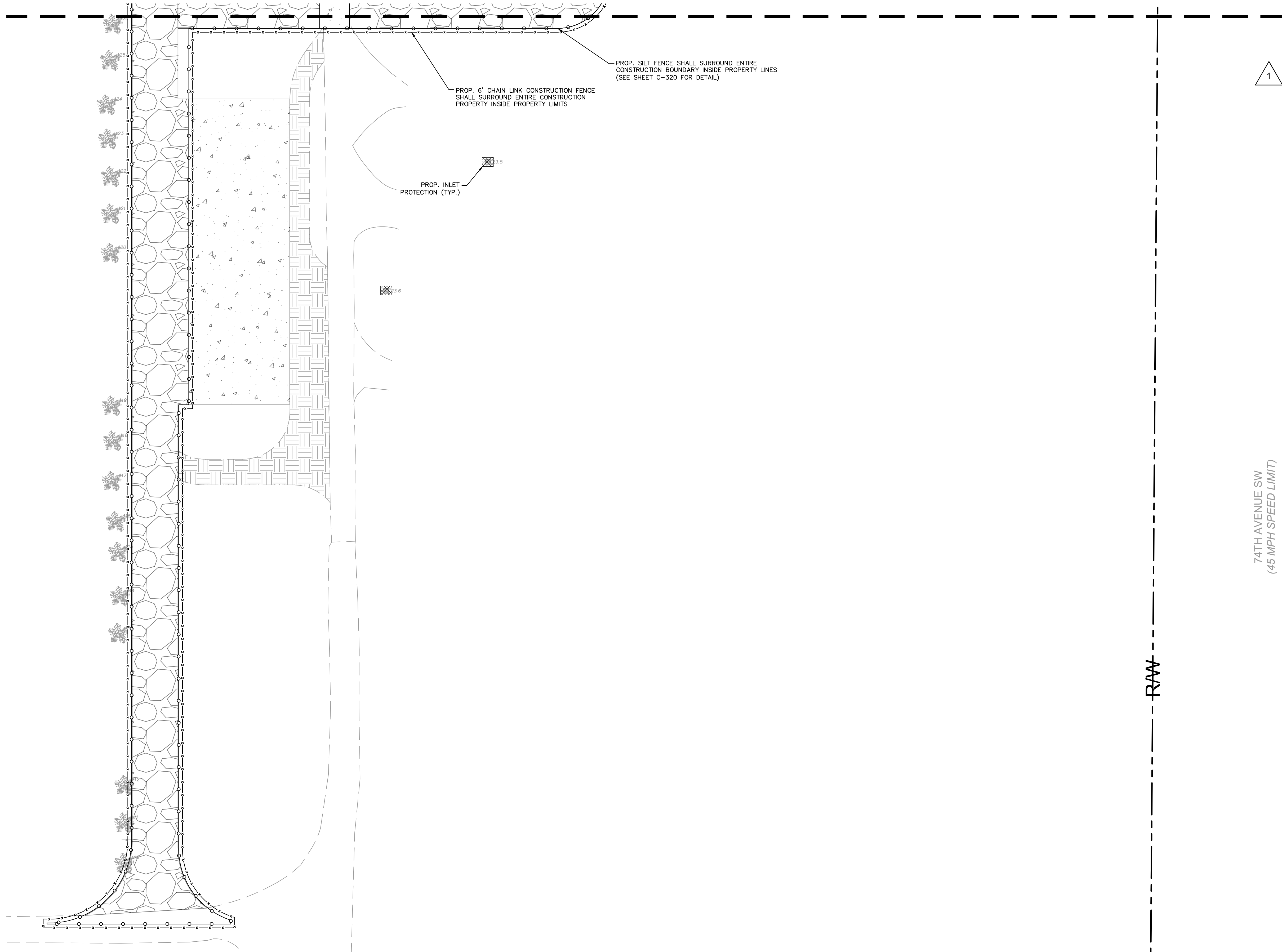
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OWNER CHANGES	No.	REVISIONS	DATE	BY	
LICENSED PROFESSIONAL					
KHA PROJECT	14-3228000	DATE	JULY 2021	SCALE	AS SHOWN
DESIGNED BY	MRC	DRAWN BY	RMR	CHECKED BY	BF
EROSION CONTROL PLAN I		INDIAN RIVER COUNTY			
IRC LANDFILL PREPARED FOR		INDIAN RIVER COUNTY			
SHEET NUMBER		C-310			

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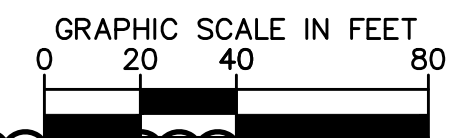
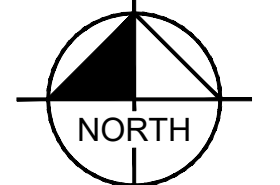
SEE SHEET C-310 FOR CONTINUATION



PROP. SILT FENCE SHALL SURROUND ENTIRE CONSTRUCTION BOUNDARY INSIDE PROPERTY LINES (SEE SHEET C-320 FOR DETAIL)

PROP. 6" CHAIN LINK CONSTRUCTION FENCE SHALL SURROUND ENTIRE CONSTRUCTION PROPERTY INSIDE PROPERTY LIMITS

PROP. INLET PROTECTION (TYP.)

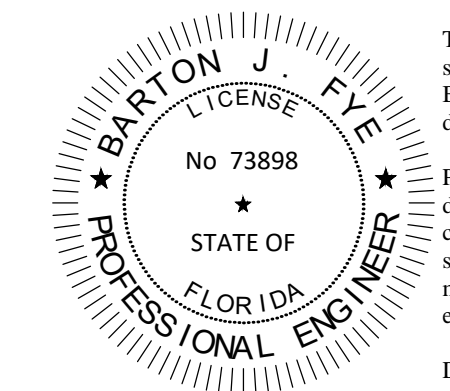


LEGEND

- RIGHT-OF-WAY LINE / PROPERTY LINE
- PROP. BUILDING
- PROP. HEAVY DUTY ASPHALT
- PROP. STANDARD DUTY ASPHALT
- PROP. LANDSCAPE AREA
- PROP. CONC. SIDEWALK
- PROP. STANDARD DUTY CONC.
- PROP. HEAVY DUTY CONC.
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- SEDIMENT BARRIER CONTROL FOR STORM STRUCTURE (SEE SHEET C-320 FOR DETAIL)
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- PROP. GRAVEL ROAD
- PROP. 6" CHAIN LINK CONSTRUCTION FENCE WITH DUST SCREEN
- PROP. 6" CHAIN LINK CONSTRUCTION FENCE WITH DUST SCREEN

74TH AVENUE SW
(45 MPH SPEED LIMIT)

RAW

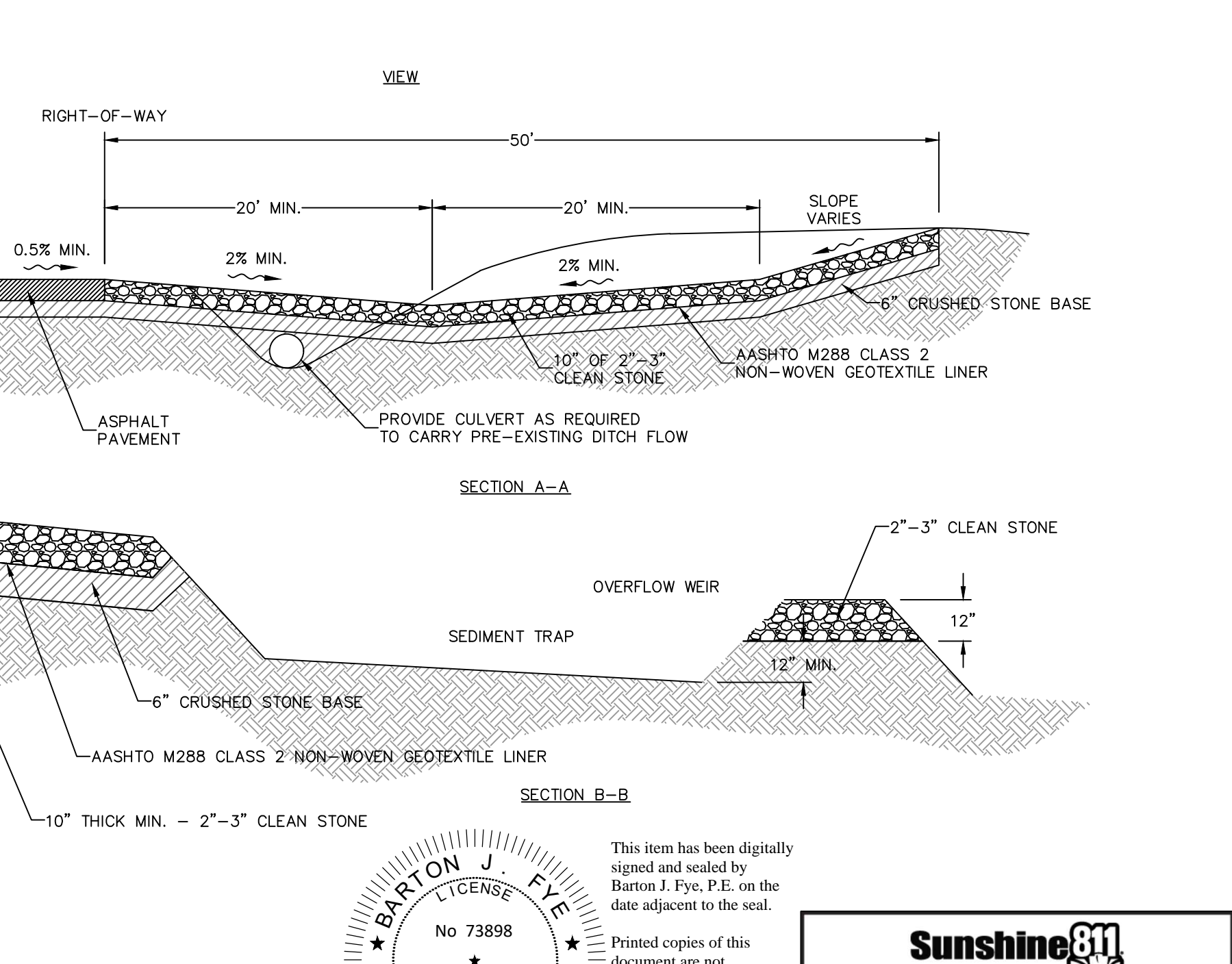
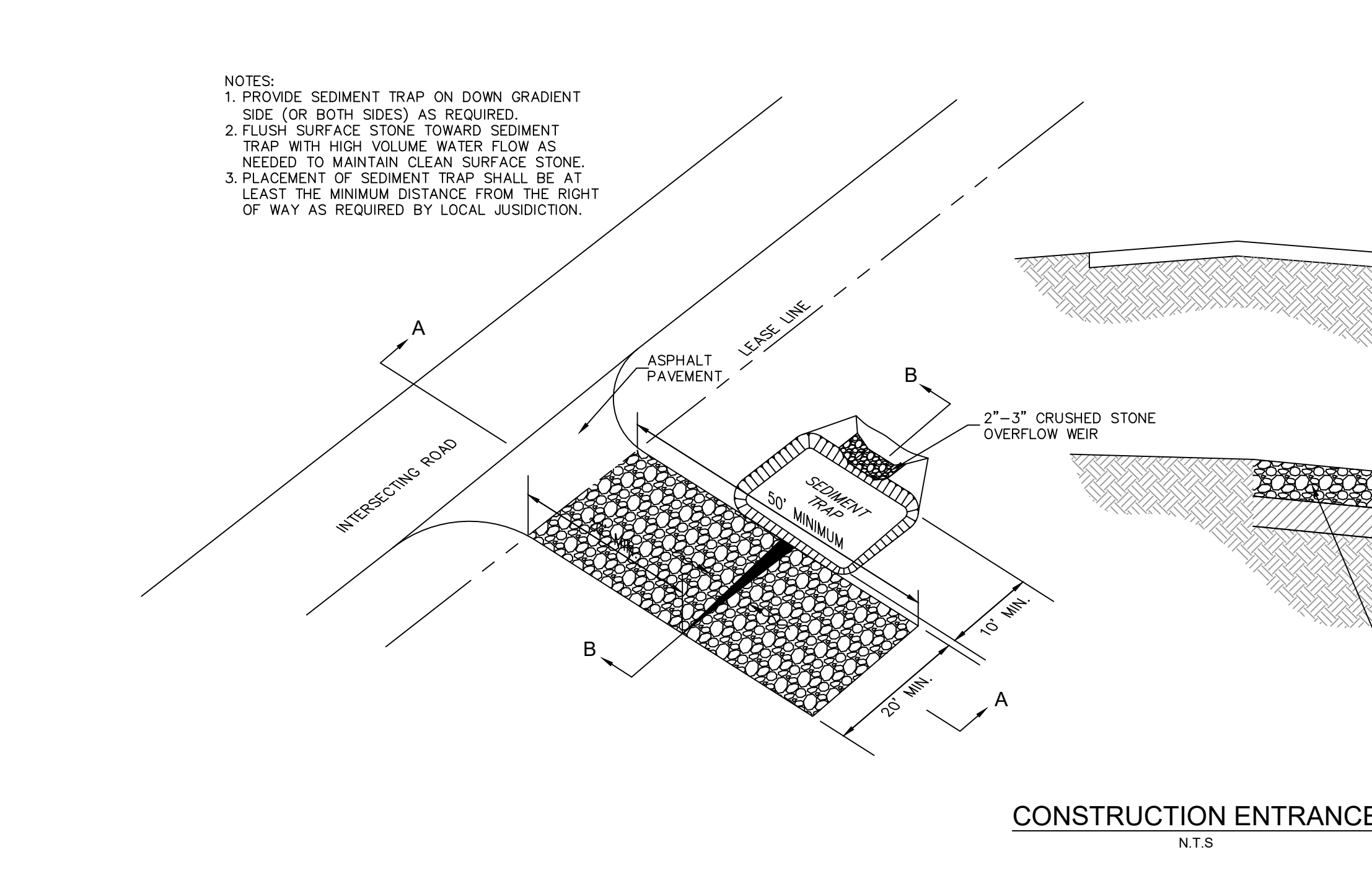
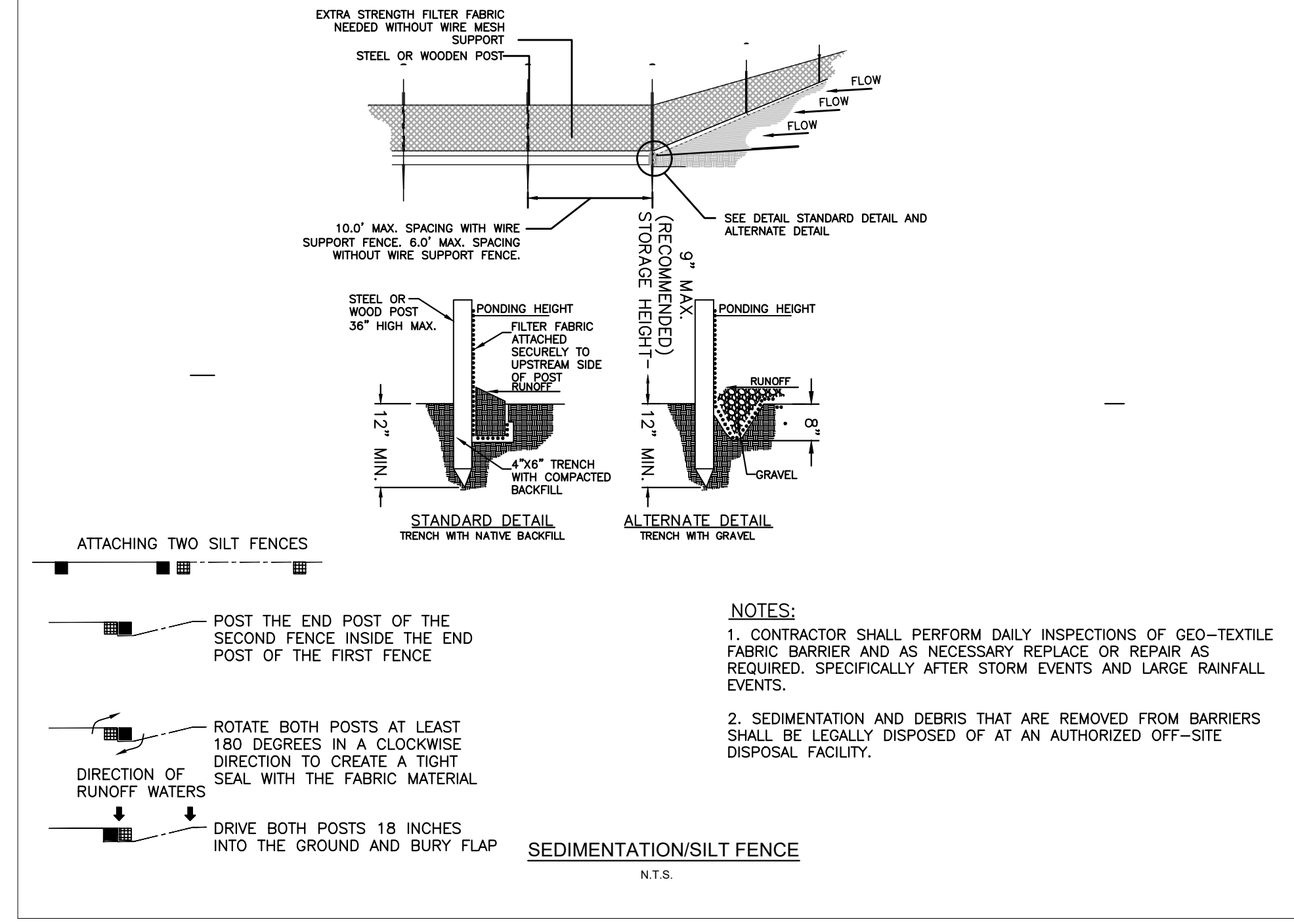
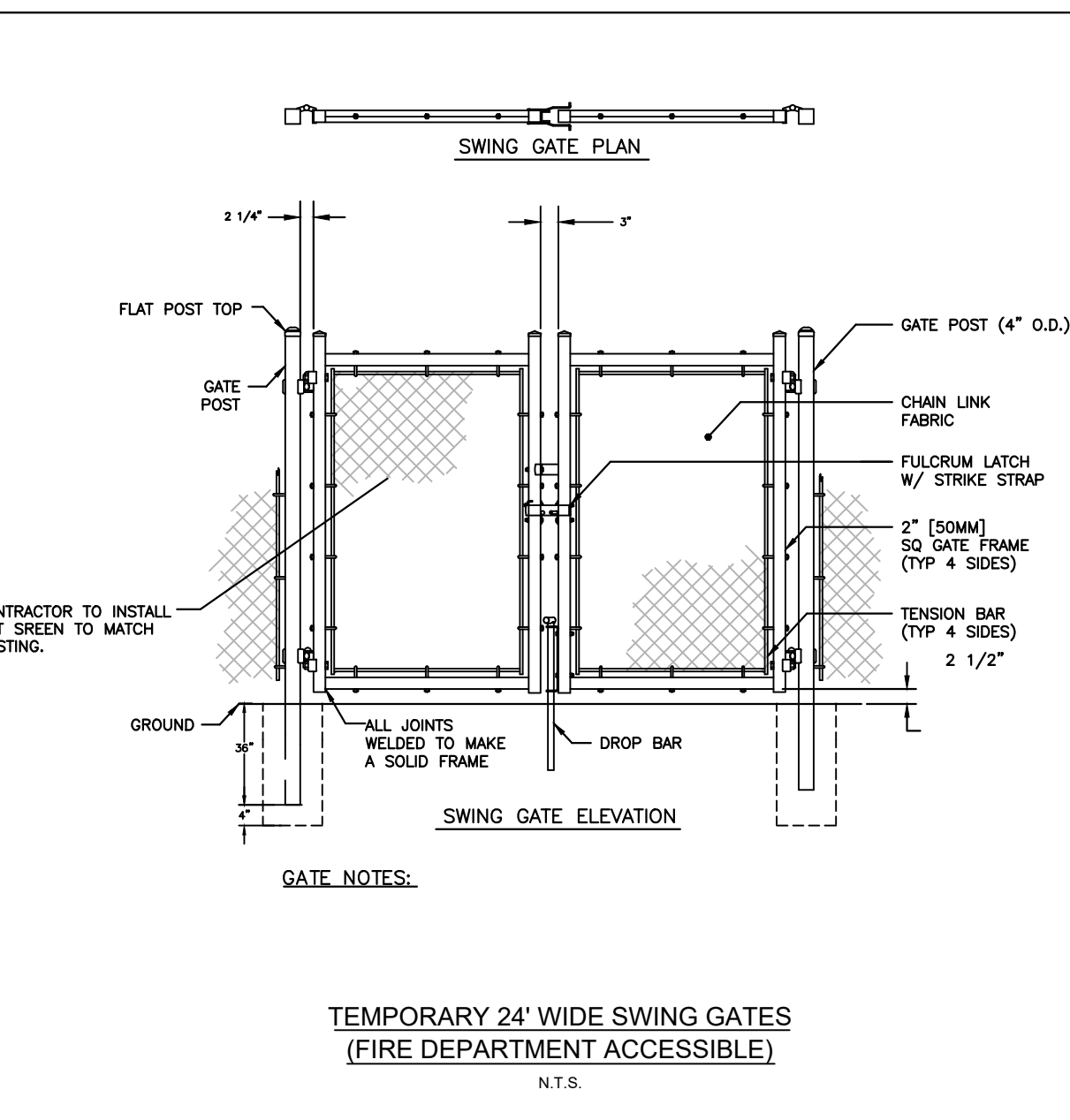
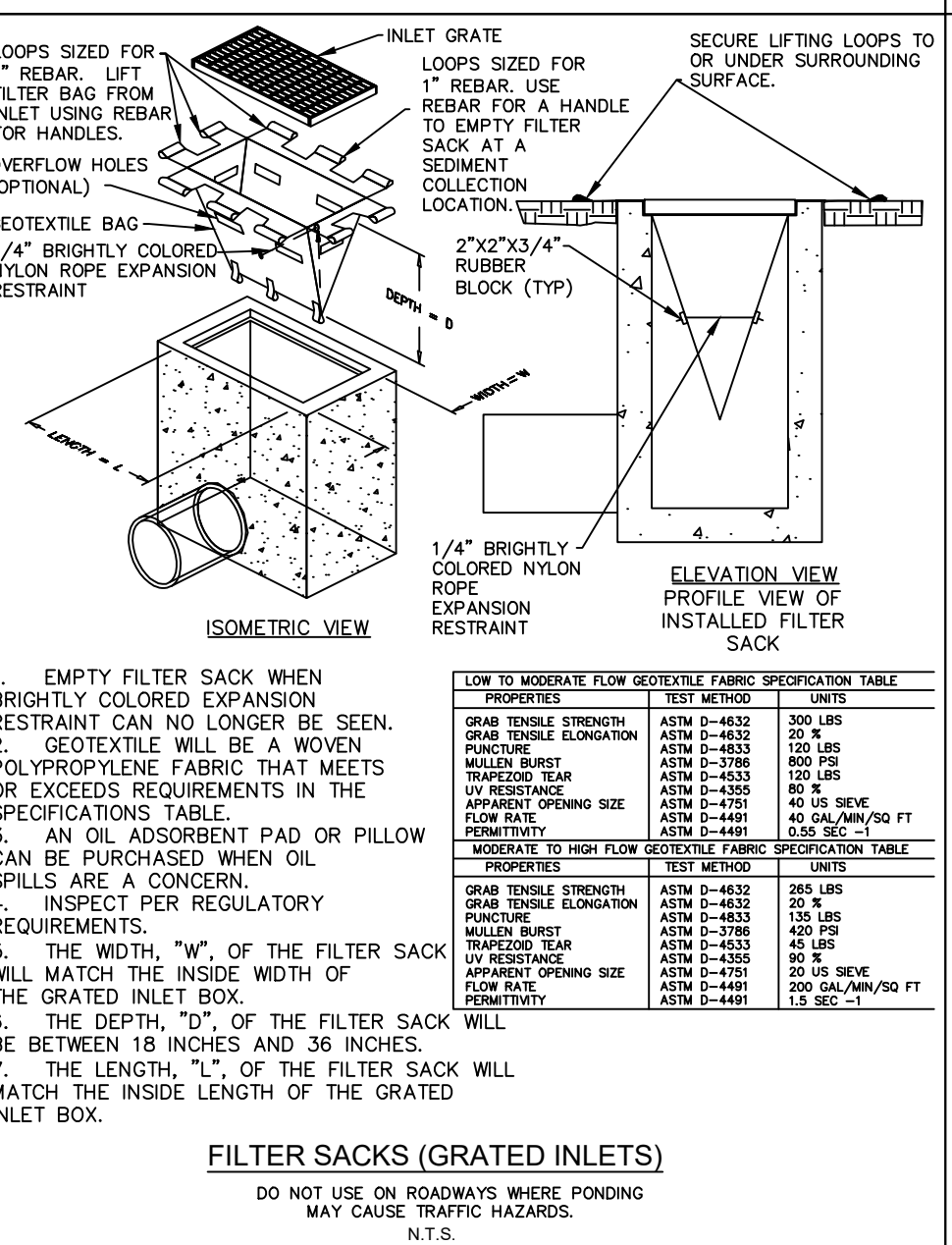
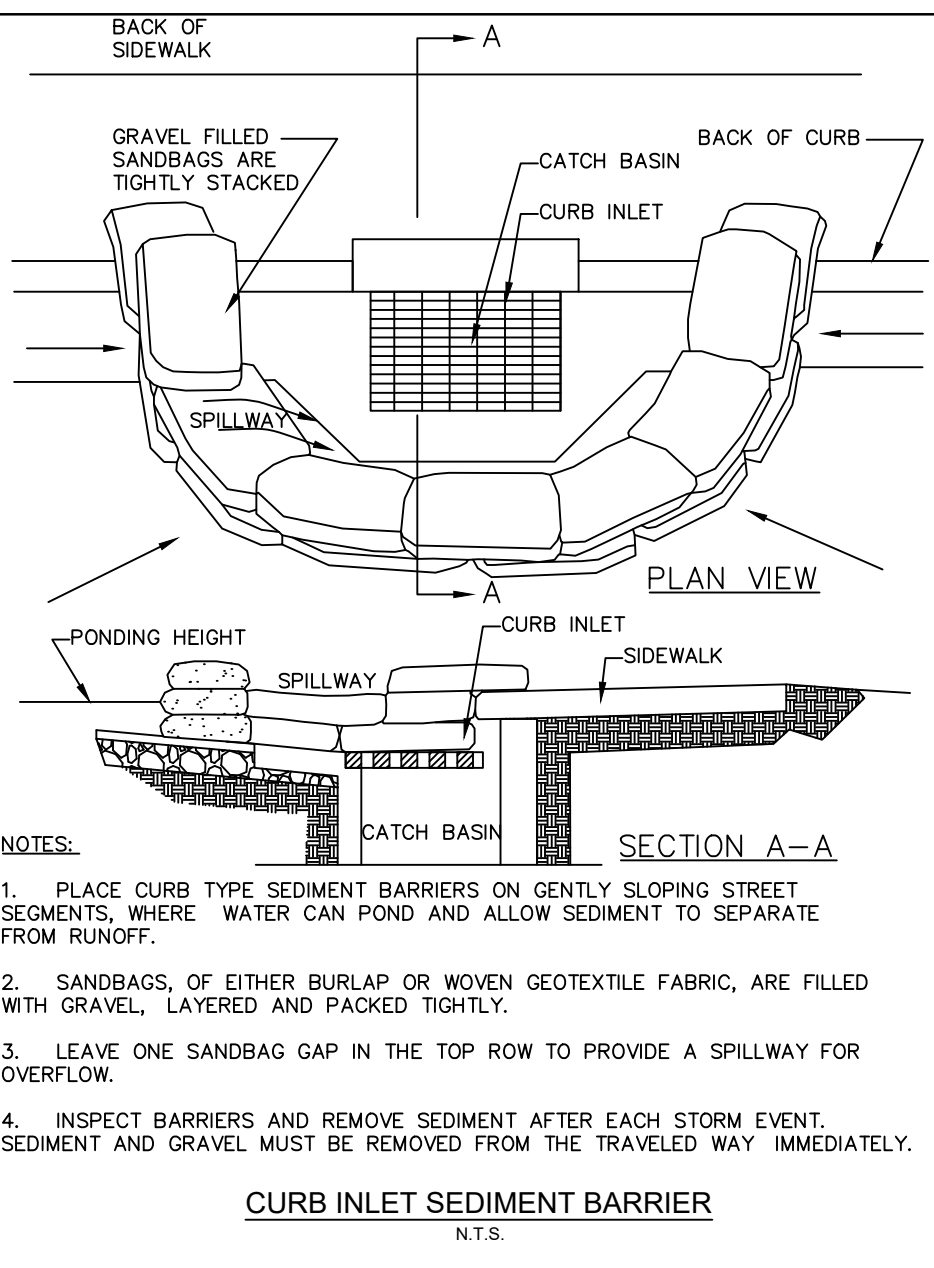
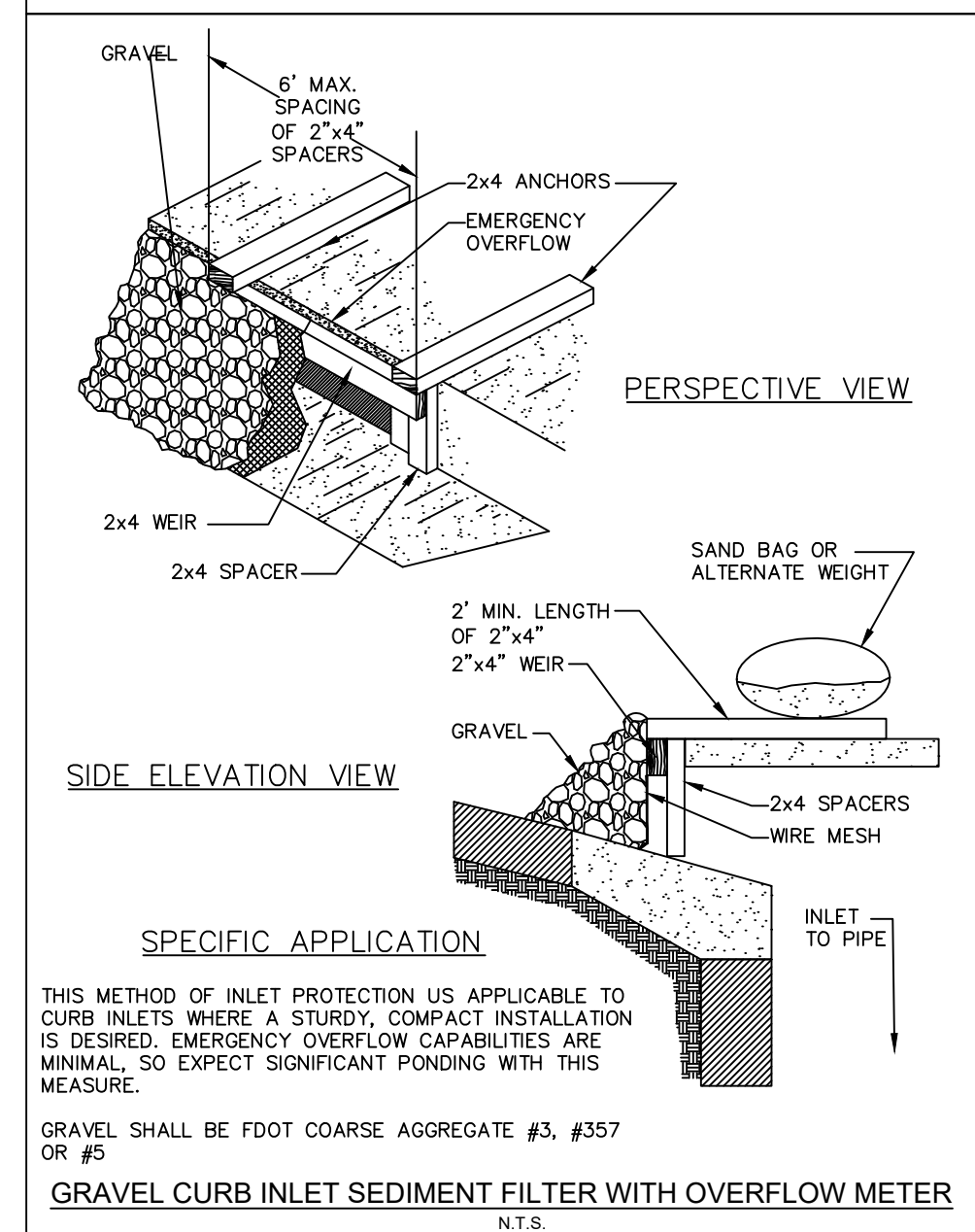
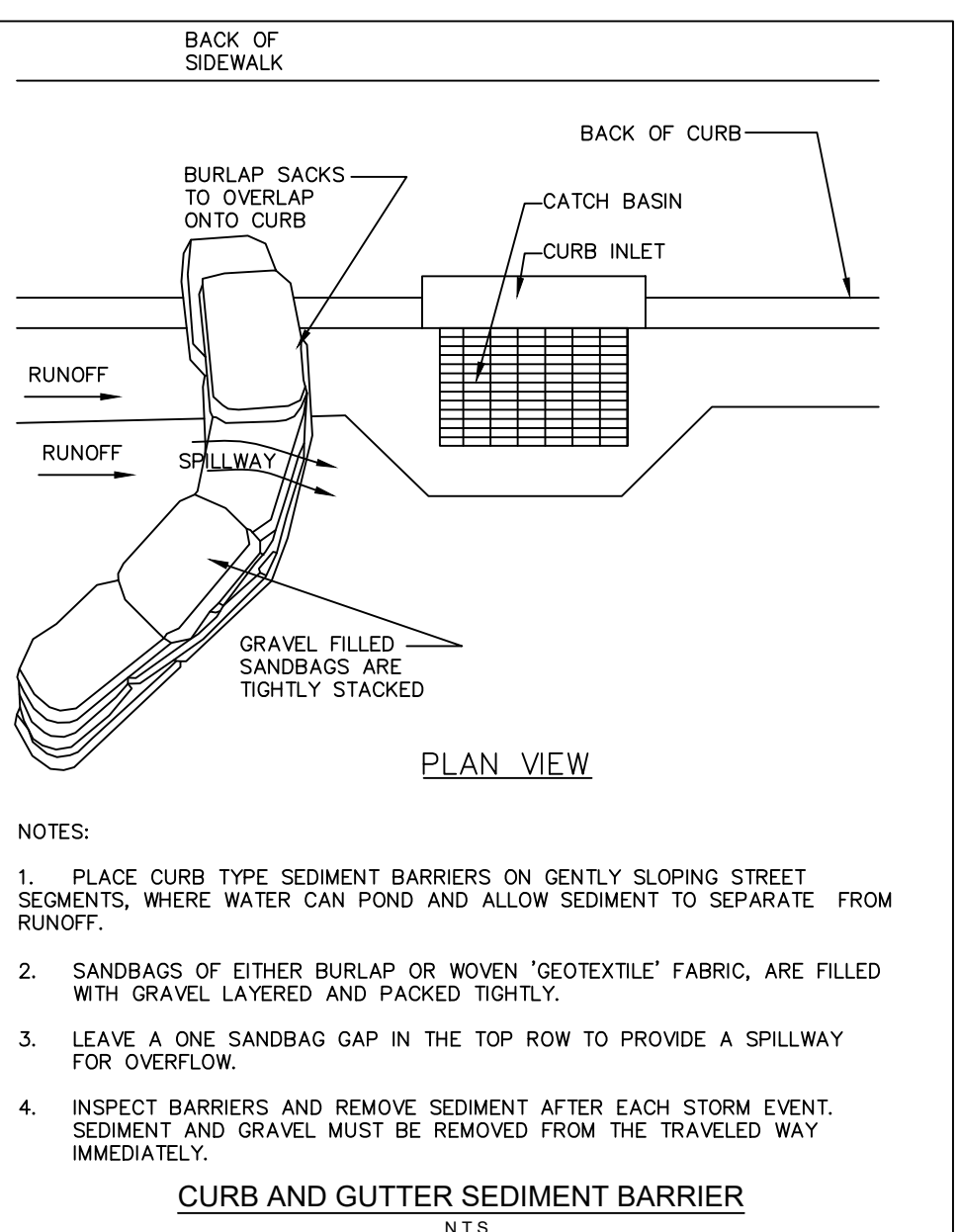
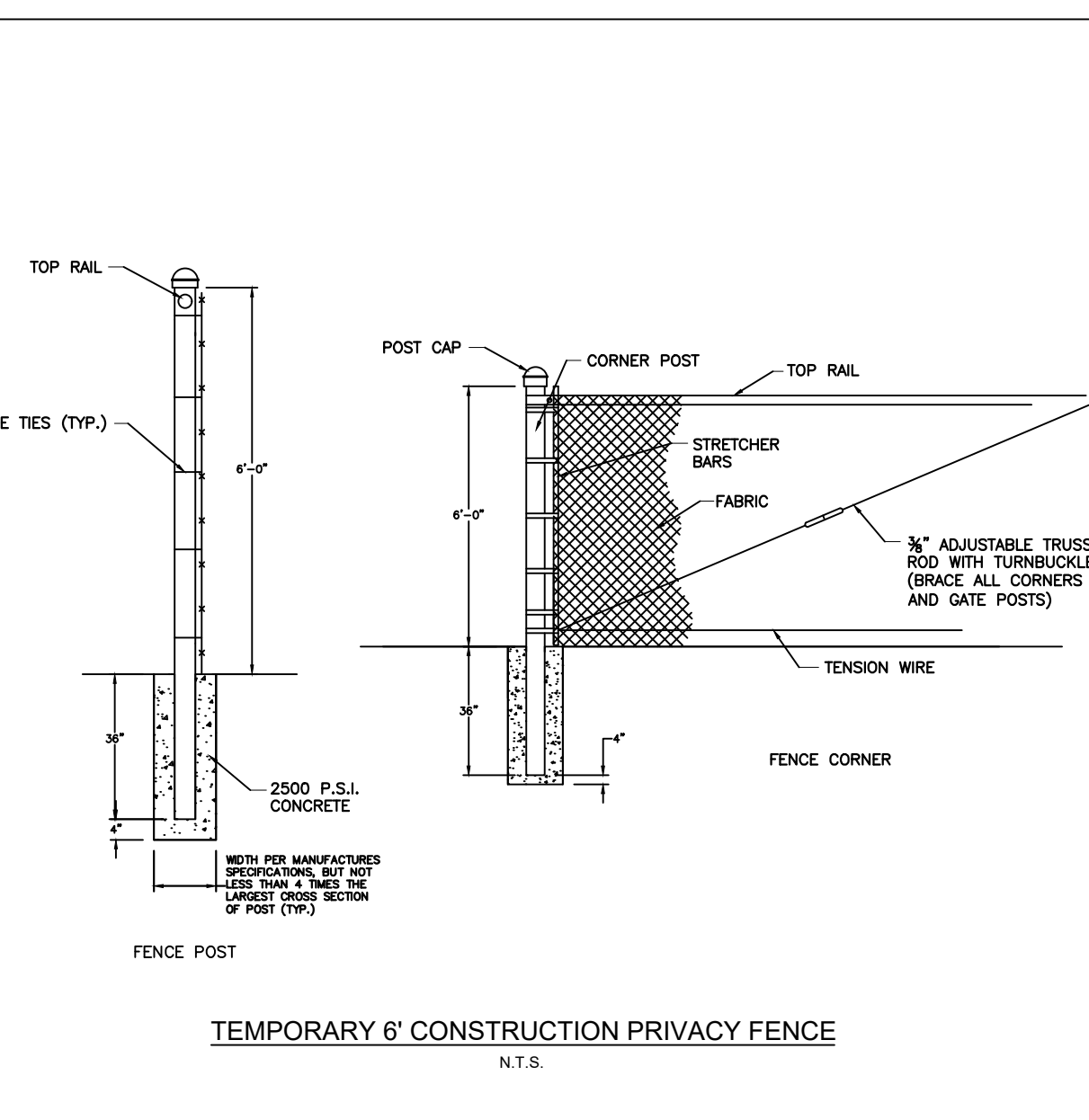
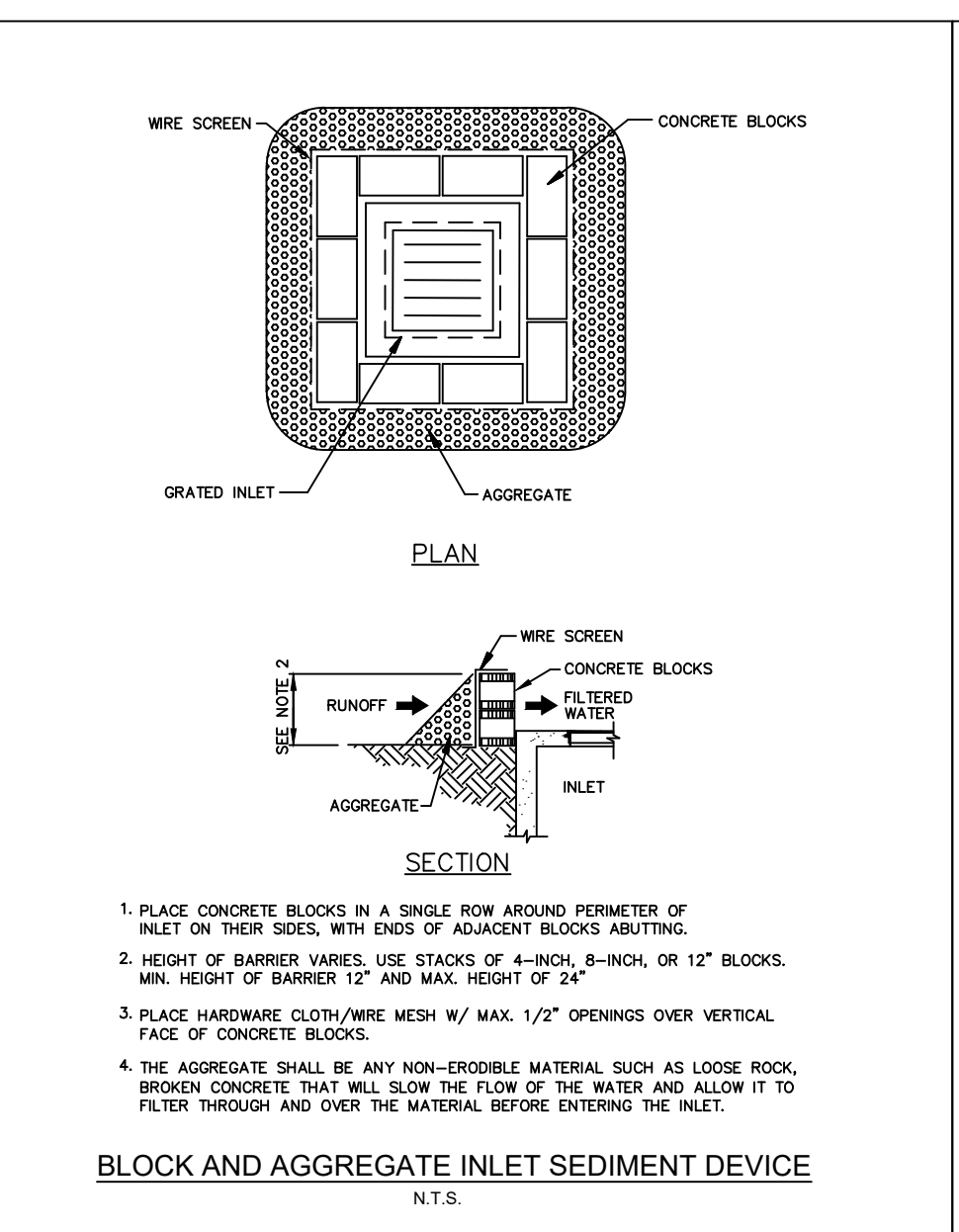
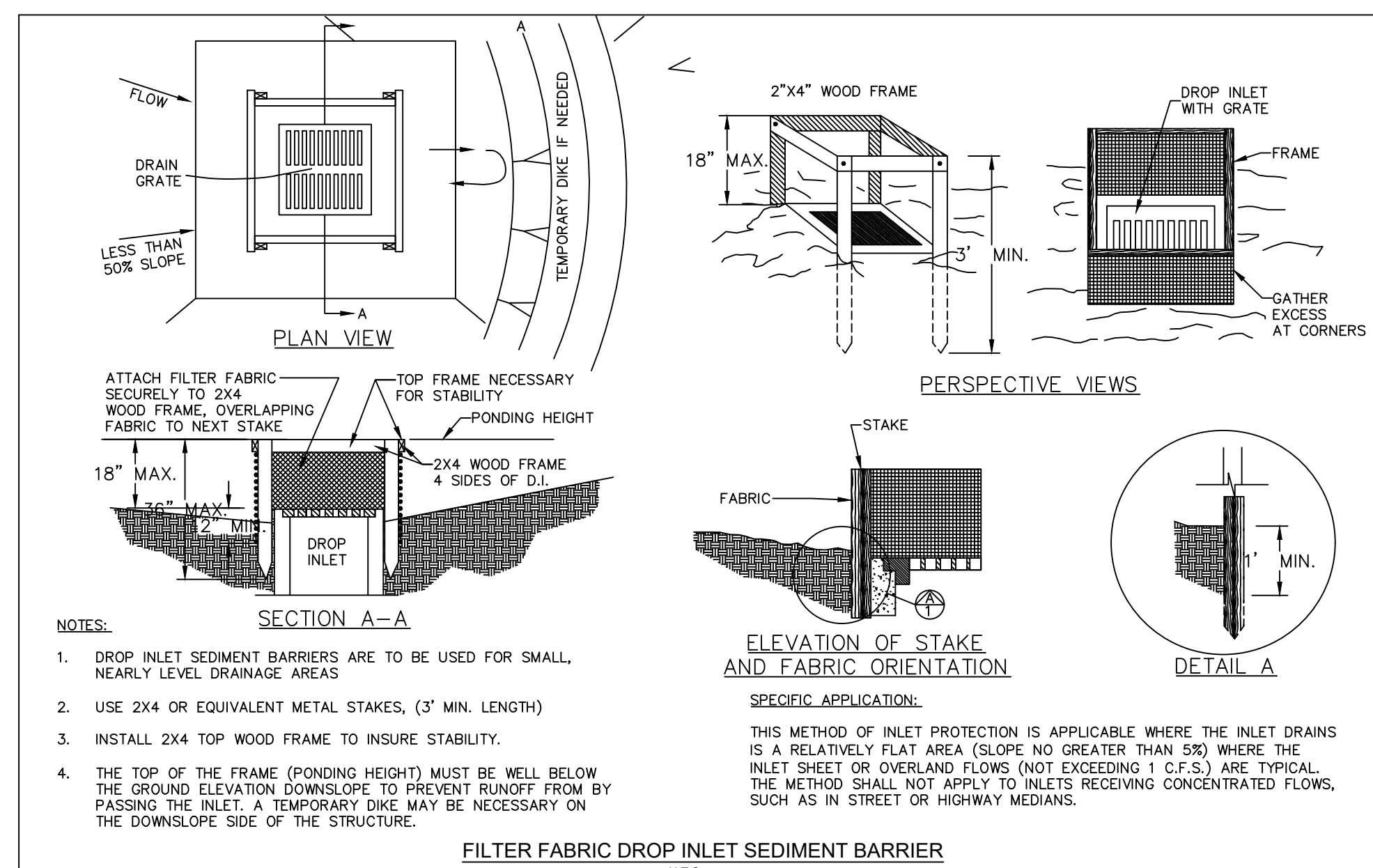


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LICENSED PROFESSIONAL		
KHA PROJECT	14-3228000	
DATE	JULY 2021	
SCALE	AS SHOWN	
DESIGNED BY	MRC	
DRAWN BY	RMR	
CHECKED BY	BF	
		DATE:
EROSION CONTROL PLAN II		
IRC LANDFILL PREPARED FOR INDIAN RIVER COUNTY		
INDIAN RIVER COUNTY FL		
SHEET NUMBER		DATE BY
C-311		

Plotted By: Rebecca Rodriguez, Sheet: EROSION CONTROL DETAILS November 17, 2021, 10:39:50am K:\vmb-civil\143228000 - irc hhw and recycling facilities\civil\CADD\plansheets\C-320 EROSION CONTROL DETAILS.dwg
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 No 73898
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

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EROSION CONTROL DETAILS
 PREPARED FOR
 INDIAN RIVER COUNTY
 INDIAN RIVER COUNTY

KHA PROJECT 14-3228000
 DATE JULY 2021
 SCALE AS SHOWN
 DESIGNED BY MRC
 DRAWN BY RMR
 CHECKED BY BF
 DATE:

LICENSED PROFESSIONAL
 REVISIONS
 No. DATE BY

IRC LANDFILL PREPARED FOR INDIAN RIVER COUNTY
 SHEET NUMBER C-320

Plotted By: Rodriguez, Rebecca - Sheet Set: IRC LANDFILL - Layout: OVERALL SITE PLAN - November 17, 2021 - 10:40:03am - c:\vmb-civil\43228000 - irc thw and recycling facility\CIVIL\CADD\plansheets\C-400 Site Plan.dwg
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NORTH

GRAPHIC SCALE IN FEET
0 100 200 400

1

LEGEND

- RAW - P- RIGHT-OF-WAY LINE / PROPERTY LINE
- FEMA HAZARDOUS FLOOD ZONE A F.I.R.M. NO.: 12061C0355H

NOTES

- 74TH AVE SW POSTED SPEED LIMIT = 45MPH
- PROPOSED INTERCONNECTED DRAINAGE SYSTEM WILL CONNECT TO THE EXISTING STORM PIPE AS DESIGNATED ON PLAN SHEET.

OWNER CHANGES

No.	REVISIONS	DATE	BY

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LICENSED PROFESSIONAL

KHA PROJECT	DATE	SCALE	AS SHOWN	DESIGNED BY	MRC	DRAWN BY	RMR	CHECKED BY	BF	DATE
14-3228000	JULY 2021	SCALE AS SHOWN								

OVERALL SITE PLAN

IRC LANDFILL
PREPARED FOR
INDIAN RIVER COUNTY
INDIAN RIVER COUNTY
FL

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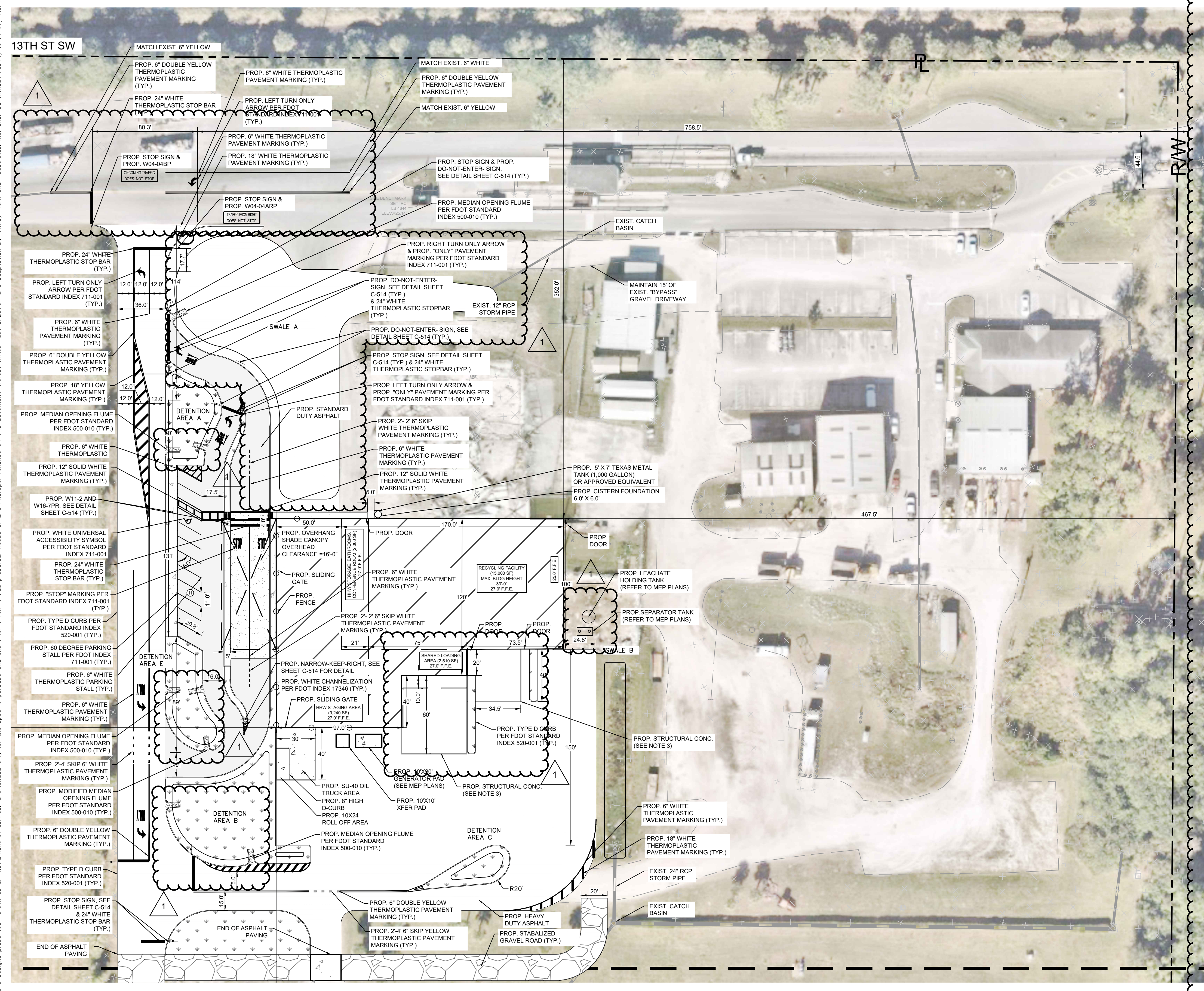
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FLORIDA
LICENSE
No 73898
STATE OF FLORIDA
BARTON J. FYE

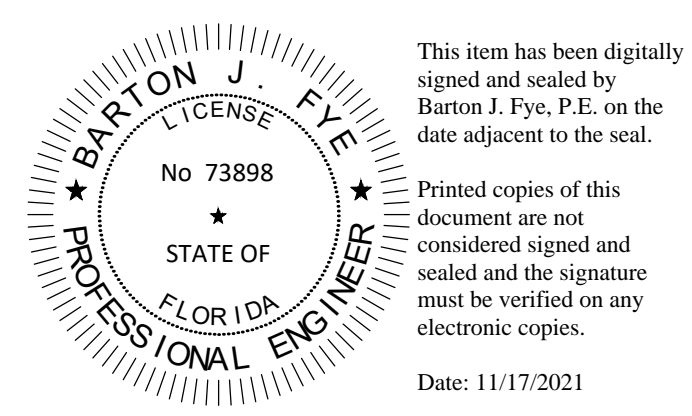
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SHEET NUMBER
C-400

Plotted By: Rodriguez, Rebecca Sheet: Set: IRC LANDFILL Layout: C-410 SITE PLAN November 17, 2021 10:40:08am K:\vmb-civil\143228000 - irc hhw and recycling facility\CADD\plan\sheet\C-410 Site Plan.dwg
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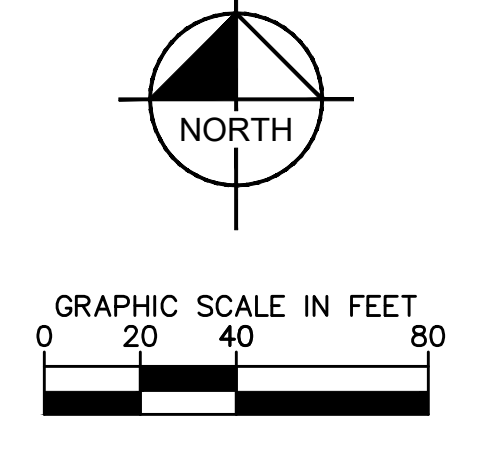


SEE SHEET C-411 FOR CONTINUATION



LEGEND

- RIGHT-OF-WAY LINE / PROPERTY LINE
- PROP. BUILDING
- PROP. GRAVEL ROAD
- PROP. HEAVY DUTY ASPHALT
- PROP. STANDARD DUTY ASPHALT
- PROP. LANDSCAPE AREA
- PROP. STANDARD DUTY CONC.
- PROP. HEAVY DUTY CONC.
- PROP. CONC. SIDEWALK
- EXIST. GRAVEL ROAD



NOTES:

1. STANDARD DUTY ASPHALT TO BE INSTALLED ONLY IN THE PEDESTRIAN PARKING LOT & DROP-OFF AREA.
2. HEAVY DUTY ASPHALT TO BE INSTALLED ONLY IN THE TRUCK COURT AND THE NORTHERN/SOUTHERN ACCESS ROAD.
3. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR CONCRETE PAVEMENT DETAIL.
4. ALL MEDIAN OPENING FLUMES TO BE CONSTRUCTED TO EXTEND DOWN TO THE BOTTOM OF ALL PONDS AND SWALES.
5. CONTRACTOR SHALL DIRECT ENTERING AND EXITING SEMI TRUCKS LOADED FOR DELIVERY AT THE EXISTING 80' X 240' CONCRETE PAD. SEMI TRUCKS LOADED AT THE EXISTING 80' X 240' CONCRETE PAD ARE ROUTED FOR DELIVERY TO ST. LUCIE COUNTY. A TEMPORARY TRAFFIC PLAN FOR THESE ACTIVITIES SHALL BE PROVIDED BY THE CONTRACTOR.

PROJECT LOCATION
 1325 74TH AVENUE SW, VERO BEACH, FL 32968
 SECTION 25, TOWNSHIP 33, RANGE 38, INDIAN RIVER COUNTY, FL
 TAX PARCEL ID: 33-28-25-00001-0090-00001.0

BENCHMARK NOTE:
 THE PRIMARY BENCHMARK UTILIZED FOR THIS SURVEY IS IRC BM267009, ELEVATION 20.50'

UTILITY PROVIDERS
 THE PROJECT WILL BE SERVED BY:
 WATER/SEWER INDIAN RIVER COUNTY
 ELECTRIC FLORIDA POWER AND LIGHT

FLOOD ELEVATION
 F.I.R.M NO.: 12061C0355H
 EFFECTIVE DATE: 12/04/2012
 SPECIAL FLOOD HAZARD AREA ZONE: ZONE X/ZONE A
 BASE FLOOD ELEVATION: N/A

BUILDING HEIGHT
 BUILDING HEIGHT: 33.0' (MAX. 35.0' ALLOWED)

SITE AREA

BUILDING COVERAGE AREA: 28,750 SQ FT	0.66 (AC)	8% (MAX. 20% ALLOWED)
IMPERVIOUS AREA: 100,277 SQ FT	2.86 (AC)	32%
PERVIOUS AREA: 230,965 SQ FT	5.34 (AC)	60%
GREEN OPEN SPACE: 220,618 SQ FT	5.10 (AC)	57%
GRAVEL ROAD: 10,348 SQ FT	0.24 (AC)	3%
TOTAL AREA: 387,860 SQ FT	8.9 (AC)	100%

PERIMETER SETBACK

	REQUIRED	PROPOSED
NORTH (SIDE)	30 FT	352 FT
EAST (FRONT)	30 FT	467.5 FT
SOUTH (SIDE)	30 FT	2,085.5 FT
WEST (REAR)	30 FT	4,029 FT

PARKING SPACE SUMMARY

	REQUIRED	PROPOSED
STANDARD	N/A	10
ACCESSIBLE	N/A	1
TOTAL	N/A	11

- PARKING SPACE NOTES**
- 1 ALL PARKING SPACES WITH THE EXCEPTION OF HANDICAPPED PARKING SPACES SHALL BE STRIPED IN WHITE RETRO-REFLECTIVE PAINT AND BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, 2016, SECTION 710.
 - 2 ALL HANDICAPPED PARKING SPACES SHALL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH THE FDOT STANDARD INDEX 17346, 2016 EDITION.
 - 3 ALL COMPACT SPACES SHALL BE MARKED "COMPACT" ON THE STALL OR TIRE STOP.
- PAVEMENT MARKINGS NOTES**
- 1 SIGNS AND PAVEMENT MARKINGS ARE TO CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND THE INDIAN RIVER COUNTY TYPICAL DRAWINGS FOR ROADWAY SIGNING, STRIPING & GEOMETRICS.
 - 2 FIRE LANES SHALL BE MARKED WITH FREE STANDING SIGNS, MARKED CURBS, OR SIDEWALKS HAVING THE WORDS "FIRE LANE - NO PARKING" PAINTED WITH A CONTRASTING COLOR AT A SIZE AND SPACING APPROVED BY THE FIRE DIVISION.
 - 3 HANDICAP STALL PARKING SHALL MEET THE REQUIREMENTS OF FDOT STANDARD DESIGN INDEX 17346 "SPECIAL MARKING AREAS", LATEST EDITION.
 - 4 ALL PARKING STALL WIDTHS SHALL BE DIMENSIONED FROM CENTERLINE TO CENTERLINE OF THE WHITE STRIPES.
 - 5 MINIMUM SPACE BETWEEN STOP BAR AND CROSSWALKS SHALL BE 4'.
 - 6 ALL PARKING SPACES WITH EXCEPTION OF THE HANDICAPPED PARKING SPACES SHALL BE STRIPED IN WHITE, RETRO-REFLECTIVE TRAFFIC PAINT AND BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, LATEST EDITION, SECTION 710.

STORMWATER DETENTION
 DRY DETENTION AREA: 203,32 SQ FT (0.47 AC)

JURISDICTIONAL AGENCY PERMITS

INDIAN RIVER COUNTY

- TYPE "B" STORMWATER PERMIT
- TREE REMOVAL PERMIT
- UTILITY CONSTRUCTION PERMIT(UCP)
- IRC LAND CLEARING
- IRC MAJOR SITE PLAN
- WATER
- WASTEWATER

FLORIDA DEP

NET NEW TRIP GENERATION SUMMARY

DEVELOPMENT SCENARIO	AVERAGE WEEKDAY DAILY GENERATION
EXISTING DEVELOPMENT	56 VEHICLES TRIPS
PROPOSED REDEVELOPMENT	133 VEHICLE TRIPS
NET NEW REDEVELOPMENT	77 VEHICLE TRIPS

CONSTRUCTION TIMETABLE

CONSTRUCTION COMMENCEMENT	SEPTEMBER 2021
CONSTRUCTION COMPLETION	MARCH 2022

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 PHONE: 305-673-2025
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SITE PLAN I

IRC LANDFILL
 PREPARED FOR
INDIAN RIVER COUNTY
 INDIAN RIVER COUNTY

SHEET NUMBER
C-410

NO.	REVISIONS	DATE	BY

OWNER CHANGES
 11/16/2021 JF

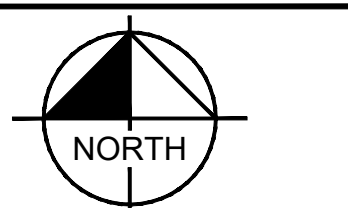
SEE SHEET C-410 FOR CONTINUATION



LEGEND

- RAW — RIGHT-OF-WAY LINE / PROPERTY LINE
- ▨ PROP. BUILDING
- ▨ PROP. GRAVEL ROAD
- ▨ PROP. HEAVY DUTY ASPHALT
- ▨ PROP. STANDARD DUTY ASPHALT
- ▨ PROP. LANDSCAPE AREA
- ▨ PROP. STANDARD DUTY CONC.
- ▨ PROP. HEAVY DUTY CONC.
- ▨ PROP. CONC. SIDEWALK
- ▨ EXIST. GRAVEL ROAD

GRAPHIC SCALE IN FEET: 0, 20, 40, 80



Plotted By: Rodriguez, Rebecca - Sheet Set: IRC LANDFILL - Layout: C-411 - SITE PLAN - November 17, 2021 - 10:40:13am - K:\vmb-civil\43228000 - irc hwh and recycling facility\CADD\plansheets\C-410 Site Plan.dwg
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NO.	REVISIONS	DATE	BY

Kimley & Horn

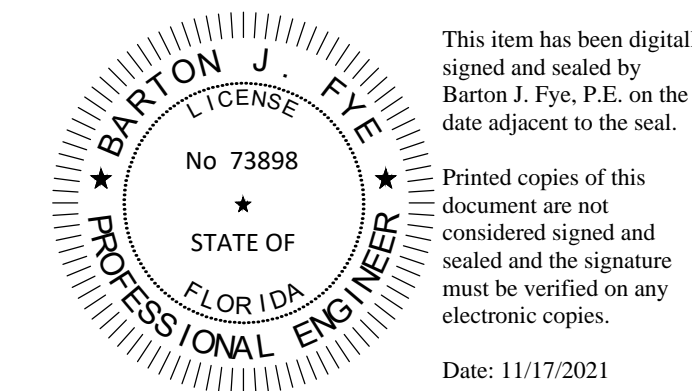
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
 355 ALHAMBRA CIRCLE, SUITE 1400, CORAL GABLES, FL 33154
 PHONE: 305-673-2025
 WWW.KIMLEY-HORN.COM REGISTRY 696

LICENSED PROFESSIONAL	
KHA PROJECT	14-3228000
DATE	JULY 2021
SCALE	AS SHOWN
DESIGNED BY	MRC
DRAWN BY	RMR
CHECKED BY	
DATE:	

SITE PLAN II

IRC LANDFILL
 PREPARED FOR
INDIAN RIVER COUNTY
 INDIAN RIVER COUNTY
 FL

SHEET NUMBER
C-411

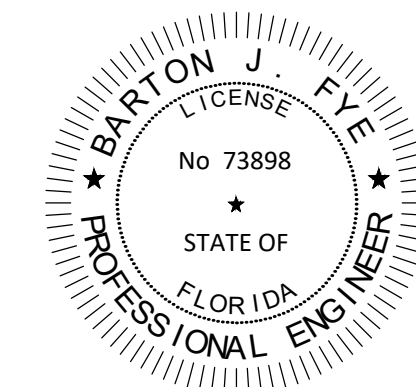
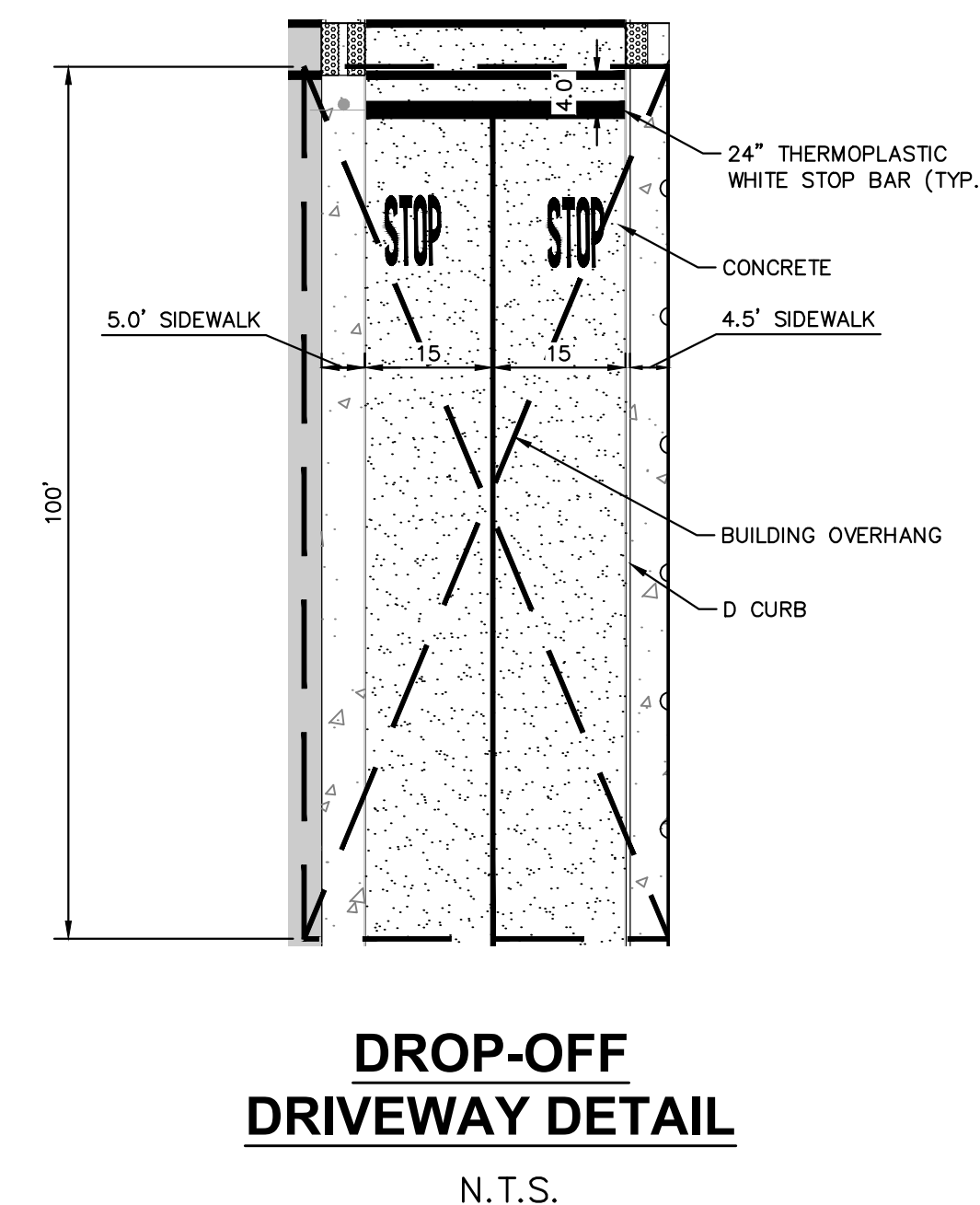
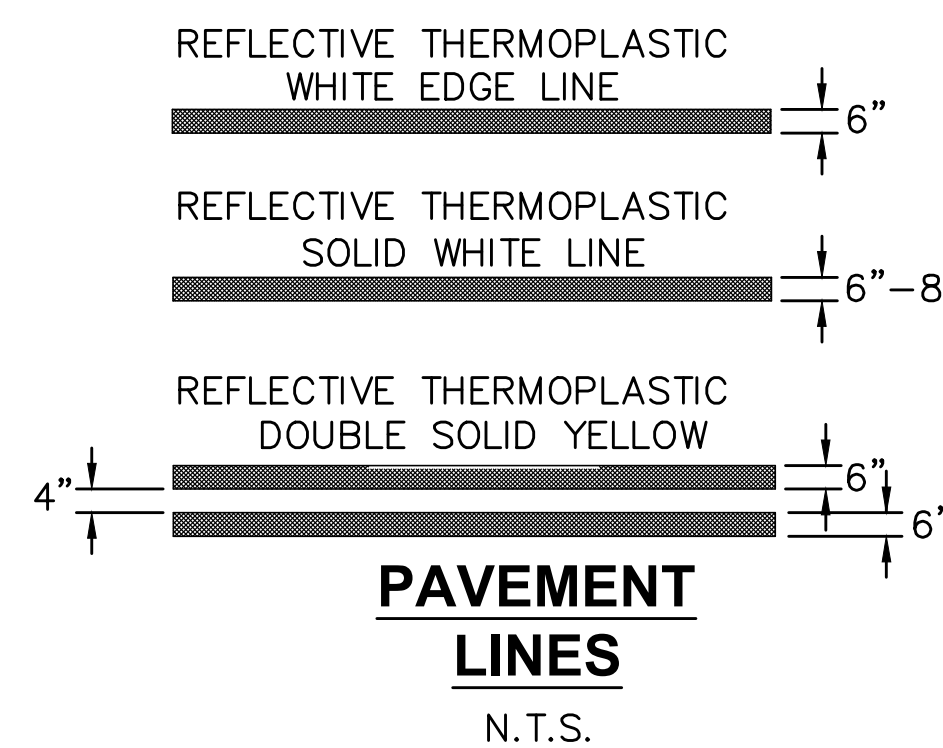
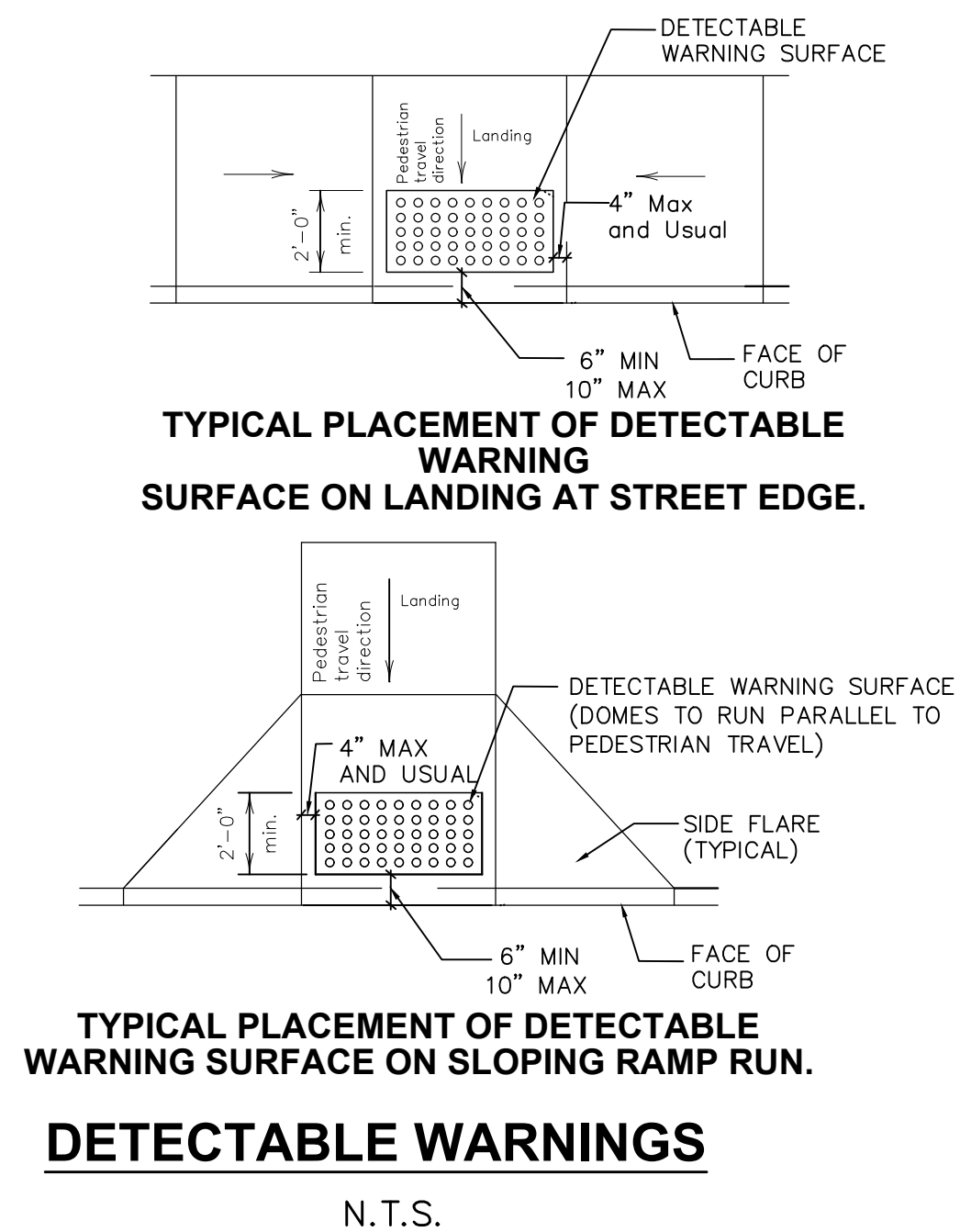
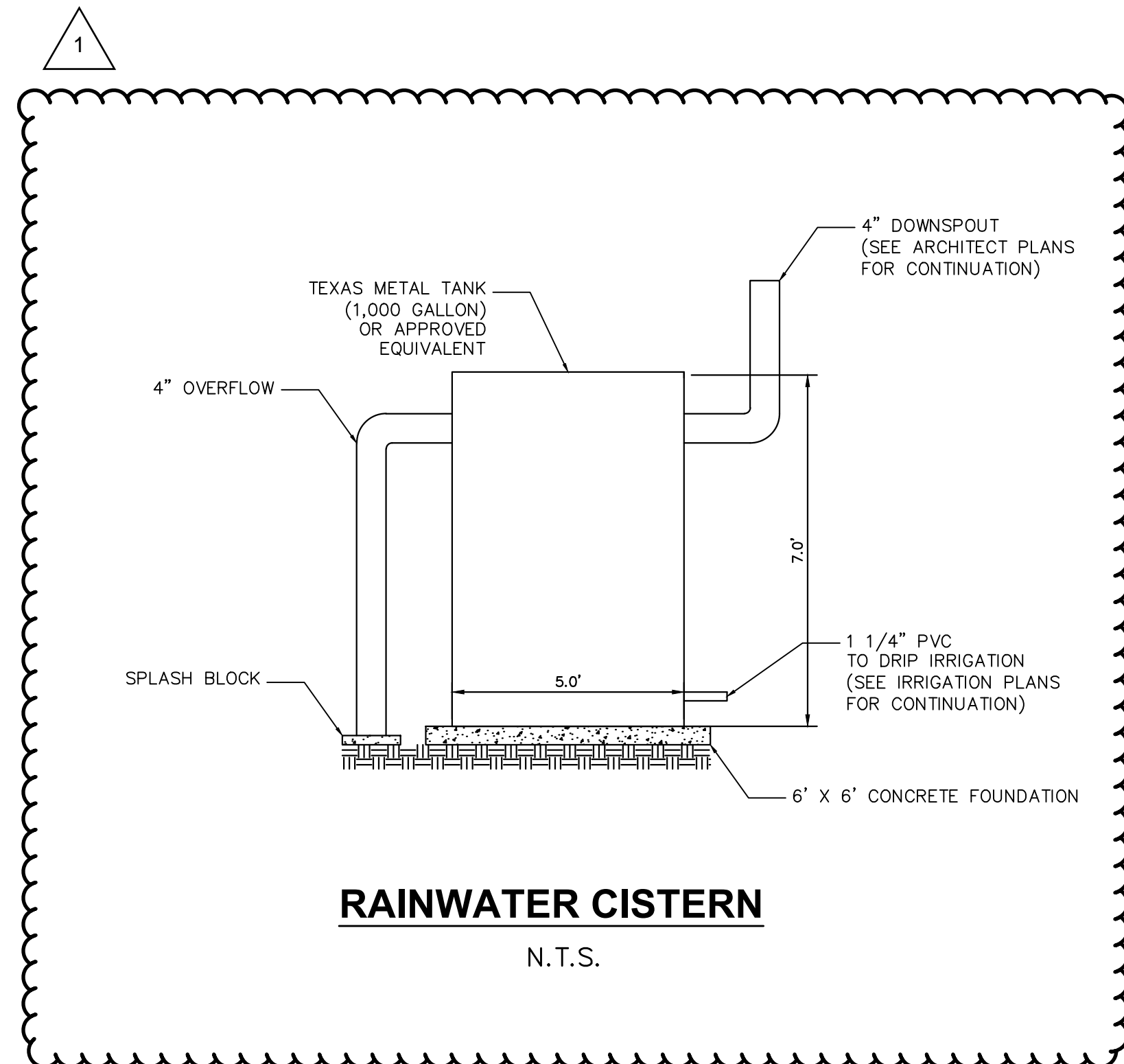
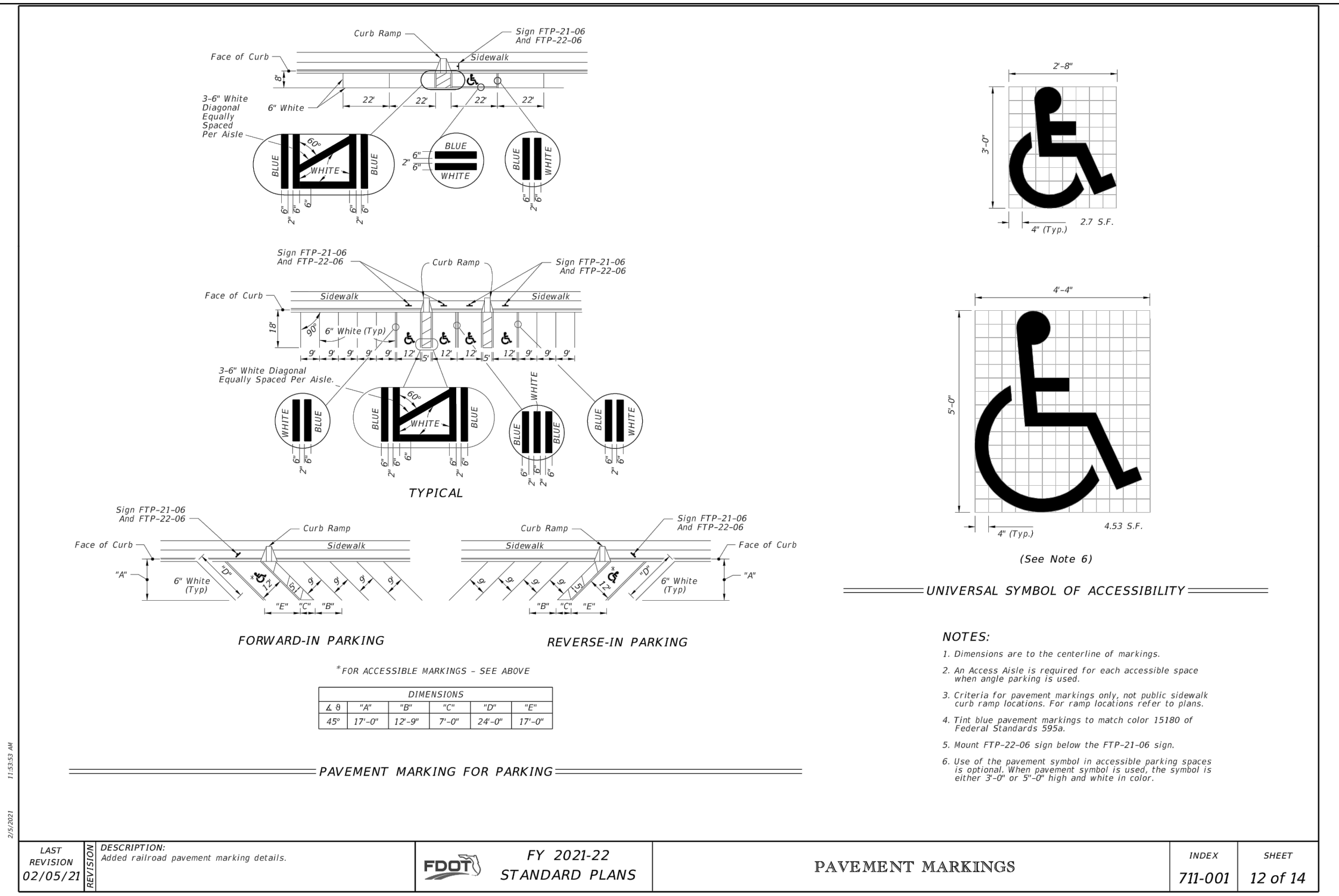
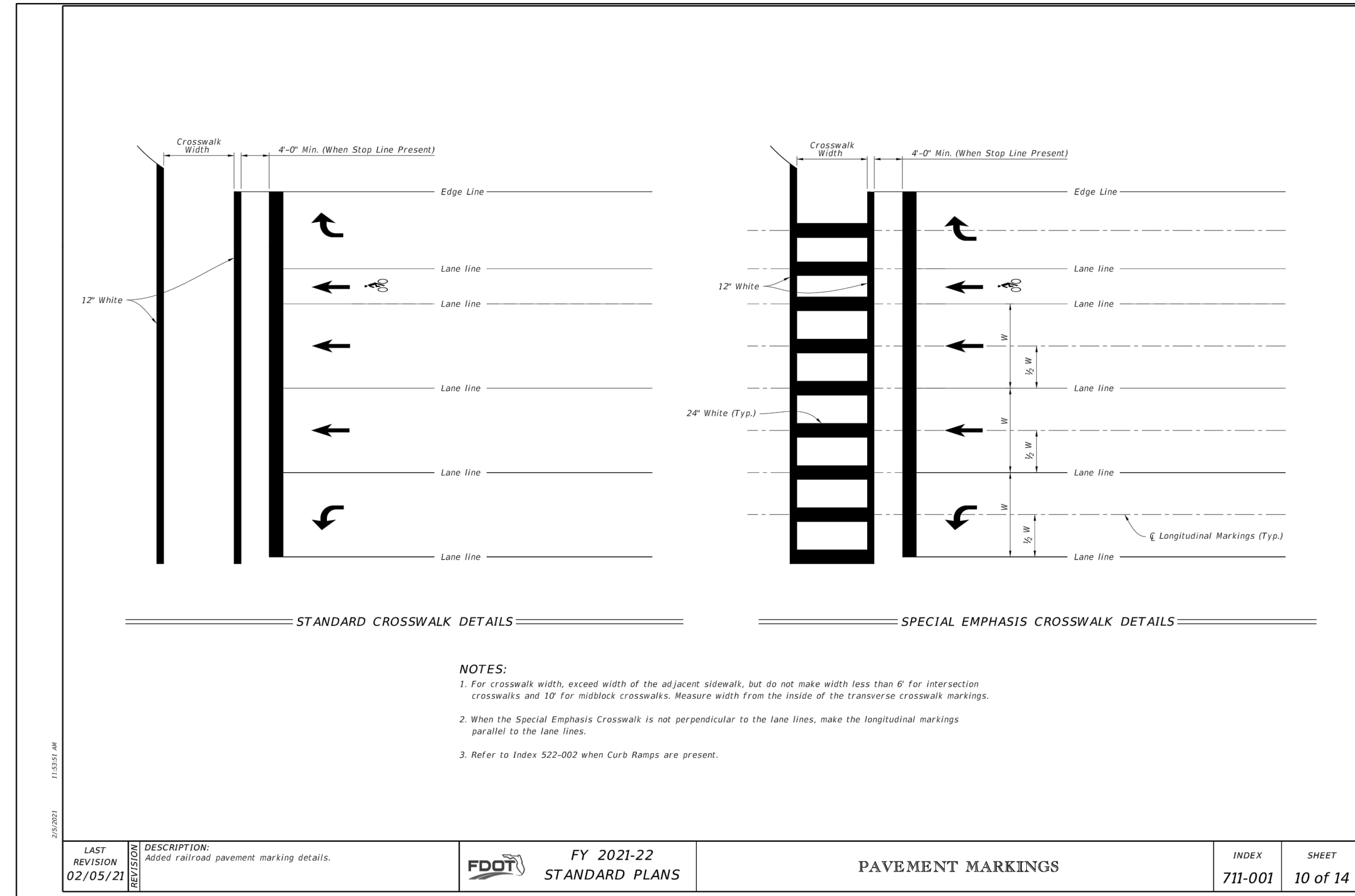


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Plotted By: Rodriguez, Rebecca - Sheet Set: IRC LANDFILL - Layout: C-412 SITE PLAN DETAILS - November 17, 2021 - 10:40:23am - k:\vmb-civil\143228000 - irc lhw and recycling facility\civil\CADD\plansheets\C-412 SITE PLAN DETAILS.dwg
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OWNER CHANGES

No.	REVISIONS	DATE	BY

LICENSED PROFESSIONAL
 KHA PROJECT 14-3228000
 DATE JULY 2021
 SCALE AS SHOWN
 DESIGNED BY MRG
 DRAWN BY RMR
 CHECKED BY BF

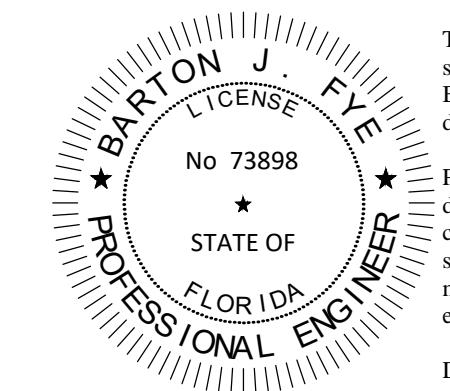
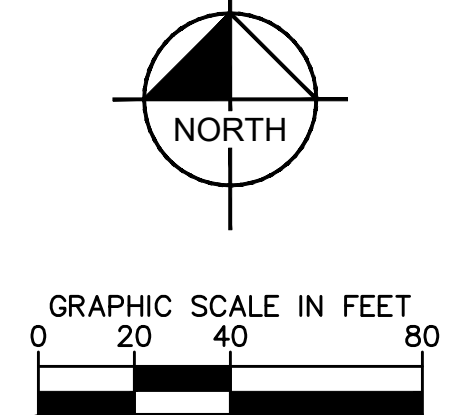
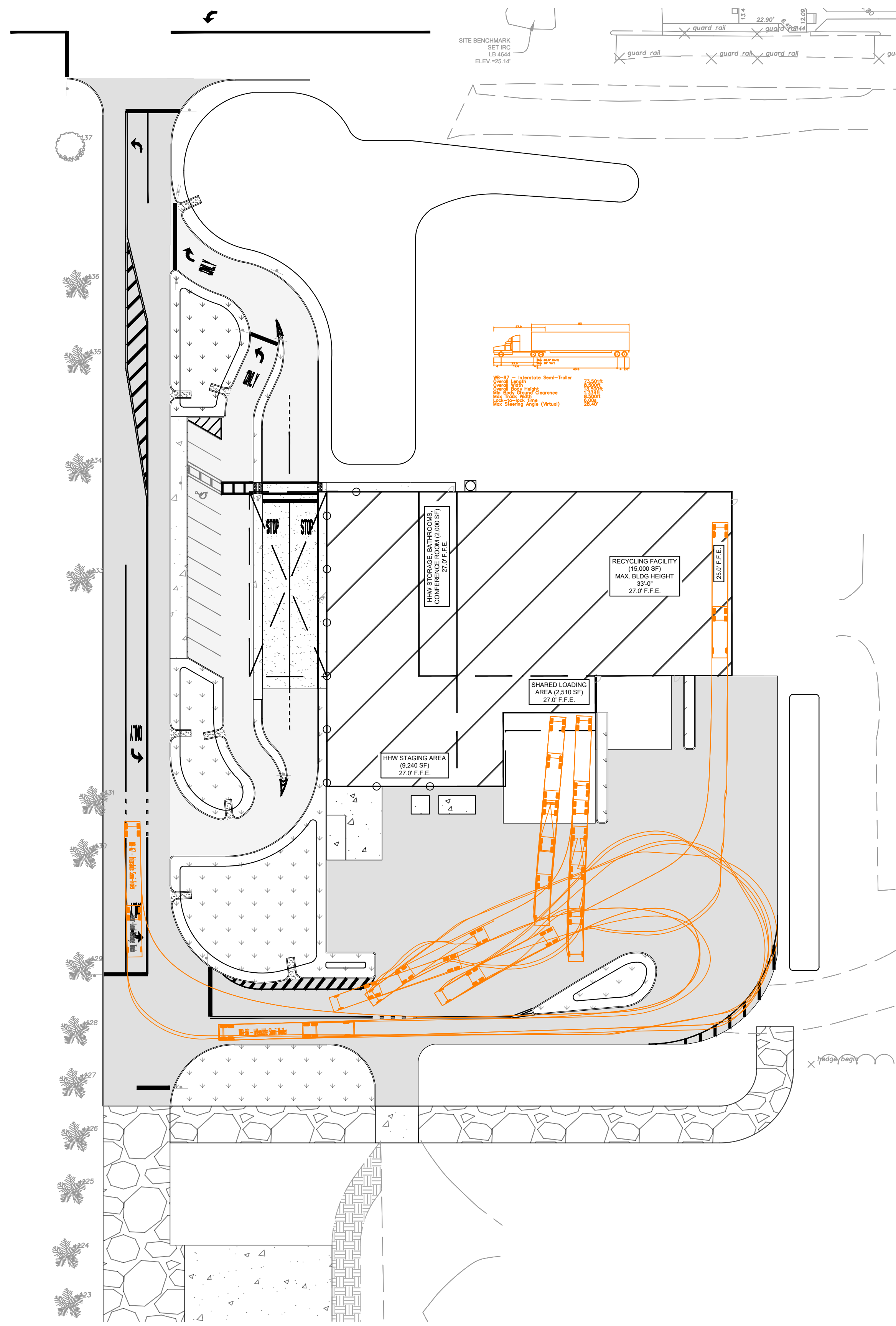
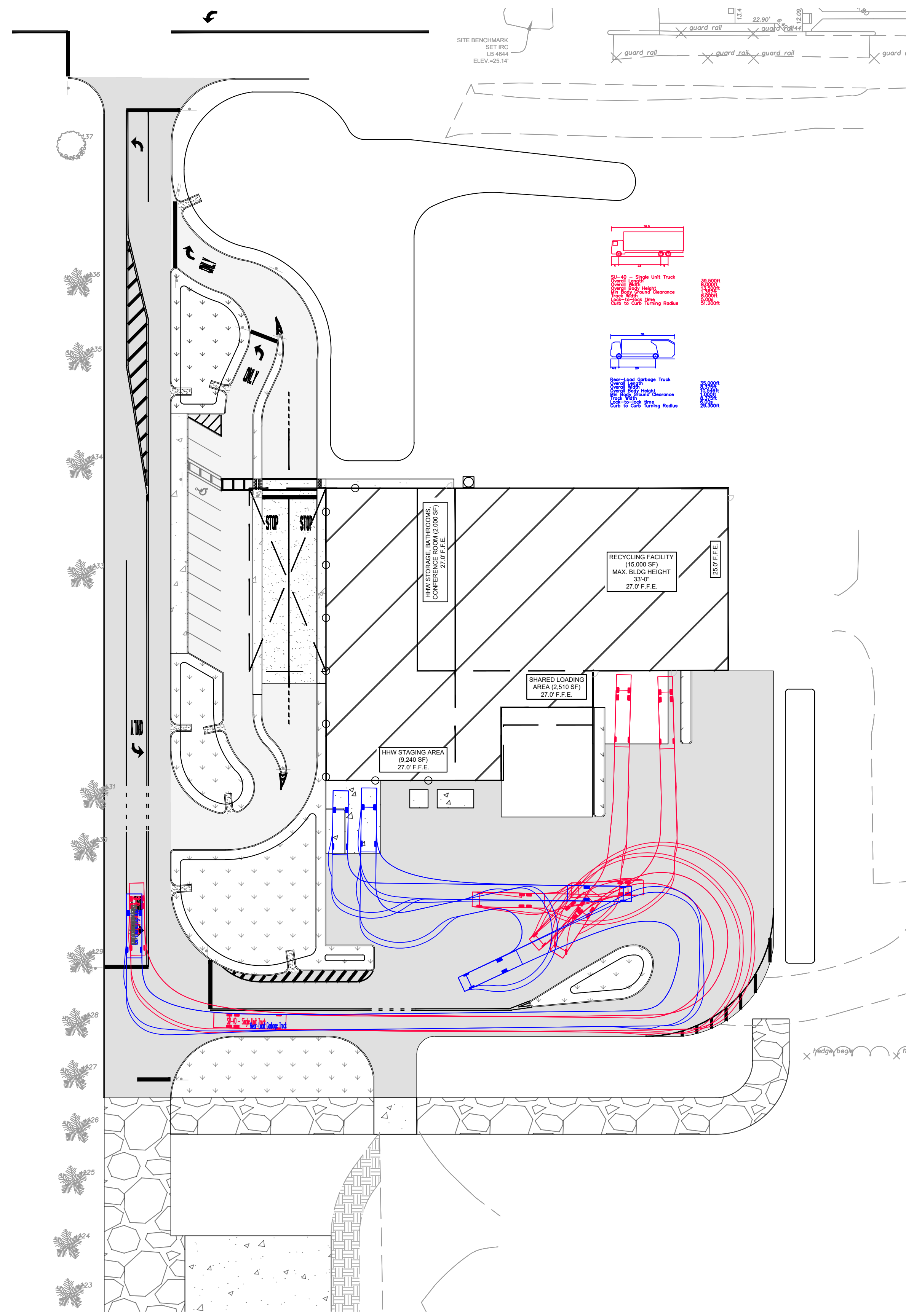
SITE PLAN DETAILS

IRC LANDFILL PREPARED FOR INDIAN RIVER COUNTY INDIAN RIVER COUNTY FL

SHEET NUMBER **C-412**

11/16/2021

Plotted By: Rodriguez, Rebecca - Sheet Set: IRC LANDFILL - Layout: C-420 MANEUVERABILITY - November 17, 2021 - 10:40:44am - k:\vmb-civil\143228000 - frc hhw and recycling facility\CIVIL\CADD\plansheets\C-420 MANEUVERABILITY.dwg
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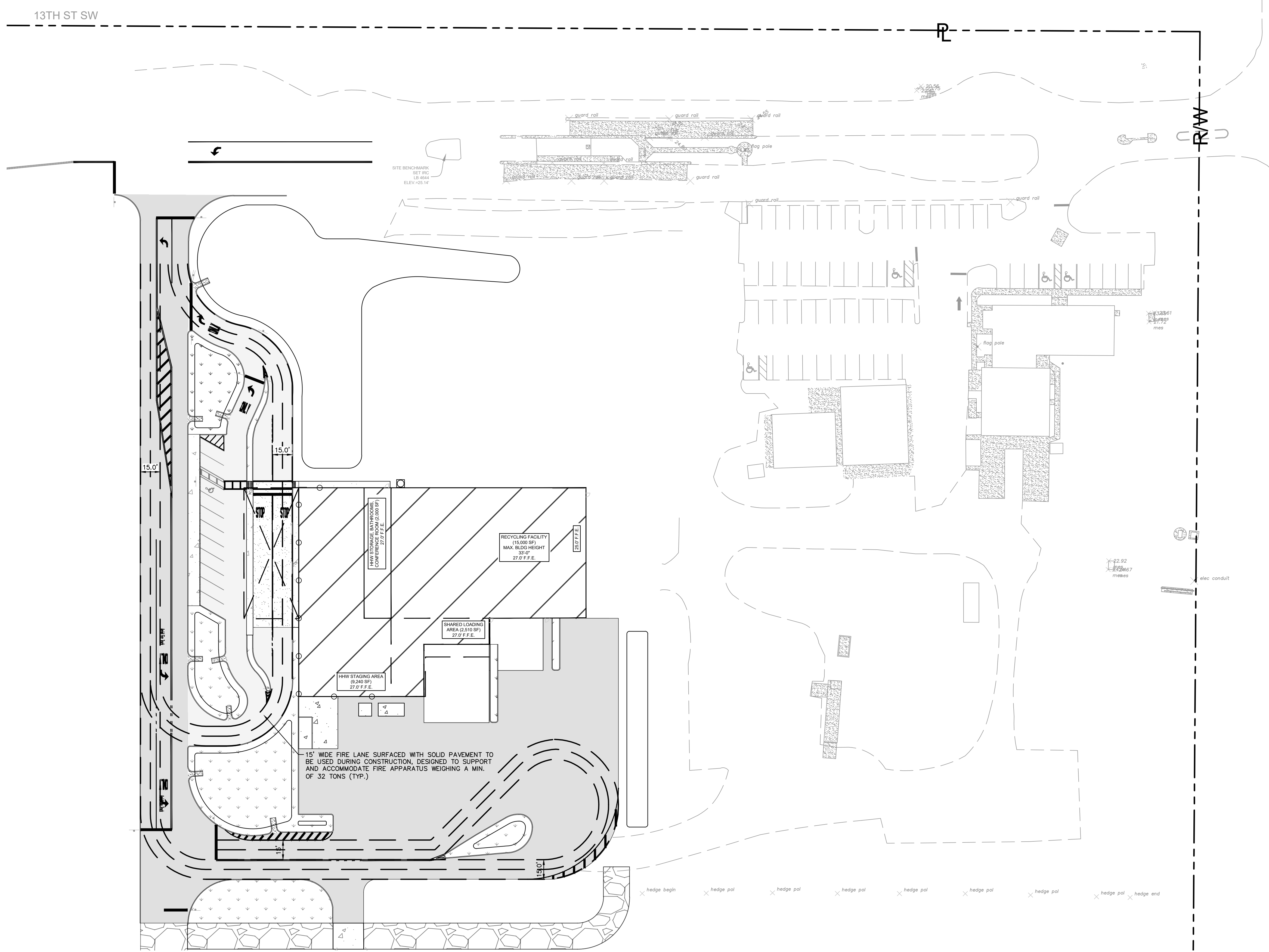
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KHA PROJECT 14-3228000	DATE JULY 2021	SCALE AS SHOWN	DESIGNED BY MRG	DRAWN BY MRG	CHECKED BY BF	DATE	BY	
								LICENSED PROFESSIONAL
MANEUVERABILITY							REVISIONS	DATE
IRC LANDFILL PREPARED FOR INDIAN RIVER COUNTY							No.	BY
INDIAN RIVER COUNTY							SHEET NUMBER C-420	

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Plotted By: Rodriguez, Rebecca - Sheet Set: IRC LANDFILL - Layout: C-450 - FIRE ACCESS PLAN - November 17, 2021 - 10:40:59am - K:\vmb-civil\143228000 - irc.lhw.and.recycling.facility\CIVIL\CADD\plansheets\C-450 - FIRE ACCESS PLAN.dwg
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LEGEND

RAW - RL RIGHT-OF-WAY LINE / PROPERTY LINE

PROP. BUILDING

PROP. GRAVEL ROAD

PROP. HEAVY DUTY ASPHALT

PROP. STANDARD DUTY ASPHALT

PROP. LANDSCAPE AREA

PROP. STANDARD DUTY CONC.

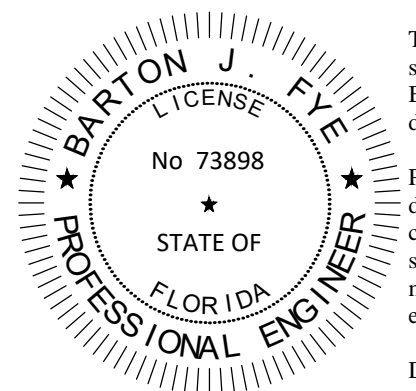
PROP. HEAVY DUTY CONC.

PROP. CONC. SIDEWALK

GRAPHIC SCALE IN FEET
0 20 40 80

1

74TH AVENUE SW
(45 MPH SPEED LIMIT)



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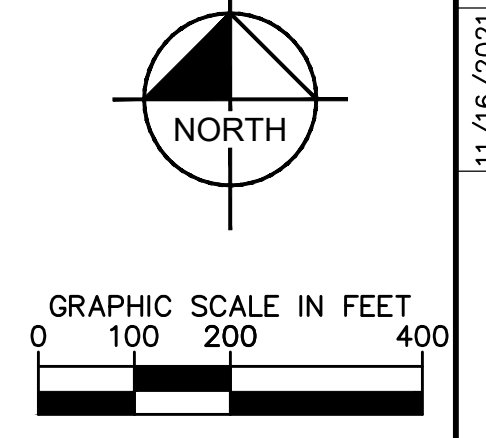
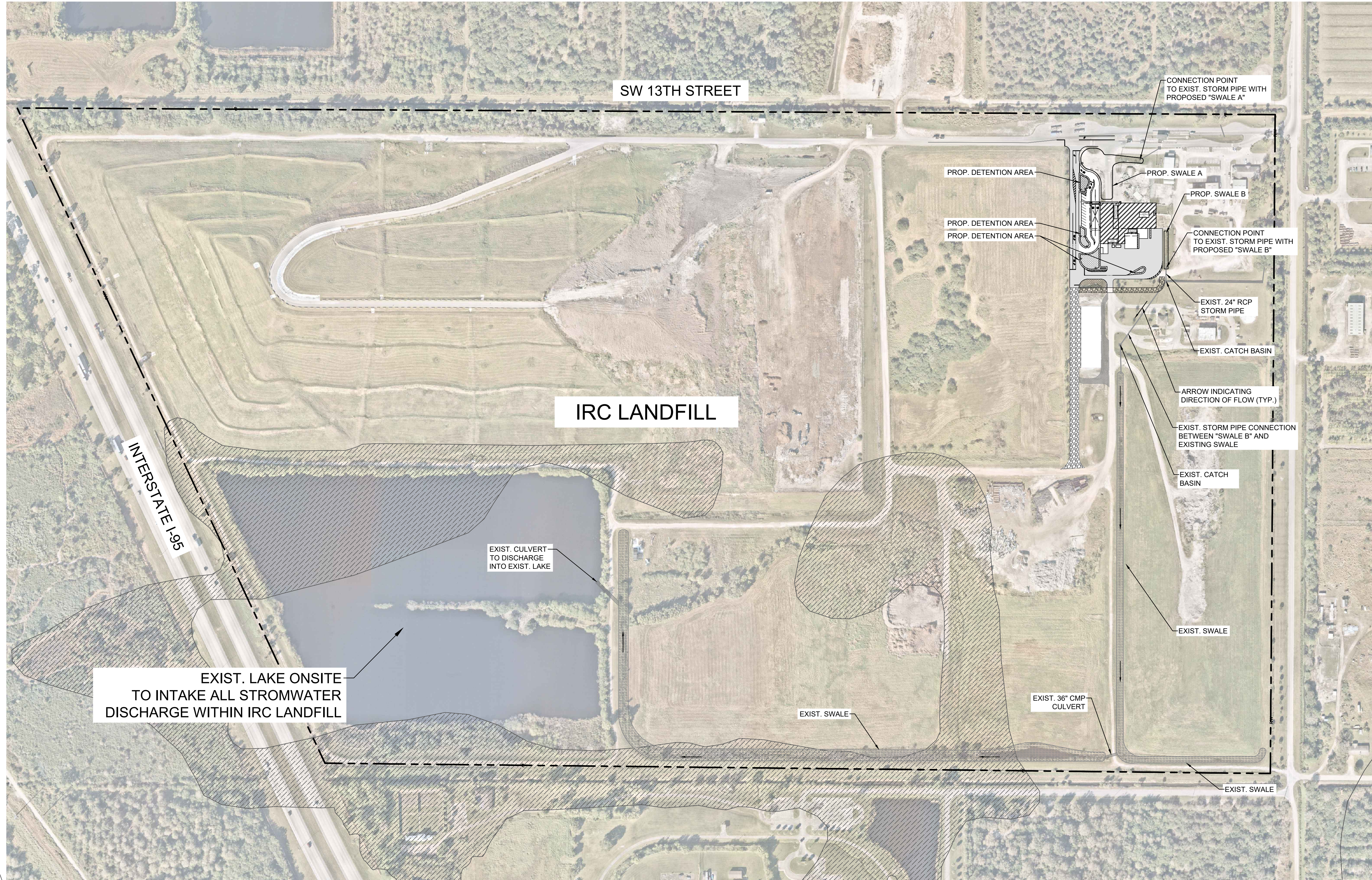
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OWNER CHANGES	No.	REVISIONS	DATE	BY	
LICENSED PROFESSIONAL					
KHA PROJECT	14-3228000	DATE	JULY 2021	SCALE	AS SHOWN
DESIGNED BY	MRC	DRAWN BY	RMR	CHECKED BY	BF
FIRE ACCESS PLAN		INDIAN RIVER COUNTY			
IRC LANDFILL		PREPARED FOR			
INDIAN RIVER COUNTY		FL			
SHEET NUMBER		C-450			

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Plotted By: Rodriguez, Rebecca Sheet: IRC LANDFILL Layout: C-500 OVERALL DRAINAGE PLAN November 17, 2021 10:41:12am K:\vmb_civil\143228000 - Irc Inhw and recycling facility\CADD\plansheets\C-500 OVERALL DRAINAGE PLAN.dwg
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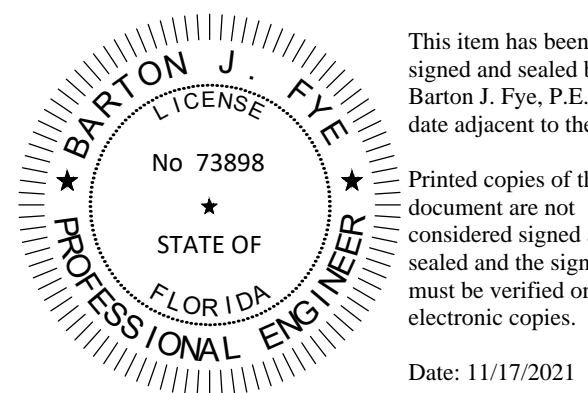


LEGEND

- RAW- P RIGHT-OF-WAY LINE / PROPERTY LINE
- FEMA HAZARDOUS FLOOD ZONE A F.I.R.M. NO.: 12061C0355H

NOTES

1. 74TH AVE SW POSTED SPEED LIMIT = 45MPH
2. PROPOSED INTERCONNECTED DRAINAGE SYSTEM WILL CONNECT TO THE EXISTING STORM PIPE AS DESIGNATED ON PLAN SHEET.



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NO.	REVISIONS	DATE	BY

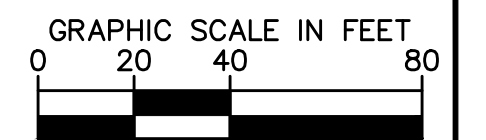
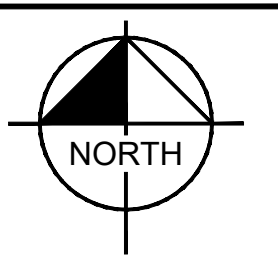
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LICENSED PROFESSIONAL	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY	DATE
	JULY 2021	AS SHOWN	MRC	RMR		

OVERALL DRAINAGE PLAN

IRC LANDFILL
 PREPARED FOR
INDIAN RIVER COUNTY
 INDIAN RIVER COUNTY
 SHEET NUMBER
C-500

Plotted By: Rebecca Rodriguez, Rebecca Rodriguez, Sheet Set: IRC LANDFILL, Layout: C-510 PAVING, GRADING AND DRAINAGE PLAN, November 17, 2021, 11:22:53am, K:\vnt\civil\143228000 - Tr hnd and recycling facility\CADD\plansheets\C-510 PAVING, GRADING AND DRAINAGE DETAILS.dwg
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LEGEND

- RAW - P** RIGHT-OF-WAY LINE / PROPERTY LINE
- H.P.** HIGH POINT (H.P.)
- FLOW ARROW
- PROP. BUILDING
- PROP. GRAVEL ROAD
- PROP. HEAVY DUTY ASPHALT
- PROP. STANDARD DUTY ASPHALT
- PROP. LANDSCAPE AREA
- PROP. STANDARD DUTY CONC.
- PROP. HEAVY DUTY CONC.
- PROP. CONC. SIDEWALK
- 25.00 ME** PROP. MATCH EXISTING ELEVATION
- 25.00** PROP. ELEVATION
- 25.00 TP** PROP. TOP OF POND ELEVATION
- 25.00 BP** PROP. BOTTOM OF POND ELEVATION

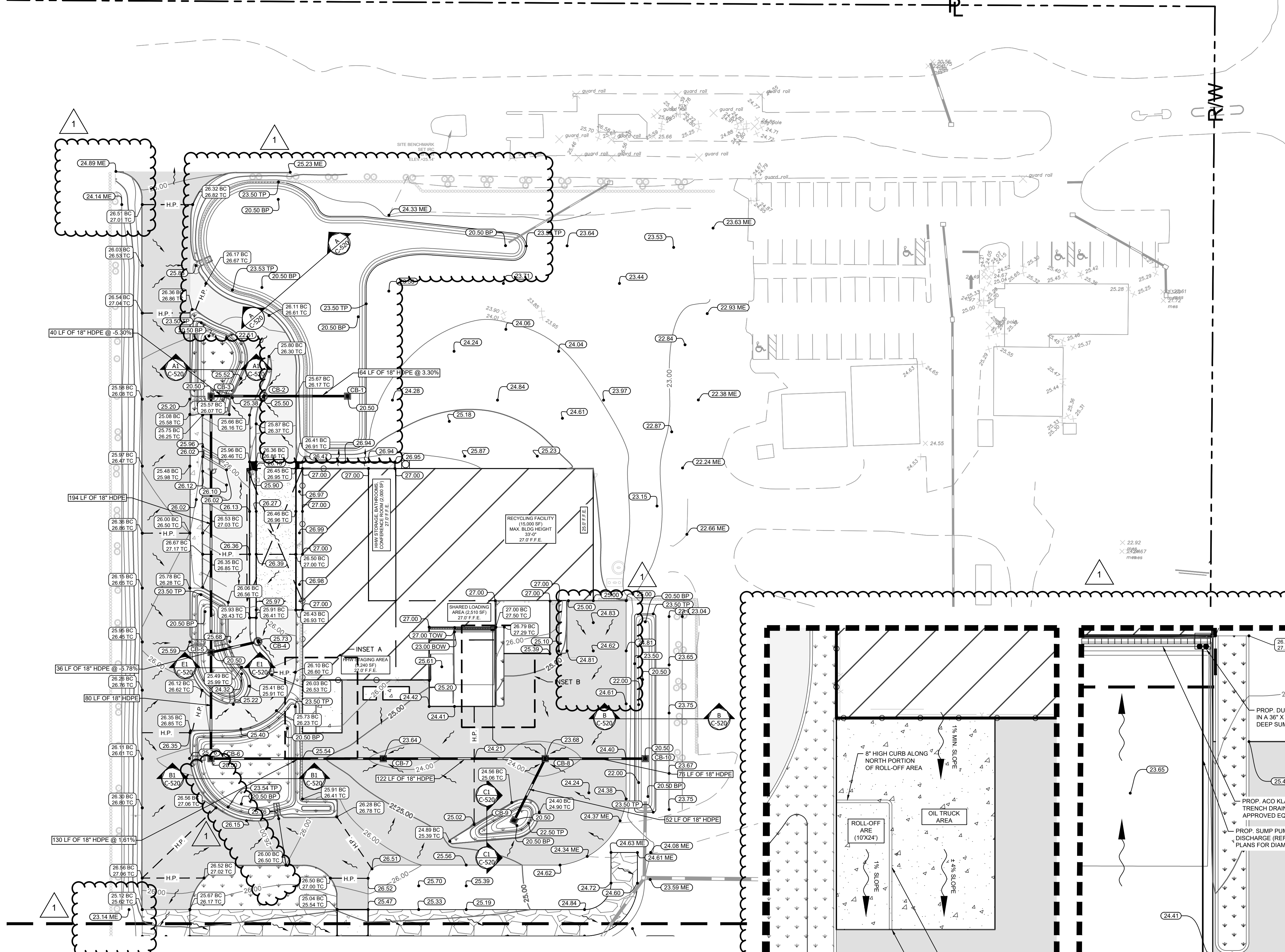
NOTES:

1. CONTRACTOR TO CONSTRUCT DRAINAGE STRUCTURES WITH USF GRATES, RIMS AND COVERS AS CALLED OUT OR APPROVED EQUAL. SHOP DRAWINGS ARE TO BE PROVIDED TO ENGINEER PRIOR TO ANY CONSTRUCTION.
2. CONTRACTOR TO REFER TO FDOT DESIGN STANDARD (AND NOT LIMITED TO) INDEXES 200, 201, 210, 211, 214, 232 & 233 FOR MANHOLE, INLET AND GRATE SPECIFICATIONS.
3. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED WITH (4) SIDING BEARING HEAVY DUTY H-20 RATED TRAFFIC RIMS AND GRATES.
4. CONTRACTOR TO VERIFY ALL EXISTING UTILITY RINGS AND COVERS ON SITE ARE HEAVY DUTY TRAFFIC RATED. TO REPLACE DEFICIENT RINGS AND COVERS WITH HEAVY DUTY TRAFFIC RATED RINGS AND COVERS. CONTRACTOR TO ADJUST RIM ELEVATIONS TO MATCH PROPOSED FINISHED GRADE OF ANY EXISTING UTILITIES TO REMAIN THAT CHANGE IN ELEVATION DURING CONSTRUCTION.
5. ALL CLEANOUT COVERS SHOULD BE RATED FOR HEAVY DUTY TRAFFIC.
6. ALL EXISTING PAVEMENT AND CONCRETE TO BE JOINED SHALL BE SAWCUT.
7. SIDEWALKS AND CROSSWALKS SHALL NOT EXCEED 2% CROSS SLOPE NOR 5% LONGITUDINAL. GRADES IN ACCESSIBLE PARKING SPACES SHALL NOT EXCEED 2% IN ANY DIRECTION. IN CASES OF SIDEWALK AT BUILDING ENTRANCES, GRADES SHALL NOT EXCEED 2% IN ANY DIRECTION. ACCESSIBLE CURB RAMPS SHALL NOT EXCEED 8" IN LENGTH, 6" RISE, AND 1:12 SLOPE. LANDINGS ASSOCIATED WITH RAMPS AND AT CHANGES IN DIRECTION SHALL BE MINIMUM 60"X60" AND SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION. MINIMUM GRADE ON SIDEWALKS IN THE FIRST TEN (10) FEET ADJACENT TO BUILDINGS SHALL BE 1.5% MINIMUM.
8. SPOT ELEVATIONS ARE AT FACE OF CURB AND EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
9. EXISTING GRADES AND DRAINAGE HAVE BEEN TAKEN FROM A SURVEY PREPARED BY MASTELLER, MOLER & TAYLOR, INC. DATED MARCH 5, 2020. THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988. THE PRIMARY BENCHMARK UTILIZED IS IRC BM267009, ELEV. = 20.50'. SITE BENCHMARKS ARE AS SHOWN.

10. HOPE STORM PIPE-CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE STORM DRAINAGE PIPE INSTALLATION MANUAL AND SPECIFICATIONS AND COMPLYING WITH ALL MANUFACTURER'S INSTALLATION PROCEDURES AND REQUIREMENTS. TESTING OF BACKFILL MATERIAL AND COMPACTION OF BACKFILL MATERIAL IS THE CONTRACTOR'S RESPONSIBILITY.
11. ROOF DRAIN CONNECTIONS TO DRAINAGE PIPE SHALL BE AS FOLLOWS:
 - 11.1 FOR ADS N-12 CORRUGATED POLYETHYLENE DRAINAGE PIPE USE ADS DUAL WALL BRICATED REDUCING SADDLE TEE#-24" DIAMETER.
 - 11.2 FOR RCP DRAINAGE PIPE MAKE CONNECTION PER FDOT INDEX 280, CONCRETE COLLAR FOR JOINING MAINLINE PIPE AND STUB PIPE DETAIL.
 - 11.3 NOTIFY CONSULTANT FOR CONNECTION METHOD TO STEEL PIPE.
 - 11.4 ALL DRAINAGE PIPE JOINTS SHALL BE FILTER FABRIC WRAPPED PER FDOT INDEX #280. ALL DRAINAGE PIPE JOINTS NEED TO BE FILTER FABRIC WRAPPED REGARDLESS OF MATERIAL.
 - 11.5 EXISTING STORM INLETS AND PIPES ON PROPERTY TO BE JETTED AND CLEANED PRIOR TO ENGINEER'S ACCEPTANCE OF SYSTEM.
12. CONTRACTOR SHALL COORDINATE PAVING IMPROVEMENTS TO AVOID TIRE MARKS FROM CONSTRUCTION ACTIVITY. FINAL PAVING SHALL BE AS SMOOTH AS POSSIBLE AND FREE FROM ANY MARKS, SCRAPES, GOUGES, TIRE MARKS, ETC. CAUSED DURING CONSTRUCTION ACTIVITY.
13. CONTRACTOR TO ENSURE POSITIVE RUNOFF FROM THE BUILDING. PAVING SHALL BE FREE OF PONDING AND MAINTAIN POSITIVE OFFFALL TO THE DRAINAGE SYSTEM. CONTRACTOR SHALL FIELD VERIFY EXISTING DRAINAGE PATTERNS AND TIE-IN GRADES AND ALERT OWNER AND ENGINEER SHOULD ANY CONFLICTS ARISE.
14. DURING CONSTRUCTION AND AFTER FINAL GRADING, NO SURFACE WATER RUNOFF MAY BE DIRECTED TO ADJACENT PROPERTIES, AND ALL SURFACE WATER RUNOFF MUST BE ROUTED TO APPROVED DRAINAGE FACILITIES OR BE RETAINED ON SITE. ALL RUNOFF FROM THE SITE, BOTH DURING AND AFTER CONSTRUCTION, MUST BE FREE OF POLLUTANTS, INCLUDING SEDIMENT, PRIOR TO DISCHARGE.
15. ALL SLOPES STEEPER THAN 6:1 SHALL BE SODDED.
16. ALL SIDEWALKS BEHIND AND ADJACENT TO LANDSCAPE ISLANDS WILL BE SLOPED TO PREVENT STANDING WATER ALONG THE LANDSCAPE ISLAND.
17. ALL MEDIAN OPENING FLUMES TO BE CONSTRUCTED PER FDOT STANDARD INDEX 600-10 AND EXTEND DOWN TO THE BOTTOM OF ALL PONDS AND SWALES, UNLESS OTHERWISE NOTED.
18. EACH PUMP IN THE DUPLEX SUMP PUMP MUST HAVE A DISCHARGE RATE OF 80 GPM @ 5' TDH.

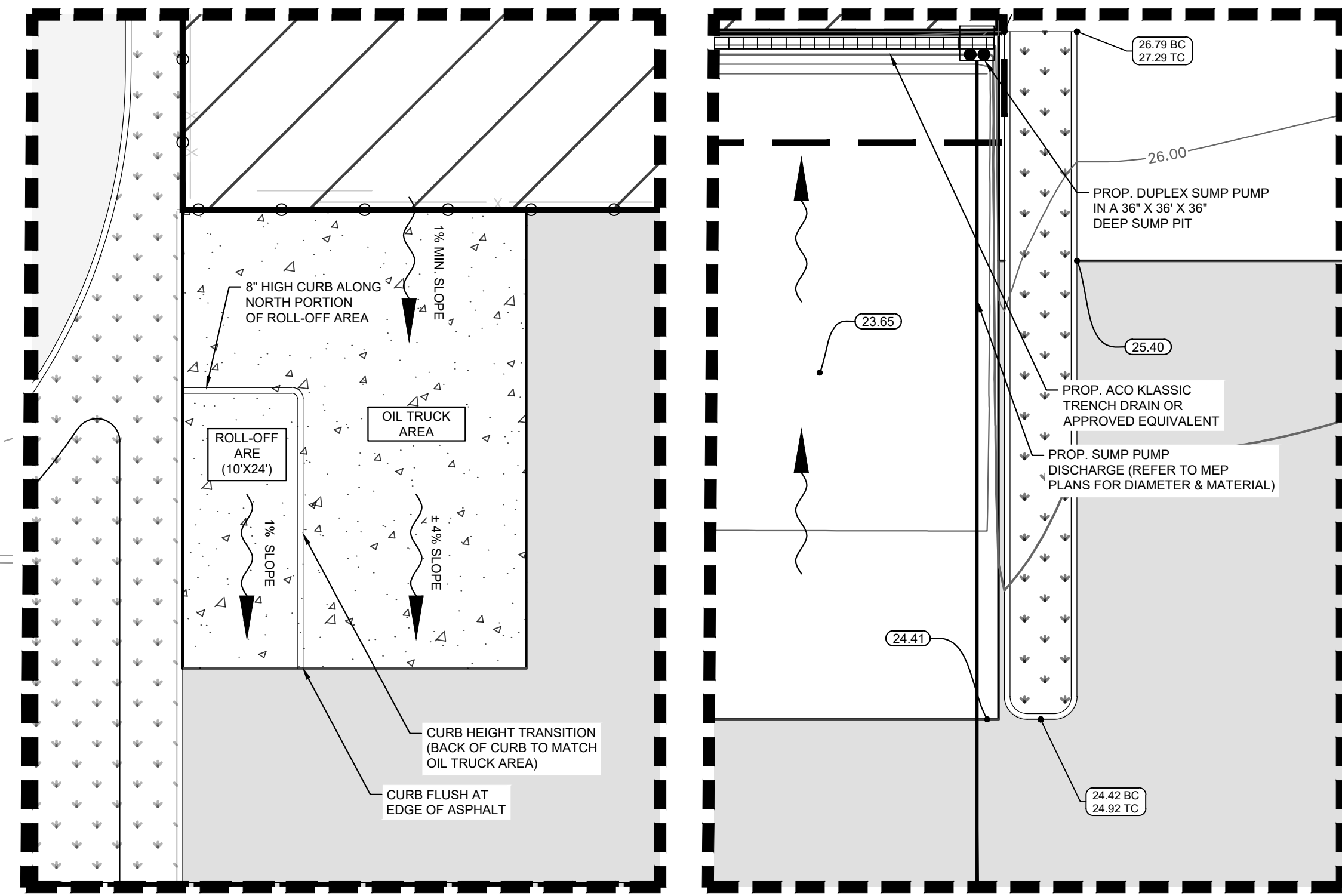
13TH ST SW

74TH AVENUE SW
(45 MPH SPEED LIMIT)



SEE SHEET C-511 FOR CONTINUATION

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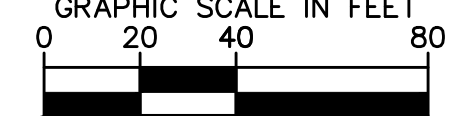
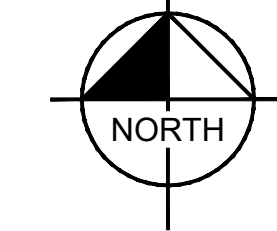
INSET A
1" = 10'

INSET B
1" = 10'

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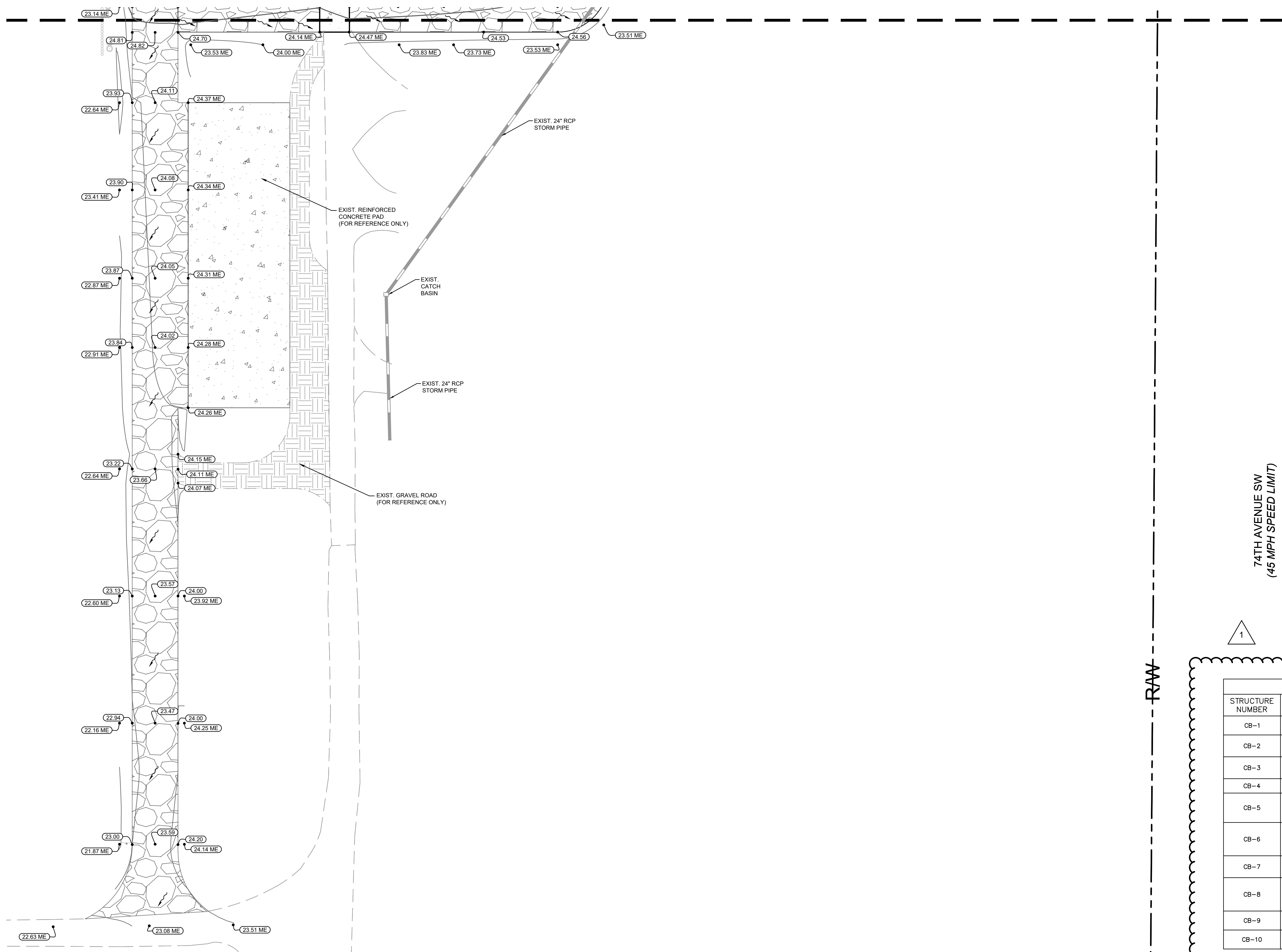
OWNER CHANGES		11/16/2021					
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SEE SHEET C-510 FOR CONTINUATION

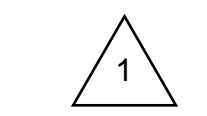


LEGEND

- RIGHT-OF-WAY LINE / PROPERTY LINE
- HIGH POINT (H.P.)
- FLOW ARROW
- PROP. BUILDING
- PROP. GRAVEL ROAD
- PROP. HEAVY DUTY ASPHALT
- PROP. STANDARD DUTY ASPHALT
- PROP. LANDSCAPE AREA
- PROP. STANDARD DUTY CONC.
- PROP. HEAVY DUTY CONC.
- PROP. CONC. SIDEWALK
- PROP. MATCH EXISTING ELEVATION
- PROP. ELEVATION
- PROP. TOP OF POND ELEVATION
- PROP. BOTTOM OF POND ELEVATION

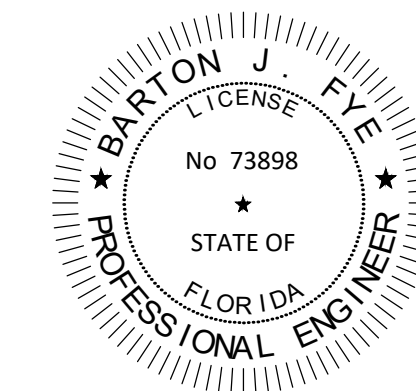


74TH AVENUE SW
(45 MPH SPEED LIMIT)



DRAINAGE STRUCTURE TABLE			
STRUCTURE NUMBER	STRUCTURE TYPE	RIM ELEVATION	INVERT ELEVATION
CB-1	PRECAST DITCH BOTTOM INLET - TYPE C 10 FT. OR LESS	RIM = 20.50	(18") 17.00 (W)
CB-2	PROP. P9 CURB INLET PER FDOT	RIM = 25.50	(18") 19.10 (W) . (18") 19.10 (E) .
CB-3	PRECAST DITCH BOTTOM INLET - TYPE C 10 FT. OR LESS	RIM = 20.50	(18") 17.00 (E) . (18") 17.00 (S) .
CB-4	PROP. P9 CURB INLET PER FDOT	RIM = 25.73	(18") 19.10 (W) .
CB-5	PRECAST DITCH BOTTOM INLET - TYPE C 10 FT. OR LESS	RIM = 20.50	(18") 17.00 (N) . (18") 17.00 (E) . (18") 17.00 (S) .
CB-6	PRECAST DITCH BOTTOM INLET - TYPE C 10 FT. OR LESS WITH 60" TYPE J BOTTOM PER FDOT INDEX 425-010	RIM = 20.50	(18") 17.00 (E) . (18") 17.00 (N) .
CB-7	PRECAST DITCH BOTTOM INLET - TYPE C 10 FT. OR LESS	RIM = 23.62	(18") 19.10 (E) . (18") 19.10 (W) .
CB-8	PRECAST DITCH BOTTOM INLET - TYPE C 10 FT. OR LESS WITH 60" TYPE J BOTTOM PER FDOT INDEX 425-010	RIM = 23.68	(18") 17.00 (SW) . (18") 19.10 (W) . (18") 17.00 (E) .
CB-9	PRECAST DITCH BOTTOM INLET - TYPE C 10 FT. OR LESS	RIM = 20.50	(18") 17.00 (NE)
CB-10	PRECAST DITCH BOTTOM INLET - TYPE C 10 FT. OR LESS	RIM = 20.50	(18") 17.00 (W)

*POLLUTION PREVENTION BAFFLE REQUIRED



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Date: 11/17/2021



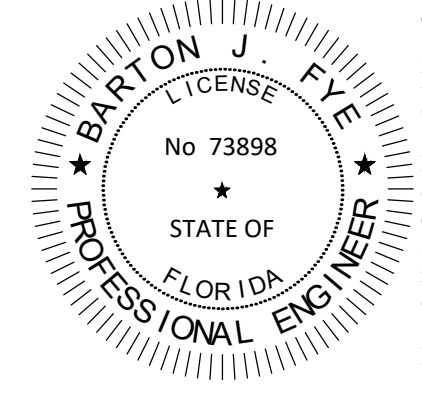
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Plotted By: Rodriguez, Rebecca - Sheet Set: IRC LANDFILL - Layout: C-511 PAVING, GRADING AND DRAINAGE PLAN II - November 17, 2021 11:23:01am K:\mb_civil\143228000 - irc hwa and recycling facility\CIVIL\CADD\plansheets\C-512 PAVING, GRADING AND DRAINAGE DETAILS.dwg This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

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INDIAN RIVER COUNTY
 INDIAN RIVER COUNTY
 FL

PAVING, GRADING AND DRAINAGE DETAILS

KHA PROJECT	14-3228000
DATE	JULY 2021
SCALE	AS SHOWN
DESIGNED BY	MRC
DRAWN BY	RMR
CHECKED BY	BF

LICENSED PROFESSIONAL

 DATE: _____

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No.	REVISIONS	DATE	BY

OWNER CHANGES 11/16/2021 JF

SHEET NUMBER
C-512

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ROADWAY PAVING, GRADING, AND DRAINAGE

GENERAL

It is intended that the Florida Department of Transportation "Standard Specifications for Road and Bridge Construction" (latest edition) be used where applicable for various work, and that where such wording therein refers to the State of Florida and its Department of Transportation and personnel, such wording is intended to be replaced with that wording which would provide proper terminology, thereby making such "Standard Specifications for Road and Bridge Construction" as the Standard Specifications for this project.

If within that particular section another section, article or paragraph is referred to, it shall be part of the Standard Specifications also.

All work shall be performed in a workmanlike manner and shall conform with all applicable City, County, State and Federal Regulations and/or Codes. The Contractor shall also be responsible for obtaining all permits and licenses required to begin work.

The Contractor shall give the Engineer 24 hours notice prior to requesting required inspections and shall supply all equipment necessary to properly test and inspect the completed work.

The Contractor shall guarantee all work and materials for a period of one year from the date of project acceptance, during which time all faulty construction and/or materials shall be corrected at the Contractor's expense.

GENERAL NOTES

The Contractor shall be responsible for protecting all existing above-ground, underground, and on the surface structures and utilities against the construction operation that may cause damage to said facility. The Contractor shall be responsible consequential damages resulting from lack of protection.

The locations of existing underground utilities are shown in an approximate way only and have not been independently verified by the Owner or its representative. The Contractor shall determine the exact location of all existing utilities before commencing work, and agrees to be fully responsible for any and all damages which might be occasioned by the Contractor's failure to exactly locate and preserve any and all underground utilities.

The Contractor shall give adequate notification to all affected utility owners for removal, relocation, and alteration of their existing facilities.

Where encountered, unsuitable material shall be removed to a depth and area determined by the Engineer and backfilled with clean granular sand or select material approved by the Engineer. Backfilling shall be in layers not greater than 8" thickness and compacted to 100 percent of the maximum density as determined by AASHTO T-99-C.

Contractor is responsible for checking actual site conditions before starting construction.

Street or highway restoration work is to be done as per local or state agency having jurisdiction.

The Contractor shall comply with all rules and regulations of the State, County and City authorities regarding closing or restricting the use of public streets or highways.

Traffic control on all county and state highway rights-of-way shall meet the requirements of the Manual of Uniform Traffic Control Devices (U.S. DOT/FHA) and the requirements of the state and any local agency having jurisdiction.

CLEARING AND GRUBBING

All trees, brush, stumps, roots, grass, weeds, rubbish, and other obstructions resting on or lying within 12" below finished grade or subgrade shall be completely removed for the full width of all pavement, swales, utility easements and drainage easements. All work shall be performed in accordance with Section 110 of the Standard Specifications.

DISTURBED AREAS

All areas disturbed within right-of-way by construction shall be sodded as specified below:

Sodding:

Within the limits delineated in the plans, the Contractor shall, after final grading and cleanup, establish a stand of grass by furnishing and placing sod in accordance with Section 575 of the Standard Specifications. The Contractor shall water the sodded area to maintain moisture levels for optimum growth to assure a healthy stand of grass. Sod shall be Bahia grass sod. Sod shall be rolled and top dressed as required by the engineer.

GRADING

Contractor shall perform all necessary grading to achieve the typical road sections as per plan. All workmanship shall be in accordance with the Standard Specifications.

STAKING

If construction staking is performed by the Owner, loss or disturbance of control points due to negligence by the Contractor will be replaced at the Contractor's expense.

STABILIZING

Stabilized subgrade shall be constructed to the Florida bearing value as per plan for the depth and limits shown on the plan, and in accordance with Section 160 of the Standard Specifications.

All stabilized areas shall be compacted to at least 98% of the maximum density as determined by AASHTO T-180.

ROCK BASE

Rock base shall be constructed of either limerock material in accordance with Section 911 or cemented coquina shell material in accordance with Section 915 of the Standard Specifications.

Limerock base shall be constructed in accordance with Section 200 and cemented coquina shell base shall be constructed in accordance with Section 230 of the Standard Specifications. Contractor shall provide rock pit certification for cemented coquina shell material.

Rock base shall be constructed to the depth and limits as shown on the plan. The rock base shall be compacted to at least 98% of the maximum density as determined by AASHTO T-180 and shall be primed.

PRIME AND TACK COAT

Prime and tack coats for the base course shall be in accordance with Section 954.10 of the Indian River County Land Development Regulations and Section 300 of the Standard Specifications.

ASPHALTIC CONCRETE SURFACE COURSE (ACSC)

Asphaltic Concrete Surface Course (ACSC) shall be constructed for the depth and limits shown on Sheet C-301, and in accordance with Sections 320, 330, and 334 of the Standard Specifications unless otherwise specified.

SIGNING AND PAVEMENT MARKING

All parking spaces, with the exception of the handicapped parking spaces, shall be marked in white, retro-reflective traffic paint and be in accordance with the Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction (latest edition).

All handicapped parking spaces shall be properly signed and marked in accordance with FDOT Standard Index 17346 (latest edition).

TESTING

The Contractor shall retain the services of an Owner approved independent testing laboratory to conduct all required tests on subgrade, base and surface course materials. Test results must be submitted prior to any request for payment on the above items.

The schedule for testing the pavement shall be as follows:

- Subgrade:
 - Florida bearing value test shall be taken at intervals of not more than 200 feet, or closer as may be necessary in the event of variations in subsoil conditions.
 - Density tests shall be taken at intervals of not more than 200 feet or closer as may be necessary.
- Base:
 - Density tests shall be taken at intervals of not more than 500 feet or closer as may be necessary.

All testing shall be taken in a staggered sampling pattern from a point 12 inches inside the left edge, to the center, to a point 12 inches inside the right edge of the item tested.

If any test indicates that the work does not meet the specifications, the substandard item shall be reworked or corrected and retested, at the Contractor's expense, until the provisions of these specifications are met.

All passing tests shall be paid for by the Owner. All failing tests shall be paid for by the Contractor.

RAMP LOCATION	MINIMUM DIMENSION	
	A	B
AT OUTSWING DOOR	44"	60"
AT INSWING/SLIDING DOOR	44"	48"
NO DOORWAY	36"	36"

NOTES:

- ALL ACCESSIBLE COMPONENTS CONSTRUCTED AS PART OF THESE PLANS SHALL COMPLY WITH CHAPTER 11 OF THE FLORIDA BUILDING CODE.
- ACCESSIBLE ROUTE TO ACCESSIBLE SPACES, BUILDING ENTRANCES, AND PUBLIC STREETS SHALL NOT EXCEED 5% RUNNING SLOPE AND 2% CROSS SLOPE.
- CHANGE IN ELEVATION WITHIN THE ACCESSIBLE ROUTE IS NOT TO EXCEED 1/2" WITHOUT A CURB RAMP.
- UNLESS OTHERWISE SHOWN ON THE PLANS, THE MINIMUM CLEAR ROUTE SHALL BE 36" WIDE WITH A 60"x60" PASSING SPACE EVERY 200 FEET.
- ACCESSIBLE ROUTES THROUGH PLANTERS SHALL BE LEVEL WITH THE SURROUNDING PAVEMENT OR PROVIDE CURB RAMPS AT EACH END WITH A MINIMUM 48" LEVEL LANDING IN BETWEEN.
- THE ACCESSIBLE ROUTE IN FRONT OF PULL-IN PARKING SHALL BE A MINIMUM OF 44" WIDE AND NOT REDUCED BY VEHICLE OVERHANGS, CURBING, SIGN POSTS, OR OTHER OBSTRUCTIONS.
- ANY WALK THAT CROSSES OR ADJOINS A VEHICULAR WAY NOT SEPARATED BY CURBS, RAILINGS, OR OTHER ELEMENTS SHALL BE DEFINED BY A CONTINUOUS 36" WIDE DETECTABLE WARNING.
- SPECIAL RAMP RULES APPLY FOR ANY RISE GREATER THAN 6" INCLUDING BUT NOT LIMITED TO RESTRICTION ON SLOPE, TOTAL RISE BETWEEN LANDINGS, AND USE OF HANDRAILS, PER F.B.C. 11-4.8.
- PUBLIC SIDEWALK CURB RAMPS CONSTRUCTED WITHIN A PUBLIC RIGHT-OF-WAY, IN ABSENCE OF LOCAL ROADWAY GUIDELINES, SHALL MEET THE REQUIREMENTS OF F.D.O.T INDEX 304.
- CURB RAMPS SHALL HAVE A DETECTABLE WARNING EXTENDING THE FULL WIDTH AND DEPTH OF THE RAMP
- DETECTABLE WARNINGS SHALL CONSIST OF EXPOSED AGGREGATE CONCRETE, CUSHIONED SURFACES MADE OF RUBBER OR PLASTIC, OR RAISED STRIPS. GROOVED SURFACES ON OUTDOOR CURB RAMPS ARE NOT PERMITTED. VERIFY LOCAL REQUIREMENTS WITH THE BUILDING DEPARTMENT.

ACCESSIBLE RAMPS

N.T.S.

CLEAN-UP

The Contractor must provide clean-up of excess construction material upon completion of the project. The site must be left in a neat, clean, graded condition.

DRAINAGE SPECIFICATIONS

Storm inlets and manholes shall be constructed in general accordance with Section 425 of the Standard Specifications.

All reinforcing steel to be ASTM A 615 (latest revision) Grade 40 Fyp=40,000 PSI, and shall be handled and placed in accordance with ACI 318 (latest revision).

Precast concrete manholes and storm inlets to be used (only after the Engineer's review of the manufacturer's shop drawings).

Storm sewer construction shall in accordance with Section 430 and related sections of the Standard Specifications.

CONCRETE

Unless otherwise specified or indicated, all concrete shall have a minimum compressive strength at 28 days of 3000 psi. All work shall comply with the current edition of the American Concrete Institute (ACI) building code and the applicable building codes having jurisdiction in the area.

PRECAST INLETS

All storm inlets shall be precast reinforced concrete in accordance with the details shown herein the project details. Type II Portland Cement shall be used in the concrete mix. Concrete shall have a minimum compressive strength at 28 days of 4000 psi.

CULVERT PIPES

Reinforced Concrete Pipe (RCP) shall be in accordance with Section 449 of the Standard Specifications.

Corrugated Aluminum Pipe (CAP) shall be in accordance with Section 945 the Standard Specifications.

High density polyethylene pipe (HDPE) shall be in accordance with Section 948 of the Standard Specs.

CONSTRUCTION OBSERVATION

The Contractor shall notify the Engineer prior to periods of the following construction activities so that the Engineer can notify the County or State to be present for construction observations:

I. Drainage

- Laying of Pipe (before backfill)
- All drainage structures and pipe laying completed
- Construction and stabilization of retention areas and swales
- Seeding, mulch, and sodding in areas where erosion is evident or where plans so identify

II. Utilities (U-2 permits or development order)

- Pipe laying within County or State rights-of-way
- Jack and boring in County or State rights-of-way
- Restoration of all rights-of-way

III. Concrete

- Completion of forming for curbing, sidewalk, and retaining walls before placement of concrete

IV. Pavement

- Line and grade (Certification)
- Sub-base (prior to adding base material)
- Base (prior to priming and sand seal)
- Base (after priming, sand seal, and before placing asphalt)
- Asphalt or concrete (while paving is in progress)
- Turn out construction on to County or State road (above inspections apply)
- Test results on sub-base
- Final project observation

INSPECTION AND TESTING

Lamping of the completed sewer system will be performed after complete backfilling and the laying of the roadway base. The lamping will determine that the lines have been laid to accurate line and grade. At the time of lamping, the line shall be clean and dry. A final inspection will be held after roadway is completed to verify that the system has not been damaged. All line appearances not meeting specifications or reasonable standards shall be repaired or replaced.

The Engineer may require a color T.V. survey and may require an exfiltration/infiltration test prior to acceptance. The survey and testing shall be at the Contractor's expense.

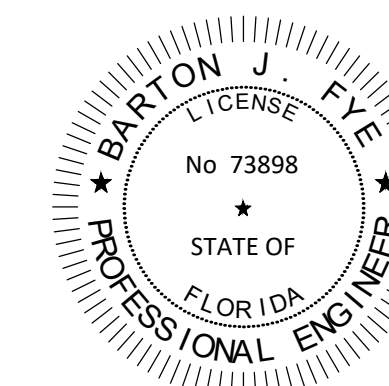
INSPECTIONS:

The Contractor shall notify the engineer of record at least 48 hours prior to beginning construction and prior to the inspection of the following items:

- Storm Drainage
- Sanitary Sewer
- Water System
- Subgrade - Submit and have approved densities prior to placement of rock.
- Limerock Base - have approved densities and as-builts prior to the placement of asphalt.
- Asphaltic Concrete
- Final walk-through Inspection

RECORD DRAWINGS

The Contractor shall maintain Record Drawings on the project site at all times which shall be annotated by the Contractor depicting any changes made in the field which differ from the contract drawings. Record Drawings shall include, but not be limited to, culvert lengths, invert and top elevations of storm sewer, manholes, inlets, and control structures. The Contractor shall submit complete and final Record Drawings in AutoCAD to the Engineer upon completion of the project and prior to final inspection and final payment. Record Drawings shall be certified by the Contractors, Engineer, or Surveyor registered in the State of Florida



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NO.	REVISIONS	DATE

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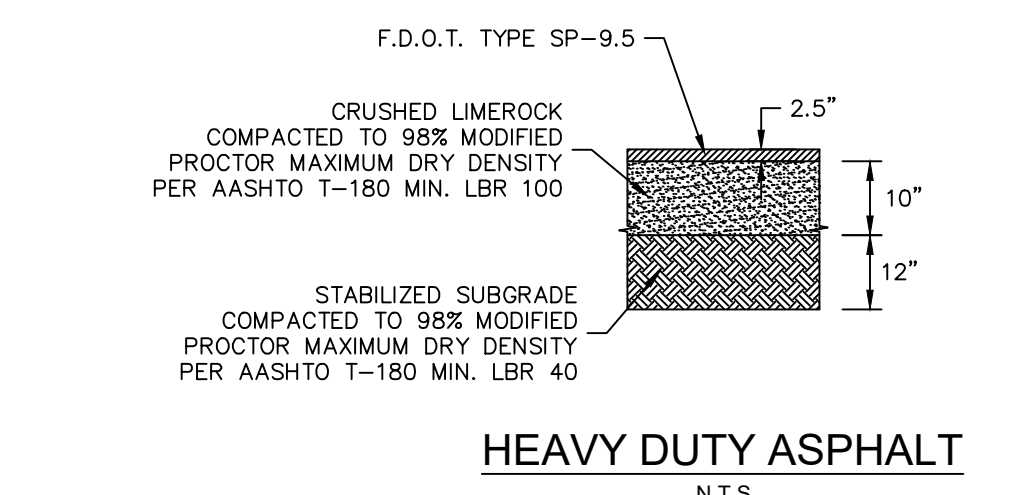
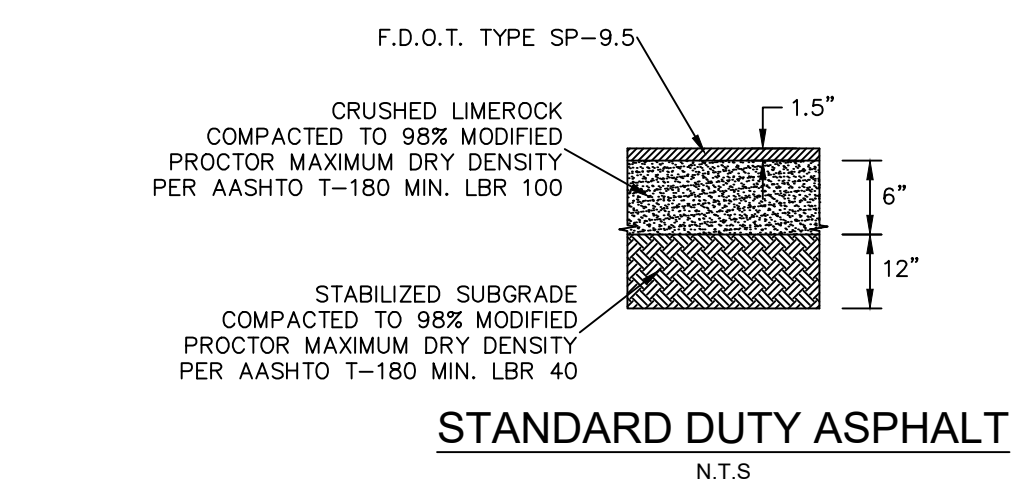
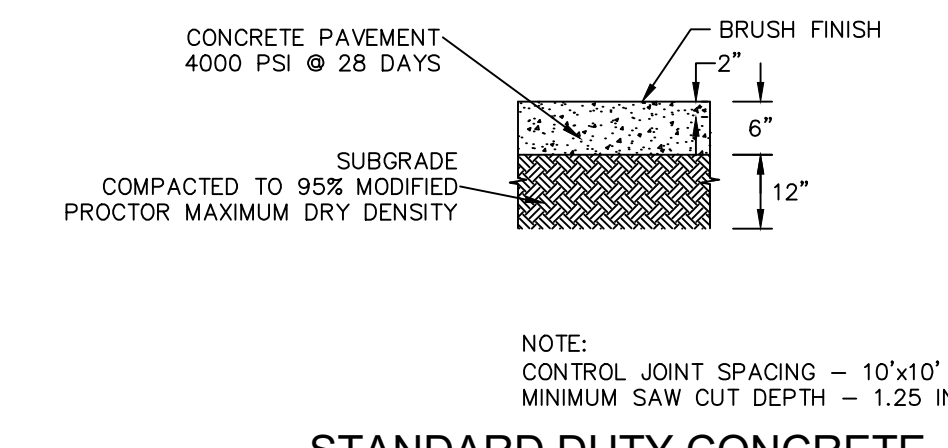
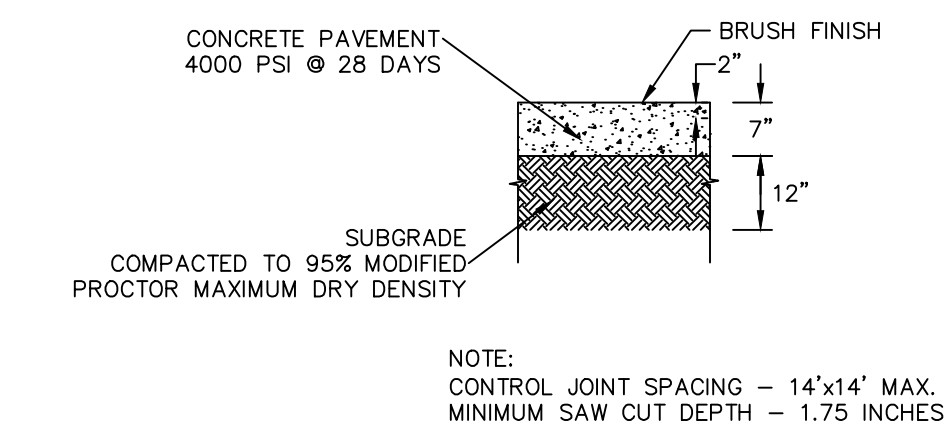
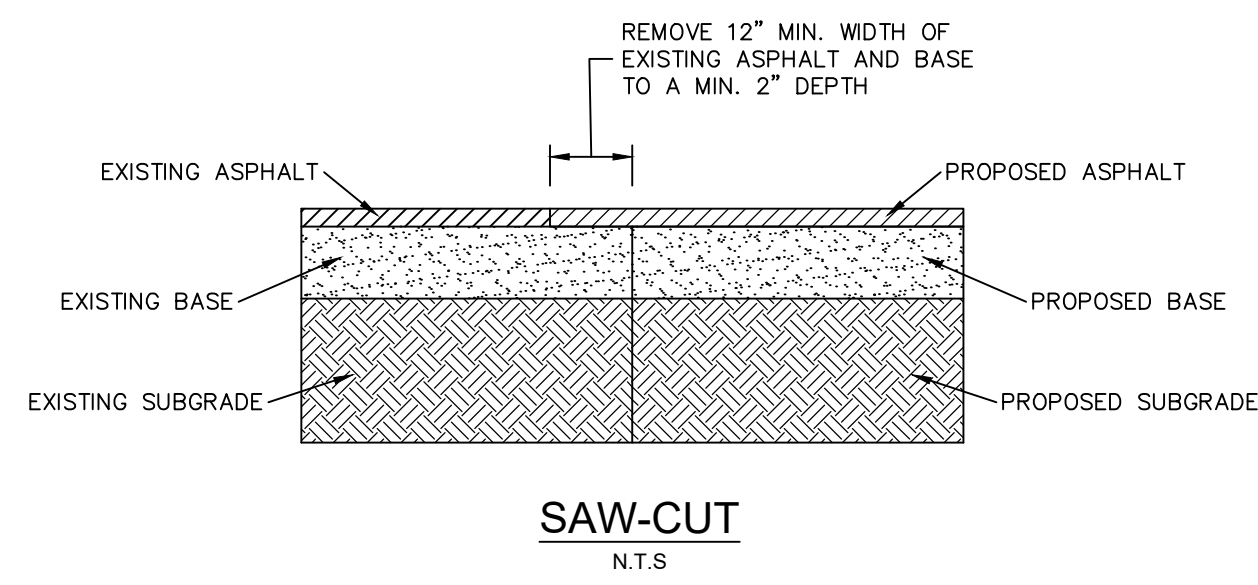
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	14-3228000	JULY 2021					
			AS SHOWN	MRC	RMR	BF	FL

PAVING, GRADING AND DRAINAGE DETAILS II

IRC LANDFILL PREPARED FOR INDIAN RIVER COUNTY

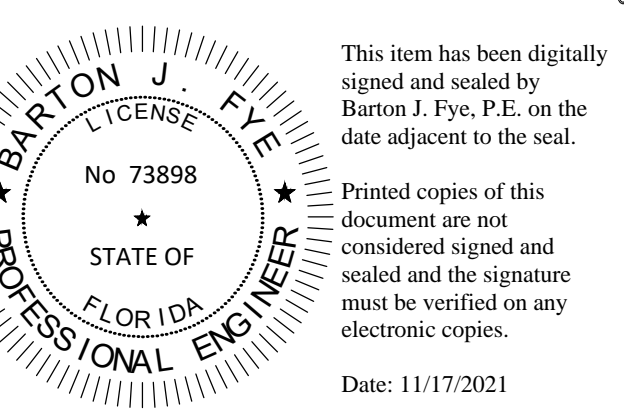
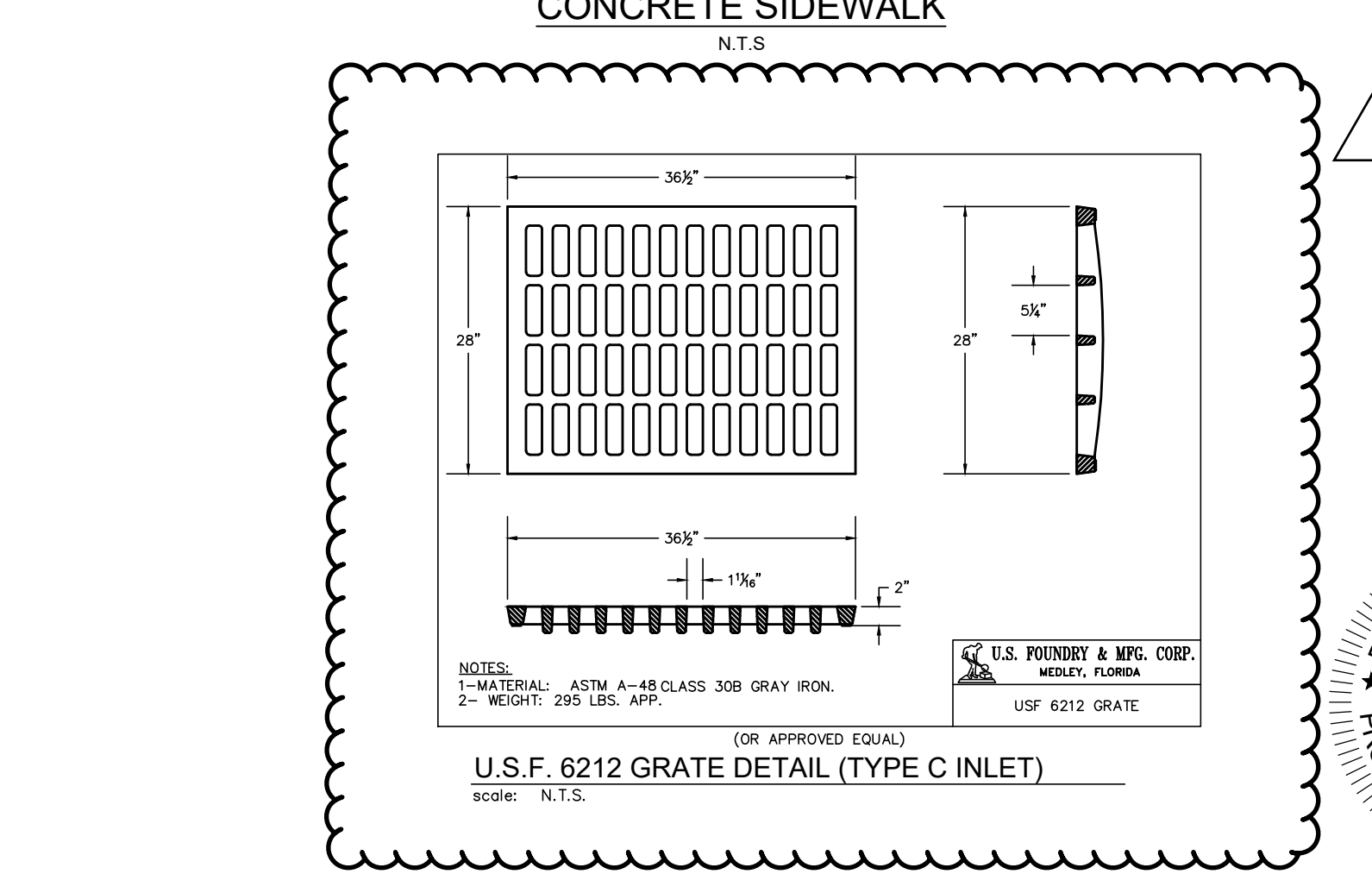
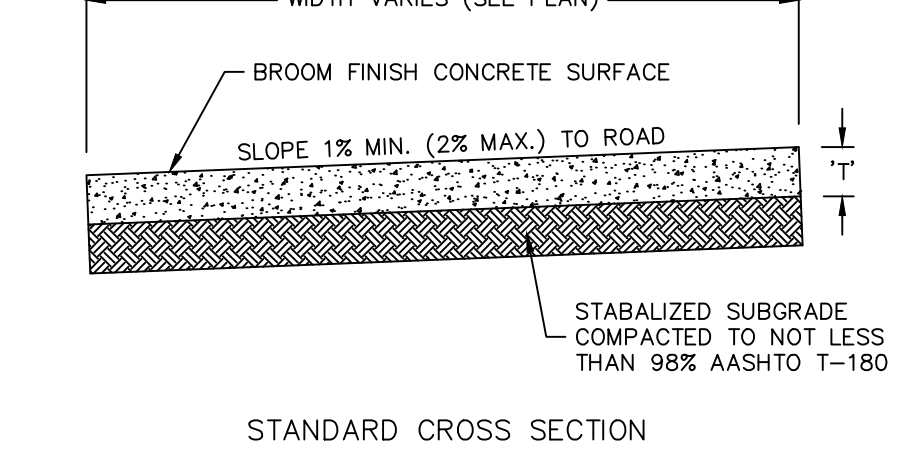
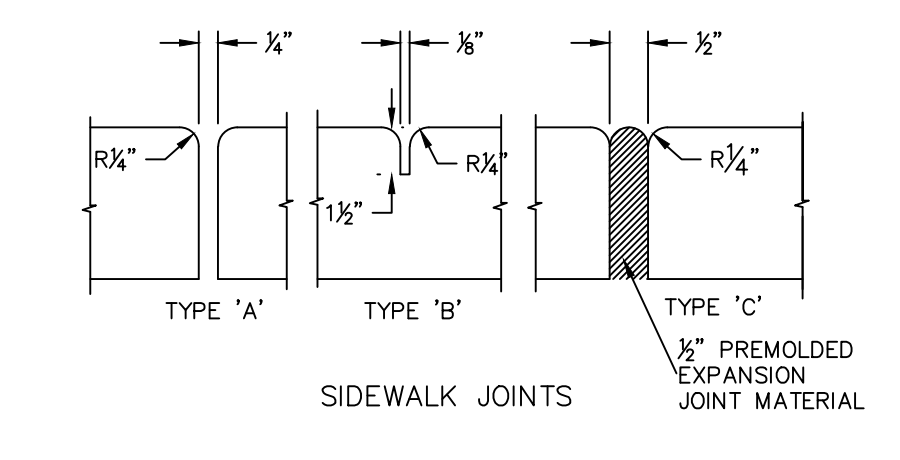
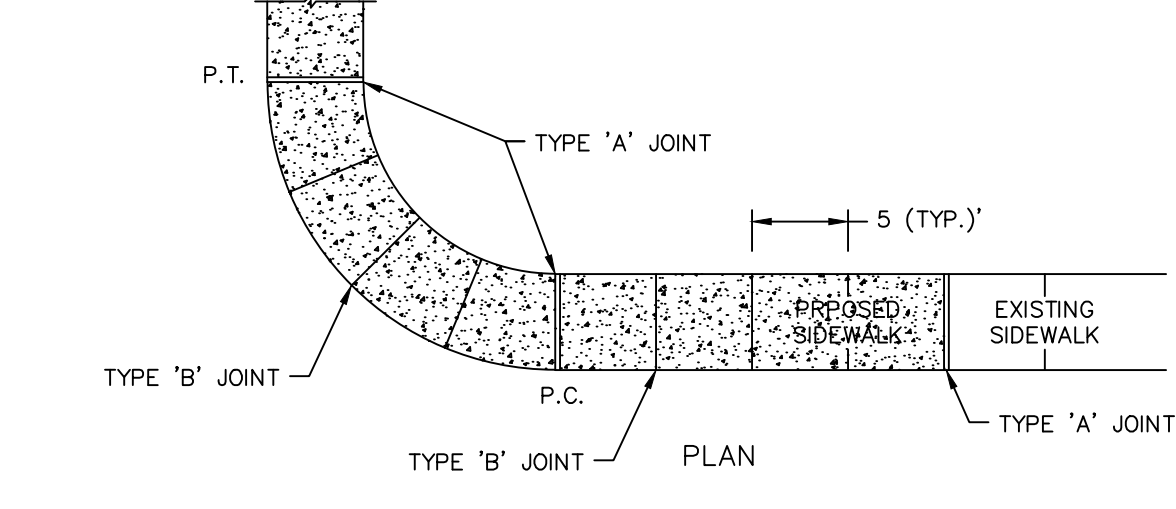
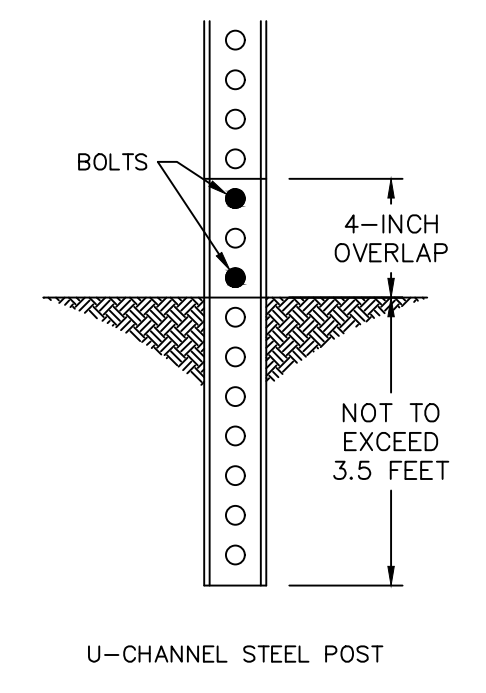
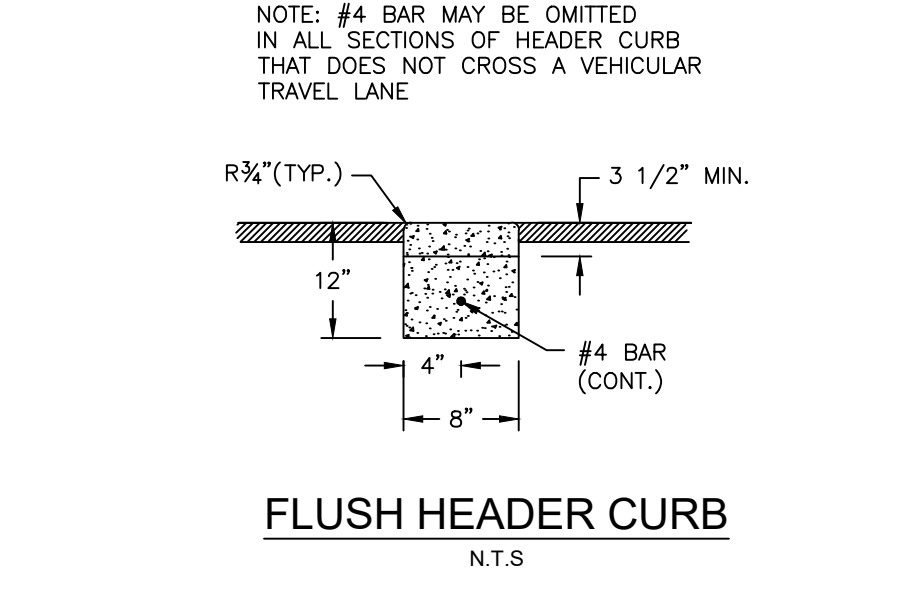
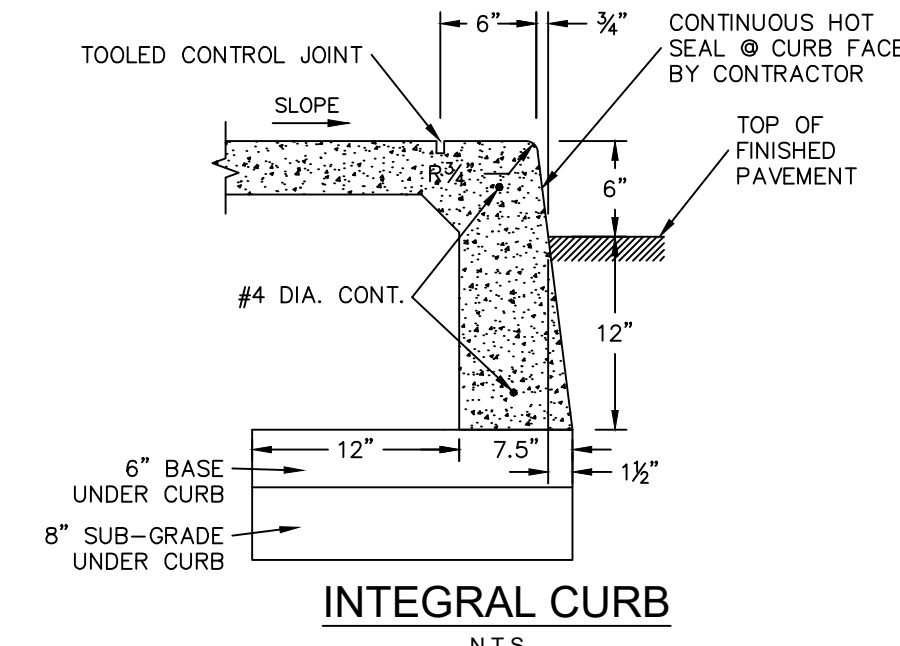
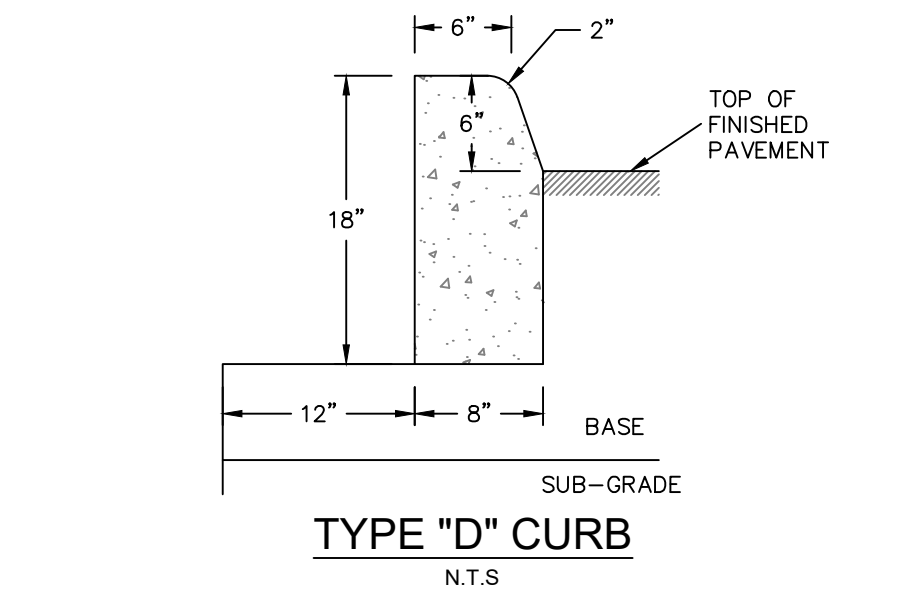
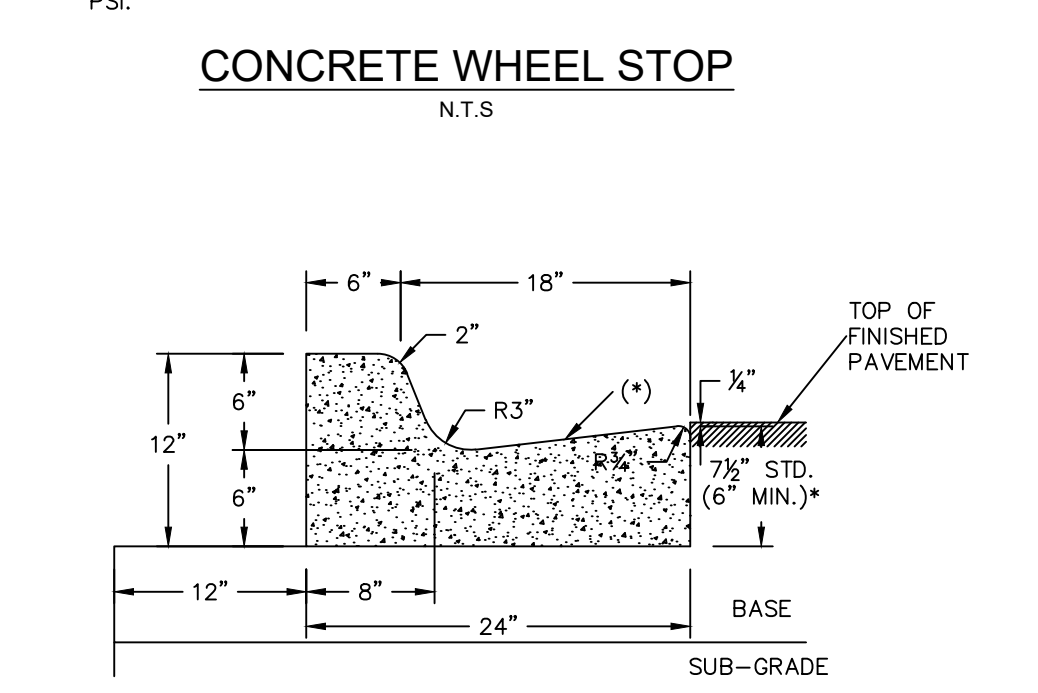
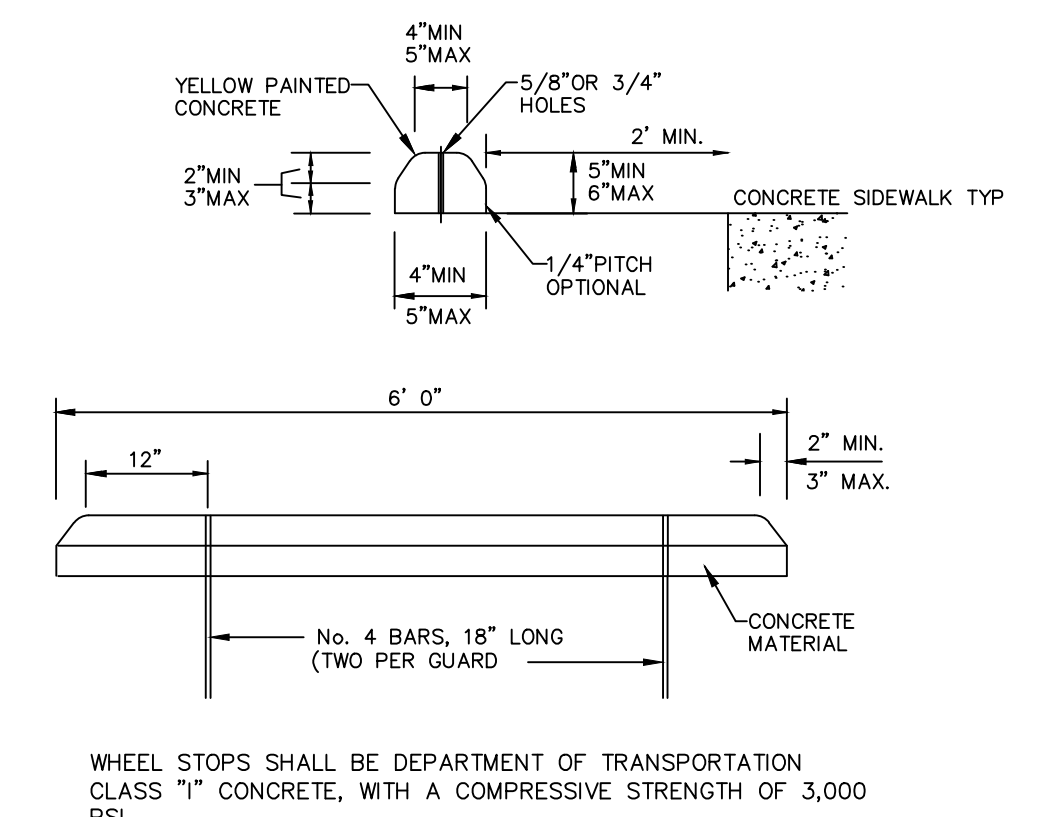
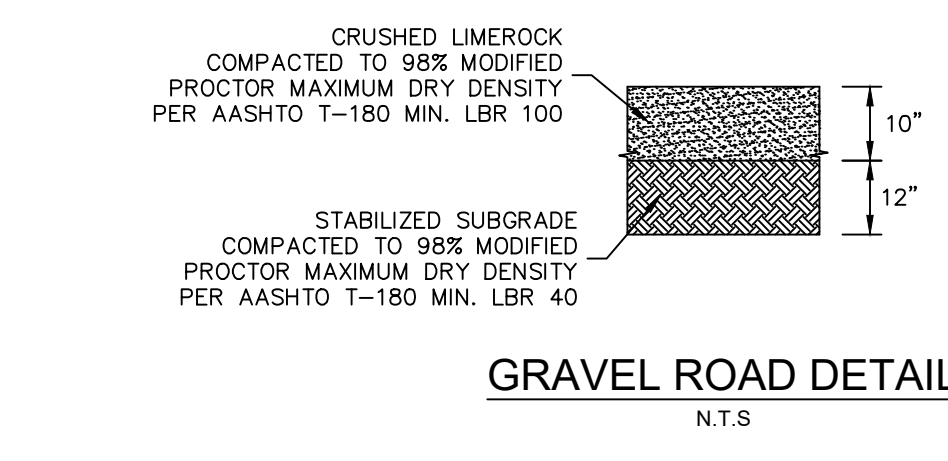
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PAVEMENT NOTES:

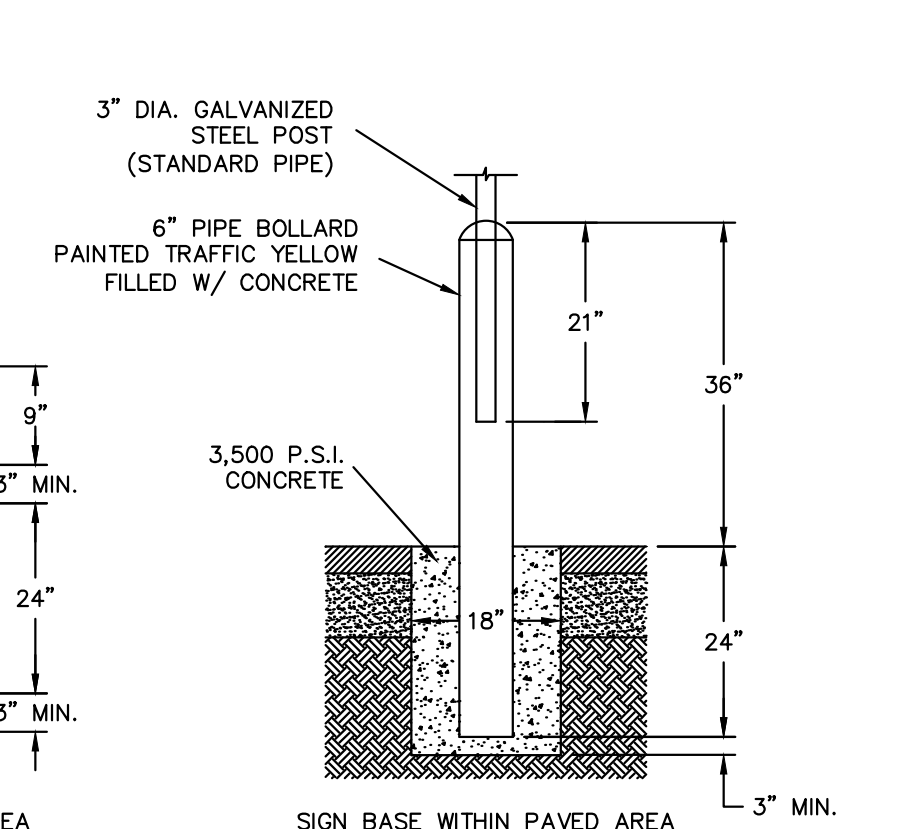
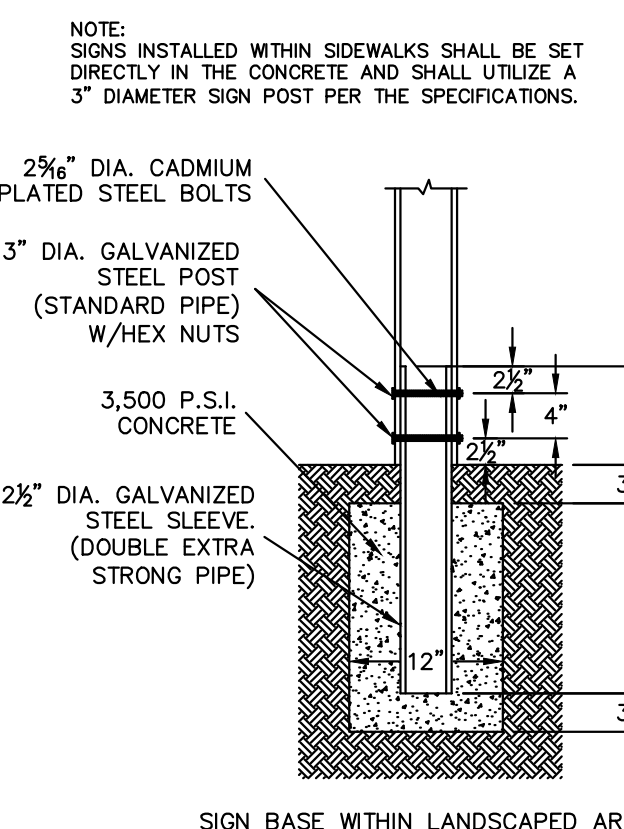
- CONTRACTOR TO REFER TO THE GEOTECHNICAL REPORT FOR SITE WORK SPECIFICATIONS.
- CORE WEARING SURFACE OF ASPHALT PAVEMENT TO EVALUATE MATERIAL THICKNESS AND COMPOSITION AT A MINIMUM FREQUENCY OF 3,000 SF OR TWO LOCATIONS PER DAY'S PRODUCTION.
- MATERIALS USED IN PAVEMENT CONSTRUCTION SHALL COMPLY WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
- COMPACTION AND TESTING SHALL BE PER SECTION 13 OF THE GEOTECHNICAL REPORT.
- ALL PARKING LOT SUBGRADE SOILS SHALL BE COMPACTED TO AT LEAST 95% OF THE MODIFIED PROCTOR - MAX DRY DENSITY (ASTM D 1557) TO A DEPTH AT LEAST 2' BELOW BOTTOM OF BASE, OR THE FULL DEPTH OF NEW FILL AND THE TOP 12 INCHES OF EXISTING SUBGRADE SOILS, WHICHEVER IS GREATER.



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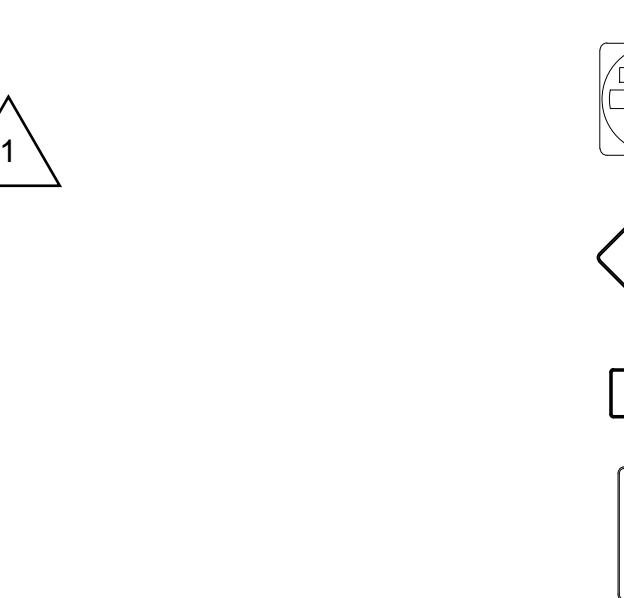
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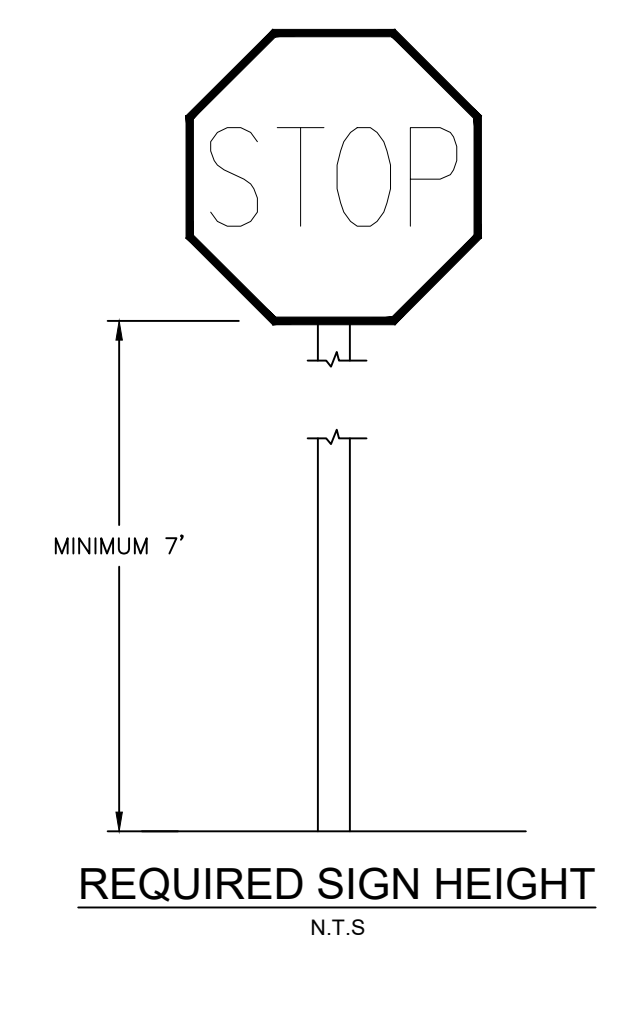
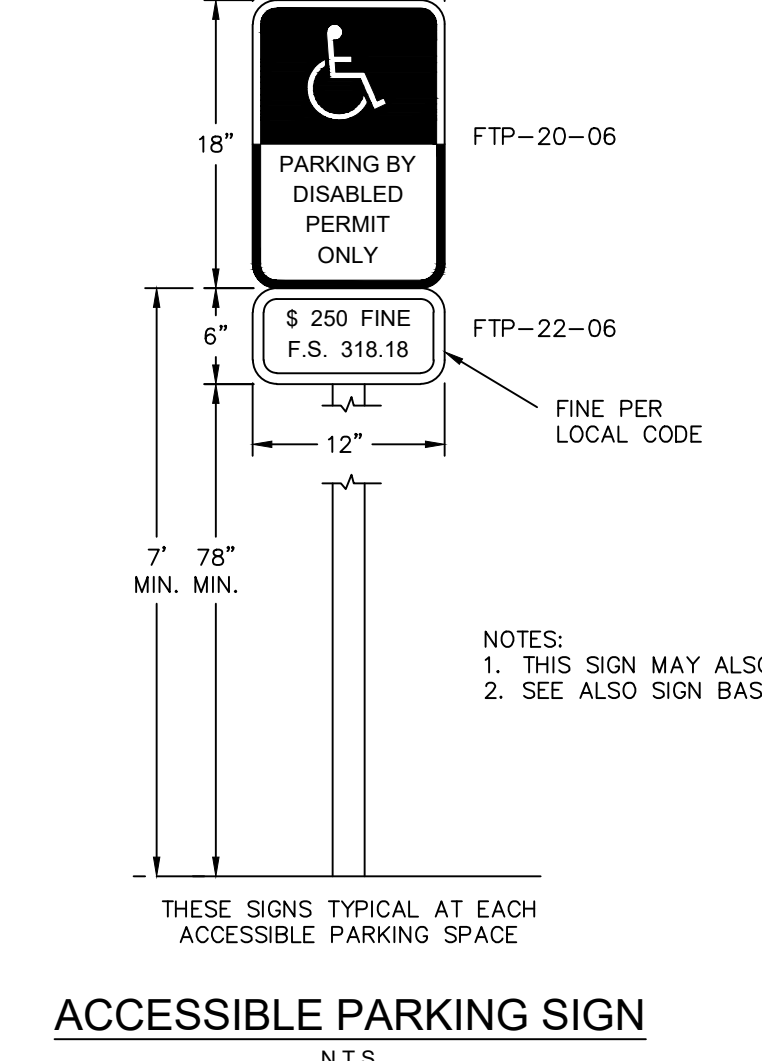


TYPE	LOCATION
'A'	100' MAX. SPACING, P.C./P.T. OF CURVES, JUNCTION OF EXISTING AND NEW SIDEWALKS.
'B'	5'-0" CENTER TO CENTER
'C'	WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS AND SIMILAR STRUCTURES.

LOCATION	THICKNESS
PEDESTRIAN ONLY AREAS	4"
DRIVEWAYS AND OTHER TRAFFIC AREAS	6"



STREET SIGN DETAILS
N.T.S.



NO.	REVISIONS	DATE	BY

Kimley-Horn
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DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
JULY 2021	AS SHOWN	MRC	RMR	BF

PAVING, GRADING AND DRAINAGE DETAILS III

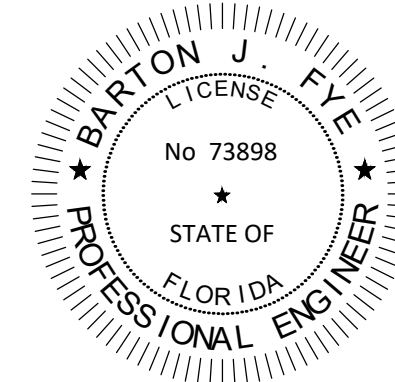
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SHEET NUMBER
C-514

Plotted By: Rodriguez, Rebecca - Sheet Set: IRC LANDFILL - Layout: C-515 PAVING, GRADING AND DRAINAGE DETAILS IV - November 17, 2021 - 10:42:10am - K:\vmb-e\civil\43228000 - Fc hhw and recycling facility\CIVIL\CADD\plan sheets\C-515 PAVING, GRADING AND DRAINAGE DETAILS IV.dwg
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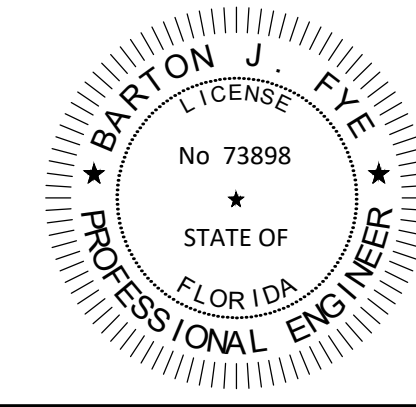
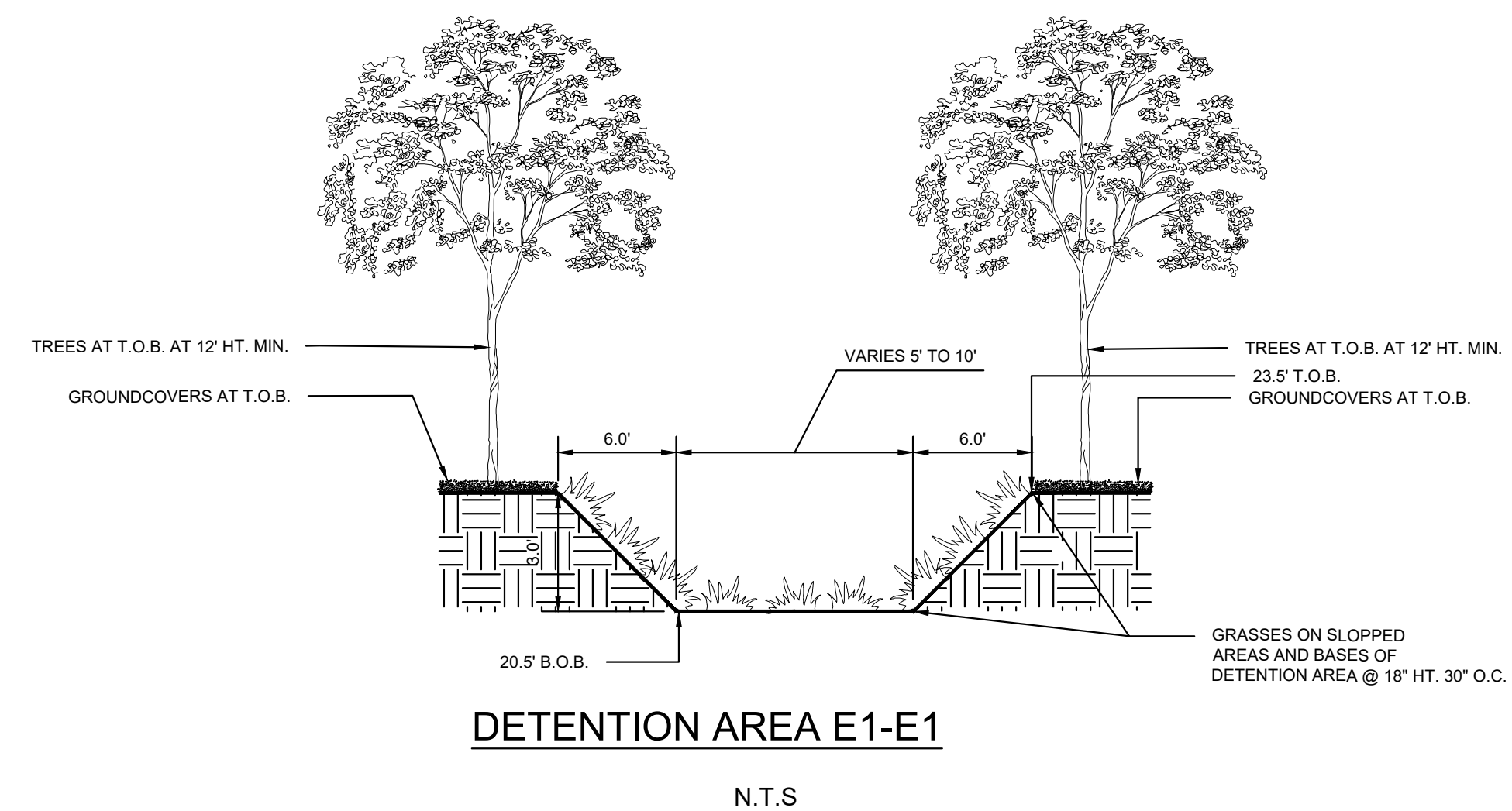
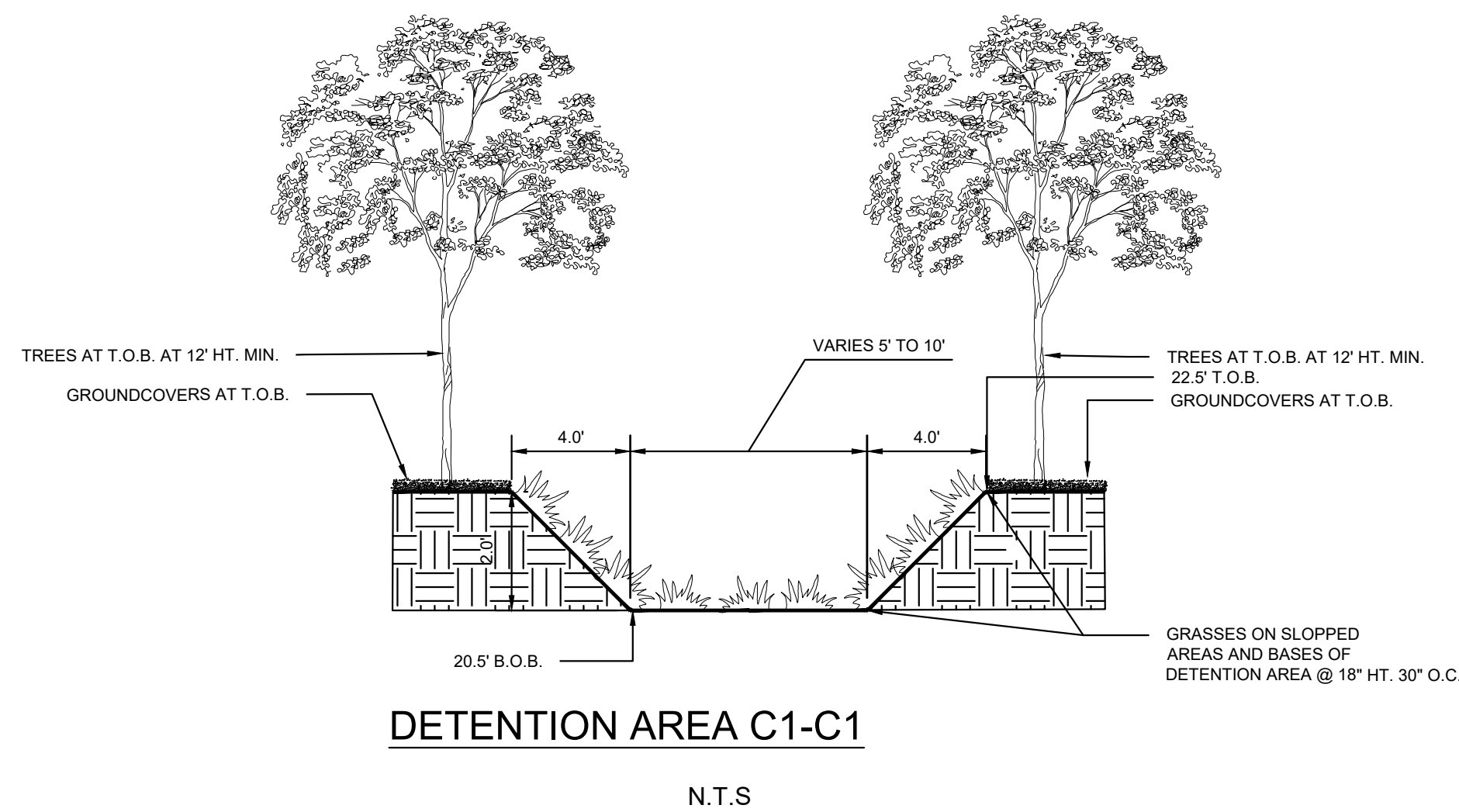
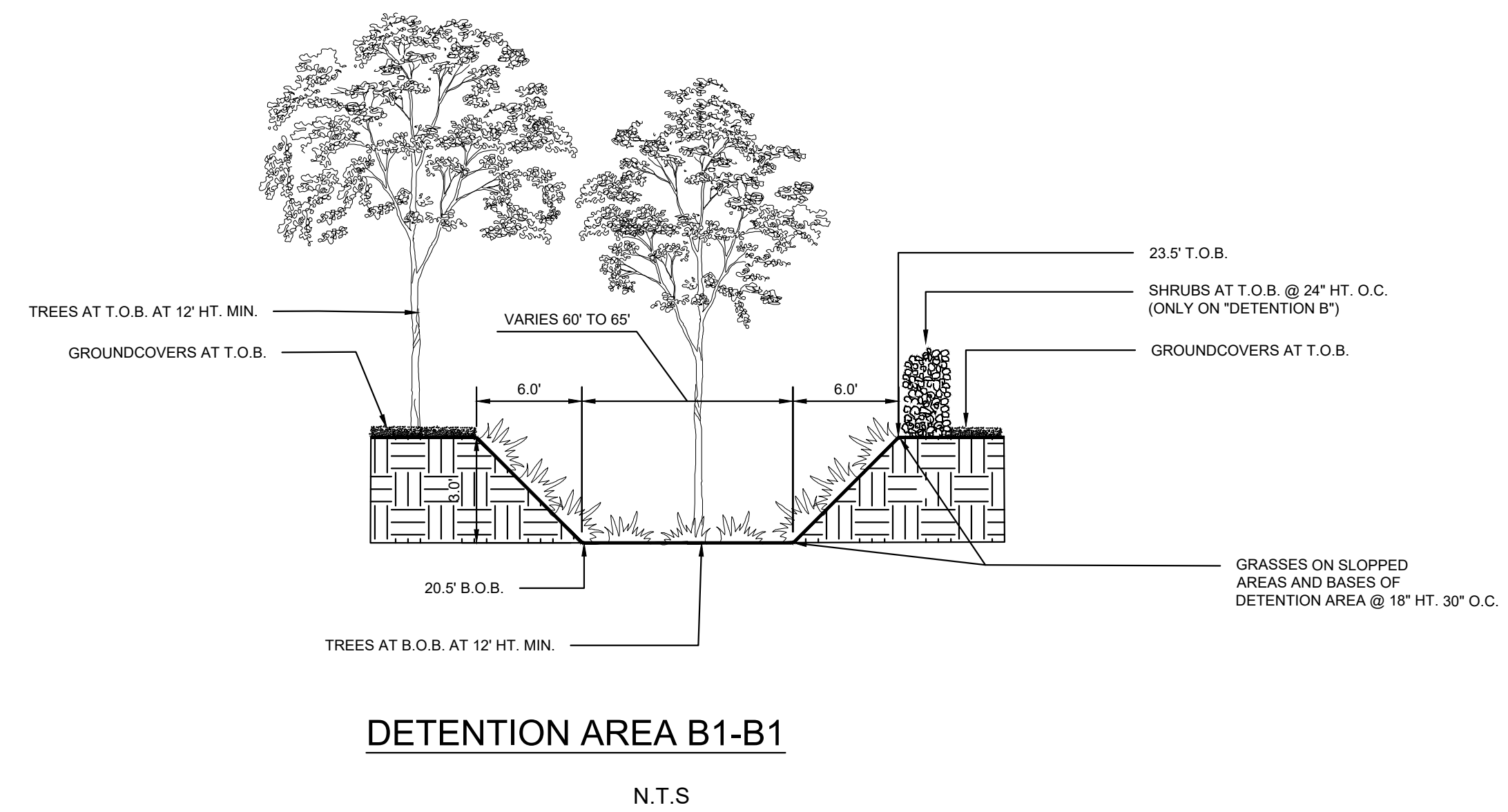
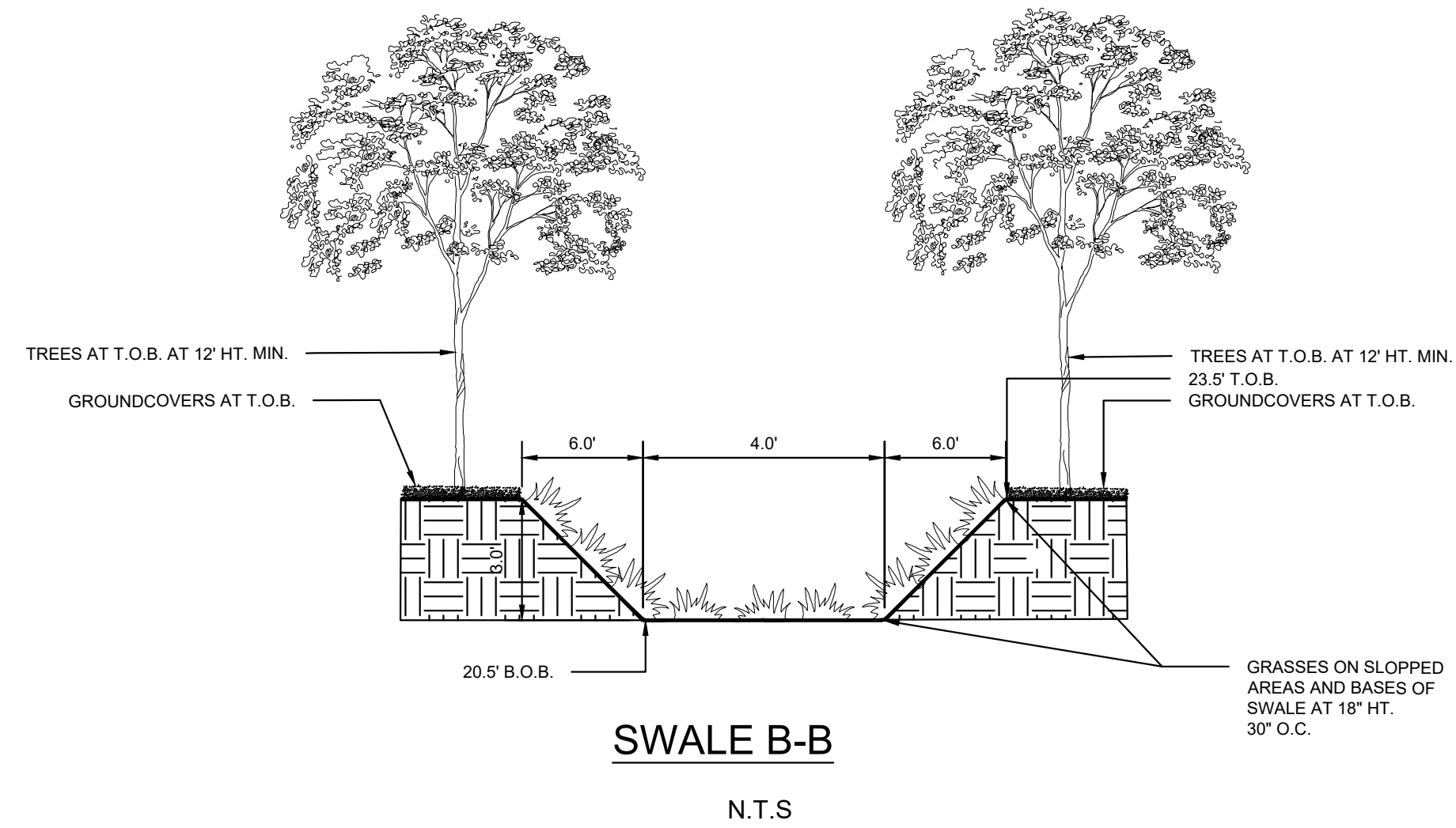
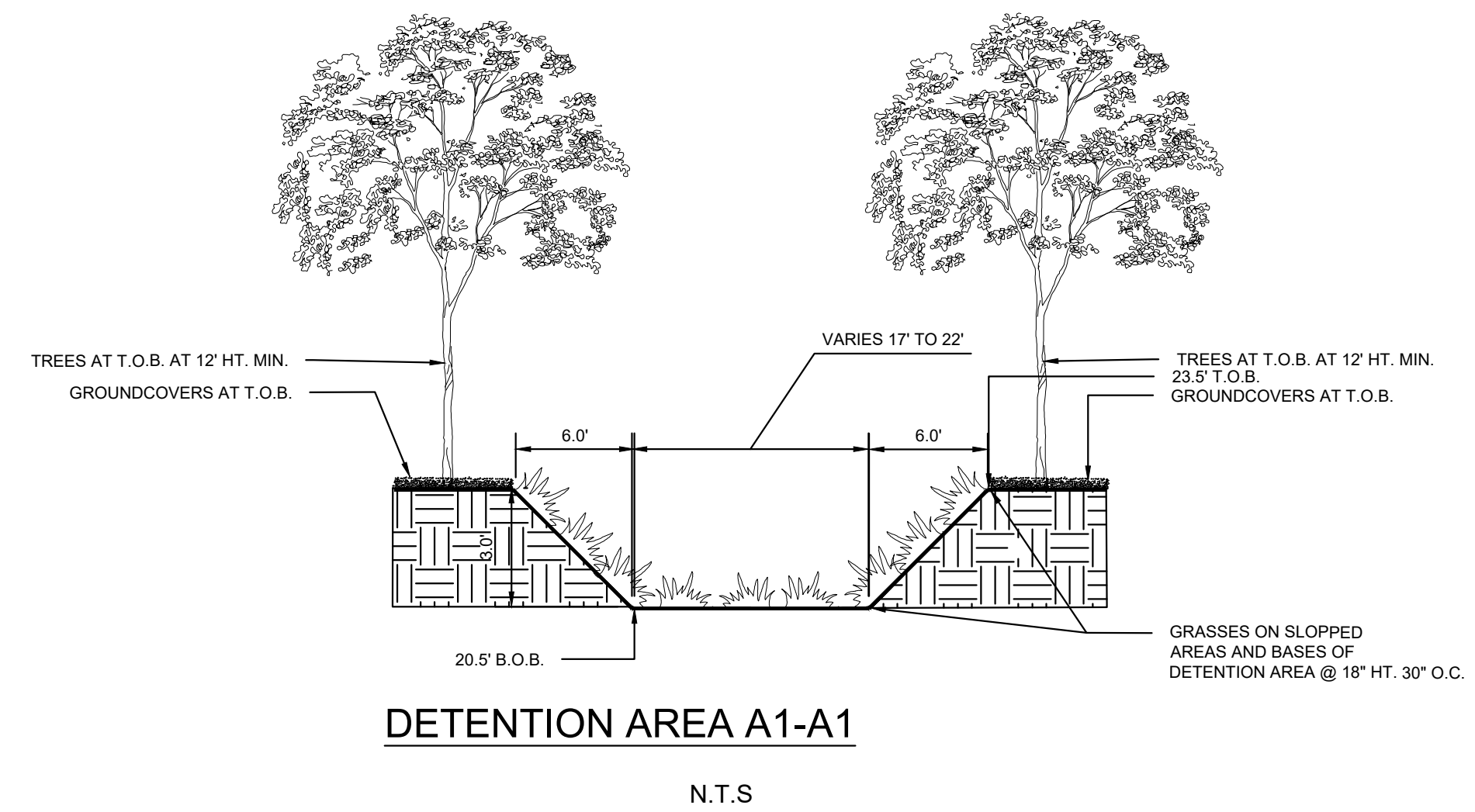
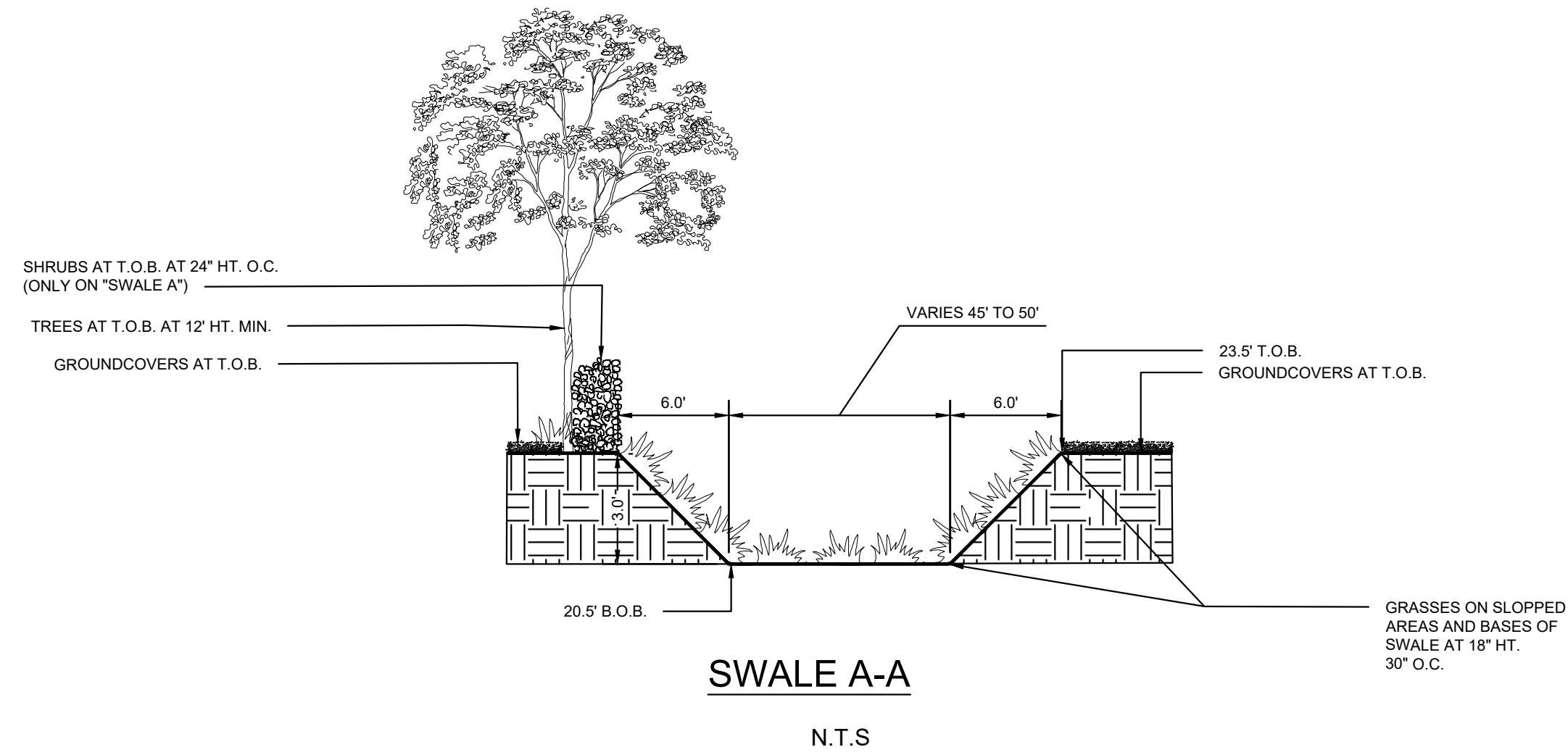


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SHEET NUMBER C-515	IRC LANDFILL PREPARED FOR INDIAN RIVER COUNTY INDIAN RIVER COUNTY FL	PAVING, GRADING AND DRAINAGE DETAILS IV	KHA PROJECT 14-3228000 DATE JULY 2021 SCALE AS SHOWN DESIGNED BY MRC DRAWN BY RMR CHECKED BY _____	LICENSED PROFESSIONAL _____ DATE: _____	 © 2021 KIMLEY-HORN AND ASSOCIATES, INC. 355 ALHAMBRA CIRCLE, SUITE 1400, CORAL GABLES, FL 33134 PHONE: 305-673-2025 WWW.KIMLEY-HORN.COM REGISTRY 696	OWNER CHANGES	11/16/2021	JF
						No.	REVISIONS	DATE

Plotted By: Rodriguez, Rebecca - Sheet Set: IRC LANDFILL - Layout: C-520 RETENTION AREAS CROSS SECTION - November 17, 2021 - 10:42:18am - K:\mhb-civil\43228000 - irc-landfill-and-recycling-facility\civil\cadd\layouts\C-520 RETENTION AREAS CROSS SECTION.dwg
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No.	REVISIONS	DATE	BY

Kimley-Horn
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 PHONE: 305-673-2025
 WWW.KIMLEY-HORN.COM REGISTRY 696

KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY	DATE
14-3228000	JULY 2021	AS SHOWN	MRC	RMR	BF	

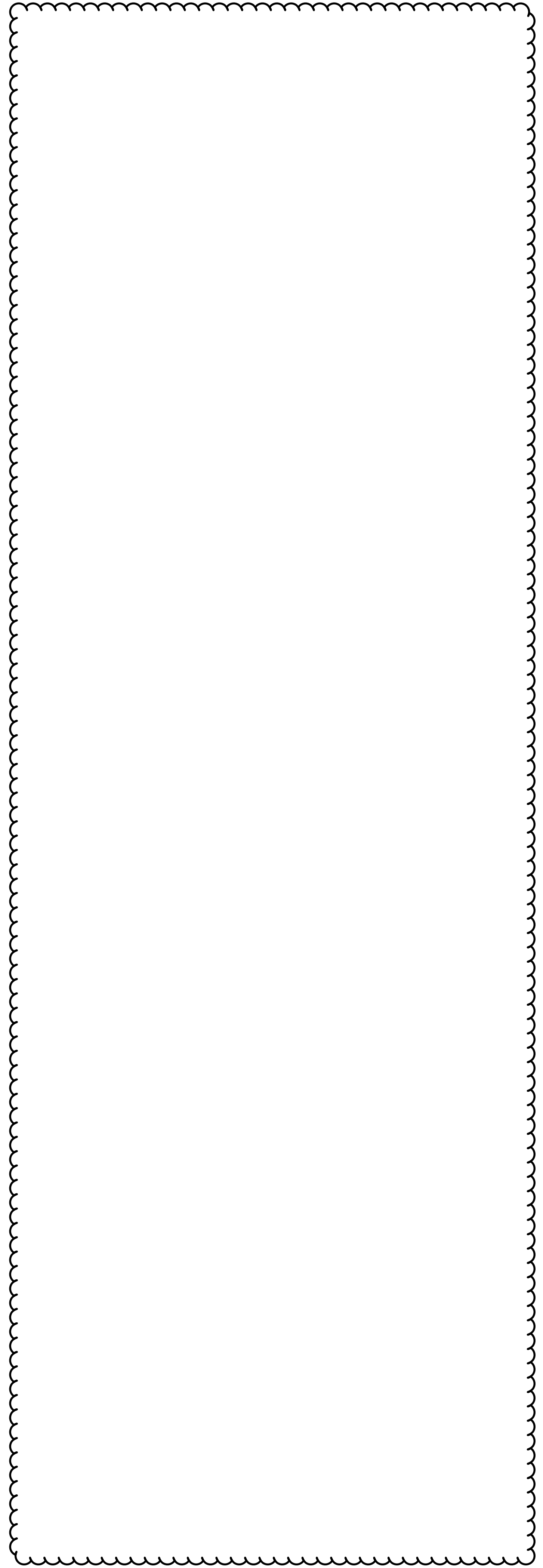
**RETENTION AREAS
 CROSS SECTION**

**IRC LANDFILL
 PREPARED FOR
 INDIAN RIVER COUNTY
 INDIAN RIVER
 COUNTY**

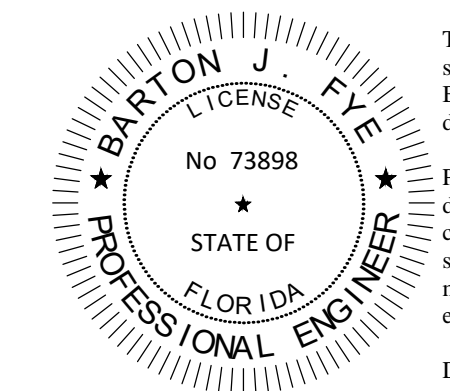
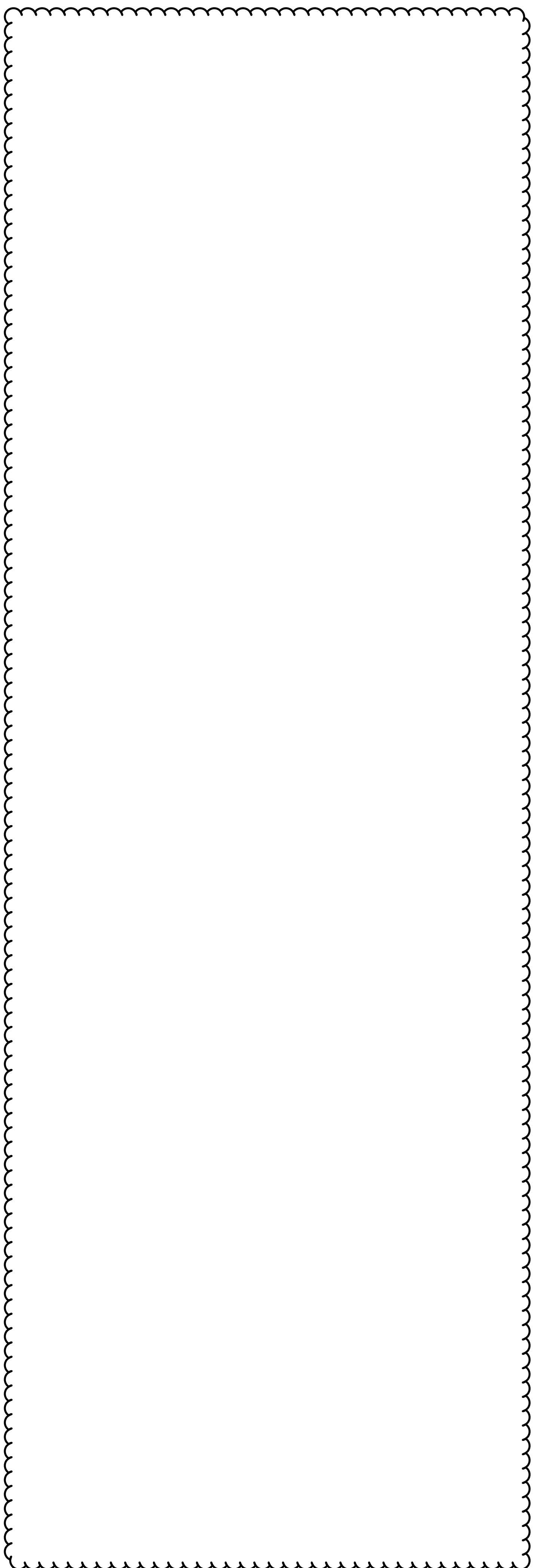
SHEET NUMBER
C-520

Plotted By: Rodriguez, Rebecca - Sheet Set: IRC LANDFILL - Layout: C-521 - RETENTION AREAS CROSS SECTION - November 17, 2021 - 10:42:18am - K:\mhb-civil\43228000 - irc-hw and recycling facility\CIVIL\CADD\plansheets\C-521 - RETENTION AREAS CROSS SECTION.dwg
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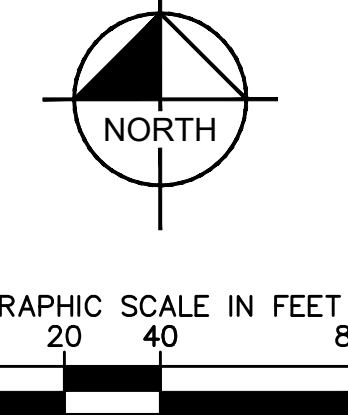
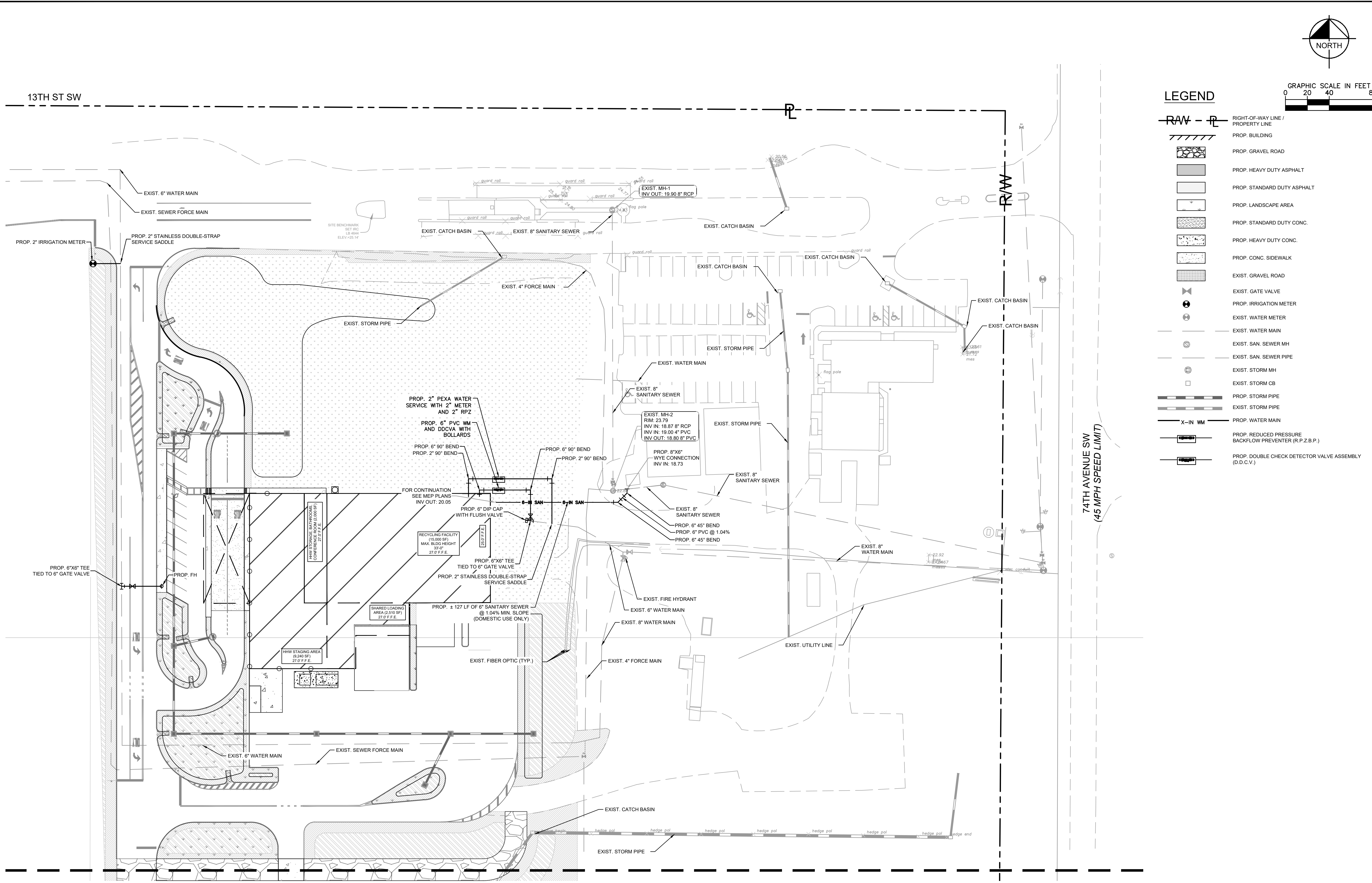


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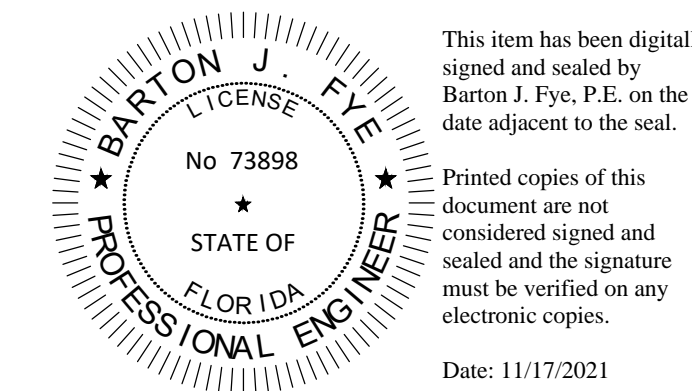
SHEET NUMBER C-521	IRC LANDFILL PREPARED FOR INDIAN RIVER COUNTY INDIAN RIVER COUNTY FL	RETENTION AREAS CROSS SECTION	KHA PROJECT 14-3228000	LICENSED PROFESSIONAL	Kimley»Horn © 2021 KIMLEY-HORN AND ASSOCIATES, INC. 355 ALHAMBRA CIRCLE, SUITE 1400, CORAL GABLES, FL 33134 PHONE: 305-673-2025 WWW.KIMLEY-HORN.COM REGISTRY 696	OWNER CHANGES	11/16/2021	JF
			DATE JULY 2021	SCALE AS SHOWN			DESIGNED BY MRC	DRAWN BY RMR

Plotted By: Rodriguez, Rebecca - Sheet Set: IRC LANDFILL - Layout: C-710 WATER AND SEWER PLANS - November 17, 2021 11:23:10am - k:\vmb-civil\143228000 - frc haw and recycling facility\CIVIL\CADD\plansheets\C-700 WATER AND SEWER PLANS.dwg
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LEGEND	
	RIGHT-OF-WAY LINE / PROPERTY LINE
	PROP. BUILDING
	PROP. GRAVEL ROAD
	PROP. HEAVY DUTY ASPHALT
	PROP. STANDARD DUTY ASPHALT
	PROP. LANDSCAPE AREA
	PROP. STANDARD DUTY CONC.
	PROP. HEAVY DUTY CONC.
	PROP. CONC. SIDEWALK
	EXIST. GRAVEL ROAD
	EXIST. GATE VALVE
	PROP. IRRIGATION METER
	EXIST. WATER METER
	EXIST. WATER MAIN
	EXIST. SAN. SEWER MH
	EXIST. SAN. SEWER PIPE
	EXIST. STORM MH
	EXIST. STORM CB
	PROP. STORM PIPE
	EXIST. STORM PIPE
	PROP. WATER MAIN
	PROP. REDUCED PRESSURE BACKFLOW PREVENTER (R.P.Z.B.P.)
	PROP. DOUBLE CHECK DETECTOR VALVE ASSEMBLY (D.C.C.V.)

SEE SHEET C-711 FOR CONTINUATION



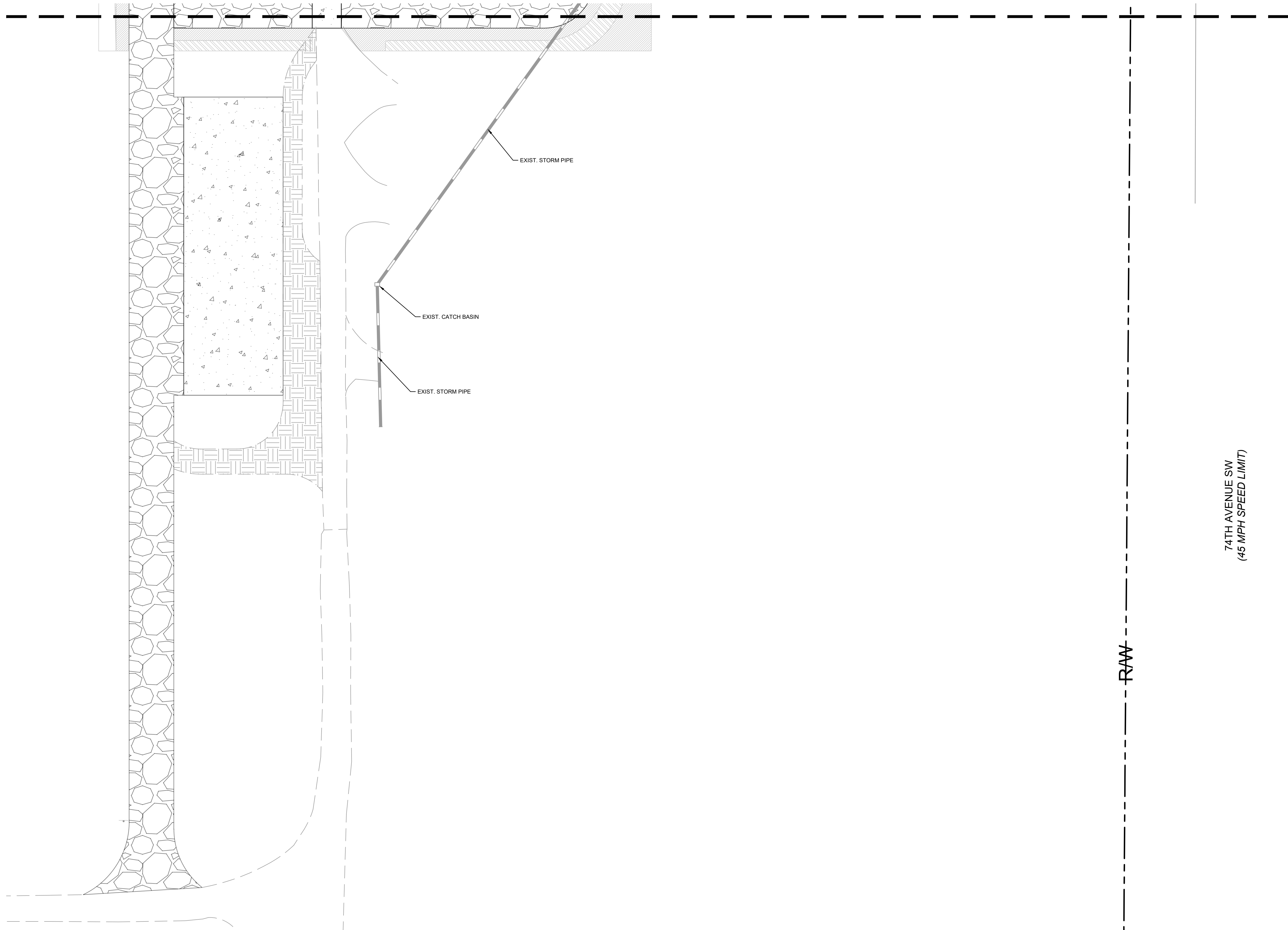
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	WATER AND SEWER PLANS I						
IRC LANDFILL PREPARED FOR INDIAN RIVER COUNTY INDIAN RIVER COUNTY	SHEET NUMBER C-710						

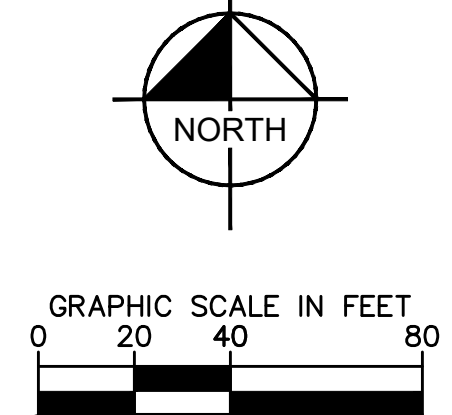
Plotted By: Rodriguez, Rebecca - Sheet Set: IRC LANDFILL - Layout: C-711 - WATER AND SEWER PLANS - November 17, 2021 - 11:23:20am - k:\ymb-civil\43228000 - irc-hw and recycling facility\CIVIL\CADD\plansheets\C-700 WATER AND SEWER PLANS.dwg
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SEE SHEET C-710 FOR CONTINUATION



LEGEND

- RIGHT-OF-WAY LINE / PROPERTY LINE
- PROP. BUILDING
- PROP. GRAVEL ROAD
- PROP. HEAVY DUTY ASPHALT
- PROP. STANDARD DUTY ASPHALT
- PROP. LANDSCAPE AREA
- PROP. STANDARD DUTY CONC.
- PROP. HEAVY DUTY CONC.
- PROP. CONC. SIDEWALK
- EXIST. GRAVEL ROAD
- EXIST. GATE VALVE
- PROP. IRRIGATION METER
- EXIST. WATER METER
- EXIST. WATER MAIN
- EXIST. SAN. SEWER MH
- EXIST. SAN. SEWER PIPE
- EXIST. STORM MH
- EXIST. STORM CB
- PROP. STORM PIPE
- EXIST. STORM PIPE
- PROP. WATER MAIN
- X-IN WM
- PROP. REDUCED PRESSURE BACKFLOW PREVENTER (R.P.Z.B.P.)
- PROP. DOUBLE CHECK DETECTOR VALVE ASSEMBLY (D.D.C.V.)



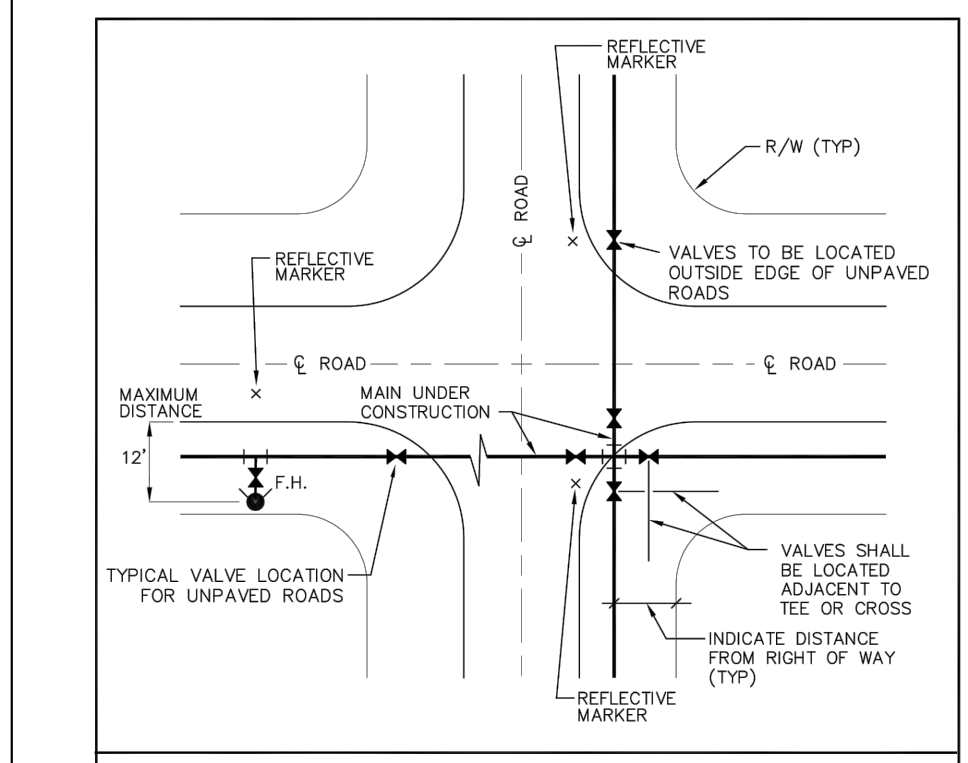
74TH AVENUE SW
(45 MPH SPEED LIMIT)

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KHA PROJECT 14-3228000 DATE JULY 2021 SCALE AS SHOWN DESIGNED BY MRC DRAWN BY RMR CHECKED BY _____ DATE: _____	LICENSED PROFESSIONAL _____ DATE: _____	Kimley-Horn © 2021 KIMLEY-HORN AND ASSOCIATES, INC. 355 ALHAMBRA CIRCLE, SUITE 1400, CORAL GABLES, FL 33134 PHONE: 305-673-2025 WWW.KIMLEY-HORN.COM REGISTRY 696	REVISIONS	DATE
			No.	BY
WATER AND SEWER PLANS II		IRC LANDFILL PREPARED FOR INDIAN RIVER COUNTY INDIAN RIVER COUNTY, FL	SHEET NUMBER C-711	

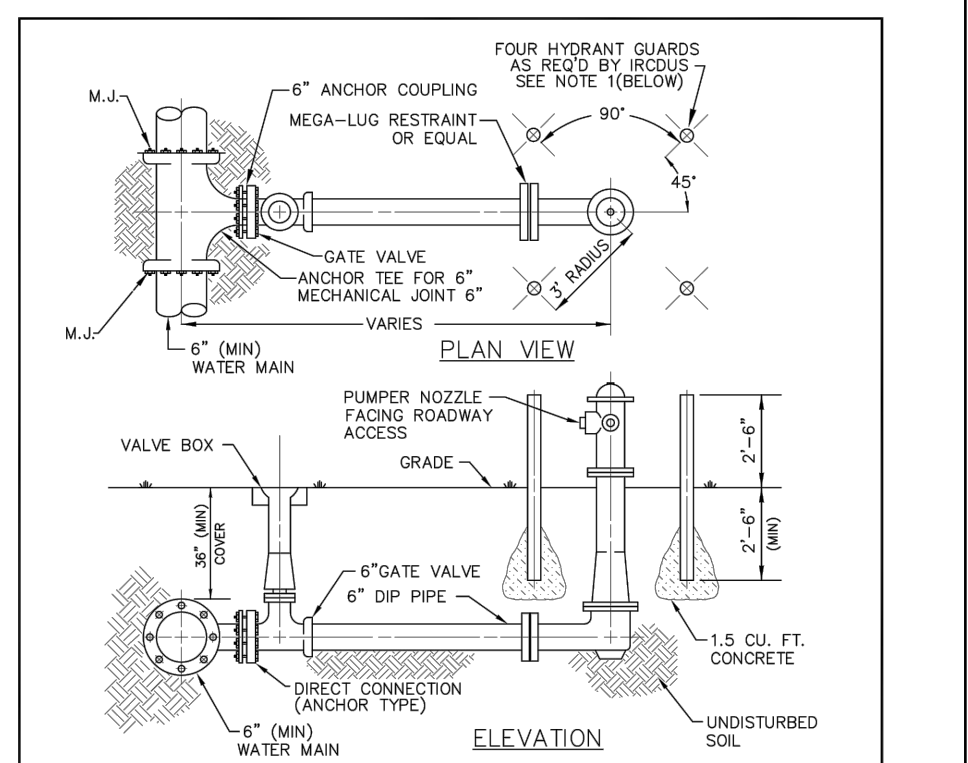
Plotted By: Rebecca, Rebecca - Sheet Set: IRC LANDFILL - 10/20/21 - 10:42:50am - K:\amb-civil\143228000 - irc.thw and recycling facilities\CADD\plansheets\C-712 INDIAN RIVER COUNTY WATER DETAILS.dwg
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NOTES

- VALVE SPACING ON WATER MAINS SHALL NOT EXCEED 100' MAXIMUM.
- A MINIMUM COVER OF 36" IS REQUIRED ABOVE BELL OF D.I.P. AND P.V.C. PIPE.
- CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF BLUE REFLECTIVE MARKERS (BRAND PERMANENT MONUMENT) INDICATING A FIRE HYDRANT AND SHALL BE LOCATED IN THE CENTERLINE OF THE LINE CLOSEST TO THE HYDRANT.
- DEAD END LINES, VALVES AND HYDRANTS SHALL BE RESTRAINED.
- ALL LINES SHALL BE A MINIMUM 10' OFFSET FROM BUILDINGS.
- ALL MAINS LESS THAN 10" IN LENGTH AND LOCATED BETWEEN FITTINGS SHALL BE D.I.P.
- REFLECTIVE MARKERS FOR: FIRE HYDRANT - BLUE WATER MAIN VALVE - WHITE FORCE MAIN VALVE - GREEN REUSE MAIN VALVE - PURPLE

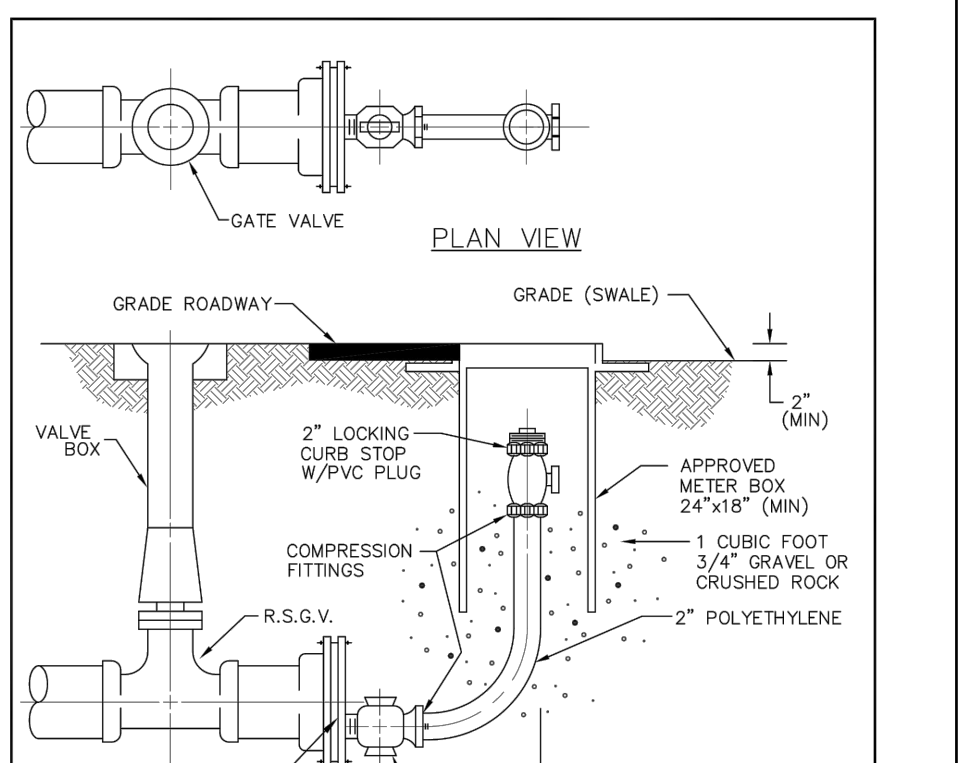
INDIAN RIVER COUNTY DEPARTMENT OF UTILITIES SERVICES
LOCATION DETAIL (VALVE AND FIRE HYDRANT)
 DRAWING NO. W-1



NOTES

- HYDRANT GUARDS TO BE 4" DIAMETER GALVANIZED STEEL OR DUCTILE IRON PIPE FILLED W/ CONCRETE GUARDS TO BE PAINTED SAME AS HYDRANT.
- 6" OF THE PUMPER CONNECTION SHALL BE 18" MIN. ABOVE THE C.E. OF THE NEAREST ROADWAY OR FINISH GRADE.
- ALL HYDRANTS SHALL BE TRAFFIC BREAKAWAY TYPE.
- COMPLETE ANCHORED FIRE HYDRANT ASSEMBLY MAY BE UTILIZED IN LIEU OF ABOVE.
- FIRE HYDRANT SHOULD BE LOCATED WITHIN 12' FROM EDGE OF PAVEMENT WHERE POSSIBLE.
- ALL MATERIALS ARE TO BE PER IRCDCS APPROVED MANUFACTURERS' PRODUCT LIST.
- TRACE WIRE TO BE INSTALLED AS PER DETAIL M-14.
- ALL NUTS SHALL BE STAINLESS STEEL.
- MAINTAIN 2" RADIUS OF HYDRANT PERPENDICULAR TO ROADWAY OR CURB FACE (EXAMPLE MUST BE CLEAR OF SIGNS, TREES, SHRUBS, TRANSFORMERS, UTILITY POLES, ETC.).
- HYDRANTS AND PROTECTION BRACES SHALL HAVE CLEARANCES OF 7'-0" IN FRONT AND TO THE SIDE OF THE FIRE HYDRANT, WITH A 4" CLEARANCE TO THE REAR OF THE HYDRANT PURSUANT TO FIRE PREVENTION CODE 3-5.6.

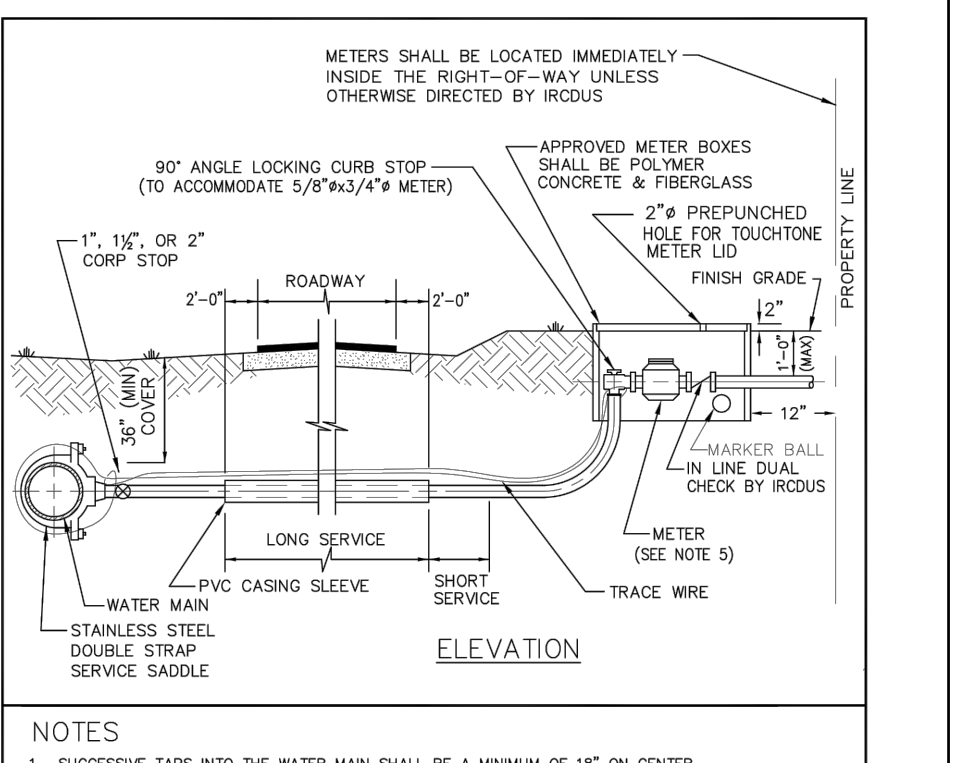
INDIAN RIVER COUNTY DEPARTMENT OF UTILITIES SERVICES
FIRE HYDRANT DETAILS
 DRAWING NO. W-2



NOTES

- BLOW-OFF TO BE LOCATED AT ALL DEAD END LINES, AS REQUIRED BY IRCDCS.
- ALL MATERIALS ARE TO BE PER IRCDCS APPROVED MANUFACTURERS' PRODUCT LIST.
- METHOD OF RESTRAINT AS APPROVED BY IRCDCS.
- TRACE WIRE TO BE INSTALLED AS PER DETAIL M-14.
- LOCATE MARKER BALLS ARE TO BE LOCATED ADJACENT TO ALL VALVE BOXES AND PLACED IN ALL METER BOXES WITHIN 24" FROM SURFACE.

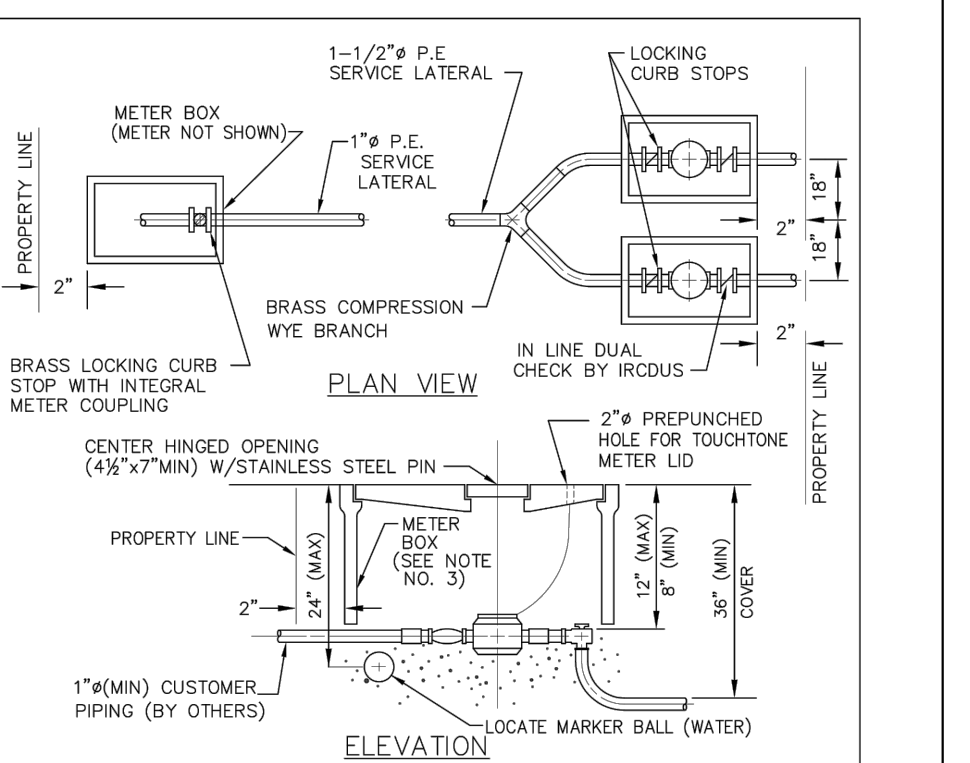
INDIAN RIVER COUNTY DEPARTMENT OF UTILITIES SERVICES
2" BLOW-OFF
 DRAWING NO. W-3



NOTES

- SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE A MINIMUM OF 18" ON CENTER.
- ALL SERVICES REQUIRE 36" MINIMUM COVER.
- MINIMUM SERVICE SIZE SHALL NOT BE LESS THAN 1 1/2" DIA. SERVICES SHALL BE A MINIMUM 1-1/2" DIA. TRIPLE SERVICES SHALL BE A MINIMUM 2" DIA. QUADRUPLE SERVICES SHALL BE APPROVED BY IRCDCS.
- 1" A 1-1/2" DIA. LONG SERVICES REQUIRE A 2" MINIMUM I.D. CASING PIPE. 2" DIA. LONG SERVICES REQUIRE A 3" MINIMUM I.D. CASING PIPE. CASING PIPE SHALL BE SCHEDULE 40 P.V.C.
- ALL METERS 2" OR SMALLER SHALL BE INSTALLED BY IRCDCS. REFER TO APPROVED MANUFACTURERS' PRODUCT LIST FOR METERS GREATER THAN 2".
- FOR LINES SHALL BE PURCHASED BY THE DEVELOPER AND/OR CONTRACTOR AND SHALL BE INSTALLED ON ALL LOCKING CURB STOPS, SAMPLING POINTS, AND WATER SERVICE CONNECTIONS AT THE TIME OF ACTIVATING ALL WATER MAINS OR AT THE TIME DIRECTED BY IRCDCS.
- CURB STOPS SHALL BE THE SAME SIZE AS THE METERS THAT ARE INSTALLED.
- TRACE WIRE TO BE INSTALLED AS PER DETAIL M-14.
- LOCATE MARKER BALLS ARE TO BE PLACED IN ALL METER BOXES WITHIN 24" FROM SURFACE.
- (2) TWO PREPUNCHED HOLES REQUIRED FOR 2" METERS.

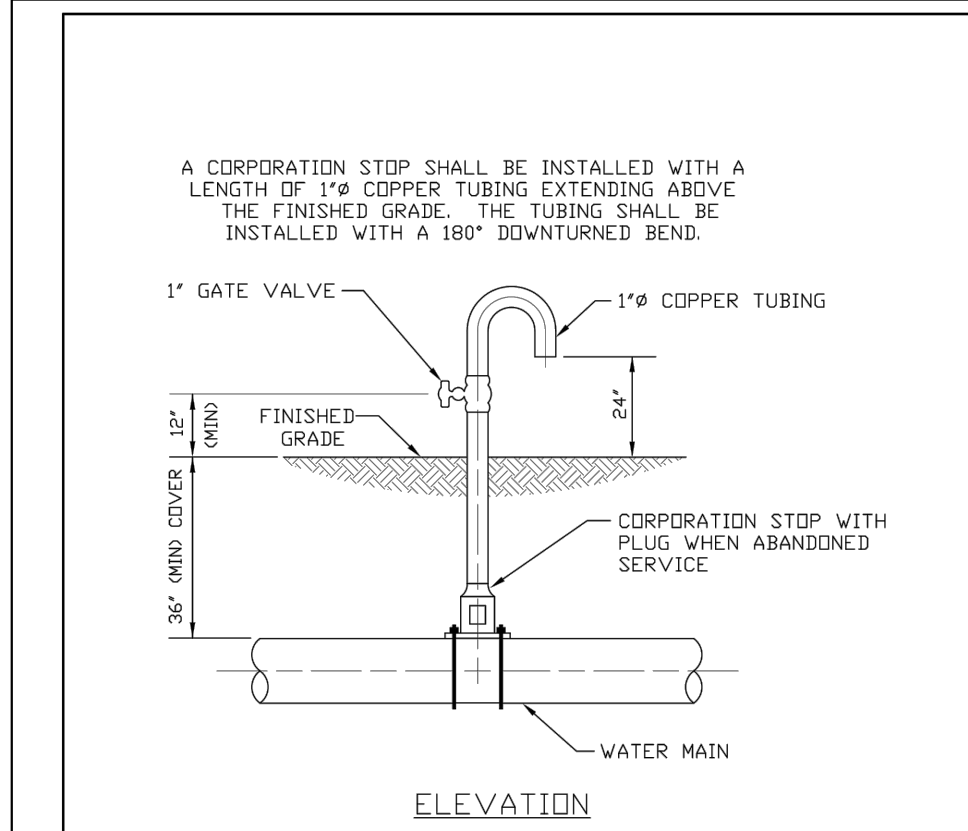
INDIAN RIVER COUNTY DEPARTMENT OF UTILITIES SERVICES
WATER SERVICE
 DRAWING NO. W-4



NOTES

- METERS OVER 2" MUST BE APPROVED BY IRCDCS AND INSTALLED BY CONTRACTOR.
- ALL METERS 2" AND SMALLER WILL BE SUPPLIED AND INSTALLED BY IRCDCS.
- MINIMUM SIZE OF METER BOXES: 1" SERVICE (12" X 18"); 1-1/2" AND 2" SERVICE (17" X 23").
- METERS GREATER THAN 2" SHALL BE COMPACT METERS. REFER TO IRCDCS APPROVED MANUFACTURERS' PRODUCT LIST.
- TRACE WIRE TO BE INSTALLED AS PER DETAIL M-14.
- LOCATE MARKER BALLS ARE TO BE LOCATED ADJACENT TO ALL INLINE VALVE BOXES AND PLACED IN ALL METER BOXES WITHIN 24" FROM SURFACE.

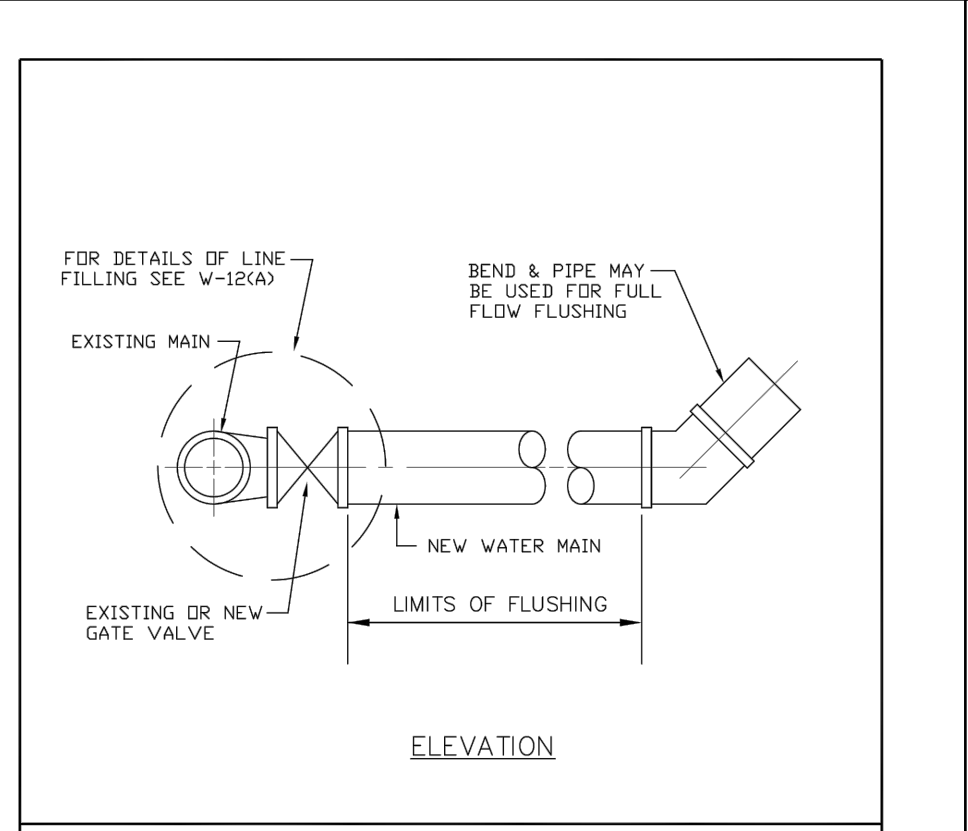
INDIAN RIVER COUNTY DEPARTMENT OF UTILITIES SERVICES
METER BOX
 DRAWING NO. W-5



NOTES

- TEMPORARY SAMPLING POINT MAY BE CONSTRUCTED OF ALTERNATE MATERIALS AS APPROVED BY IRCDCS.

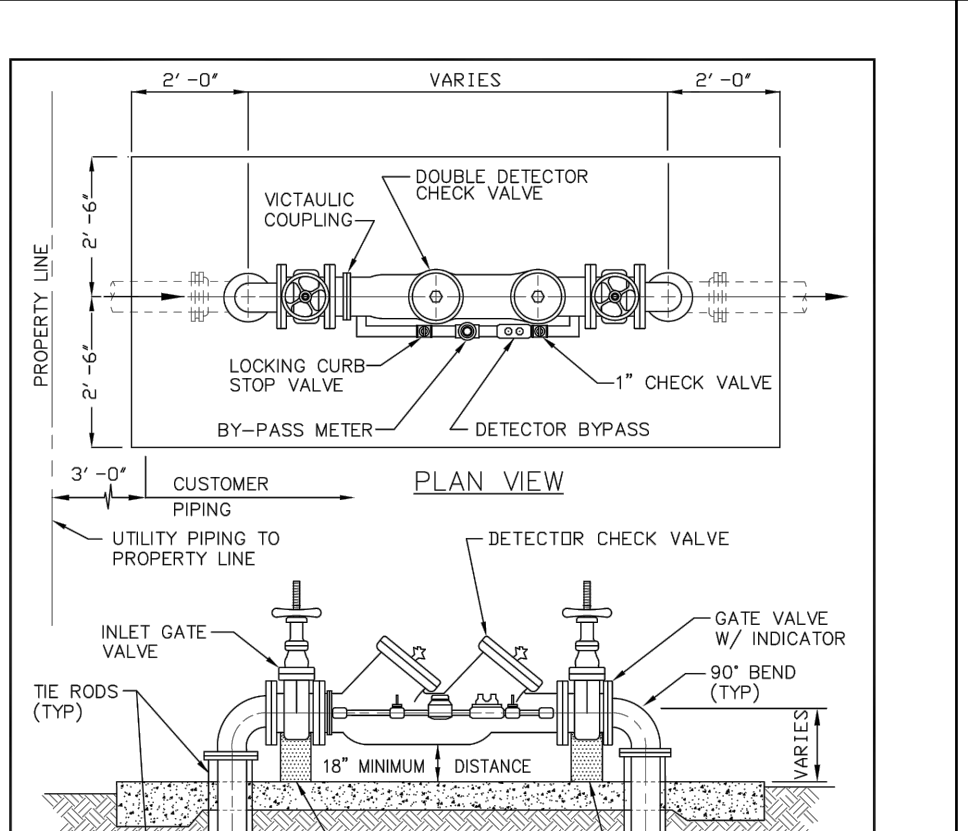
INDIAN RIVER COUNTY DEPARTMENT OF UTILITIES SERVICES
TEMPORARY SAMPLING POINT (BACTERIOLOGICAL)
 DRAWING NO. W-6



NOTES

- A FULL LINE FLUSH IS THE ONLY FLUSHING METHOD APPROVED FOR MAINS.
- ALL FIRE HYDRANTS AND DETECTOR CHECK VALVES SHALL BE INSPECTED AND TESTED TO ENSURE THAT NO FOREIGN OBJECTS IMPEDE THE FLOW OF WATER.
- A PRESSURE GAUGE SHALL BE INSTALLED UPSTREAM OF THE FLUSHING POINT. THE PRESSURE UPSTREAM SHALL NOT FALL BELOW 25 P.S.I.
- PROVIDE ALL NECESSARY THRUST BLOCKS AND/OR OTHER RESTRAINTS.
- INDIAN RIVER COUNTY UTILITY PERSONNEL, AFTER A MINIMUM OF A 48 HOUR NOTICE BY THE CONTRACTOR, SHALL BE PRESENT FOR ALL FLUSHING ACTIVITIES AND SHALL OPERATE ALL EXISTING VALVES.

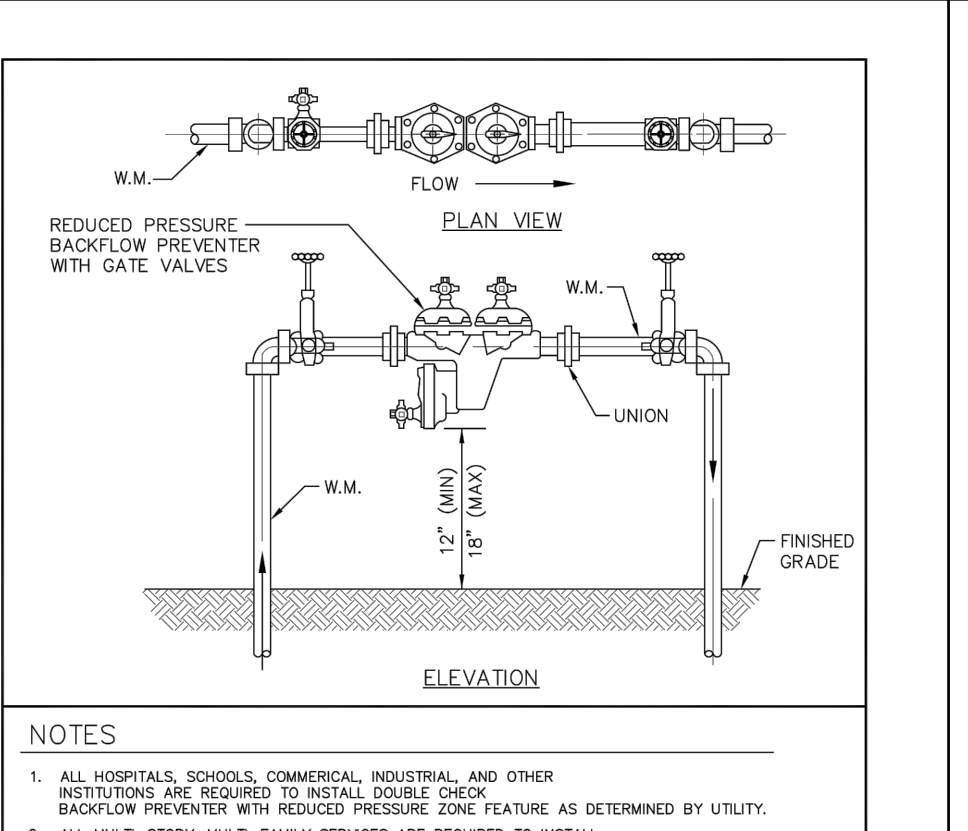
INDIAN RIVER COUNTY DEPARTMENT OF UTILITIES SERVICES
FLUSHING CONNECTION
 DRAWING NO. W-7



NOTES

- ALL COMMERCIAL BUILDINGS AND INSTITUTIONS WITH BUILDING SPRINKLERS MUST HAVE DOUBLE DETECTOR CHECK VALVE AND METER TO BE INSTALLED ON THEIR OWN PROPERTY. DETECTOR CHECK VALVES SHALL BE INSTALLED IN ACCORDANCE WITH THE STATE FIRE MARSHAL CODE AND THE IRCDCS AND SHALL BE INSTALLED ABOVE GROUND.
- DETAIL SHOWN CAN BE MODIFIED AND APPROVED BY IRCDCS FOR EACH INDIVIDUAL PROJECT.
- ALL MATERIALS ARE TO BE PER IRCDCS APPROVED MANUFACTURERS' PRODUCT LIST.

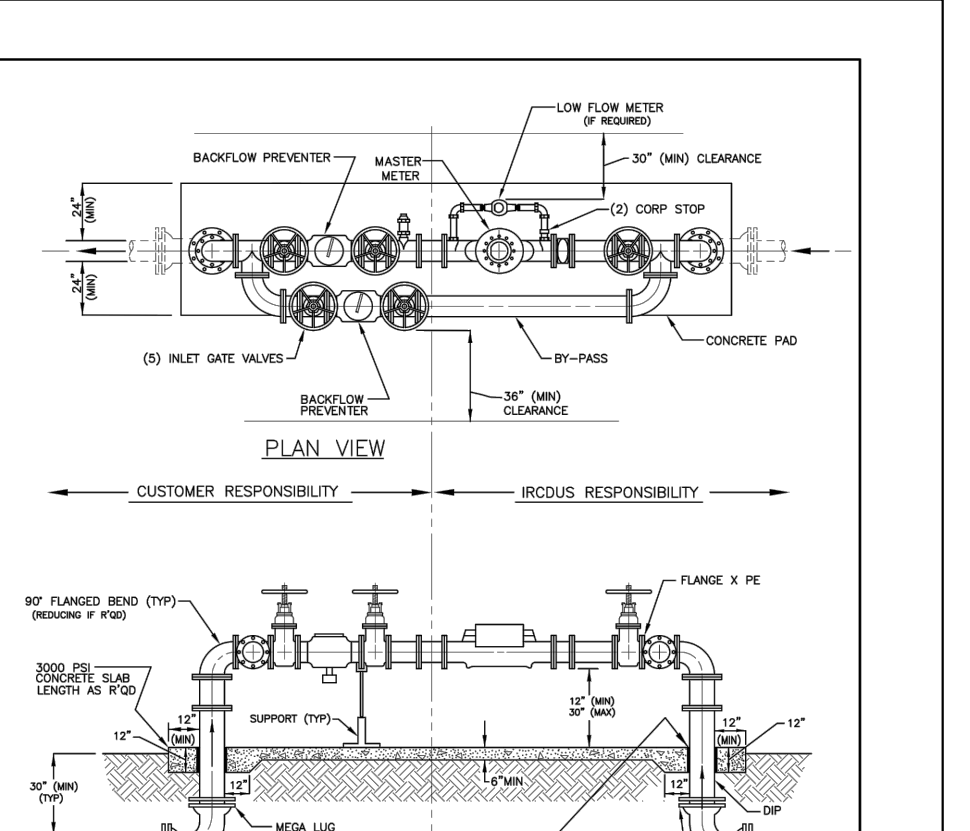
INDIAN RIVER COUNTY DEPARTMENT OF UTILITIES SERVICES
DOUBLE-DETECTOR CHECK VALVE ASSEMBLY
 DRAWING NO. W-8



NOTES

- ALL HOSPITALS, SCHOOLS, COMMERCIAL, INDUSTRIAL AND OTHER INSTITUTIONS ARE REQUIRED TO INSTALL DOUBLE CHECK BACKFLOW PREVENTER WITH REDUCED PRESSURE AS DETERMINED BY UTILITY.
- ALL MULTI-STORY MULTI-FAMILY RESIDENCES ARE REQUIRED TO INSTALL RPZ BACKFLOW PREVENTERS.
- APPROVED EQUALS HAVING FULL I.L.U. USE AND AWWA CERTIFICATIONS MAY BE INSTALLED ONLY AFTER SPECIFIC APPROVAL BY IRCDCS.
- SUPPORT BRACKET OR PREVENTER FROM WALL OR APPROVED PIPE SUPPORT SYSTEM. PIPE SUPPORT SYSTEM SHALL BE BRASS, COPPER OR D.I.P., AS APPROVED BY IRCDCS.
- BELOW GROUND INSTALLATION IN A VAULT MAY BE CONSIDERED FOR APPROVAL IF FINISHED GRADE OF BOTTOM OF VAULT IS AT LEAST 1'-0" ABOVE THE HIGH WATER TABLE.
- PIPEING 2-1/2" OR GREATER SHALL BE FLANGED DUCTILE IRON PIPE.
- ALL FASTENERS ARE TO BE PER IRCDCS APPROVED MANUFACTURERS' PRODUCT LIST.
- ALL FASTENERS SHALL BE 316 STAINLESS STEEL (OR APPROVED EQUALS).
- ALL RPZ BACK FLOW PREVENTERS SHALL BE CERTIFIED BY APPROVED TESTER AND APPROPRIATE CERTIFIED FORM SUBMITTED TO IRCDCS.
- BY-PASS PIPE DIAMETER SHALL BE SAME SIZE AS MAIN PIPE.

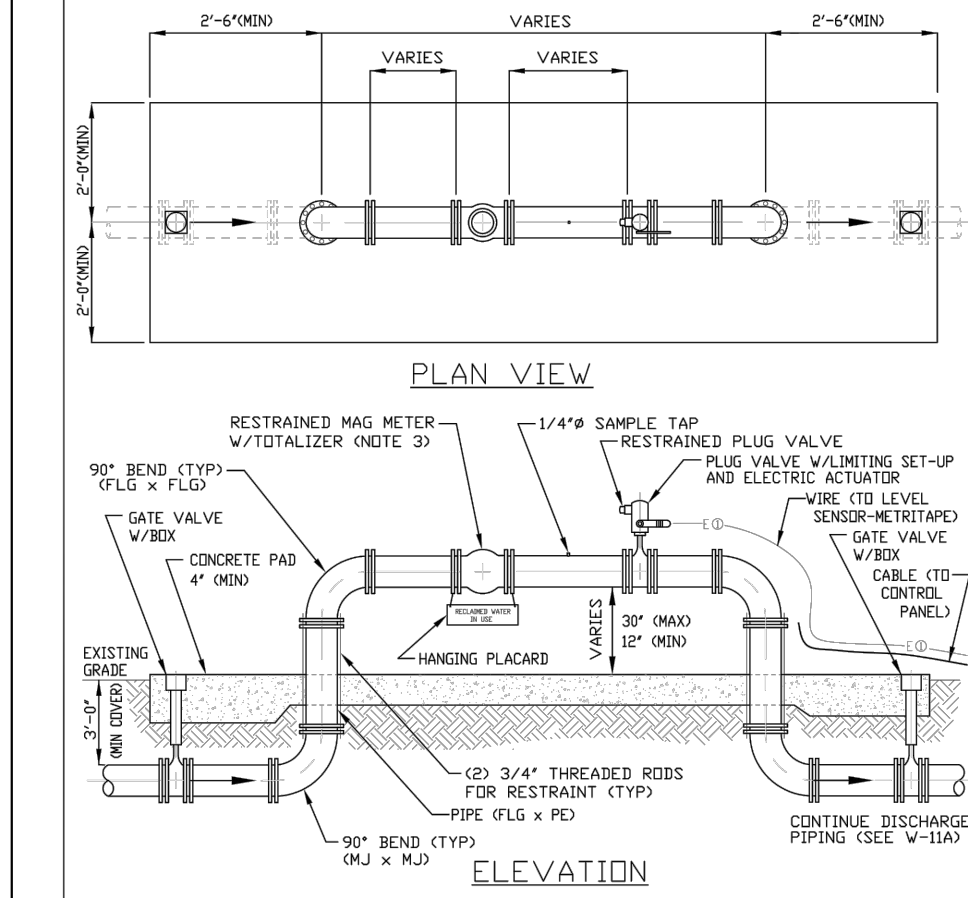
INDIAN RIVER COUNTY DEPARTMENT OF UTILITIES SERVICES
BACKFLOW PREVENTER
 DRAWING NO. W-9



NOTES

- ALL ABOVE GROUND PIPING SHALL BE FLANGED DUCTILE IRON.
- FIELD FABRICATED FLANGES ARE UNACCEPTABLE.
- DEVICE TO BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS' INSTRUCTIONS.
- ASSEMBLY TO BE PRIMED WITH RUST INHIBITING PRIMER AND FINISHED PAINTED AFTER INSTALLATION. (SEE APPROVED MANUFACTURERS' PRODUCT LIST)
- BY-PASS PIPE DIAMETER SHALL BE SAME SIZE AS MAIN PIPE.

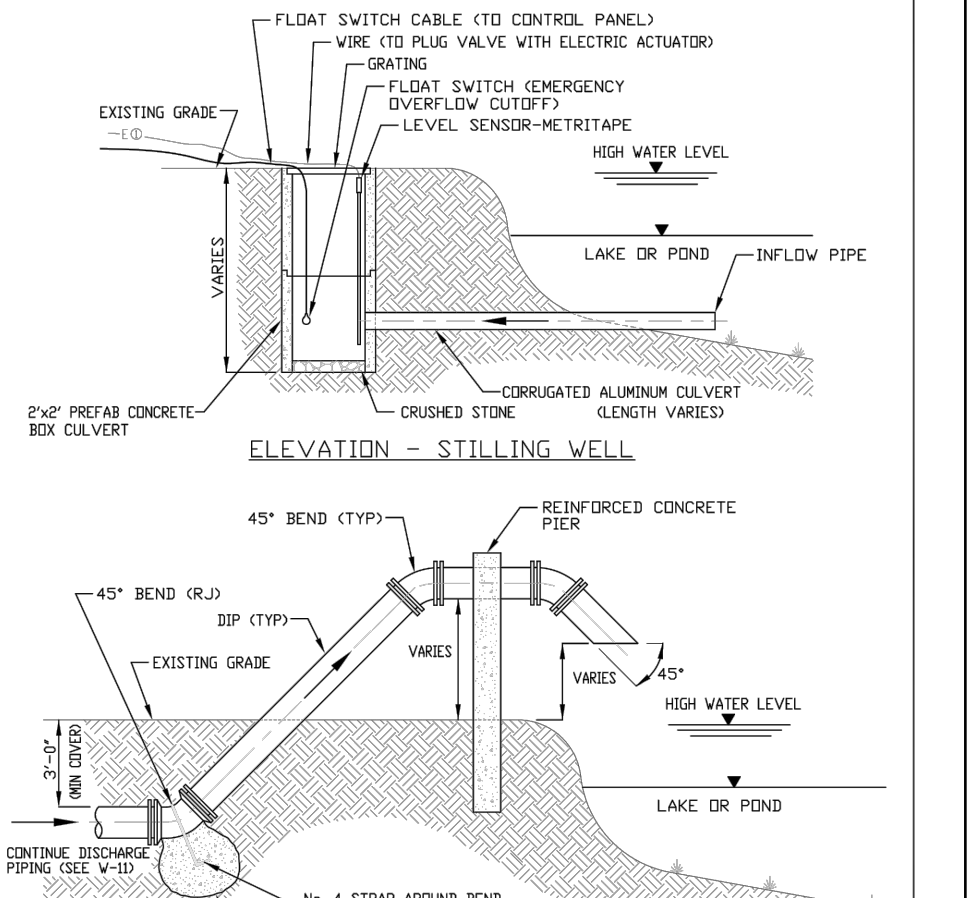
INDIAN RIVER COUNTY DEPARTMENT OF UTILITIES SERVICES
MASTER METER COMBINATION ASSEMBLY
 DRAWING NO. W-10



NOTES

- ALL ABOVE GROUND PIPING SHALL BE PAINTED PANTONE PURPLE C522C.
- PROVIDE A HANGING PLACARD WITH THE WORDS "RECLAIMED WATER IN USE".
- MAG METER SHALL BE LINKED TO IRCDCS RTU FOR REMOTE MONITORING BY IRCDCS. THE METER SHALL REPORT IN GALLONS PER MINUTE. PLUG VALVE SHALL BE REMOTELY ACTIVATED VIA EXISTING IRCDCS RTU AND BY LEVEL SENDER-METRI-TAP IN LAKE. PLUG VALVE SHALL REPORT "OPEN" OR "CLOSED" POSITION. INTERGRATE ALL LOGS WITH IRCDCS SCADA SYSTEM.
- ALL MATERIALS ARE TO BE PER IRCDCS APPROVED MANUFACTURERS' PRODUCT LIST.

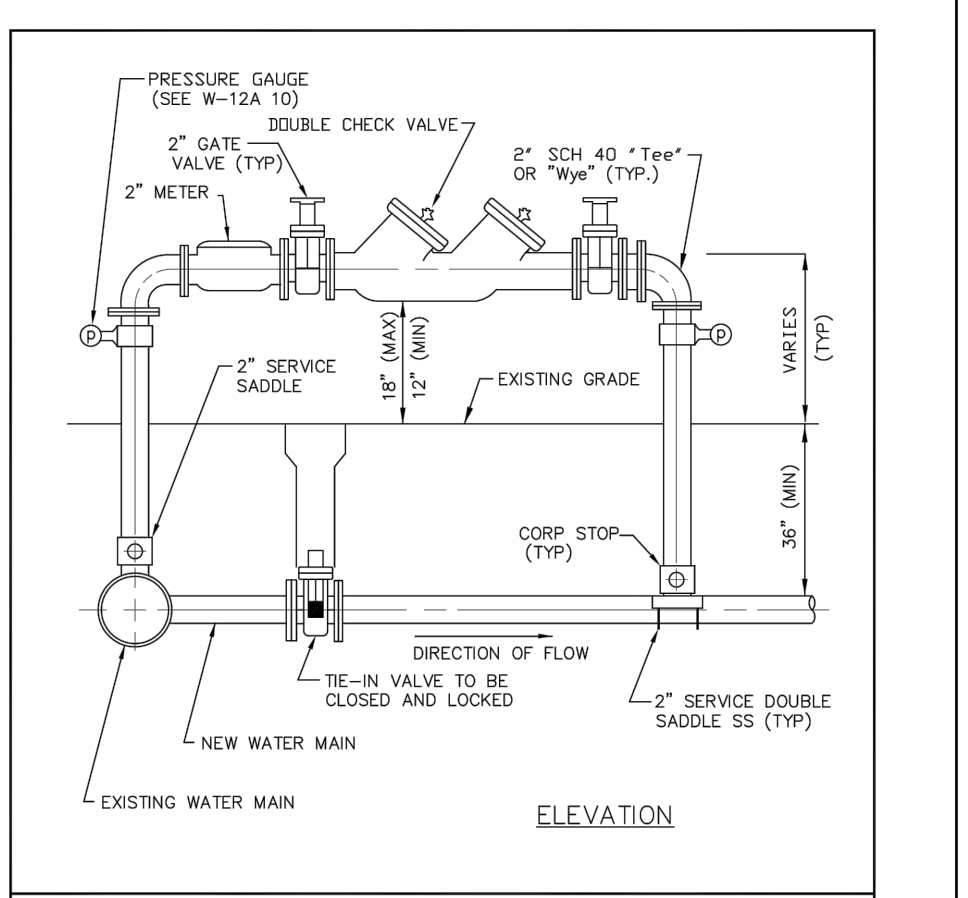
INDIAN RIVER COUNTY DEPARTMENT OF UTILITIES SERVICES
REUSE METER/VALVE ASSEMBLY DETAIL
 DRAWING NO. W-11



NOTES

- ALL ABOVE GROUND PIPING SHALL BE PAINTED PANTONE PURPLE C522C.
- PROVIDE A PLACARD WITH THE WORDS "RECLAIMED WATER IN USE".
- ALL MATERIALS ARE TO BE PER IRCDCS APPROVED MANUFACTURERS' PRODUCT LIST.

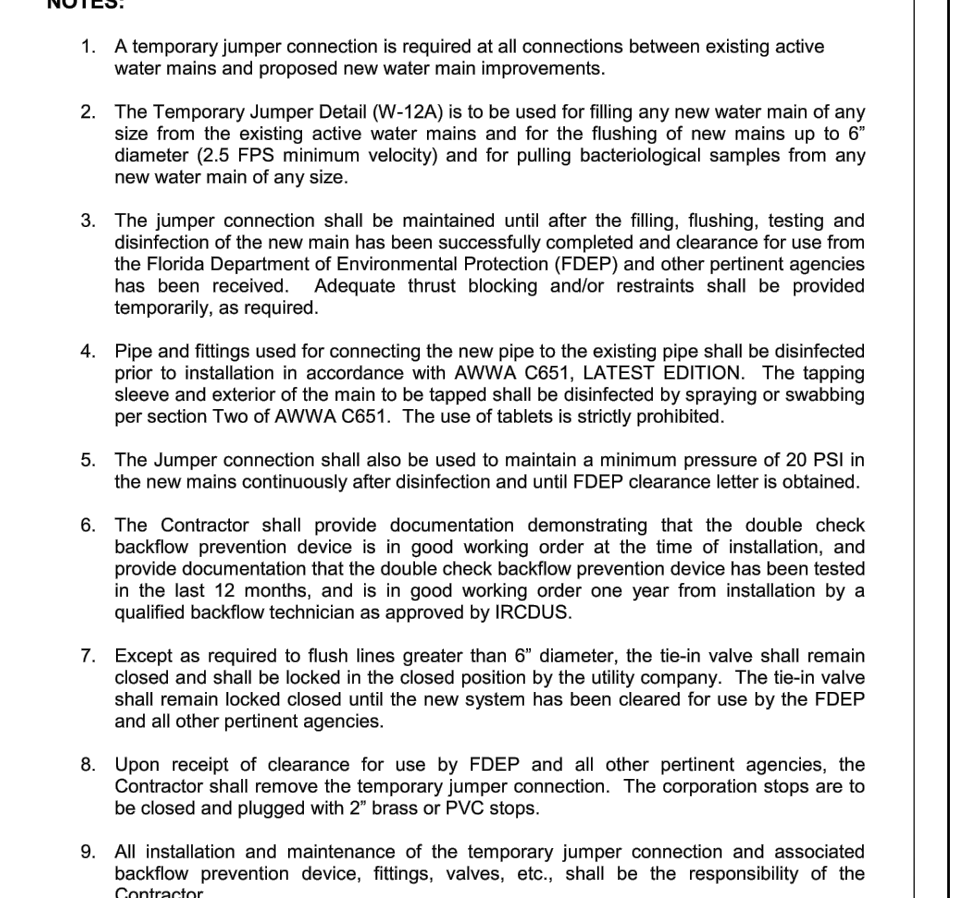
INDIAN RIVER COUNTY DEPARTMENT OF UTILITIES SERVICES
REUSE PIPE DISCHARGE DETAIL
 DRAWING NO. W-11 A



NOTES

- TI-E-IN VALVE SHALL BE OPERATED BY RECORD PERSONNEL ONLY AND IN THE PRESENCE OF THE ENGINEER OF RECORD.
- ALL LINES TO BE FULL PIPE FLUSHED.
- ALL MATERIALS ARE TO BE PER IRCDCS APPROVED MANUFACTURERS' PRODUCT LIST.

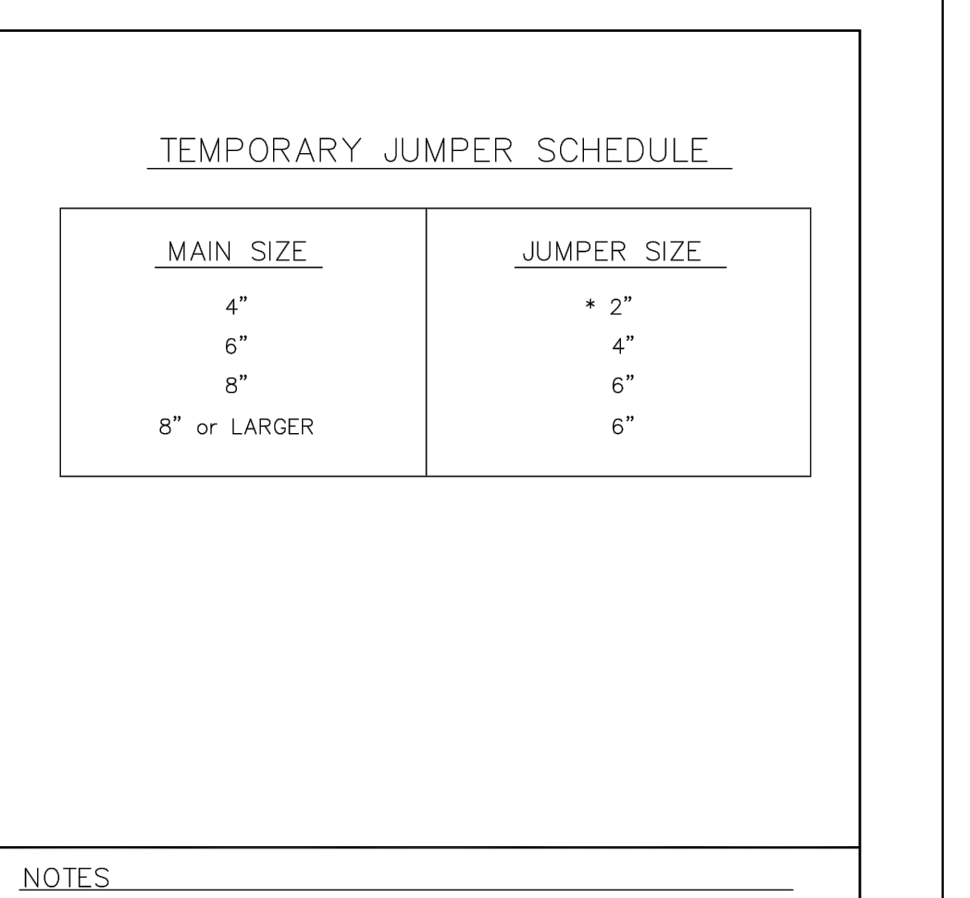
INDIAN RIVER COUNTY DEPARTMENT OF UTILITIES SERVICES
TEMPORARY JUMPER CABLE
 DRAWING NO. W-12



NOTES

- A temporary jumper connection is required at all connections between existing active water mains and proposed new water main improvements.
- The Temporary Jumper Detail (W-12A) is to be used for filling any new water main of any size from the existing active water mains and for the flushing of new mains up to 6" diameter (2.5 FPS minimum velocity) and for flushing of temporary samples from any new water main of any size.
- The jumper connection shall be maintained until after the filling, flushing, testing and disinfection of the new main has been successfully completed and clearance for use from the Florida Department of Environmental Protection (FDEP) and other pertinent agencies has been received. Adequate thrust blocking and/or restraints shall be provided temporarily, as required.
- Pipe and fittings used for connecting the new pipe to the existing pipe shall be disinfected prior to installation in accordance with AWWA C651, LATEST EDITION. The tapping sleeve and exterior of the main to be tapped shall be disinfected by spraying or swabbing per section Two of AWWA C651. The use of tables is strictly prohibited.
- The jumper connection shall also be used to maintain a minimum pressure of 20 PSI in the new mains continuously after disinfection and until FDEP clearance letter is obtained.
- The Contractor shall provide documentation demonstrating that the double check backflow prevention device is in good working order at the time of installation, and provide documentation that the double check backflow prevention device has been tested in the last 12 months, and is in good working order one year from installation by a qualified backflow technician as approved by IRCDCS.
- Except as required to flush lines greater than 6" diameter, the tie-in valve shall remain closed and shall be locked in the closed position by the utility company. The tie-in valve shall remain locked closed until the new system has been cleared for use by the FDEP and all other pertinent agencies.
- Upon receipt of clearance for use by FDEP and all other pertinent agencies, the Contractor shall remove the temporary jumper connection. The corporation stops are to be closed and plugged with 2" brass or PVC stop.
- All installation and maintenance of the temporary jumper connection and associated backflow prevention device, fittings, valves, etc., shall be the responsibility of the Contractor.
- If the water main to be flushed is greater than 6" diameter or such length that a full pipe flush at the 2.5 FPS velocity cannot be accomplished, the following procedure shall be utilized:
 - Install pressure gauges as indicated on Temporary Jumper Detail (W-11).
 - Open all downstream valves in the new system prior to flush.
 - Flush new water main thru tie-in valve maintaining a 10+ PSI pressure differential between gauges during flush.
 - IRCDCS PERSONNEL, in the presence of the Engineer of Record shall operate tie-in valve to insure that the required pressure differential is maintained.

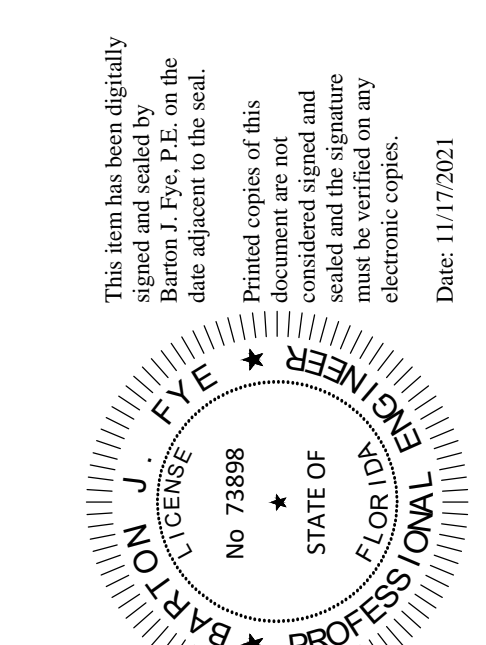
INDIAN RIVER COUNTY DEPARTMENT OF UTILITIES SERVICES
TEMPORARY JUMPER SCHEDULE
 DRAWING NO. W-12 (A)



NOTES

- WITH THE USE OF A 2" JUMPER, A CORPSTOP WITH SERVICE SADDLE MAY BE UTILIZED IN LIEU OF A CROSS AND VALVE AT MAIN CONNECTION.

INDIAN RIVER COUNTY DEPARTMENT OF UTILITIES SERVICES
TEMPORARY JUMPER DETAIL
 DRAWING NO. W-12 (B)



INDIAN RIVER COUNTY WATER DETAILS
 PREPARED FOR
IRC LANDFILL
 INDIAN RIVER COUNTY

KHA PROJECT
 14-3228000
 DATE
 JULY 2021
 SCALE AS SHOWN
 DESIGNED BY MRG
 DRAWN BY RMR
 CHECKED BY BF

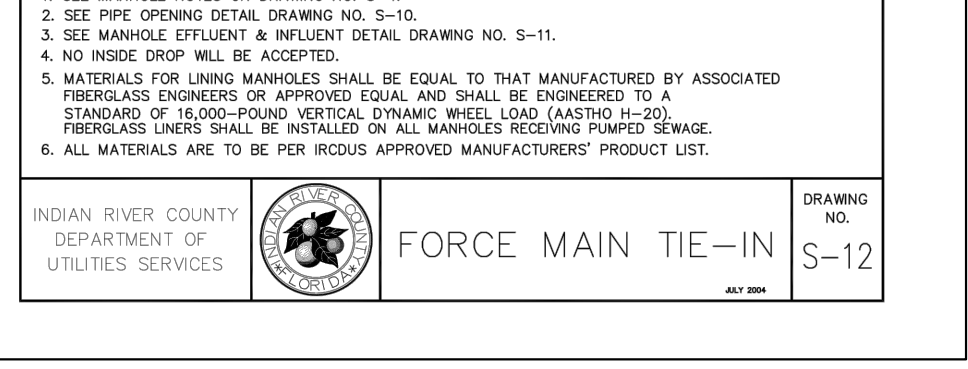
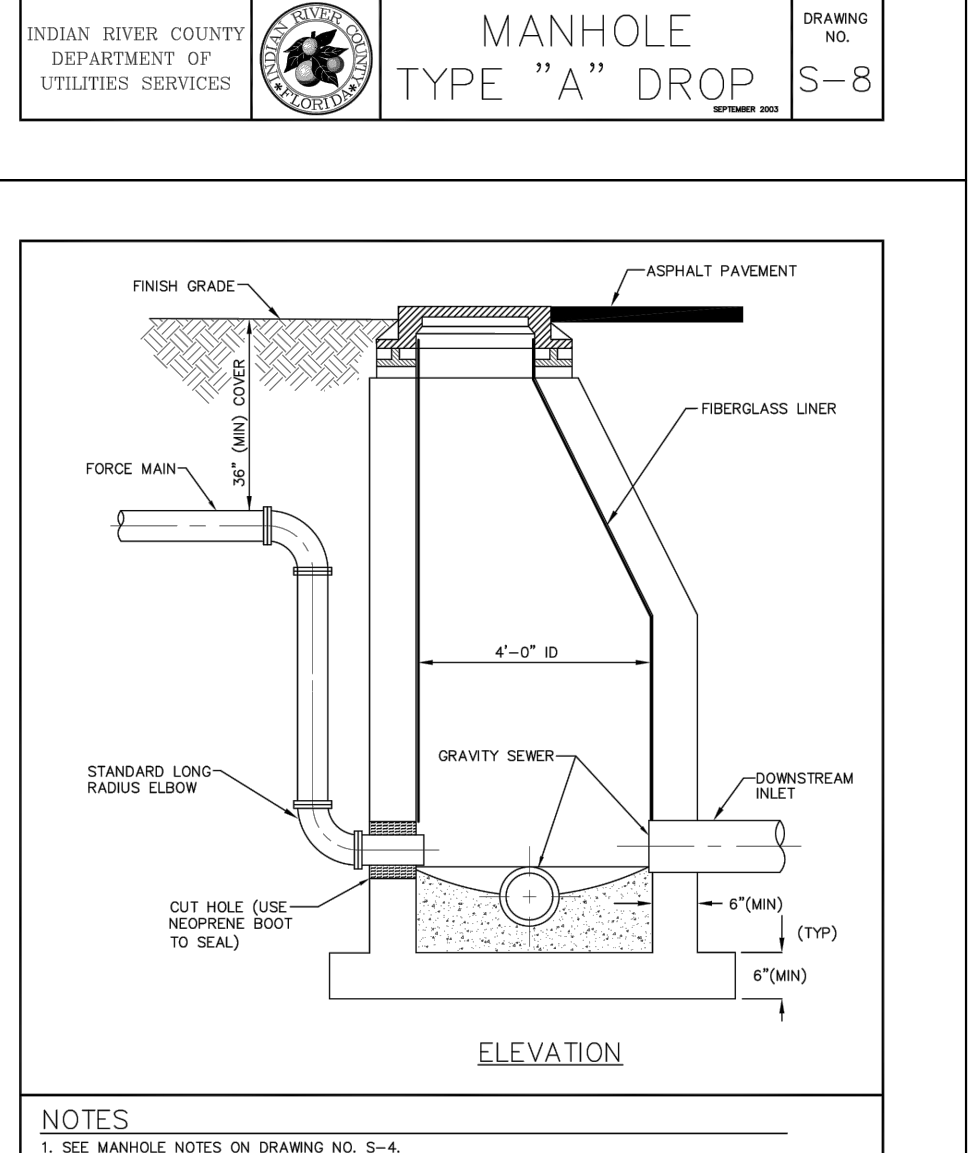
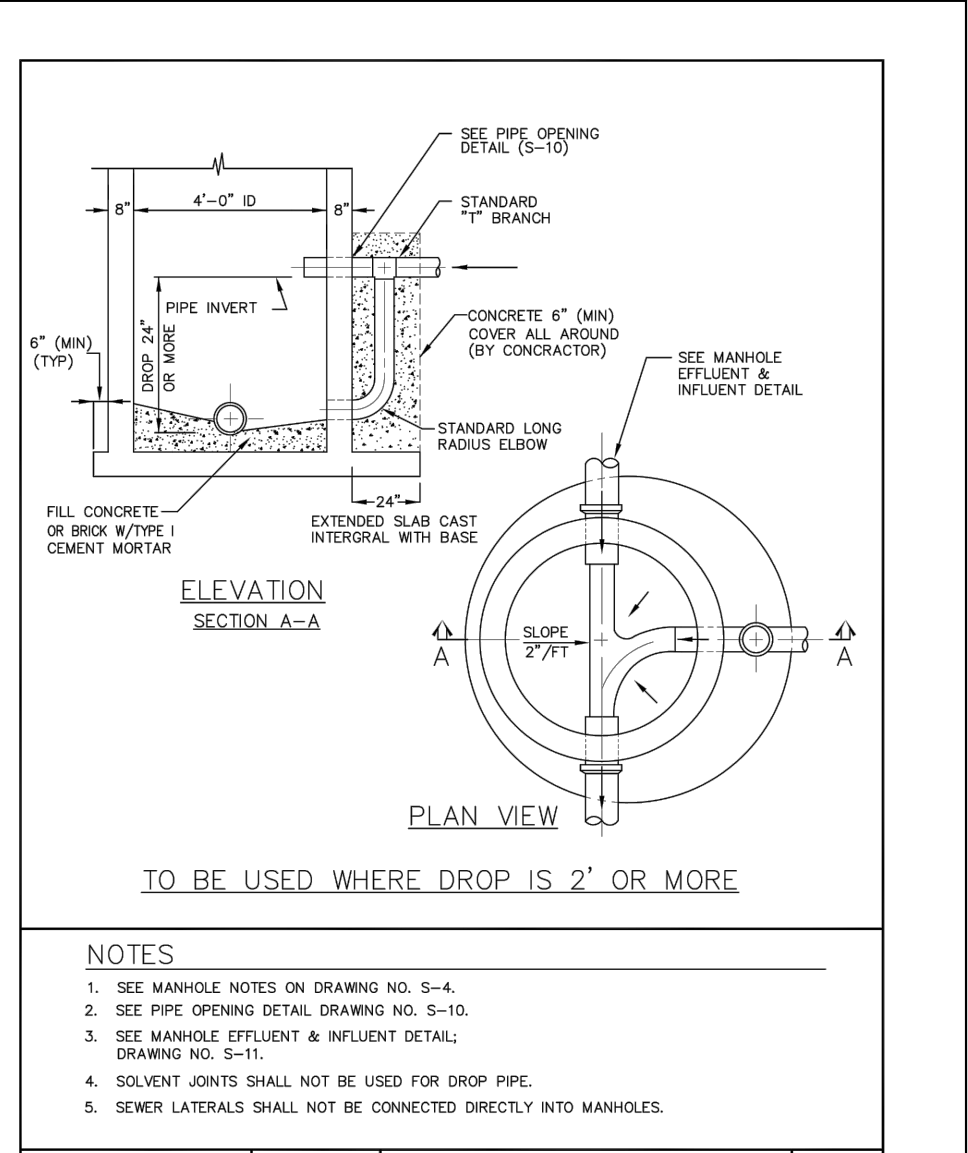
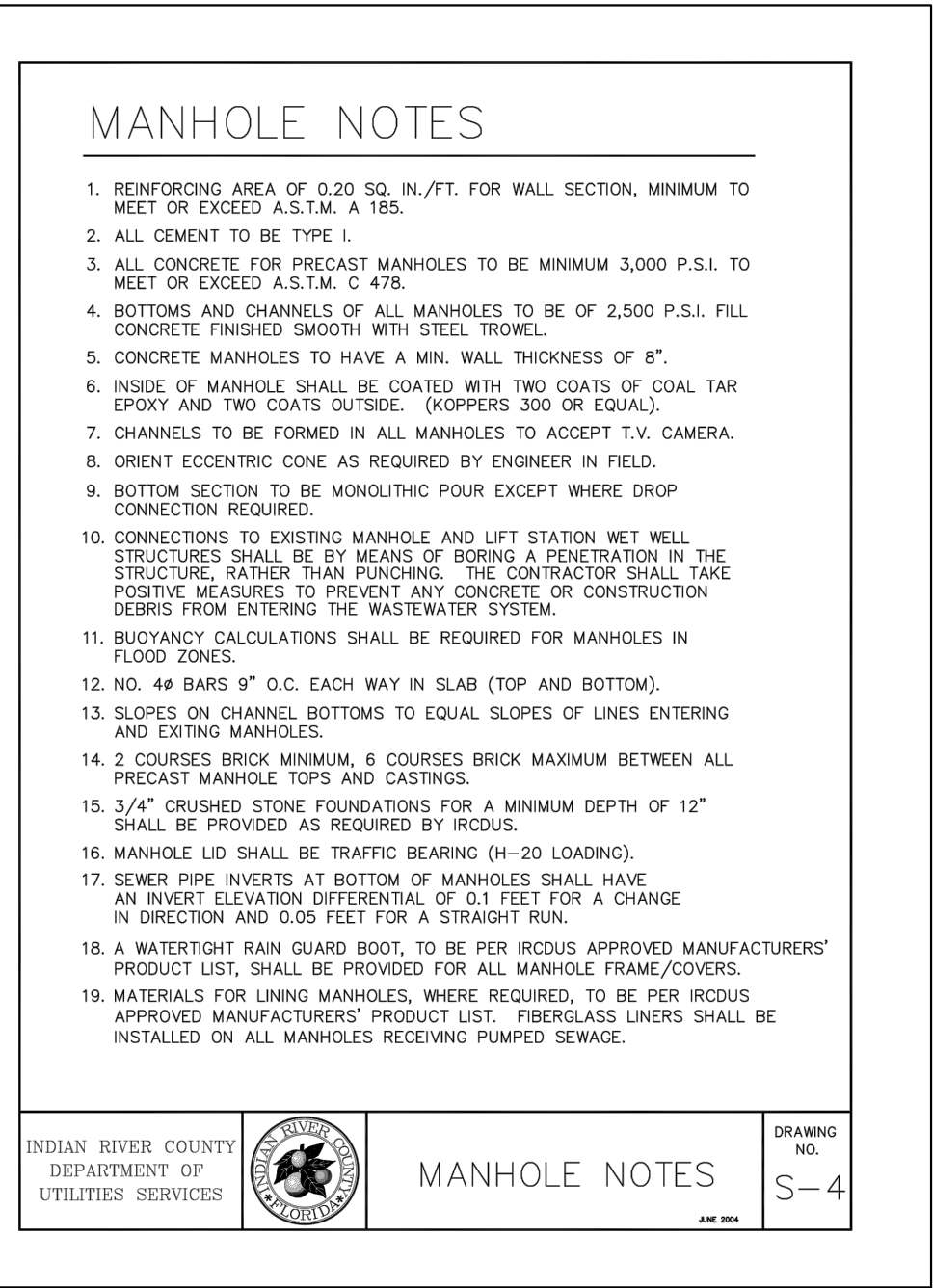
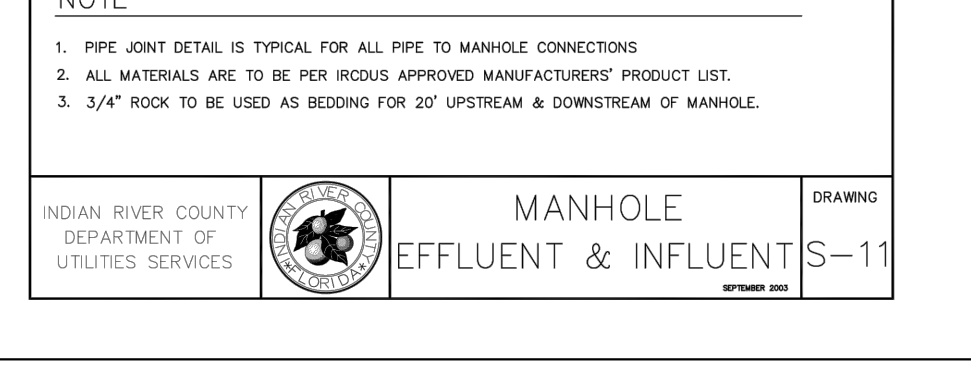
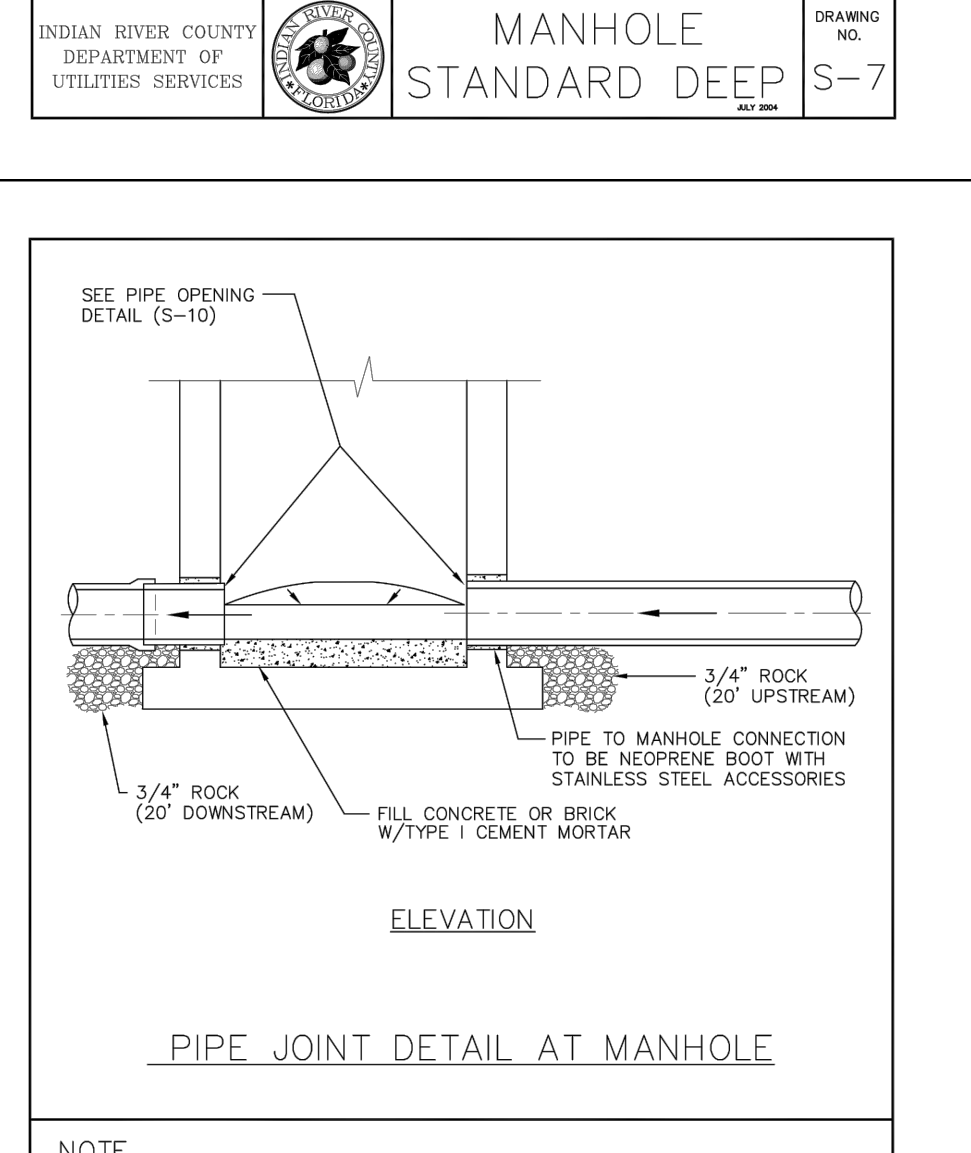
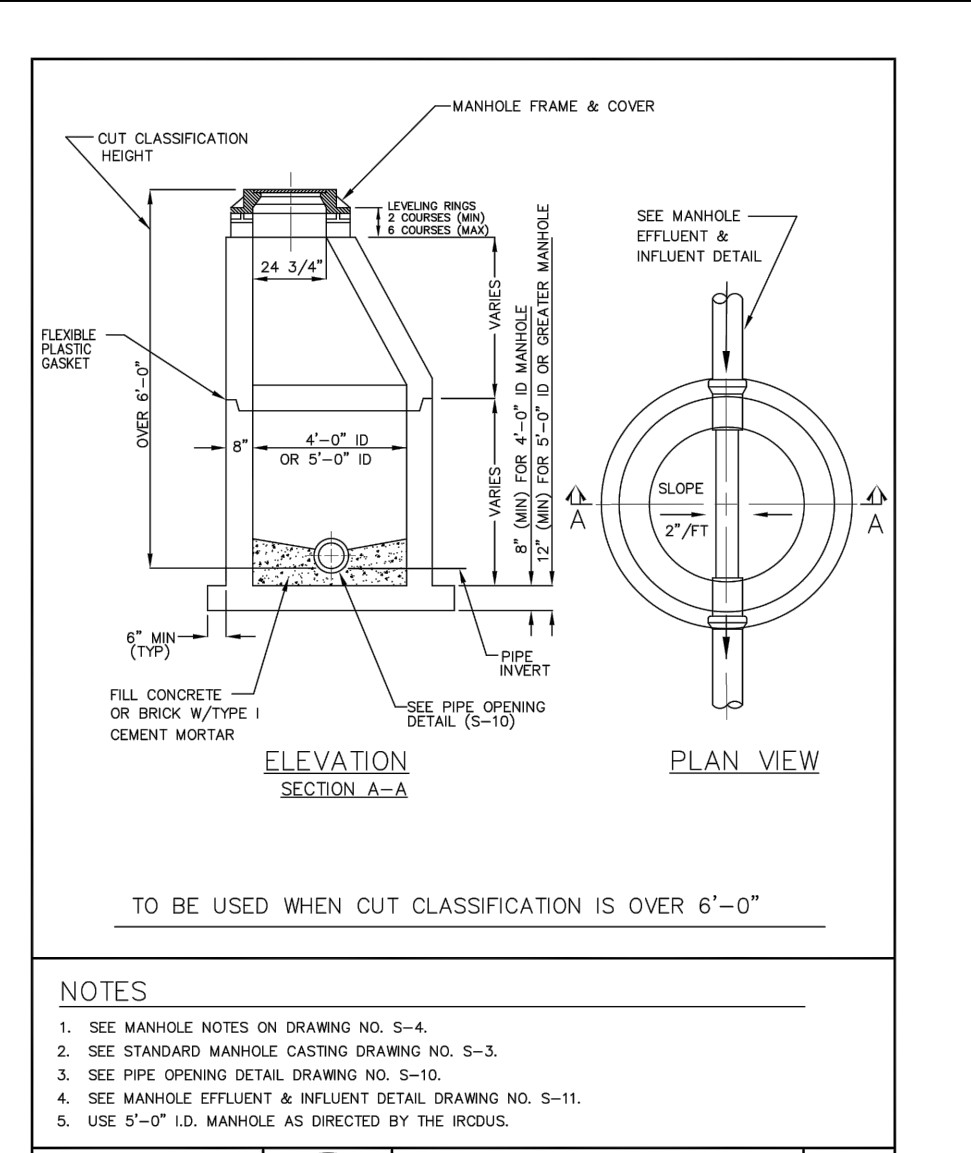
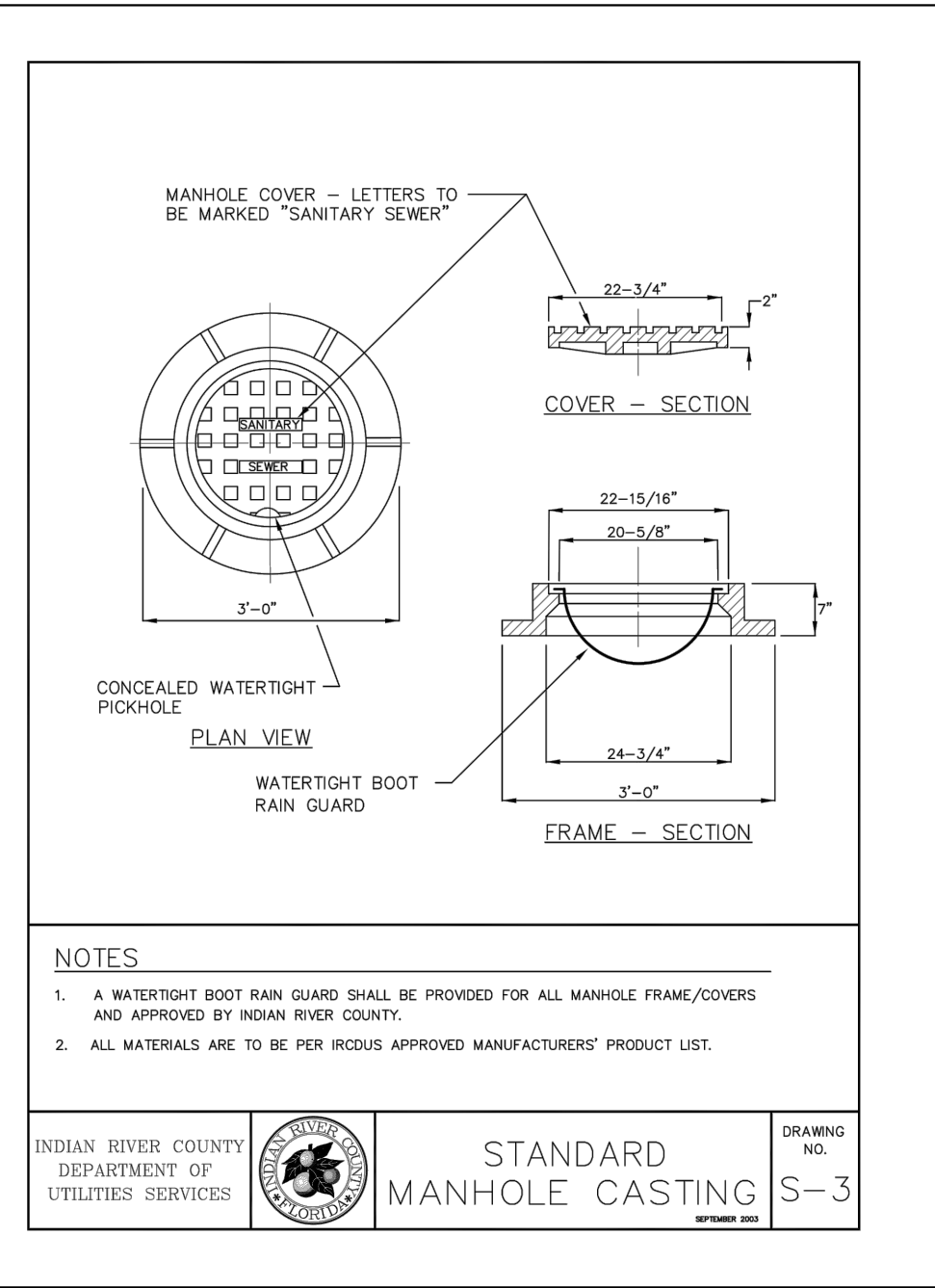
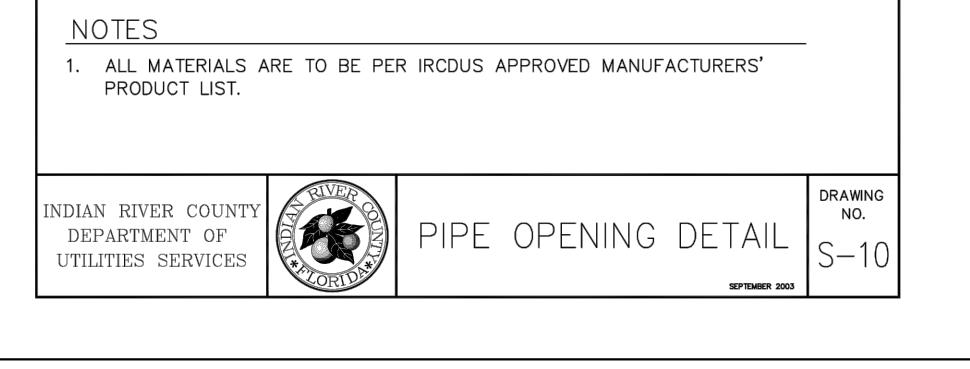
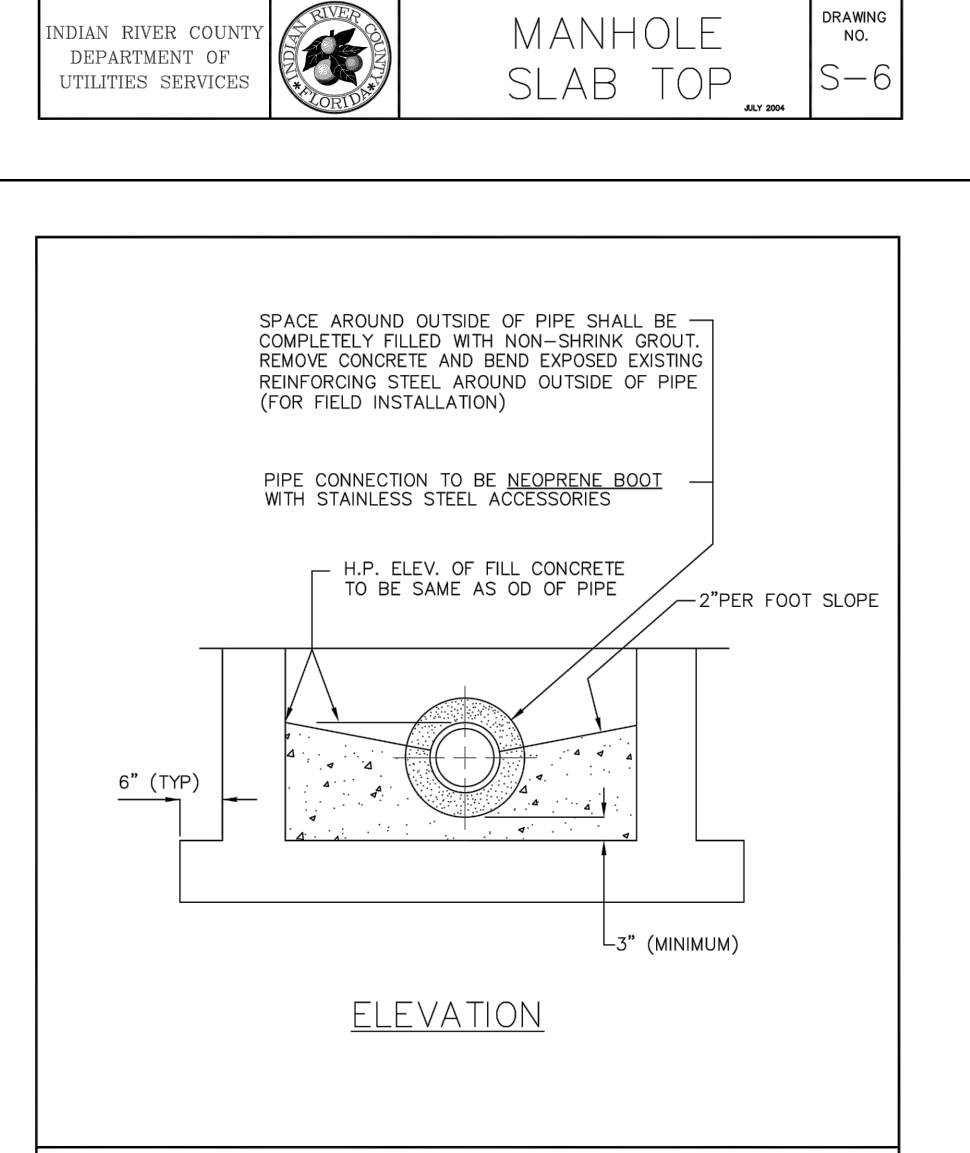
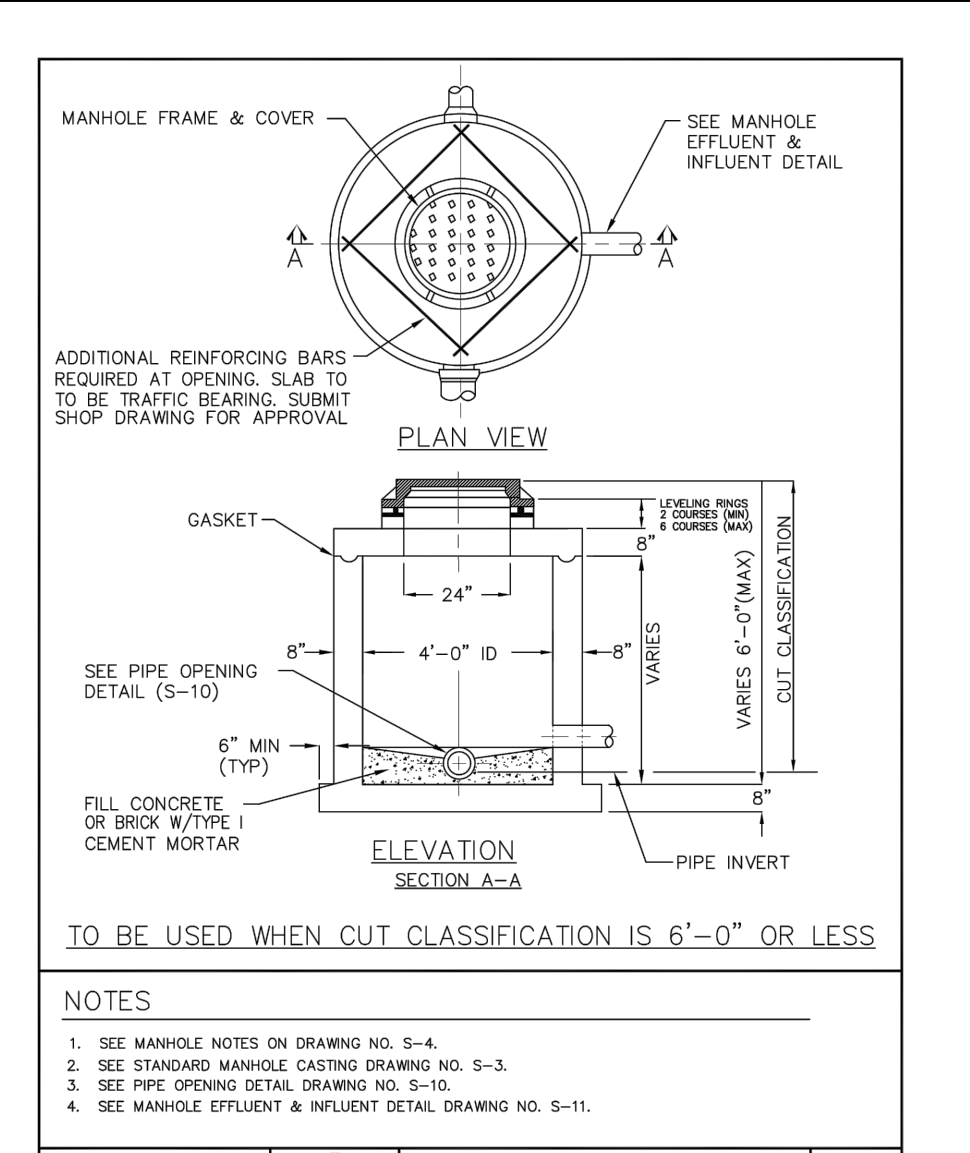
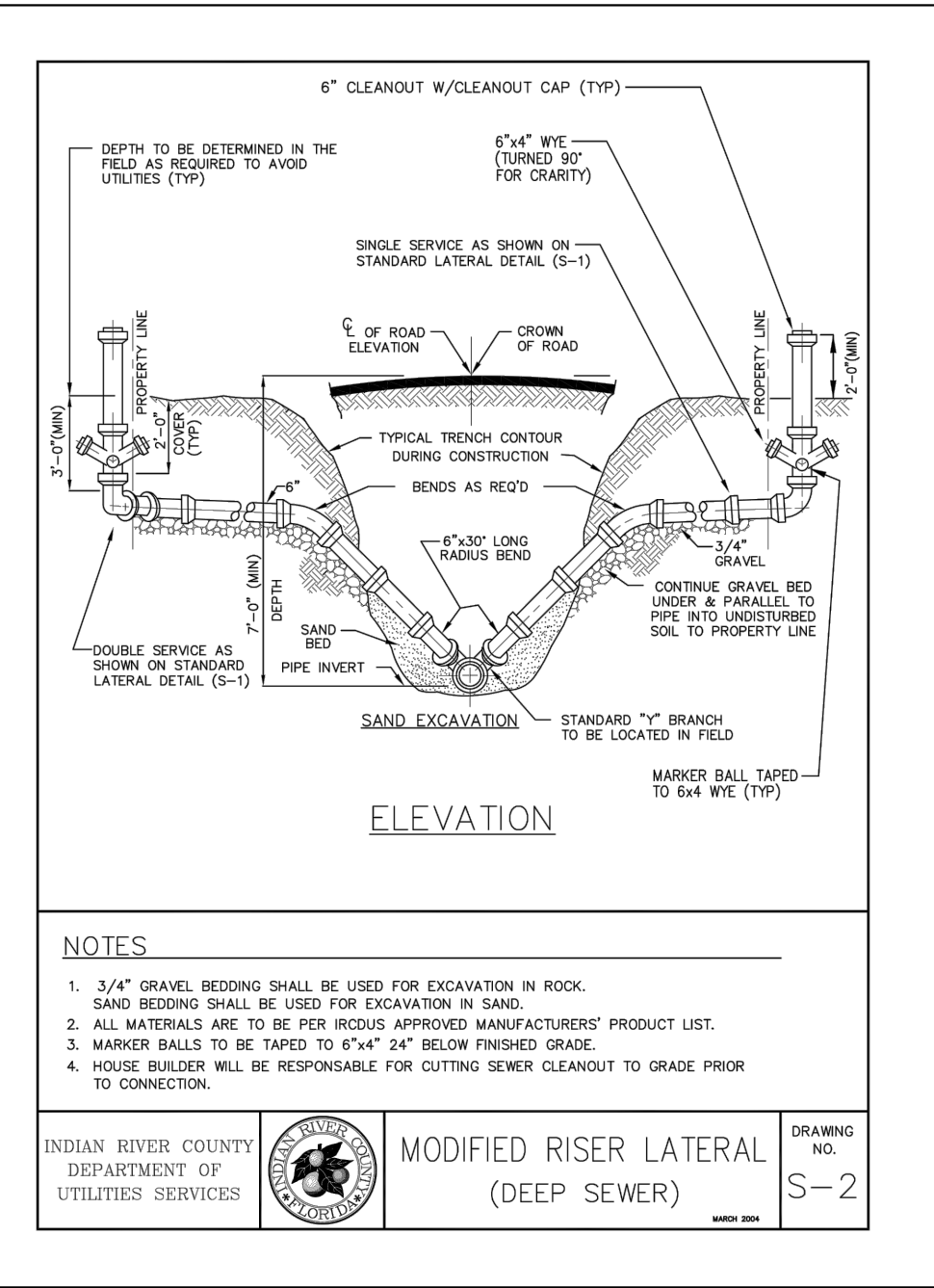
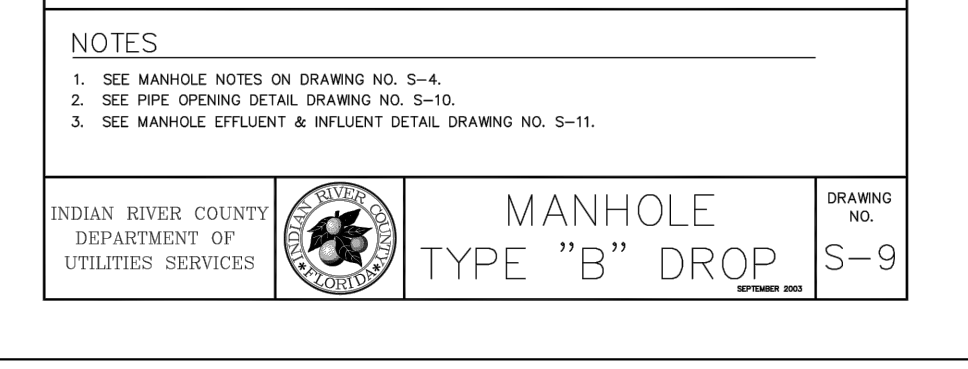
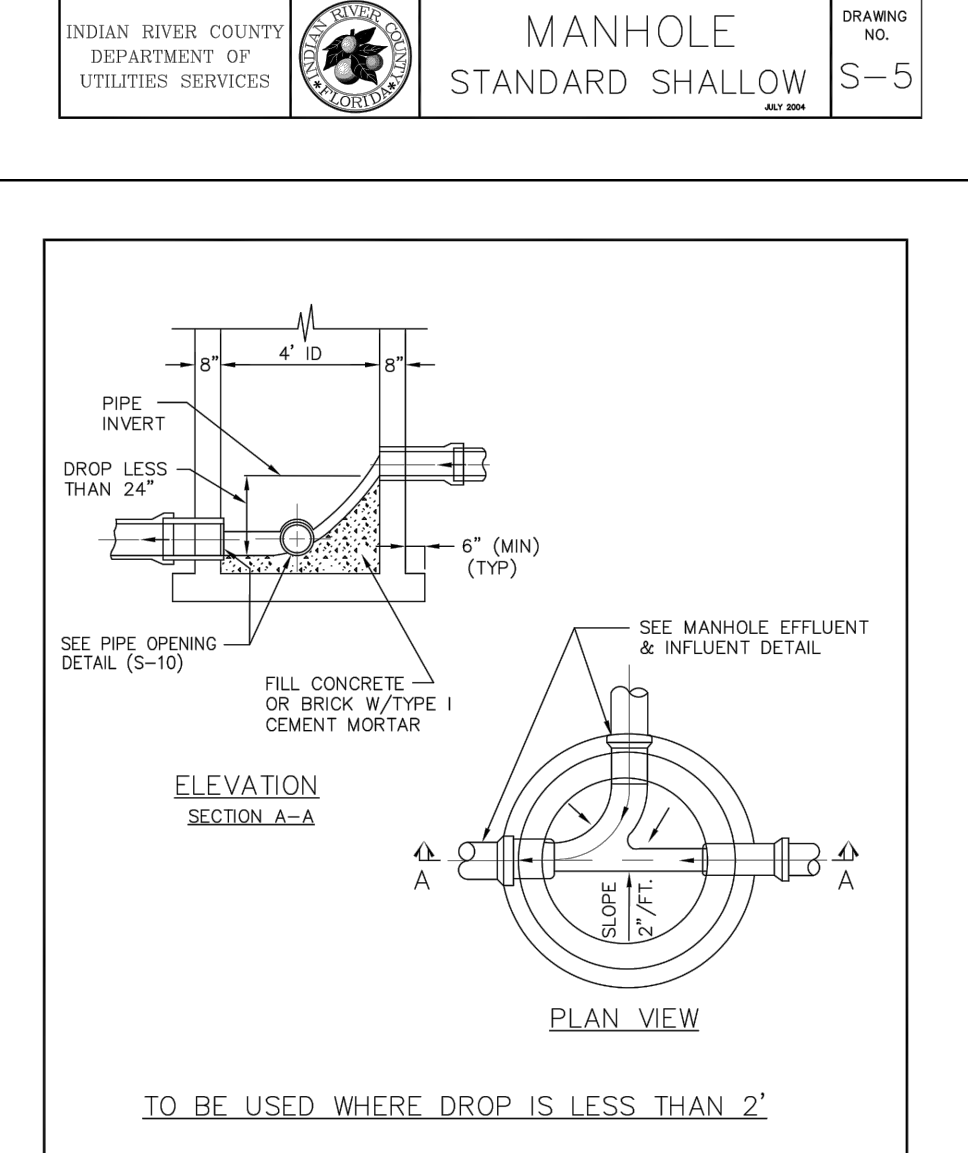
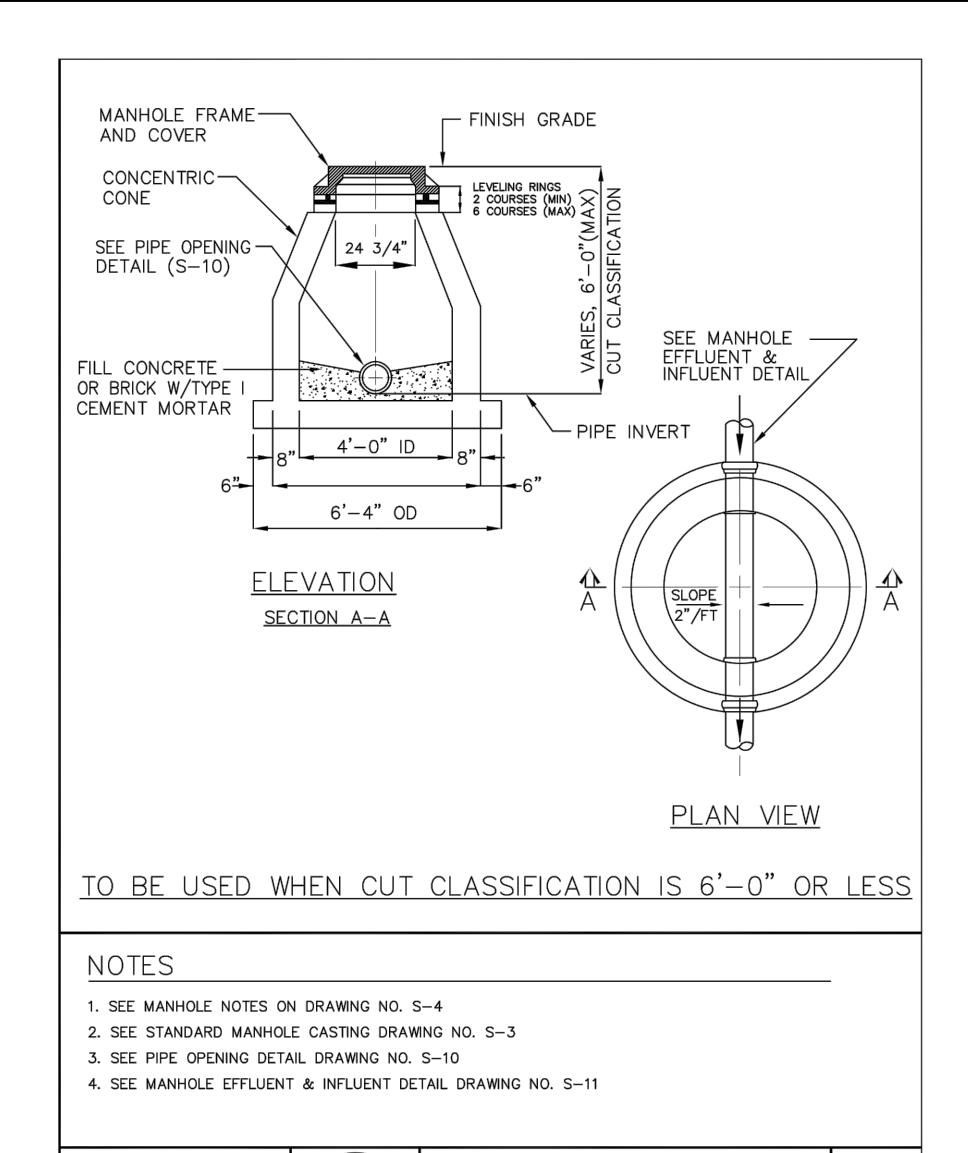
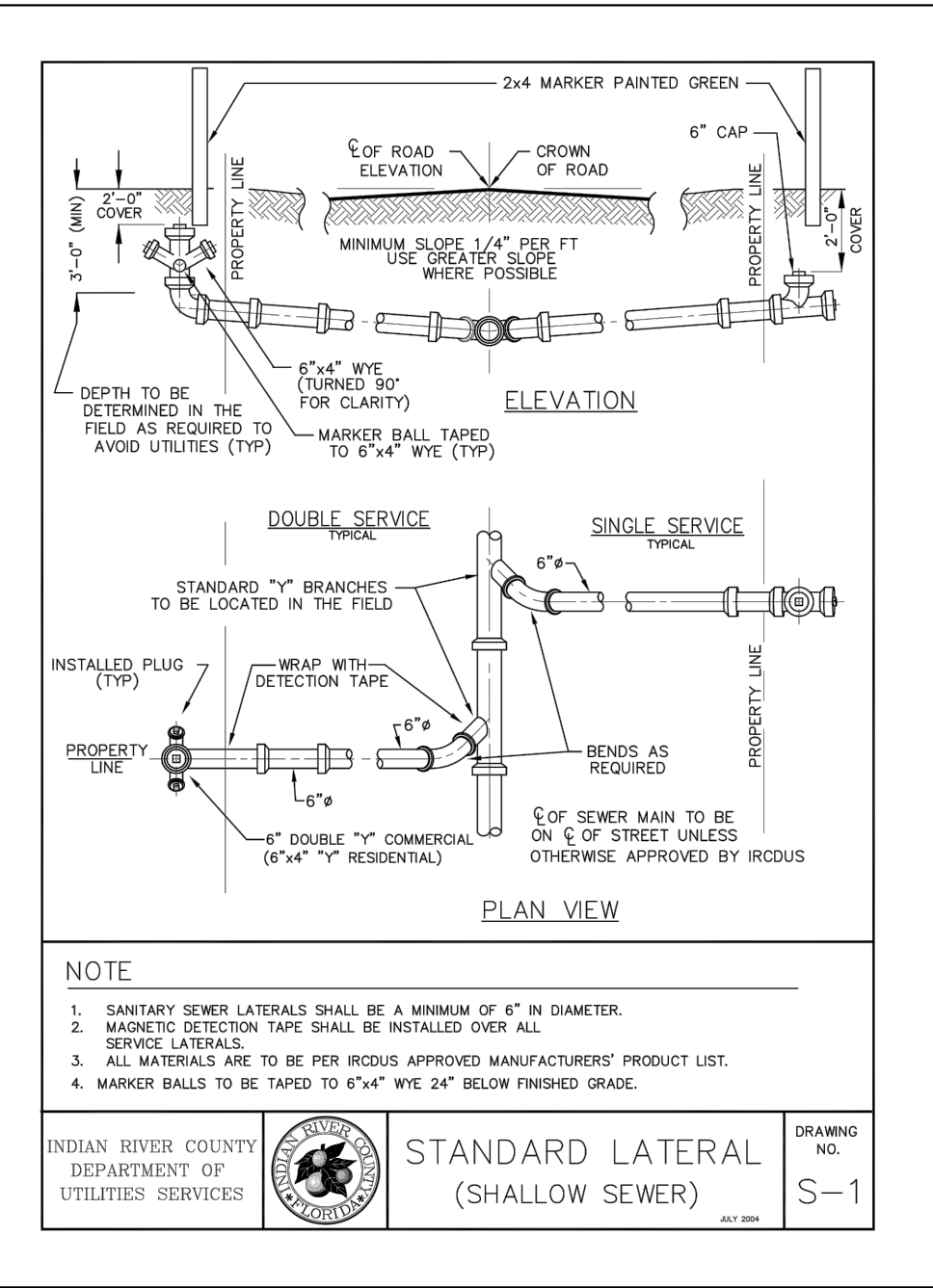
LICENSED PROFESSIONAL
 BART J. FIVE
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 No. 73898

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 355 ALHAMBRA CIRCLE, SUITE 1400, CORAL GABLES, FL 33134
 PHONE: 305-673-2025
 WWW.KIMLEY-HORN.COM REGISTRY 696

SHEET NUMBER
C-712

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Plotted By: Rodriguez, Rebecca - Sheet: IIRC LANDFILL - Layout: C-713 INDIAN RIVER COUNTY SEWER DETAILS - November 17, 2021 - 10:43:04am - k:\mb-cl\143228000 - irc shrw and recycling details\civil\cadd\plansheets\C-713 INDIAN RIVER COUNTY SEWER DETAILS.dwg - This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



MANHOLE NOTES

1. REINFORCING AREA OF 0.20 SQ. IN./FT. FOR WALL SECTION, MINIMUM TO MEET OR EXCEED A.S.T.M. A 185.
2. ALL CEMENT TO BE TYPE I.
3. ALL CONCRETE FOR PRECAST MANHOLES TO BE MINIMUM 3,000 P.S.I. TO MEET OR EXCEED A.S.T.M. C 478.
4. BOTTOMS AND CHANNELS OF ALL MANHOLES TO BE OF 2,500 P.S.I. FILL CONCRETE FINISHED SMOOTH WITH STEEL TROWEL.
5. CONCRETE MANHOLES TO HAVE A MIN. WALL THICKNESS OF 6".
6. INSIDE OF MANHOLE SHALL BE COATED WITH TWO COATS OF COAL TAR EPXY AND TWO COATS OUTSIDE. (KOPERS 300 OR EQUAL).
7. CHANNELS TO BE FORMED IN ALL MANHOLES TO ACCEPT TV. CAMERA.
8. ORIENT ECCENTRIC CONE AS REQUIRED BY ENGINEER IN FIELD.
9. BOTTOM SECTION TO BE MONOLITHIC POUR EXCEPT WHERE DROP CONNECTION REQUIRED.
10. CONNECTIONS TO EXISTING MANHOLE AND LIFT STATION WET WELL STRUCTURES SHALL BE BY MEANS OF BORING A PENETRATION IN THE STRUCTURE RATHER THAN PRINCING. THE CONTRACTOR SHALL TAKE POSITIVE MEASURES TO PREVENT ANY CONCRETE OR CONSTRUCTION DEBRIS FROM ENTERING THE WASTEWATER SYSTEM.
11. BUOYANCY CALCULATIONS SHALL BE REQUIRED FOR MANHOLES IN FLOOD ZONES.
12. NO. 48 BARS 9" O.C. EACH WAY IN SLAB (TOP AND BOTTOM).
13. SLOPES ON CHANNEL BOTTOMS TO EQUAL SLOPES OF LINES ENTERING AND EXITING MANHOLES.
14. 2 COURSES BRICK MINIMUM, 6 COURSES BRICK MAXIMUM BETWEEN ALL PRECAST MANHOLE TOPS AND CASTINGS.
15. 3/4" CRUSHED STONE FOUNDATIONS FOR A MINIMUM DEPTH OF 12" SHALL BE PROVIDED AS REQUIRED BY IRCOUS.
16. MANHOLE LID SHALL BE TRAFFIC BEARING (H-20 LOADING).
17. SEWER PIPE INVERTS AT BOTTOM OF MANHOLES SHALL HAVE AN INVERT ELEVATION DIFFERENTIAL OF 0.1 FEET FOR A CHANGE IN DIRECTION AND 0.05 FEET FOR A STRAIGHT RUN.
18. A WATERTIGHT RAIN GUARD BOOT TO BE PER IRCOUS APPROVED MANUFACTURERS' PRODUCT LIST, SHALL BE PROVIDED FOR ALL MANHOLE FRAME/COVERS.
19. MATERIALS FOR LINING MANHOLES, WHERE REQUIRED, TO BE PER IRCOUS APPROVED MANUFACTURERS' PRODUCT LIST. FIBERGLASS LINERS SHALL BE INSTALLED ON ALL MANHOLES RECEIVING PUMPED SEWAGE.

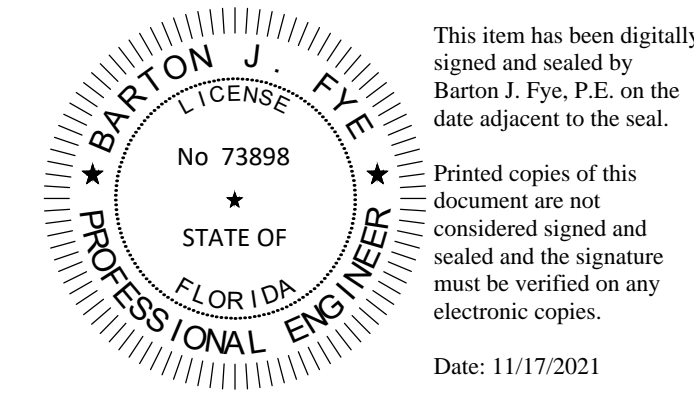
NO.	REVISIONS	DATE	BY

Kimley-Horn
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LICENSED PROFESSIONAL	KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY	DATE
	14-3228000	JULY 2021	AS SHOWN	MRC	RMR		

INDIAN RIVER COUNTY SEWER DETAILS

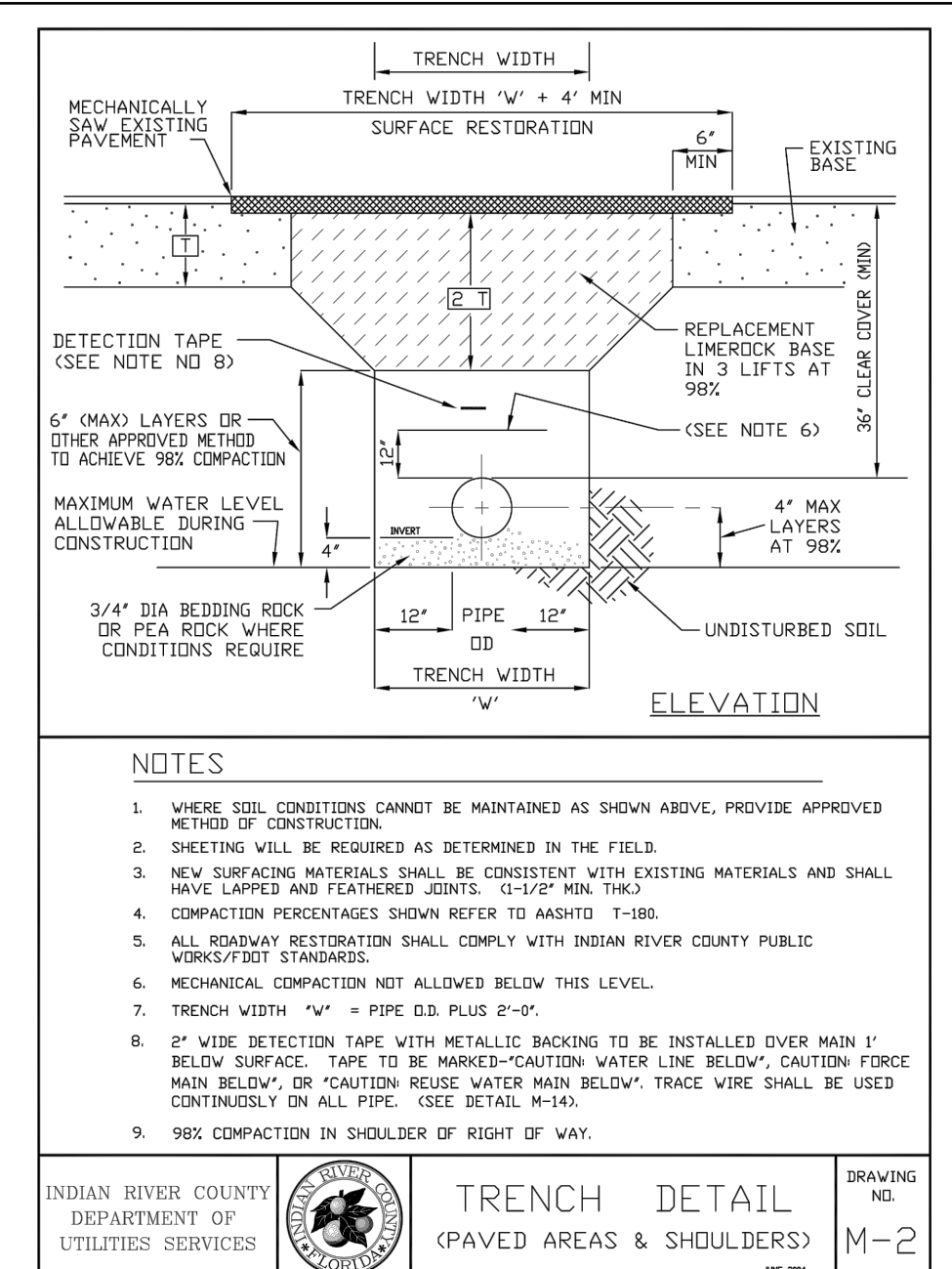
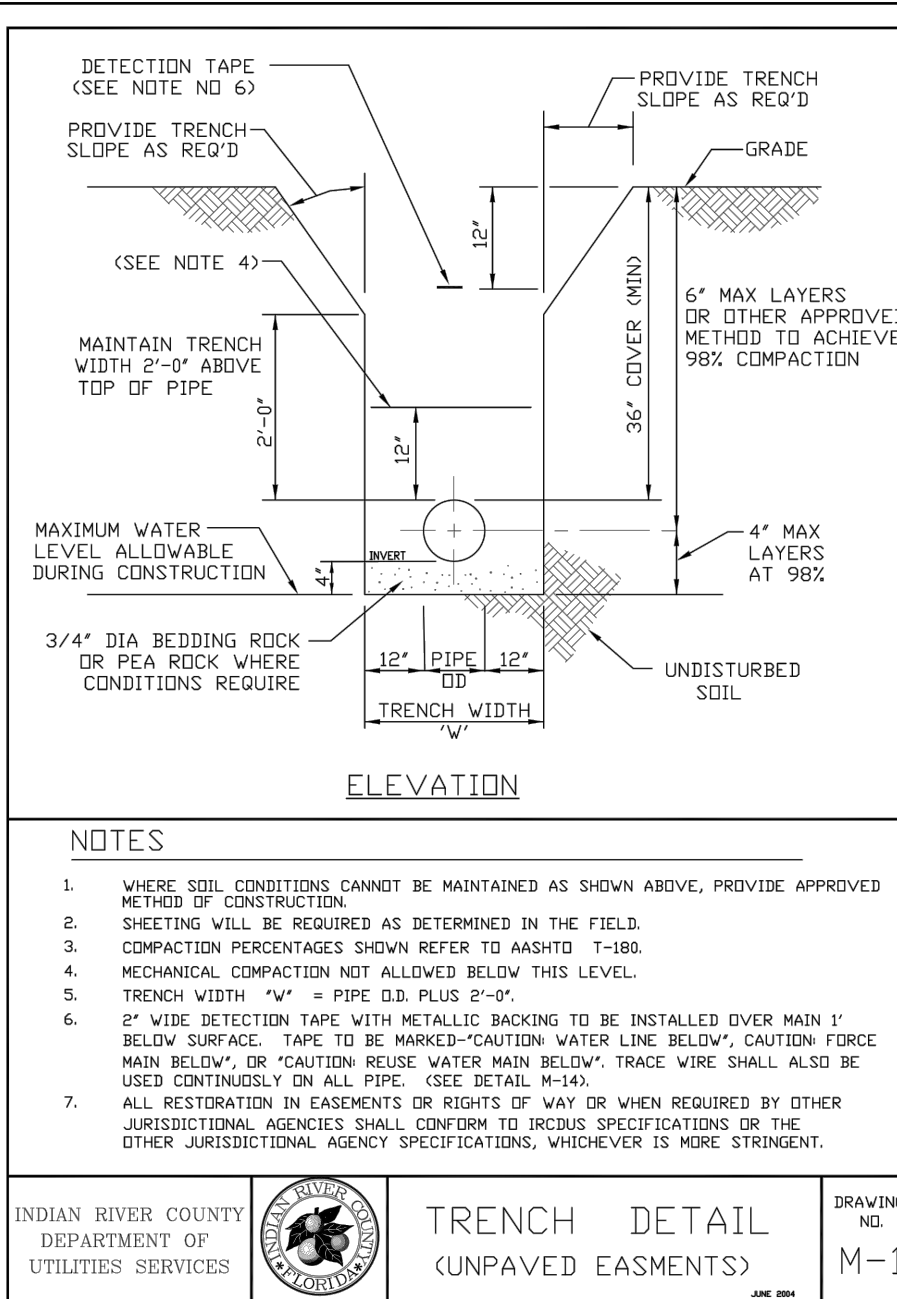
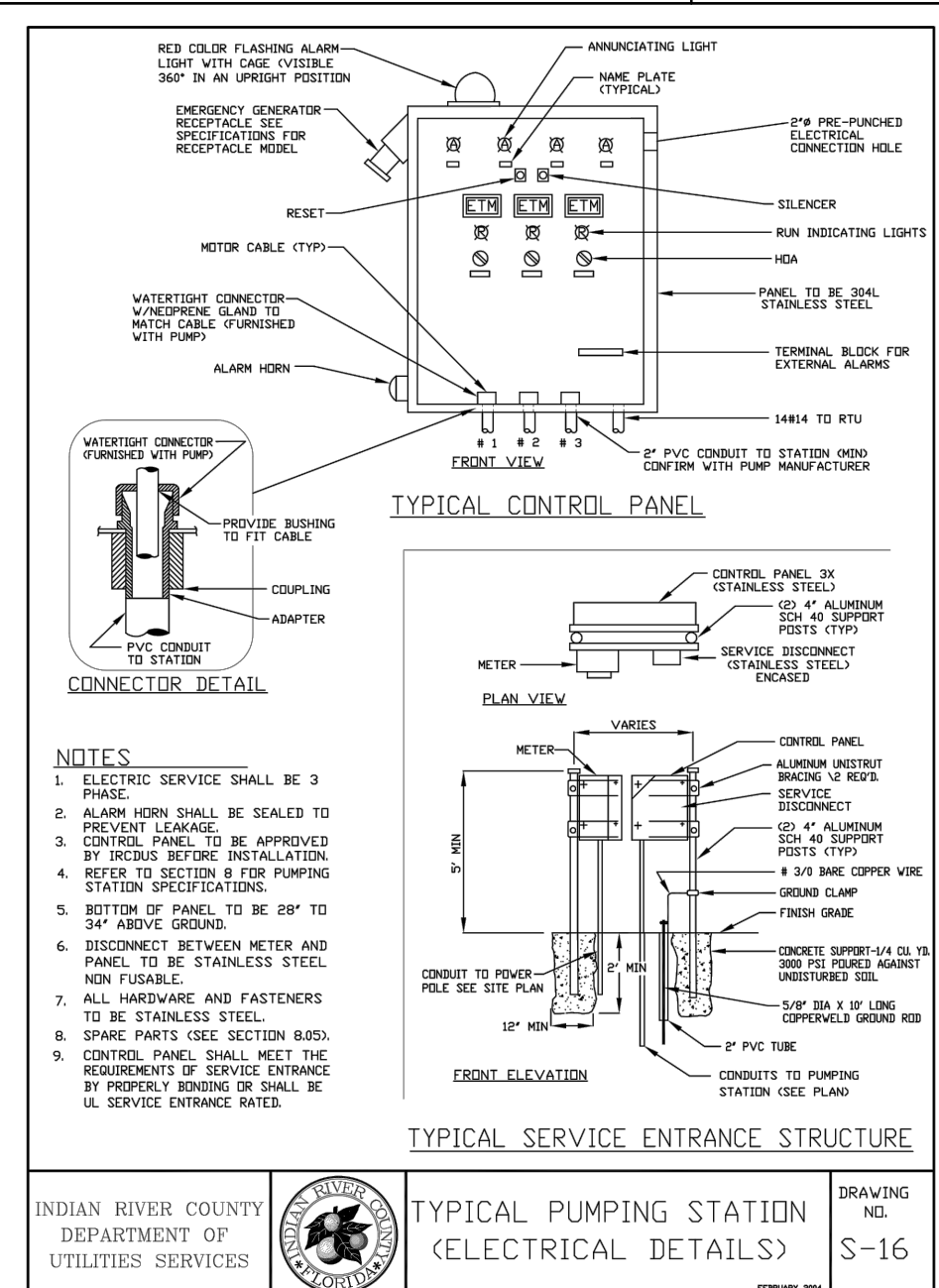
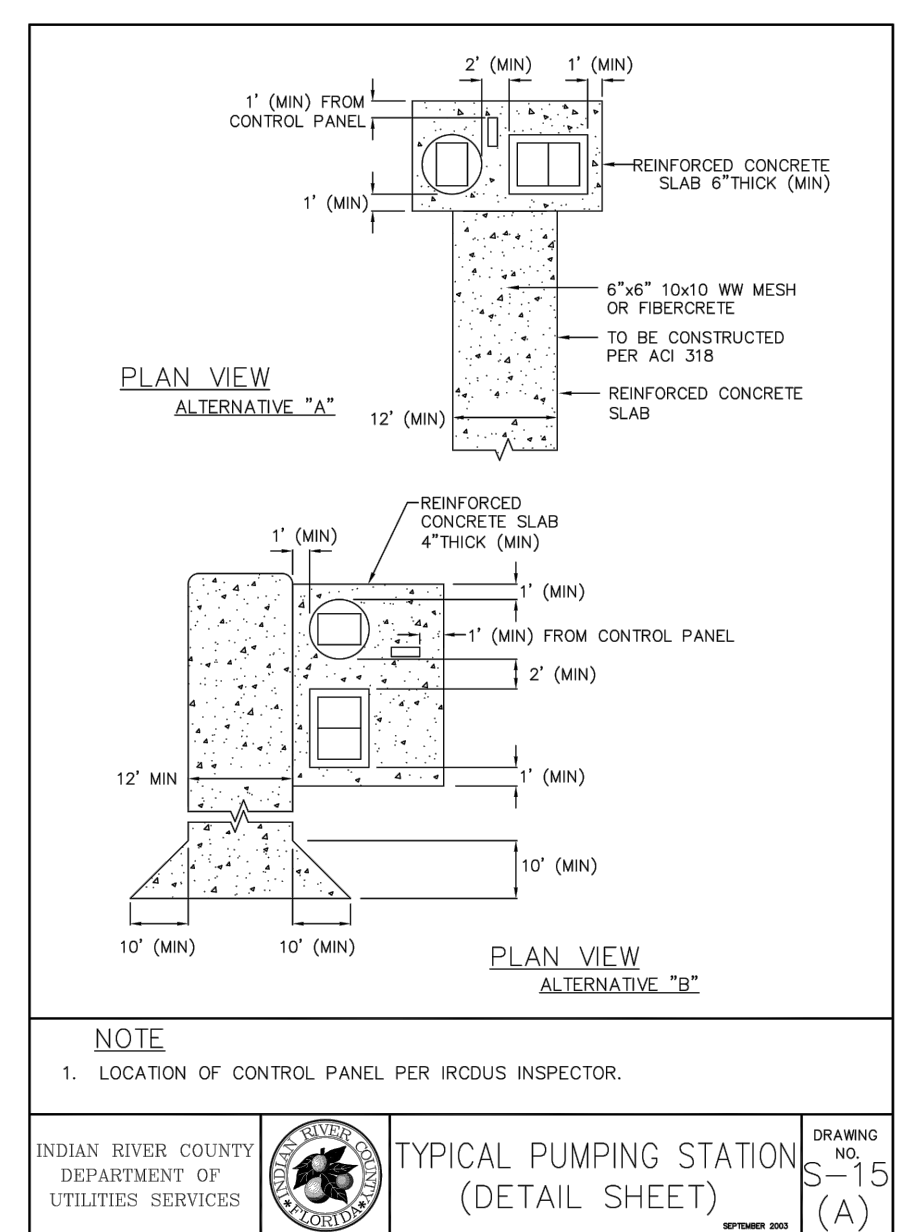
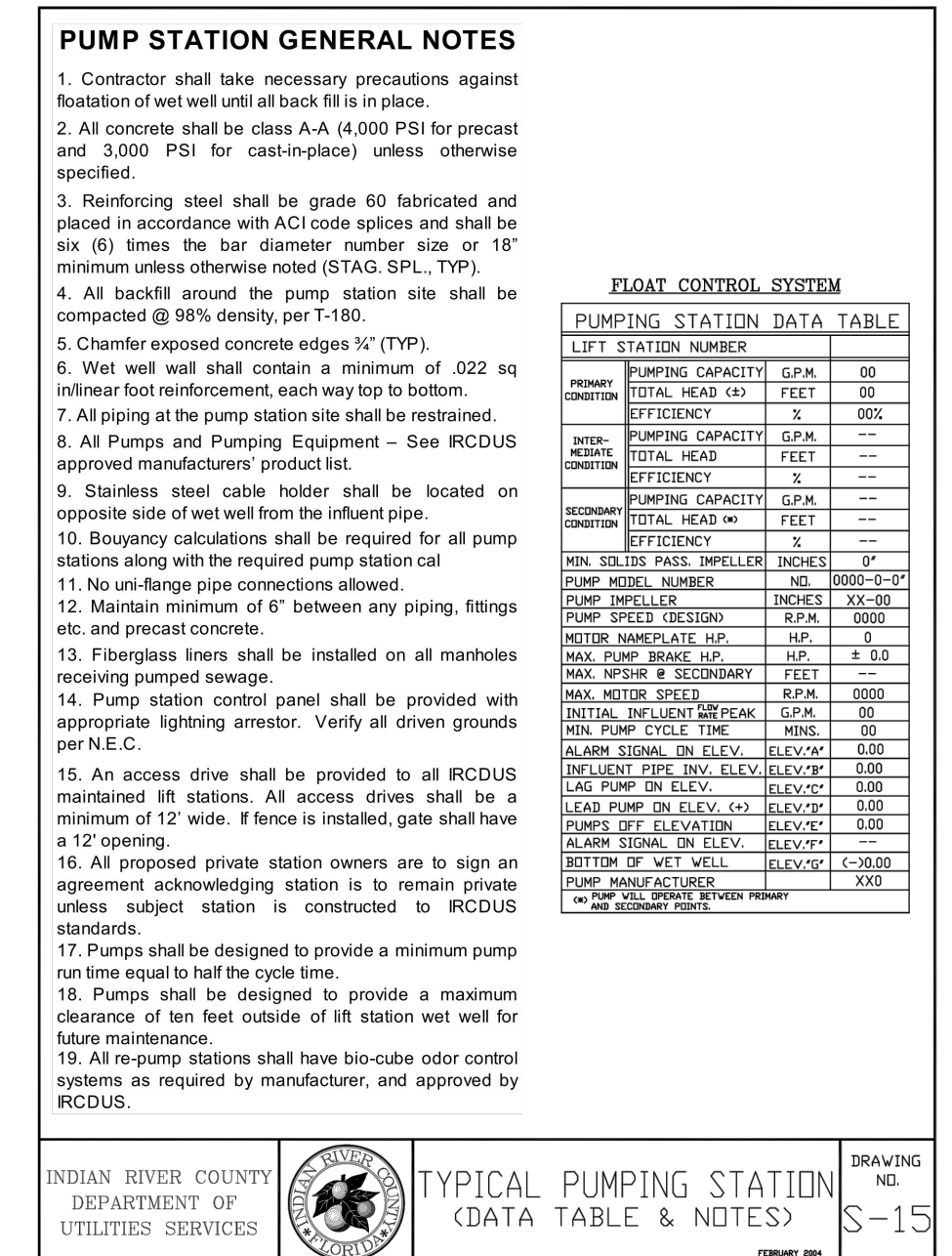
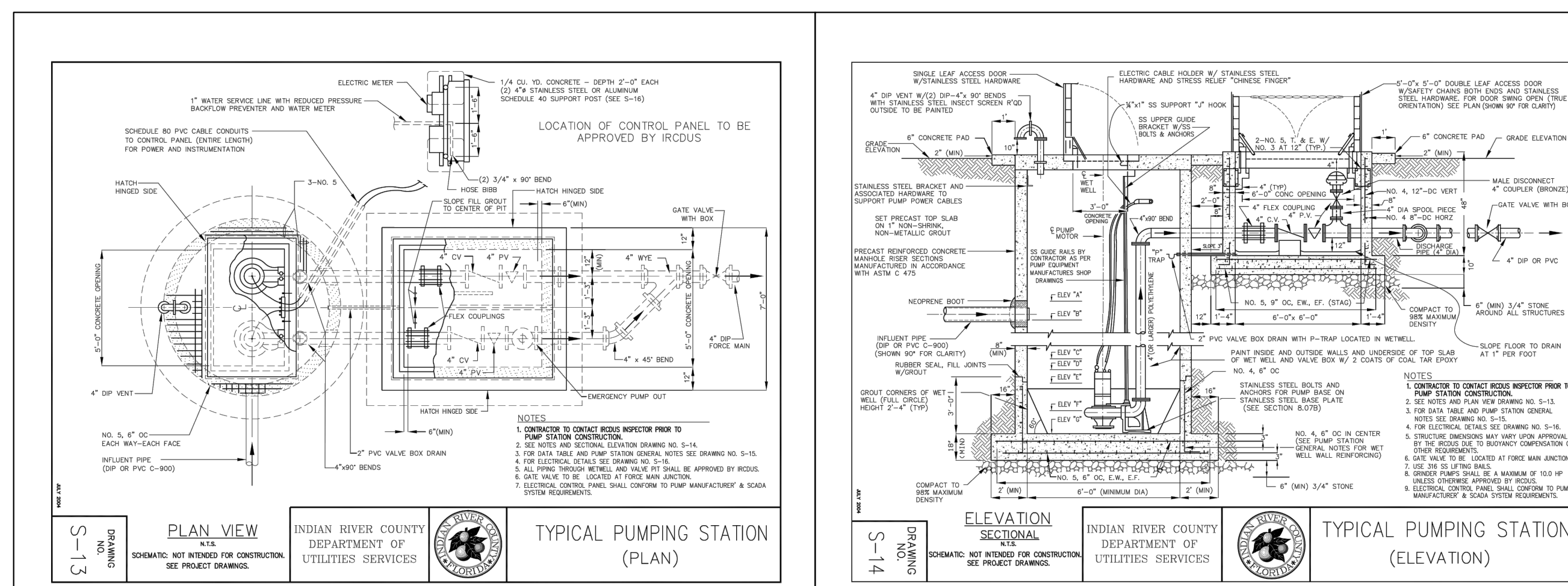
IRC LANDFILL PREPARED FOR INDIAN RIVER COUNTY



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 Date: 11/17/2021

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Printed by: Rebecca, Rebecca - Sheet: Set: IRC LANDFILL - 7/4. INDIAN RIVER COUNTY SEWER DETAILS - November 17, 2021. 10:43:07am
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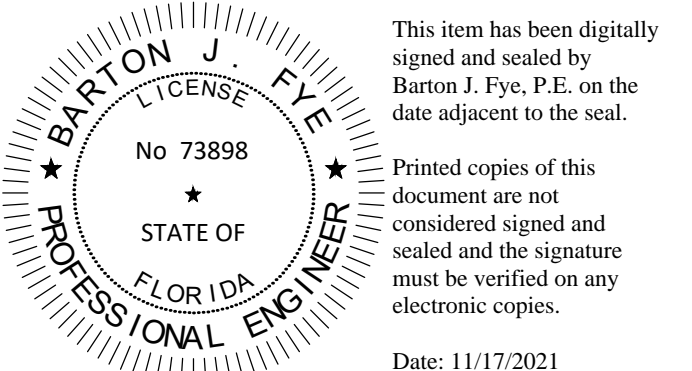
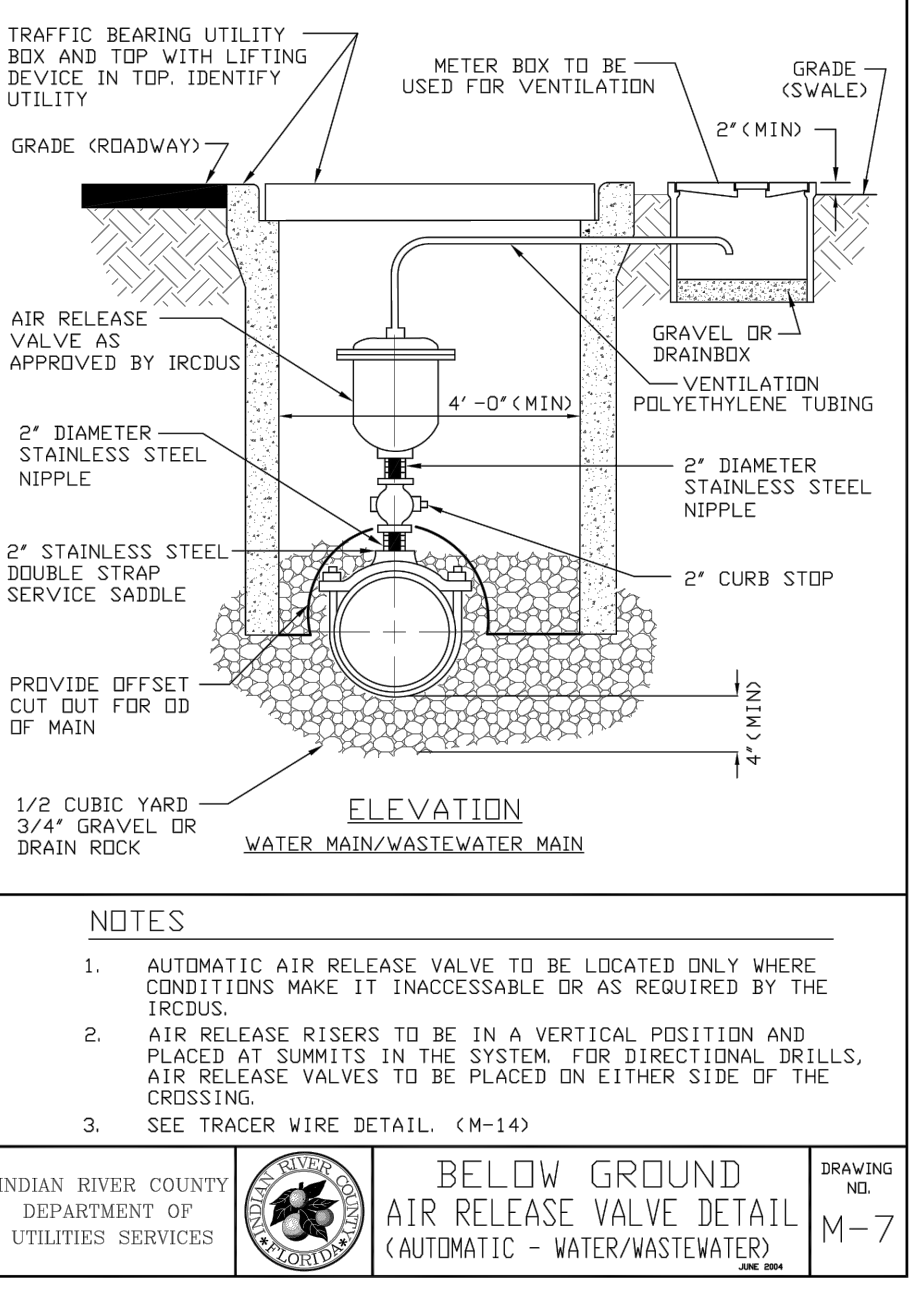
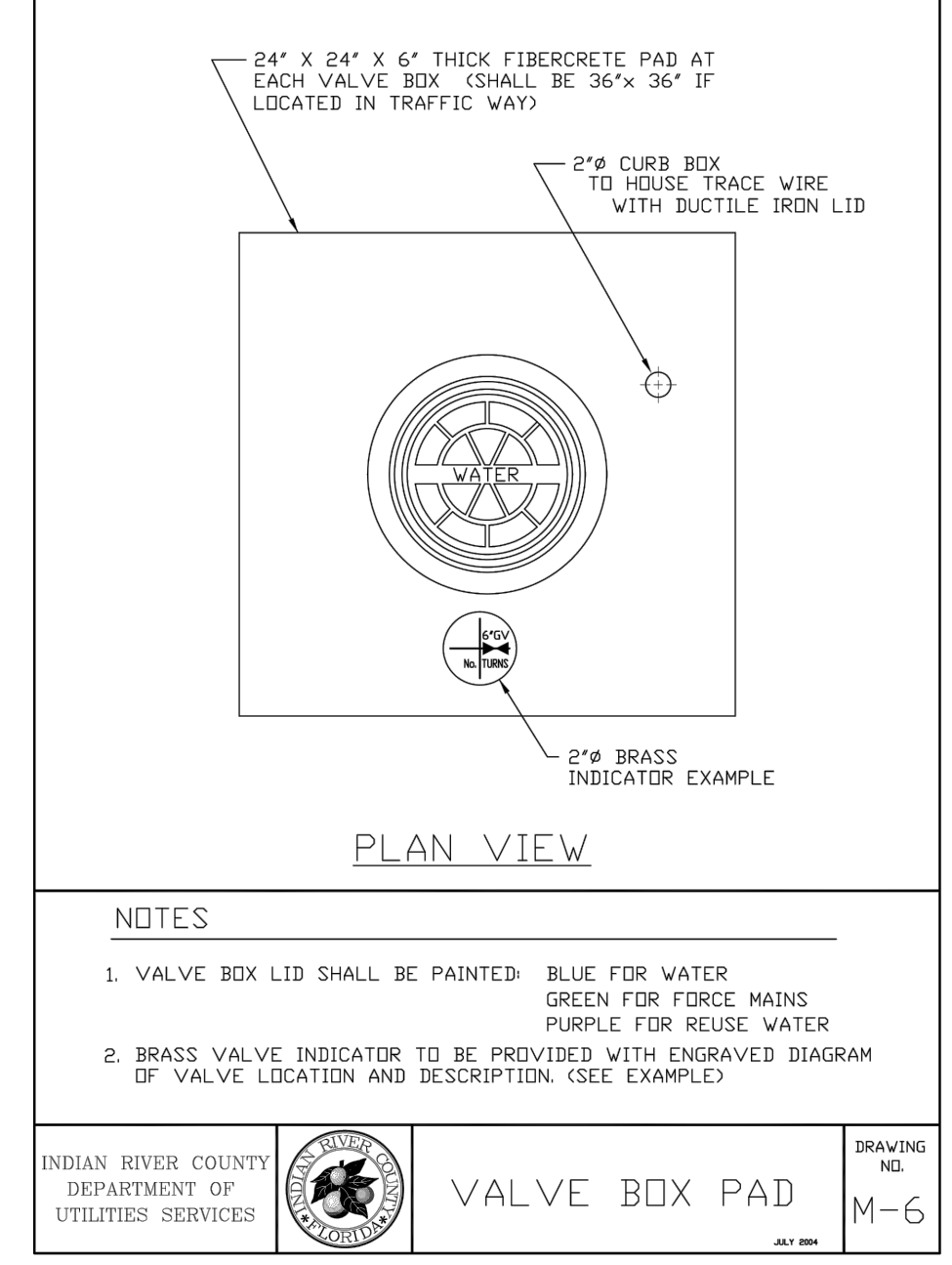
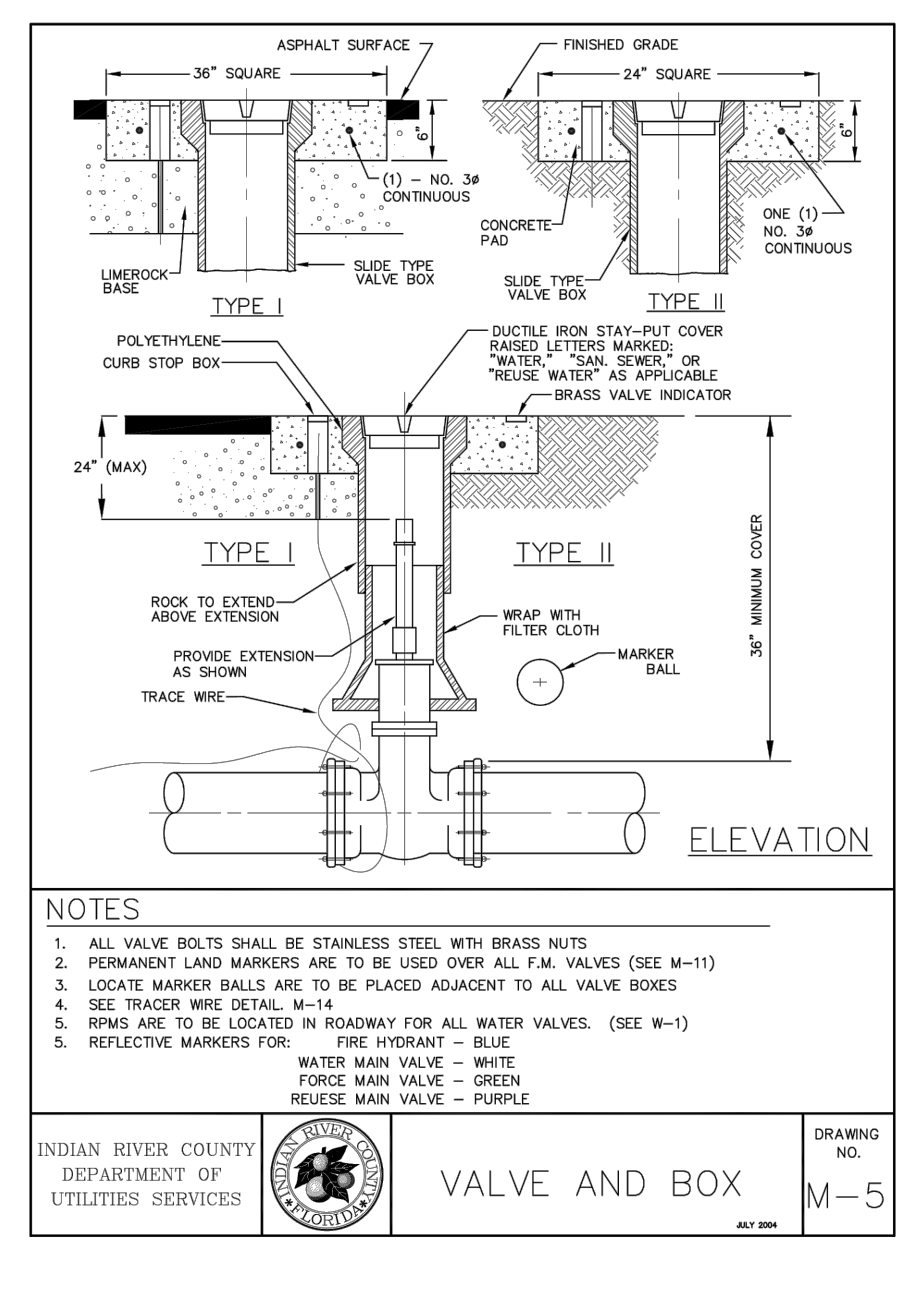
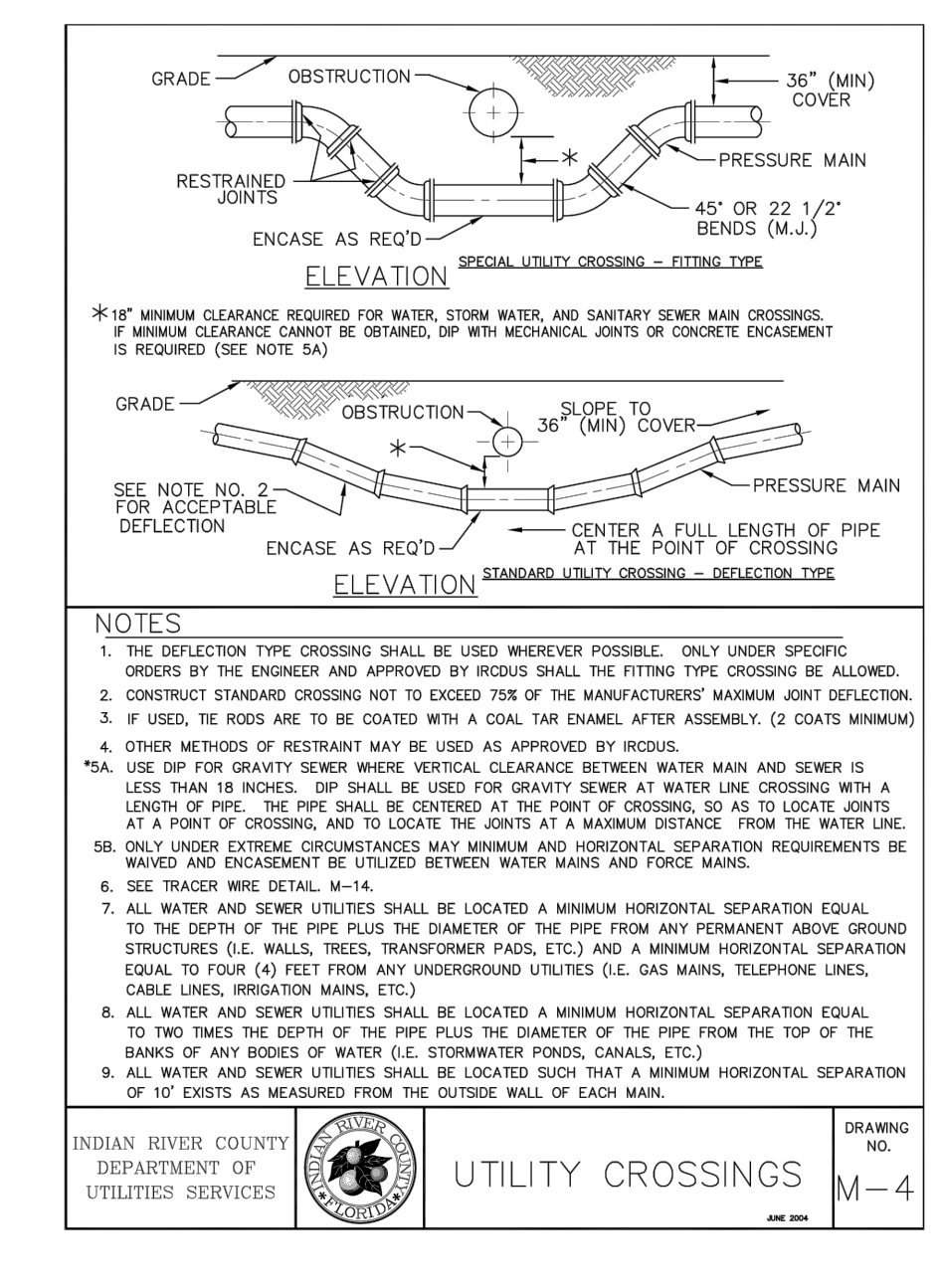
SCHEDULE AND NOTES

RETRAINING

PIPE DIAMETER (INCHES)	D. I. P.				P. V. C.				RESTRAINED LENGTH IN FEET FOR REDUCER						
	9"	12"	18"	24"	9"	12"	18"	24"	6"	8"	10"	12"	18"	24"	30"
4"	30	15	10	5	40	20	10	5	0	0	0	0	0	0	0
6"	35	15	10	5	55	25	10	5	4	0	0	0	0	0	0
8"	55	25	10	5	80	35	10	5	6	50	45	0	0	0	0
8"	65	30	15	10	90	40	10	5	6	75	70	40	0	0	0
10"	80	35	10	10	110	50	15	10	7	95	90	70	40	0	0
12"	95	40	10	10	130	55	15	10	8	120	115	100	75	40	0
16"	120	50	15	15	165	70	15	10	16	160	155	140	120	100	70
20"	150	60	15	15	200	85	40	10	20	200	195	170	130	130	75
24"	180	70	15	20	230	90	45	15	24	160	155	140	120	100	50
30"	190	80	40	20	250	105	50	25	30	195	190	185	180	170	160
36"	220	90	45	25	0	0	0	0	36	225	220	215	210	200	195
48"	245	105	50	25	0	0	0	0	48	245	240	235	230	220	215
48"	260	120	60	30	0	0	0	0	48	255	250	245	240	235	195

RESTRAINED LENGTHS FOR DEAD ENDS AND BRANCHES FROM TEES SHALL BE THE SAME AS FOR 90° BENDS.

LENGTH OF RESTRAINED JOINT FOR LARGER DIAMETER PIPE



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INDIAN RIVER COUNTY SEWER DETAILS

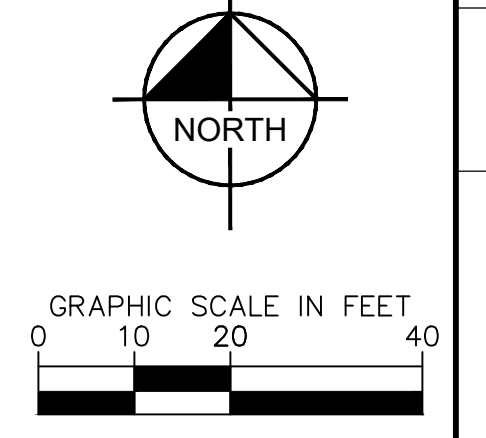
IRC LANDFILL PREPARED FOR INDIAN RIVER COUNTY

SHEET NUMBER C-714

LICENSED PROFESSIONAL ENGINEER

BY		DATE	
REVISIONS			
No.			

Plotted By: Rodriguez, Rebecca - Sheet Set: IRC LANDFILL - Layout: C-800 LIGHTING PLAN - November 17, 2021 - 10:43:22am - k:\vmb-civil\143228000 - frc-hw-and-recycling-facility\CADD\plan\shasta\C-800 Lighting Plan.dwg
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LEGEND:

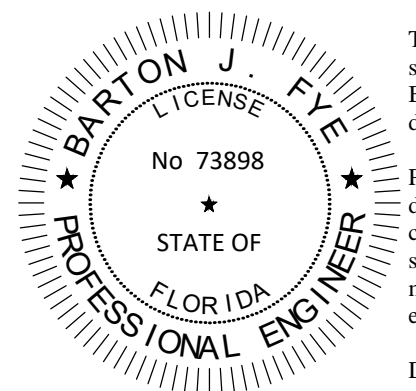
- R/W --- P/L R/W OR PROPERTY LINE
- CENTERLINE
- SANITARY SEWER
- *X.X FOOTCANDLES
- PROP. STANDARD DUTY CONC.
- PROP. CONC. SIDEWALK

NOTES:
 1. ALL MOUNTING HEIGHTS REFERENCED ARE TO TOP OF BRACKET/FIXTURE.

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
North Building Face	Illuminance	Fc	1.79	5.70	0.00	N/A	N/A
South Building Face	Illuminance	Fc	1.09	4.30	0.00	N/A	N/A
West Building Face	Illuminance	Fc	0.80	0.00	0.00	N/A	N/A
East Building Face	Illuminance	Fc	1.2	5.10	0.00	N/A	N/A

Symbol	Qty	Catalog Number	Total Lamp Lumens	LLF
	4	WDG4_LED_P4_70CRI_R3_50	20,163.10	0.85
	7	WDG2_LED_P3_50K_80CRI_VW	3,206.30	0.85

Type	Manufacturer	Catalog No.	Mounting	Lamp	Remarks
PL1	LITHONIA LIGHTING	WDG2_LED_P3_50K_80CRI_VW	WALL MOUNTED 17'-0"	5000K	SINGLE WALL SCONCE LIGHT
PL2	LITHONIA LIGHTING	WDG4_LED_P4_70CRI_R3_50	WALL MOUNTED 25'-0"	5000K	SINGLE WALL SCONCE LIGHT
PL3	LITHONIA LIGHTING	WDG4_LED_P4_70CRI_R3_50	WALL MOUNTED 25'-0"	5000K	SINGLE WALL SCONCE LIGHT
PL4	LITHONIA LIGHTING	WDG4_LED_P4_70CRI_R3_50	WALL MOUNTED 25'-0"	5000K	SINGLE WALL SCONCE LIGHT
PL5	LITHONIA LIGHTING	WDG2_LED_P3_50K_80CRI_VW	WALL MOUNTED 20'-0"	5000K	SINGLE WALL SCONCE LIGHT
PL6	LITHONIA LIGHTING	WDG4_LED_P4_70CRI_R3_50	WALL MOUNTED 25'-0"	5000K	SINGLE WALL SCONCE LIGHT
PL7	LITHONIA LIGHTING	WDG2_LED_P3_50K_80CRI_VW	WALL MOUNTED 15'-0"	5000K	SINGLE WALL SCONCE LIGHT
PL8	LITHONIA LIGHTING	WDG2_LED_P3_50K_80CRI_VW	WALL MOUNTED 14'-0"	5000K	SINGLE WALL SCONCE LIGHT
PL9	LITHONIA LIGHTING	WDG2_LED_P3_50K_80CRI_VW	WALL MOUNTED 14'-0"	5000K	SINGLE WALL SCONCE LIGHT
PL10	LITHONIA LIGHTING	WDG2_LED_P3_50K_80CRI_VW	WALL MOUNTED 14'-0"	5000K	SINGLE WALL SCONCE LIGHT
PL11	LITHONIA LIGHTING	WDG2_LED_P3_50K_80CRI_VW	WALL MOUNTED 14'-0"	5000K	SINGLE WALL SCONCE LIGHT

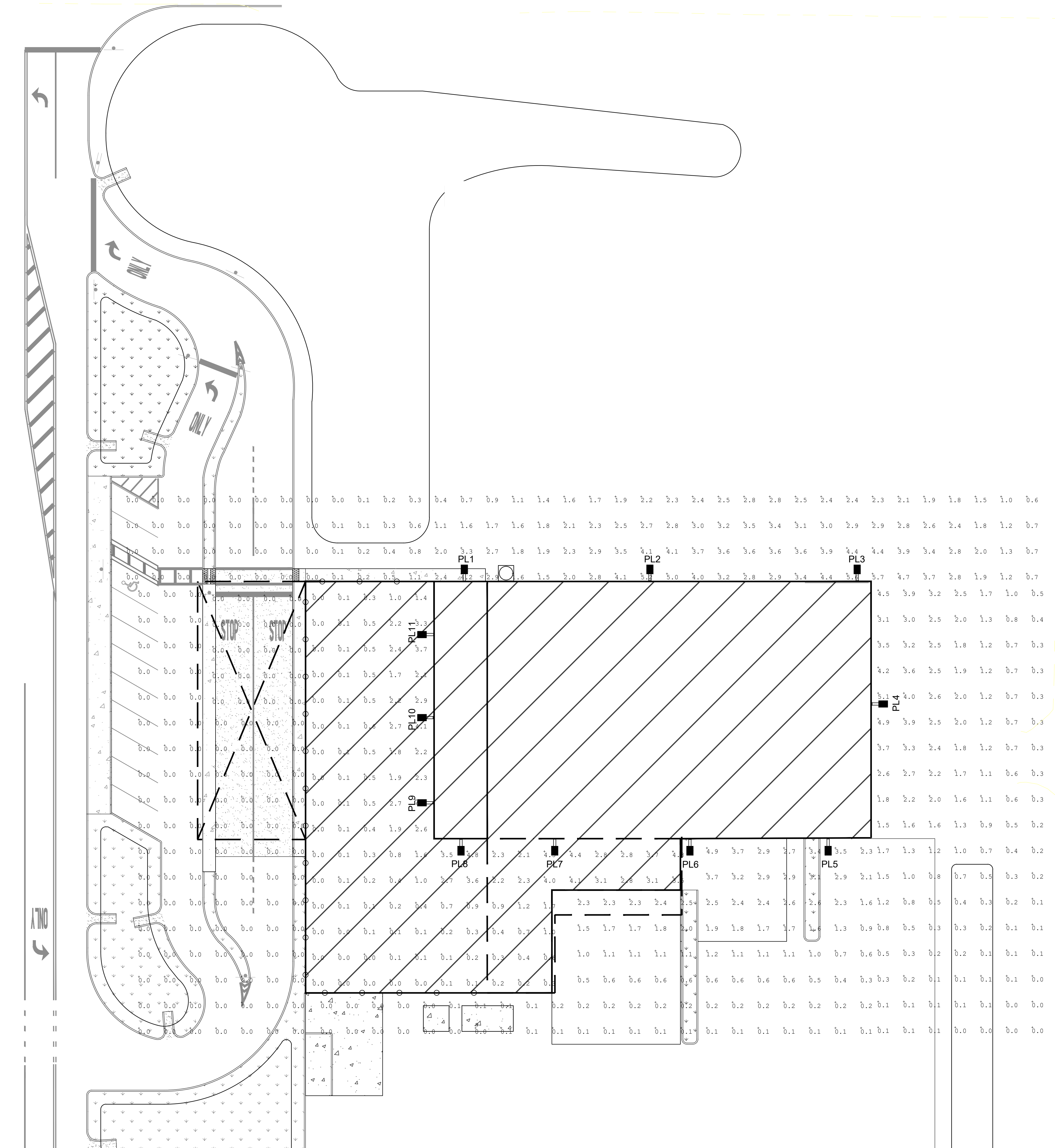


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No.	REVISIONS	DATE	BY

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LICENSED PROFESSIONAL

KHA PROJECT	14-3228000
DATE	JULY 2021
SCALE	AS SHOWN
DESIGNED BY	AJL
DRAWN BY	MIC
CHECKED BY	AJL
DATE:	

LIGHTING PLAN

IRC LANDFILL
 PREPARED FOR
 INDIAN RIVER COUNTY
 INDIAN RIVER COUNTY
 SHEET NUMBER
C-800

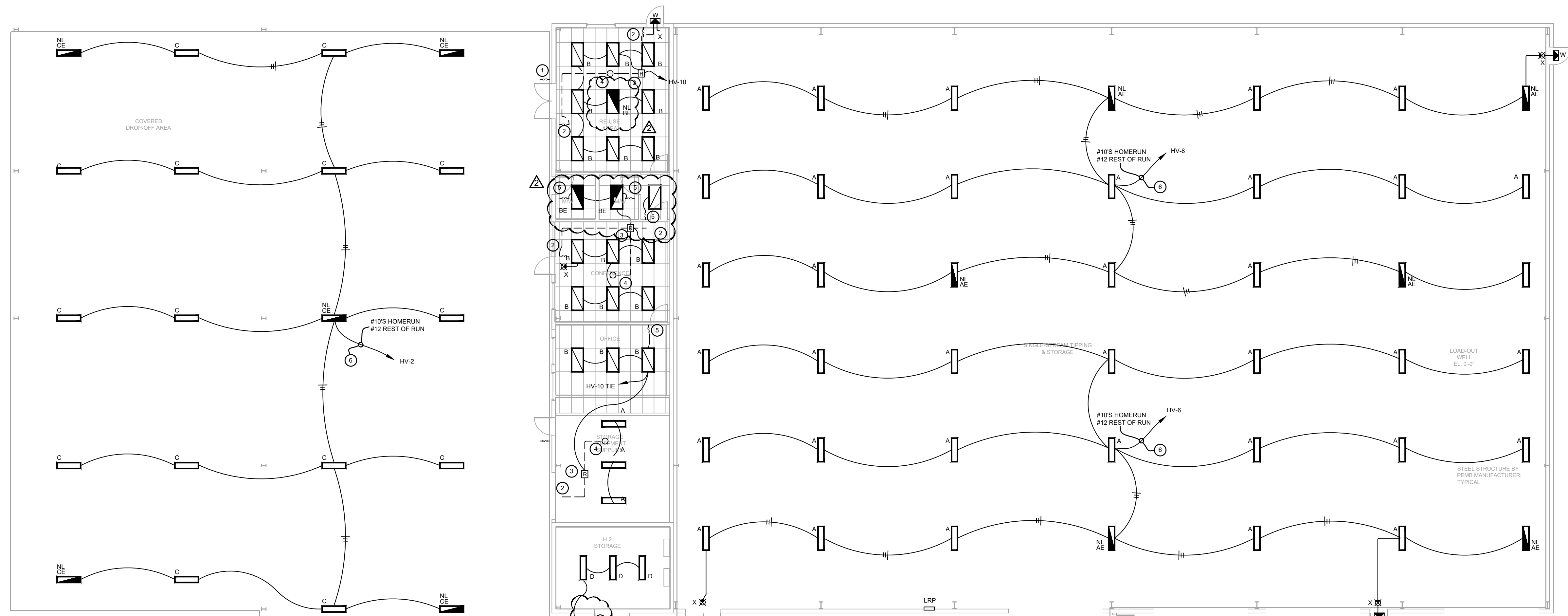
NO.	REVISIONS	DATE
1	FIELD COORDINATION	05.15.2021
2	FIELD COORDINATION	11.05.2021

JOB NO.
2016

ISSUE DATE:
07/07/2021

DRAWN BY:
WG

SHEET TITLE
LIGHTING PLAN
SHEET NO.
E101

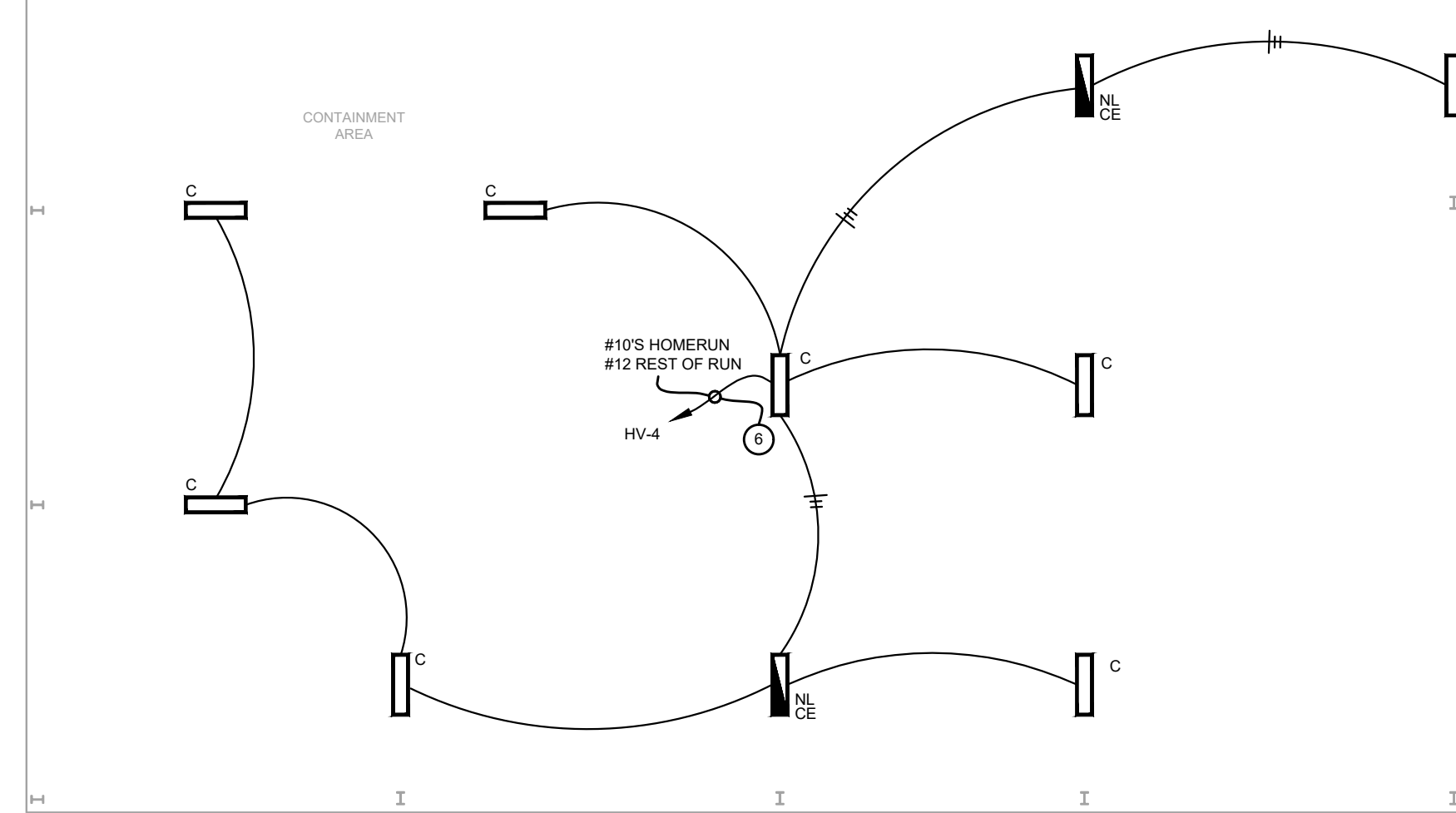


LIGHTING NOTES

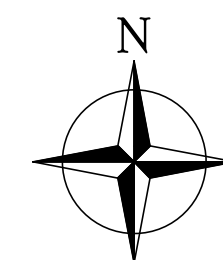
1. LOW VOLTAGE MANUAL OVERRIDE SWITCHES FOR WATTSTOPER LP-8 LIGHTING CONTROL PANEL. VERIFY EXACT LOCATION WITH OWNER PRIOR INSTALLATION.
2. ON/OFF OVERRIDE SWITCH MODEL nPODM.
3. LOW VOLTAGE POWER PACK. SENSOR SWITCH nPP16 SA. REFER TO CONTROL DIAGRAMS ON THIS SHEET.
4. PROVIDE NEW CEILING/PENDANT/SURFACE MOUNTED, LOW-VOLTAGE, EXTENDED RANGE, DUAL-TECHNOLOGY, LIGHTING OCCUPANCY SENSOR. SENSOR SWITCH MODEL #nCM-PDT-10.
5. PROVIDE NEW WALL MOUNTED, SINGLE-POLE, LINE-VOLTAGE, STANDARD RANGE, DUAL-TECHNOLOGY, LIGHTING OCCUPANCY SENSOR WITH BUILT-IN MANUAL OVERRIDE. SENSOR SWITCH MODEL #WSX-PDT.
6. ROUTE CIRCUIT THROUGH LIGHTING RELAY PANEL (LRP) LIGHTING RELAY PANEL SHALL BE LOCATED NEXT TO ELECTRICAL PANELS AS SHOWN. CONTRACTOR TO CARRY EXTRA HOT CONDUCTOR FOR EMERGENCY AND NIGHT LIGHT FIXTURES. SEE LIGHTING RELAY PANEL DETAIL ON SHEET 'E000'.
7. PROVIDE 120V/1P SNAP SWITCH. THE CONTRACTOR SHALL PROVIDE A RIGID CONDUIT WITH A SEAL OFF ON THE CONDUIT THAT IS DUCTED INTO THE "H-2-STORAGE ROOM". ALL ELECTRICAL EQUIPMENT MUST BE LISTED AS EXPLOSION-PROOF.

FIXTURE, SWITCHING & DEVICE SUFFIXES:
E = EXISTING
R = RELOCATED
RE = RELOCATE EXISTING
N = NEW
3 = 3-WAY SWITCHES
D = DIMMER. PROVIDE FIXTURE COMPATIBLE DIMMER SWITCH.
a,b,...etc = LOWER CASE LETTERS INDICATE CONTROL GROUPS.
NL= NIGHT LIGHT

NOTES: ALL DEVICES ARE NEW UNLESS INDICATED OTHERWISE.



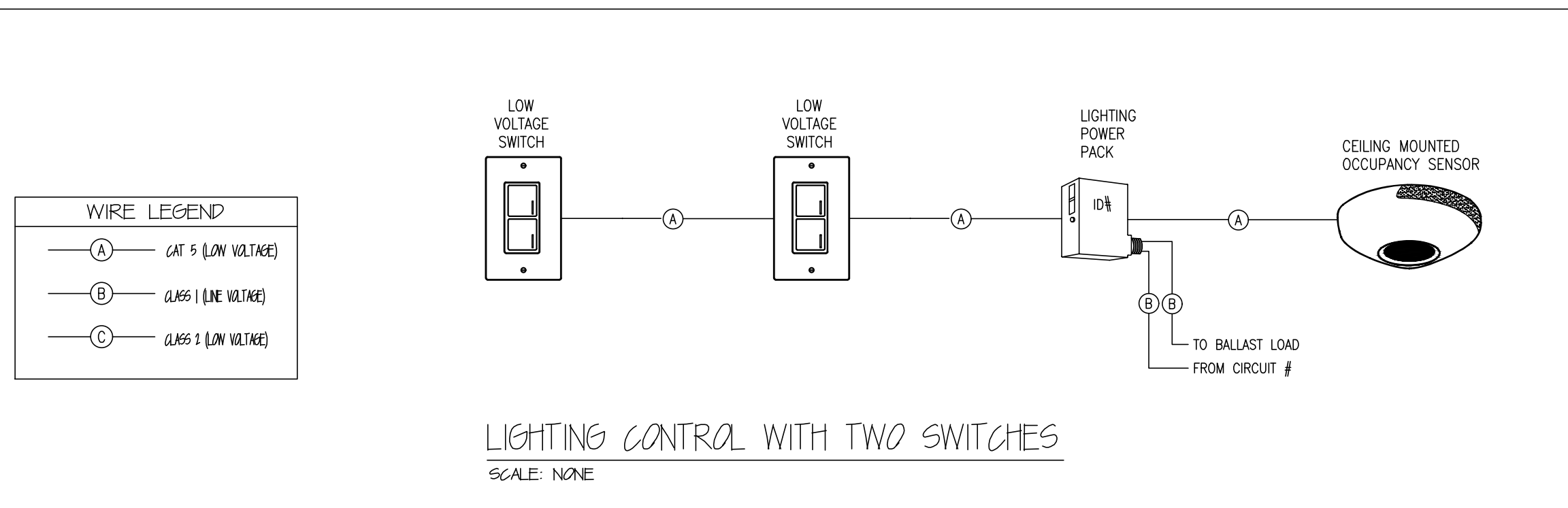
LIGHTING PLAN
SCALE: 3/32" = 1'-0"



LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG NO.	MOUNTING	VOLT	LAMP	REMARKS	SELECTION
A	COLUMBIA LIGHTING	CHB2-40MH-FA-EDU	SUSPENDED AT 16' AFF	277	LED 170W 4000K	COLUMBIA LED HIGHBAY LIGHT FIXTURE	
AE						SAME AS 'A' FIXTURE. PROVIDE NEW 90-MIN BATTERY BACKUP IN FIXTURE.	
B	COLUMBIA LIGHTING	CBT24-LS40-4400L	LAY-IN GRID	277	LED 50W 4000K	2X4 LED LIGHT FIXTURE	
BE						SAME AS 'B' FIXTURE. PROVIDE NEW 90-MIN BATTERY BACKUP IN FIXTURE.	
C	COLUMBIA LIGHTING	CHB2-40MH-FA-EDU-DAMP LISTED	SUSPENDED AT 16' AFF	277	LED 170W 4000K	COLUMBIA LED HIGHBAY LIGHT FIXTURE (DAMP LISTED)	
CE						SAME AS 'C' FIXTURE. PROVIDE NEW 90-MIN BATTERY BACKUP IN FIXTURE.	
D	SOLAS RAY LIGHTING	HJL141-060-40-U-4JSPM	SUSPENDED AT 16' AFF	277	LED 60W 4000K	EXPLOSION PROOF LIGHT FIXTURE	
W	MCGRAW-EDISON	TO BE SELECTED BY OWNER	SURFACE	120	67W MAX	LARGE EXTERIOR WALL PACK FIXTURE WITH BUILT IN 90-MIN BATTERY BACKUP AND PHOTOCELL CONTROL.	
X			SURFACE CEILING	277	11W LED	EXIT SIGN WITH 90-MIN BATTERY BACKUP IN FIXTURE.	

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PERMIT SET

INDIAN RIVER COUNTY LANDFILL
HOUSEHOLD HAZARDOUS WASTE
AND RECYCLING FACILITY
Indian River County, Florida

NO.	REVISIONS	DATE
▲	FIELD COORDINATION	05/15/2021
▲	FIELD COORDINATION	11/05/2021

JOB NO.
2016

ISSUE DATE:
07/07/2021

DRAWN BY:
WG

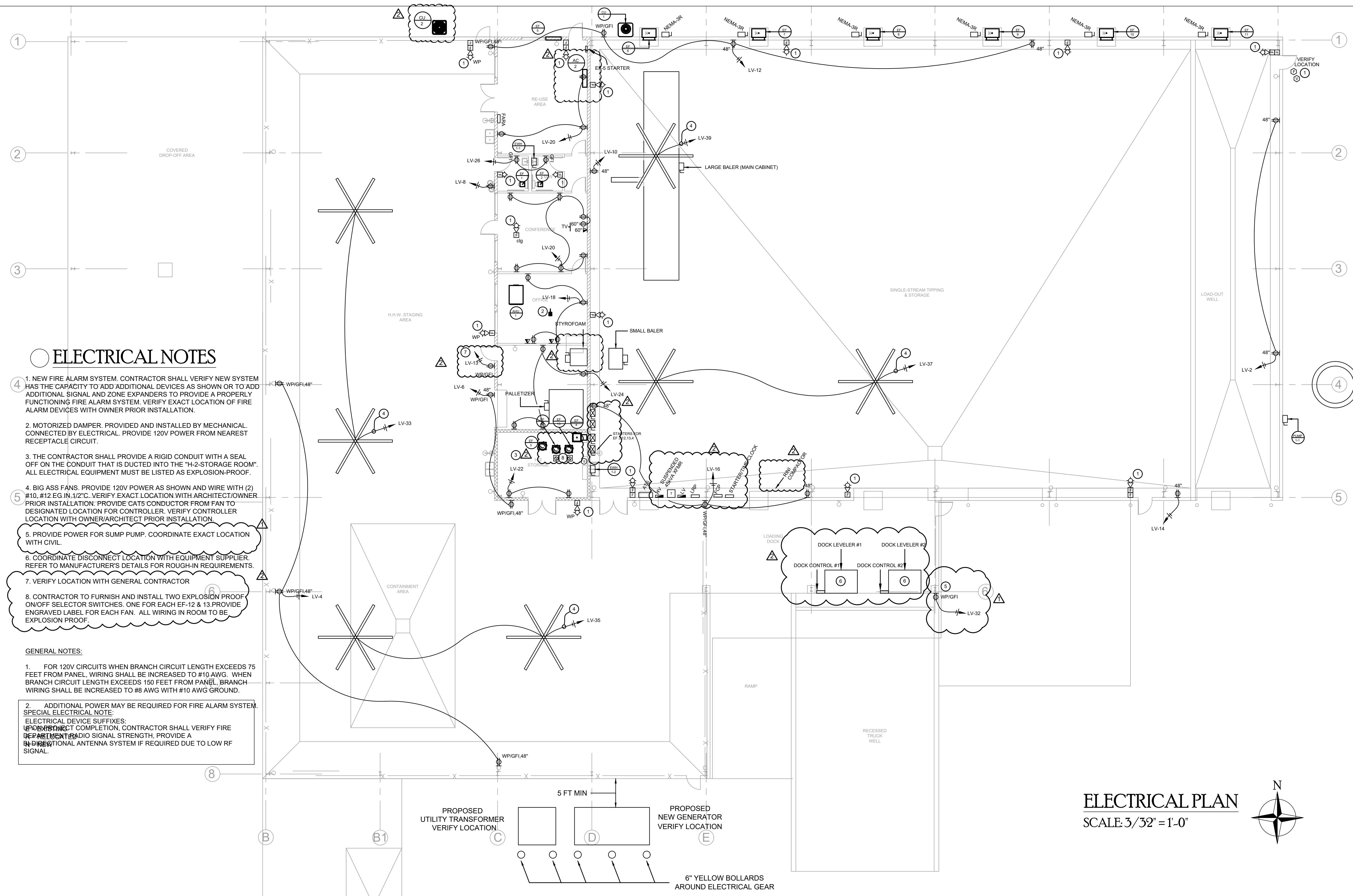
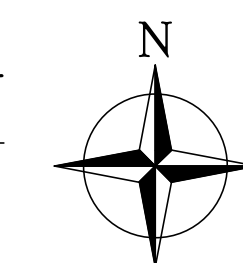
SHEET TITLE
ELECTRICAL PLAN

SHEET NO.
E201

PERMIT SET

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



ELECTRICAL NOTES

1. NEW FIRE ALARM SYSTEM. CONTRACTOR SHALL VERIFY NEW SYSTEM HAS THE CAPACITY TO ADD ADDITIONAL DEVICES AS SHOWN OR TO ADD ADDITIONAL SIGNAL AND ZONE EXPANDERS TO PROVIDE A PROPERLY FUNCTIONING FIRE ALARM SYSTEM. VERIFY EXACT LOCATION OF FIRE ALARM DEVICES WITH OWNER PRIOR INSTALLATION.
2. MOTORIZED DAMPER. PROVIDED AND INSTALLED BY MECHANICAL. CONNECTED BY ELECTRICAL. PROVIDE 120V POWER FROM NEAREST RECEPTACLE CIRCUIT.
3. THE CONTRACTOR SHALL PROVIDE A RIGID CONDUIT WITH A SEAL OFF ON THE CONDUIT THAT IS DUCTED INTO THE "H-2-STORAGE ROOM". ALL ELECTRICAL EQUIPMENT MUST BE LISTED AS EXPLOSION-PROOF.
4. BIG ASS FANS. PROVIDE 120V POWER AS SHOWN AND WIRE WITH (2) #10, #12 EG IN 1/2" C. VERIFY EXACT LOCATION WITH ARCHITECT/OWNER PRIOR INSTALLATION. PROVIDE CAT5 CONDUCTOR FROM FAN TO DESIGNATED LOCATION FOR CONTROLLER. VERIFY CONTROLLER LOCATION WITH OWNER/ARCHITECT PRIOR INSTALLATION.
5. PROVIDE POWER FOR SUMP PUMP. COORDINATE EXACT LOCATION WITH CIVIL.
6. COORDINATE DISCONNECT LOCATION WITH EQUIPMENT SUPPLIER. REFER TO MANUFACTURER'S DETAILS FOR ROUGH-IN REQUIREMENTS.
7. VERIFY LOCATION WITH GENERAL CONTRACTOR
8. CONTRACTOR TO FURNISH AND INSTALL TWO EXPLOSION PROOF ON/OFF SELECTOR SWITCHES. ONE FOR EACH EF-12 & 13. PROVIDE ENGRAVED LABEL FOR EACH FAN. ALL WIRING IN ROOM TO BE EXPLOSION PROOF.

GENERAL NOTES:

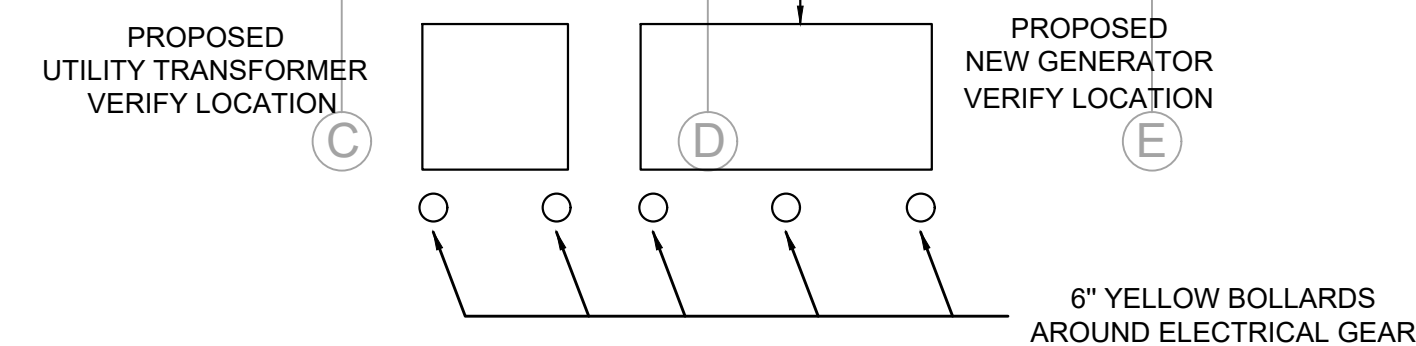
1. FOR 120V CIRCUITS WHEN BRANCH CIRCUIT LENGTH EXCEEDS 75 FEET FROM PANEL. WIRING SHALL BE INCREASED TO #10 AWG. WHEN BRANCH CIRCUIT LENGTH EXCEEDS 150 FEET FROM PANEL, BRANCH WIRING SHALL BE INCREASED TO #8 AWG WITH #10 AWG GROUND.

2. ADDITIONAL POWER MAY BE REQUIRED FOR FIRE ALARM SYSTEM.
SPECIAL ELECTRICAL NOTE:
ELECTRICAL DEVICE SUFFIXES:
UPON INSTANT COMPLETION, CONTRACTOR SHALL VERIFY FIRE DEPARTMENT RADIO SIGNAL STRENGTH. PROVIDE A DIRECTIONAL ANTENNA SYSTEM IF REQUIRED DUE TO LOW RF SIGNAL.

SPECIAL ELECTRICAL NOTE:
SEE SHEET E300 FOR MECHANICAL SCHEDULE.

DESCRIPTION	ELECTRICAL CHARACTERISTICS				CIRCUIT DESIGNATION	BREAKER AMPS	POLES	FEEDER	EQUIP. GROUND	CONDUIT	DISCONNECT SWITCH	REMARKS
	VOLTS	PHASE	KW	HP								
LARGE BALER	460	3	83	132.9	HV-1,3,5	200	3	(3) #1/0	#6	2"	DIRECT CONNECTION	SEE NOTE 1,2
SMALL BALER	480	3	10	17.5	HV-7,9,11	25	3	(3) #12	#12	1/2"	DIRECT CONNECTION	SEE NOTE 1,2
STYROFOAM MACHINE	208	3		48.0	LV-1,3,5	50	3	(3) #6	#10	3/4"	60A/2P/NF/NEMA-1	SEE NOTE 1
PALLETIZER	120	1	15.0		LV-7	20	1	(2) #12	#12	1/2" C	30A/2P/NF/NEMA-1	SEE NOTE 1
DOCK LEVELER #1	120	1	15.0		LV-9	20	1	(2) #12	#12	1/2"	20A/1P/NF/NEMA-1	SEE NOTE 1
DOCK LEVELER #2	120	1	15.0		LV-11	20	1	(2) #12	#12	1/2"	20A/1P/NF/NEMA-1	SEE NOTE 1
STRETCH WRAP	120	1	15.0		LV-13	20	1	(2) #12	#12	1/2"	30A/2P/NF/NEMA-1	SEE NOTE 1
RUNI COMPACTOR	460	3	10	21.0	HV-31,33,35	40	3	(3) #6	#10	3/4"	30A/3P/NF/NEMA-1	SEE NOTE 1

NOTES:



☐ RISER NOTES

- NEW 277/480/3Ø CT METER. COORDINATE WITH LOCAL UTILITY. PROVIDE LIGHTING ARRESTOR AND GROUND PER LOCAL UTILITY REQUIREMENTS. CT METER ENCLOSURE TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR. MOUNT CT METER ENCLOSURE ON A 4X4 CONCRETE PEDESTAL ADJACENT TO THE ENCLOSURE.
- PROVIDE (4) #500 MCM IN 3" CONDUIT.
- PROVIDE NEW 400A, 277/480V/3Ø SERVICE ENTRANCE RATED AUTOMATIC TRANSFER SWITCH WITH A 400A MAIN CIRCUIT BREAKER ON UTILITY SOURCE. SWITCH SHALL BE 3-POLE, IN NEMA-3R ENCLOSURE. ATS SHALL SERVE AS THE NEW MAIN DISCONNECT FOR THE BUILDING. BOND NEUTRAL AND GROUND AT ATS.
- PROVIDE #1/0 GROUNDING ELECTRODE CONDUCTOR TO 5/8" X 10" COPPER CLAD GROUND RODS. BOND NEUTRAL AND GROUND IN ATS. SEE DETAIL THIS SHEET.
- PROVIDE (4) #500 MCM, #3 EG IN 3-1/2" CONDUIT.
- PROVIDE (3) #1, #6 EG IN 1-1/2".
- PROVIDE (4) #250, #2 GEC IN 2-1/2".
- 277/480V/3Ø, 250kW DIESEL GENERATOR WITH NEMA-3R SOUND ENCLOSURE AND SUB-BASE FUEL TANK AND 400A 80% RATED OUTPUT BREAKER. COORDINATE EXACT LOCATION WITH OWNER. GENERATOR SHALL COMPLY WITH NEC ARTICLE 702 (OPTIONAL STANDBY SYSTEMS). CONTRACTOR SHALL PROVIDE GENERATOR PAD. PROVIDE 48 HOUR FUEL TANK.
- PROVIDE (4) #500 MCM, #3 EG IN 3-1/2" CONDUIT.
- NOT USED.
- PROVIDE 1" C FOR NEW GENERATOR START CIRCUIT. USE (2) #12, #12 EG WITH TWO STRANDED TWISTED PAIRS FOR GENERATOR ANNUNCIATION AND GENERATOR EPO. SIZE AS REQUIRED PER MANUFACTURER. ANNUNCIATOR AND EPO SHALL BE LOCATED BY OWNER IN A LOCATION EASILY MONITORED. VERIFY EXACT LOCATIONS WITH TENANT.
- PROVIDE A 120V, 20A/1P CIRCUIT FOR BATTERY CHARGER. PROVIDE A 208V, 20A/2P CIRCUIT FOR BLOCK HEATER. WIRE EACH WITH (2) #12, #12 EG IN 3/4" C.
- (2) 5/8"X10" COPPER CLAD GROUND RODS. BOND GENERATOR ENCLOSURE TO GROUND RODS. GENERATOR IS NOT A SEPARATELY DERIVED SOURCE.
- (2) 3/4"X10" CONDUIT FOR GENERATOR EPO BUTTON. SIZE PER MANUFACTURER REQUIREMENTS. EPO BUTTON SHALL BE LOCATED WITHIN GENERATOR REACH. VERIFY LOCATION WITH OWNER PRIOR TO INSTALLATION.

DESCRIPTION	ELECTRICAL CHARACTERISTICS				CIRCUIT DESIGNATION	BREAKER AMPS / POLES	FEEDER	EQUIP. GROUND	CONDUIT	DISCONNECT SWITCH	REMARKS
	VOLTS	PHASE	KW	HP							
AHU-1	480	3	10		19.3 HV-25,27,29	20 3	(3) #12	#12	1/2"	30A/3P/NF/NEMA-1	SEE NOTE 1
CU-1	480	3			21.5 HV-13,15,17	30 3	(3) #10	#12	1/2"	30A/3P/NF/NEMA-3R	SEE NOTE 1,3
EF-3, EF-4, EF-12, EF-13	480	3			4.0 HV-19,21,23	15 3	(3) #12	#12	1/2"	PROVIDED BY MECH	SEE NOTE 1,2,3,5,6
EF-6 & EF-7 & EF-8	480	3		1	2.6 HV-37,39,41	15 3	(3) #12	#12	1/2"	30A/3P/NF/NEMA-3R	SEE NOTE 1,4
EF-9 & EF-10 & EF-11	480	3		1	2.6 HV-32,34,36	15 3	(3) #12	#12	1/2"	30A/3P/NF/NEMA-3R	SEE NOTE 1,4
PUMP 1-1	208	1		1	8.0 LV-29,31	20 2	(2) #12	#12	1/2"	30A/2P/NF/NEMA-3R	
EWH 1-1	208	1	3.6		17.3 LV-25,27	20 2	(2) #12	#12	1/2"	30A/2P/NF/NEMA-1	
EWH 1-2	277	1	8		28.8 HV-12	30 1	(2) #10	#10	3/4"	30A/2P/NF/NEMA-1	
AC-2	208	1			18.0 LV-15,17	30 2	(2) #10	#10	3/4"	30A/2P/NF/NEMA-3R	
EF-5	480	3			0.5 HV-38,40,42	15 3	(3) #12	#12	1/2"	30A/3P/NF/NEMA-3R	SEE NOTE 1,5

NOTES:

- SEE MECHANICAL PLANS FOR CONTROL INFORMATION.
- MECHANICAL CONTRACTOR TO FURNISH EXPLOSION PROOF DISCONNECTS FOR EF-3, EF-4, EF-12, EF-13. INSTALLED BY ELECTRICAL CONTRACTOR.
- PROVIDE WPI/GFI 120V, 20A GENERAL MAINTENANCE RECEPTACLE WITH IN 25' OF UNIT AS REQUIRED. PROVIDE POWER FROM NEAREST GENERAL RECEPTACLE CIRCUIT.
- CONTRACTOR TO VERIFY BRANCH CIRCUIT CONTAINS NO MORE THAN (6) RECEPTACLES.
- CONTRACTOR TO FURNISH AND INSTALL A SIZE "0" STARTER WITH OVERLOADS, 120V COIL, HOA SWITCH IN COVER, IN A NEMA 1 ENCLOSURE. CONTRACTOR TO FURNISH AND INSTALL A 24 HOUR TIME CLOCK TO CONTROL ALL FANS. TIME CLOCK TO CONTROL ALL FOUR FANS TOGETHER.
- FOR EF-3 & EF-4 CONTRACTOR TO FURNISH AND INSTALL A SIZE "0" COMBINATION NON FUSED STARTER WITH OVERLOADS, 480V COIL, IN A NEMA 1 ENCLOSURE. STARTER TO BE IN ON AT ALL TIMES.
- FOR EF-12 & EF-13. CONTRACTOR TO FURNISH AND INSTALL A SIZE "0" COMBINATION NON FUSED STARTER WITH OVERLOADS, 120V COIL, IN A NEMA-1 ENCLOSURE. SEE NOTE/ ON PLANS FOR CONTROLS.

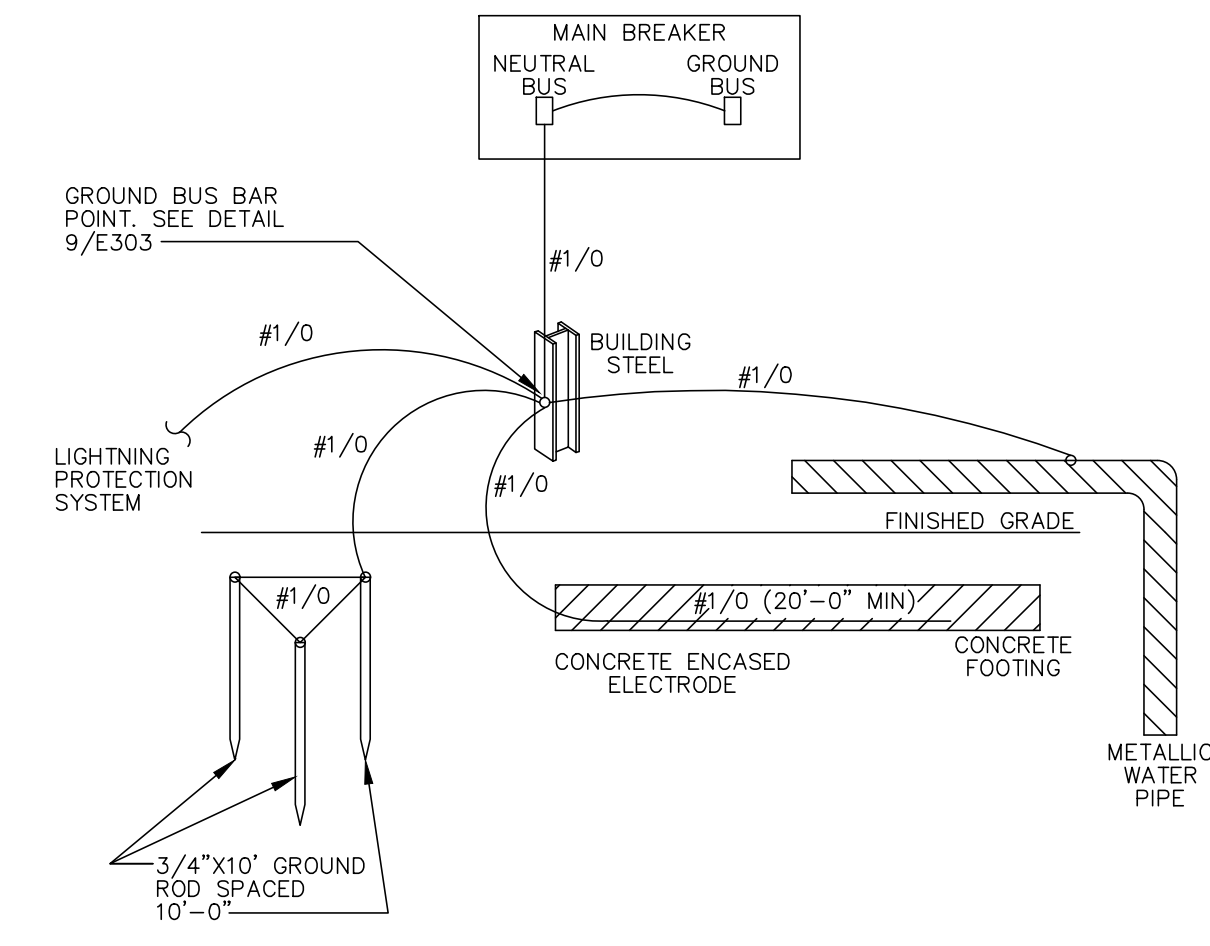
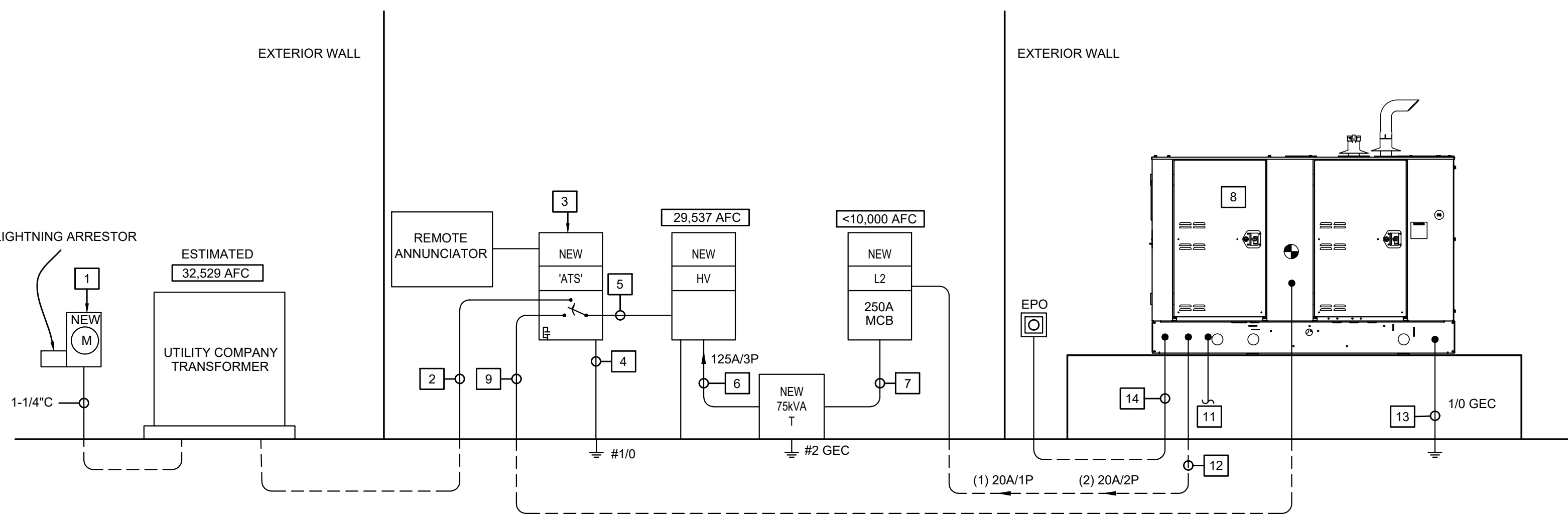
NEW PANEL LV VOLTAGE 120 / 208 V SIZE 225A MCB CABINET SURFACE NEMA-1 SQD OR EQUAL PHASE 3 PH 225A BUS RATING 10,000 AIC RATED

REMARKS	AMPS	P	VA PHASE LOAD			BUS	CT	A	B	C	VA PHASE LOAD	CT BKR	REMARKS	
			A	B	C									A
STYROFOAM MACHINE	50	3	4621	4621	4621	1	X	2			360	20 1	GENERAL REC	
PALLETIZER	20	1	1800			7	X	8			360	20 1	DRINKING FTN	
DOCK LEVELER #1	20	1		1800		9	X	10			1080	20 1	GENERAL REC	
DOCK LEVELER #2	20	1			1800	11	X	12			1080	20 1	GENERAL REC	
STRETCH WRAP	20	1	1800			13	X	14			1080	20 1	GENERAL REC	
AC-1	30	2		1500		15	X	16			1080	20 1	GENERAL REC	
SPARE	20	1			1500	17	X	18			1080	20 1	CONF RM REC	
SPARE	20	1				19	X	20			1080	20 1	OFFICE RM REC	
SPARE	20	1				21	X	22			360	20 1	H-2 STORAGE REC	
SPARE	20	1				23	X	24			1080	20 1	STORAGE REC	
EWH 1-1	20	2	1800	1800		25	X	26			360	20 1	RESTROOM REC	
PUMP 1-1	20	2			832	29	X	30			1080	20 1	FACP	
BIG ASS FANS	20	1	832			31	X	32			1200	20 1	EFC STARTERS	
BIG ASS FANS	20	1		1500		33	X	34				20 1	SPARE	
BIG ASS FANS	20	1			1500	35	X	36				20 1	SPARE	
BIG ASS FANS	20	1	1500			37	X	38				20 1	SPARE	
BIG ASS FANS	20	1		750		39	X	40				20 1	SPARE	
SPARE	20	1				41	X	42				20 1	SPARE	
TOTAL			12353	11971	10253						4440	4680	5400	TOTAL

NOTE: CONTRACTOR IS RESPONSIBLE FOR UPDATING ALL PANEL SCHEDULES WITH CURRENT DESCRIPTIONS OF ALL BRANCH CIRCUIT DESIGNATIONS.

TABULATION MEASURED	TOTAL LOAD	DEMAND FACTOR	DEMAND LOAD
LIGHTING			
COOLING			
HEATING			
RECEPTACLE	13320	0.88	11660
MISCELLANEOUS	35776	1.00	35776
KITCHEN EQUIP			
LARGEST MOTOR			
TOTAL DEMAND LOAD			47436 VA
TOTAL DEMAND AMPS			131.7 A

GENERATOR FUEL TANK CALCULATION:
 GENERATOR SIZE: 250kW/313kVA
 FUEL CONSUMPTION AT 100% LOAD: 18.5 GAL/HR
 18.5 GAL/HR X 8HR = 148 GAL.
 TANK SIZE = 372 GAL.



SERVICE GROUNDING DIAGRAM
SCALE: NONE
REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

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INDIAN RIVER COUNTY LANDFILL
 HOUSEHOLD HAZARDOUS WASTE
 AND RECYCLING FACILITY
 Indian River County, Florida

NO.	REVISIONS	DATE
1	FIELD COORDINATION	05/15/2021
2	FIELD COORDINATION	11/05/2021

JOB NO. **2016**

ISSUE DATE:
07/07/2021

DRAWN BY:
WG

SHEET TITLE
RISER DIAGRAM & PANEL SCHEDULES
SHEET NO.
E300

PERMIT SET

FIRE PROTECTION GENERAL NOTES

- THESE FIRE PROTECTION SYSTEM ENGINEERING DOCUMENTS PROVIDE THE ENGINEERING REQUIREMENTS TO BE USED IN THE PREPARATION OF THE FIRE PROTECTION SYSTEM LAYOUT DOCUMENTS AND INDICATE THE OVER ALL NATURE OF THE PROJECT SCOPE OF WORK.
- THE PROPOSED TYPE II 33,487 SQUARE FEET BUILDING SHALL BE PROTECTED BY AN WET AUTOMATIC SPRINKLER SYSTEM THROUGHOUT. THE PROPOSED CONSTRUCTION AREAS SHALL BE INSTALLED IN ACCORDANCE WITH THE 2016 EDITION OF NFPA 13, 2020 SEVENTH EDITION OF THE FLORIDA FIRE PREVENTION CODE, 2020 FLORIDA BUILDING CODE, CHAPTER 9 AND APPLICABLE LOCAL AND STATE REQUIREMENTS ADOPTED AT TIME OF PERMITTING.
- THE OCCUPANCY CLASSIFICATION OF THIS FACILITY PER NFPA 13, 2016 EDITION SHALL BE:
 OFFICES, RESTROOMS AND LIKE AREAS SHALL BE DESIGNED PER LIGHT HAZARD OCCUPANCY, WITH A MINIMUM DENSITY OF 0.10 GPM OVER THE HYDRAULICALLY MOST DEMANDING OPERATING AREA PER NFPA 13 2016 11.2.3. TEMPERATURE RATING OF THE SPRINKLERS SHALL BE 155° OR AS INDICATED ON DRAWINGS. SPACING BETWEEN SPRINKLERS SHALL BE A MINIMUM OF 6' AND A MAXIMUM OF 15'. AREA OF COVERAGE PER SPRINKLER SHALL BE 225 SQUARE FEET MAXIMUM FOR STANDARD SPACING AND MANUFACTURERS LISTING REQUIREMENTS FOR EXTENDED COVERAGE SPACING.
 ELECTRICAL/MECHANICAL EQUIPMENT ROOMS AND LIKE AREAS SHALL BE DESIGNED PER ORDINARY HAZARD GROUP I OCCUPANCY, WITH A MINIMUM DENSITY OF 0.15 GPM OVER THE HYDRAULICALLY MOST DEMANDING OPERATING AREA PER NFPA 13 2016 11.2.3. TEMPERATURE RATING OF THE SPRINKLERS SHALL BE 155° OR AS INDICATED ON DRAWINGS. SPACING BETWEEN SPRINKLERS SHALL BE A MINIMUM OF 6' AND A MAXIMUM OF 15'. AREA OF COVERAGE PER SPRINKLER SHALL BE 130 SQUARE FEET MAXIMUM FOR STANDARD SPACING AND MANUFACTURERS LISTING REQUIREMENTS FOR EXTENDED COVERAGE SPACING.
 TIPPING, DROP OFF, STORAGE AND LIKE AREAS SHALL BE DESIGNED PER ORDINARY HAZARD GROUP II OCCUPANCY, WITH A MINIMUM DENSITY OF 0.20 GPM OVER THE HYDRAULICALLY MOST DEMANDING OPERATING AREA PER NFPA 13 2016 11.2.3. TEMPERATURE RATING OF THE SPRINKLERS SHALL BE 155° OR AS INDICATED ON DRAWINGS. SPACING BETWEEN SPRINKLERS SHALL BE A MINIMUM OF 6' AND A MAXIMUM OF 15'. AREA OF COVERAGE PER SPRINKLER SHALL BE 130 SQUARE FEET MAXIMUM FOR STANDARD SPACING AND MANUFACTURERS LISTING REQUIREMENTS FOR EXTENDED COVERAGE SPACING. WALLS SURROUNDING H-2 STORAGE AREA SHALL EXTEND TO THE DECK.
 H-2 STORAGE SHALL BE DESIGNED PER EXTRA HAZARD GROUP II OCCUPANCY, WITH A MINIMUM DENSITY OF 0.40 GPM OVER THE ENTIRE AREA AS THE OPERATING AREA PER NFPA 13 2016 11.2.3. TEMPERATURE RATING OF THE SPRINKLERS SHALL BE 175° STANDARD RESPONSE TYPE AS INDICATED ON DRAWINGS. SPACING BETWEEN SPRINKLERS SHALL BE A MINIMUM OF 6' AND A MAXIMUM OF 12'. AREA OF COVERAGE PER SPRINKLER SHALL BE 120 SQUARE FEET MAXIMUM FOR STANDARD SPACING AND MANUFACTURERS LISTING REQUIREMENTS FOR EXTENDED COVERAGE SPACING.
- THE SUPPORT SYSTEMS OF THE BUILDING HAVE ADEQUATE LOAD CARRYING CAPACITY FOR A 5 PSF DEAD LOAD WHICH WILL BE CONTRIBUTED BY THE FIRE SPRINKLER, MECHANICAL & ELECTRICAL SYSTEMS. THERE ARE NO SIGNIFICANT STRUCTURAL OPENINGS THAT WILL BE REQUIRED BY THE FIRE SPRINKLER SYSTEM. REFER TO STRUCTURAL DRAWINGS.
- THE NEW FLOW SWITCH, LOCATED ON THE RISER CONTROL VALVE ASSEMBLY, SHALL BE CONNECTED TO THE EXTERIOR ELECTRIC BELL AND TO THE BUILDING FIRE ALARM SYSTEM. THE NEW TAMPER SWITCH, LOCATED ON THE RISER CONTROL VALVE ASSEMBLY, SHALL BE CONNECTED TO THE BUILDING FIRE ALARM SYSTEM.
- THIS PROPOSED BUILDING IS TO BE PROTECTED BY A WET PIPE AUTOMATIC SPRINKLER SYSTEM. THE FIRE PROTECTION CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE THE PREPARATION OF THE FIRE PROTECTION SYSTEM LAYOUT DOCUMENTS, AND THE INSTALLATION OF ALL NECESSARY COMPONENTS, SYSTEMS, MATERIALS, ASSEMBLIES, EQUIPMENT AND SUPPORT SYSTEMS REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM.
- THE ACCEPTANCE TESTING OF ALL FIRE PROTECTION SYSTEMS AND COMPONENTS SHALL BE IN ACCORDANCE WITH NFPA 13, 2016 EDITION FOR THE INSIDE (ABOVE GROUND) FIRE SPRINKLER SYSTEM AND NFPA 24, 2016 EDITION FOR THE OUTSIDE (UNDERGROUND) FIRE SPRINKLER SYSTEM.
- THE FIRE SPRINKLER POINT OF SERVICE FOR THIS NEW PROJECT SHALL BE PER F.S. 633.021(18) AT THE DISCHARGE SIDE OF THE PROPOSED BACKFLOW PREVENTOR.
- FIRE FLOW TEST:**
 PROVIDED BY: INDIAN RIVER COUNTY DEPARTMENT OF UTILITIES
 DATE: 04/29/21
 STATIC: 55 PSI
 RESIDUAL: 42 PSI
 FLOWING: 993 GPM
 THE AWARDED CONTRACTOR SHALL OBTAIN AN AHJ PURVEYOR APPROVED HYDRANT FLOW TEST PER NFPA 13 2016 23.2.1.1. HYDRAULIC CALCULATIONS, LAYOUT DRAWINGS AND MATERIAL SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER AND FIRE MARSHAL AND SHALL BE APPROVED PRIOR TO ANY FABRICATION OR INSTALLATION INVOLVED WITH THIS PROJECT
- THERE ARE NO KNOWN CONDITIONS THAT WOULD INDICATE MICROBIAL INDUCED CORROSION IS PRESENT IN THE WATER SYSTEMS OF THIS JURISDICTION AS UNUSUAL PIPE FAILURES HAVE NOT BEEN KNOWN TO OCCUR.
- THE QUALITY AND PERFORMANCE SPECIFICATIONS OF THE INTERIOR FIRE PROTECTION COMPONENTS SHALL BE GROOVED SCHEDULE 10 PIPE WITH GROOVED FITTINGS, AND OR SCHEDULE 40 WITH THREADED CAST IRON FITTINGS OR GROOVED SCHEDULE 10 PIPE WITH GROOVED FITTINGS.
- ALL FIRE PROTECTION SYSTEM COMPONENTS SHALL BE UL LISTED FOR INTENDED USE.
- TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH CHAPTER 61G15-32 OF THE FLORIDA ADMINISTRATIVE CODE.
- ALL FIRE PROTECTION WORK SHALL BE IN STRICT ACCORDANCE WITH ALL RELATED NFPA STANDARDS, THE OWNER'S INSURANCE UNDERWRITER, UNDERWRITERS LABORATORY, THE FLORIDA STATE FIRE PREVENTION CODE 2020 AND ALL LOCAL CODES AND AMENDMENTS.
- FINAL INSPECTION AND APPROVAL OF AUTOMATIC SPRINKLER SYSTEM SHALL BE BY THE LOCAL FIRE MARSHAL (AHJ) AND ARCHITECT/ENGINEER
- THE CONTRACTOR SHALL FOLLOW THE DRAWINGS, NOTES AND SPECIFICATIONS AS CLOSE AS POSSIBLE. HOWEVER, THE ARCHITECT/ENGINEER RESERVES THE RIGHT TO CHANGE THE LOCATION(S) OF SPRINKLERS, PIPING, VALVES, ETC. TO ACCOMMODATE EXISTING CONDITIONS WHICH MAY ARISE DURING THE SYSTEM INSTALLATION WITHOUT ADDITIONAL COMPENSATION TO THE CONTRACTOR FOR SUCH CHANGES, PROVIDED SUCH CHANGES ARE REQUESTED PRIOR TO THE INSTALLATION OF THE CONTRACTOR'S WORK. COORDINATE WITH ALL OTHER TRADES.
- THE BIDDER IS REQUIRED, BEFORE SUBMITTING HIS PROPOSAL, TO VISIT THE SITE OF THE PROPOSED WORK AND FAMILIARIZE HIMSELF WITH THE NATURE AND EXTENT OF THE WORK AND ANY EXISTING CONDITIONS THAT MAY IN ANY MANNER AFFECT THE WORK TO BE DONE AND THE EQUIPMENT, MATERIALS AND LABOR REQUIRED. THE BIDDER IS ALSO REQUIRED TO EXAMINE CAREFULLY THE PLANS AND SPECIFICATIONS AND TO INFORM HIMSELF THOROUGHLY REGARDING ANY AND ALL CONDITIONS AND REQUIREMENTS THAT MAY IN ANY MANNER AFFECT THE WORK TO BE PERFORMED UNDER THIS CONTRACT.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING DESCRIPTIONS AND HEIGHTS.
- SPRINKLERS SHALL BE COORDINATED WITH ALL DIFFUSERS, SPEAKERS, LIGHTING FIXTURES, FIRE ALARM DEVICES, AND CEILING SYSTEMS. SPACING OF SPRINKLERS SHALL BE IN ACCORDANCE WITH NFPA 13 AND THE LISTING OF THE SPRINKLER.
- SPRINKLERS SHALL BE CENTERED IN THE CEILING TILE AS INDICATED ON THE DRAWINGS. PROVIDE RETURN BENDS OR SWING JOINTS AS REQUIRED.
- SLEEVE AND/OR FIRESTOP ALL PENETRATIONS THROUGH RATED WALLS, CEILINGS, AND FLOORS WITH UL LISTED ASSEMBLIES. FIRESTOP ASSEMBLIES SHALL BE EQUAL TO OR EXCEED THE RATING OF THE WALL, CEILING OR FLOOR. SEE ARCHITECTURAL DRAWINGS FOR FINAL FINISHES.
- PROVIDE A PERMANENTLY ATTACHED NAME TAG ATTACHED TO THE RISER STATING THE REQUIRED OR MODIFIED DESIGN CRITERIA FOR EACH HYDRAULICALLY DESIGNED SYSTEM.
- PROVIDE SPRINKLERS CAGES ON ALL SPRINKLERS IN ELECTRIC ROOMS, TELEPHONE ROOMS, MECHANICAL ROOMS, GYMNASIUMS, AND ON ANY SPRINKLER LESS THAN 7'-0" ABOVE FLOOR.
- COORDINATE SPRINKLER PIPING WITH ALL ELECTRICAL EQUIPMENT (PANELS, TRANSFORMERS, ETC.) PRIOR TO ANY INSTALLATION. DO NOT ROUTE ANY SPRINKLER PIPING OVER ANY ELECTRICAL PANELS UNDER ANY CIRCUMSTANCES. ANY SPRINKLER PIPING RUN OVER NEW PROPOSED ELECTRICAL PANELS/EQUIPMENT SHALL BE REROUTED AT ADDITIONAL COST AS APPROVED IN RFI PROCESS THROUGH GC TO ARCHITECT.
- THE CONTRACTOR SHALL INFORM THE OWNER (A MINIMUM OF ONE WEEK IN ADVANCE) OF ANY DISRUPTION OF SERVICES TO THE BUILDING AND SHALL NOT PROCEED TO WORK WITHOUT WRITTEN APPROVAL FROM THE OWNER. THE CONTRACTOR SHALL MAKE REPAIRS TO ANY SERVICES (ABOVE OR BELOW GROUND) DAMAGED BY WORK PERFORMED BY HIM. IF FOR ANY REASON OVERNIGHT SHUTDOWN IS REQUIRED, A "FIRE WATCH" CONDITION SHALL BE REQUEST AND APPROVED IN RFI PROCESS THROUGH GC TO ARCHITECT.

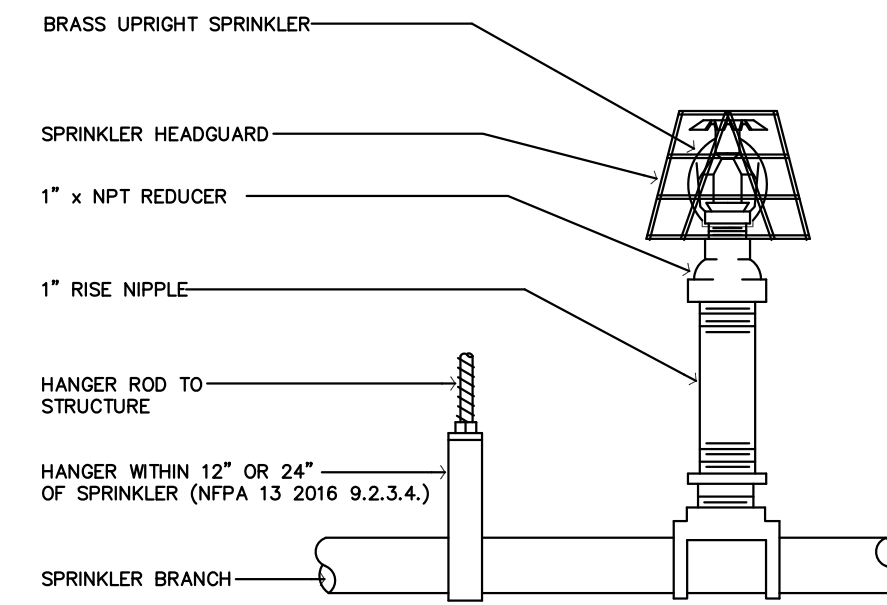
FIRE PROTECTION CODE CRITERIA

THE FOLLOWING IS A LIST OF ALL CODES AND STANDARDS ADOPTED DECEMBER 31, 2020 BY THE STATE FIRE MARSHAL'S RULE 69A3.012 F.A.C.:

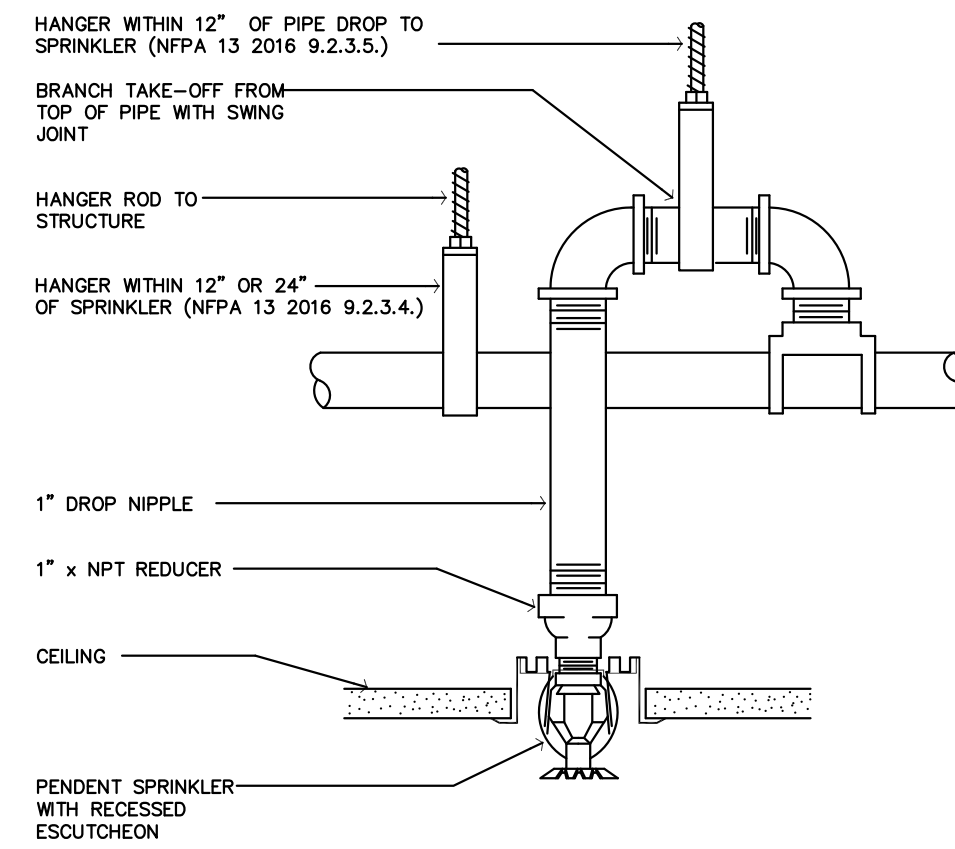
FLORIDA BUILDING CODE, SEVENTH EDITION (2020) - ALL SECTIONS
 FLORIDA FIRE PREVENTION CODE, SEVENTH EDITION (2020)
 FLORIDA BUILDING CODE (FBC), SEVENTH EDITION (2020) ENERGY CONSERVATION SOFTWARE: ENERGY GAUGE SUMMIT VERSION 6.10
 FLORIDA BUILDING CODE (FBC), SEVENTH EDITION (2020) ACCESSIBILITY - 2012 FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION

(1) EXCEPT AS SPECIFICALLY MODIFIED BY STATUTE OR BY THE STATE FIRE MARSHAL'S RULES, THE "FLORIDA FIRE PREVENTION CODE, 7TH EDITION (2020)," WHICH IS COMPRISED OF THE FLORIDA SPECIFIC EDITION OF NFPA 101, THE LIFE SAFETY CODE (2018 EDITION) AND THE FLORIDA SPECIFIC EDITION OF NFPA 1, THE FIRE CODE (2018 EDITION), ARE HEREBY ADOPTED AND INCORPORATED BY REFERENCE AND ARE APPLICABLE TO THOSE BUILDINGS AND STRUCTURES SPECIFIED IN PARAGRAPHS (A) AND (B), OF SUBSECTION (1), OF SECTION 633.206, F.S. IN ADDITION, THE FOLLOWING STANDARDS, EXCEPT AS SPECIFICALLY MODIFIED IN THE RULE CHAPTERS IN RULE TITLE 69A, ARE HEREBY ADOPTED AND INCORPORATED BY REFERENCE AND SHALL TAKE EFFECT ON THE EFFECTIVE DATE OF THIS RULE, AS A PART OF THE UNIFORM FIRE SAFETY STANDARDS ADOPTED BY RULE BY THE STATE FIRE MARSHAL AND ARE APPLICABLE TO THOSE BUILDINGS AND STRUCTURES SPECIFIED IN SECTIONS 633.206(1)(A) AND (B), F.S.:

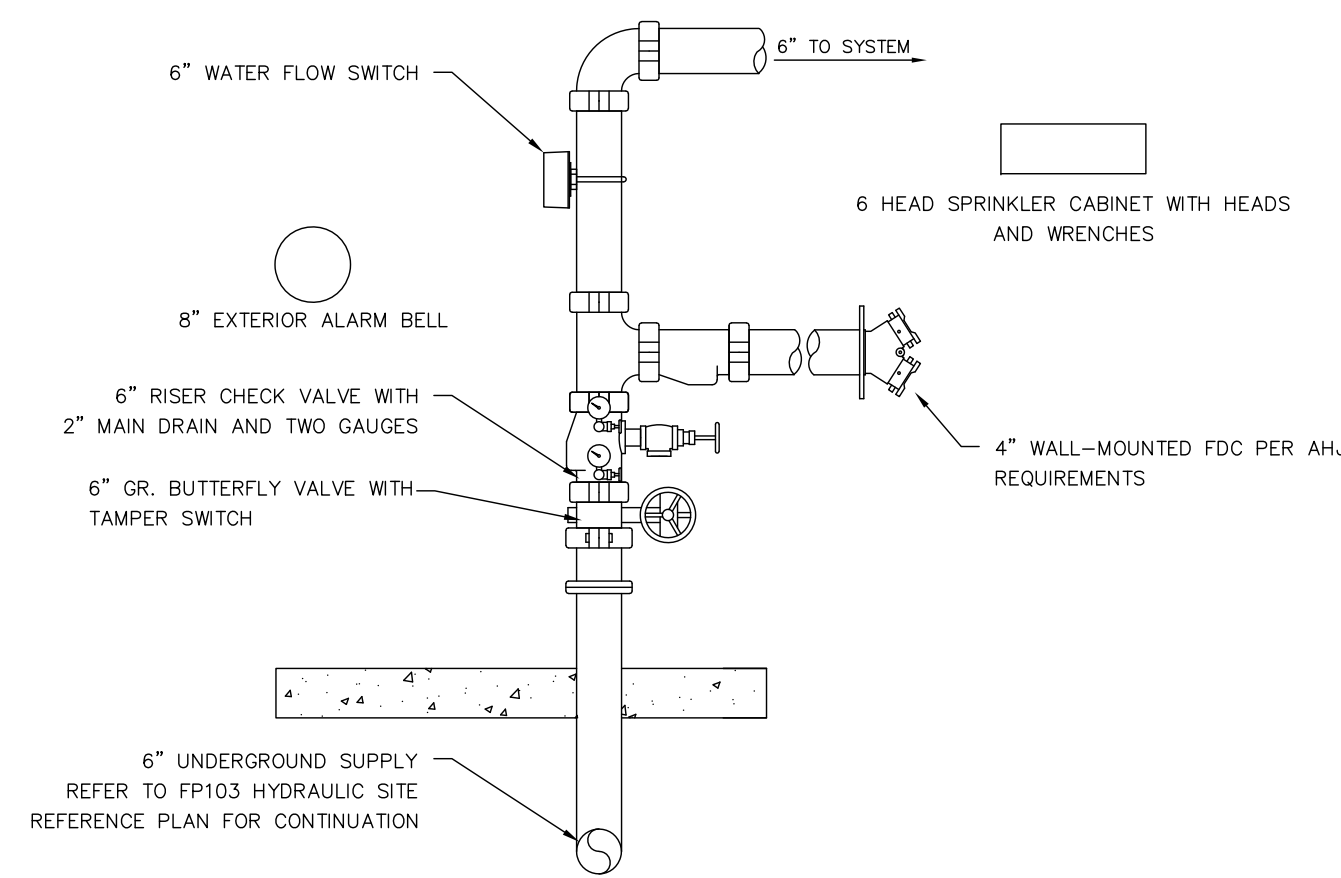
NFPA 13-2016 STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS
 NFPA 24-2016 STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES
 NFPA 25-2017 STANDARD FOR THE INSPECTION, TESTING, AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS, EXCEPT THAT QUARTERLY FLOW TESTS SHALL BE REQUIRED FOR THOSE SYSTEMS SUPPLIED BY A MUNICIPAL WATER SUPPLY.
 NFPA 70-2017 NATIONAL ELECTRIC CODE
 NFPA 72-2016 NATIONAL FIRE ALARM CODE
 NFPA 241-2013 STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION AND DEMOLITION OPERATIONS



TYPICAL UPRIGHT SPRINKLER HEAD

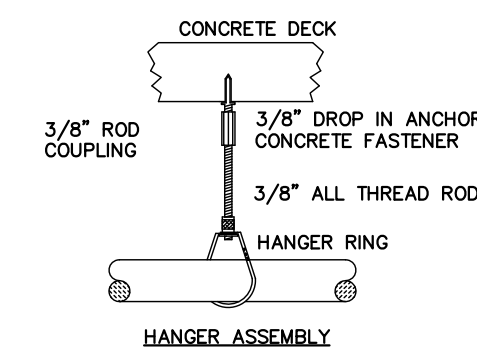


TYPICAL RECESSED PENDENT SPRINKLER HEAD

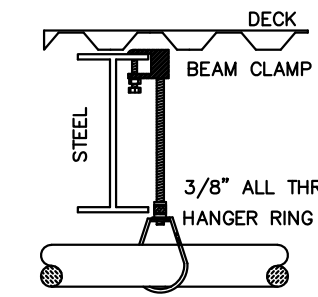


INTERIOR ISOLATION RISER ASSEMBLY

NO SCALE



HANGER REQUIREMENTS
 1. ON BRANCH LINES, THERE SHALL BE NOT LESS THAN ONE HANGER FOR EACH LENGTH OF PIPE.
 2. THE DISTANCE BETWEEN THE HANGER AND CENTERLINE OF AN UPRIGHT SPRINKLER SHALL NOT BE LESS THAN THREE INCHES (3").
 3. THE UNSUPPORTED LENGTH BETWEEN THE END SPRINKLER AND THE LAST HANGER SHALL BE NOT MORE THAN 36 INCHES FOR 1-INCH PIPE, OR 48 INCHES FOR 1-1/4" PIPE AND 60 INCHES FOR 1-1/2" PIPE AND LARGER. WHEN THESE LIMITS ARE EXCEEDED, THE PIPE SHALL BE EXTENDED BEYOND THE END SPRINKLER AND SUPPORTED BY AN ADDITIONAL HANGER.
 4. HANGERS ARE NOT REQUIRED ON ONE INCH (1") DIA. OVERS LESS THAN TWELVE INCHES (12") NFPA 13 9.2.3.4.4.2, OR TWENTY-FOUR INCHES (24") NFPA 13 9.2.3.5.

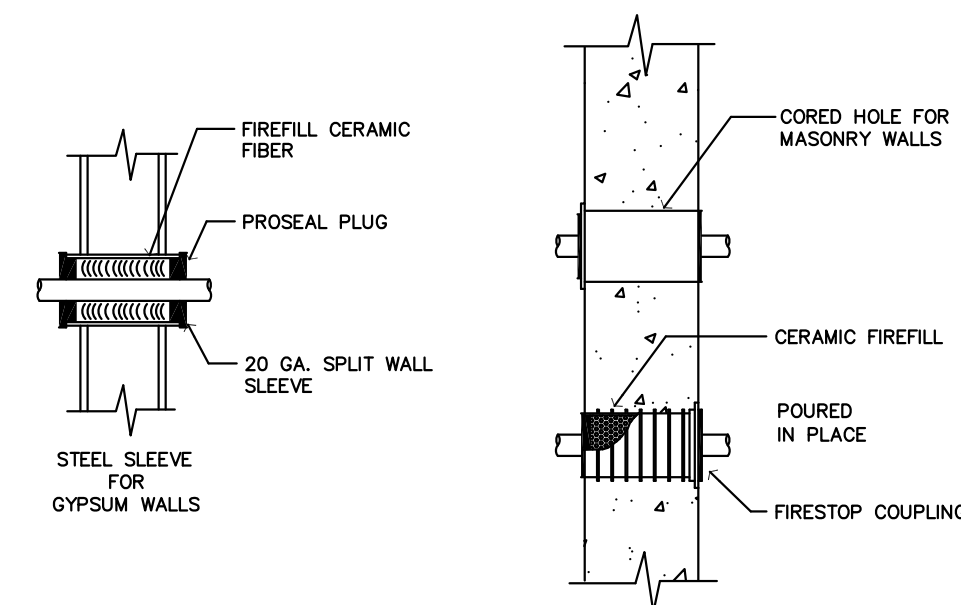


* CUMULATIVE HORIZONTAL LENGTH OF AN UNSUPPORTED ARMORER SHALL NOT EXCEED 24 INCHES FOR STEEL PIPE PER NFPA 13 9.2.3.5, 2016 EDITION

PIPE SIZE	MAXIMUM SPACING
1" 40	12'-0"
1-1/4" 40	12'-0"
1-1/2" 40	15'-0"
2" 40	15'-0"
2-1/2" 10	15'-0"
3" 10	15'-0"
4" 10	15'-0"

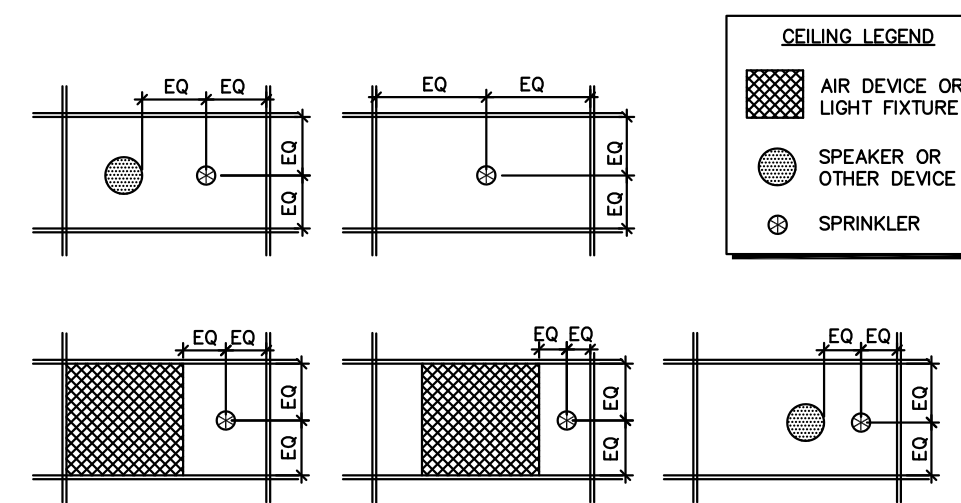
* INFORMATION PER : NFPA 13 2016 - CHAPTER 9 PIPE HANGER EQUAL TO ANVIL MFG. NO. 69 TYPE SWIVEL LOOP RING

TYPICAL NEW HANGER ASSEMBLY FOR SYSTEM



SLEEVES & FIRESTOPPING
 USE PROSEAL "FIRESTOP PENETRATORS," U.L. CLASSIFIED IN THE BUILDING MATERIALS DIRECTORY, TESTED BY ASTM E814. USE ALL APPLICABLE PIPE PENETRATIONS THROUGH FIRE RATED WALLS OR FLOOR CEILING ASSEMBLIES IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.

FIRE RATED WALL SLEEVING SYSTEM



SPRINKLERS IN GRID CEILING SYSTEMS SHALL BE LOCATED AT THE MIDPOINT OR QUARTERPOINT OF THE FOUR FOOT (4') DIMENSION AND THE MIDPOINT OF THE TWO FOOT (2') DIMENSION, WHERE A CONFLICT OCCURS SYMMETRY ABOUT THE AXIS SHALL BE MAINTAINED.

TYPICAL SPRINKLER MOUNTING IN ACT

DRAWING INDEX

- FP100 OVERALL DETAILS & NOTES FIRE PROTECTION PLAN
- FP101 FIRE PROTECTION PLAN - SECTION A
- FP102 FIRE PROTECTION PLAN - SECTION B
- FP103 FIRE PROTECTION HYDRAULIC SITE PLAN

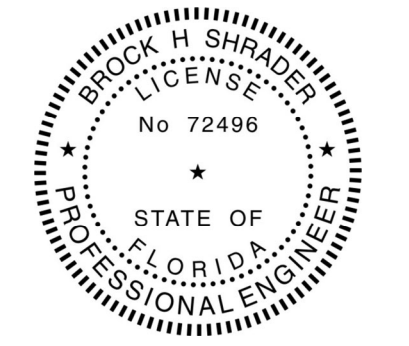
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 marcos@cmkdesignstudio.com



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INDIAN RIVER COUNTY LANDFILL
 HOUSEHOLD HAZARDOUS WASTE
 AND RECYCLING FACILITY
 Indian River County, Florida

NO.	REVISIONS	DATE
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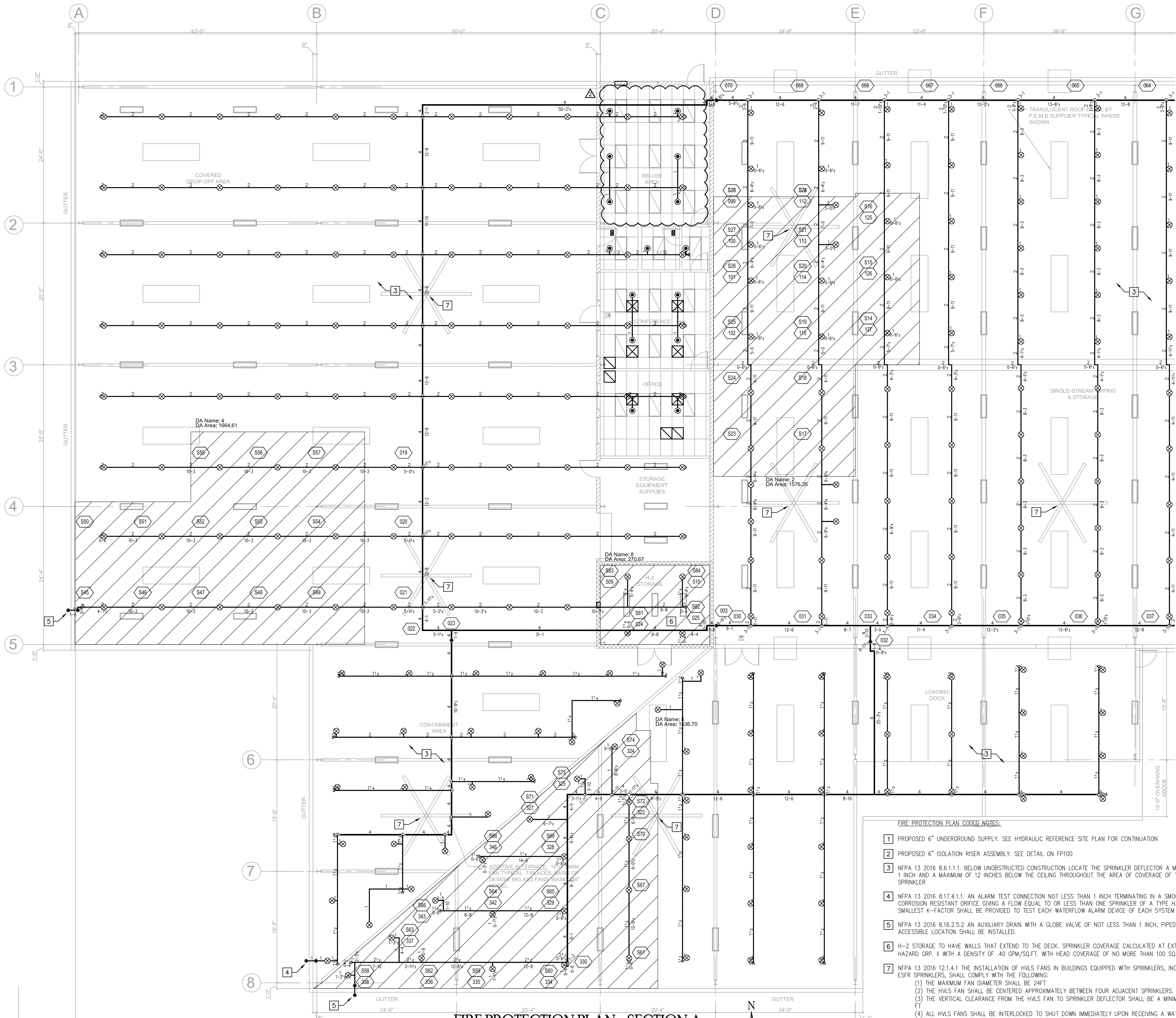
SHEET TITLE

DETAILS & NOTES

SHEET NO.

FP100

PERMIT SET



BASE BUILDING CALCULATION - TIPPING STORAGE

CALC AREA - RMA 2
 OCCUPANCY CLASSIFICATION - OH-2
 DENSITY - 0.20 GPM/SQ FT
 AREA OF APPLICATION - 1576.35 SQ FT
 CALCULATED SPRINKLER COVERAGE - 130 SQ FT
 NFPA 13 2013 11.2.3.2.3. NO QR REDUCTION
 20'0" MAXIMUM CEILING HEIGHT EXCEEDED
 NUMBER OF SPRINKLERS CALCULATED - (13)
 HOSE STREAM ALLOWANCE - 250
 SYSTEM DEMAND @ SOURCE
 659.1 GPM @ 36.0 PSI
 SAFETY MARGIN 12.9 PSI OF SUPPLY

BASE BUILDING CALCULATION - DROP OFF AREA

CALC AREA - RMA 4
 OCCUPANCY CLASSIFICATION - OH-2
 DENSITY - 0.20 GPM/SQ FT
 AREA OF APPLICATION - 1500.0 SQ FT
 CALCULATED SPRINKLER COVERAGE - 130 SQ FT
 NFPA 13 2013 11.2.3.2.3. NO QR REDUCTION
 20'0" MAXIMUM CEILING HEIGHT EXCEEDED
 NUMBER OF SPRINKLERS CALCULATED - (13)
 HOSE STREAM ALLOWANCE - 250
 SYSTEM DEMAND @ SOURCE
 604.3 GPM @ 33.1 PSI
 SAFETY MARGIN 16.8 PSI OF SUPPLY

BASE BUILDING CALCULATION - CONTAINMENT AREA

CALC AREA - RMA 5
 OCCUPANCY CLASSIFICATION - OH-2
 DENSITY - 0.20 GPM/SQ FT
 AREA OF APPLICATION - 1536.7 SQ FT
 CALCULATED SPRINKLER COVERAGE - 130 SQ FT
 NFPA 13 2013 11.2.3.2.3. NO QR REDUCTION
 20'0" MAXIMUM CEILING HEIGHT EXCEEDED
 NUMBER OF SPRINKLERS CALCULATED - (16)
 HOSE STREAM ALLOWANCE - 250
 SYSTEM DEMAND @ SOURCE
 715.0 GPM @ 43.1 PSI
 SAFETY MARGIN 4.8 PSI OF SUPPLY

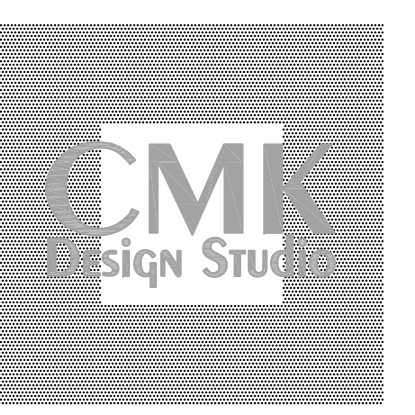
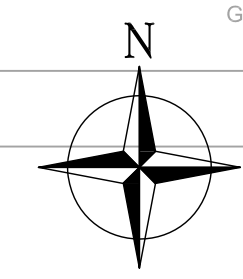
BASE BUILDING CALCULATION - H-2 STORAGE

CALC AREA - RMA 8
 OCCUPANCY CLASSIFICATION - EH-2
 DENSITY - 0.40 GPM/SQ FT
 AREA OF APPLICATION - 400.0 SQ FT
 CALCULATED SPRINKLER COVERAGE - 100 SQ FT
 NFPA 13 2013 11.2.3.2.3. NO QR REDUCTION
 20'0" MAXIMUM CEILING HEIGHT EXCEEDED
 NUMBER OF SPRINKLERS CALCULATED - (4)
 HOSE STREAM ALLOWANCE - 500
 SYSTEM DEMAND @ SOURCE
 667.50 GPM @ 44.4 PSI
 SAFETY MARGIN 4.3 PSI OF SUPPLY

SYM	POSITION	FINISH	TEMP	K	NPT	SIN	IMG.	MODEL#
○	PEND	WHITE	155	5.60	1/2"	TY3231	TYCO	TY-FRB
⊗	UPR	BRASS	200	8.00	3/4"	TY4131	TYCO	TY-FRB

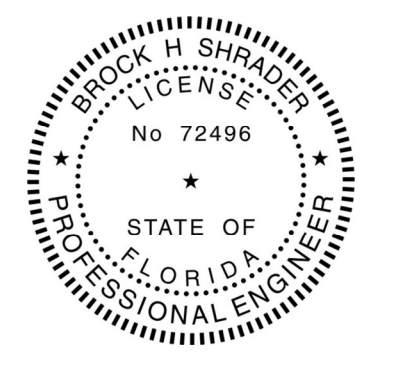
- FIRE PROTECTION PLAN CODED NOTES:**
- 1 PROPOSED 6" UNDERGROUND SUPPLY. SEE HYDRAULIC REFERENCE SITE PLAN FOR CONTINUATION
 - 2 PROPOSED 6" ISOLATION RISER ASSEMBLY. SEE DETAIL ON FP100
 - 3 NFPA 13 2016 8.6.1.1.1. BELOW UNOBSTRUCTED CONSTRUCTION LOCATE THE SPRINKLER DEFLECTOR A MINIMUM OF 1 INCH AND A MAXIMUM OF 12 INCHES BELOW THE CEILING THROUGHOUT THE AREA OF COVERAGE OF THE SPRINKLER
 - 4 NFPA 13 2016 8.17.4.1.1. AN ALARM TEST CONNECTION NOT LESS THAN 1 INCH TERMINATING IN A SMOOTH BORE CORROSION RESISTANT ORIFICE GIVING A FLOW EQUAL TO OR LESS THAN ONE SPRINKLER OF A TYPE HAVING THE SMALLEST K-FACTOR SHALL BE PROVIDED TO TEST EACH WATERFLOW ALARM DEVICE OF EACH SYSTEM
 - 5 NFPA 13 2016 8.16.2.5.2. AN AUXILIARY DRAIN WITH A GLOBE VALVE OF NOT LESS THAN 1 INCH, PIPED TO AN ACCESSIBLE LOCATION SHALL BE INSTALLED.
 - 6 H-2 STORAGE TO HAVE WALLS THAT EXTEND TO THE DECK. SPRINKLER COVERAGE CALCULATED AT EXTRA HAZARD GRP. II WITH A DENSITY OF .40 GPM/SQ.FT. WITH HEAD COVERAGE OF NO MORE THAN 100 SQ. FT.
 - 7 NFPA 13 2016 12.1.4.1 THE INSTALLATION OF HVLS FANS IN BUILDINGS EQUIPPED WITH SPRINKLERS, INCLUDING ESFR SPRINKLERS, SHALL COMPLY WITH THE FOLLOWING:
 - (1) THE MAXIMUM FAN DIAMETER SHALL BE 24FT
 - (2) THE HVLS FAN SHALL BE CENTERED APPROXIMATELY BETWEEN FOUR ADJACENT SPRINKLERS.
 - (3) THE VERTICAL CLEARANCE FROM THE HVLS FAN TO SPRINKLER DEFLECTOR SHALL BE A MINIMUM OF 3 FT
 - (4) ALL HVLS FANS SHALL BE INTERLOCKED TO SHUT DOWN IMMEDIATELY UPON RECEIVING A WATERFLOW SIGNAL FROM THE ALARM SYSTEM IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 72 2016

FIRE PROTECTION PLAN - SECTION A
SCALE: 1/8" = 1'-0"



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**INDIAN RIVER COUNTY LANDFILL
HOUSEHOLD HAZARDOUS WASTE
AND RECYCLING FACILITY**
Indian River County, Florida

NO.	REVISIONS	DATE
1	FIELD COORDINATION	05.15.2021
2	FIELD COORDINATION	11.05.2021

JOB NO.
2016

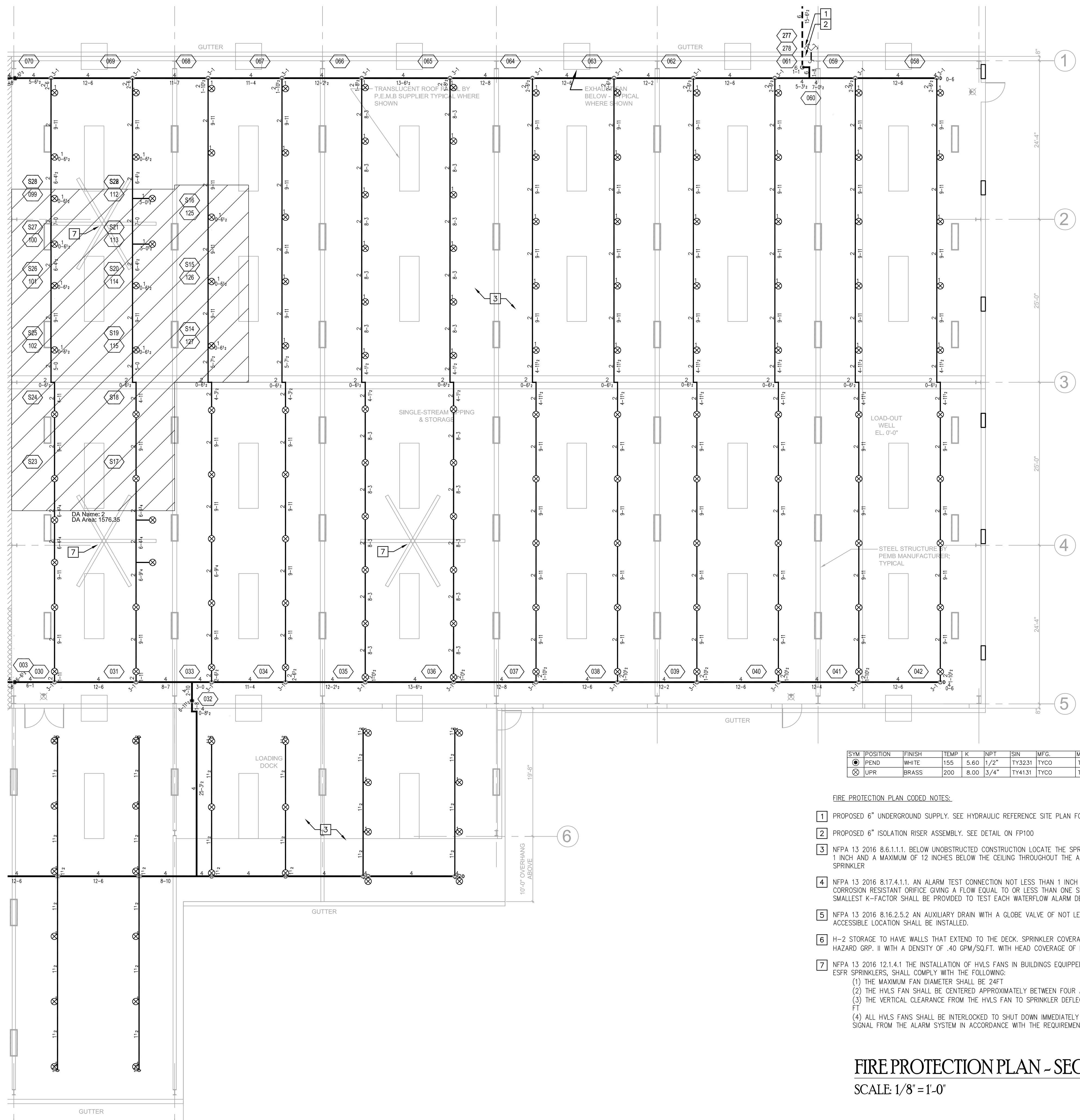
ISSUE DATE:
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SHEET TITLE
FIRE PROTECTION PLAN - SECTION A
SHEET NO.
FP101

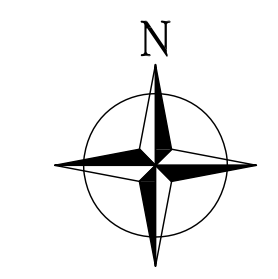
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SYM	POSITION	FINISH	TEMP	K	RP T	ISN	MF G	MODEL #
●	PEND	WHITE	155	5.60	1/2"	TY3231	TYCO	TY-FRB
⊗	UPR	BRASS	200	8.00	3/4"	TY4131	TYCO	TY-FRB

- FIRE PROTECTION PLAN CODED NOTES:**
- PROPOSED 6" UNDERGROUND SUPPLY. SEE HYDRAULIC REFERENCE SITE PLAN FOR CONTINUATION
 - PROPOSED 6" ISOLATION RISER ASSEMBLY. SEE DETAIL ON FP100
 - NFPA 13 2016 8.6.1.1.1. BELOW UNOBSTRUCTED CONSTRUCTION LOCATE THE SPRINKLER DEFLECTOR A MINIMUM OF 1 INCH AND A MAXIMUM OF 12 INCHES BELOW THE CEILING THROUGHOUT THE AREA OF COVERAGE OF THE SPRINKLER
 - NFPA 13 2016 8.17.4.1.1. AN ALARM TEST CONNECTION NOT LESS THAN 1 INCH TERMINATING IN A SMOOTH BORE CORROSION RESISTANT ORIFICE GIVING A FLOW EQUAL TO OR LESS THAN ONE SPRINKLER OF A TYPE HAVING THE SMALLEST K-FACTOR SHALL BE PROVIDED TO TEST EACH WATERFLOW ALARM DEVICE OF EACH SYSTEM
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 - ALL HVLS FANS SHALL BE INTERLOCKED TO SHUT DOWN IMMEDIATELY UPON RECEIVING A WATERFLOW SIGNAL FROM THE ALARM SYSTEM IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 72 2016

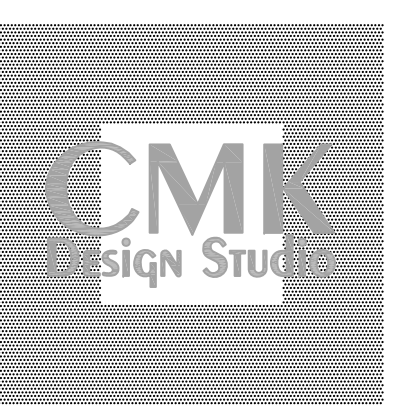
FIRE PROTECTION PLAN - SECTION B
 SCALE 1/8" = 1'-0"



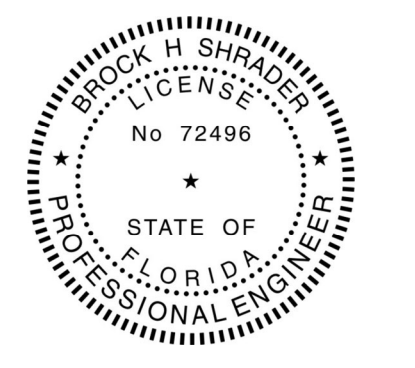
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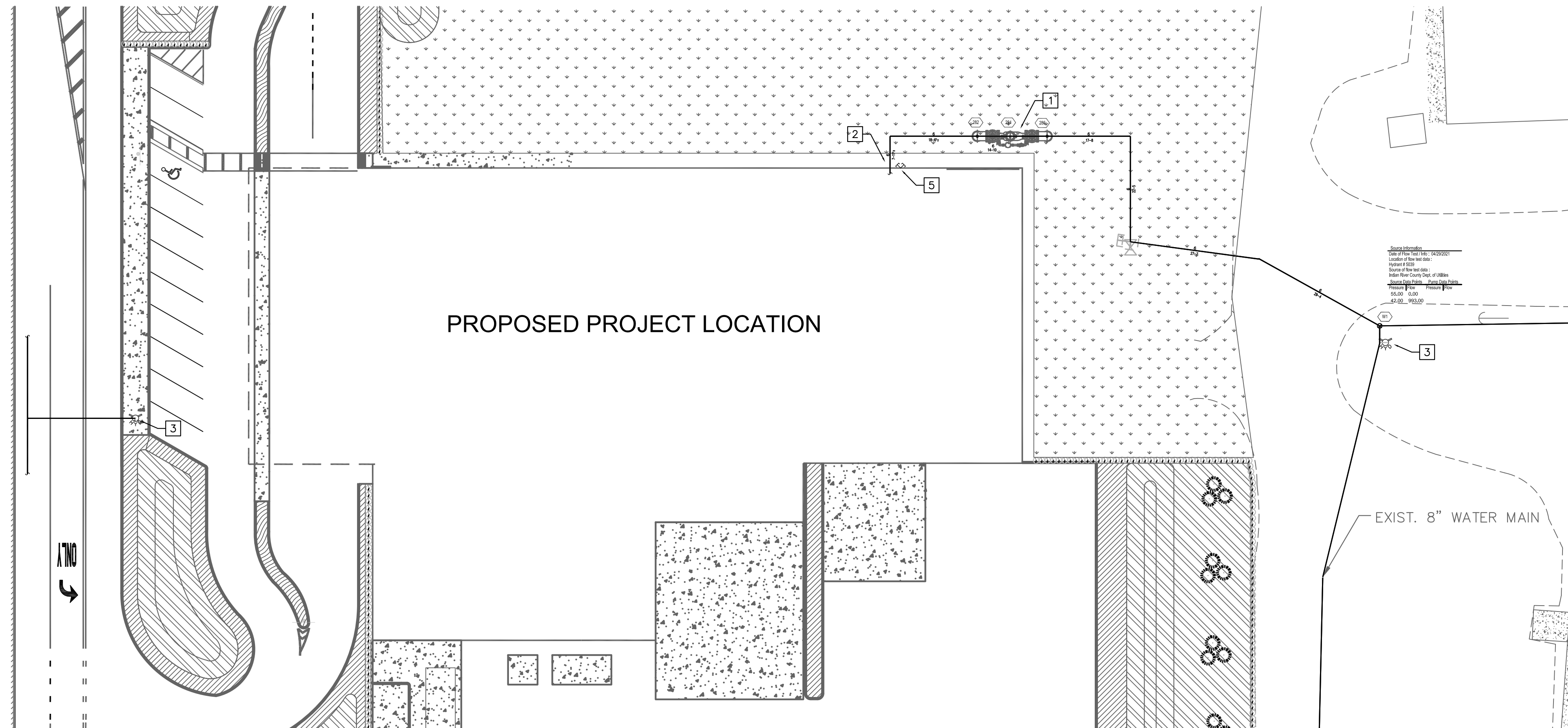
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JOB NO.
2016
 ISSUE DATE:
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SHEET TITLE
FIRE PROTECTION PLAN - SECTION B
 SHEET NO.
FP102

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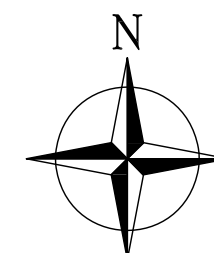


FIRE PROTECTION PLAN CODED NOTES:

- 1 PROPOSED 6" DDCVA WITH BOLLARDS. SEE CIVIL ENGINEERING DRAWINGS FOR DETAILS
- 2 FOR CONTINUATION OF SYSTEM PIPE INTO BUILDING, SEE FP101-FP102
- 3 EXISTING FIRE HYDRANT. SEE CIVIL ENGINEERING DRAWINGS FOR DETAILS
- 4 PROPOSED FIRE HYDRANT. SEE CIVIL ENGINEERING DRAWINGS FOR DETAILS
- 4 WALL-MOUNTED FDC. SEE RISER DETAIL ON FP100

DRAWING NOTE:
 THE UNDERGROUND SITE WATER PIPING IS SHOWN IN ACCORDANCE WITH FAC 61G15-32 TO REFERENCE THE FIRE PROTECTION SYSTEM IN ITS ENTIRETY, INCLUDING HYDRAULIC NOTE POINT LOCATIONS. IT IS THE RESPONSIBILITY OF THE CIVIL ENGINEER OF RECORD TO DESIGN THE UNDERGROUND SITE WATER PIPING AND TO LOCATE WITH DETAIL ALL UNDERGROUND APPURTENANCES PER LOCAL AUTHORITY HAVING JURISDICTION REQUIREMENTS.

HYDRAULIC SITE REFERENCE PLAN
 SCALE: 1/16" = 1'-0"



C.O.A. #26759

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SHEET TITLE
HYDRAULIC SITE REFERENCE PLAN

SHEET NO.
FP103

JOB NO.
2016

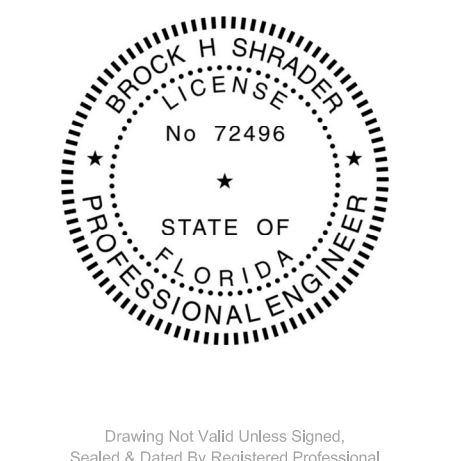
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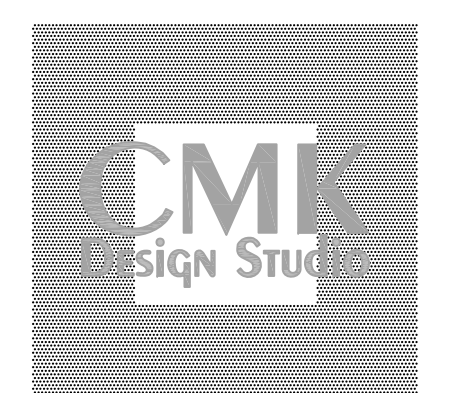
Indian River County, Florida



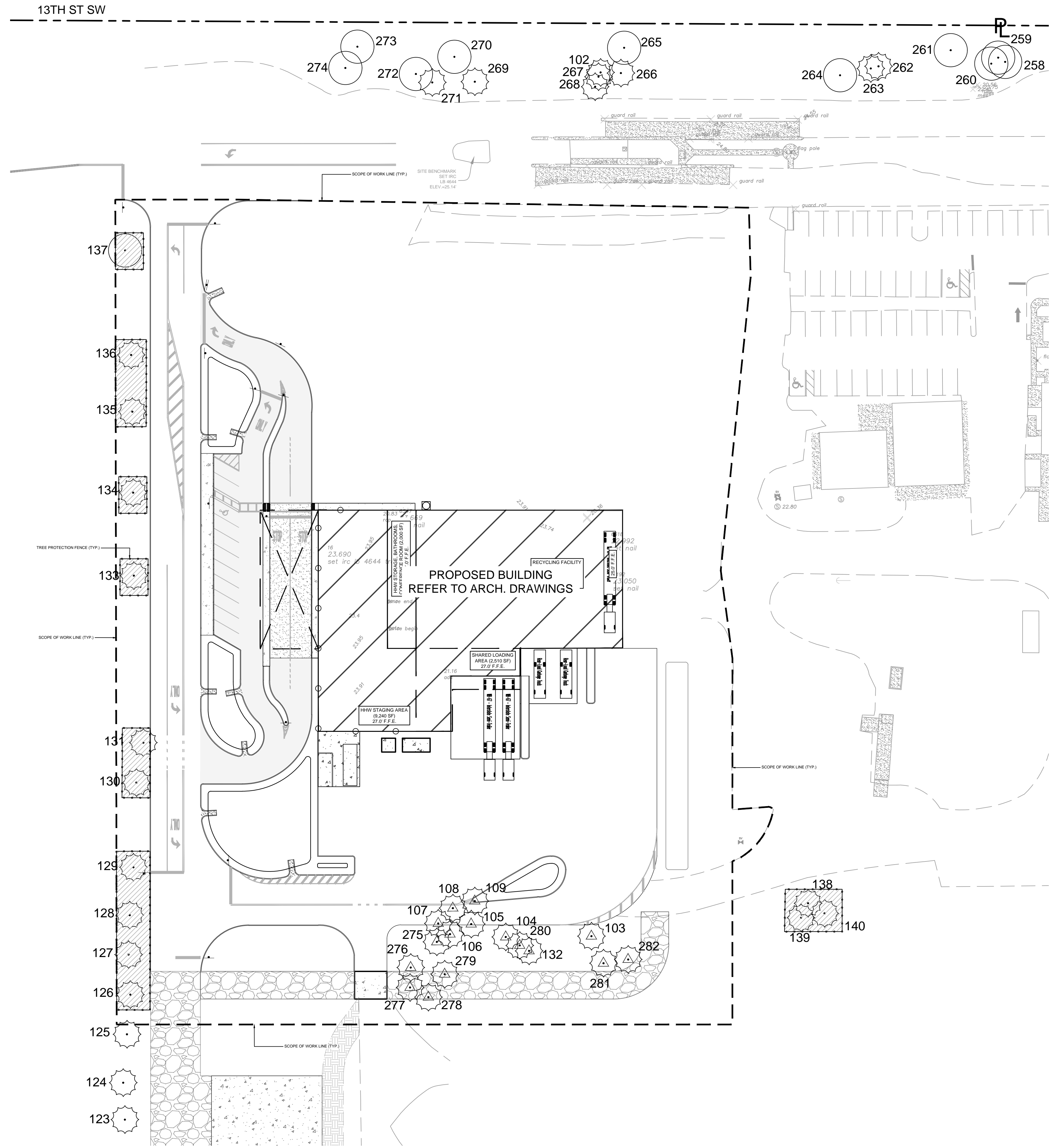
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 marcos@cmkdesignstudio.com



Plotted By: Ftpi, Carlos, Sheet Set: IRC LANDFILL, Layout: L-100, TREE DISPOSITION, November 16, 2021, 03:20:49pm, \\kimley-horn.com\F\A\MIA\Civil\143228000 - IRC HHW and Recycling Facility\Landscaping\CADD\PlanSheets\L-100 TREE DISPOSITION.dwg
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TREE LIST

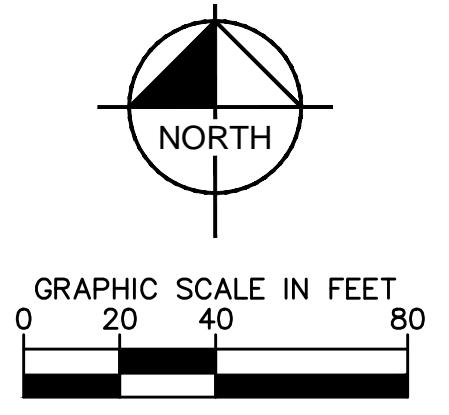
SURVEY TREE #	COMMON NAME	HEIGHT (FT)	DBH (IN)	CANOPY (FT)	CONDITION	DISPOSITION
102	Palm	10	21	11	GOOD	REMAN
103	Palm	14	18.5	10	GOOD	RELOCATE
104	Palm	14	19	11	GOOD	RELOCATE
105	Palm	16	22	11	GOOD	RELOCATE
106	Palm	14	17	9	GOOD	RELOCATE
107	Palm	14	21	10	GOOD	RELOCATE
108	Palm	14	21	10	GOOD	RELOCATE
109	Palm	14	20	10	GOOD	RELOCATE
110	Palm	8	25	9	GOOD	REMAN
111	Palm	10	24	10	GOOD	REMAN
112	Palm	10	18	13	MODERATE	REMAN
113	Palm	8	20	11	GOOD	REMAN
114	Palm	6	16	9	MODERATE	REMAN
115	Palm	12	20	13	GOOD	REMAN
116	Palm	6	17	9	GOOD	REMAN
117	Palm	8	21	12	GOOD	REMAN
118	Palm	10	20	13	GOOD	REMAN
119	Palm	10	26	16	GOOD	REMAN
120	Palm	8	19	10	GOOD	REMAN
121	Palm	12	19	13	GOOD	REMAN
122	Palm	10	27	18	GOOD	REMAN
123	Palm	14	19	13	GOOD	REMAN
124	Palm	12	20	13	GOOD	REMAN
125	Palm	10	21	11	GOOD	REMAN
126	Palm	8	17	11	GOOD	REMAN
127	Palm	10	18	9	GOOD	REMAN
128	Palm	10	16	8	GOOD	REMAN
129	Palm	10	18	7	GOOD	REMAN
130	Palm	8	24	14	GOOD	REMAN
131	Palm	10	10	18	GOOD	REMAN
132	Palm	10	18	8	MODERATE	RELOCATE
133	Palm	8	22	20	GOOD	REMAN
134	Palm	8	18	8	GOOD	REMAN
135	Palm	8	22	17	GOOD	REMAN
136	Palm	8	17	10	GOOD	REMAN
137	Oak Tree	10	21	16	GOOD	REMAN
138	Palm	12	16.5	8	GOOD	REMAN
139	Palm	10	16.5	8	GOOD	REMAN
140	Palm	16	16.5	10	GOOD	REMAN
258	Pine Tree	10	45	9	GOOD	REMAN
259	Pine Tree	10	30	12	GOOD	REMAN
260	Pine Tree	14	54	22	GOOD	REMAN
261	Pine Tree	18	53	28	GOOD	REMAN
262	Palm	12	19	8	GOOD	REMAN
263	Palm	12	18	8	GOOD	REMAN
264	Pine Tree	20	49	33	GOOD	REMAN
265	Pine Tree	20	44	26	GOOD	REMAN
266	Palm	14	26	10	GOOD	REMAN
267	Palm	10	18	8	GOOD	REMAN
268	Palm	10	17	8	GOOD	REMAN
269	Palm	15	21	9	GOOD	REMAN
270	Pine Tree	18	43	25	GOOD	REMAN
271	Palm	12	23	11	GOOD	REMAN
272	Pine Tree	12	45	12	GOOD	REMAN
273	Pine Tree	15	43	12	POOR	REMAN
274	Pine Tree	12	47	18	MODERATE	REMAN
275	Palm	12	20	10	GOOD	RELOCATE
276	Palm	12	21	10	GOOD	RELOCATE
277	Palm	12	21	11	GOOD	RELOCATE
278	Palm	12	19.5	10	GOOD	RELOCATE
279	Palm	12	18	10	GOOD	RELOCATE
280	Palm	12	27	12	GOOD	RELOCATE
281	Palm	12	19	10	GOOD	RELOCATE
282	Palm	12	25	12	GOOD	RELOCATE

NOTE:

INFORMATION UTILIZED IN PREPARATION OF THE TREE LIST ASCERTAINED FROM AND RELIANT UPON THE 1325 74th AVENUE SW, VERO BEACH, FL. BOUNDARY SURVEY PREPARED BY MASTELLER, MOLER & TAYLOR INC. DATED 05/18/20.

TREE DISPOSITION GRAPHIC LEGEND

SYMBOL	DESCRIPTION
	EXISTING TREE TO REMAIN
	TREE #
	EXISTING PALM TO REMAIN
	EXISTING PALM TO RELOCATE
	PALM #
	TREE PROTECTION FENCE



LEGEND

	RIGHT-OF-WAY LINE / PROPERTY LINE
	PROP. BUILDING OUTLINE
	PROP. ASPHALT
	PROP. CONC.
	PROP. GRAVEL ROAD
	SCOPE OF WORK LINE

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 355 ALHAMBRA CIRCLE, SUITE 1400, CORAL GABLES, FL 33134
 PHONE: 305-673-2025
 WWW.KIMLEY-HORN.COM REGISTRY 696

IRC LANDFILL
 PREPARED FOR
INDIAN RIVER COUNTY
 INDIAN RIVER COUNTY

TREE DISPOSITION PLAN

NO.	REVISIONS	DATE	BY

KHA PROJECT
14-3228000

DATE
JULY 2021

SCALE AS SHOWN

DESIGNED BY
NW

DRAWN BY
NW

CHECKED BY
NW

SHEET NUMBER
L-100

Sunshine 811

Call 811 or www.sunshine811.com two full business days before digging to have utilities located and marked.
 Check positive response codes before you dig!

TREE REMOVAL/TRANSPLANT SPECIFICATIONS

PART 1 - EXPLANATION OF NATURAL RESOURCE PRESERVATION PROCEDURES

- The sequence of operation is critical to the protection of the trees.
- Tree canopy pruning is to compensate for root loss and damage.
 - Fertilization is to stimulate root systems to heal quickly and grow back in root-pruned areas. It also produces faster availability of food to a root system that is less efficient due to the damage incurred.
 - Root pruning is to remove the roots with a trenching procedure that is less damaging to the roots than regular construction.
 - Mulching is to increase moisture-holding capacity and keep the temperature of the soil more constant.

PART 2 - DEFINITIONS

- Combo Fence - Combination silt and natural resource protection fence (see detail).
- Critical Root Zone - The mass of roots surrounding a tree that is required by the tree to live. The critical root zone is often much larger than the canopy. Shown on the plans as dashed circles.
- DBH - Diameter Breast High - Indicates the location on the trunk, approximately 4.5' above ground, to measure the diameter of a tree.
- Grade - Refers specifically to grade on the Significant Tree or Transplant Schedule. The grade of a tree refers to the overall health and appearance of the tree. The grades range from 'A' being excellent to 'D' being hazardous.
- Preserve Trees - Trees that are to be saved in place.
- Project Urban Forester - A representative, hired and paid for by the owner, that supervises the construction of the procedures shown on the natural resource plans.
- Protection Zones/Areas - Any area enclosed partially or completely by a fence shown on the natural resource plans.
- Spade Transplant - A tree transplanted using a tree spade machine.
- Transplanted Trees - Trees that are to be moved by hand, spade, crane or gantry to another location.

PART 3 - PRODUCTS FOR TREE TREATMENT

Every effort shall be made to utilize chemicals of an organic or biodegradable nature in order to offer the least impact to the natural environment. Contractor is responsible for mixing, applying, and disposal of all chemicals in accordance with strict adherence to manufacturer's directions, unless otherwise directed in these drawings.

- Chemical Treatments.
 - Recommended Fertilizer:
 - "XL Injecto Feed", product of Doggett Corp., Lebanon, New Jersey (908) 236-6335. Apply a 12/24/24 ratio with a dilution rate 1/3 more water than specified on bag.
 - Recommended Wetting Agent:
 - "APSA-80", product of Amway Corp. (800) 253-7088.
 - Mycorrhizal Treatment:
 - Plant Health Care, Inc. (800) 421-9051. Products of the same type from other sources shall not be excluded, provided they possess like physical and functional characteristics and are approved by the Project Landscape Architect.
 - Insecticide Treatments.
 - "Astro", a product of FMC Corporation. (800) 321-1362.
 - Fencing Materials.
 - Woven wire fence (Minimum 14.5 gauge maximum 6" mesh spacing).
 - Artic Vinyl Flagging, Color: International Orange. Forestry Suppliers Catalog (800) 647-5368. Artic Vinyl Flagging is required due to strength and longevity. No substitution without approval of Project Urban Forester.
 - 6" T-Bar Post.
 - T-Bar Post Caps.
 - Rebar Caps. Brilliant Orange mushroom type as manufactured by Mutual Industries North (800) 523-0888 or equal.
 - R-4 T-Bar Post Caps as manufactured by RammFence (800) 434-8455 or equal.

PART 4 - EXECUTION

- Tree Canopy Pruning Operation
 - Trees to be pruned shall include only trees affected by construction or as designated on Significant Tree or Transplant Schedule. This item is to be coordinated by the Project Urban Forester.
 - All pruning shall be done in accordance with ANSI A300 (Part 1) Pruning.
 - Certified Arborist shall perform all pruning.
 - Pruning shall consist of the following methods:
 - Cleaning, see Sect. 5.6.1.
 - Interfering branch removal.
 - Raising, see Sect. 5.6.4. Height to be 6' (min.) in parking lot areas only.
- Fertilization Operation
 - Only trees affected by construction or as shown on the Tree Removal Plan shall be treated.
 - Trees specified to receive fertilizer shall be treated in the fall of 2008. Preserve Tree Injectable Fertilizer Treatment. See detail sheet.
 - Mix fertilizer with a dilution rate 1/3 more water than label instructions into a tank with agitation capability (15lbs. = 133 Gallons).
 - Mix Wetting Agent at a rate of 5 oz. Per 100 gallons of fertilizer solution into same tank with fertilizer. Agitate mix.
 - Inject the mixture with a hydraulic injection system set at 100 to 150 p.s.i. for sandy soils, 200 p.s.i. for silt/clay soils, into the upper 6-12 inches of soil with a soil probe. Inject at the rate of one third (1/3) gallon at each injection site.
 - Critical Root Zone areas shall be injected, where possible, in the Critical Root Zone area plus 2' beyond Critical Root Zone, but not beyond Root Prunes. See detail.
 - Fertilizer shall be installed prior to installation of any aeration systems. AT THE REQUEST OF THE SPECIFIER, EMPTY PRODUCT BAGS TO BE RETURNED TO THE SPECIFIER FOR PROOF OF USE.
 - Transplant Injectable Fertilizer Treatment.
 - Mix fertilizer with a dilution rate 1/3 more water than label instructions into a tank with agitation capability (15lbs. = 133 Gallons).
 - Mix Wetting Agent at a rate of 5 oz. Per 100 gallons of fertilizer solution into same tank with fertilizer. Agitate mix.
 - Inject the mixture with a hydraulic injection system set at 100 to 150 p.s.i. for sandy soils, 200 p.s.i. for silt/clay soils, into the upper 6-12 inches of soil with a soil probe. Inject at the rate of one third (1/3) gallon at each injection site.
 - See transplant details on this sheet for injection locations. EMPTY PRODUCT BAGS TO BE STOCKPILED FOR INSPECTION BY PROJECT LANDSCAPE ARCHITECT PRIOR TO DISPOSAL.
 - Transplant Inoculant & Biostimulant. See Detail Sheet.
 - Use one 3 oz. Packet of MycorTree Tree Saver Transplant Mycorrhizal Transplant Inoculant for every 1-foot diameter of root ball. Mix inoculant in 10' wide topsoil ring around the root ball.
 - Mix one 4 oz. Bag of MycorTree Tree Saver Injectable Mycorrhizal Inoculant and 4 packs (to equal 1 pound) PHC BioPack per 100 gallons of water.
 - Agitate for 10 minutes.
 - Inject the mixture with a hydraulic injection system set at 100 to 150 p.s.i. for sandy soils, 200 p.s.i. for silt/clay soils, into the upper 6-12 inches of soil with a soil probe. Inject at the rate of one third (1/3) gallon at each injection site. See transplant details on this sheet for injection locations. EMPTY PRODUCT BAGS TO BE STOCKPILED FOR INSPECTION BY PROJECT LANDSCAPE ARCHITECT PRIOR TO DISPOSAL.
 - Transplant Maintenance
 - Approximately one year after planting, the Tree Relocation Contractor shall refertilize all transplants utilizing the same procedure.
- Insecticide Operation
 - Apply "Astro" as a topical solution if recommended by Project Landscape Architect or by these plans. Notify Project Landscape Architect if an infestation is noticed. Apply around base of trunk to soil line, trunk and any limb 1/3 the size of the trunk to 25'-30' high. Insure complete coverage. Reapply "Astro" 2-3 months after initial application utilizing same procedure.
 - Follow all manufacturers' recommendations concerning application when applying "Astro". Read all warning labels. Any pets, as well as, the pets food and water bowls should be removed from the area and any swimming pools should be covered. Coordinate with Project Urban Forester for further instruction.
- Root Pruning/Trenching Operation
 - Trenching locations shall be approved in the field by the Project Landscape Architect.
 - Trenching equipment that will turn at high RPM's is preferred. Trenching equipment is to be used to perform all root pruning operations. A minimum depth of three feet is required. Clean cut roots in trench on tree side with loppers or chain saw after trenching is complete.
 - The trench shall be backfilled and compacted immediately.
- Natural Resource Protection (or Tree Protection) Fencing
 - See details for types and locations.
 - Fencing is to be located accurately per plan by General Contractors Surveyor.
- Tree Removals
 - Natural Resource Contractor shall remove and discard all trees shown on the tree removal plan to be removed, see Existing Tree Schedule. All trees shown to be removed shall be felled with a chain saw and stump ground 6" below surface. Any tree shown to be removed and is in an area where compaction is critical the tree shall be felled with a chain saw and stump removed by Clearing Contractor. Care must be taken not to damage trees marked for

- Clearing Contractor is to clear all remaining trees after the Natural Resource Fencing is installed. If fence is damaged, repair is to be performed immediately. See Fence Penalties. Care must be taken not to damage trees marked for preservation.
- All wood from removals shall be hauled from the site the same day, except for tops. All tops are to be mulched and stockpiled or hauled directly to mulched areas, if scheduling permits. (See landscape plans for mulching). All excess wood chips should be hauled off site after landscaping is complete.
- Clearing Contractor is to haul off all stumps.
- All burn pits if applicable must be approved by the Project Urban Forester and owner.

G. Topsoil

- All clean backfill/clean topsoil necessary for transplant operations shall fall within the limits of the planting specifications, located elsewhere in the contract documents.

H. Machine Dug Transplant Operation

- Dig transplant-receiving hole.
- Set spade dug root ball into receiving hole 4"-6" above existing grade.
- Wash sand or topsoil into air pockets between root ball and receiving hole.
- Install topsoil ring, 4" high, 10" wide, around perimeter of root ball. Mix MycorTree Tree Saver Mycorrhizal Transplant Inoculant into topsoil ring. See Part 4 Section B for procedure.
- Install 4"-6" mulch from perimeter of root ball to within 6" of tree trunk.
- Cover topsoil ring with 1" of mulch and extend mulch 4"-6" deep, 6" away from perimeter of root ball.
- Water transplant.

I. Holding Area for Transplants

- Coordinate with Owner's Representative for location. Coordinate construction and scheduling with Owner's Representative.
- Install protection fencing surrounding holding area after all transplants have been moved unless otherwise instructed by Owner's Representative.
- Transplants shall be placed into the soil at the holding area unless the soil is deemed unacceptable by Project Landscape Architect. If unacceptable soil is encountered, the holding area shall be relocated to a new location or excavated to a depth determined by Project Landscape Architect and new approved topsoil installed. Transplants shall be backfilled with approved topsoil.
- Install three (3) 12' tensiometers. One on opposite corners and one in the middle of the holding area. Project Landscape Architect shall adjust locations of tensiometers per observations in the field.
- General Contractor shall supply temporary irrigation to the holding area. Temporary irrigation shall consist of above the ground PVC or Polyethylene pipe, spray or rotor heads (with head to head coverage) and a controller. Set schedule per Part 7.

PART 5 - PENALTIES

A. Repair of Damaged Trees

- If any damage to trees or other natural resources should occur by accident or negligence during the construction period, the Project Urban Forester shall appraise the damage and make recommendations to the owner for repair by the General Contractor.
- If any tree that is designated to be saved is deemed substantially damaged or dead due to construction damage, at the sole discretion of Project Landscape Architect, the following penalties will apply:
 - Trees 1" - 12" of trunk diameter, measured at 1' from the ground will be valued at \$300.00 per diameter inch.
 - Trees 13" and above of trunk diameter measured at 4.5' from the ground will be valued at \$400.00 per diameter inch.
 - If any tree designated to be saved is removed from the site without permission of the owner's representative, the penalty will be \$600.00 per inch.

B. Repair of Damaged Natural Resource Fences

- If any damage to Natural Resource Fences should occur by accident or negligence, the General Contractor will be responsible for immediate repairs of the initial damage. Fines will be imposed as follows:
 - First time offense, a fine of \$200.00 will be imposed.
 - In the event the fence is not repaired within 24 hours to the Owner's Representative's satisfaction, an additional fine of \$100.00 per day will be imposed, until the fence is satisfactorily repaired.
 - In the event a natural resource is damaged due to fence being down, a fine of \$200.00 plus the cost of repair or replacement of the natural resource as appraised by the Project Landscape Architect will be imposed.

PART 6 - NATURAL RESOURCE PROTECTION SEQUENCE

A. The sequence of tree treatment and preservation measures shall be:

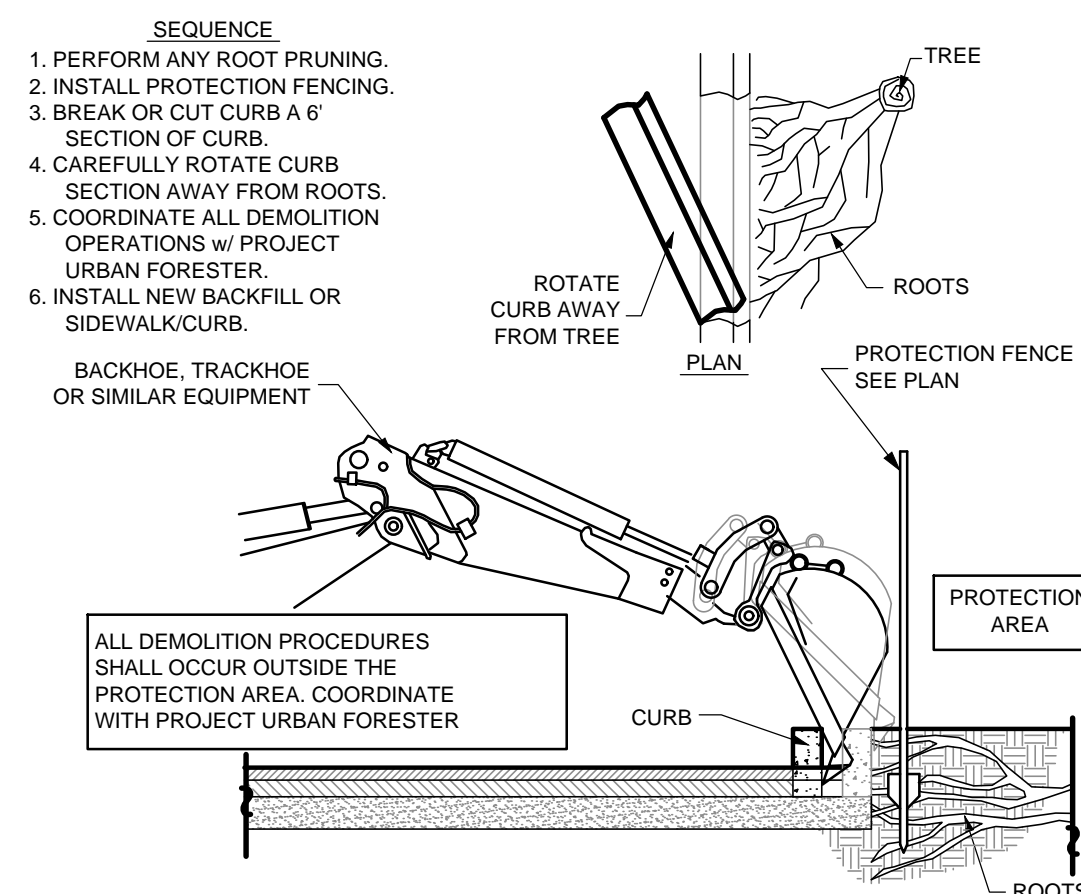
- Root Pruning and Root Barriers.
- Natural Resource Fencing.
- Clearing and Grading.
- Tree Pruning.
- Fertilization.
- Insecticide. General Contractor's Surveyor shall stake all site improvements in order to facilitate accurate location of trenching and fencing operations.
- Maintain and repair Natural Resource fencing during site construction operations.
- General Contractor's access to Fenced protection areas will be permitted only with approval of owner's representative.
- Perform any excavation or grading required within the fenced root zone areas by hand. This operation is to be supervised by the Project Landscape Architect or Owner's Representative.
- Limit required grading to 3" cut or fill within the fenced tree root zone areas. All grading to be supervised by the Owner's Representative.
- Clear by hand designated trees, shrubs, vines and groundcover from protected root zone areas.
- Do not install conduit, sprinklers, or any utility line in any critical root zone area without the approval of the Project Landscape Architect.

PART 7 - IRRIGATION

Every effort shall be made to water the transplants as shown below. The Landscape Architect and/or Owner's Representative shall inspect all irrigation zones during the initial irrigation months and adjust settings accordingly to insure proper watering. Water in all transplants immediately after planting. Tree Relocation Contractor shall water by hand or by temporary irrigation, all transplants after planting as required by Landscape Architect or Owner's Representative until permanent irrigation is installed and operating. Irrigation Contractor shall install systems and set controllers as shown below.

A. Transplant Irrigation Zones & Holding Area Zones

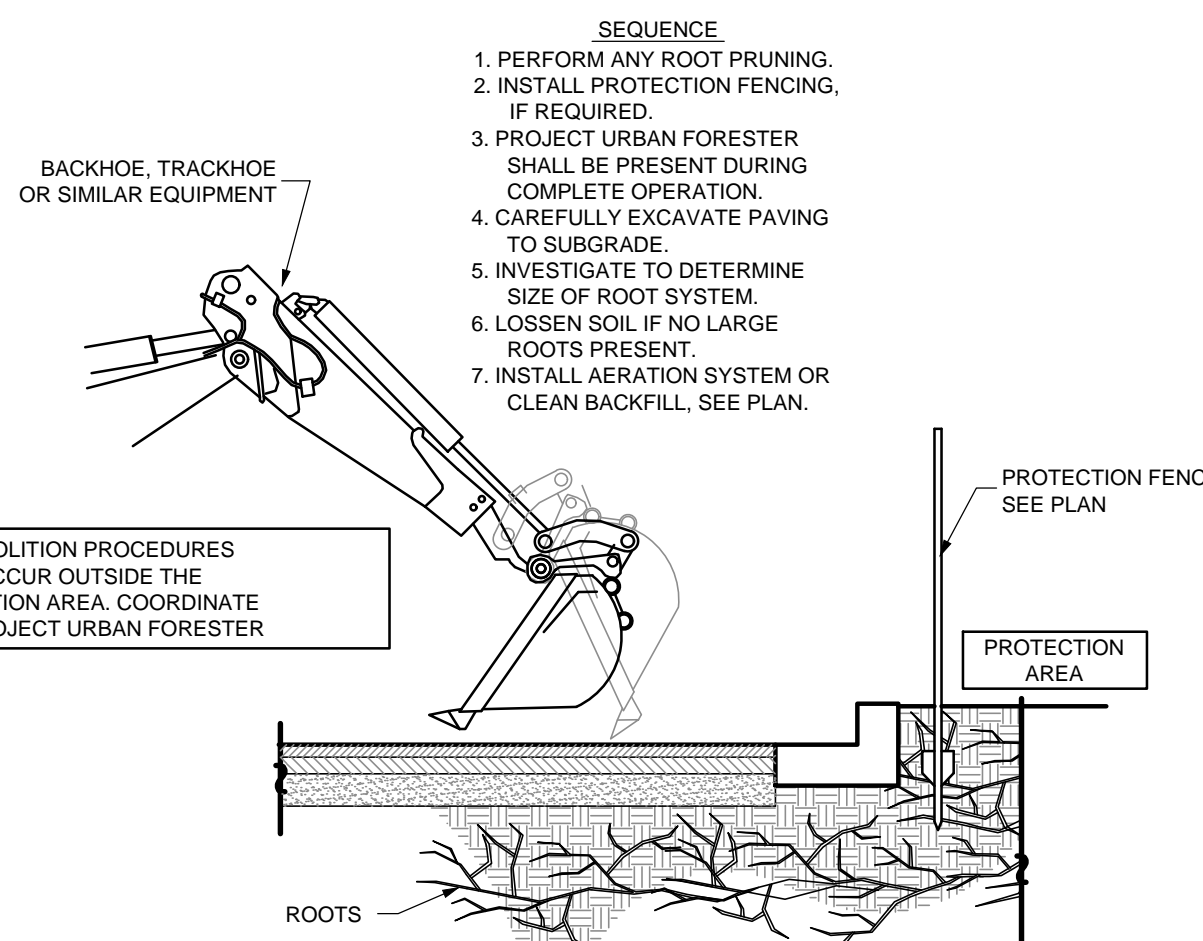
- Use the following watering schedule for all transplants:
- Set the controller to water for the following limits:
 - First 90 days = 15 minutes, 4 times a week. (0.5" per application = 2" per week)
 - 90 days - 270 days = 2 times a week (1" per application = 2" per week)
 - 270 days on = 2 times a week (0.5" per application = 1" per week)Irrigation within current watering restrictions, as applicable.



(A)

DEMOLITION PROCEDURE - CURB

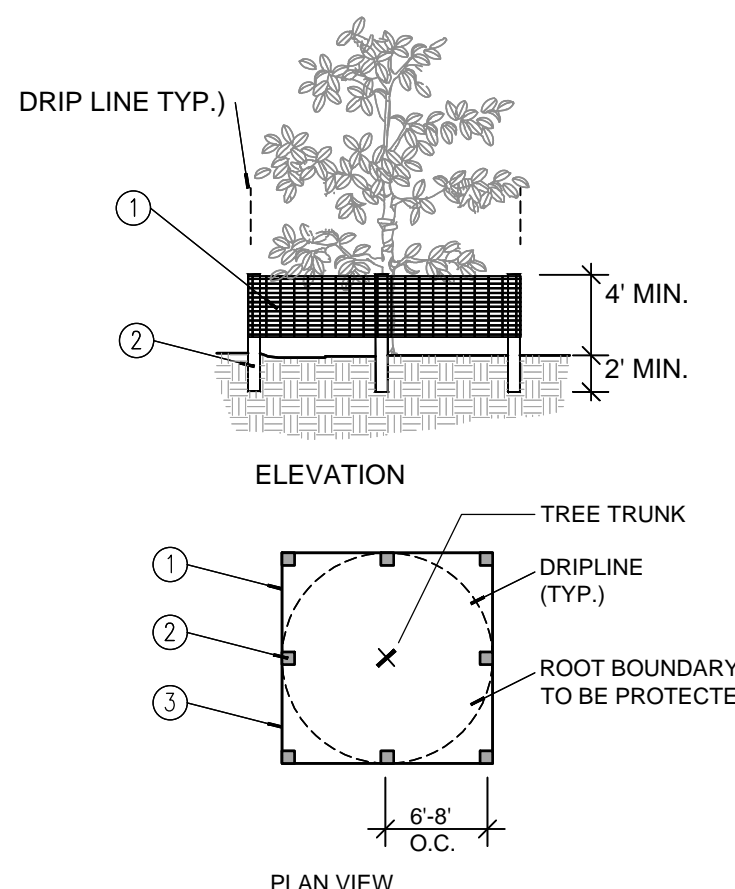
NTS



(B)

DEMOLITION PROCEDURE - PAVEMENT

NTS



(C)

TREE PROTECTION FENCE/BARRIER DETAIL

NTS

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KHA PROJECT 14-3228000		DATE JULY 2021
SCALE AS SHOWN		DESIGNED BY NW
DRAWN BY CT		CHECKED BY NW

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW VINCENT WISNIEWSKI LAG667406 ON DATE ADJACENT TO SEAL.

Kimley»Horn
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355 ALHAMBRA CIRCLE, SUITE 1400, CORAL GABLES, FL 33134
PHONE: 305-673-2025
WWW.KIMLEY-HORN.COM REGISTRY 696

REGISTERED PROFESSIONAL ENGINEER
No. LA6667406
STATE
11/17/2021
FLORIDA

TREE DISPOSITION NOTES & DETAILS

IRC LANDFILL PREPARED FOR INDIAN RIVER COUNTY INDIAN RIVER COUNTY



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Check positive response codes before you dig!

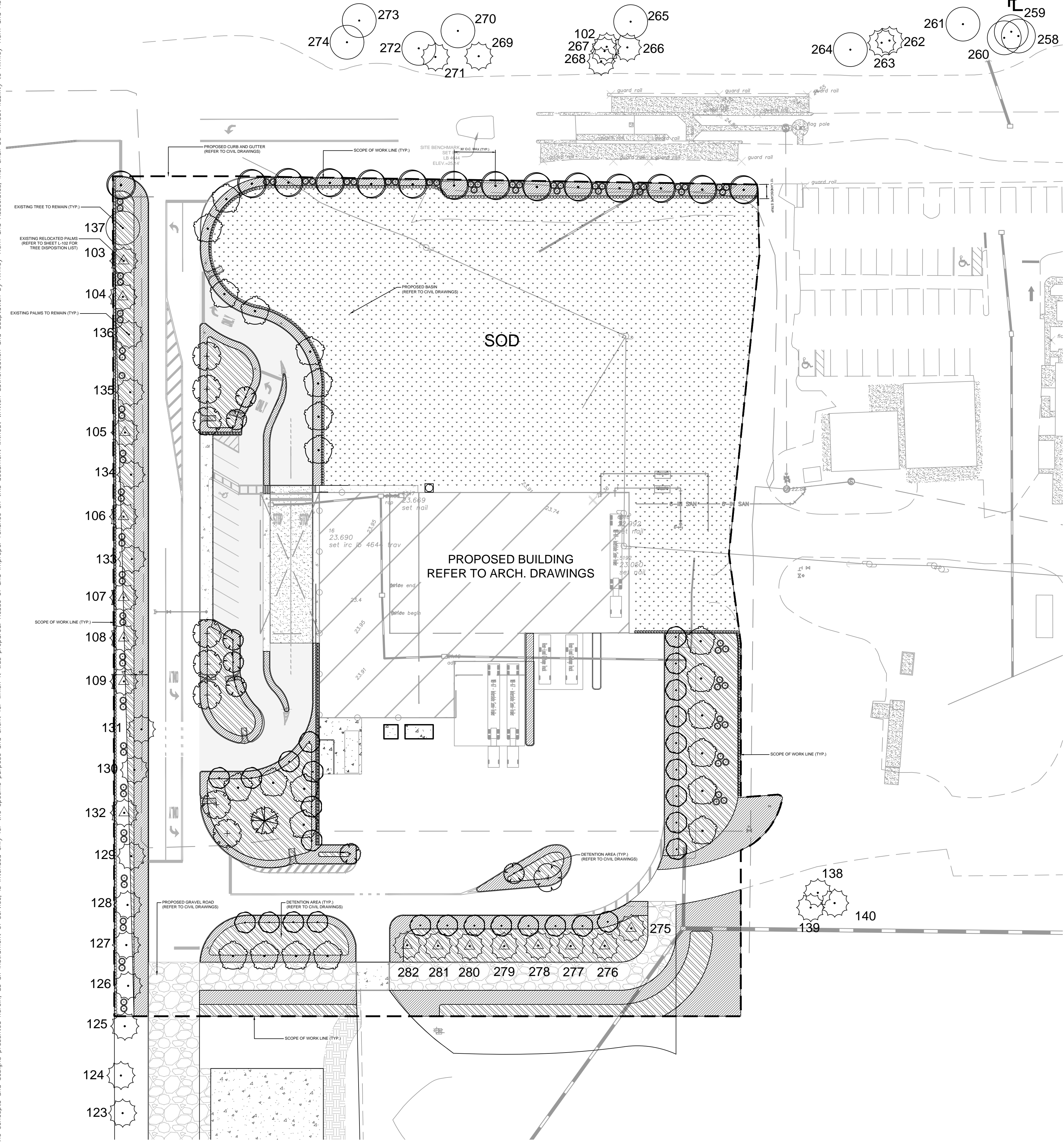
SHEET NUMBER

L-150

Plotted By: Frip, Carlos. Sheet Set: IRC LANDFILL. Layout: L-150 TREE NOTES. November 16, 2021. 03:20:51pm. Kimley-Horn.com. EL MIA MIE Civil. 143228000. IRC HHW and Recycling Facility Landscaping CAD. Plan Sheets L-150 TREE DISPOSITION.dwg. This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

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13TH ST SW



INDIAN RIVER COUNTY LANDSCAPE CALCULATIONS

Zoning District: A-1 Net Lot Area: 6.2 Acres or 268,536 SF*

OPEN SPACE
 A. Square feet of open space required by Section 911.06:
 Open space area = 268,536 x 6% = 16,112 SF
 B. Maximum area provided = 16,112 SF

LAWN AREA CALCULATION
 A. Total square feet of landscape open space required by Section 911.06 = 16,112 SF
 B. Maximum area provided = 16,112 SF

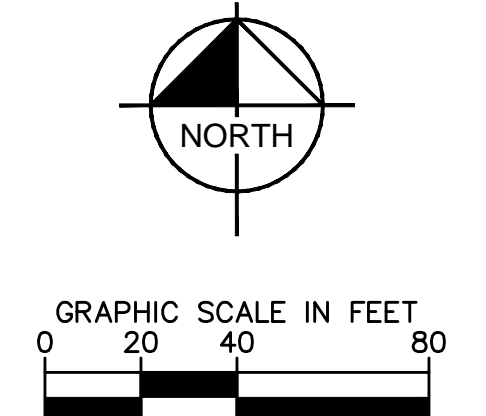
NON-VEHICULAR AREA LANDSCAPING
 A. The number of canopy trees required per Section 926.10 (1 tree/3000 SF of non-vehicular open space) = 46.40 trees per net lot area
 B. 30% palm trees allowed (three palms = one tree) = 15 "trees"
 C. Percentage of native trees required = 50% = 7.5 trees
 D. Percentage of low maintenance and drought-tolerant trees = 50% = 7.5 trees

PARKING AREA INTERIOR LANDSCAPING
 A. Total square footage of paved area per Section 926.09 (driving lanes, driveways, parking spaces, loading areas) = 16,122 SF
 B. Minimum interior landscaping in parking areas = 12% = 1,935 SF

PLANTING ALONG ROADWAYS - NORTH
 A. Trees along Exclusive Driveway per Section 926.09 (3.3 Canopy Trees, 6.8 Understory Trees per 100 LF):
 422 linear feet along north driveway/100 x 3.3 Canopy Trees = 1392.6 trees
 422 linear feet along north driveway/100 x 6.8 Understory Trees = 2872.4 trees
 B. Total number of shrubs along the exclusive driveway = 1872.0 shrubs
 C. The number of shrubs required = 50% = the number of native shrubs required = 936.0 shrubs

PLANTING ALONG ROADWAYS - WEST
 A. Trees along Exclusive Driveway per Section 926.09 (3.3 Canopy Trees, 6.8 Understory Trees per 100 LF):
 597 linear feet along north driveway/100 x 3.3 Canopy Trees = 1970.1 trees
 597 linear feet along north driveway/100 x 6.8 Understory Trees = 4060.8 trees
 B. Total number of shrubs along the exclusive driveway = 2094.0 shrubs
 C. The number of shrubs required = 50% = the number of native shrubs required = 1047.0 shrubs

BUILDING PLANTING
 A. Total number of required building planting area (760 LF of Facade x 0.4 = 304 LF of Foundation planting):
 304 LF x 10 FT Avg. Depth Min. = 3040 SF of Planting required
 B. Canopy Trees (1 tree/50 SF of Required Planting Area) = 60.8 trees
 C. Understory Trees (1 tree/300 SF of Required Planting Area) = 10.1 trees
 D. Shrubs (15 Shrubs/100 SF of Required Planting Area) = 30.4 shrubs
 E. The number of shrubs required = 50% = the number of native shrubs required = 15.2 shrubs



TREE DISPOSITION GRAPHIC LEGEND

SYMBOL	DESCRIPTION
	EXISTING TREE TO REMAIN
	EXISTING PALM TO REMAIN
	EXISTING PALM TO RELOCATE
	TREE PROTECTION FENCE

LEGEND

	RIGHT-OF-WAY LINE / PROPERTY LINE
	PROP. BUILDING OUTLINE
	PROP. ASPHALT
	PROP. CONC.
	PROP. GRAVEL ROAD
	SCOPE OF WORK LINE

PLANT SCHEDULE

CANOPY TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	CAL / DBH	HT	SPRD	NATIVE	
	BS	22	BURSERIA SIMARUBA	GUMBO LIMBO	FG	2" DBH	12' HT. MIN. / 5' C.T. MIN.	4.5' MIN	YES	
	CS	7	CONOCARPUS ERECTUS SERICEUS	SILVER BUTTWOOD	FG	2" DBH	12' HT. MIN. / 5' C.T. MIN.	4.5' MIN	YES	
	CU	1	COCCOLOBA UVIFERA	SEA GRAPE	FG	2" DBH	12' HT. MIN. / 5' C.T. MIN.	4.5' MIN	YES	
	QV	8	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	FG	2" DBH	12' HT. MIN. / 5' C.T. MIN.	4.5' MIN	YES	
	TD	1	TAXODIUM DISTICHUM	BALD CYPRESS	FG	2" DBH	12' HT. MIN. / 5' C.T. MIN.	4.5' MIN	YES	
NARROW CANOPY TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	CAL / DBH	HT	SPRD	NATIVE	
	MF	28	MYRCIANTHES FRAGRANS	SIMPSON'S STOPPER	FG	2" DBH	12' HT. MIN. / 5' C.T. MIN.	4.5' MIN	YES	
STREET TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	CAL / DBH	HT	SPRD	NATIVE	
	QV2	14	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	FG	2" DBH	12' HT. MIN. / 5' C.T. MIN.	4.5' MIN	YES	
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SPACING	SIZE	NATIVE	DROUGHT TOLERANT	
	CR	308	CHRYSOBALANUS ICACO 'RED TIP'	RED TIP COCCOPLUM	CONT.	24" O.C.	24" HT MIN	YES	YES	
ROADWAY SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SPACING	SIZE	NATIVE	DROUGHT TOLERANT	
	MF2	427	MYRCIANTHES FRAGRANS	SIMPSON'S STOPPER	CONT.	24" O.C.	24" HT MIN	YES	YES	
UNDERSTORY TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SPACING	SIZE	NATIVE	DROUGHT TOLERANT	
	SR	85	SERENOA REPENS	SAW PALMETTO	CONT.	36" OC	36" HT MIN	YES	YES	
SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SPACING	SIZE	NATIVE	DROUGHT TOLERANT	SPACING
	CN	81	CLUSIA ROSEA 'NANA'	DWARF PITCH APPLE	CONT.	30" OC	18" HT MIN	YES	YES	30" o.c.
	TF	4,673	TRIPSACUM DACTYLOIDES	FAKAHATCHEE GRASS	CONT.	30" OC	18" HT.	YES	YES	30" o.c.
GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SPACING	SIZE	NATIVE	DROUGHT TOLERANT	
	AG	28,391 SF	ARACHIS GLABRATA	PERENNIAL PEANUT	SOD	SOD	SOD	NO	YES	
	PN	76,418 SF	PASPALUM NOTATUM	BAHIA GRASS	PALLET	SOD	SOD	NO	NO	

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REGISTERED LANDSCAPE ARCHITECT
 Matthew Vincent Wisniewski
 No. LA667406
 STATE OF FLORIDA
 11/17/2021

KHA PROJECT 143228000
 DATE JULY 2021
 SCALE AS SHOWN
 DESIGNED BY MW
 DRAWN BY CT
 CHECKED BY MW

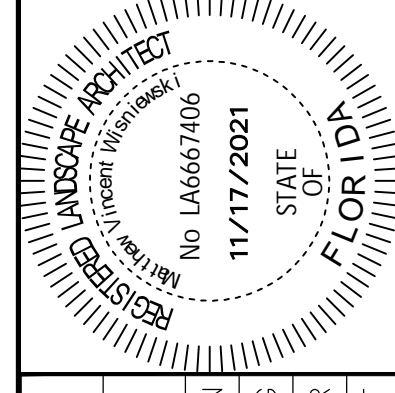
IRC LANDFILL PREPARED FOR INDIAN RIVER COUNTY
 LANDSCAPE PLAN
 SHEET NUMBER L-200

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Plotted By: F:\p1 Carlos_Sheet Set: IRC LANDFILL Layout: L-201 LANDSCAPE REQUIREMENTS November 16, 2021 03:21:45pm \\kimley-horn.com\F1\MIA\MIB_G\143228000 - IRC_HHW and Recycling Facility Landscape\CADD\PlanSheets\L-200 LANDSCAPE PLAN.dwg
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LANDSCAPING POINTS REQUIREMENTS		
SEC. 926.11 LANDSCAPE POINT SYSTEM. NOTWITHSTANDING THE OTHER PROVISIONS OF THIS CHAPTER, EACH LANDSCAPE PLAN MUST SATISFY A MINIMUM OF THIRTY (30) POINTS FROM THE FOLLOWING LIST OF OPTIONS:		
DESIGN OPTIONS	AVAILABLE POINTS	PROVIDED POINTS
IRRIGATION SYSTEM:		
1. MOISTURE SENSING CONTROLLER	5	
2. PLAN SUBMITTED WITH LOW, MODERATE AND HIGH WATER USAGE ZONES INDICATED	5	
SHRUBS:		
1. FIFTY (50) TO SEVENTY-FIVE (75) PERCENT OF TOTAL QUANTITY OF PLANTS RATED "VERY DROUGHT TOLERANT"	5	
2. SEVENTY-SIX (76) TO ONE HUNDRED (100) PERCENT OF TOTAL QUANTITY OF PLANTS RATED "VERY DROUGHT TOLERANT"	10	10
TREES:		
1. FIFTY (50) TO SEVENTY-FIVE (75) PERCENT OF TOTAL QUANTITY OF TREES RATED "VERY DROUGHT TOLERANT"	5	
2. SEVENTY-SIX (76) TO ONE HUNDRED (100) PERCENT OF TOTAL QUANTITY OF TREES RATED "VERY DROUGHT TOLERANT"	10	10
EXTRA SHADE/CANOPY TREES IN VEHICULAR USE AREAS:		
1. TWENTY (20) TO FORTY (40) PERCENT MORE THAN REQUIRED	5	
2. MORE THAN FORTY (40) PERCENT MORE THAN REQUIRED	10	
SOD/GRASS AREAS:		
1. THIRTY-ONE (31) TO FIFTY (50) PERCENT OF LANDSCAPE AREA	5	5
2. LESS THAN THIRTY (30) PERCENT OF LANDSCAPE AREA	10	
FLORIDA NATIVE LANDSCAPE:		
1. ONE HUNDRED (100) PERCENT OF LANDSCAPE AREA IS PRESERVED OR RE-ESTABLISHED FLORIDA NATIVE VEGETATION, OR NEW NATIVE PLANTINGS OF SPECIES LISTED IN APPENDIX A AND APPENDIX C. PLAN MUST INCLUDE TREES, UNDERSTORY, AND GROUND COVER WITH A MAXIMUM OF FIFTY (50) PERCENT OF SITE SODDED/GRASSED	30	30
2. SEVENTY-FIVE (75) TO NINETY-NINE (99) PERCENT OF LANDSCAPE AREA IS PRESERVED OR RE-ESTABLISHED FLORIDA NATIVE VEGETATION, OR NEW NATIVE PLANTINGS OF SPECIES LISTED IN APPENDIX A AND APPENDIX C. PLAN MUST INCLUDE TREES, UNDERSTORY, AND GROUND COVER WITH A MAXIMUM OF FIFTY (50) PERCENT OF SITE SODDED/GRASSED	15	
* THE LIST OF DROUGHT TOLERANT NATURAL GRASS, SHRUBS, AND TREE SPECIES IS CONTAINED IN WATERWISE, THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT PLANT AND LANDSCAPE PRACTICES GUIDE, AS MAY BE AMENDED. THESE SPECIES SHOULD HOWEVER, NOT INCLUDE INVASIVE SPECIES.	TOTAL	55

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KHA PROJECT
 14-3228000
 DATE
 JULY 2021
 SCALE AS SHOWN
 DESIGNED BY MRG
 DRAWN BY RMR
 CHECKED BY BFB

LANDSCAPE REQUIREMENTS

IRC LANDFILL
 PREPARED FOR
 INDIAN RIVER COUNTY
 INDIAN RIVER COUNTY
 FL

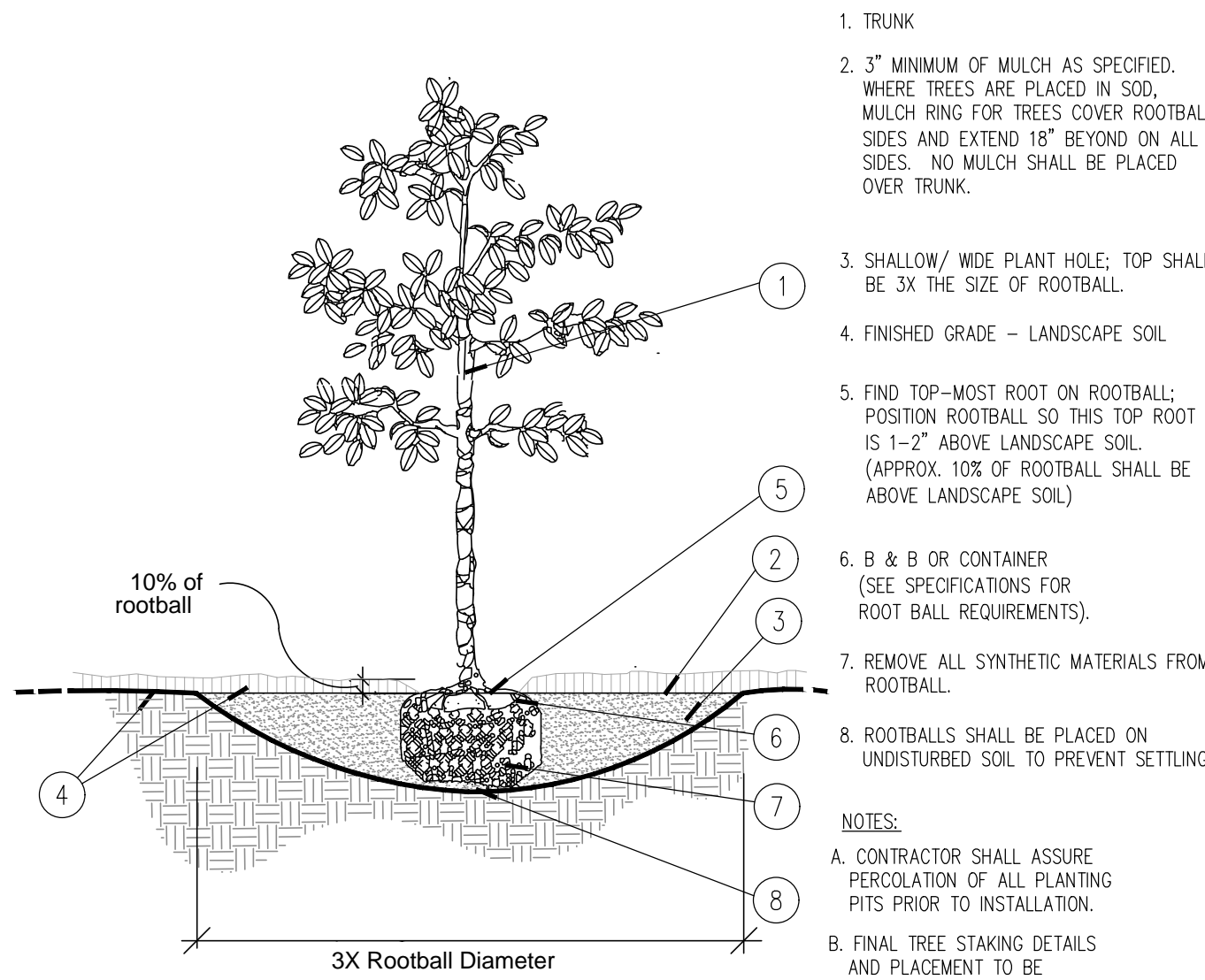
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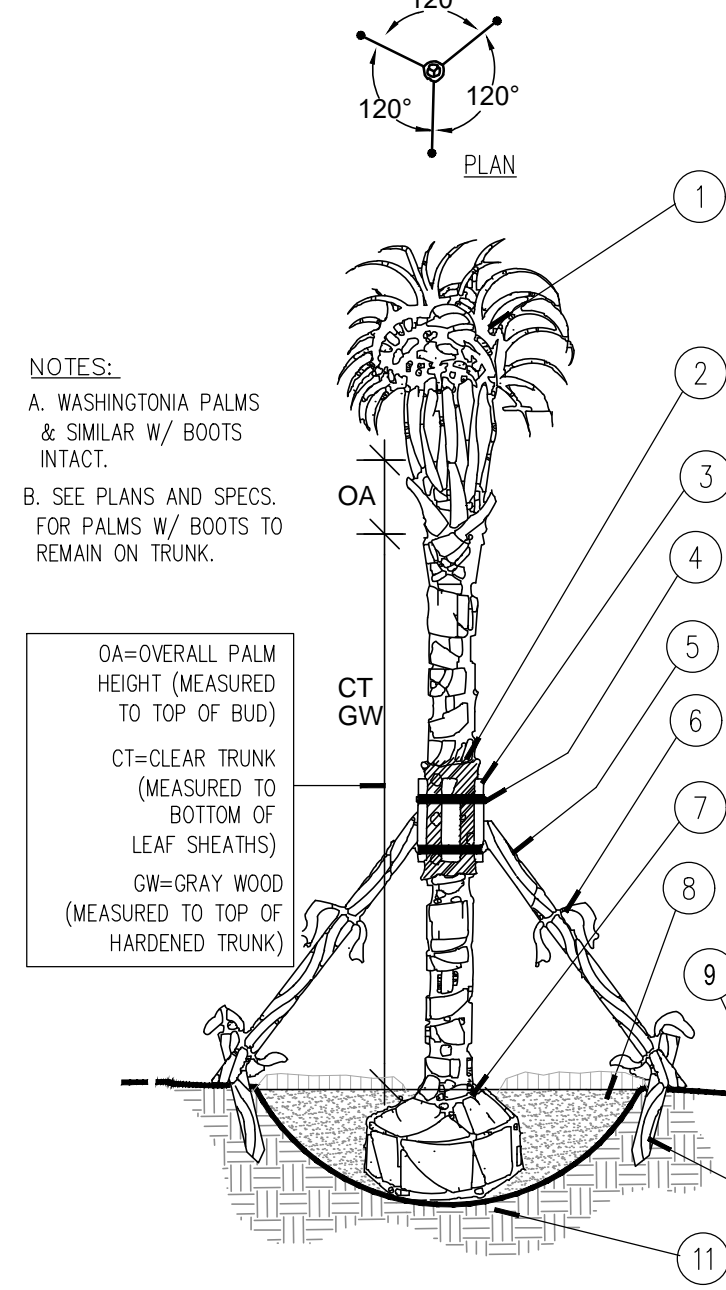
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A Tree Planting
SECTION
NTS

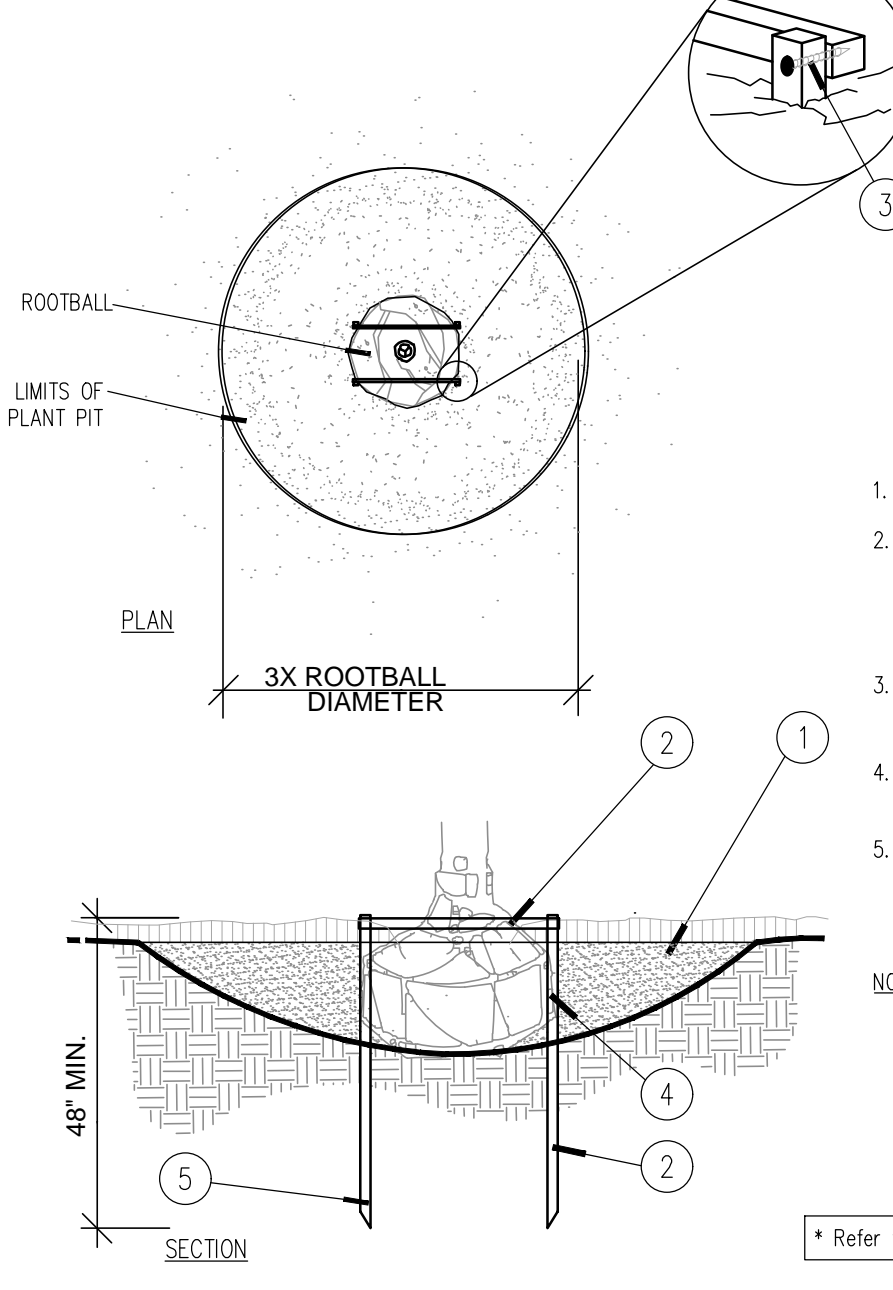
1. TRUNK
 2. 3" MINIMUM OF MULCH AS SPECIFIED, WHERE TREES ARE PLACED IN SOIL. MULCH RING FOR TREES COVER ROOTBALL SIDES AND EXTEND 18" BEYOND ON ALL SIDES. NO MULCH SHALL BE PLACED OVER TRUNK.
 3. SHALLOW/ WIDE PLANT HOLE; TOP SHALL BE 3X THE SIZE OF ROOTBALL.
 4. FINISHED GRADE - LANDSCAPE SOIL
 5. FIND TOP-MOST ROOT ON ROOTBALL; POSITION ROOTBALL SO THIS TOP ROOT IS 1-2" ABOVE LANDSCAPE SOIL. (APPROX. 10% OF ROOTBALL SHALL BE ABOVE LANDSCAPE SOIL)
 6. B & B OR CONTAINER (SEE SPECIFICATIONS FOR ROOT BALL REQUIREMENTS).
 7. REMOVE ALL SYNTHETIC MATERIALS FROM ROOTBALL.
 8. ROOTBALLS SHALL BE PLACED ON UNDISTURBED SOIL TO PREVENT SETTLING.
- NOTES:
- A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.
 - B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER AFTER REVIEWED BY LANDSCAPE ARCHITECT.
 - C. CONTRACTOR SHALL PAINT ALL STAKES BENJAMIN MOORE, EXTERIOR GRADE PAINT FLAT MATTE BLACK, 2 COATS.
 - D. SEE ALTERNATE STAKING METHODS, THIS SHEET.
- * ALL TREES SHALL BE PLUMB VERTICALLY WITHIN A TOLERANCE OF THREE DEGREES, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.



B Palm Planting and Staking
SECTION
NTS

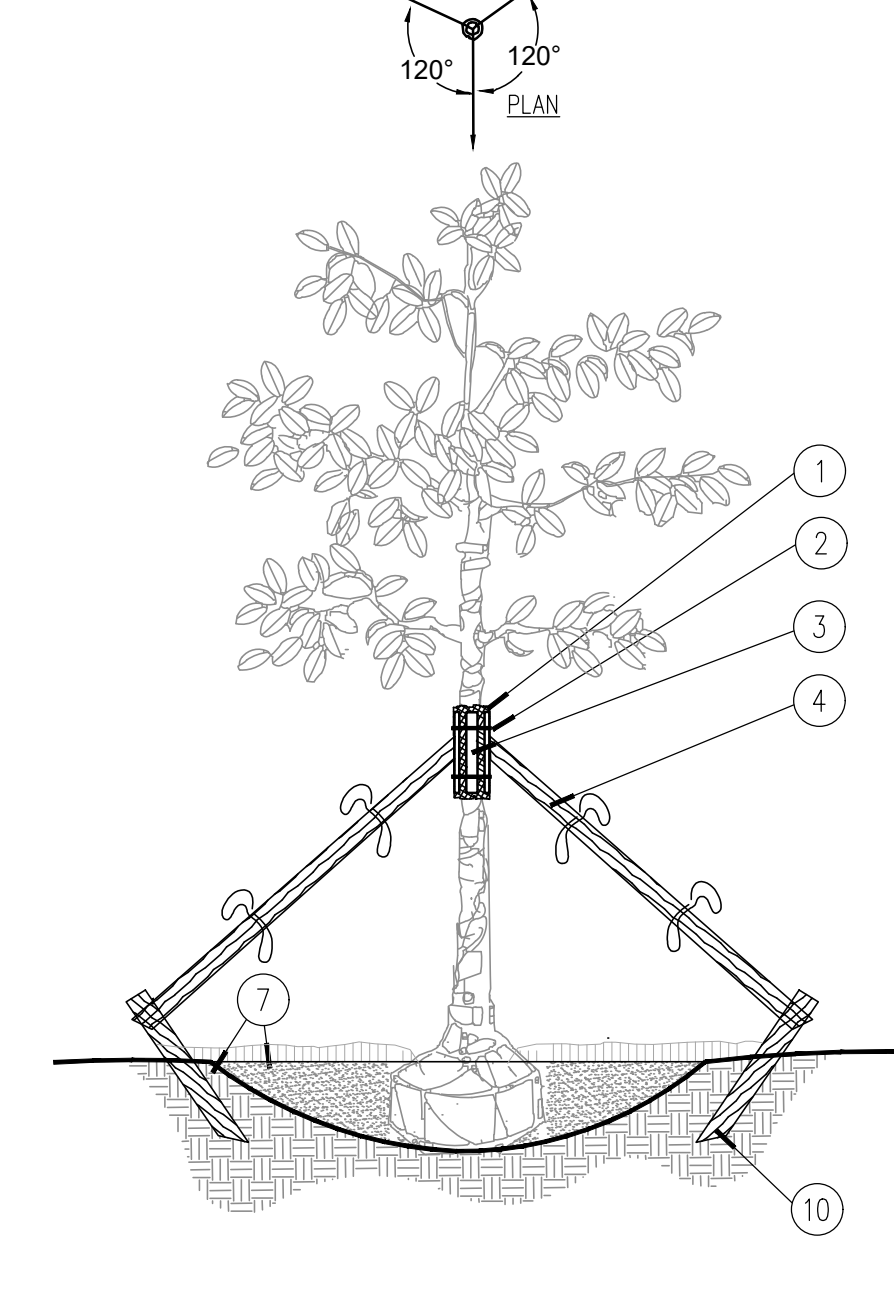
- NOTES:
- A. WASHINGTONIA PALMS & SIMILAR W/ BOOTS INTACT.
 - B. SEE PLANS AND SPECS. FOR PALMS W/ BOOTS TO REMAIN ON TRUNK.
- OA=OVERALL PALM HEIGHT (MEASURED TO TOP OF BUD)
CT=CLEAR TRUNK (MEASURED TO BOTTOM OF LEAF SHEATHS)
GW=GRAY WOOD (MEASURED TO TOP OF HARDENED TRUNK)

1. MINIMUM OF NINE (9) GOOD PALM FRONDS; PRUNE AND TRIM FRONDS WITH HEMP TWINE. SABAL PALMS TO BE SELECTIVELY "HURRICANE CUT", LEAVING ONLY NEWLY- EMERGING GROWTH.
 2. 5 LAYERS OF BURLAP TO PROTECT TRUNK.
 3. FIVE (5) 18"L, 2X4 WOOD BATTENS, UNTREATED, #2
 4. SECURE BATTENS WITH TWO (2) 3/4" CARBON STEEL BANDS TO HOLD BATTENS IN PLACE. NO NAILS SHALL BE DRIVEN INTO PALM. HEIGHT OF BATTENS SHALL BE LOCATED PROPORTIONATELY TO THE HEIGHT OF THE PALM FOR ADEQUATE BRACING.
 5. THREE (3) 8'L 2X4 SUPPORTS, NAIL (DRILL AND NAIL IF NECESSARY) TO BATTENS AND 2" X 4" STAKES. PALMS SHALL BE PLUMB VERTICALLY UNLESS OTHERWISE NOTED.
 6. PROVIDE FLAGGING AT MIDPOINT AND BASE OF SUPPORTS.
 7. TOP-MOST ROOT SHALL BE VISIBLE AT THE SURFACE OF THE ROOTBALL, SLIGHTLY ABOVE SURROUNDING GRADE.
 8. 3" SPECIFIED MULCH
 9. FINISH GRADE
 10. 24"L (MIN.) 2X4 P.T. WOOD STAKES, NAIL TO SUPPORT POLES
 11. PREPARED PLANTING SOIL AS SPECIFIED
 12. CONTRACTOR SHALL PAINT ALL STAKES BENJAMIN MOORE, EXTERIOR GRADE PAINT FLAT MATTE BLACK, 2 COATS.
 13. ALTERNATE PALM ANCHORING SYSTEMS MAY BE SUBSTITUTED UPON APPROVAL BY OWNER OR OWNER'S REPRESENTATIVE AFTER REVIEW BY LANDSCAPE ARCHITECT
- ALTERNATE SYSTEMS:
*BROOKS TREE BRACE SYSTEM
*ARBOR TIE TREE BRACING



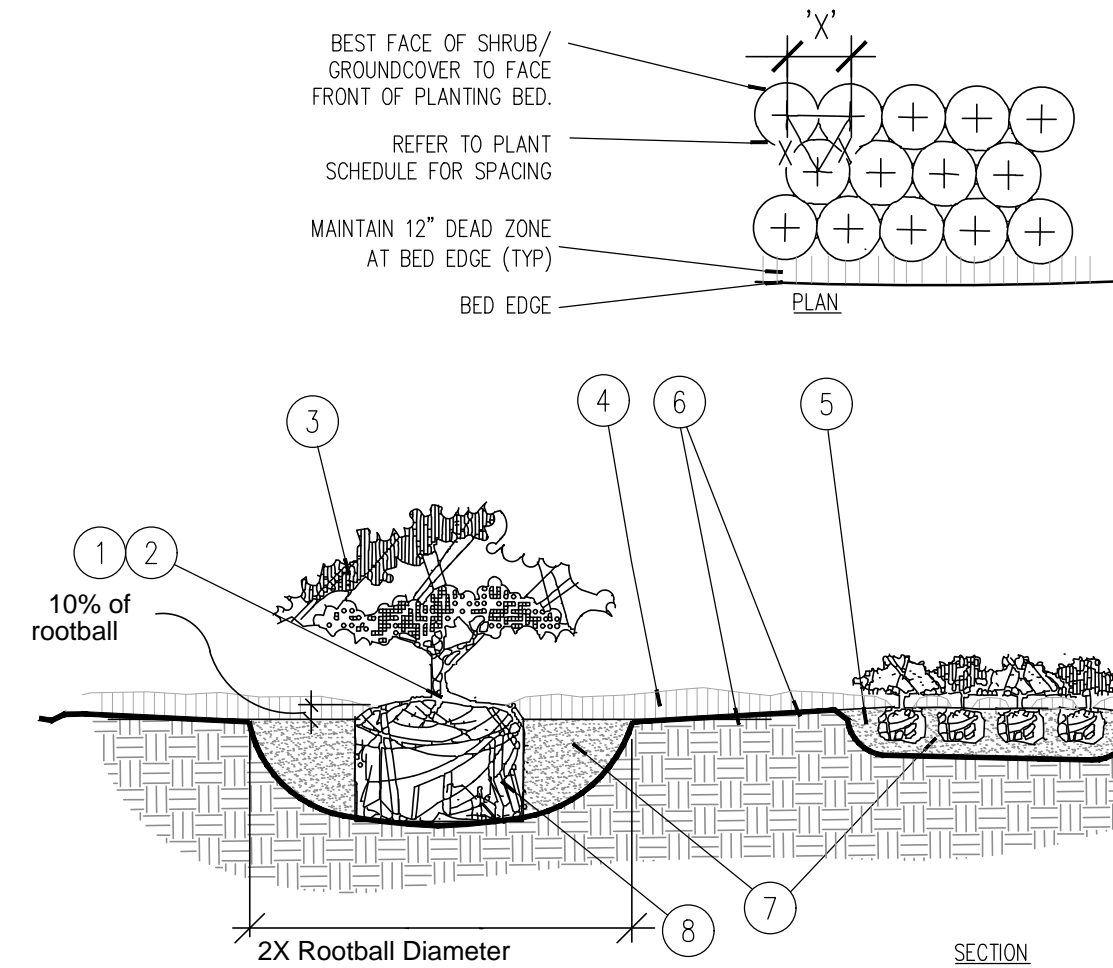
C Staking - up to 65 gal. or B&B to 3-1/2" Cal.
PLAN/SECTION
NTS

1. FINISH GRADE
 2. HORIZONTAL 2X2 SCREWED TO 2X2 STAKE. ALL WOOD SHALL BE #2 UNTREATED.
 3. CONTRACTOR SHALL PAINT ALL STAKES BENJAMIN MOORE, EXTERIOR GRADE PAINT FLAT MATTE BLACK, 2 COATS.
 4. STAKES SHALL BE PLUMB VERTICALLY UNLESS OTHERWISE NOTED.
 5. STAKES TO EXTEND INTO NATIVE SOIL BY 1-1/2 X THE ROOTBALL DEPTH MIN.
- NOTE:
IF SPATIAL REQUIREMENTS PRECLUDE STAKING WITH THIS METHOD, SUBMIT ALTERNATE FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLING PLANT.
- * Refer to details B and E for planting



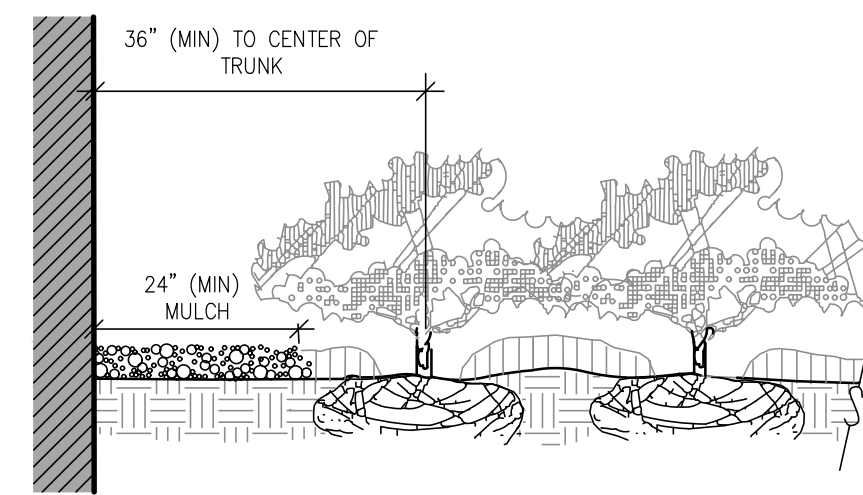
D Large Tree Staking - 100 Gal + or B&B 4" +
SECTION
NTS

1. FIVE (5) LAYERS OF BURLAP TO PROTECT TRUNK
 2. TWO STEEL BANDS TO SECURE BATTENS
 3. FIVE 2 X 4 X 18", WOOD BATTENS
 4. THREE (3) 2" X 8" LODGE POLES, DRILL USING GALVANIZED SCREWS, TO BATTENS AND 2" X 4" STAKES. NO SCREWS SHALL PENETRATE TREE. FLAG AT MIDPOINT AND AT BASE.
 5. 2" X 4" X 3' (MIN), P.T. WOOD STAKES BURIED 3" BELOW FINISHED GRADE.
 6. CONTRACTOR SHALL PAINT ALL STAKES BENJAMIN MOORE, EXTERIOR GRADE PAINT FLAT MATTE BLACK, 2 COATS.
 7. FINISHED GRADE (SEE GRADING PLAN)
- NOTES:
- A. ALL TREES SHALL BE PLUMB VERTICALLY WITHIN A TOLERANCE OF THREE DEGREES, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.
 - B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
 - C. ALTERNATE TREE ANCHORING SYSTEMS MAY BE SUBSTITUTED FOR WOOD STAKING SYSTEM UPON APPROVAL BY OWNER OR OWNER'S REPRESENTATIVE AFTER REVIEWED BY LANDSCAPE ARCHITECT.
 - D. ALTERNATE SYSTEMS:
*BROOKS TREE BRACE SYSTEM
*ARBOR TIE TREE BRACING
* RUBBER HOSE/WIRE SYSTEMS ARE NOT ALLOWED.
- * Refer to details B and D for planting



E Shrub / Groundcover Planting
PLAN/SECTION
NTS

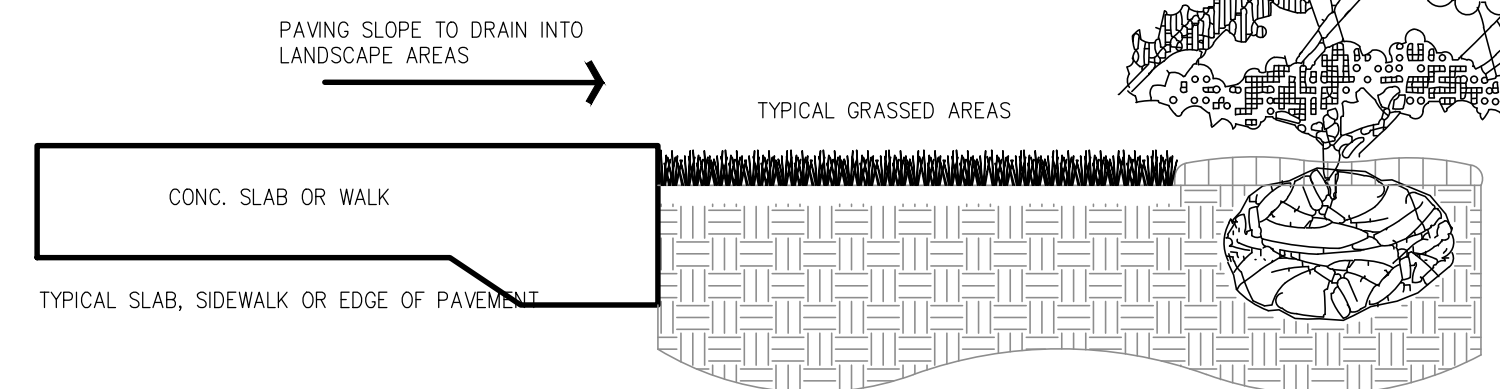
- NOTES:
1. FIND POINT WHERE TOPMOST ROOT EMERGES FROM TRUNK WITHIN 2" OF SURFACE. CLEAR EXCESS SOIL IF NECESSARY.
 2. TOP 10% OF SHRUB AND GROUNDCOVER ROOTBALLS TO BE PLANTED ABOVE THE LANDSCAPE GRADE. DO NOT COVER EXPOSED 10% ON SIDES WITH SOIL.
 3. PRUNE ALL LIKE SHRUBS WITHIN A PLANTED MASS TO ACHIEVE A UNIFORM MASS/HEIGHT.
 4. 3" MINIMUM MULCH AS SPECIFIED - DO NOT COVER ENTIRE SHRUB ROOTBALL OR CREATE "WATER RINGS" ONLY COVER SIDES OF ROOTBALL WITH MULCH
 5. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
 6. FINISHED GRADE (SEE GRADING PLAN).
 7. PREPARED PLANTING SOIL AS SPECIFIED. NOTE: WHEN GROUND-COVERS AND SHRUBS USED IN MASSES, ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
 8. SCARIFY ROOTBALL SIDES AND BOTTOM.
- * ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNER'S REPRESENTATIVE.



F Plantings Adjacent to Buildings
SECTION
NTS

- NOTES
- * CLEAR ZONE: 36" MIN. FROM BUILDING TO CENTER OF NEAREST SHRUB.
 - * STONE MULCH: 24" MIN. FROM BUILDING, INSTALL STONE MULCH. MULCH TYPE TO BE GRAY GRANITE OR OWNER'S REPRESENTATIVE APPROVED EQUAL. STONE MULCH TO BE INSTALLED TO A DEPTH OF 3" (MIN.) CONTRACTOR SHALL SUBMIT SAMPLE FOR APPROVAL.

1. TYPICAL SOLID SOD LAID LEVEL WITH TIGHT JOINTS SET ADJACENT TO EDGE OF PAVEMENT SUCH THAT THE TOP OF SOD WHEN FRESHLY MOWED IS FLUSH WITH TOP OF PAVEMENT IN ORDER NOT TO IMPEDE THE FLOW OF RUNOFF INTO LANDSCAPE AREAS AND TO APPEAR NEAT AND WELL MAINTAINED.
 2. ALL SOD LAD ADJACENT TO THE SHRUB OR GROUNDCOVER PLANTING AREAS SHALL HAVE WELL DEFINED BEDLINES, AND SHALL BE INSTALLED A DISTANCE BACK FROM THE FACE EDGE OF PLANT MATERIALS TO ALLOW FOR GROWTH OF THE PLANTS. THE TOP OF THE SOD AND THE FINISHED GRADE OF THE 2" MULCH COVER SHALL BE FLUSH AND LEVEL.
 3. SOD SET ON PREPARED GRADE WHICH IS LEVEL OR GRADED TO MEET THE REQUIREMENTS OF THE ENGINEERED SITE DRAINAGE PLANS.
 4. PROVIDE 60 DAYS MAINTENANCE TO ESTABLISH THE NEW SOD. MAINTENANCE INCLUDES ROLLING, FERTILIZING MONTHLY, WEED AND INSECT CONTROL (PRE- & POST- EMERGENT), MOWING WITH REEL TYPE MOWERS, TRIMMING, AND EDGING.
- FOR SOD BEING USING AS SPORTS FIELD:
1. CONTRACTOR SHALL COORDINATE METHODOLOGY FOR INSTALLATION & SOD GROWING PERIOD PERIOD WITH CITY OF MIAMI'S PARKS AND REC DEPT SPORTS FIELD MANAGER PRIOR TO PROCUREMENT & INSTALLATION. ALL PRODUCTS, INCLUDING FERTILIZER & PEST/WEED CONTROL SHALL BE APPROVED BY CITY OF MIAMI SPORTS FIELD MANAGER.
2. CONTRACTOR SHALL MOW AFTER ESTABLISHMENT PERIOD TO NO HIGHER THAN 1" PER CITY OF MIAMI, PARKS & REC. DEPT.



G Typical Sod Planting Detail
SECTION
NTS

NO.	REVISIONS	DATE

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LANDSCAPE ARCHITECT
REGISTERED PROFESSIONAL
No. LA6667406
11/17/2021
STATE OF FLORIDA
FLOOR 10C

KHA PROJECT	14-3228000
DATE	JULY 2021
SCALE	AS SHOWN
DESIGNED BY	NW
DRAWN BY	CF
CHECKED BY	NW

LANDSCAPE DETAILS

IRC LANDFILL
PREPARED FOR
INDIAN RIVER COUNTY
INDIAN RIVER COUNTY
SHEET NUMBER
L-250

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2.09 AUTOMATIC CONTROL VALVE

The automatic remote control valves shall be as specified on the plans, or approved equal.

2.10 GATE VALVES

- A. Gate valves for 3/4" through 2-1/2" shall be of brass or bronze construction, solid wedge, IPS threads, non-rising stem with wheel operating handle, for a continuous working pressure of 150 PSI.
- B. Gate valves for 3" and larger: Iron body, brass or bronze mounted AWWA gate valves, with a clear waterway equal to the full nominal diameter of the valve, rubber gasket for a continuous working pressure of 150p PSI. Valve shall be equipped with a square operating nut.

2.11 VALVE BOXES

- A. For gate valves, use AMETEK #10-181-014 box with #10-181-015 locking lid, or as per the drawings.
- B. For control valves 3/4" through 2", the drip valve assemblies, use AMETEK #10-181-014 box with #10-181-015 locking lid, or sized as necessary to effectively house the equipment
- C. For control wiring splices, use AMETEK #10-181-014 box with #10-181-015 locking lid, or as per the drawings.

2.12 IRRIGATION WIRING

- A. Wiring used for connecting the electric control valves to the controllers shall be Type UF, 600 volt, single strand, solid copper with PVC insulation 4/64" thick. Size shall be 14 gauge, red for "hot" or lead wires, and common wire to be 14 gauge, white in color.
- B. Contractor shall perform an ohm test on ground to assure adequate protection against surges and indirect lightning strikes.

2.13 MISCELLANEOUS MATERIALS

- A. Drainage Backfill: Cleaned gravel or crushed stone, graded from 1" maximum to 3/4" minimum.
- B. Metalized Underground Tape: The detectable, underground utility marking tape shall consist of a minimum: 5 mil (0.005") overall thickness, five-ply composition; ultra-high molecular weight, 100% virgin polyethylene; acid, alkaline and corrosion resistant; with no less than 150 pounds of tensile break strength per 6" width; color -code impregnated with color stable, lead-free, organic pigments suitable for direct burial. Tapes utilizing reprocessed plastics or resins shall not be acceptable. The detectable, underground utility marking tape shall have a 35 gauge (0.0035") solid aluminum foil, core encapsulated within a 2.55 mil (0.00255") polyethylene backing and a 0.6 mil (0.006") PET cover coating. The laminate on each side shall consist of a 0.75 mil (0.00075") layer of hot LPDE, poly-fusing the "sandwich" without use of adhesives.

2.14 AUTOMATIC CONTROL SYSTEM

An Independent Station Controller: Furnish a solid state controller, as specified on the plans.
Each station shall be capable of timing from zero (0) minute to 99 minutes per station in one (1) minute increments.

Each station shall be capable of operating two (2) 7VA electric valve-in-head solenoids.

The stand-alone controller shall have two (2) possible programs.

The stand-alone controller shall provide global percentage increase/decrease (water budget) for all stations simultaneously, from ten (10) to two hundred (200) percent, in ten (10) percent increments.

All stations shall be able to be turned on/off manually buy operating timing mechanism or by manual switch at station output.

The stand-alone controller shall incorporate an integral MOV surge protection into the terminal block for each of its 24 VAC field wire outputs. Controller power input wires will also incorporate surge protection.

The control panel shall provide continuous display time. It shall have alphanumeric displays of descriptive English menus and legend identifiers with cursor selection of function and precision value adjustment by rotary dial input.

The stand-alone controller shall be UL listed and FCC approved.

The stand-alone controller shall have 117 VAC, 60 Hz input, 26.5 VAC, 60 Hz output for operating 24 VAC solenoids.

The stand-alone controller cabinet shall be a lockable and weather-resistant outdoor cabinet. Mount as noted on plans.

The controller shall be equipped with lightning protection, by the Contractor, on both the primary (120v) and each secondary (24v) circuit. The controller circuits shall be grounded to a copper clad grounding rod located at each controller.

The controller shall be equipped for a water conservation device, as specified.

PART III: EXECUTION

3.01 INSPECTION

The Contractor shall examine the areas and conditions under which landscape irrigation system is to be installed and notify the Landscape Architect in writing of conditions detrimental to the proper and timely completion of the work. The Contractor shall proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Landscape Architect.

3.02 PREPARATION

The Contractor shall provide sleeves to accommodate piping under walks or paving. The Contractor shall coordinate with other trades and install to accurate levels prior to paving work. Cutting and patching of paving and concrete will not be permitted. The Contractor shall maintain all warning signs, shoring, barricades, flares and red lanterns, as required by any local codes, ordinances or permits.

3.03 TRENCHING AND BACKFILLING

- A. Excavation: The Contractor shall stake out the location of each run of pipe, sprinkler heads, sprinkler valves and isolation valves prior to trenching. Excavation shall be open vertical construction sufficiently wide to provide free working space around the work installed and to provide ample space or backfilling and tamping. Trenches for pipe shall be cut to required grade lines, and compacted to provide accurate grade and uniform bearing for the full length of the line. The bottom of the trenches shall be free of rock or other sharp edged objects. Minimum cover shall be as follows:

Pipe and Wire Depth

Pressure Mainline	18" at top of pipe from Finish Grade
Lateral Piping (rotor)	12" at top of pipe from Finish Grade
Lateral Piping (pop-up)	12" at top of pipe from Finish Grade
Control Wiring	Side of main Line

- B. Minimum Clearances: All pipelines shall have a minimum clearance of six inches from each other and from lines of other crafts. Parallel lines shall not be installed directly over one another. No lateral line shall be installed in the main-line trench.

3.04 INSTALLATION OF PIPING

- A. PVC Pipe and Joints: The Contractor shall not install solvent wild pipe when air temperature is below 40o F. Installation shall be in accordance with the manufacturer's instructions.

- 1. Only the solvent recommended by the pipe manufacturer shall be used. All PVC pipe and fittings shall be installed as outlined and instructed by the pipe manufacturer, and it shall be the Contractor's full responsibility to make arrangements with the pipe manufacturer for any field assistance that may be necessary. The Contractor shall assume full responsibility for the correct installation.

3.05 BACKFILLING PROCEDURES

Initial backfill on PVC lines shall be pulverized native soil, free of foreign matter. Within radius of 4" of the pipe shall be clean soil or sand. Plant locations shall take precedence over sprinkler and pipe locations. The Contractor shall coordinate the location of trees and shrubs with the routing of lines and final head locations.

- A. Backfill and Compaction: The Contractor shall leave trenches slightly mounded to allow for settlement after the backfilling is completed. The Contractor shall clean the site of the work continuously of excess waste materials as the backfilling progresses, and leave in a neat condition. No trenches shall be left open for a period of more than 48 hours. Protect open trenches as required.

The Contractor shall carefully backfill excavated materials approved for backfilling, consisting of earth, loam, sand, and other approved materials, free of rock and debris over 1" in size. Backfill shall be compacted to original density of surrounding soil without dips, sunken areas, or irregularities.

The Contractor shall conform to DOT requirements for methods and required compaction percentages, for roads and paving.

The Contractor shall hand place the first 6" of backfill (or to top of pipe) and have it walked on so as to secure the position of the pipe and wire.

No wheel rolling will be allowed. The Contractor shall remove rock or debris extracted from backfill materials and dispose of offsite. The Contractor shall fill any voids left in backfill with approved backfill materials.

- B. Existing Lawns: Where trenching is required across existing lawns, uniformly cut strips of sod 6" wider than trench. The Contractor shall remove sod in rolls of suitable size for handling and keep moistened until replanted. The Contractor shall replant sod within 48 hours after removal, roll and water generously. The Contractor shall resod any areas not in healthy condition equal to adjoining lawns 10 days after replanting.

- C. Seeded Area: Trenching will be required across existing seeded areas, primarily roadway edging. The Contractor shall conform to the requirements of seeding, Section 02930 for the reseeding of the disturbed trench area.

- D. Pavements: Jack and bore or directional bore piping under paving materials as per local regulatory codes. No cutting and patching of pavement will be permitted.

3.06 VALVES

- A. Isolation Valves: Shall be sized corresponding to adjacent pipe size. Specified valve boxes shall be installed flush with finish grade in such a manner that surface forces applied to their exposed area will not be transmitted to the piping in which the valve is installed nor any other piping, wiring or other lines in the vicinity of said valves.

- B. Gate Valves: Install where shown, in valve boxes.

- C. Electric Control Valves: Shall be installed in specified valve boxes. The valve shall have 6" of 3/4" pea gravel installed below the bottom of the valve. If the valve box does not extend to the base of the valve, a valve box extension shall be installed. Electric control valves shall be installed where shown and grouped together where practical. The Contractor shall place no closer than 24" to walk edges, bikeway edges, buildings and walls. The Contractor shall adjust the valve to provide flow rate or rated operating pressure required for each sprinkler circuit.

3.07 CONDUIT AND SLEEVES

- A. Conduit and Sleeves for Control Wiring and Main/Lateral Pipe: The Contractor shall provide and install where necessary. Contractor shall coordinate locations of previously installed sleeving with the General Site Contractor.

The Contractor shall coordinate installation of sleeves with work of other disciplines.

3.08 CONTROLS

- A. The Contractor shall connect electric control valves to controllers in a clockwise sequence to correspond with station settings beginning with Stations 1, 2, 3, etc. Automatic controllers shall be provided and installed by the Contractor as noted on the drawings. All zones will be labeled on the controller.
- B. Controllers shall be equipped with lightning protection and grounded to a standard 5/8" copper clad steel ground rod driven a minimum of 8' into the ground and clamped.
- C. The electrical service to the controllers shall be performed by an electrical subcontractor in compliance with NEC requirements.

3.09 CONTROL WIRE

- A. Control wiring between the controller and electric valves shall be buried in main line trenches or in separate trenches. Electrical connection at valve will allow for pigtail so solenoid can be removed from valve with sufficient slack to allow ends to be pulled 12" above ground for examination and cleaning.
- B. An expansion loop shall be provided at every valve at 100' o.c. Expansion loop shall be formed by wrapping wire at least eight times around a 3/4" pipe and withdrawing pipe.
- C. The wire shall be bundled and taped every ten feet. The wire shall be laid in the trench prior to installing the pipe being careful to install wire beneath and 6" to the side of the main pipe line.
- D. Electrical connections to electric control valves shall be made with Rainbird Pen-Tite or Techdel GT-3-GEL - Tite connectors or equal.

Power Connections: Electrical connections to power and signal wires shall be made using 3M 82-A2 power cable splice kits.

3.10 SPRINKLER HEADS

- A. General Provisions:

- 1. Sprinkler heads shall be installed as designated on the shop drawings. Heads shall be installed on flexible PVC. Top to be flush with finish grade or top of curb.
- 2. Spacing of heads shall not exceed the maximum indicated on the shop drawings (unless directed by the Landscape Architect). In no case shall the spacing exceed the maximum recommended by the manufacturer.

- B. Head Types:

- 1. Pop-up- Rotary Sprinkler Heads: Shall be installed on flex joint and be set with top of head flush with finish grade. Heads installed at curb shall have 6" to 10" between perimeter of head and concrete. Heads placed at edge of pavement having no curb shall be installed 24" from edge of pavement.
- 2. Spray Pop-up Sprinkler Heads: Shall be installed on flexible PVC and be set with top of head flush with finished grade. Sprinkler heads placed adjacent to curbs will be installed 9" from concrete. Sprinkler heads placed adjacent to pavement having no curb shall be installed 24" from the edge of pavement.

3.11 COMPLETION

- A. Flushing: Before sprinkler heads are set, the Contractor shall flush the lines thoroughly to make sure there is no foreign matter in the lines.

The Contractor shall flush the main lines from dead end fittings for a minimum of five minutes under a full head of pressure.

- B. Testing: The Contractor shall notify Landscape Architect and Owner forty-eight (48) hours in advance of testing.

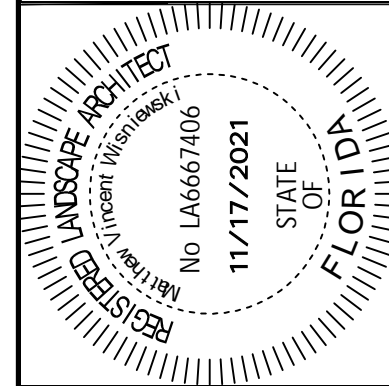
Prior to backfilling of main line fittings, Contractor shall fill the main line piping with water, in the presence of the Owner/Landscape Architect, taking care to purge the air from it by operating all the sprinkler control valves one or more times and/or such other means as may be necessary. A small, high pressure pump or other means of maintaining a continuous water supply shall be connected to the main line and set so as to maintain 100 PSI in the main line system for two (2) hours without interruption. When this has been accomplished and while the pressure in the system is still 100 PSI, leakage testing shall be performed in accordance with AWWA Standard C-600. Pressure readings shall be noted and make up water usage shall be recorded. Should the rate of make up water usage indicate significant leakage, the source of such leakage shall be found and corrected and the system then retested until the Owner/Landscape Architect is satisfied that the system is reasonably sound. Lateral line testing shall be conducted during the operating testing of the system by checking visually the ground surface until no leaks in this portion of the system are evident. Leaks shall be repaired or paid for by the Contractor at any time they appear during the warranty period.

- C. Adjustment and Coverage of System: Coordinate pressure testing with adjustments and coverage test of system so both may occur at the same time. The Contractor shall balance and adjust the various components of the system so that the overall operation of the system is most efficient. This includes a synchronization of the controllers, adjustments to pressure regulators, pressure relief valves, part circle sprinkler heads, and individual station adjustments on the controllers.

3.12 WARRANTY

- A. The Contractor shall fully warrant the landscape irrigation system for a period of one (1) year after the written final acceptance and will receive a written confirmation from the Landscape Architect that the warranty period is in effect.
- B. During the warranty period, the Contractor will enforce all manufacturer's and supplier's warranties as if made by the Contractor himself. Any malfunctions, deficiencies, breaks, damages, disrepair, or other disorder due to materials, workmanship, or installation by the Contractor and his suppliers shall be immediately and properly corrected to the proper order as directed by the Owner and/or Landscape Architect.
- C. Any damages caused by system malfunction shall be the responsibility of the Contractor who shall make full and immediate restoration for said damages.

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KHA PROJECT
14-3228000
DATE
JULY 2021
SCALE AS SHOWN
DESIGNED BY NW
DRAWN BY CT
CHECKED BY NW

IRRIGATION
SPECIFICATIONS

IRC LANDFILL
PREPARED FOR
INDIAN RIVER COUNTY
INDIAN RIVER
COUNTY

SHEET NUMBER
L-351

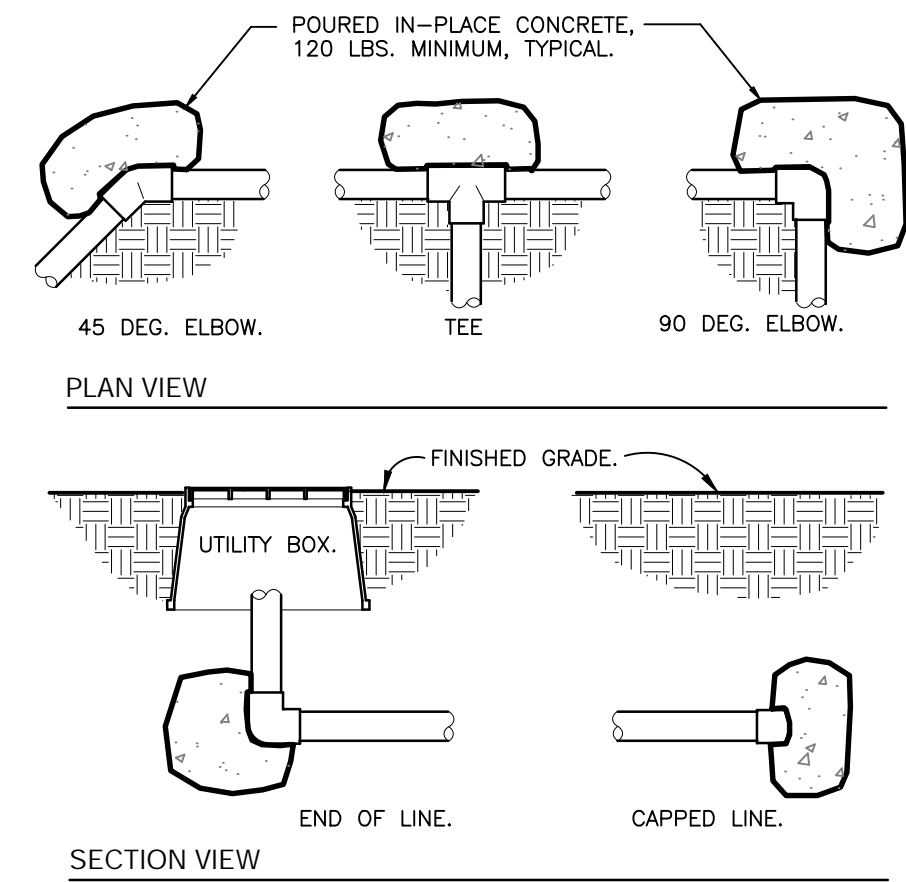


Call 811 or www.sunshine811.com two full business days before digging to have utilities located and marked.

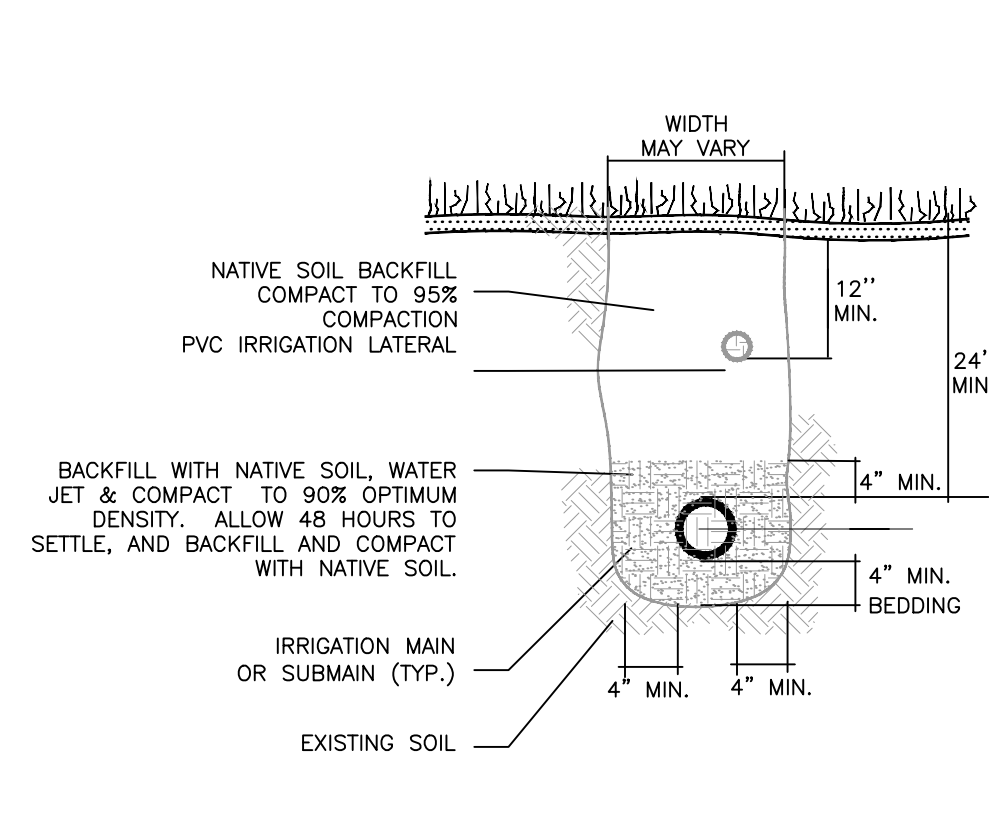
Check positive response codes before you dig!

BY
DATE
REVISIONS
No.

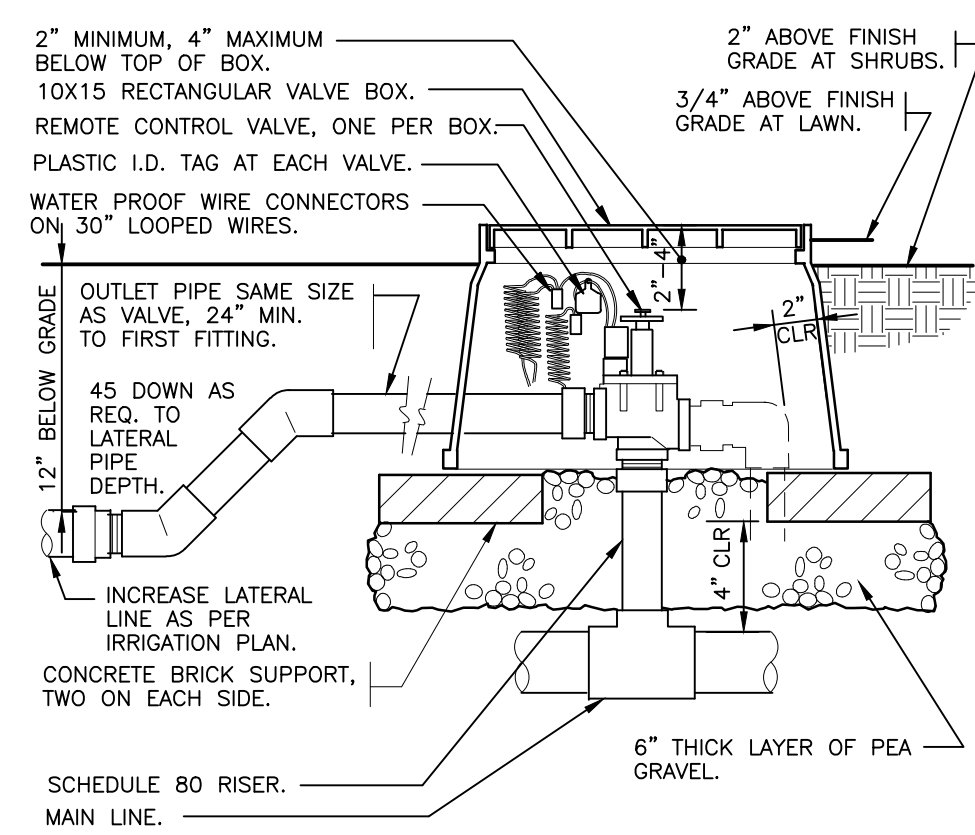
Plotted By: Epiq Carlos, Sheet Set: IRC LANDFILL, Layout: IR-352 DETAILS, November 15, 2021, 03:22:44pm, \\kimley-horn.com\EL\MA\MIB_Civil\143228000 - IRC HW and Recycling Facility\Landscapes\CADD\PlanSheets\1-300 IRRIGATION PLAN.dwg
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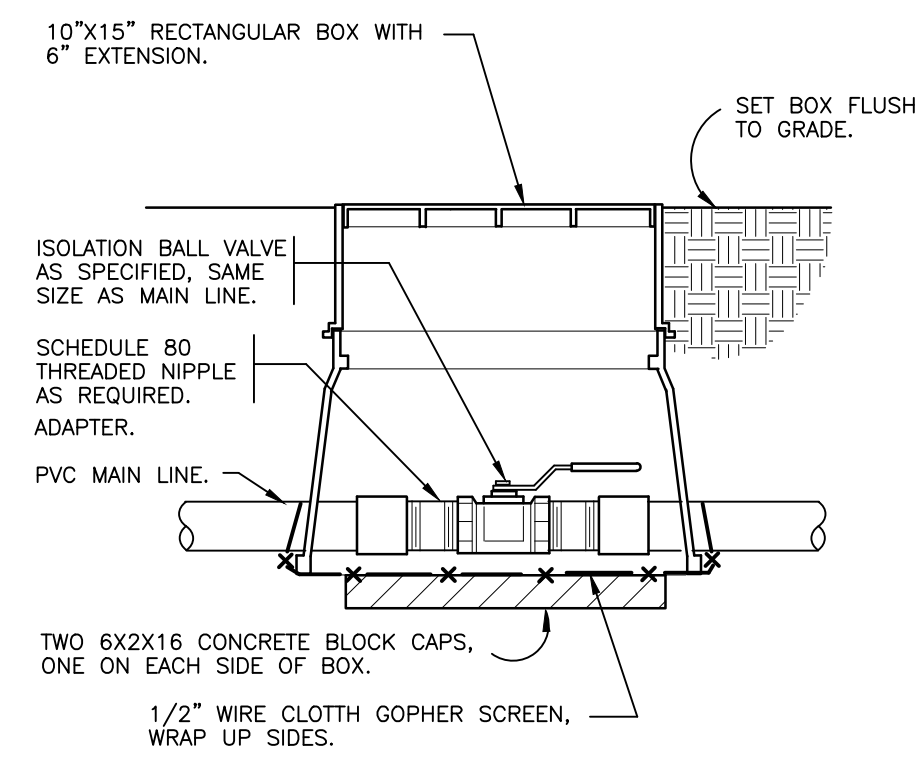
1 THRUST BLOCKING
 3/4" = 1'-0"



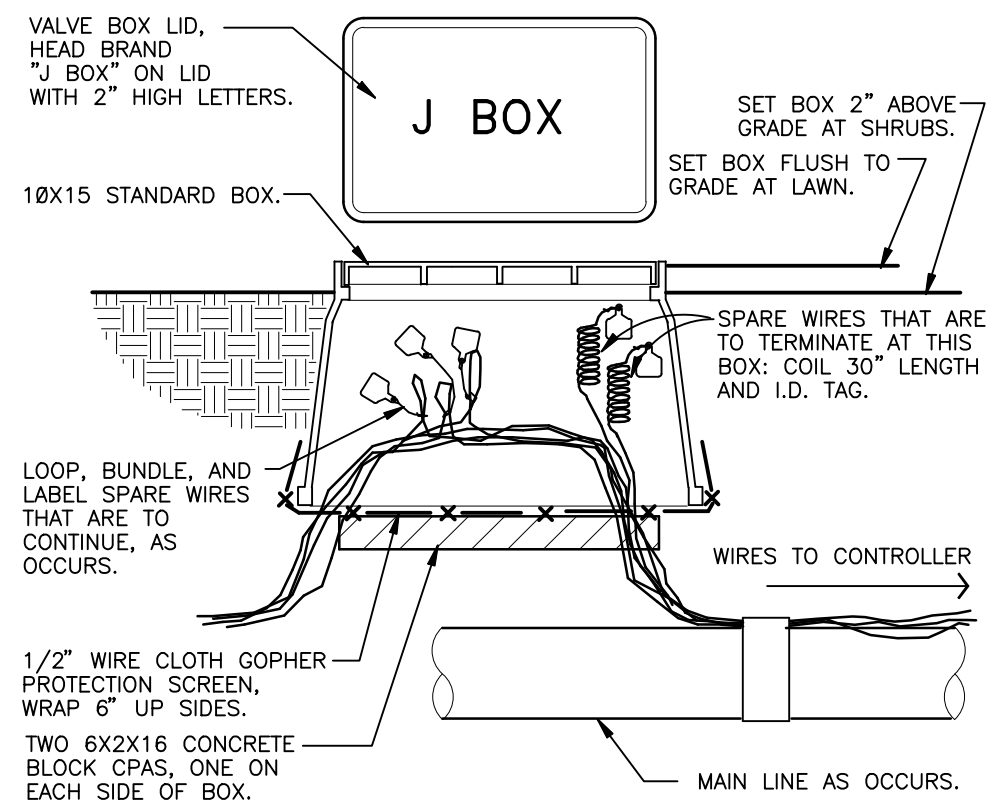
2 TRENCHING DETAIL
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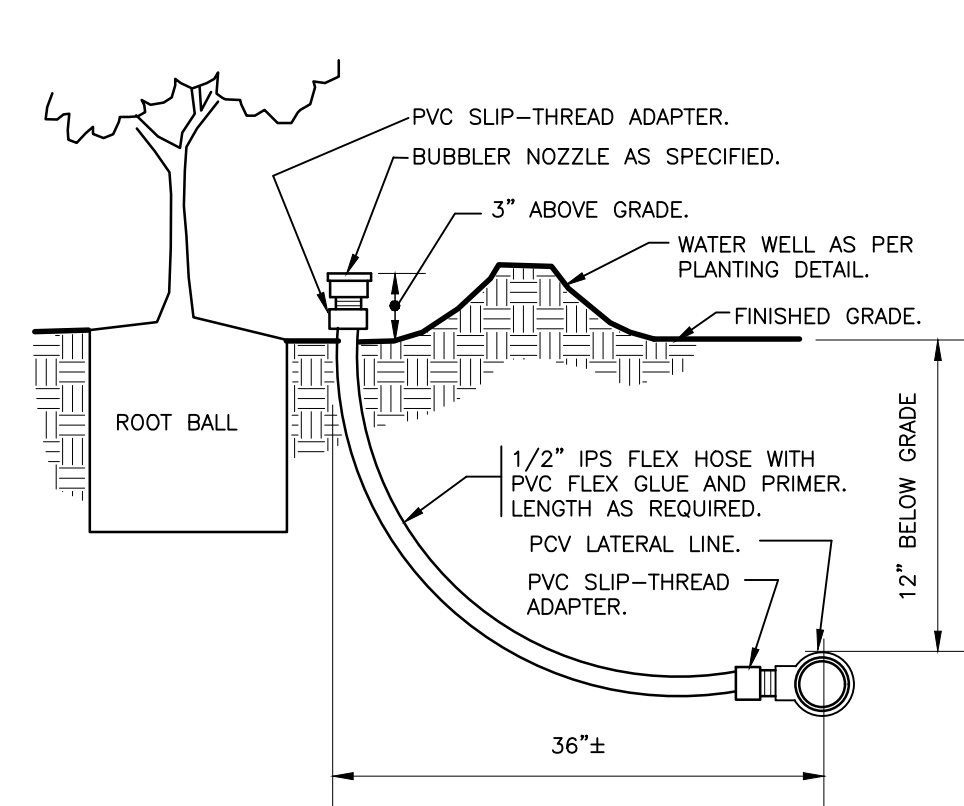
3 ELECTRIC REMOTE CONTROL VALVE
 1 1/2" = 1'-0"



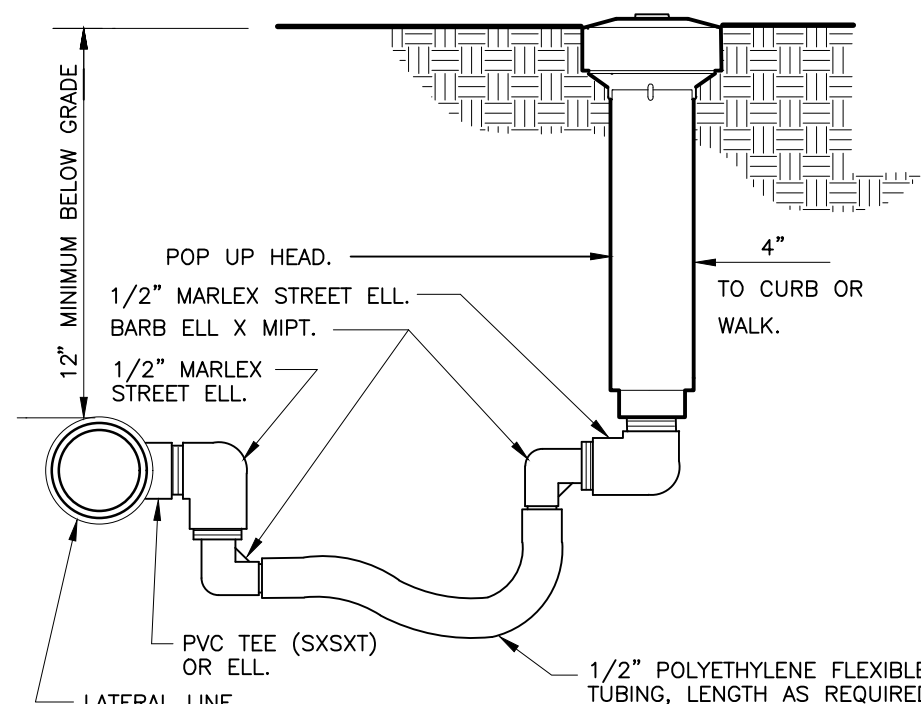
4 BRASS BALL ISOLATION VALVE
 1 1/2" = 1'-0"



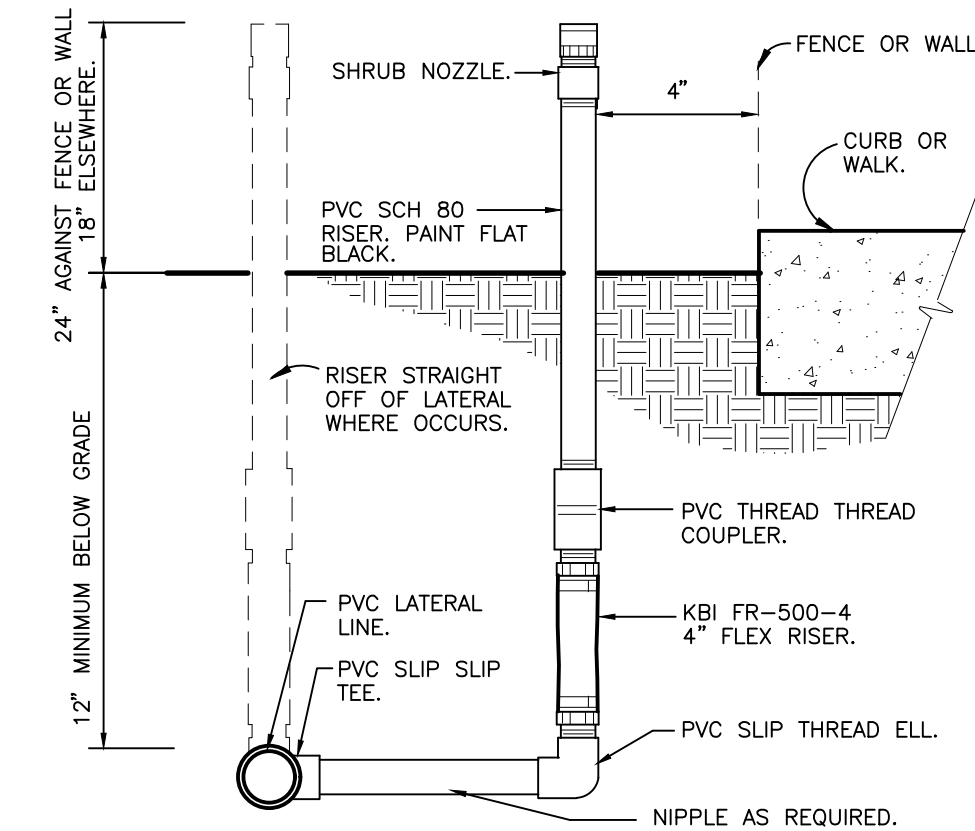
5 WIRE BUNDLE JUNCTION BOX
 1 1/2" = 1'-0"



6 BUBBLER ON FLEX HOSE RISER
 3" = 1'-0"

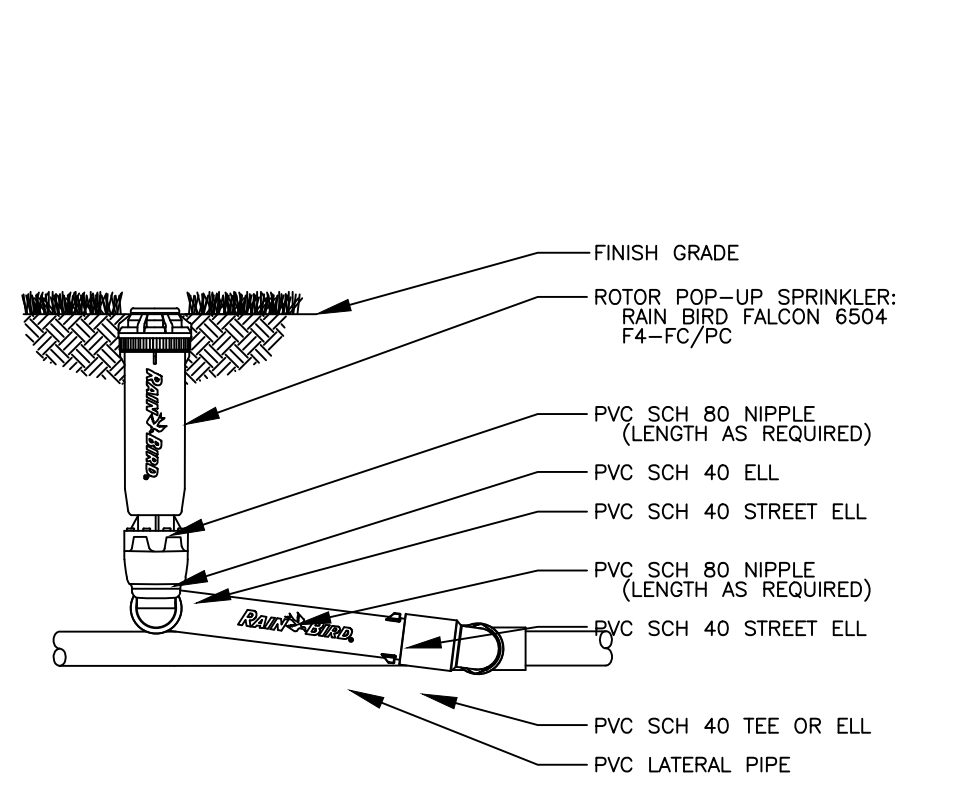


7 POP-UP SPRAY FLEX ASSEMBLY
 3" = 1'-0"

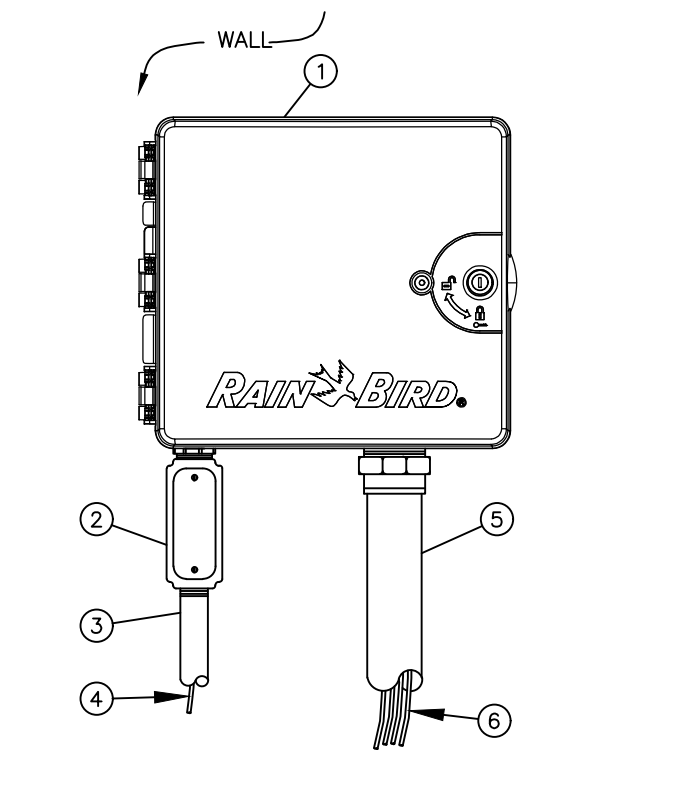


8 SHRUB SPRAY FIXED RISER
 3" = 1'-0"

32 8403.23-01

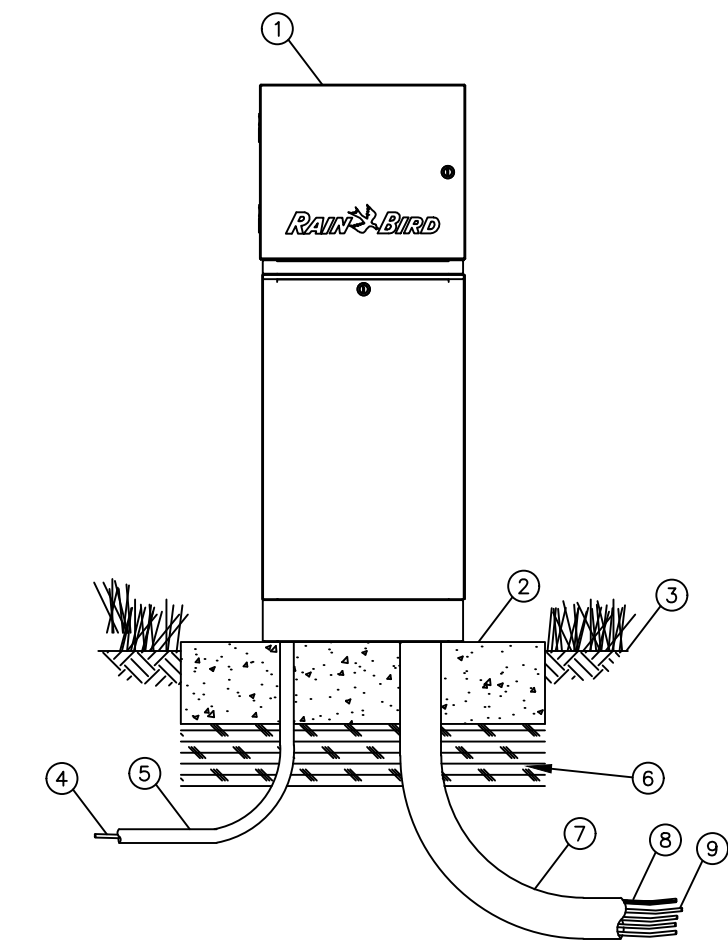


9 ROTOR POP UP SPRINKLER
 NOT TO SCALE



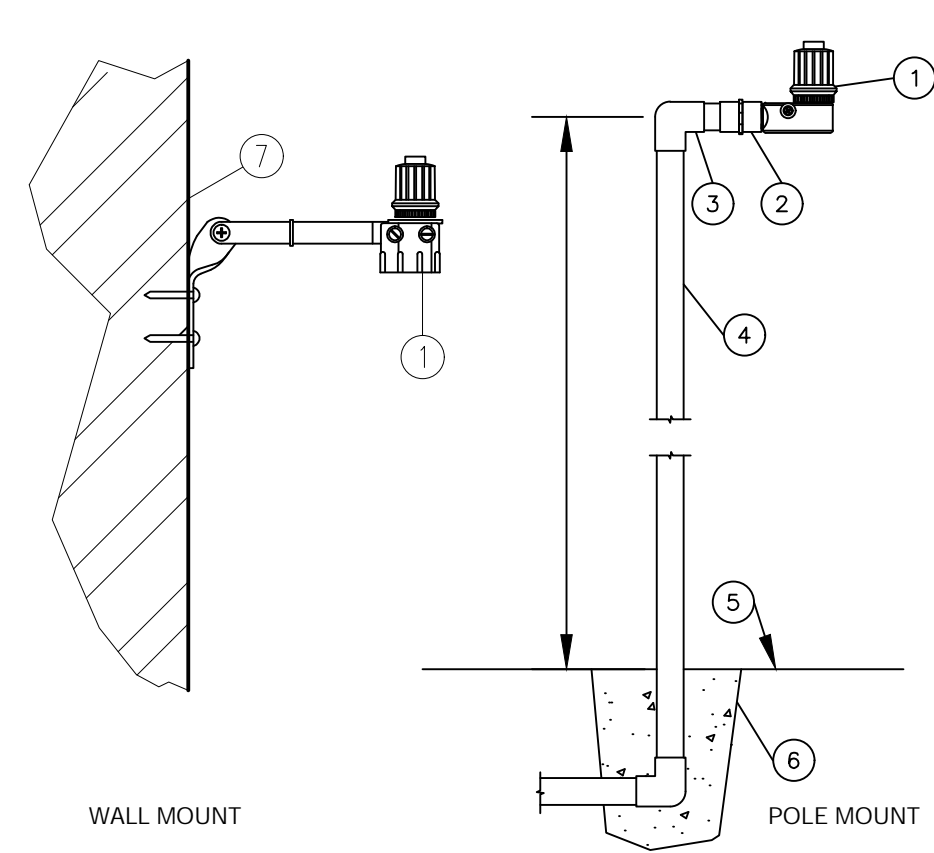
10 ESP-LXMEF CONTROLLER IN PLASTIC CABINET
 NOT TO SCALE

- 1 IRRIGATION CONTROLLER: RAIN BIRD ESP-LXMEF CONTROLLER IN PLASTIC CABINET WITH WALL MOUNT. INSTALL CONTROLLER AND CABINET ON WALL PER MANUFACTURER'S RECOMMENDATIONS.
- 2 JUNCTION BOX
- 3 1-INCH CONDUIT AND FITTINGS TO POWER SUPPLY
- 4 POWER SUPPLY WIRE
- 5 2-INCH CONDUIT AND FITTINGS FOR STATION WIRES
- 6 WIRES TO REMOTE CONTROL VALVES
- NOTES:
- ESP-LXMEF CONTROLLER IS AVAILABLE IN 8- OR 12-STATION BASE MODELS. ADDITIONAL MODULES IN 4-, 8- AND 12-STATION VERSIONS MAY BE ADDED TO BRING THE CONTROLLER UP TO 48 STATIONS MAXIMUM.
 - FOR EASE OF INSTALLATION INTO A CONTROLLER WITH MORE THAN 24 STATIONS, INSTALL A JUNCTION BOX AT THE BASE OF CONTROLLER AND TRANSITION LARGER VALVE AND COMMON WIRES FROM FIELD TO 1/2" AWG MULTI CONDUCTOR WIRE TO BE USED IN CONTROLLER.
 - USE STEEL CONDUIT FOR ABOVE GRADE AND SCH 40 PVC CONDUIT FOR BELOW GRADE CONDITIONS.
 - PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.



11 ESP-LXMEF CONTROLLER IN STAINLESS STEEL PEDESTAL - LXMM5 SPED
 NOT TO SCALE

- 1 IRRIGATION CONTROLLER: RAIN BIRD ESP-LXMEF CONTROLLER WITH FLOW SMART MODULE IN LXMM METAL CABINET AND LXMMPED METAL PEDESTAL. INSTALL CONTROLLER, CABINET AND PEDESTAL PER MANUFACTURER'S RECOMMENDATIONS.
- 2 CONCRETE PAD: 6-INCH MINIMUM THICKNESS.
- 3 FINISH GRADE
- 4 POWER SUPPLY WIRE
- 5 1-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR POWER SUPPLY
- 6 COMPACTED SUBGRADE
- 7 3-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR STATION WIRES
- 8 FLOW SENSOR WIRE (PE 39, 89 OR 54) TO FLOW SENSOR
- 9 MASTER VALVE AND REMOTE CONTROL VALVE WIRES
- NOTES:
- ESP-LXMEF CONTROLLER IS AVAILABLE IN 8- OR 12-STATION BASE MODELS. ADDITIONAL MODULES IN 4-, 8- AND 12-STATION VERSIONS MAY BE ADDED TO BRING THE CONTROLLER UP TO 48 STATIONS MAXIMUM.
 - FOR EASE OF INSTALLATION INTO A CONTROLLER WITH MORE THAN 24 STATIONS, INSTALL A JUNCTION BOX AT THE BASE OF CONTROLLER AND TRANSITION LARGER VALVE AND COMMON WIRES FROM FIELD TO 1/2" AWG MULTI CONDUCTOR WIRE TO BE USED IN CONTROLLER.
 - PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.



12 RAIN SENSOR
 NOT TO SCALE

- 1 RAIN SENSOR: RAIN BIRD WR2 WIRELESS
- 2 FEMALE ADAPTER (SLIP X FIPT)
- 3 GALVANIZED 90° EL (1 OF 2)
- 4 3/4-INCH GALVANIZED PIPE
- 5 FINISHED GRADE
- 6 CONCRETE BASE
- 7 EXTERIOR WALL (SEE NOTES BELOW)
- NOTES:
- MOUNT SENSOR ON SURFACE WHERE IT WILL BE EXPOSED TO UNOBSTRUCTED RAINFALL, BUT NOT IN PATH OF SPRINKLER SPRAY. COORDINATE MOUNTING WITH OWNER AND ARCHITECT.
- PAINT PIPE SEMI GLOSS BLACK AND SISTER THE PIPE TO A LIFT STATION FENCE POST WITH SS PIPE CLAMPS

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NO.	REVISIONS	BY	DATE

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 355 ALHAMBRA CIRCLE, SUITE 1400, CORAL GABLES, FL 33134
 PHONE: 305-673-2025
 WWW.KIMLEY-HORN.COM REGISTRY 696

REGISTERED LANDSCAPE ARCHITECT
 No. LA6667406
 STATE OF FLORIDA
 11/17/2021

KHA PROJECT	14-3228000
DATE	JULY 2021
SCALE	AS SHOWN
DESIGNED BY	NW
DRAWN BY	CT
CHECKED BY	NW

IRRIGATION DETAILS

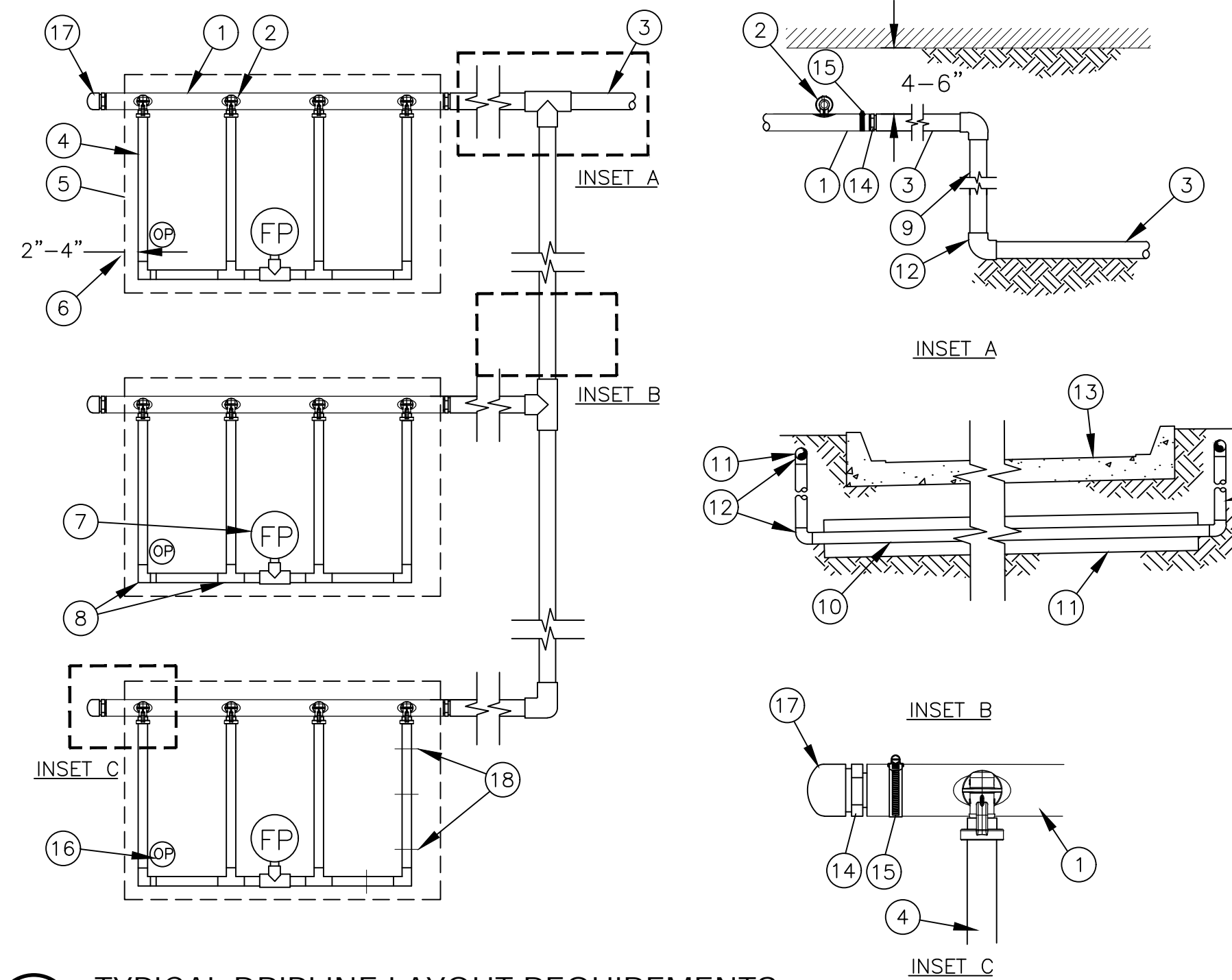
IRC LANDFILL
 PREPARED FOR
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 INDIAN RIVER COUNTY

SHEET NUMBER
L-352

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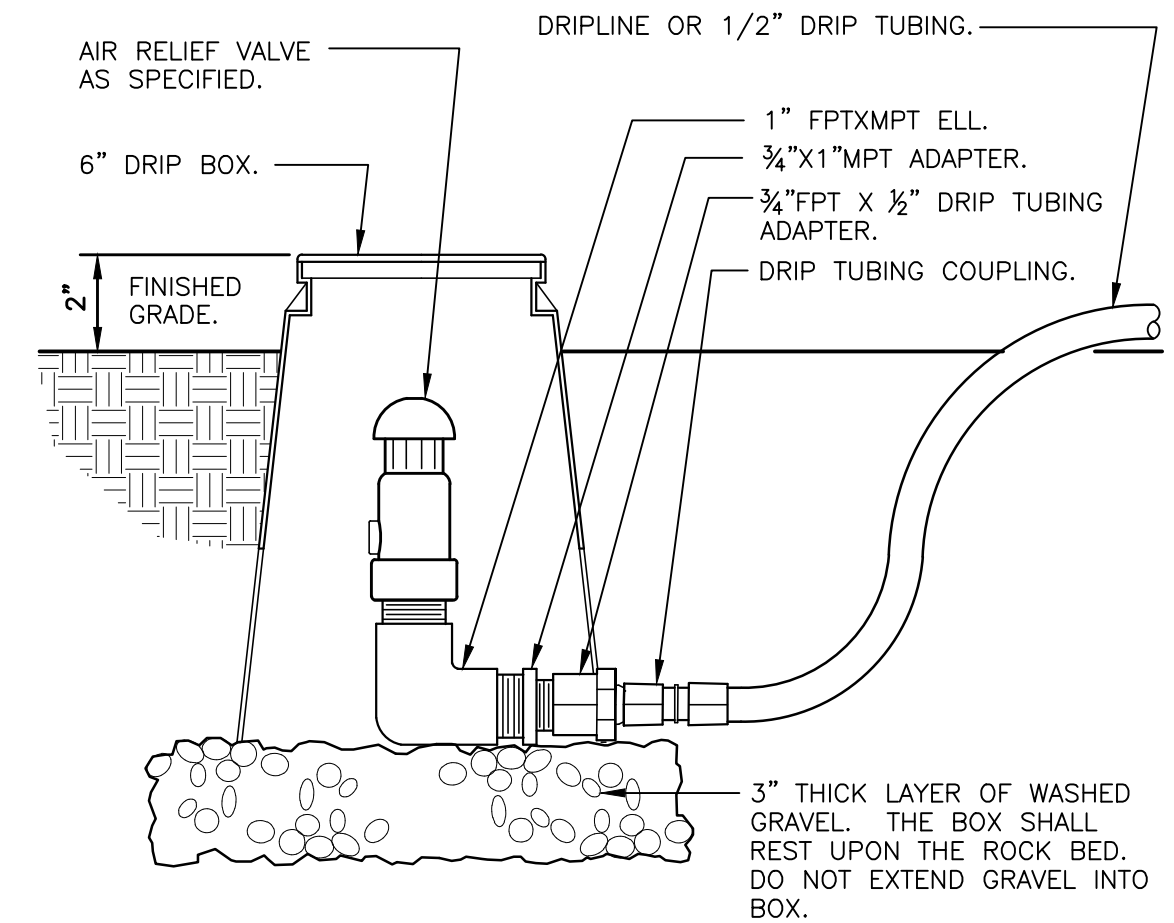
Plotted By: Epiq. Carlos. Sheet Set: IRC LANDFILL. Layout: IR-353. DETAILS. November 15, 2021. 03:22:46pm. \\kimley-horn.com\EL\MA\WIB_Civil\143228000 - IRC HHW and Recycling Facility\Landscaping\CADD\PlanSheets\1-300 IRRIGATION PLAN.dwg
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- 1 QF-SUPPLY HEADER
- 2 PRE-INSTALLED BARB FITTING
- 3 PVC DRIP MANIFOLD FROM RAIN BIRD CONTROL ZONE VALVE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
- 4 RAIN BIRD XFS SERIES DRIPLINE (TYPICAL)
- 5 PERIMETER OF AREA
- 6 PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
- 7 FLUSH POINT (TYPICAL) - SEE RAIN BIRD XFF DETAILS FOR FLUSH POINT INSTALLATION
- 8 BARB X BARB INSERT TEE OR ELL: RAIN BIRD XFF-TEE OR RAIN BIRD XFF-ELBOW (TYPICAL)
- 9 PVC RISER PIPE
- 10 PVC SUPPLY MANIFOLD
- 11 PVC SCH 40 SLEEVE PIPE SIZED TWICE THE SIZE OF MANIFOLD PIPE SIZE
- 12 PVC SCH 40 TEE OR ELL (TYPICAL)
- 13 PAVEMENT AND CURB
- 14 MALE ADAPTER INSERT
- 15 STAINLESS STEEL, OETIKER OR MURRAY CLAMP
- 16 OPERATION INDICATOR RAIN BIRD MODEL: OPERIND
- 17 PVC SCH 40 CAP
- 18 XF SERIES TIE-DOWN STAKES (TDS-050) REFER TO RAIN BIRD DRIPLINE DESIGN GUIDE FOR PROPER SPACING

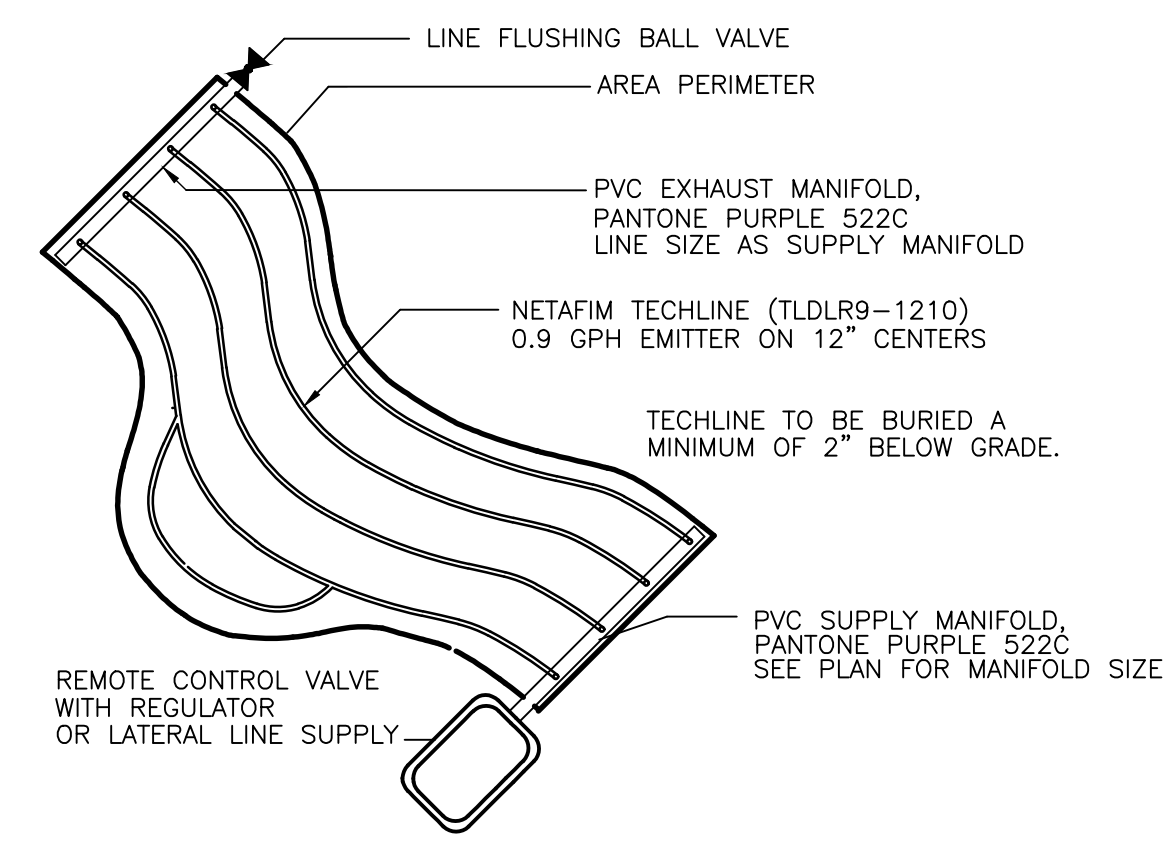
NOTES:
 1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE INSTALLATION SPECIFICATIONS ON RAIN BIRD WEB SITE (WWW.RAINBIRD.COM) FOR SUGGESTED SPACING.
 2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING SHOWN IN THE ACCOMPANYING TABLE.
 3. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
 4. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

Inlet Pressure psi	12" Spacing		18" Spacing		24" Spacing	
	Nominal Flow (gph)	Nominal Flow (gph)	Nominal Flow (gph)	Nominal Flow (gph)	Nominal Flow (gph)	Nominal Flow (gph)
15	0.6	0.9	0.6	0.9	0.6	0.9
20	273	155	314	250	424	322
30	318	169	353	294	508	368
40	360	230	413	350	586	414
50	395	255	465	402	652	474
60	417	285	528	420	720	488
60	460	290	596	455	780	514

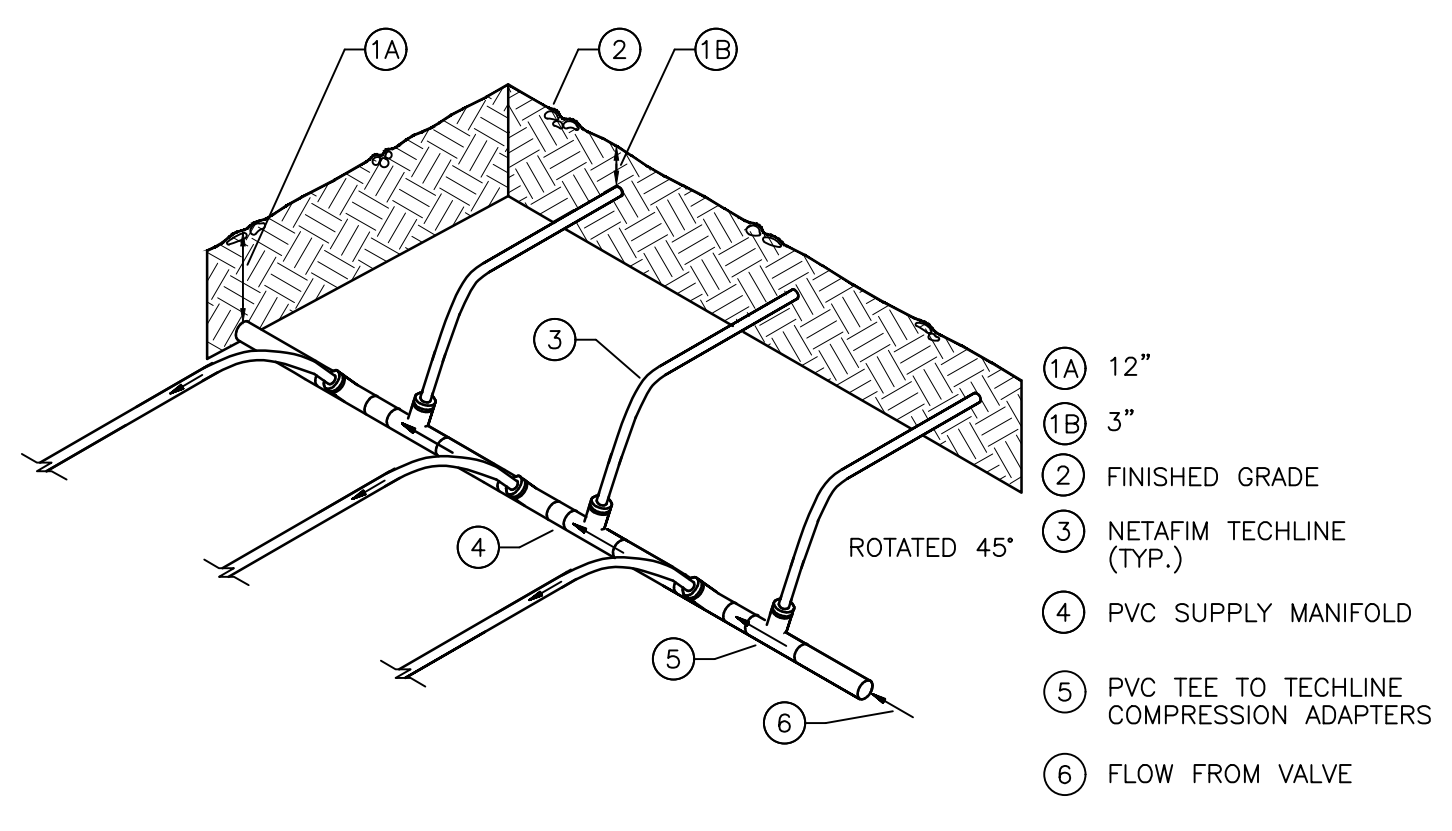


1 TYPICAL DRIPLINE LAYOUT REQUIREMENTS
 NOT TO SCALE

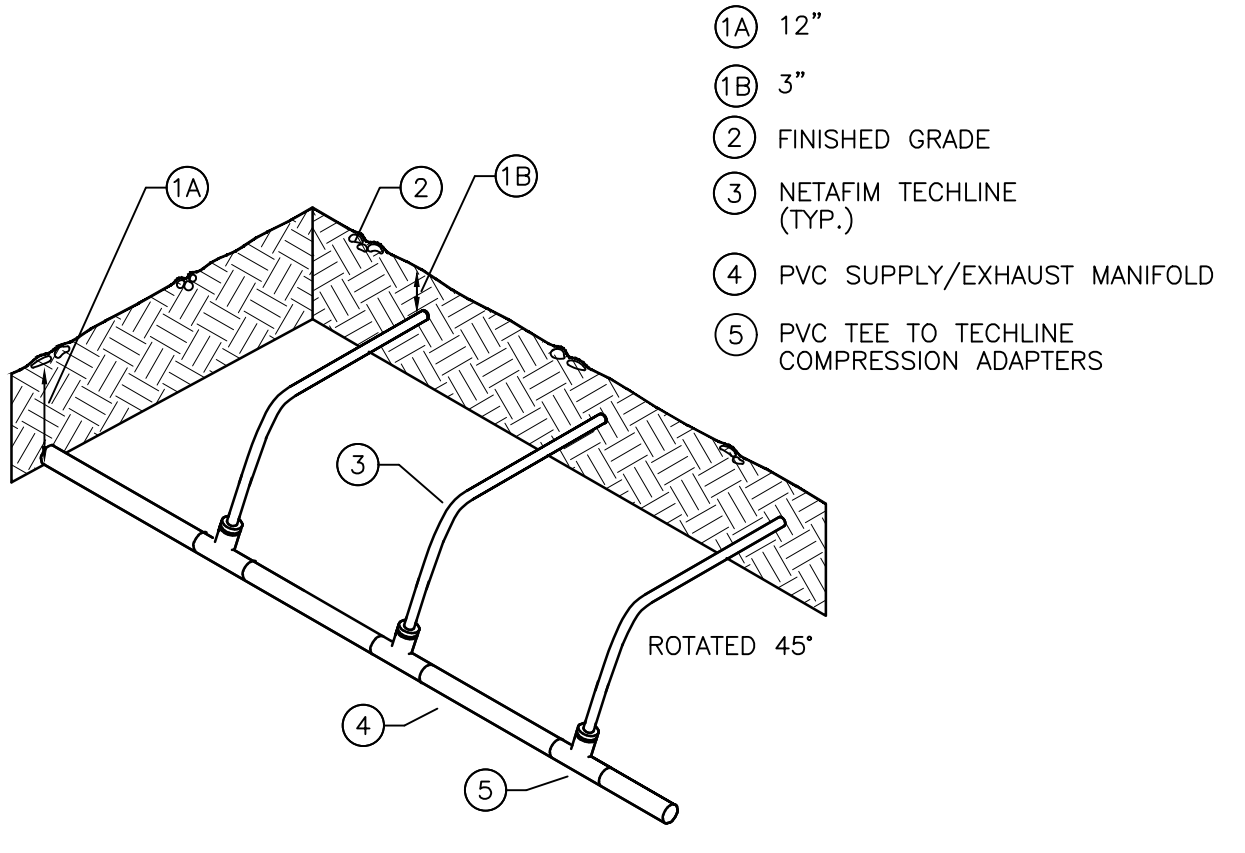
2 DRIFT AIR RELIEF VALVE IN BOX
 3" = 1'-0" 32 8413.53-03



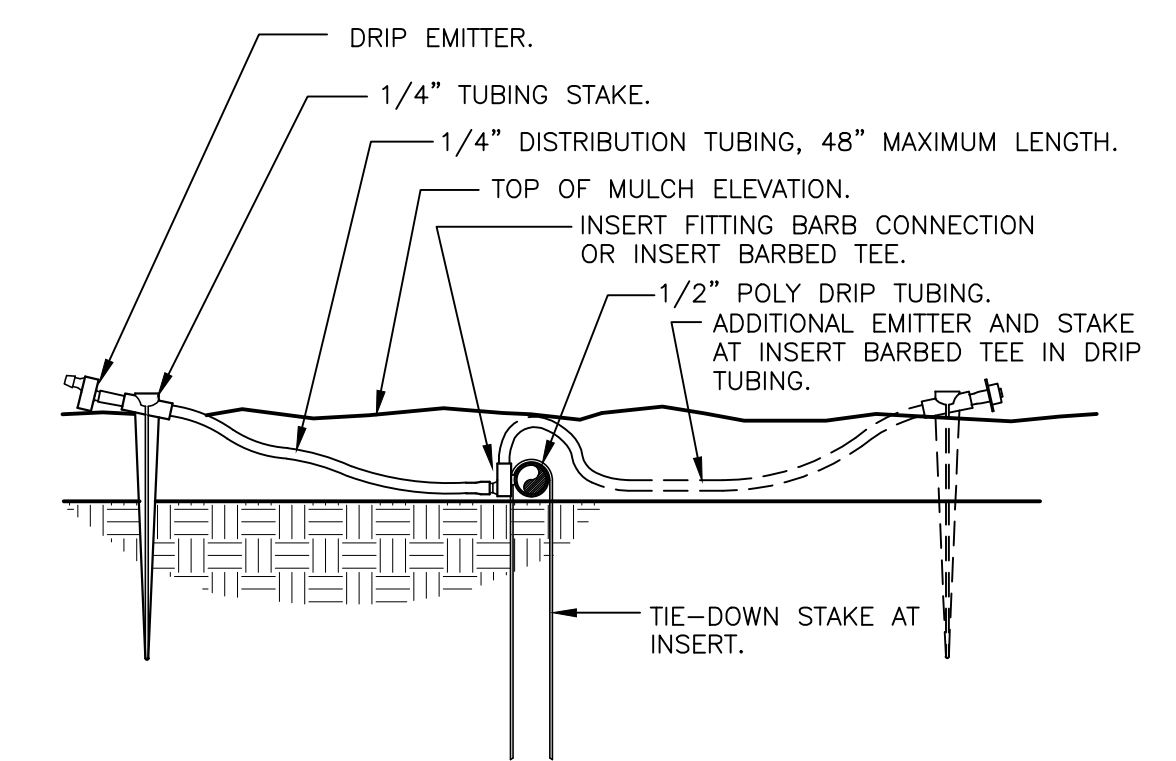
3 IRREGULAR AREAS
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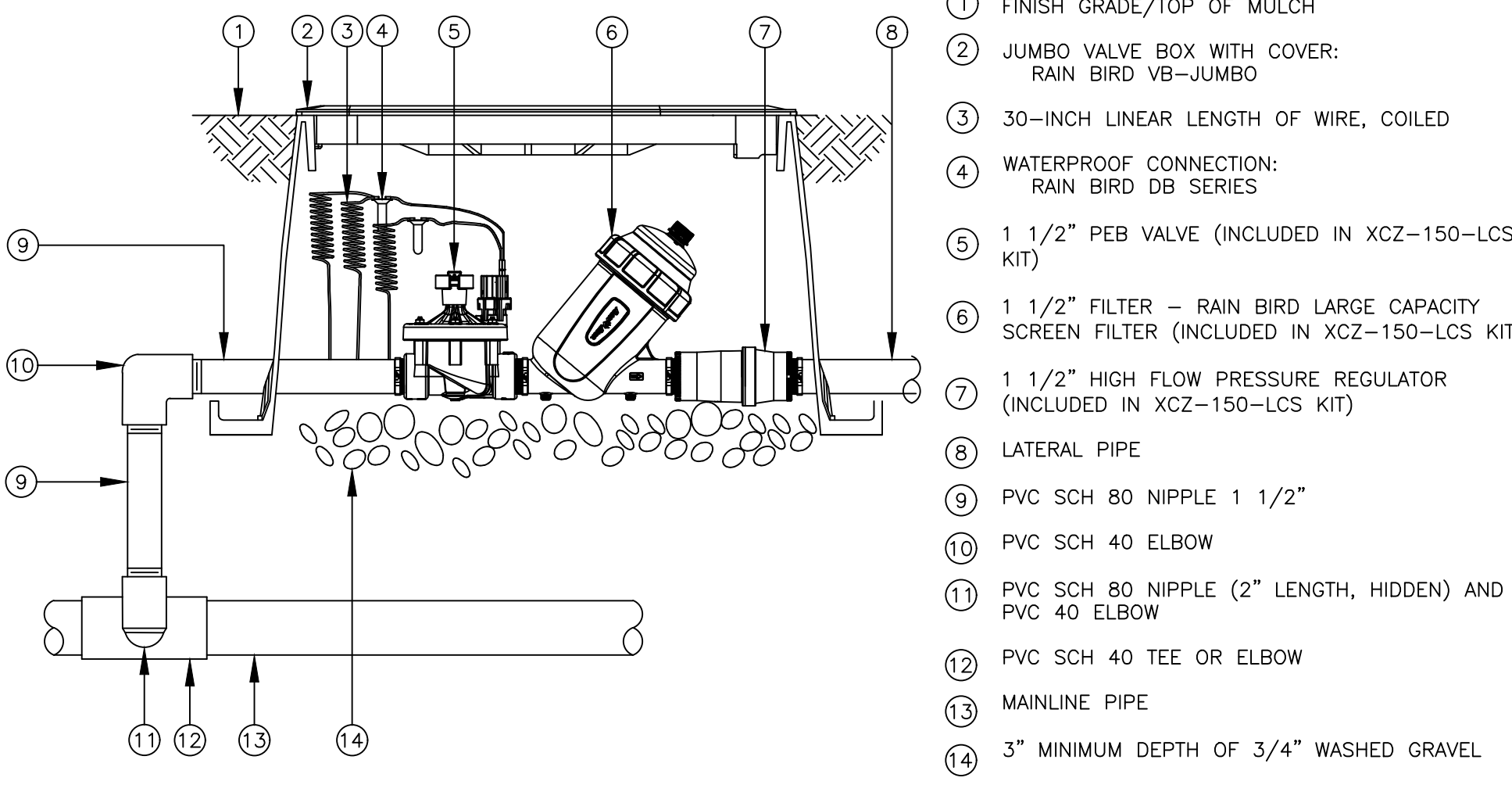
4 LATERAL TO DRIP FEED DETAILS
 NOT TO SCALE



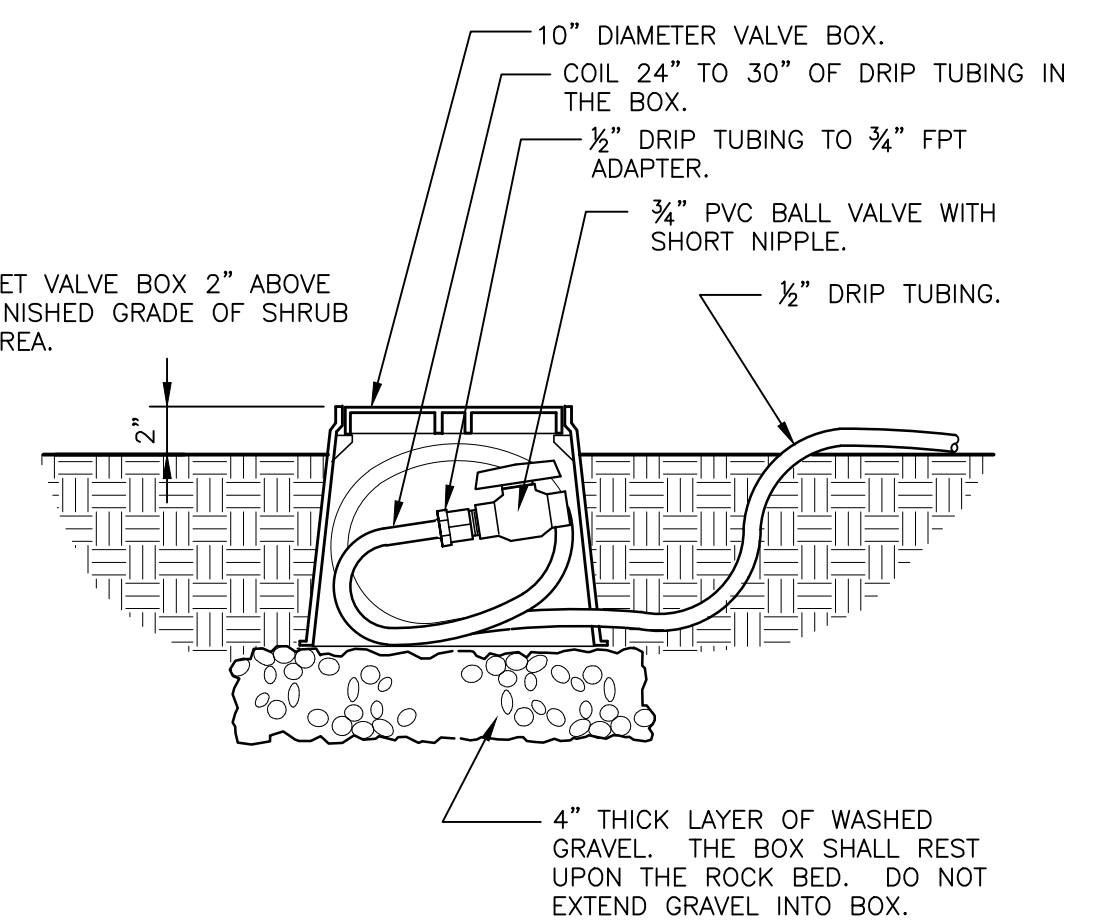
5 ZONE CONTROL
 3" = 1'-0" 32 8413.46-03



6 DRIP EMITTER AT 1/4" TUBING
 3" = 1'-0" 32 8413.13-13



7 DRIP ZONE CONTROL VALVE KIT IN JUMBO VALVE BOX
 3" = 1'-0" 32 8413.49-03



8 DRIP FLUSH VALVE
 1 1/2" = 1'-0" 32 8413.49-03

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KHA PROJECT
 143228000
 DATE
 JULY 2021
 SCALE AS SHOWN
 DESIGNED BY
 NW
 DRAWN BY
 CT
 CHECKED BY
 NW

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 355 ALHAMBRA CIRCLE, SUITE 1400, CORAL GABLES, FL 33134
 PHONE: 305-673-2025
 WWW.KIMLEY-HORN.COM REGISTRY 696

REVISIONS
 No. _____
 DATE _____

IRRIGATION DETAILS

IRC LANDFILL
 PREPARED FOR
 INDIAN RIVER COUNTY
 INDIAN RIVER COUNTY

SHEET NUMBER
L-353

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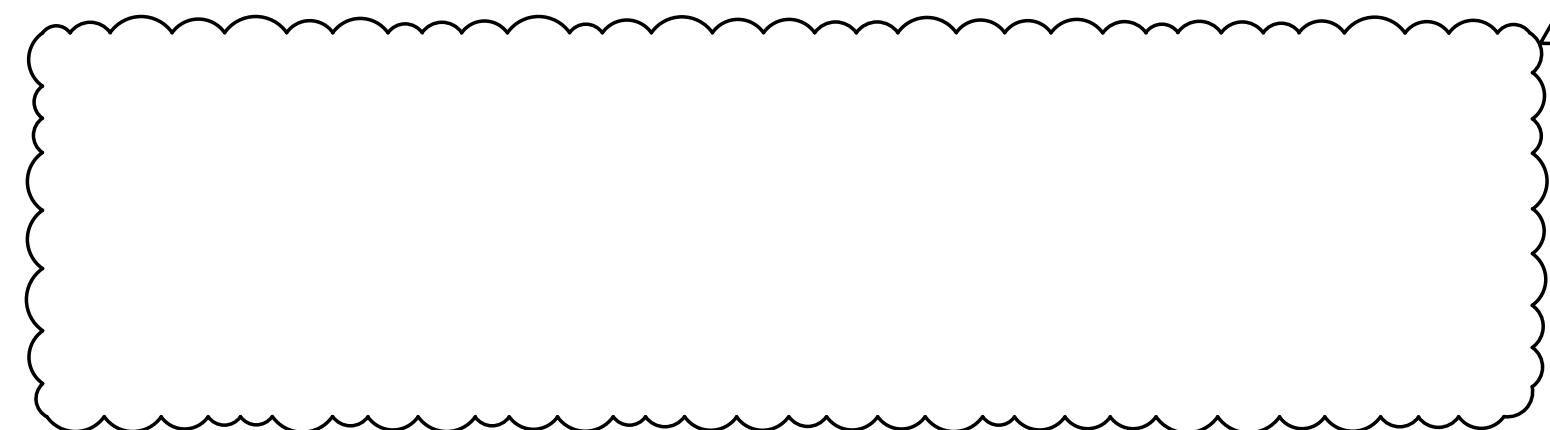
GENERAL MECHANICAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH 2020 FLORIDA BUILDING CODE 7TH EDITION - MECHANICAL TO THE BEST OF THE ENGINEER'S KNOWLEDGE. ALL DRAWINGS AND SPECIFICATIONS COMPLY WITH MINIMUM EXISTING CODES.
- CONTRACTOR SHALL PROVIDE ALL WORK CUSTOMARILY INCLUDED IF NOT SPECIFICALLY CALLED FOR ON THE PLANS. ALL WORK SHALL BE IN ACCORDANCE WITH BASE BUILDING PLANS AND SPECIFICATIONS.
- CONTRACTOR TO CONSULT BUILDING OWNER FOR BUILDING STANDARDS AND CONTROL SEQUENCES.
- CONTRACTOR SHALL CONFIRM THE EXISTENCE OF FIRE DAMPERS AS REQUIRED BY CODE IN ANY DUCT PENETRATING EXISTING FIRE RATED PARTITIONS.
- CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE THEMSELV WITH ALL DETAILS OF THE WORK AND EXISTING CONDITIONS. THE INTENT OF THESE NOTES AND MECHANICAL NOTES ON DRAWINGS IS TO CLARIFY THE SCOPE OF WORK AND ALERT CONTRACTOR OF EXISTING CONDITIONS. CONTRACTOR SHALL VERIFY ALL CLEARANCES BEFORE FABRICATION OF DUCTWORK AND PROVIDE ADDITIONAL OFFSET AND/OR CHANGES IN DUCT SIZES TO MEET FIELD CONDITIONS AND COORDINATE WITH ELECTRICAL AND PLUMBING SUBCONTRACTOR BEFORE ANY CONSTRUCTION WORK.
- CONTRACTOR SHALL PROVIDE A COPY OF THE INDEPENDENT TEST AND BALANCE REPORT AT THE FINAL INSPECTION. CONTRACTOR SHALL ALSO PROVIDE ALL REPORTS AS REQUIRED BY THE SPECIFICATIONS.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL TRADES INSTALLATION SCHEDULES. FIXED WORK SUCH AS DUCTWORK AND PLUMBING SHALL BE INSTALLED PRIOR TO ANY TRADE WORK THAT CAN BE EASILY RELOCATED OR OFFSET SUCH AS ELECTRICAL CONDUITS AND SMALL WATER LINES, ETC.
- CONTRACTOR SHALL REVIEW STRUCTURAL DRAWINGS BEFORE INSTALLATION TO AVOID ANY BEAM CONFLICTS AND COORDINATE PIPING AND HVAC DUCTWORK ACCORDINGLY.
- BALANCE AIR DISTRIBUTION SYSTEMS TO QUANTITIES AS INDICATED ON DRAWINGS.
- ALL SUPPLY TAKE-OFFS ARE CONNECTED TO HARD TRUNK DUCT WITH SPIN-IN FITTING (WITH MANUAL DAMPER) OF SIZE EQUAL TO DIFFUSER INLET AND DUCT CONNECTION. FLEXIBLE DUCT SHALL BE STRAIGHT WITH NO SAGS OR EXCESS DUCT. TOTAL TURNS SHALL NOT EXCEED 135 DEGREES. FLEX CONNECTIONS ARE NOT TO EXCEED 8 FEET IN LENGTH. PROVIDE HARD DUCT FOR OVER 8 FEET OR AS SPECIFICALLY CALLED FOR ON THE PLANS. THERMA-FLEX OR EQUAL INSULATED FLEX DUCT CONFORMING TO NFPA-90A AND UL 181 FOR "AIR DUCT CONNECTOR."
- ALL EXHAUST VENTS MUST BE AT LEAST 10' FROM ANY OUTSIDE AIR INTAKE. CONTRACTOR TO ADJUST VENTS ACCORDINGLY.
- ALL DUCT SIZES INDICATED ON DRAWINGS ARE INSIDE CLEAR DIMENSIONS.
- ALL DUCTWORK SHALL BE FIBERBOARD WITH 1.5" THICK INSULATION, EXCLUDING FLEX DUCT CONNECTIONS. ALL FLEXIBLE DUCT SHALL BE ATCO BRAND (CLASS 1) WITH AN INSULATION VALUE OF R8. ALL JOINTS MUST BE MECHANICALLY FASTENED AND SEALED TO 100% CLOSURE. METHODS FOR ATTACHMENT AND SEALING SHALL BE APPROVED METHOD AS STATED IN FBCM TABLE 603 AND SECTIONS 603.1 THRU 603.17. ALL DUCTWORK CONSTRUCTION SHALL MEET SECTION C403 OF THE FBC ENERGY CONSERVATION.
- ALL CEILING MOUNTED DIFFUSERS SHALL BE 4-WAY THROW UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL PROVIDE CONCEALED DAMPER REGULATOR OR ACCESS PANEL OF ALL MANUAL VOLUME DAMPERS/SPIN-IN DAMPERS ABOVE HARD CEILINGS OR OTHERWISE INACCESSIBLE AREAS ABOVE CEILING.
- IN GENERAL, PLANS AND DIAGRAMS ARE SCHEMATIC ONLY AND SHOULD NOT BE SCALED.
- COORDINATE AIR DEVICE LOCATIONS WITH LIGHTING FIXTURES.
- PROVIDE ADDITIONAL DUCTWORK AND PIPING SUPPORTS ON BOTH SIDES AND WITHIN 18" OF FIRE RATED WALL. DUCTWORK OR PIPING SHALL NOT BE SUPPORTED FROM ANY FIRE RATED WALL.
- TURNING VANES SHALL BE PROVIDED IN ALL SUPPLY DUCT RECTANGULAR ELBOWS WITH ANGLES BETWEEN 15 DEGREES AND LESS THAN 90 DEGREES PER SMACNA.
- DUCTWORK SHALL NOT BE SUPPORTED BY THE CEILING OR CEILING SUSPENSION SYSTEM.
- ALL WALL MOUNTED THERMOSTATS AND/OR TEMPERATURE SENSORS SHALL BE INSTALLED AT AN ELEVATION OF 48" A.F.F. ALL THERMOSTATS NEED TO BE RECALIBRATED BY A MECHANICAL CONTRACTOR IF THEY ARE RELOCATED. THERMOSTATS SHALL BE FASTENED BY PLASTIC SHIELD AND SCREWS.
- OUTSIDE AIR SUPPLY RATES CONFORM TO ASHRAE 62-2016 STANDARDS.
- UNLESS OTHERWISE NOTED, INSTALL DUCTWORK AS HIGH AS POSSIBLE, TIGHT TO BOTTOM OF STRUCTURE. COORDINATE DUCT ELEVATION WITH WATER PIPING, SANITARY DRAINS AND MAJOR ELECTRICAL CONDUITS.
- PROVIDE ALL SUPPLEMENTARY STEEL REQUIRED TO INSTALL MECHANICAL EQUIPMENT AND MATERIALS.
- INSTALL AND INSULATE REFRIGERANT PIPING AS PER MANUFACTURER.
- CONDENSATE PIPING SHALL BE COPPER. PROVIDE A TRAP IN ALL CONDENSATE PIPING LOCATED AT THE AIR HANDLING UNIT. INSULATE ALL CONDENSATE LINES WITH 1/2" THICK CLOSED CELL FOAM INSULATION. SLOPE CONDENSATE LINES AT 1/8" PER FOOT MINIMUM.
- INSTALLATION OF MECHANICAL EQUIPMENT SHALL COMPLY WITH THE MANUFACTURER'S SPECIFICATIONS AND CLEARANCE REQUIREMENTS.
- MATCH DIFFUSER MOUNTING FRAME WITH CEILING TYPE.
- ALL DASHED LINED EQUIPMENT AND DUCTWORK ARE EXISTING. ALL SOLID LINED EQUIPMENT AND DUCTWORK ARE NEW UNDER TENANT WORK EXCEPT FOR DIFFUSERS.
- FOR DUCTWORK PENETRATING ONE HOUR FIRE RATED WALL: THE ENTIRE DUCT SYSTEM TO BE CONSTRUCTED PER SMACNA STANDARDS WITH A MINIMUM OF 26 GAUGE STEEL DUCT AND SHALL CONTINUE IN THE HORIZONTAL DIRECTION WITHOUT ANY GRILLE OR OPENING FOR NOT LESS THAN 5'-0" FROM THE WALL AND DUCT SHALL NOT EXCEED SQUARE INCH REQUIREMENTS OF LOCAL CODE, OTHERWISE A FIRE DAMPER SHALL BE PROVIDED.
- PENETRATIONS THROUGH SMOKE OR FIRE RATED ASSEMBLIES: PENETRATIONS FOR PIPES, CONDUITS OR OTHER PURPOSES THROUGH ASSEMBLIES (FLOORS, ROOF, WALLS PARTITIONS, ETC.) WITH A REQUIRED FIRE RESISTANCE RATING SHALL BE SEALED TO THE PENETRATING MEMBER IN AN APPROVED MANNER WHICH MAINTAINS THE REQUIRED FIRE RESISTANCE RATING OF THE ASSEMBLY.
- TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH SECTION AND CHAPTER 633, FLORIDA STATUTES. FBC 110.8.4.4 2020.

FMC TABLE 403.3.11 VENTILATION REQUIREMENTS

REQUIRED OUTSIDE AIR			
CONFERENCE: 12 PEOPLE X 5 CFM/PERSON + 329 SQ FT X 0.06 CFM/SQ FT = 80 CFM			
OFFICE: 2 PEOPLE X 5 CFM/PERSON + 232 SQ FT X 0.06 CFM/SQ FT = 24 CFM			
AVAILABLE OUTSIDE AIR			
NEW MAIN AIR HANDLER SERVING THE CONDITIONED SPACES ARE DESIGNED TO DELIVER A TOTAL OF 150 CFM OF OUTSIDE AIR.			
OUTSIDE AIR			
AHU-1	150 CFM		
TOTAL OUTSIDE AIR	150 CFM	TOTAL	
		OUTSIDE AIR	+ 150 CFM
		EXHAUST	- 140 CFM
EXHAUST AIR			
EF-1	70 CFM		
EF-2	70 CFM		
TOTAL EXHAUST	140 CFM	TOTAL CONDITIONED AREA PRESSURE	+ 10 CFM

AIR BALANCE



MECHANICAL LEGEND	
MVD	MANUAL VOLUME DAMPER
EXIST.	EXISTING
RA	RETURN AIR
OA	OUTSIDE AIR
	DUCT REDUCTION IN DIRECTION OF FLOW
	DUCT MOUNTED SMOKE DETECTOR
	MOTORIZED DAMPER
	RETURN (OR EXHAUST) GRILLE
	SUPPLY DIFFUSER
ETR	EXISTING TO REMAIN
RE	RELOCATE EXISTING
ER	EXISTING RELOCATED
	FIRE DAMPER
	EXISTING FIRE DAMPER
	SMOKE TIGHT DUCT SEAL
	SMOKE DAMPER
	FIRE/SMOKE DAMPER
	NEW HARD DUCT
	EXISTING HARD DUCT
	NEW FLEXIBLE DUCT
	EXISTING FLEXIBLE DUCT
	THERMOSTAT
	NEW CONNECTION
	BACKDRAFT DAMPER
	REMOTE TEST STATION

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HOUSEHOLD HAZARDOUS WASTE
AND RECYCLING FACILITY**

Indian River County, Florida

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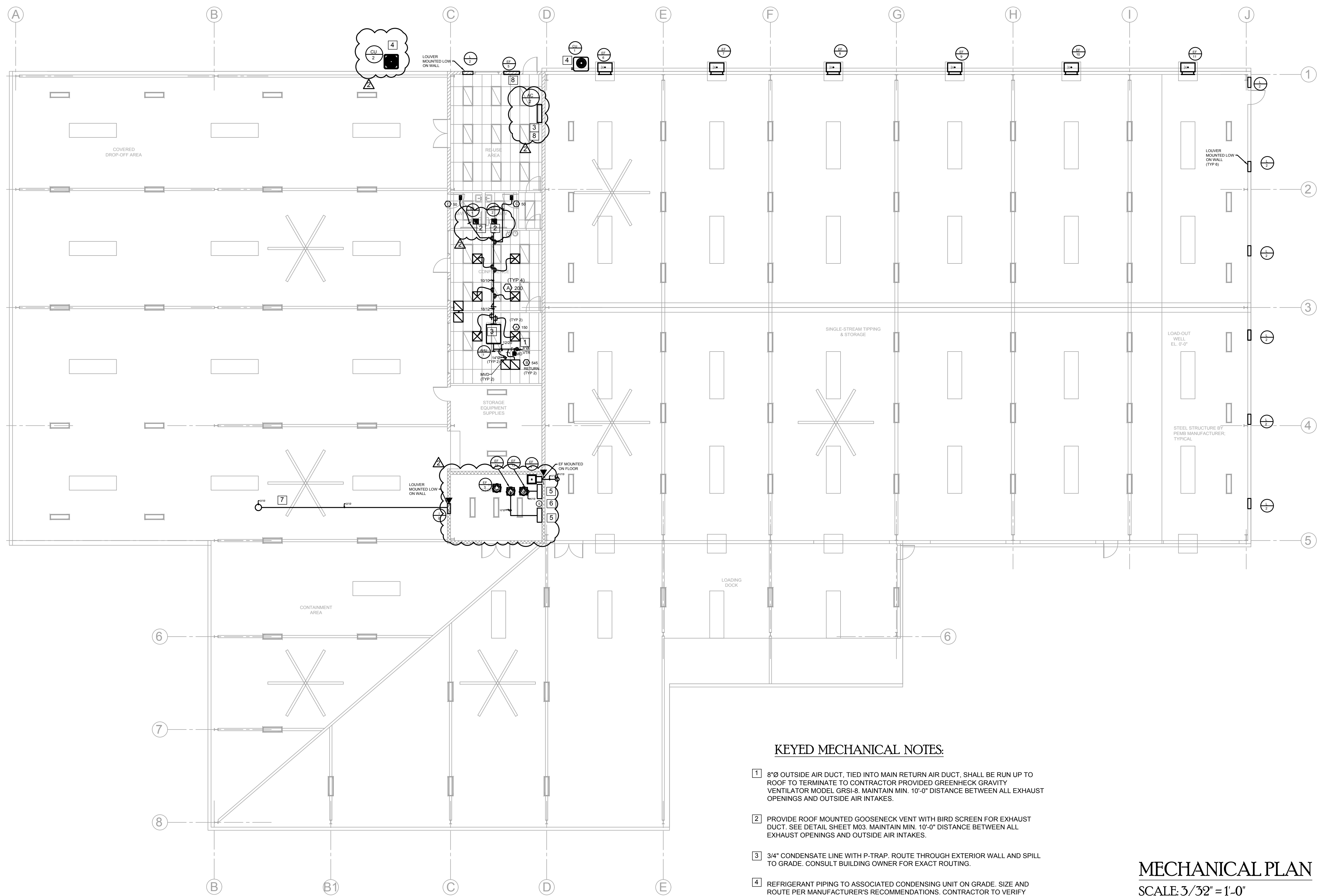
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MECHANICAL NOTES

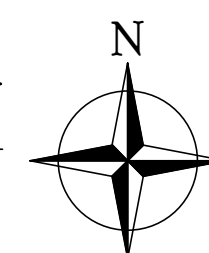
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M101



KEYED MECHANICAL NOTES:

- 1 8"Ø OUTSIDE AIR DUCT, TIED INTO MAIN RETURN AIR DUCT, SHALL BE RUN UP TO ROOF TO TERMINATE TO CONTRACTOR PROVIDED GREENHECK GRAVITY VENTILATOR MODEL GRSI-8. MAINTAIN MIN. 10'-0" DISTANCE BETWEEN ALL EXHAUST OPENINGS AND OUTSIDE AIR INTAKES.
- 2 PROVIDE ROOF MOUNTED GOOSENECK VENT WITH BIRD SCREEN FOR EXHAUST DUCT. SEE DETAIL SHEET M03. MAINTAIN MIN. 10'-0" DISTANCE BETWEEN ALL EXHAUST OPENINGS AND OUTSIDE AIR INTAKES.
- 3 3/4" CONDENSATE LINE WITH P-TRAP. ROUTE THROUGH EXTERIOR WALL AND SPILL TO GRADE. CONSULT BUILDING OWNER FOR EXACT ROUTING.
- 4 REFRIGERANT PIPING TO ASSOCIATED CONDENSING UNIT ON GRADE. SIZE AND ROUTE PER MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO VERIFY ROUTE AND CONSULT BUILDING OWNER FOR EXACT LOCATION OF CONDENSING UNIT.
- 5 CONTRACTOR TO DUCT 10" ROUND EXHAUST FROM ROOF MOUNTED EXHAUST FAN TO VENDOR PROVIDED BULKING HOOD. CONTRACTOR TO CONSULT VENDOR FOR FUTURE CONNECTIONS TO BULKING HOOD.
- 6 CONTRACTOR TO PROVIDE H2 SENSOR AND MONITORING SYSTEM. MOUNT SENSOR ABOVE BULKING HOODS' EXHAUST INTAKE.
- 7 CONTRACTOR TO PROVIDE INTAKE WITH 40 FEET MINIMUM FROM H2 STORAGE. CONTRACTOR TO RUN DUCTWORK TIGHT TO STRUCTURE BEFORE ROOF PENETRATION.
- 8 WHEN SWITCH IS TURNED ON, EF-5 SHALL BE ENERGIZED AND AC-2 SHALL TURN OFF. WHEN SWITCH IS TURNED OFF EF-5 SHALL DE-ENERGIZE AND AC-2 WILL TURN ON.

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



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MECHANICAL PLAN

SHEET NO.
M102

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SPLIT SYSTEM AIR HANDLING UNIT SCHEDULE

REMARKS:
ALL AHUS TO UTILIZE R-410A REFRIGERANT AND TO HAVE MINIMUM 13.0 SEER RATING

MARK AHU NO.	MIN. O.A. CFM	MAX. O.A. CFM	FAN DATA			COOLING DATA				ACCESSORY HEATER DATA				ELECTRICAL DATA			WEIGHT (LBS)	BASIS OF DESIGN	SEER	ACCESSORIES	
			CFM	EXT. SP. WG	MOTOR HP	EDB °F	EWB °F	TOTAL CAP MBH	SENS. CAP MBH	V/φ	(KW)	STEPS	MCA	MOCP	V/φ	MCA					MOCP
AHU-1	0	150	1200	0.5	0.5	80	67	34	27.4	460/3	10	1	19.3	20	208/1	5.1	15	163	CARRIER FV4CMB006L00	14.0	①②③④⑤⑥⑦⑧

ACCESSORIES:
 ① AUXILIARY DRAIN PAN WITH FLOAT SWITCH. UNIT TO SHUT DOWN UPON WATER DETECTION. CONDENSATE DRAIN SHALL BE FULL SIZE FROM UNIT. PROVIDE CONDENSATE PUMP AND ROUTE CONDENSATE TO NEAREST BASE BUILDING CONDENSATE RISER.
 ② SINGLE POINT ELECTRICAL CONNECTION.
 ③ 1" DISPOSABLE FILTERS.
 ④ PROGRAMMABLE DIGITAL THERMOSTAT.
 ⑤ DISCONNECTS BY DIVISION 16.
 ⑥ VARIABLE SPEED FAN.
 ⑦ PROVIDE WITH ACCESSORY DUCT HEATER WARREN WKF1005A
 ⑧ PROVIDE RAWAL/APR DEVICE FOR CAPACITY CONTROL

SPLIT SYSTEM CONDENSING UNIT SCHEDULE

REMARKS:
 1. SIZE AND ROUTE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS.
 2. COORDINATE EXACT LOCATION OF UNIT WITH OWNER.
 3. ALL AHUS TO UTILIZE R-410A REFRIGERANT.

MARK CU NO.	PAIR WITH	LOCATION	ELECTRICAL DATA			BASIS OF DESIGN	WEIGHT (LBS)	ACCESSORIES
			V/φ	MCA	MPS (amps)			
CU-1	AHU-1	GRADE	460/3	21.5	30	CARRIER 24ABB336A006	170	①②

ACCESSORIES: ① DISCONNECTS BY DIVISION 16 ② PROVIDE WITH LOW AMBIENT CONTROLS

AIR DISTRIBUTION SCHEDULE

REMARKS:
 1. COORDINATE FRAME & BORDER TYPE WITH CEILING TYPE. REFER TO ARCHITECTURAL PLANS.
 2. COORDINATE WITH BLDG MGT FOR BLDG STANDARDS.

MARK	CFM	NECK SIZE (INCHES)	FACE SIZE (INCHES)	BASIS OF DESIGN	ACCESSORIES
A	0-120	6"Ø	24"x24"	SUPPLY DIFFUSER EQUAL TO TITUS MODEL PAS TO MATCH EXISTING. INSULATE BACK OF ALL DIFFUSERS.	
	121-250	8"Ø	24"x24"		
	251-350	10"Ø	24"x24"		
	351-450	12"Ø	24"x24"		
B	0-1600	22"x22"	24"x24"	PERFORATED RETURN/TRANSFER GRILLE EQUAL TO TITUS PAR TO MATCH EXISTING. INSULATE BACK OF ALL DIFFUSERS.	
C	0-120	6"Ø	11.75"x7.75"	SUPPLY GRILLE EQUAL TO PRICE MODEL 640.	

FAN SCHEDULE

MARK	SERVICE	LOCATION	CFM	EXT. SP. WG	MOTOR HP	MOTOR V/φ	MAX RPM	DRIVE TYPE	WEIGHT	INTERLOCK	BASIS OF DESIGN	ACCESSORIES
EF-1	RESTROOM	CEILING	70	0.25	74.7 W	115/1	1400	DIRECT	26 lbs	LIGHTS	COOK GEMINI GC-146	①②
EF-2	RESTROOM	CEILING	70	0.25	74.7 W	115/1	1400	DIRECT	26 lbs	LIGHTS	COOK GEMINI GC-146	①②
EF-3	H-2 STORAGE	ROOF	1200	0.5	.25	460/3	1725	BELT	127 lbs	CONTINUOUS	COOK ACRU-B	①③④⑤⑩⑪⑫
EF-4	H-2 STORAGE	WALL	400	0.25	0.25	460/3	1140	BELT	282 lbs	CONTINUOUS	COOK SQI-HP	①③④⑤
EF-5	RE-USE AREA	WALL	850	0.25	0.25	460/3	1140	BELT	64 lbs	SWITCH	COOK ACW-B	①③④⑤
EF-6 EF-7 EF-8 EF-9 EF-10 EF-11	SINGLE STREAM TIPPING	WALL	6850	0.25	0.948	460/3	840	BELT	572	SWITCH	COOK AWB	①⑬⑭⑮
EF-12 EF-13	H-2 STORAGE	ROOF	600	1.0	.293	460/3	1538	BELT	106 lbs	SWITCH	COOK ACE-B	①③④⑤⑩⑪⑫⚠

ACCESSORIES:
 ① SPEED CONTROLLER ⑥ OSHA BELT GUARD ⑬ MANUFACTURER'S ROOF CURB + BIRD SCREEN ⑮ MOTORIZED DAMPER
 ② MOTOR WITH THERMAL OVERLOAD ⑦ INLET SAFETY SCREEN ⑭ MIAMI-DADE HURRICANE RATED CONSTRUCTION
 ③ EXPLOSION PROOF MOTOR ⑧ OSHA BELT GUARD ⑮ PREMIUM EFFICIENCY MOTOR
 ④ BACKDRAFT DAMPER ⑨ VIBRATION ISOLATORS ⑯ GRAVITY SHUTTER
 ⑤ EXPLOSION PROOF DISCONNECT ⑩ AMCA A CONSTRUCTION ⑰ WALL COLLAR

LOUVER SCHEDULE

MARK	DESCRIPTION
L-1	12"x12" INTAKE LOUVER. COOK MODEL SG-10 FINISH TBD BY ARCH
L-2	26"x26" INTAKE LOUVER. COOK MODEL SG-24 FINISH TBD BY ARCH

DUCTLESS FAN COIL UNIT SCHEDULE

MARK A/C #	FAN DATA			COIL DATA				FILTER DATA		BASIS OF DESIGN	ELECTRIC MCA	ELECTRICAL MOCP	REMARKS
	CFM	EXT. SP. WG	MOTOR HP	V/φ	EDB °F	EWB °F	TOTAL CAP MBH	SENS. CAP. MBH	TYPE				
2	775	-	-	230/1	80	67	24.0	-	-	MITSUBISHI PKA-A24HA4	1.0	SEE CU	①②③④

① PROVIDE DIGITAL THERMOSTAT FOR EACH UNIT ② PROVIDE LOW AMBIENT COOLING. ③ POWER FEED FROM CONDENSING UNIT
 ④ PROVIDE CONDENSATE PUMP ⑤ CONDENSATE TO BE ROUTED TO EXTERIOR

DUCTLESS AIR COOLED CONDENSING UNIT SCHEDULE

MARK CU #	LOCN.	PAIRED WITH A/C#...	V/φ	ELECTRICAL DATA		BASIS OF DESIGN	REMARKS
				MCA	MOCP		
2	ON GRADE	AC-1	230/1	18	30	MITSUBISHI PUY-A24NHA4	①②③

① 95 OUT DOOR AIR TEMP. ② ROUTE REFRIGERANT LINE TO ROOF.
 ③ CONDENSING UNIT ON ROOF. LOCATION TO BE COORDINATED WITH BUILDING OWNER.



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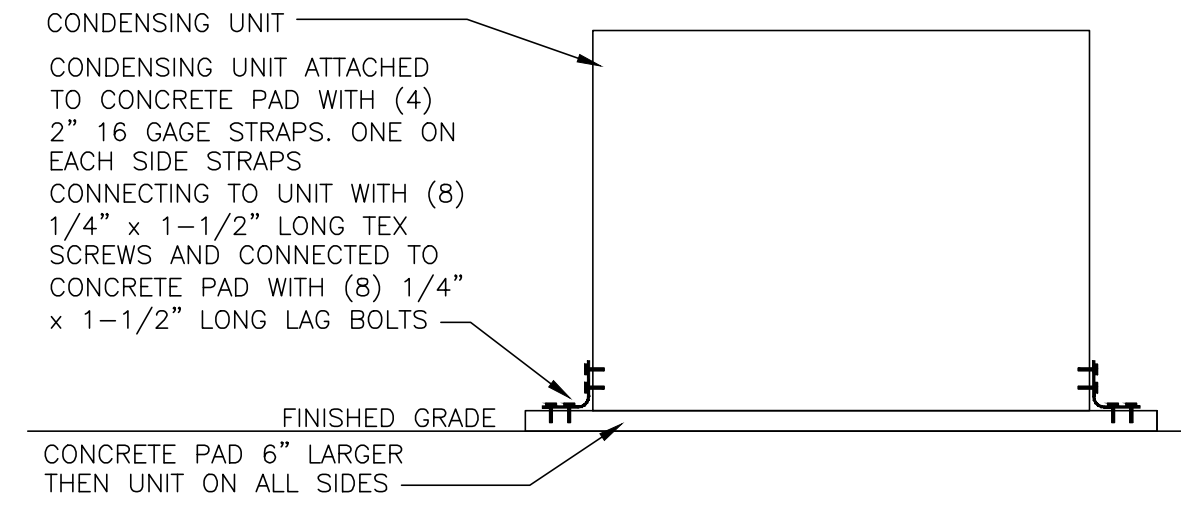
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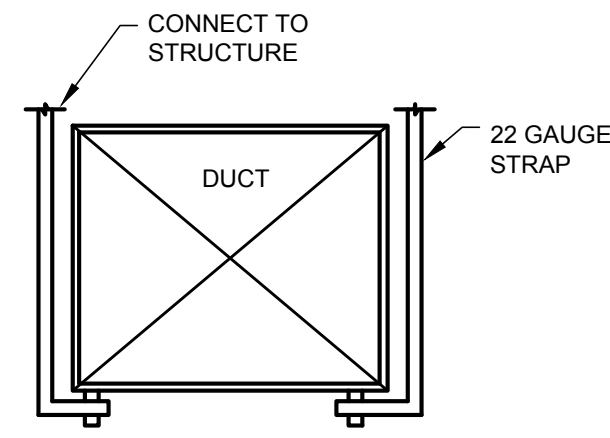
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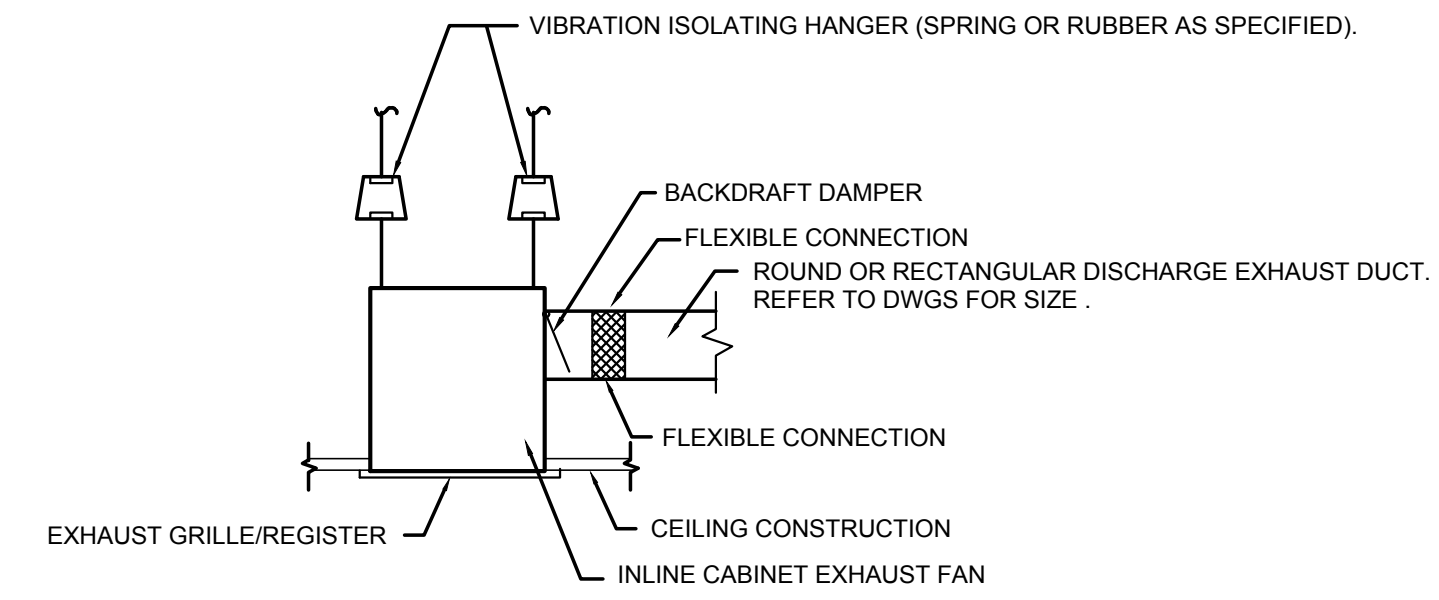
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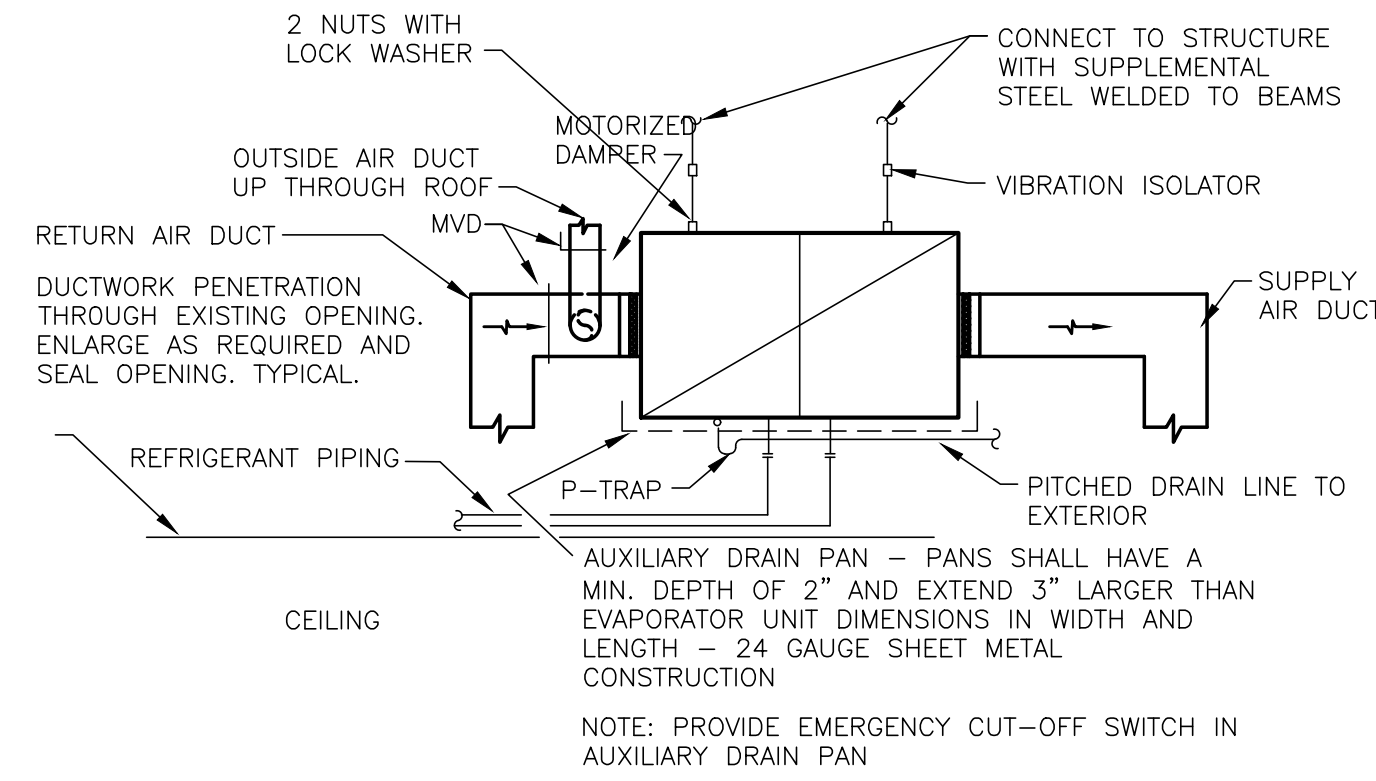
CONDENSING UNIT MOUNTED DETAIL
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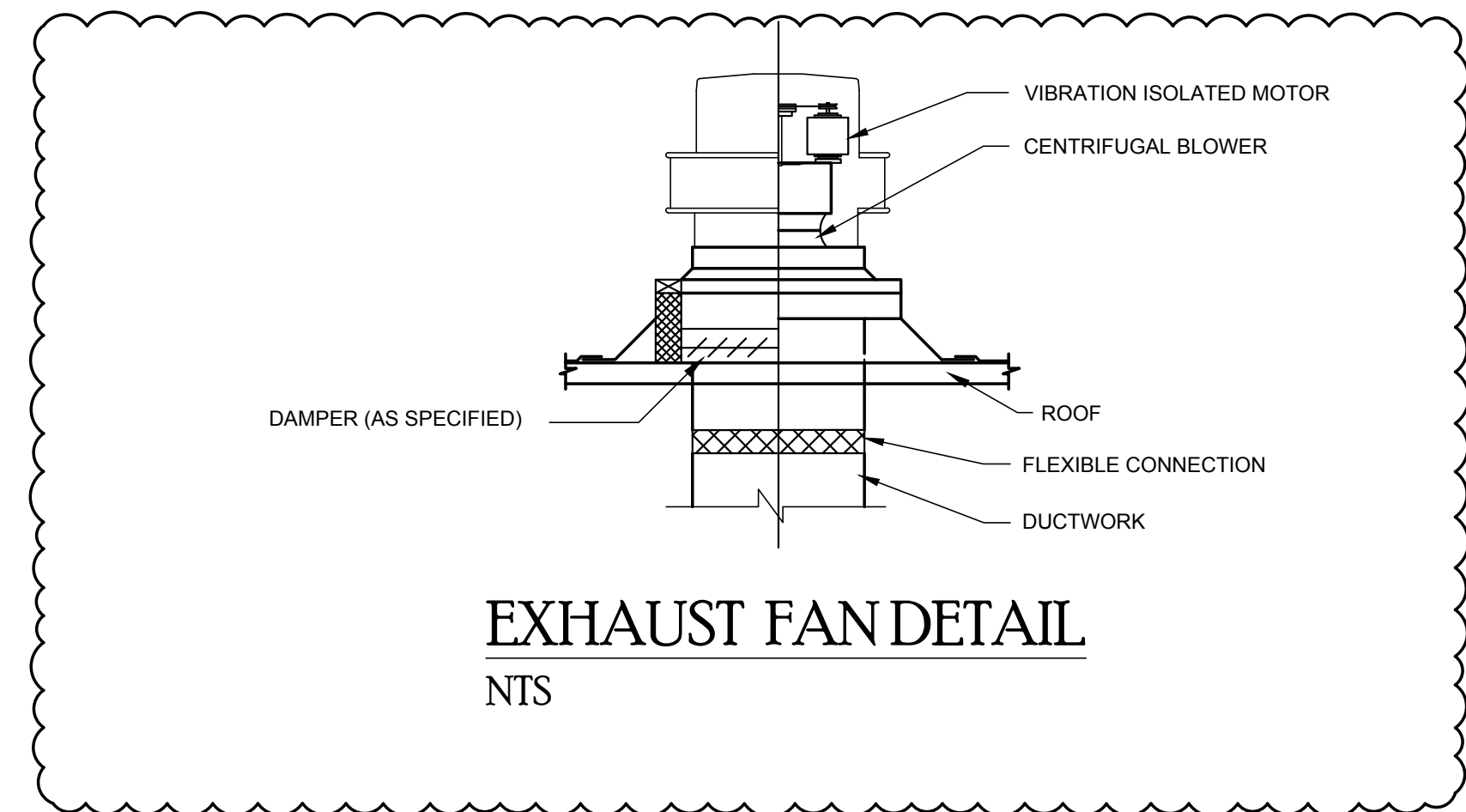
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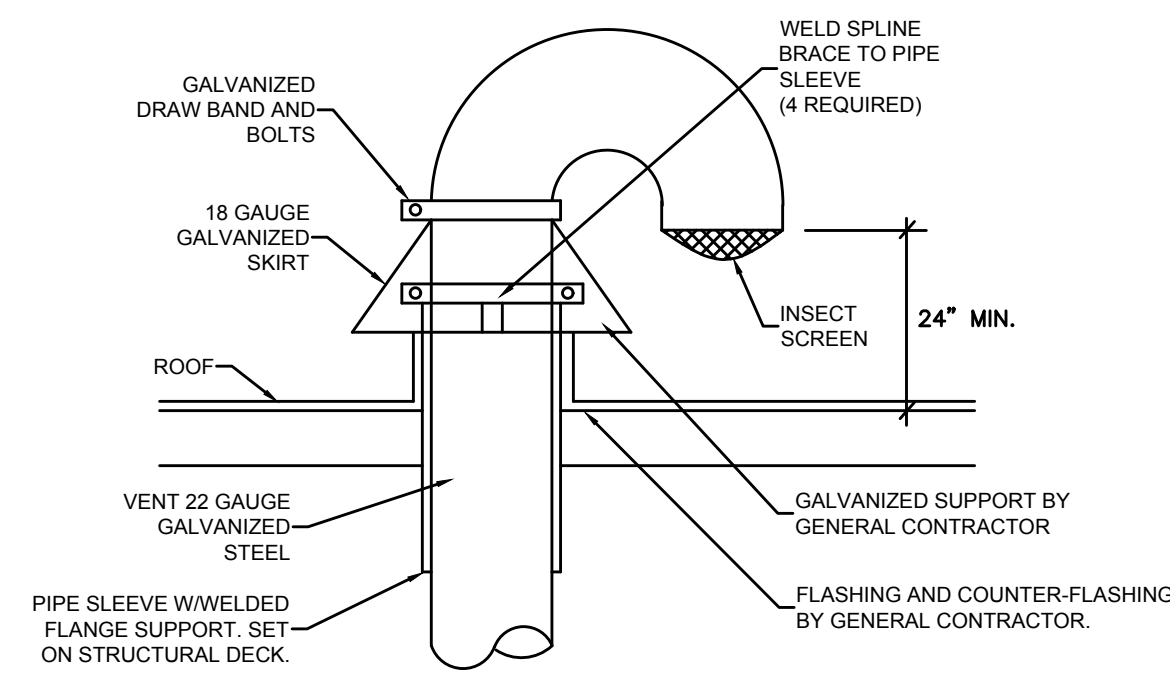
CABINET EXHAUST FAN DETAIL
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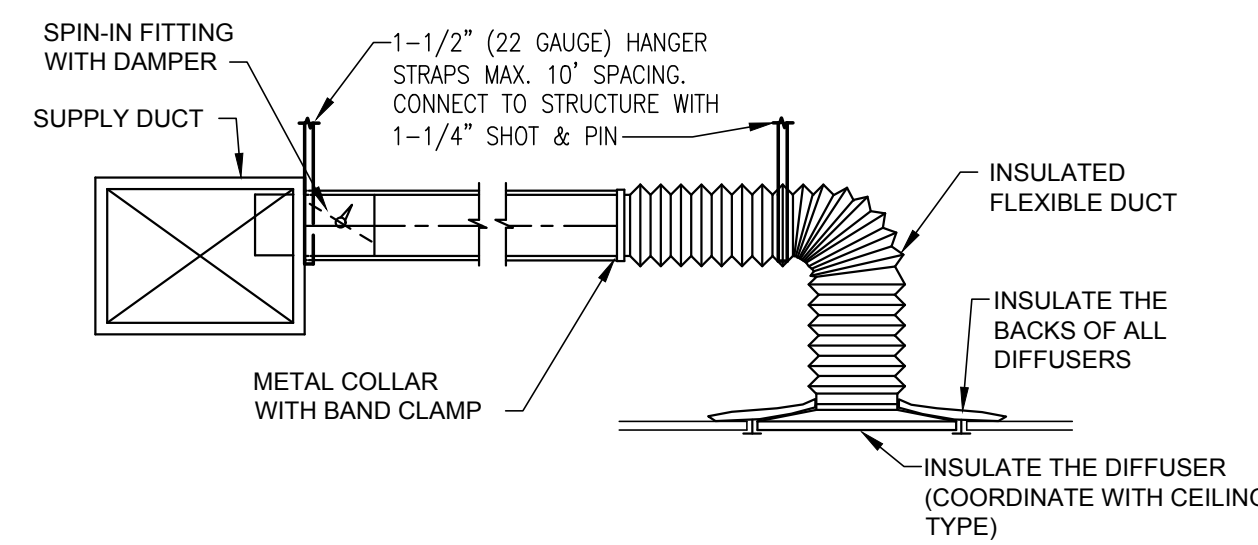
AIR HANDLING UNIT INSTALLATION DETAIL
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EXHAUST FAN DETAIL
NTS



DUCT GOOSENECK DETAIL
NTS



SUPPLY DIFFUSER FLEX SUPPORT DETAIL
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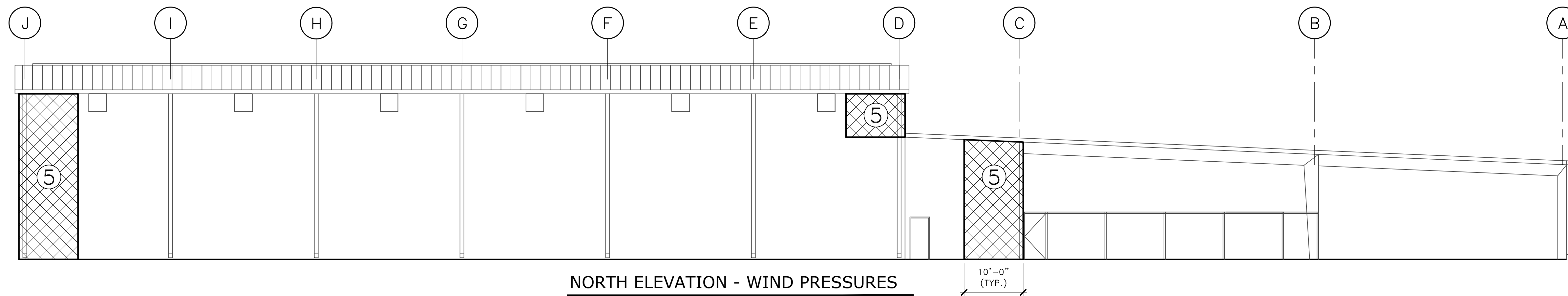
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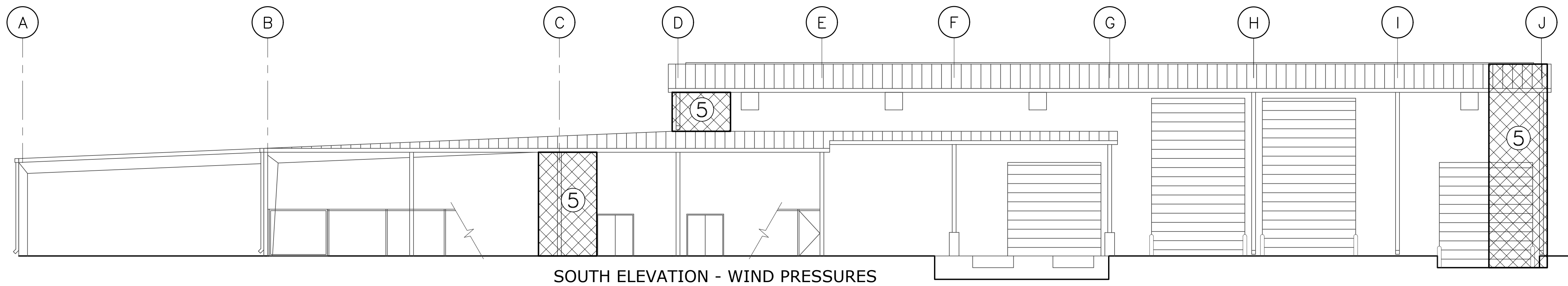
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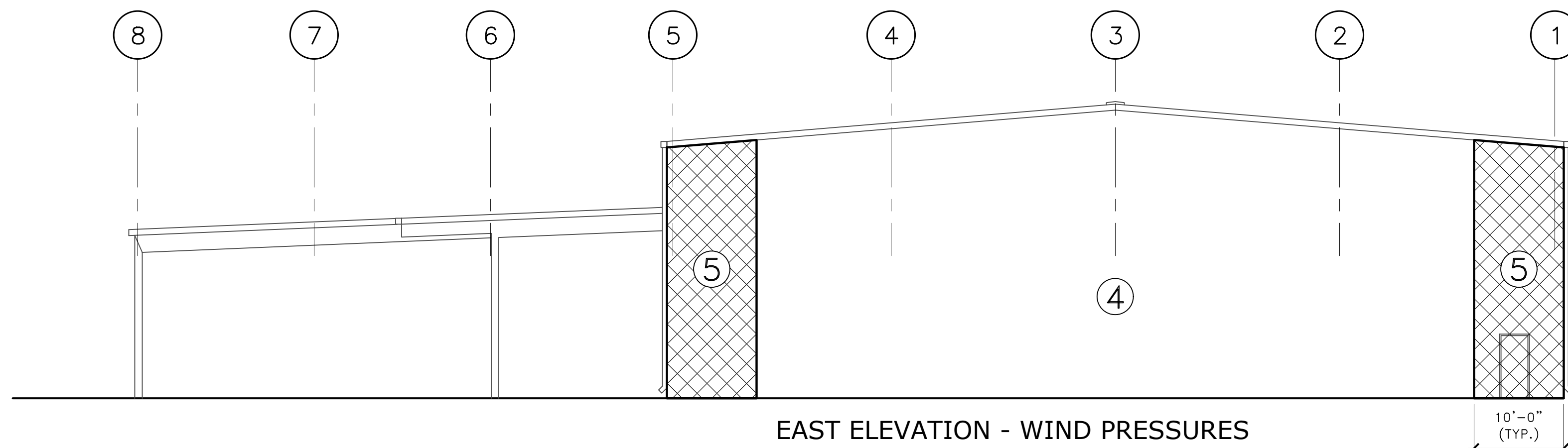
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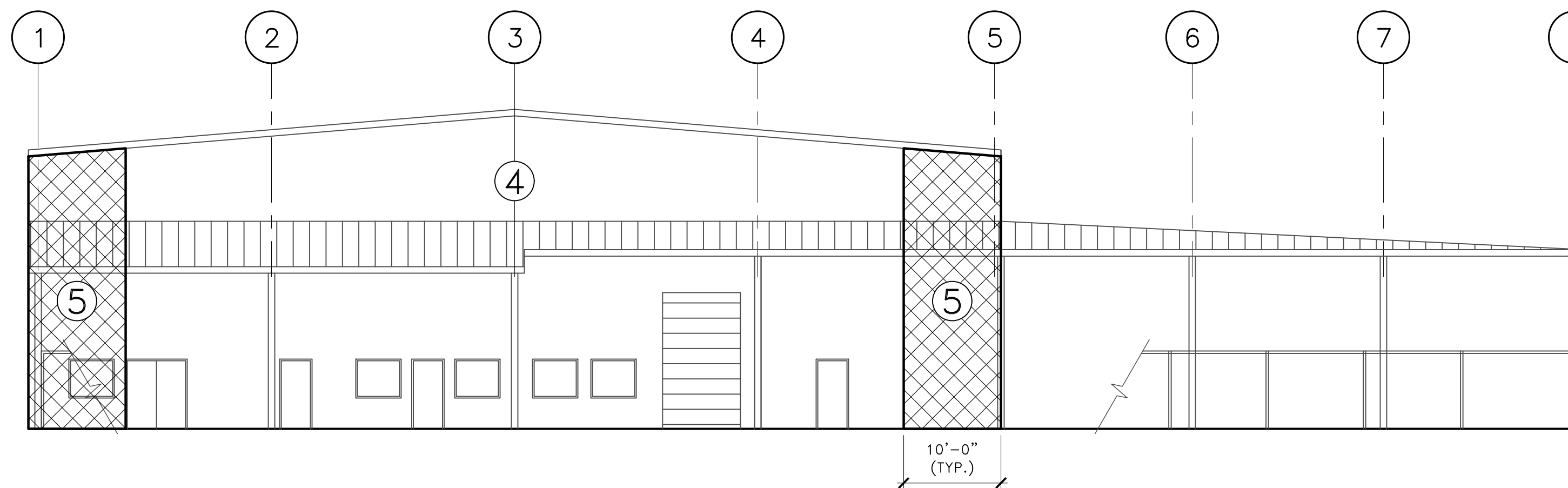
NORTH ELEVATION - WIND PRESSURES



SOUTH ELEVATION - WIND PRESSURES



EAST ELEVATION - WIND PRESSURES



WEST ELEVATION - WIND PRESSURES

ASD WIND LOAD WALL PRESSURES Kd=0.85				
TRIBUTARY AREA	ZONE 4 (PSF)		ZONE 5 (PSF)	
	(+)	(-)	(+)	(-)
WINDOW	+46.9	-49.9	+46.9	-58.6
DOOR	+45.4	-48.3	+45.4	-55.5
0 sf to 19 sf	+46.9	-49.9	+46.9	-58.6
20 sf to 29 sf	+45.4	-48.3	+45.4	-55.5
30 sf to 49 sf	+44.5	-47.4	+44.5	-53.7
50 sf to 99 sf	+43.3	-46.3	+43.3	-51.4
100 sf to 199 sf	+41.8	-44.7	+41.8	-48.3

NOTES:

1. REFER TO DIAGRAM FOR LOCATION OF ZONE ④ AND ⑤.
2. VALUES INDICATED CAN BE INTERPOLATED.
3. FOR Kd = 1.0, MULTIPLY VALUES BY 1.18.
4. FOR ULTIMATE VALUES, MULTIPLY VALUES IN TABLE BY 1.67.

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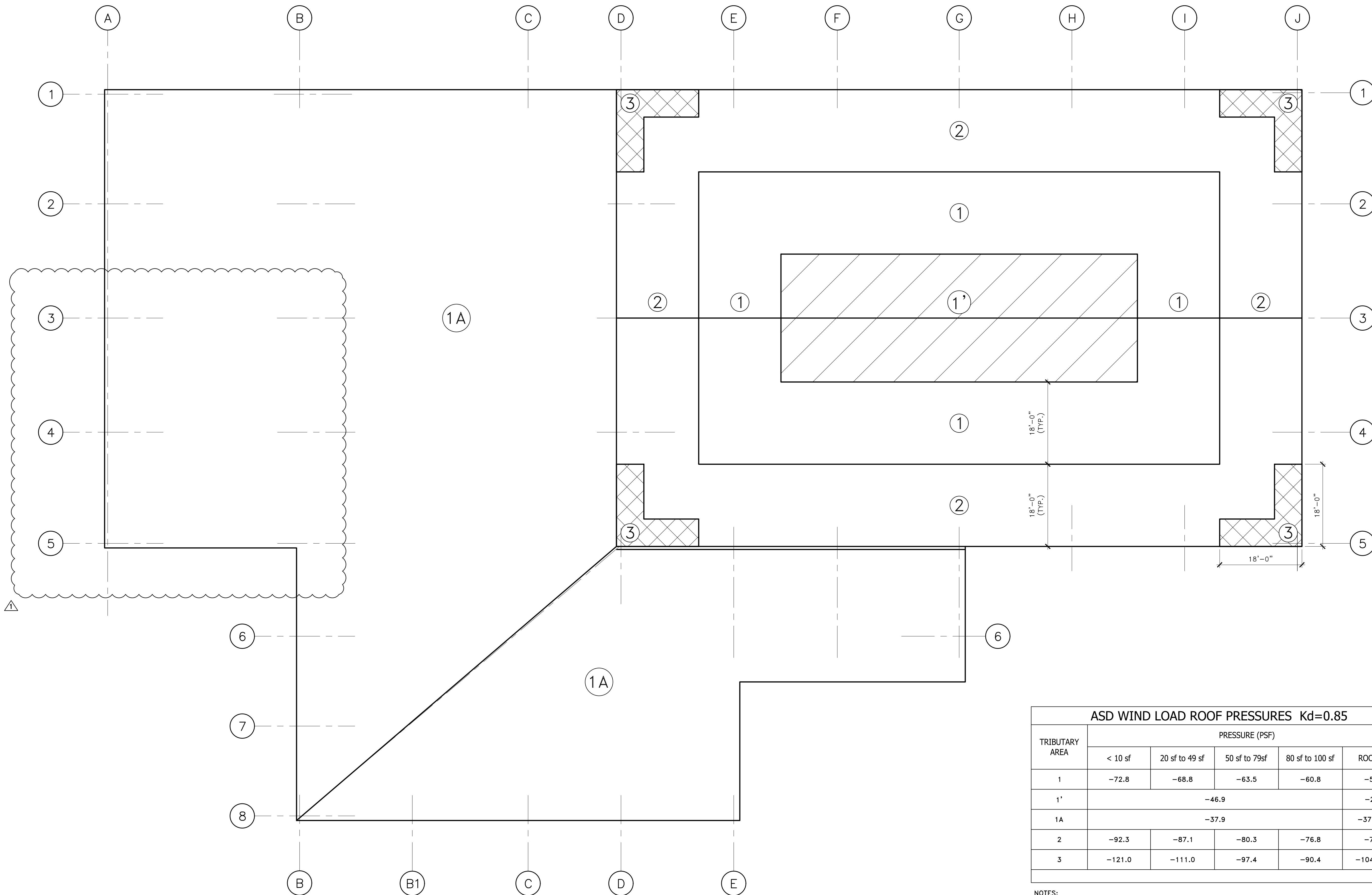
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KHA PROJECT
14-3228000
 DATE
APRIL 2021
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 DRAWN BY **WR**
 CHECKED BY **JF**

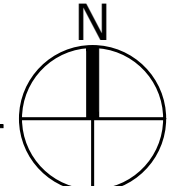
ELEVATIONS WIND PRESSURE DIAGRAMS

IRC LANDFILL
 PREPARED FOR
 INDIAN RIVER COUNTY
 INDIAN RIVER COUNTY

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ROOF WIND PRESSURE DIAGRAM



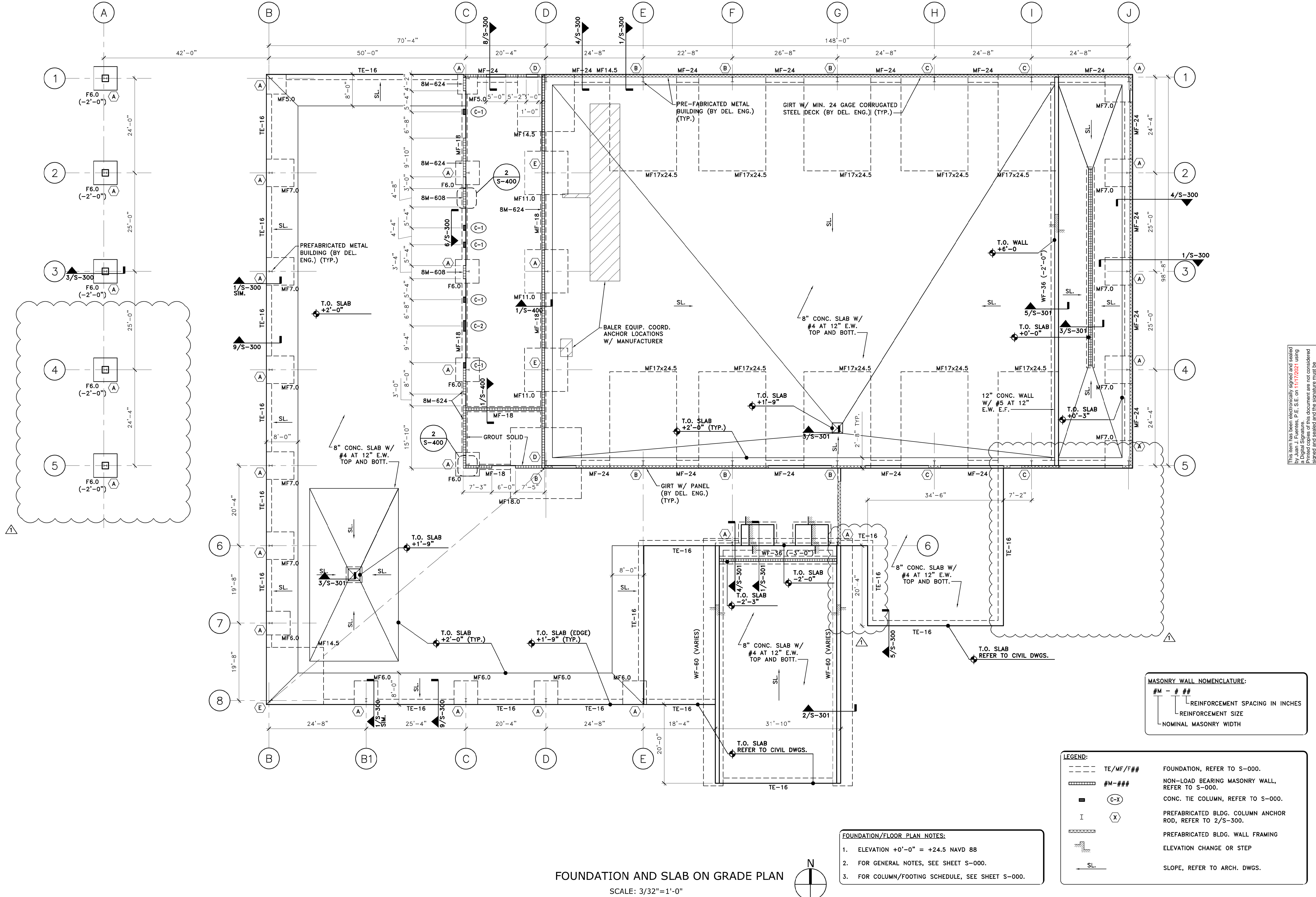
TRIBUTARY AREA	ASD WIND LOAD ROOF PRESSURES Kd=0.85				
	PRESSURE (PSF)				
	< 10 sf	20 sf to 49 sf	50 sf to 79sf	80 sf to 100 sf	ROOFING
1	-72.8	-68.8	-63.5	-60.8	-55.0
1'	-46.9				-29.1
1A	-37.9				-37.9000
2	-92.3	-87.1	-80.3	-76.8	-74.5
3	-121.0	-111.0	-97.4	-90.4	-104.0000

- NOTES:
- FOR Kd = 1.0, MULTIPLY VALUES BY 1.18.
 - THE FIGURES SHOWN REPRESENT GROSS VALUES. TO OBTAIN NET UPLIFT VALUES ONLY 10 PSF OF DEAD LOAD SHALL BE DEDUCTED FROM THEM.
 - FOR ULTIMATE VALUES, MULTIPLY VALUES IN TABLE BY 1.67.

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No.	REVISIONS	DATE	BY										
			SHEET NUMBER S-102	11/16/2021 JF									

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FOUNDATION AND SLAB ON GRADE PLAN
SCALE: 3/32"=1'-0"

- FOUNDATION/FLOOR PLAN NOTES:
- ELEVATION +0'-0" = +24.5 NAVD 88
 - FOR GENERAL NOTES, SEE SHEET S-000.
 - FOR COLUMN/FOOTING SCHEDULE, SEE SHEET S-000.

MASONRY WALL NOMENCLATURE:

#M - # ##	REINFORCEMENT SPACING IN INCHES
REINFORCEMENT SIZE	
NOMINAL MASONRY WIDTH	

LEGEND:

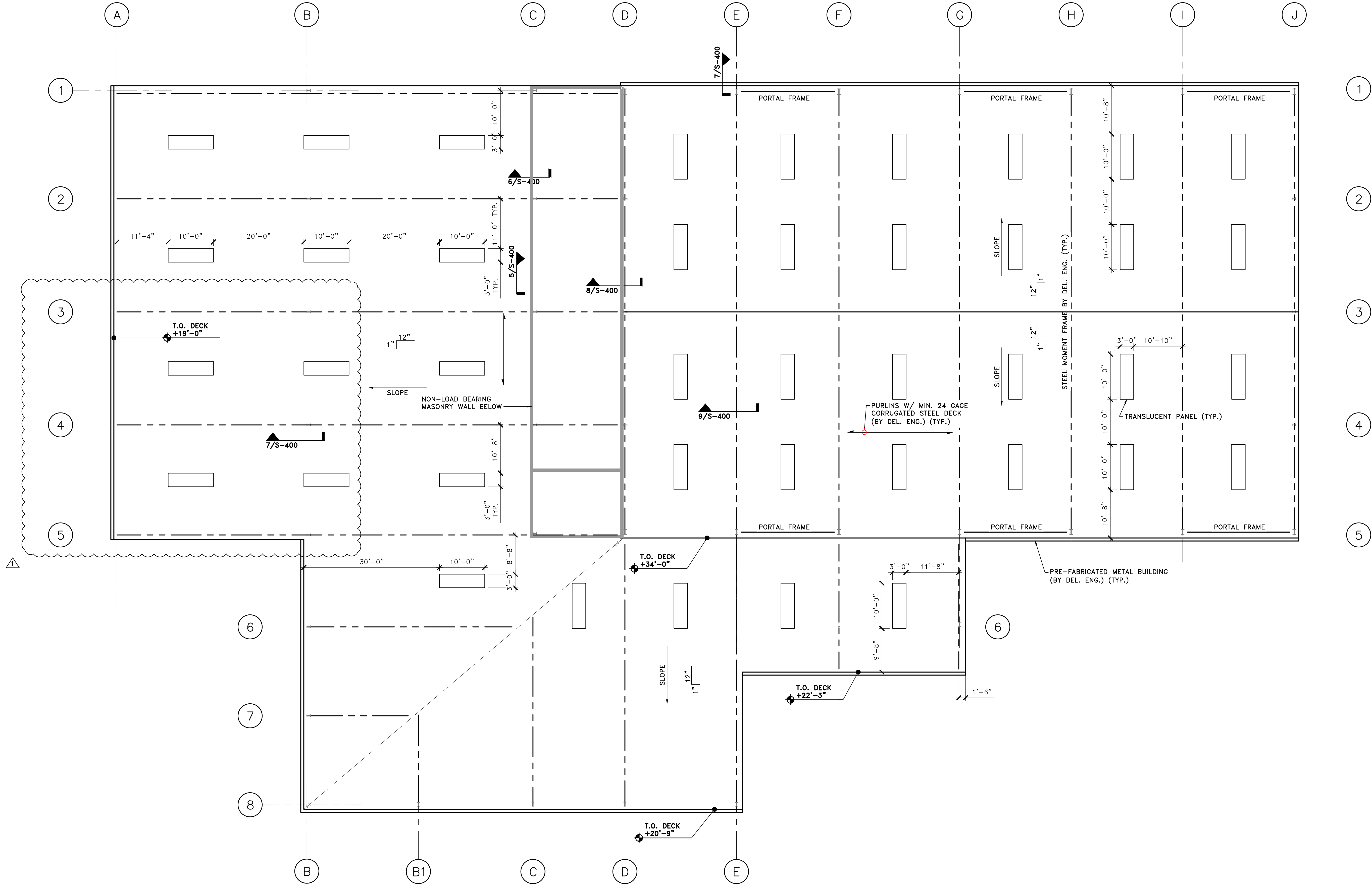
--- TE/MF/F##	FOUNDATION, REFER TO S-000.
▬ #M-###	NON-LOAD BEARING MASONRY WALL, REFER TO S-000.
■ (C-X)	CONC. TIE COLUMN, REFER TO S-000.
I (X)	PREFABRICATED BLDG. COLUMN ANCHOR ROD, REFER TO 2/S-300.
▬	PREFABRICATED BLDG. WALL FRAMING
▲	ELEVATION CHANGE OR STEP
— SL —	SLOPE, REFER TO ARCH. DWGS.

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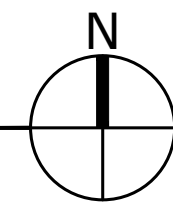
KHA PROJECT 143228000	DATE APRIL 2021	SCALE AS SHOWN	DESIGNED BY JF	DRAWN BY WR	CHECKED BY JF	INDIAN RIVER COUNTY FL	SHEET NUMBER S-200	OWNER CHANGES	11/16/2021	JF		
									No.	REVISIONS	DATE	BY
									Kimley-Horn			

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ROOF FRAMING PLAN
SCALE: 3/32"=1'-0"



- ROOF PLAN NOTES:**
- ELEVATION +0'-0" = +24.5 NAVD 88
 - FOR GENERAL NOTES, SEE SHEET S-000.
 - COORD. ALL SLOPES AND ELEVATIONS W/ ARCH. DWGS.

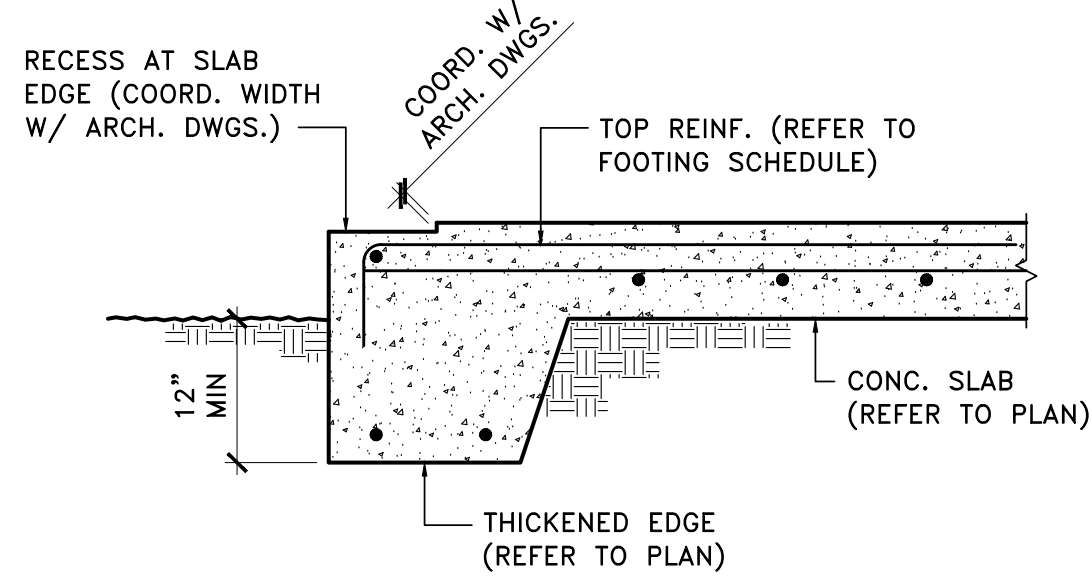
LEGEND:

	PORTAL FRAME BEAM (BY DEL. ENG.)
	STEEL FRAME BEAM (BY DEL. ENG.)
	STEEL COLUMN (BY DEL. ENG.)
	NON-LOAD BEARING MASONRY WALL
	PURLIN FRAMING (BY DEL. ENG.)
	ROOF SLOPE

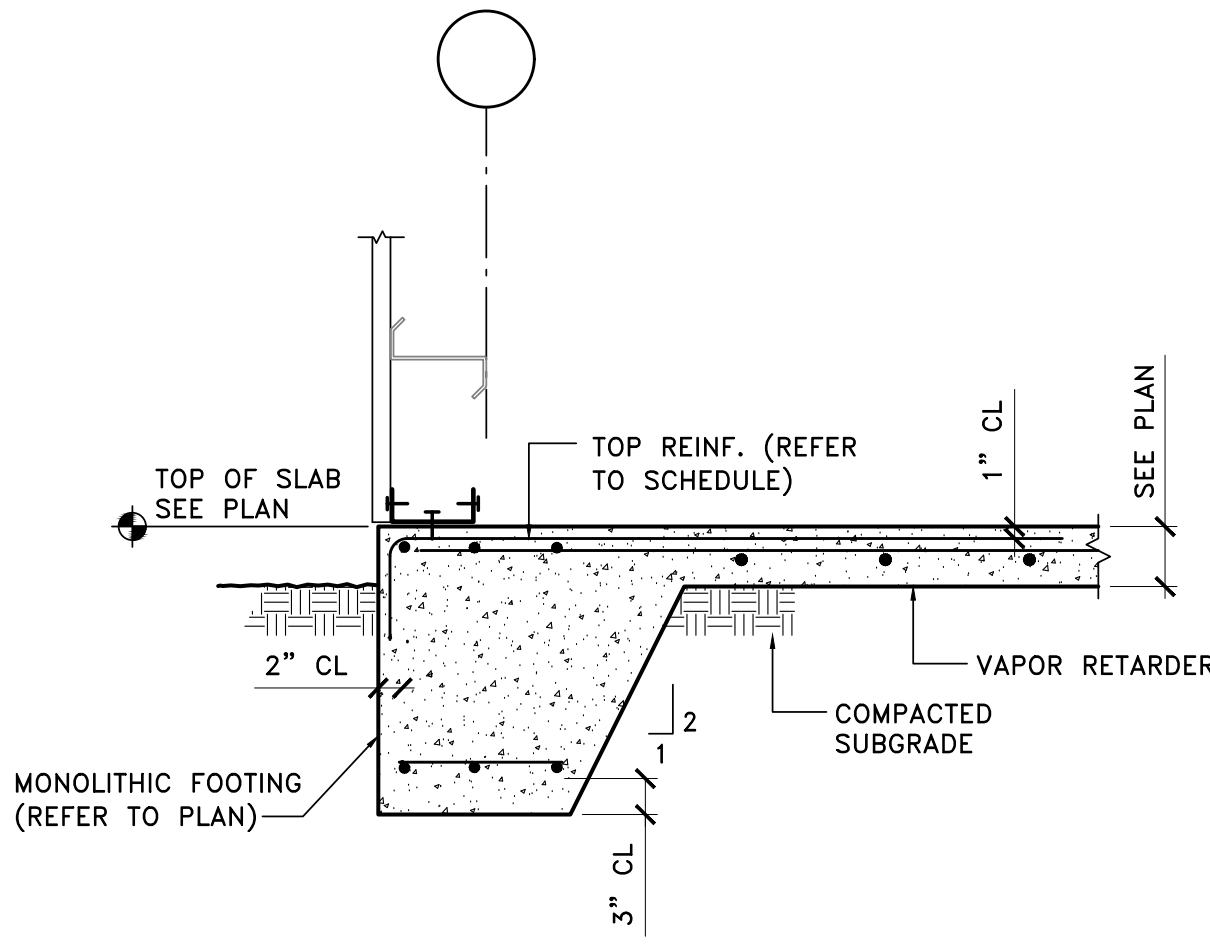
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<p>IRC LANDFILL PREPARED FOR INDIAN RIVER COUNTY INDIAN RIVER COUNTY FL</p>	<p>ROOF FRAMING PLAN</p>	<p>KHA PROJECT 143228000</p> <p>DATE APRIL 2021</p> <p>SCALE AS SHOWN JF</p> <p>DESIGNED BY JF</p> <p>DRAWN BY WR</p> <p>CHECKED BY JF</p>	<p>OWNER CHANGES</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>No.</th> <th>REVISIONS</th> <th>DATE</th> <th>BY</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	No.	REVISIONS	DATE	BY				
No.	REVISIONS	DATE	BY								
<p>© 2021 KIMLEY-HORN AND ASSOCIATES, INC. 355 ALHAMBRA CIRCLE, SUITE 1400, CORAL GABLES, FL 33134 PHONE: 305-673-2025 WWW.KIMLEY-HORN.COM REGISTRY 696</p>		<p>LICENSED PROFESSIONAL</p> <p>Juan S. Fuentes, P.E. SE 51 LEED AP Structural Engineer Florida License No. 62426</p>									
<p>SHEET NUMBER S-201</p>		<p>11/16/2021 JF</p>									

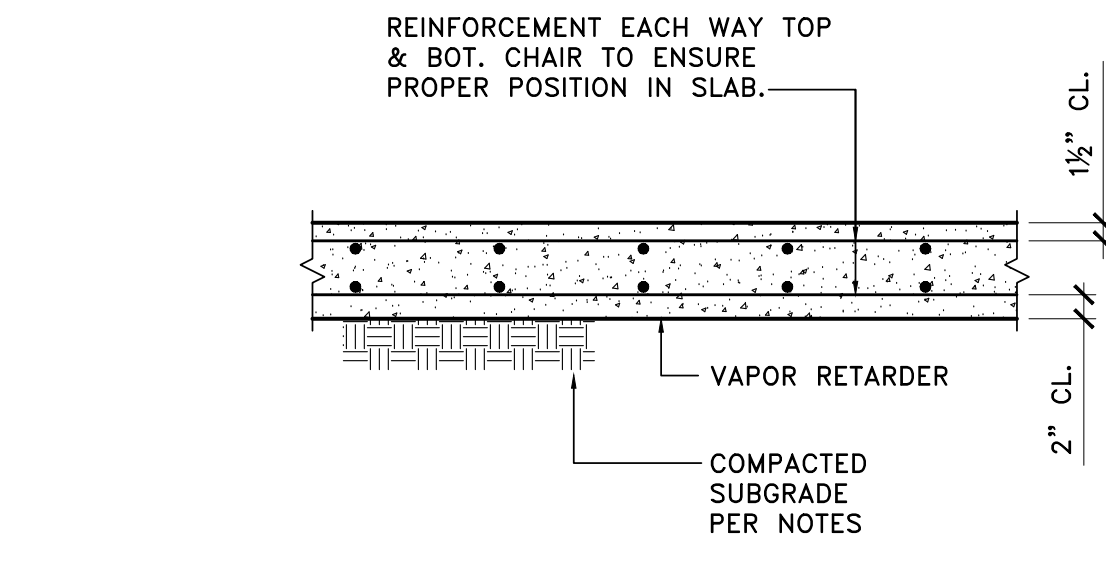
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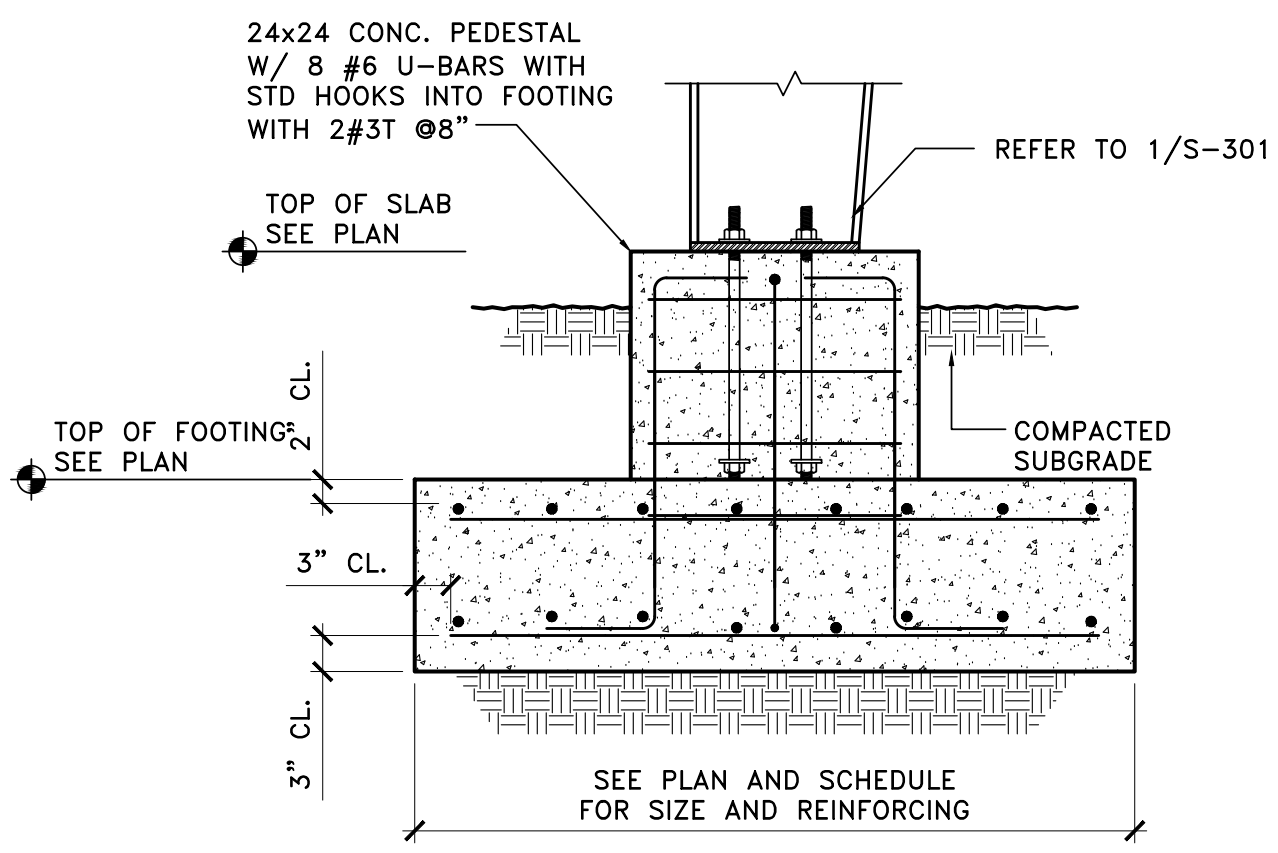
8 TYP. SLAB EDGE AT DOOR
SCALE: 3/4"=1'-0"



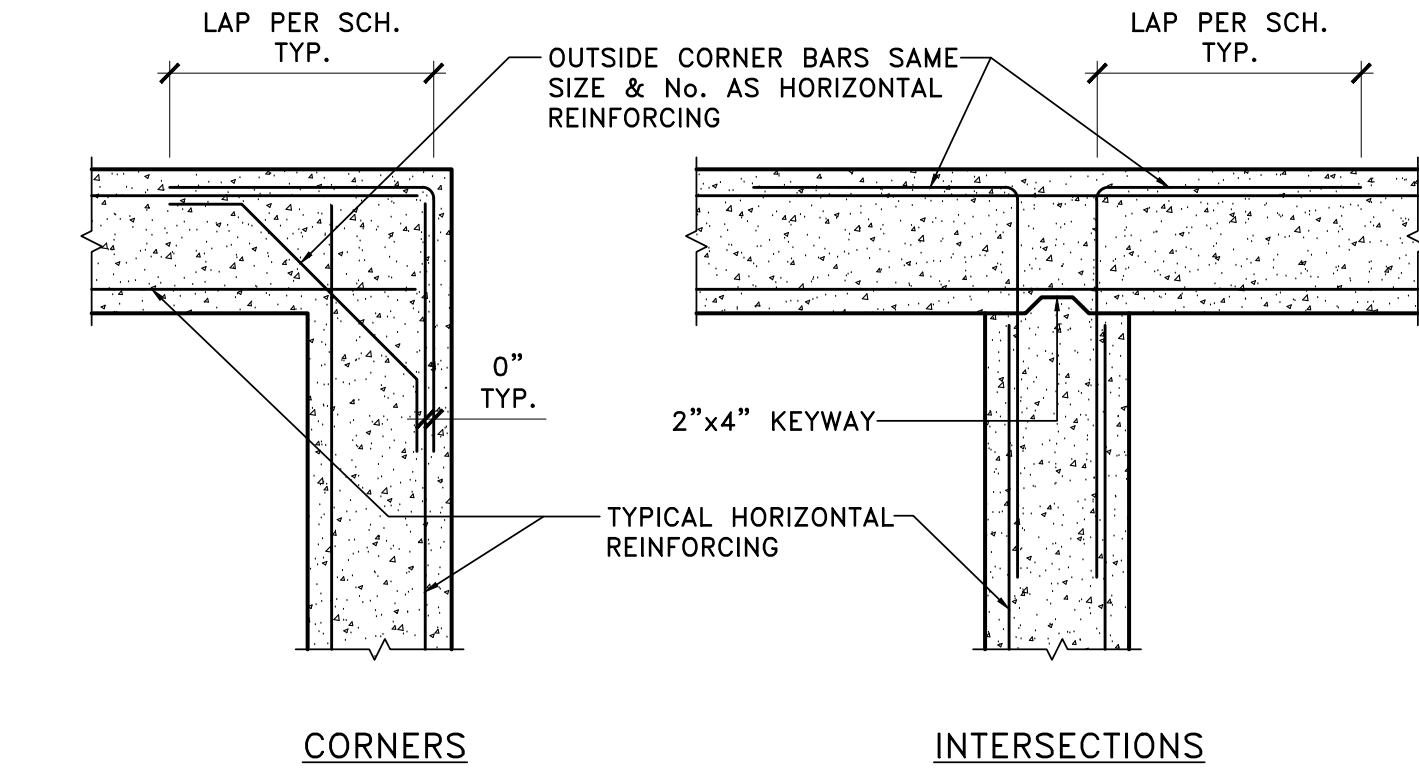
4 TYP. BLDG. SLAB EDGE
SCALE: 3/4"=1'-0"



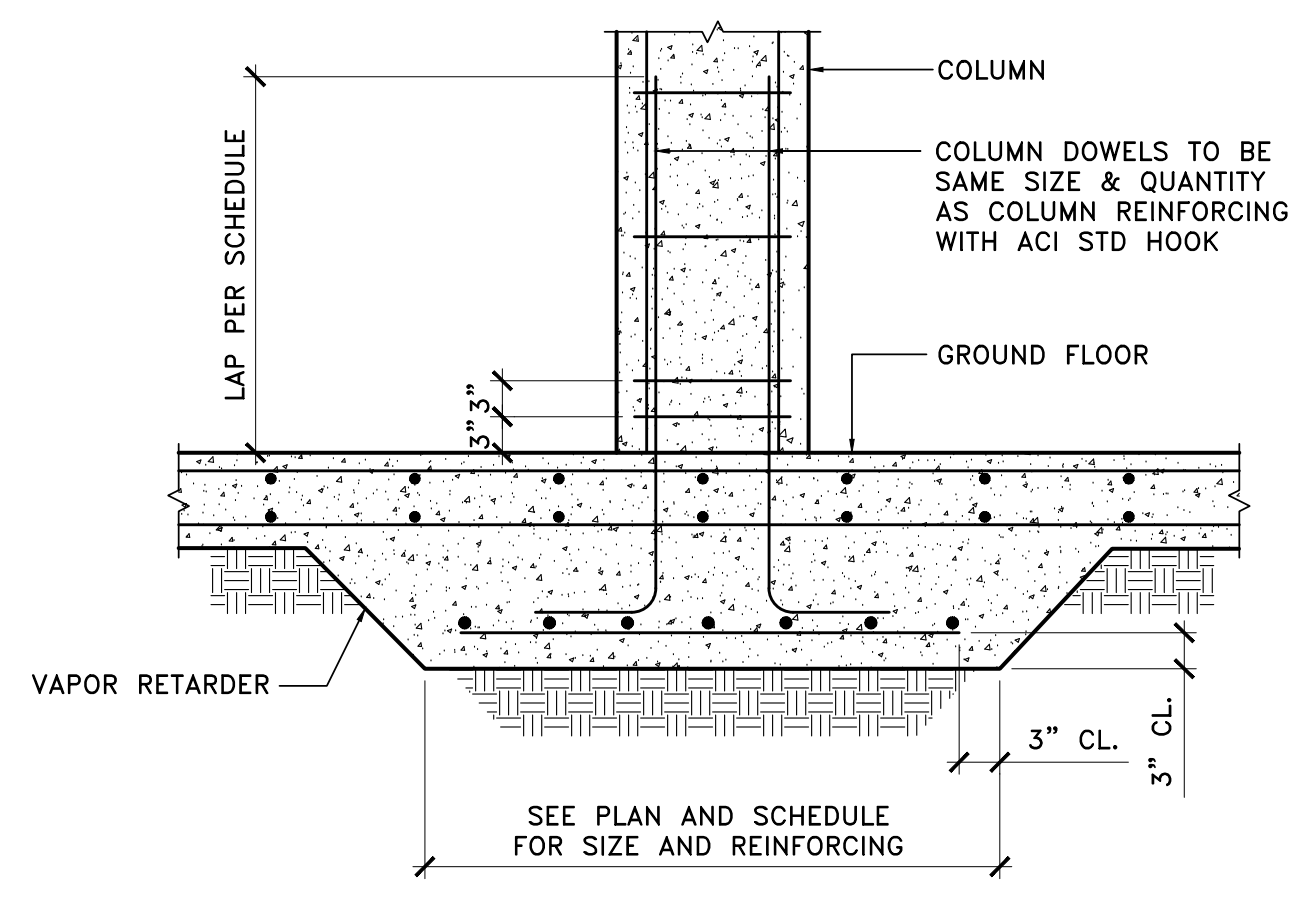
7 TYP. CONC. SLAB-ON-GRADE
NTS



3 TYP. COL. TO FOOTING
SCALE: 3/4"=1'-0"

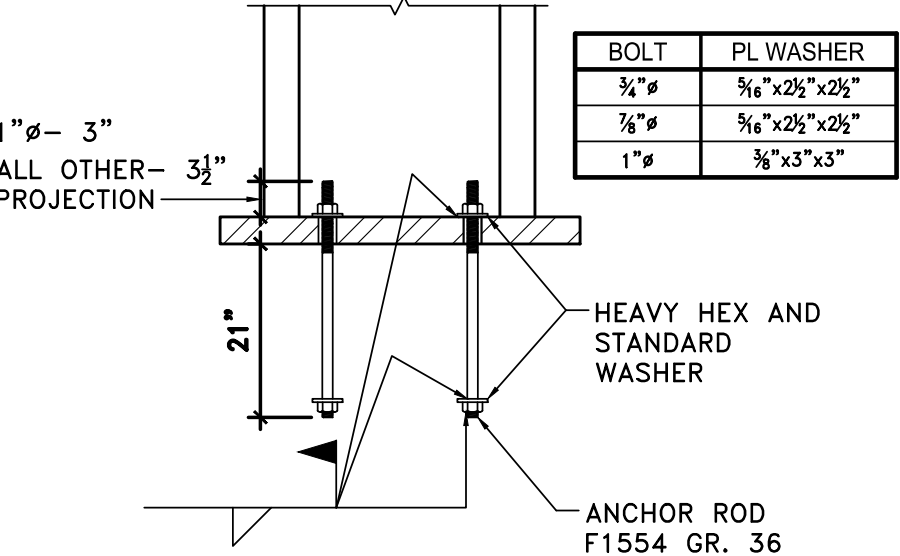


10 TYPICAL HORIZONTAL REINFORCING
CONCRETE TIE BEAMS, WALLS, AND FOOTINGS

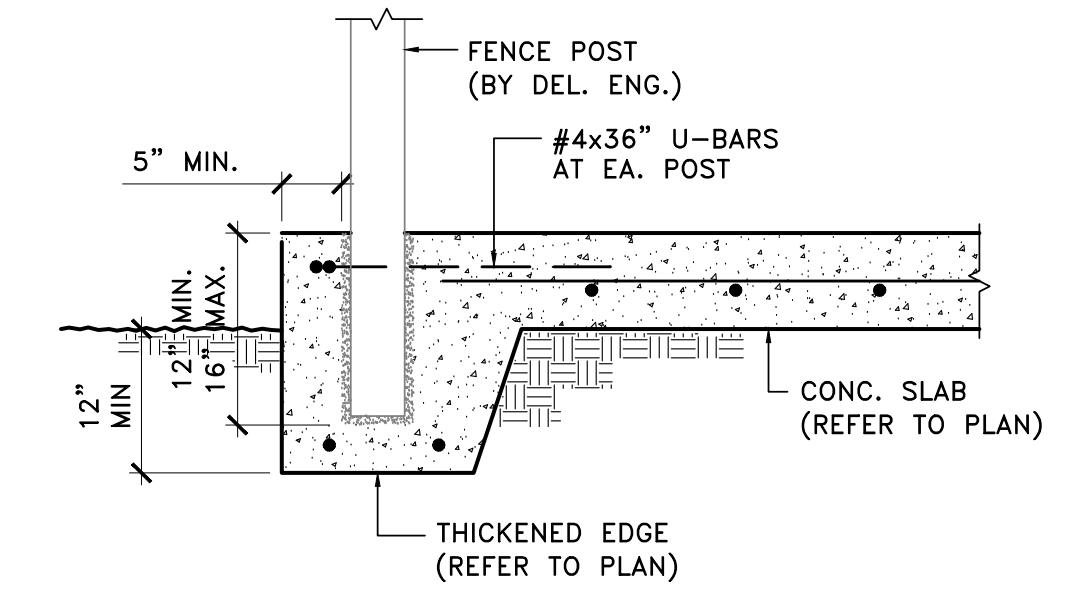


6 TYP. COL. TO FOOTING
SCALE: 3/4"=1'-0"

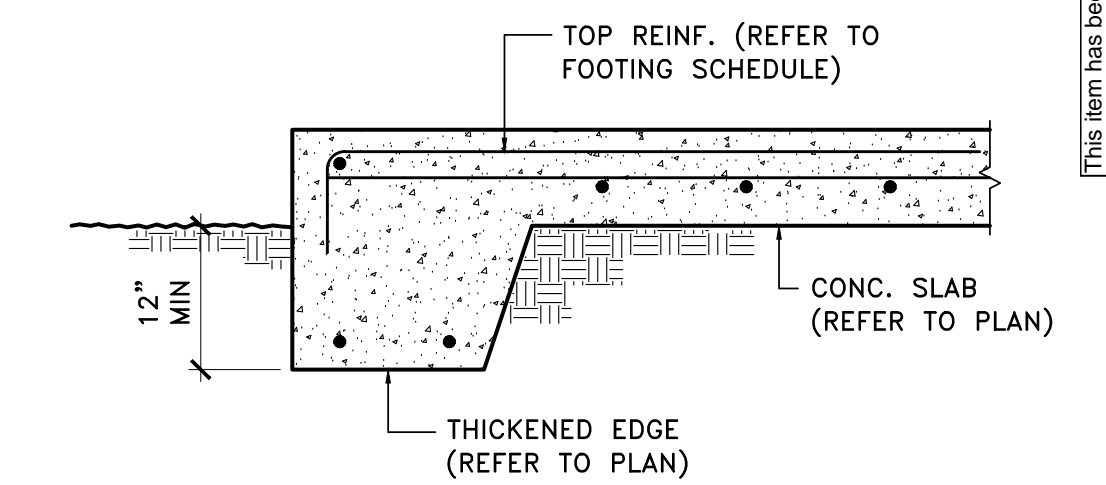
ANCHOR BOLT SCHEDULE		
MARK	ANCHOR BOLT	BOLT PATTERN
A	4 - 3/8"	2 x 2
B	6 - 1"	2 x 3
C	6 - 3/8"	2 x 3
D	6 - 3/8"	2 x 3
E	8 - 1"	2 x 4



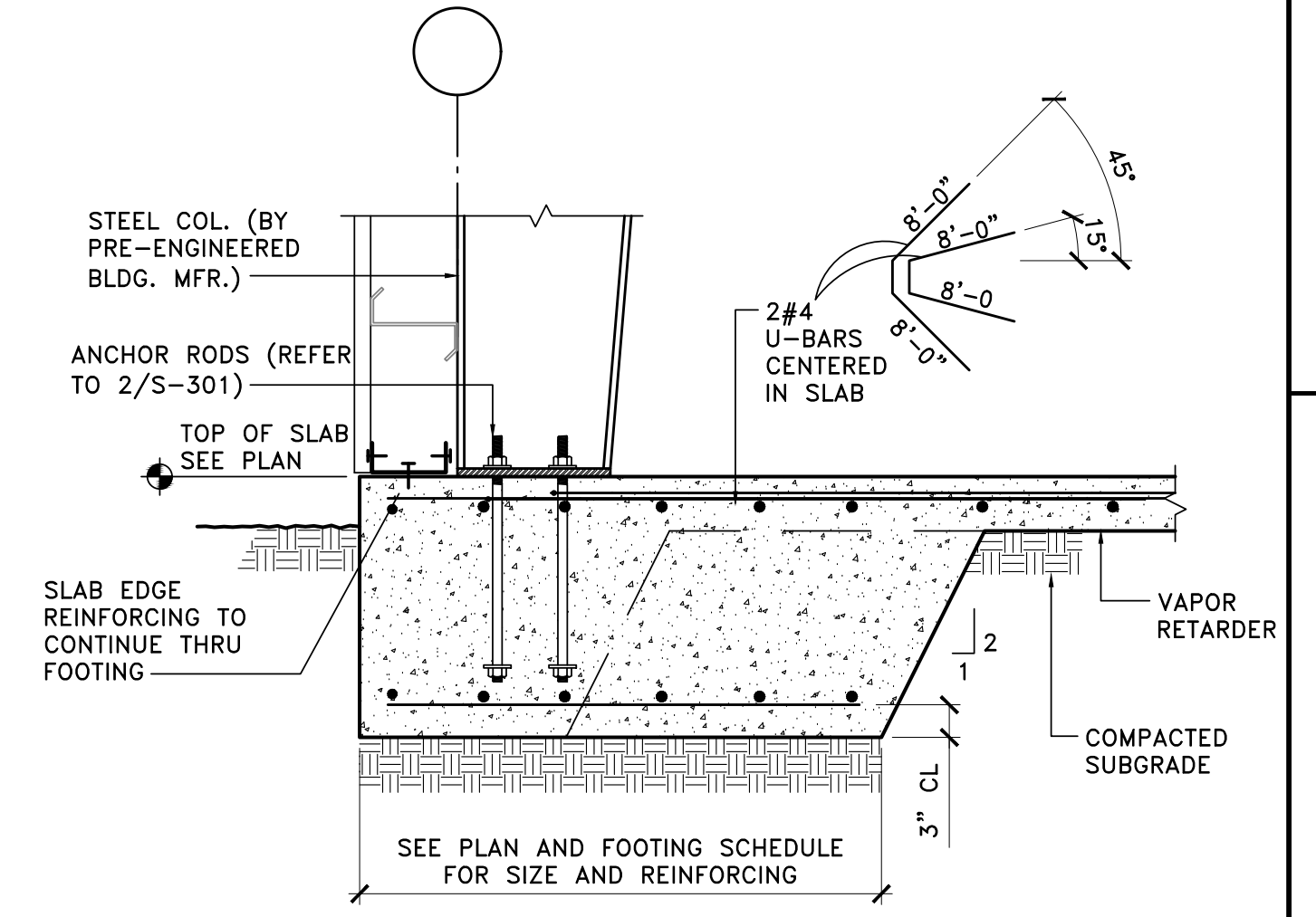
2 TYP. ANCHOR RODS
NTS



9 TYP. FENCE POST CONN.
SCALE: 3/4"=1'-0"



5 TYP. SLAB EDGE
SCALE: 3/4"=1'-0"



1 TYP. FOOTING AT COL.
SCALE: 3/4"=1'-0"

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LICENSED PROFESSIONAL
Juan J. Fuentes, P.E. S.E. LEED AP
Structural Engineer
Florida License No. 62426

KHA PROJECT	143228000
DATE	APRIL 2021
SCALE	AS SHOWN
DESIGNED BY	JF
DRAWN BY	WR
CHECKED BY	JF

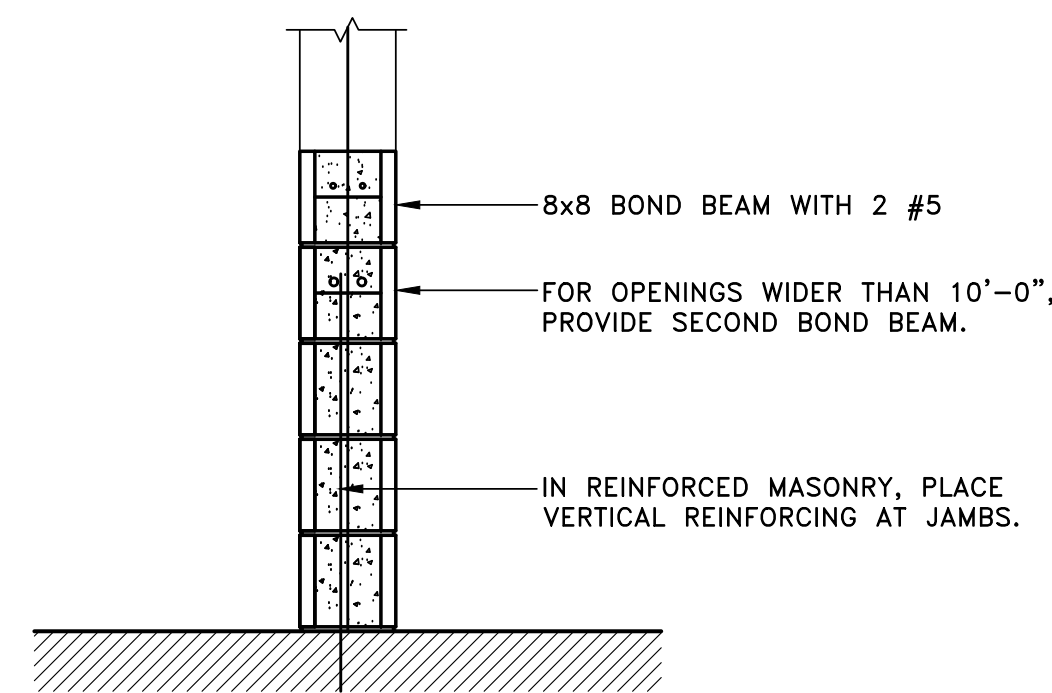
FOUNDATION SECTIONS

IRC LANDFILL
PREPARED FOR
INDIAN RIVER COUNTY
INDIAN RIVER COUNTY FL

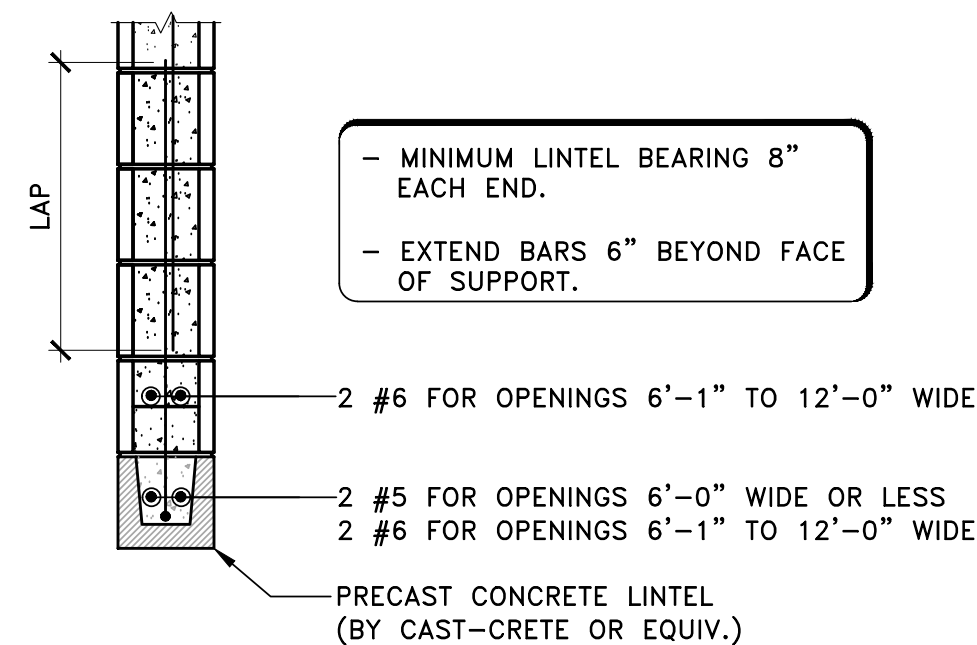
SHEET NUMBER
S-300

NO.	REVISIONS	DATE	BY

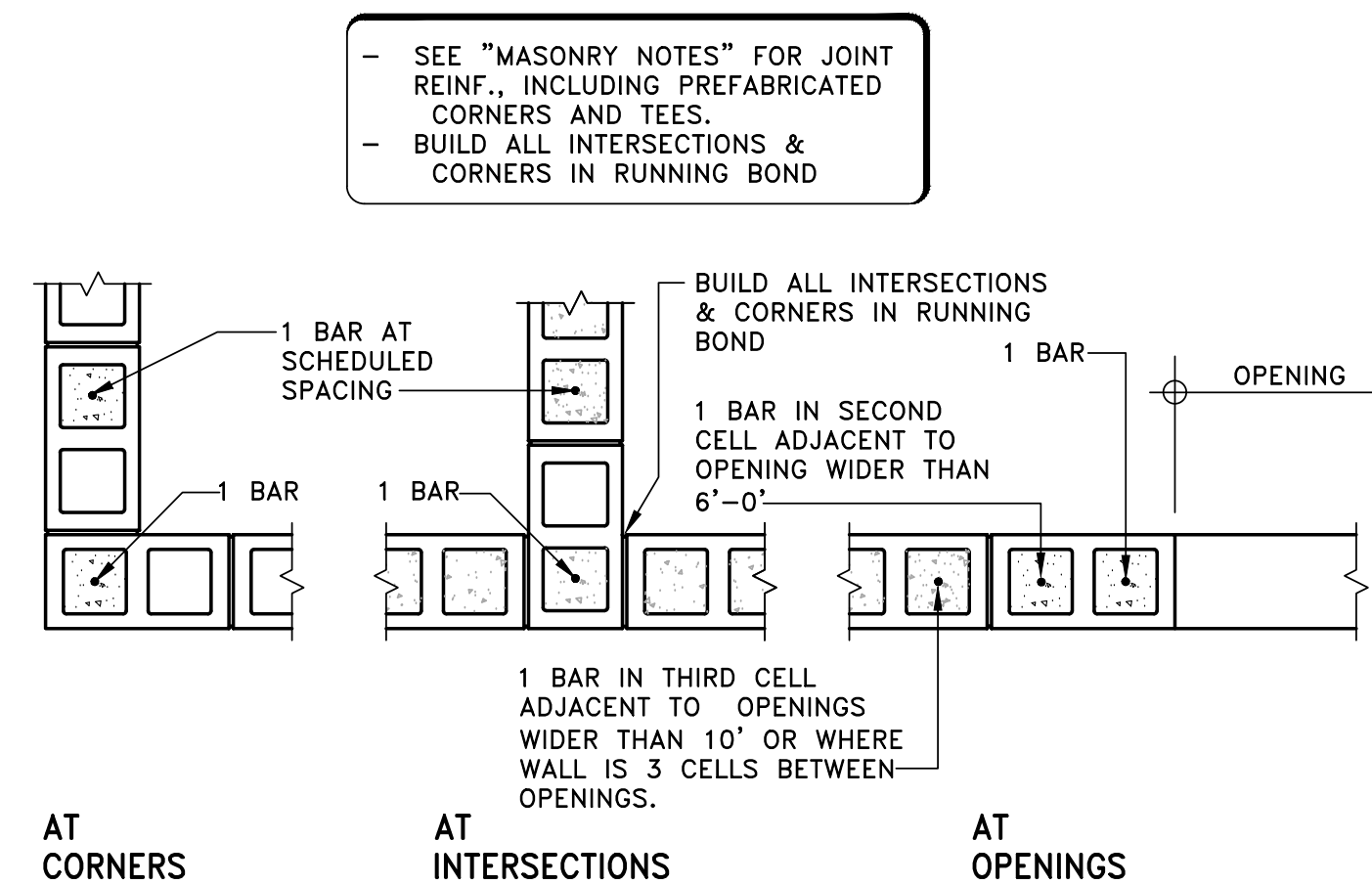
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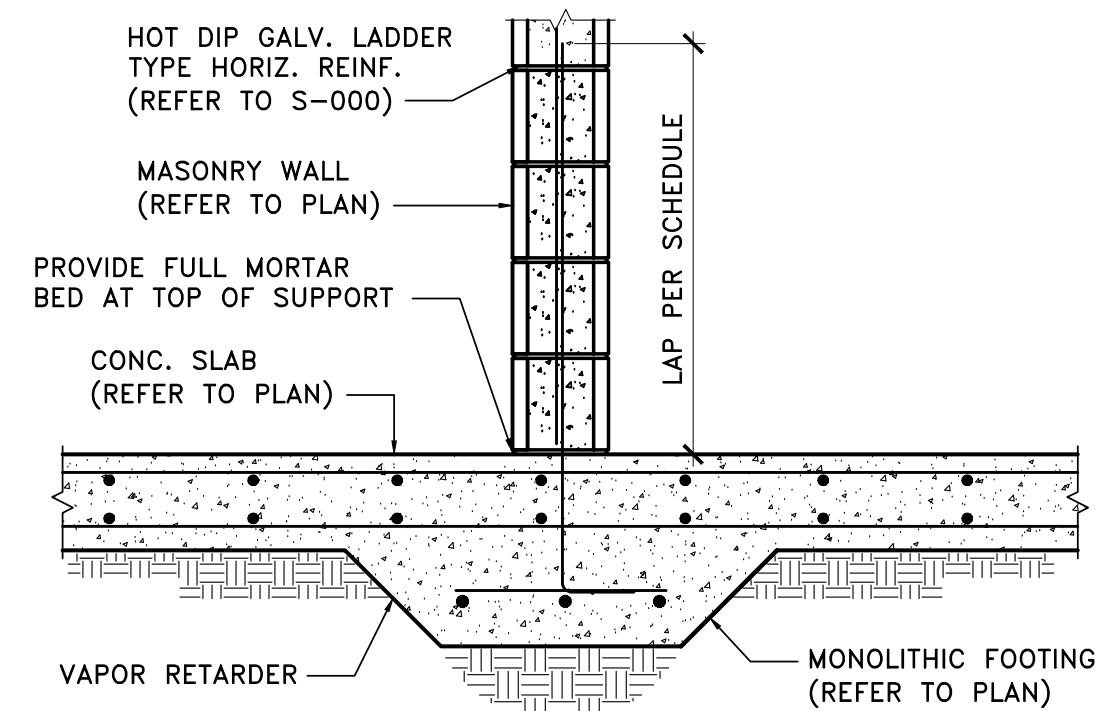
4 TYP. MASONRY SILL
SCALE: 3/4"=1'-0"



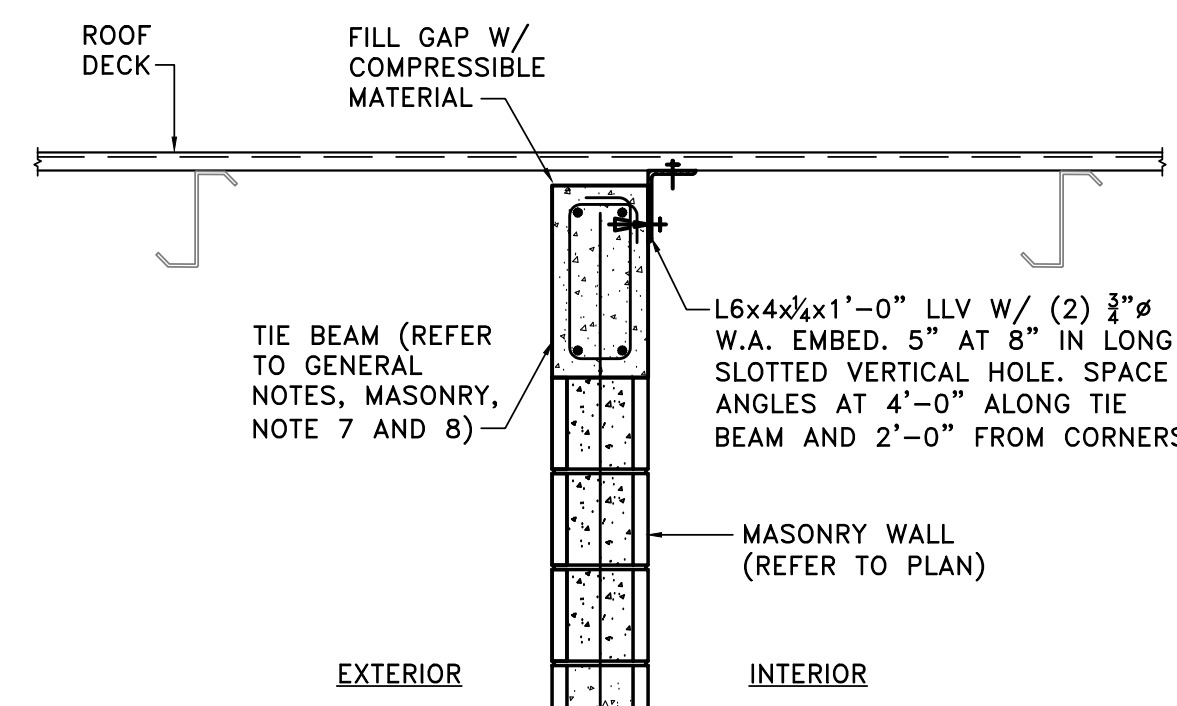
3 MASONRY WALL REINFORCING
SCALE: 3/4"=1'-0"



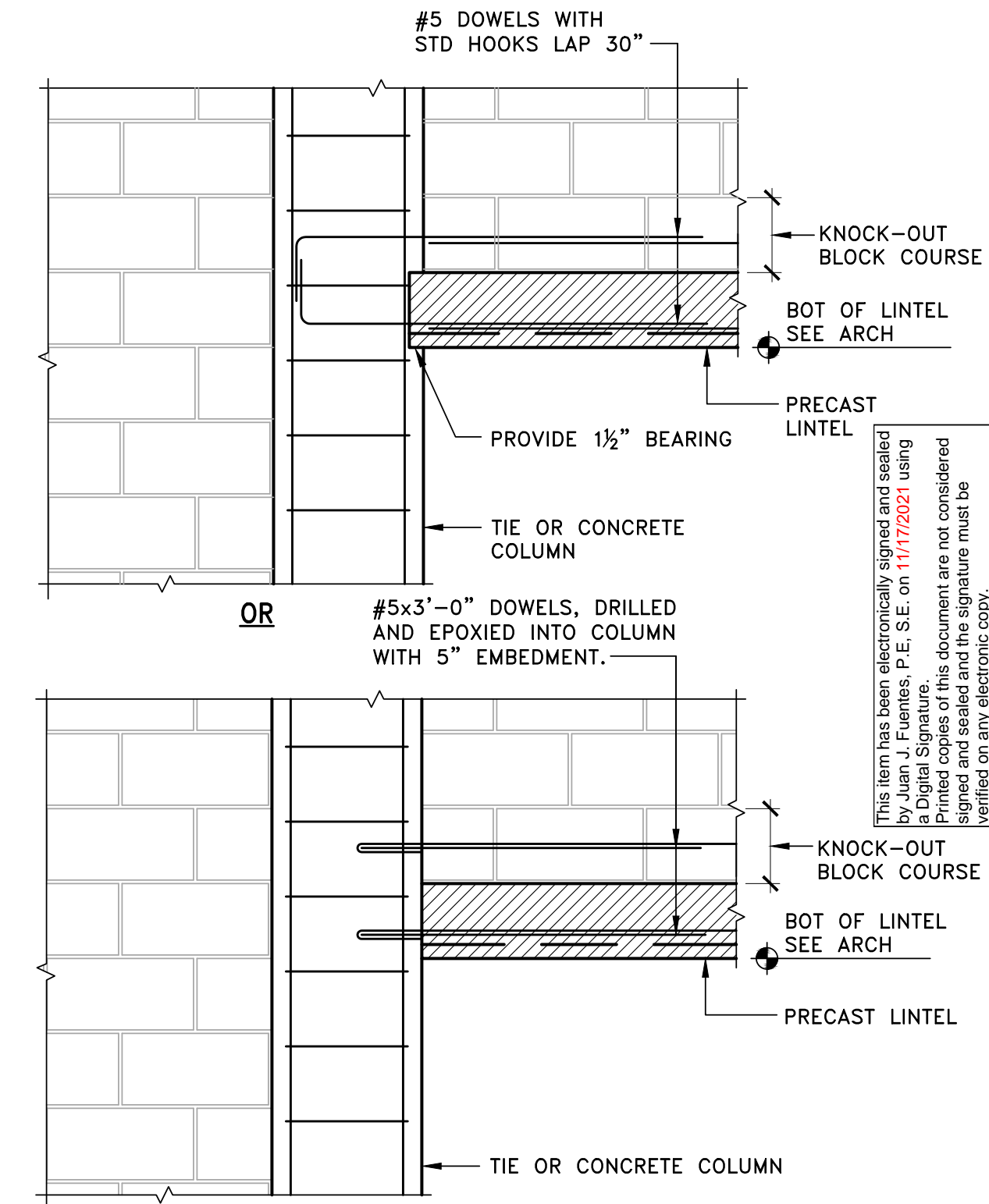
2 MASONRY WALL REINFORCING
SCALE: 3/4"=1'-0"



1 TYP. MASONRY WALL TO FOOTING
SCALE: 3/4"=1'-0"



6 PRECAST LINTEL AT COL.
SCALE: 3/4"=1'-0"



5 PRECAST LINTEL AT COL.
SCALE: 3/4"=1'-0"

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KHA PROJECT 14-3228000		DATE APRIL 2021	
SCALE AS SHOWN		DESIGNED BY JF	
DRAWN BY WR		CHECKED BY JF	
INDIAN RIVER COUNTY		INDIAN RIVER COUNTY	
PREPARED FOR IRC LANDFILL		SHEET NUMBER S-400	
MASONRY AND ROOF SECTIONS		REVISIONS	
LISCENED PROFESSIONAL		No.	
Juan J. Fuentes, P.E. S.E. LEED AP Structural Engineer Florida License No. 62426		DATE	
BY		DATE	