CONSTRUCTION PLANS

for

IVEY LANE APARTMENTS

SANITARY SYSTEM RECONSTRUCTION PROJECT

CITY OF ORLANDO, FLORIDA

DEVELOPER/OWNER:
BESSOLO DESIGN GROUP, INC.
7901 4TH STREET NORTH, SUITE 200
ST. PETERSBURG, FL 33702
CONTACT: KEVIN J. BESSOLO

ENGINEER:

DAVE SCHMITT ENGINEERING, INC.
12301 LAKE UNDERHILL ROAD
SUITE 241.
ORLANDO, FL 32828
PHONE: 407-207-9088
FAX 407-207-9089
CONTACT: MR. DAVE SCHMITT, P.E.

SURVEYOR:

SOUTHEASTERN SURVEYING AND MAPPING CORPORATION
6500 ALL AMERICAN BOULEVARD.
ORLANDO, FLORIDA 32810
PHONE: 407-509-0385 EXT.2248
CONTACT: SCOTT SOWARDS

SITE LOCATION

ELECTRIC SERVICE:

OUC - ORLANDO UTILITY COMMISSION
100 WEST ANDERSON STREET.
ORLANDO, FLORIDA 32801
PHONE: 407-423-9100

TELEPHONE SERVICE:

AT&T
6021 RIO GRANDE AVENUE.
ORLANDO, FLORIDA 32809
PHONE: 855-966-0726

WATER SERVICE:

OUC - ORLANDO UTILITY COMMISSION
100 WEST ANDERSON STREET.
ORLANDO, FLORIDA 32801
PHONE: 407-423-9100

SEWER SERVICE:

CITY OF ORLANDO
400 SOUTH ORANGE AVENUE.
ORLANDO, FLORIDA 32801
PHONE: 407-426-2121

GAS SERVICE:

ORLANDO WATER UTILITY
100 WEST ANDERSON STREET.
ORLANDO, FLORIDA 32801
PHONE: 407-423-9100

CABLE SERVICE:

SPECTRUM
1004 US HIGHWAY 92 W
AUBURNDALE, FL 33823
PHONE: (866) 309-3279

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- TOPOGRAPHIC SURVEY

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PREPARED FOR:

BESSOLO DESIGN GROUP, INC.

DAVE M. SCHMITT
FLORIDA REG. NUMBER
48274

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PROFESSIONAL SEAL

KEVIN J. BESSOLO
AR12069

IVEY LANE APARTMENTS SANITARY SYSTEM RECONSTRUCTION PROJECT CITY OF ORLANDO, FLORIDA

ISSUED

DATE:	ISSUED FOR:

REVISIONS

NO:	DATE:	DESCRIPTION

PROJECT NO: BDG-2
DRAWN BY: JT
PROJECT MANAGER: RW
CHECKED BY: KB
DATE: FEB 2024
SCALE: NONE

SHEET 1

COVER SHEET

GENERAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM WITH CITY OF ORLANDO ENGINEERING STANDARDS MANUAL (WHITE BOOK) AND F.D.O.T. STANDARDS FOR ROAD & BRIDGE CONSTRUCTION. ALL UTILITIES CONSTRUCTION CONNECTING TO THE O.U.C. AND O.C.P.U. SYSTEM SHALL CONFORM TO THE CITY OF ORLANDO UTILITIES MANUAL OF STANDARDS & SPECIFICATIONS FOR WASTEWATER AND WATER MAIN CONSTRUCTION.

2. THE CONTRACTOR SHALL COORDINATE ALL WORK WITHIN EXISTING ROAD RIGHTS-OF-WAY WITH THE CITY OF ORLANDO TRAFFIC ENGINEER, THE CITY OF ORLANDO ENGINEER AND THE FLORIDA DEPARTMENT OF TRANSPORTATION.

3. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND IN-HAND BEFORE BEGINNING CONSTRUCTION.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL INSPECTION CRITERIA AND SCHEDULES, AND FOR SIGNING SAID INSPECTIONS.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION, AND FOR NOTIFYING THE VARIOUS UTILITY PROVIDERS TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATION, TEMPORARY DISRUPTION OF SERVICE, OR CLARIFICATION OF ACTIVITY REGARDING SAID UTILITY. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN CROSSING AN UNDERGROUND UTILITY, WHETHER SHOWN ON THESE PLANS OR FIELD LOCATED. ALL UTILITIES WHICH INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY PROVIDERS AND THE CONTRACTOR SHALL COOPERATE WITH THE UTILITY PROVIDER DURING RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE BY THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.

6. THE LOCATION OF ALL EXISTING UTILITIES, STORM DRAINAGE SYSTEMS AND TOPOGRAPHIC FEATURES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. SHOULD A DISCREPANCY ARISE BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, WHICH WOULD APPRECIABLY AFFECT THE EXECUTION OF THESE PLANS, THE CONTRACTOR WILL HALT ALL CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY.

7. ORLANDO UTILITIES COMMISSION (OUC) WILL INSTALL, REGULATE AND MAINTAIN THE PROPOSED POWER DISTRIBUTION SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH OUC TO INSURE PROPER CONSTRUCTION PHASING, ELIMINATE CONFLICTS IN THE WORK, AND AVOID UNNECESSARY DELAYS.

8. THE LOCAL TELEPHONE COMPANY WILL INSTALL, REGULATE AND MAINTAIN THE PROPOSED COMMUNICATION DISTRIBUTION SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH SAID PROVIDER TO INSURE PROPER CONSTRUCTION PHASING, ELIMINATE CONFLICTS AND AVOID UNNECESSARY DELAYS.

9. ALL WORK AND MATERIALS FURNISHED SHALL BE IN REASONABLE CONFORMITY WITH THE LINES, GRADES, GRADING SECTIONS, CROSS SECTIONS, DIMENSIONS, MATERIAL REQUIREMENTS, AND TESTING REQUIREMENTS THAT ARE SPECIFIED IN THE CONTRACT, PLANS OR SPECIFICATIONS.

10. THE CONTRACTOR SHALL CONTROL HIS OPERATIONS AND THOSE OF HIS SUBCONTRACTORS, AND ALL SUPPLIERS TO ASSURE THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC. THE CONTRACTOR SHALL MAINTAIN FREE AND UNOBSTRUCTED MOVEMENT OF VEHICULAR TRAFFIC AND SHALL LIMIT HIS OPERATIONS FOR THE SAFETY AND CONVENIENCE OF THE TRAVELING PUBLIC. UNDER ALL CIRCUMSTANCES, SAFETY SHALL BE THE MOST IMPORTANT CONSIDERATION.

11. PRIOR TO COMMENCING WORK THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL BARRICADES, WARNING SIGNS, AND MARKINGS FOR HAZARDS AND THE CONTROL OF TRAFFIC, IN REASONABLE CONFORMITY WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS OR AS DIRECTED BY THE CITY OF ORLANDO TRAFFIC ENGINEER; SUCH AS TO EFFECTIVELY PREVENT ACCIDENTS IN ALL PLACES WHERE THE WORK CAUSES OBSTRUCTIONS TO THE NORMAL TRAFFIC OR CONSTITUTES IN ANY WAY A HAZARD TO THE PUBLIC.

12. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS CONTROLLING POLLUTION OF THE ENVIRONMENT.

13. THE CONTRACTOR SHALL COMPLY WITH ALL LOAD RESTRICTIONS IN THE HAULING OF MATERIALS IN PUBLIC ROADS BEYOND THE LIMITS OF THE WORK. A SPECIAL PERMIT WILL NOT RELIEVE THE CONTRACTOR OF LIABILITY FOR THE DAMAGE WHICH MAY RESULT FROM THE MOVING OF MATERIAL AND EQUIPMENT.

14. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE POLICIES AND GUIDELINES ESTABLISHED BY CITY OF ORLANDO, FLORIDA FOR THE PRESERVATION OF ALL PUBLIC AND PRIVATE PROPERTY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE OR INJURY TO PROPERTY OF ANY CHARACTER, DURING THE EXECUTION OF THE WORK, RESULTING FROM ANY OMISSION, NEGLECT, OR MISCONDUCT IN HIS MANNER OR METHOD OF EXECUTING THE WORK, OR AT ANYTIME DUE TO DEFECTIVE WORK OR MATERIALS.

15. THE CONTRACTOR SHALL INSURE THAT PROPER SOIL DENSITIES ARE ACHIEVED FOR PLACEMENT OF ALL HEADWALL/ENDWALL FOOTINGS, RETAINING WALLS, AND IN GENERAL, ANY FOOTING SUPPORT DESCRIBED ON THESE PLANS. IT WILL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT SUFFICIENT SOILS TESTING HAS BEEN PERFORMED PRIOR TO CONSTRUCTION. ALL ORGANIC SOILS ENCOUNTERED IN BUILDING FOOTPRINT AREA ARE TO BE REMOVED AND REPLACED WITH SUITABLE FILL MATERIAL.

16. THE CONTRACTOR SHALL COMPLY WITH THE CITY OF ORLANDO STANDARDS AND SPECIFICATIONS FOR STRIPPING, CLEARING, GRUBBING, GRADING, BACKFILLING, AND EMBANKMENT PREPARATION WITHIN ALL DESIGNED ROADWAY RIGHT-OF-WAY SECTIONS.

17. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN A COPY OF THE GEOTECHNICAL ENGINEER'S REPORT FOR THIS PROJECT FROM DAVE SCHMITT ENGINEERING. INC. AND MEET THE GEOTECHNICAL ENGINEER'S REQUIREMENTS FOR SOIL PREPARATION ON THE SITE.

18. AFTER THE ROADWAY HAS BEEN CONSTRUCTED TO SUBGRADE, IT SHALL BE PROOF-ROLLED TO ASSURE THAT PROPER COMPACTION HAS BEEN ATTAINED. THE PROOF-ROLLING AND COMPACTION OPERATIONS SHALL BE INSPECTED AND TESTED BY A FLORIDA LICENSED GEOTECHNICAL ENGINEER TO ASSURE THAT THE SPECIFIED COMPACTION IS MAINTAINED AND THAT ALL DELETERIOUS MATERIALS HAVE BEEN REMOVED.

19. COMPACT THE TOP 24 INCHES OF UTILITY TRENCHES WITHIN ROADWAYS TO 98% OF THE MODIFIED PROCTOR DENSITY; WITHIN OTHER AREAS TO 95%.

20. IN OTHER AREAS WHICH REQUIRE FILL MATERIAL THE CONTRACTOR WILL STRIP OR OTHERWISE REMOVE ALL VEGETATION SUCH AS BRUSH, HEAVY SODS, HEAVY GROWTH OF GRASS, DECAYED VEGETABLE MATTER, RUBBISH AND ANY OTHER DELETERIOUS MATERIAL BEFORE EMBANKMENT IS STARTED. IMMEDIATELY PRIOR TO THE PLACEMENT OF FILL MATERIALS, THE ENTIRE AREA UPON WHICH FILL IS TO PLACED, SHALL BE SCARIFIED IN A DIRECTION APPROXIMATELY PARALLEL TO THE AXIS OF FILL. THE GEOTECHNICAL ENGINEER SHALL APPROVE THE AREA PRIOR TO THE PLACEMENT OF FILL.

21. DURING CONSTRUCTION, NO DIRECT DISCHARGE OF WATER TO DOWNSTREAM RECEIVING WATERS WILL BE ALLOWED. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING WATER QUALITY, AND SHALL ROUTE DISCHARGE WATER IN SUCH A MANNER TO ADEQUATELY REMOVE SILT PRIOR TO RUNOFF FROM SITE.

22. RECORD DRAWINGS: AT THE END OF CONSTRUCTION, THE CONTRACTOR WILL PROVIDE ONE SET OF DRAWINGS SHOWING ALL CHANGES MARKED IN WATERPROOF RED WITH THE FOLLOWING CONTRACTOR CERTIFICATION EXECUTED ON EACH SHEET: THE CONTRACTOR:
____ HEREBY CERTIFIES TO THE OWNER THAT IMPROVEMENTS COVERED BY THIS DRAWING AND ALL RELATED DETAILS HAVE BEEN CONSTRUCTED AS INDICATED OR AS MODIFIED BY THE NOTES AND GRAPHICS SHOWN. ABSENT A NOTE OR GRAPHIC TO THE CONTRARY, THE IMPROVEMENTS HAVE BEEN CONSTRUCTED MEETING INDUSTRY STANDARD TOLERANCES.
SIGNED:_________________________________ DATE:__________________
AUTHORIZED CONTRACTOR'S REPRESENTATIVE

23. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.

24. MISCELLANEOUS ENGINEER NOTIFICATIONS

    A. THE CONTRACTOR SHALL PROVIDE THE ENGINEER 24 HOUR ADVANCE NOTIFICATION FOR THE FOLLOWING CONSTRUCTION AND OBSERVATION ACTIVITIES.
        a. SANITARY SEWER VIDEO INSPECTION.
        b. CONNECTIONS TO EXISTING SYSTEMS
        c. THRUST BLOCK POURS AND RESTRAINT CONNECTIONS
        d. STORM DRAINAGE LAMPING
        e. INLET TOP POURS (REINFORCING STEEL CHECK)
        f. WATER & FORCE MAIN PRESSURE TESTS
        g. BACTERIOLOGICAL SAMPLING
        h. BASE OBSERVATION & SOUNDING
        i. ASPHALT PLACEMENT
        j. PRE-FINAL INSPECTION
        k. FINAL INSPECTION
    B. THE CONTRACTOR SHALL KEEP DAILY "AS-BUILT" DRAWINGS AND MAKE THEM READILY ACCESSIBLE.
    C. THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER A PROJECT CONSTRUCTION SCHEDULE (BAR GRAPH) AND UPDATE SAID SCHEDULE ON A MONTHLY BASIS.
    D. ALL FUEL STORAGE AREAS SHALL HAVE THE PROPERTY OWNER'S PRIOR APPROVAL AND APPROPRIATE MEASURES SHALL BE TAKEN TO INSURE PROTECTION OF GROUNDWATER AND SOIL RESOURCES.
    E. THE CONTRACTOR SHALL COORDINATE ALL BACKFILL OPERATIONS WITH THE PROJECT GEOTECHNICAL ENGINEER AND SUBMIT TEST REPORTS TO THE ENGINEER PRIOR TO BEGINNING WORK ON THE NEXT ITEM OF WORK, I.E. SUBGRADE PRIOR TO CURB.
    F. THE ENGINEER RESERVES THE RIGHT TO REQUIRE THE CONTRACTOR TO UNCOVER, RETEST AND OR PERFORM ANY ACTION NECESSARY TO ENSURE THAT THE IMPROVEMENTS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

WATER

25. THE FOLLOWING UTILITY PROVIDER IS LISTED FOR THE CONVENIENCE TO THE CONTRACTOR.

    ORLANDO UTILITIES COMMISSION
    6003 PERSHING AVE.
    ORLANDO, FL 32822
    (407) 737-4203

CITY OF ORLANDO. WILL MAINTAIN THE PROPOSED POTABLE WATER SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND DOING ALL OF THE WORK IN ACCORDANCE WITH THE LATEST O.U.C UTILITIES SPECIFICATIONS AND STANDARDS.

26. ALL WATER MAIN FITTINGS, VALVES, RESTRAINTS, COUPLINGS, PIPE, AND IN GENERAL ALL MATERIALS REQUIRED FOR INSTALLING THE WATER SUPPLY SYSTEM, THAT CONNECT TO THE O.U.C. SYSTEM SHALL CONFORM TO THE O.U.C. STANDARDS.

27. LOCATING TAPE CAPABLE OF REGISTERING ON A METAL LOCATOR SHALL BE INSTALLED DIRECTLY ABOVE THE PIPE CENTERLINE AND BURIED TO A MINIMUM DEPTH OF SIX (6) INCHES AND MAXIMUM DEPTH OF TWELVE (12) INCHES FOR ALL PROPOSED PRESSURE SYSTEMS. THE TAPE SHALL BE LAID CONTINUOUSLY WITHOUT GAPS BETWEEN ENDS OVER ALL INSTALLED PIPING. THE TAPE SHALL HAVE THE WORD "CAUTION" AND THE LINE IDENTIFICATION; SUCH AS, "CAUTION, WATER LINE BURIED BELOW", PRINTED CONTINUOUSLY ALONG ITS LENGTH. THE TAPE SHALL BE COLOR CODED BLUE. FULL RANGE MARKERS SHALL ALSO BE USED.

28. WATER AND UTILITY CROSSINGS:

UTILITY SEPARATION-VERTICAL CLEARANCE

    A. WHERE WATER MAINS CROSS A GRAVITY SANITARY SEWER OR STORM SEWER MAIN, A VERTICAL SEPARATION (OUTSIDE TO OUTSIDE) OF AT LEAST SIX INCHES, AND PREFERABLY TWELVE INCHES, ABOVE OR AT LEAST TWELVE INCHES BELOW MUST BE MAINTAINED. WHEREVER POSSIBLE, THE WATER MAIN SHALL BE LAID ABOVE THE OTHER PIPE.
    B. WHERE WATER MAINS CROSS A SANITARY FORCE MAIN OR RECLAIMED WATER MAIN, A VERTICAL SEPARATION (OUTSIDE TO OUTSIDE) OF AT LEAST 12 INCHES MUST BE MAINTAINED. WHEREVER POSSIBLE, THE WATER MAIN SHALL BE LAID ABOVE THE OTHER PIPE.
    C. ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ON THE OTHER PIPELINE SO THAT THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE JOINTS OF THE OTHER PIPE.

UTILITY SEPARATION-HORIZONTAL SEPARATION

    D. WHEN WATER MAINS PARALLEL A GRAVITY SEWER MAIN, SANITARY FORCE MAIN, OR RECLAIMED WATER MAIN NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., A SEPARATION (MEASURED OUTSIDE TO OUTSIDE) OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, MUST BE MAINTAINED. THE MINIMUM SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY SANITARY SEWERS SHALL BE THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SANITARY SEWER PIPE
    E. WHERE WATER MAINS PARALLEL A STORM SEWER PIPE OR RECLAIMED WATER MAIN REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. A MINIMUM OF 3 FEET HORIZONTAL SEPARATION (MEASURED OUTSIDE TO OUTSIDE) MUST BE MAINTAINED.
    F. NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY MANHOLE OR STORM SEWER INLET OR MANHOLE.
    G. FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM THE A STORM SEWER OR RECLAIMED WATER MAIN REGULATED BY PART III OF CHAPTER 62-610, F.A.C.; AND AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM A GRAVITY SANITARY SEWER, SANITARY FORCE MAIN OR RECLAIMED WATER MAIN NOT REGULATED BY PART III OF CHAPTER 62-610, F.A.C.
    H. THE WATER MAIN PIPE SHALL BE LAID SUCH THAT THE JOINTS ARE STAGGERED AS FAR AS POSSIBLE FROM THE JOINTS OF THE OTHER PIPE.

29. WHERE DUCTILE IRON PIPE IS REQUIRED FOR WATER MAINS, IT SHALL CONFORM TO ANSI/AWWA A21.51.A MINIMUM THICKNESS OF CLASS 50 PER ANSI/AWWA SHALL BE SUPPLIED. DIP PIPE MUST BE IN CONFORMANCE WITH AWWA C150 AND C151.

30. TESTING: THE CONTRACTOR TO TEST ALL WATER MAINS AS PER THE FOLLOWING: HYDROSTATIC TEST PER AWWA-C600 (OR M23) STANDARD, AND DISINFECTION OF WATER MAIN PER AWWA-C651.

31. WATER MAINS SHALL COMPLY WITH AWWA STANDARDS. ALL WATER MAINS SHALL BE OWNED AND MAINTAINED BY O.U.C. ALL 4" DIAMETER THRU 12" DIAMETER PVC WATER MAINS SHALL BE AWWA C900-DR18. ALL WATER MAINS LESS THAN 4 INCHES IN DIAMETER SHALL BE IN ACCORDANCE WITH ASTM 2241 SDR21 CLASS 200. PIPE SIZES 16" THRU 36" SHALL BE IN ACCORDANCE WITH AWWA C-905.52 ALL WATER MAINS SHALL BEAR THE NSF LOGO INDICATING APPROVAL FOR DRINKING WATER AND SHALL BE COLOR CODED OR MARKED USING BLUE AS A PREDOMINANT COLOR TO DIFFERENTIATE DRINKING WATER FROM OTHER WATER LINES.

32. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, WASTEWATER AND RECLAIMED WATER LINES.

33. ALL FIRE HYDRANTS SHALL BE POSITIONED NO MORE THAN 5 FEET FROM THE CURB.

34. A BACKFLOW DEVICE (I.E. JUMPER CONNECTION) IS REQUIRED AT ALL ACTIVE WATER MAINS AND PROPOSED NEW WATER MAIN IMPROVEMENTS.

35. FIRE PROTECTION SHALL BE IN ACCORDANCE WITH SECTION 9.3.3 OF THE SUBDIVISION REGULATIONS AND ORDINANCE #81.19.

SEWER

36. THE FOLLOWING UTILITY PROVIDER IS LISTED FOR THE CONVENIENCE TO THE CONTRACTOR.

CITY OF ORLANDO
400 SOUTH ORANGE AVENUE.
ORLANDO, FLORIDA 32801
PHONE: 407-426-2121

37. UNDERGROUND GRAVITY SEWER PIPING WHICH IS NOT MANUFACTURED OF METAL OR CONCRETE PIPE SHALL BE COLOR CODED GREEN USING LIGHT STABLE COLORANTS. UNDERGROUND METAL PIPE SHALL BE COLOR CODED OR MARKED USING GREEN AS A PREDOMINANT COLOR.

38. ALL PROPOSED SANITARY LINES (EITHER GRAVITY OR PRESSURES SYSTEMS), FITTINGS, VALVES, RESTRAINTS, COUPLINGS, PIPES, AND IN GENERAL, THOSE MATERIALS REQUIRED FOR INSTALLING THE WASTEWATER DISPOSAL SYSTEM SHALL CONFORM TO THE CITY OF ORLANDO ENGINEERING STANDARD MANUAL (ESM).

39. RECLAIMED WATER LINES, IF PROPOSED ON THESE PLANS, MAY BE EITHER PVC C900 DR18 OR DUCTILE IRON CLASS 350 (CERAMIC EPOXY LINED).

40. UNDERGROUND RECLAIMED WATER PIPING WHICH IS NOT MANUFACTURED OF METAL OR CONCRETE PIPE SHALL BE COLOR CODED PANTONE PURPLE 522C USING LIGHT STABLE COLORANTS. UNDERGROUND METAL AND CONCRETE PIPE SHALL BE COLOR CODED OR MARKED USING PURPLE AS A PREDOMINANT COLOR.

46. ALL PUBLIC STORM DRAINAGE PIPES MUST BE WRAPPED AT THE JOINT WITH FILTER FABRIC.

47. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL RETENTION AND DETENTION FACILITIES AND ALL LANDSCAPE BUFFERS, THROUGH THE DURATION OF THE PROJECT, AND UNTIL THE WORK IS ACCEPTED BY THE OWNER. ALL DISRUPTED AREAS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION.

48. ROADWAY AND DRAINAGE DESIGN PER CURRENT CITY OF ORLANDO AND F.D.O.T STANDARDS AND SPECIFICATIONS.

49. UTILITY (SEWER AND WATER) DESIGN PER CURRENT O.U.C. AND CITY OF ORLANDO STANDARDS AND SPECIFICATIONS.

50. THE CONTRACTOR SHALL SUBMIT A MAINTENANCE OF TRAFFIC PLAN TO THE CITY OF ORLANDO AND OBTAIN PLAN APPROVAL PRIOR TO CONSTRUCTION.

51. AIR RELEASE VALVES SHALL BE REQUIRED AT ALL HIGH POINTS ON PROPOSED FORCEMAINS, RECLAIMED WATER MAINS AND POTABLE WATER MAINS.

52. O.U.C, AND CITY OF ORLANDO UTILITIES EMERGENCY WASTEWATER SPILL AND WATER MAIN BREAK PROCEDURES.

    A. TELEPHONE NOTIFICATION

        THE O.U.C, AND CITY OF ORLANDO, DISPATCH OPERATOR SHALL BE NOTIFIED IMMEDIATELY IN THE EVENT OF A FORCEMAIN, GRAVITY SEWER OR WATERMAIN BREAK OR DAMAGE AT 407-423-9018 & 407-246-3824

    B. REPAIR IMMEDIATELY

        ALL DAMAGE TO O.U.C, AND CITY OF ORLANDO MAINS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT THE CONTRACTORS' EXPENSE. IF THE REPAIR IS NOT MADE IN A TIMELY MANNER, AS DETERMINED BY THE O.U.C, AND CITY OF ORLANDO UTILITIES INSPECTOR, THEY MAY PERFORM REPAIRS AND THE CONTRACTOR WILL BE CHARGED FOR THOSE REPAIRS.

    C. O.U.C, AND CITY OF ORLANDO UTILITIES GENERAL TELEPHONE NUMBERS

        CONSTRUCTION INSPECTION SECTION 407-434-4111 / 407-246-3254

        ENGINEERING DIVISION 407-246-2271

    D. ADVANCE NOTIFICATION OF CONSTRUCTION

        WATER DIVISION 407-836-6800

        THE O.U.C UTILITIES CONSTRUCTION SECTION (407-236-9651) SHALL BE NOTIFIED AT LEAST 7 DAYS PRIOR TO ANY CONSTRUCTION ACTIVITIES.

    E. ADVANCE NOTIFICATION OF PENDING CONNECTION

        THE O.U.C WATER DIVISION (407-236-9651) AND THE CITY OF ORLANDO WASTEWATER DIVISION (407-246-2213) SHALL BE NOTIFIED AT LEAST SEVEN (7) DAYS PRIOR TO SCHEDULED MAIN TIE-INS AND VALVE OPERATIONS TO THEIR UTILITIES SYSTEMS.

    F. OPERATION OF O.U.C, AND,CITY OF ORLANDO VALVES

        WATER, WASTEWATER, AND REUSE VALVES ARE TO BE OPERATED ONLY BY AN O.U.C, AND CITY OF ORLANDO UTILITIES INSPECTOR (407-236-9651 / 407-246-2213). ALL VALVES BEING INSTALLED ARE TO REMAIN CLOSED DURING CONSTRUCTION.

    G. OPERATION OF CITY OF ORLANDO PUMP STATIONS

        THE CONTRACTOR SHALL COORDINATE ALL PUMP STATION OPERATIONS AND SHUT DOWN CONTROLS WITH AN ORANGE CITY OF ORLANDO INSPECTOR (407-246-2213).

    THE CONTRACTOR SHALL NOTIFY THE O.U.C, AND CITY OF ORLANDO PUBLIC UTILITIES CONSTRUCTION DEPARTMENT 48 HOURS PRIOR TO ANY UTILITIES CONSTRUCTION. TELEPHONES (407-236-9651 / 407-246-2213)

53. PRESSURE PIPE LENGTHS DO NOT INCLUDE BENDS, AIR RELEASE VALVES OR FIRE HYDRANT ASSEMBLIES.

54. THE CONTRACTOR IS RESPONSIBLE FOR MEETING THE REQUIREMENTS OF EPA AND FDEP AS IT RELATES TO THE NPDES NOTES INCLUDING THE POLLUTION DISCHARGE CONTROL.

55. ALL EXISTING UTILITIES HAVE BEEN FIELD VERIFIED AT ALL POINTS OF CONNECTION TO, AND AT ALL AREAS OF CONFLICT WITH O.U.C. MAINS.

STORMWATER/EROSION CONTROL

41. THE STORMWATER SYSTEM FOR THIS PROJECT HAS BEEN DESIGNED IN ACCORDANCE WITH APPLICABLE RULES AND DESIGN STANDARDS OF THE WATER MANAGEMENT DISTRICT OR REGULATORY AGENCY WITH THE MOST STRINGENT DESIGN STANDARDS, AS REQUIRED BY THE ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT AND CITY OF ORLANDO, FLORIDA.

42. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE BUFFERS, RETENTION AND DETENTION FACILITIES UNTIL THE WORK HAS BEEN ACCEPTED BY THE OWNER. ALL DISRUPTED AREAS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION.

43. ALL REINFORCED CONCRETE PIPE (R.C.P.) SHALL BE MINIMUM CLASS III.

44. ALL PRECAST DRAINAGE STRUCTURES TO HAVE STEEL ANGLE IRON FRAME. ALL STRUCTURES IN PAVED AREAS TO HAVE STEEL RECTILINEAR GRATES WITH H-20 LOADING.

45. THE CONTRACTOR SHALL PERFORM EROSION CONTROL MEASURES IN ACCORDANCE WITH THE CITY OF ORLANDO STANDARDS, DETAILS CONTAINED IN THE PLANS, THE FOLLOWING NOTES, AND AS DIRECTED BY THE ENGINEER.

    A. TEMPORARY EROSION CONTROL
        a. STOCKPILING MATERIAL NO EXCAVATING MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATERBODY OR STORMWATER COLLECTION FACILITY.
        b. INLET PROTECTION INLETS AND CATCH BASINS SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATERBODY OR STORMWATER COLLECTION FACILITY.
        c. TEMPORARY SEEDING AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN THIRTY DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED, AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING. THE RATE OF SEEDING SHALL BE 30 POUNDS PER ACRE.
        d. TEMPORARY SEEDING AND MULCHING SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN NOTE 3 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA TO A DEPTH OF 4 INCHES.
        e. TEMPORARY GRASSING THE SEEDED OR THE SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED AS REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER.
        f. TEMPORARY REGRASSING IF, AFTER FOURTEEN DAYS, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75% GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATION COVER.
        g. THE CONTRACTOR SHALL PLACE HAY BALES AROUND ALL EXISTING AND NEWLY CONSTRUCTED INLETS TO CONTROL EROSION DURING CONSTRUCTION.
        h. MAINTENANCE ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.
    B. PERMANENT EROSION CONTROL
    C. THE EROSION CONTROL FACILITIES FOR THE PROJECT SHALL BE DESIGNED TO MINIMIZE THE IMPACT ON OFF-SITE FACILITIES. ALL STORMWATER DISCHARGE FROM THE PROJECT LIMITS SHALL BE ROUTED THROUGH DETENTION BASINS TO TRAP SUSPENDED SEDIMENTS AND DISCHARGE FACILITIES FROM THESE BASINS SHALL BE PROVIDED WITH A SKIMMER DEVICE TO TRAP FLOATABLE DEBRIS.
        a. PERMANENT SEEDING ALL AREAS WHICH HAVE BEEN DISTURBED BY THE CONSTRUCTION WILL, AS A MINIMUM, BE FERTILIZED AND SEEDED. THE FERTILIZER SHALL BE OF 12-8-8 PROPORTIONS AND SHALL BE UNIFORMLY SPREAD AT A RATE OF 400-500 POUNDS PER ACRE AND MIXED WITH THE SOIL TO A UNIFORM DEPTH OF FOUR INCHES. INCLUDED WITH THE FERTILIZING OPERATION, WILL BE THE APPLICATION OF AMENDMENTS, IF NECESSARY, SUCH AS DOMOMITIC LIMESTONE OR ALUMINUM SULFATE TO CORRECT THE PH FACTOR TO WITHIN THE LIMITS OF 6.0-7.0. THE GRASS SEED SHALL BE UNIFORMLY SPREAD AT THE RATE OF 100 POUNDS PER ACRE WHILE THE SOIL IS MOIST. THE GRASS SEED MIXTURE SHALL BE OF 20 PARTS BERMUDA AND 80 PARTS BAHIA, WITH THE ADDITION OF 30 PARTS RYE IN THE WINTER SEASON.
        b. PERMANENT SEEDING AND MULCHING IN ADDITION TO THE MINIMUM REQUIREMENTS OF NOTE 1. ABOVE, SLOPES OF 6:1 TO 4:1 INCLUSIVE WILL BE MULCHED WITH A UNIFORM THICKNESS OF APPROXIMATELY TWO INCHES, LOOSE MEASURE, OF MULCH MATERIAL INCORPORATED INTO THE SOIL BY MIXING TO A DEPTH OF FOUR INCHES.
        c. PERMANENT SODDING ALL RETENTION/DETENTION BASINS SHALL BE SODDED WITHIN THEIR LIMITS. ALL EXPOSED AREAS WITHIN PUBLIC RIGHT-OF-WAYS WILL BE SOLID SODDED. OTHER AREAS WITH SLOPES STEEPER THAN 4:1 WILL BE SODDED.
        d. STRIP SODDING STRIP SOD SHALL BE PLACED ADJACENT TO ALL CURBS, WALKS AND PAVEMENTS.
        e. REGRASSING ALL GRASSED AREAS WILL BE MAINTAINED TO ASSURE A GOOD STAND AND SUFFICIENT GROUND COVER TO MINIMIZE EROSION. IF, AFTER 60 DAYS AN ADEQUATE GROUND COVER HAS NOT BEEN ESTABLISHED, THE AREA WILL BE REGRASSED.
        f. ADDITIONAL FERTILIZATION GRASSED AREAS NOT ACCEPTED WITHIN 90 DAYS OF THEIR COMPLETION SHALL BE FERTILIZED AT AN APPLICATION RATE OF 250 POUNDS PER ACRE.

56. ALL WORK PERFORMED WITHIN THE FDOT RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FDOT DESIGN STANDARDS, THE LATEST EDITION OF THE SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE 2017 UTILITY ACCOMMODATION MANUAL.

57. PLEASE NOTIFY ORLANDO OPERATIONS TWO DAYS BUSINESS DAYS @ 321-319-8100 BEFORE BEGINNING WORK.

58. EOR WILL BE FULLY RESPONSIBLE TO UPDATE/ADD/REMOVE ANY SIGNS AND PAVEMENT MARKINGS THAT NEED TO BE UPDATED/ADDED/REMOVED IN THE FIELD WITH THE PROPOSED CHANGES EVEN IF THE FDOT COMMENTS BELOW ARE NOT COMPREHENSIVE AND DO NOT COVER EVERY ONE OF THE CHANGES REQUIRED.

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PROFESSIONAL SEAL

KEVIN J. BESSOLO
AR12069

IVEY LANE APARTMENTS SANITARY SYSTEM RECONSTRUCTION PROJECT CITY OF ORLANDO, FLORIDA

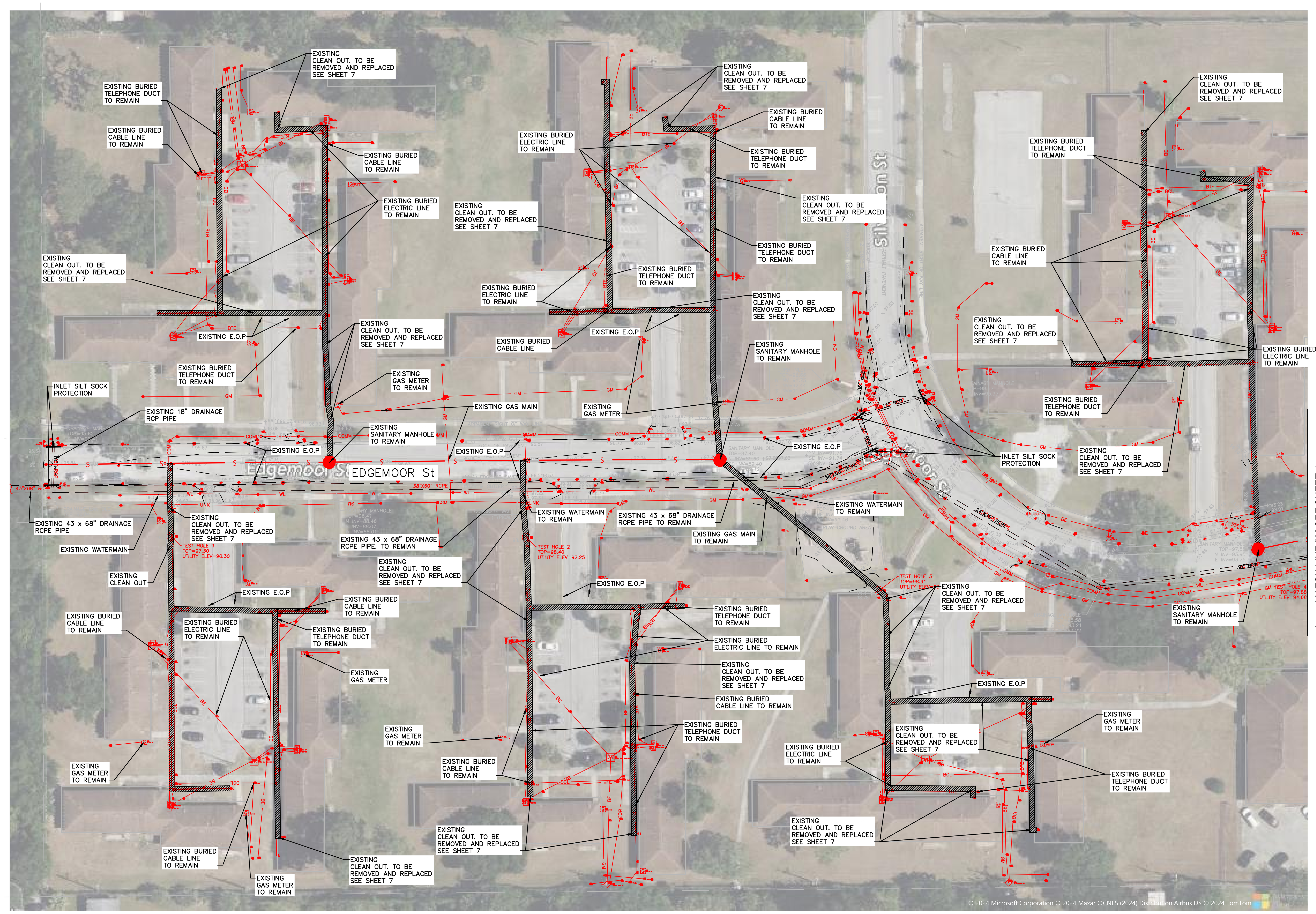
ISSUED	
DATE:	ISSUED FOR:

REVISIONS		
NO:	DATE:	DESCRIPTION

PROJECT NO: BDG-2
DRAWN BY: JT
PROJECT MANAGER: RW
CHECKED BY: KB
DATE: FEB 2024
SCALE: NONE

SHEET 2

GENERAL CONSTRUCTION NOTES



0 20' 40' 80'
SCALE: 1" = 40'

MATCH LINE "A" SEE SHEET 4

LEGEND	PROPOSED	EXISTING
SURVEYED SANITARY LATERALS TO BE REMOVED	(hatched)	
NOT SURVEYED SANITARY LATERALS TO BE REMOVED	(cross-hatched)	
INLET PROTECTION	(solid line)	
BURIED COMM. PHONE OR CABLE		COMM
BURIED FIBER OPTIC		BFO
BURIED CABLE LINE		BCL
BURIED ELECTRIC LINE		BE
BURIED TELEPHONE DUCT		BTE
GAS MAIN		GM
UNKNOWN UTILITY LINE		UNK
WATER LINE		WL
SANITARY SEWER		S
GAS METER		
DRAINAGE		(dashed)
SANITARY MANHOLE		(large dot)
CLEAN OUT		(small dot)

THIS SHEET

KEY MAP
NTS

DAVE M. SCHMITT
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CITY OF ORLANDO, FLORIDA

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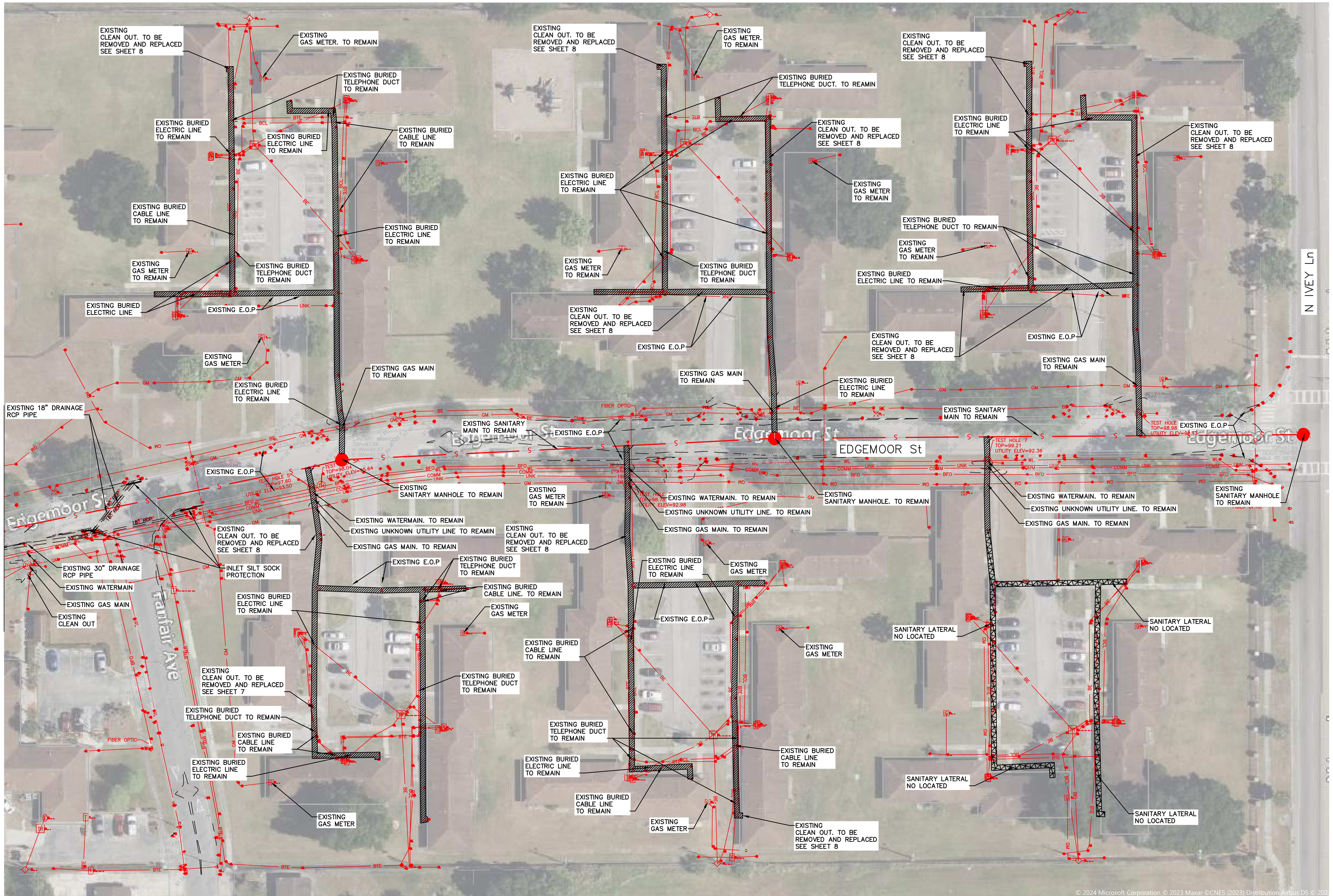
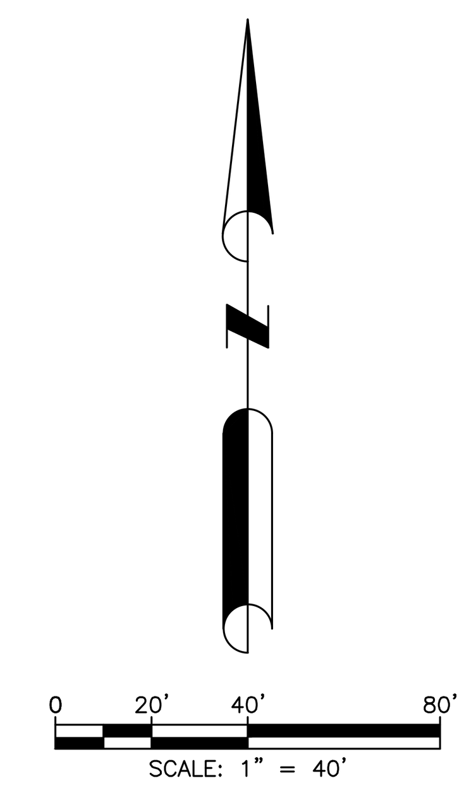
SHEET 3

DEMO & EROSION CONTROL PLAN-1



MATCH LINE "A" SEE SHEET 3



LEGEND

LEGEND	PROPOSED	EXISTING
SANITARY LATERAL TO BE REMOVED AND REPLACE	(hatched)	
SANITARY LATERAL NO LOCATED TO BE REMOVED AND REPLACE	(cross-hatched)	
INLET PROTECTION	(solid bar)	
BURIED COMM. PHONE OR CABLE		COMM
BURIED FIBER OPTIC		BFO
BURIED CABLE LINE		BCL
BURIED ELECTRIC LINE		BE
BURIED TELEPHONE DUCT		BTE
GAS MAIN		GM
UNKNOWN UTILITY LINE		UNK
WATER LINE		WL
SANITARY SEWER		S
GAS METER		[G]
DRAINAGE		
SANITARY MANHOLE		
CLEAN OUT		

THIS SHEET

KEY MAP
NTS

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CITY OF ORLANDO, FLORIDA

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DATE:	ISSUED FOR:

REVISIONS

NO:	DATE:	DESCRIPTION

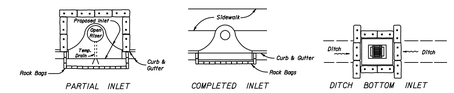
PROJECT NO: BDG-2
DRAWN BY: JT
PROJECT MANAGER: RW
CHECKED BY: KB
DATE: FEB 2024
SCALE: 1" = 40'

SHEET 4

DEMO & EROSION CONTROL PLAN-2

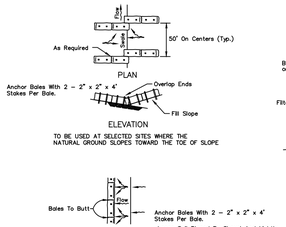
EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AND SWALES AT COMPLETION OF CONSTRUCTION.
2. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
3. ADDITIONAL PROTECTION - ON-SITE PROTECTION IN ADDITION TO THE ABOVE MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNSEEN CONDITIONS OR ACCIDENTS.
4. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
5. WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED.
6. FDOT NO. 1 COARSE AGGREGATE SHALL BE PLACED OVER THE WIRE MESH AS INDICATED IN D-903. THE DEPTH OF STONE SHALL BE AT LEAST 12 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.
7. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.
8. BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED WITH THE BINDINGS ORIENTED AROUND THE SIDES RATHER THAN OVER AND UNDER THE BALES.
9. BALES SHALL BE PLACED LENGTHWISE IN A SINGLE ROW SURROUNDING THE INLET, WITH THE ENDS OF ADJACENT BALES PRESSED TOGETHER.
10. THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 8 INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER.
11. EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE.
12. LOOSE STRAW SHOULD BE WEDGED BETWEEN BALES TO PREVENT WATER FROM ENTERING BETWEEN BALES.
13. STRAW BALE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
14. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.
15. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BALES SHALL BE ACCOMPLISHED PROMPTLY.
16. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE STRAW BALE BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
17. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
18. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
19. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-THIRD THE HEIGHT OF THE BARRIER.
20. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.
21. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
22. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/3 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
23. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST EROSION AND SEDIMENT CONTROL PRACTICES AS OUTLINED IN THE PLANS, SPECIFICATIONS AND ST. JOHNS RIVER WATER MANAGEMENT DISTRICT SPECIFICATIONS AND CRITERIA.
24. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE FLORIDA DEVELOPMENT MANUAL - A GUIDE TO SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (F.D.E.R.) CHAPTER 6.
25. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION. SEE DETAIL SHEET FOR TYPICAL CONSTRUCTION.
26. ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED, MULCHED AND MAINTAINED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED.
27. SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS ARE MAINTAINED.
28. ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
29. DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.
30. ALL DISTURBED AREAS TO BE STABILIZED THROUGH COMPACTION, SILT SCREENS, HAY BALES, AND GRASSING. ALL FILL SLOPES 3:1 OR STEEPER TO RECEIVE STAKED SOLID SOD.
31. ALL DEWATERING, EROSION, AND SEDIMENT CONTROL TO REMAIN IN PLACE AFTER COMPLETION OF CONSTRUCTION AND REMOVED ONLY WHEN AREAS HAVE STABILIZED.
32. THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT MEASURES REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.
33. THE CONTRACTOR SHALL BE REQUIRED TO RESPOND TO ALL WATER MANAGEMENT DISTRICT INQUIRIES, RELATIVE TO COMPLIANCE OF SWFWMD FOR EROSION AND SEDIMENTATION CONTROL. THE COST OF THIS COMPLIANCE SHALL BE PART OF THE CONTRACT.



PARTIAL INLET — COMPLETED INLET — DITCH BOTTOM INLET

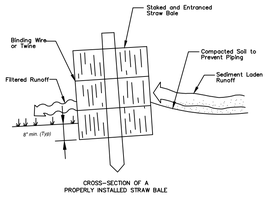
PROTECTION AROUND INLETS OR SIMILAR STRUCTURES



BARRIERS FOR FILL SLOPES

HAY BALE PLACEMENT

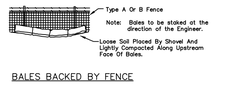
N.T.S.



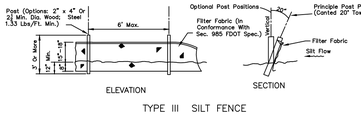
STAKED SYNTHETIC HAY BALE

(D-911)

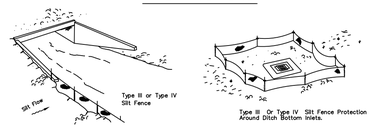
N.T.S.



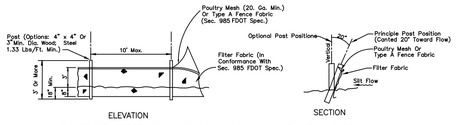
BALES BACKED BY FENCE



TYPE III SILT FENCE

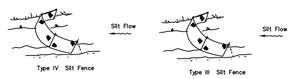


Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.



Note: Silt Fence to be paid for under the contract lump sum price for Erosion and Sediment Control.

TYPE IV SILT FENCE

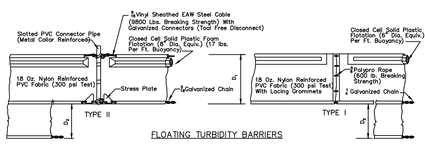


Note: Spacing for Type III & TYPE IV Fence to be in accordance with Chart 1, Sheet 1 of 3, FDOT Index Ditch installations at drainage structures Sheet 2 of 3, FDOT.

SILT FENCE APPLICATIONS

SILT FENCE TYPE III & IV

N.T.S.

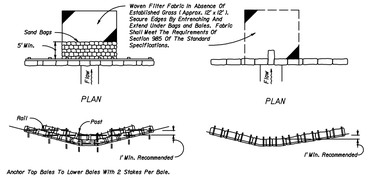


FLOATING TURBIDITY BARRIERS

NOTES:
1. Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
2. Number and spacing of anchors dependent on current velocities.
3. Deployment of barrier around pile locations may vary to accommodate construction operations.
4. Navigation may require segmenting barrier during construction operations.
5. For additional information see Section 104 of the FDOT Standard Specifications.

TURBIDITY BARRIERS

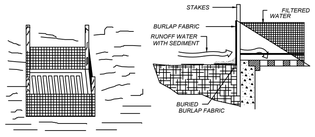
N.T.S.



BARRIER FOR UNPAVED DITCHES

SYNTHETIC HAY BALE BARRIERS TYPE I & II

N.T.S.



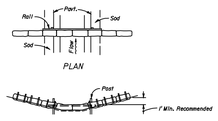
FABRIC SEDIMENT FILTER

SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5 PERCENT) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 cfs) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS. SUCH AS IN STREET OR HIGHWAY MEDIANS.

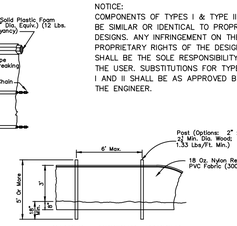
DROP INLET SEDIMENT TRAP

N.T.S.



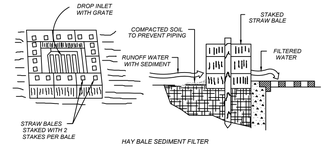
BARRIER FOR PAVED DITCH

NOTICE:
COMPONENTS OF TYPES I & TYPE II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.



STAKED TURBIDITY BARRIER

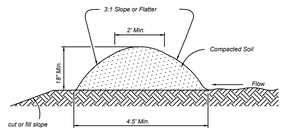
Note:
Turbidity barriers for flowing streams and tidal creeks may be either floating, or staked types or any combinations of types that will suit site conditions and meet erosion control and water quality requirements. The barrier type(s) will be at the Contractors option unless otherwise specified in the plans, however, payment will be under the contract lump sum price established in the bid proposal for Erosion and Sediment Control Posts in staked turbidity barriers to be installed in vertical position unless otherwise directed by the Engineer.



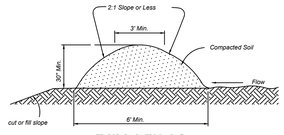
HAY BALE SEDIMENT FILTER

SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5 PERCENT) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 cfs) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.



TEMPORARY DIVERSION DIKE FOR AREA OF 1 TO 5 ACRES



TEMPORARY DIVERSION DIKE FOR AREA OF 5 OR MORE ACRES

DIVERSION DIKE

N.T.S.

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PROFESSIONAL SEAL

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IVEY LANE APARTMENTS SANITARY SYSTEM RECONSTRUCTION PROJECT
CITY OF ORLANDO, FLORIDA

ISSUED

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DAVE M. SCHMITT
FLORIDA REG. NUMBER
48274

SHEET 5

EROSION CONTROL DETAILS

STORM WATER POLLUTION PREVENTION PLAN

OWNER'S REQUIREMENTS

SITE DESCRIPTION

PROJECT NAME AND LOCATION:
IVEY LANE APARTMENTS SANITARY SYSTEM RECONSTRUCTION PROJECT
CITY OF ORLANDO, FLORIDA

OWNER NAME AND ADDRESS:
BESSOLO DESIGN GROUP, INC.
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ST. PETERSBURG, FL 33702
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DESCRIPTION:
THIS PROJECT INCLUDES THE DEMOLISH ALL EXISTING SANITARY SEWER FROM THE CLEANOUT SERVING EACH BUILDING ALL THE WAY BACK THROUGH THE PRIVATE STREETS ALL THE WAY TO THE MAIN PUBLIC STREET WERE THE DEVELOPMENT IS FED AT IVEY LANE, THE CONSTRUCTION OF NEW SEWER LINE AND REMEDIATION OF IMPACTS DUE TO THE RENOVAL OF SEWER SYSTEM.

SOIL DISTURBING ACTIVITIES WILL INCLUDE, BUT NOT LIMITED TO:
CLEARING AND GRUBBING; EARTHWORK, DRAINAGE SYSTEM,
PAVING, AND PREPARATION FOR FINAL LANDSCAPING.

RUNOFF CURVE NUMBERS:
1. PRE-CONSTRUCTION = SEE DRAINAGE CALCULATION NOTEBOOK
2. DURING CONSTRUCTION = SEE DRAINAGE CALCULATION NOTEBOOK
3. POST-CONSTRUCTION = SEE DRAINAGE CALCULATION NOTEBOOK

SOILS:
SEE GEOTECHNICAL REPORT FOR BORINGS AND SOILS DATA.

SITE MAPS:
* SEE ATTACHED PLANS FOR PRE & POST DEVELOPMENT GRADES, AREAS OF SOILS, DISTURBANCE, LOCATION OF SURFACE WATERS, WETLANDS, PROTECTED AREAS, MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS AND STORM WATER DISCHARGE POINTS.
* SEE ATTACHED EROSION CONTROL PLAN FOR LOCATION OF TEMPORARY STABILIZATION PRACTICES AND EROSION CONTROL DETAILS.
* SEE ATTACHED GENERAL NOTES SHEET AND EROSION CONTROL PLAN FOR REQUIREMENTS FOR TEMPORARY AND PERMANENT STABILIZATION.

PROJECT AREA:
APPROXIMATELY 29 AC.

1. ANTICIPATED START DATE OF CONSTRUCTION: 05/24
2. ANTICIPATED END DATE OF CONSTRUCTION: 05/25

(CONSTRUCTION DATES ARE TO BE FILLED IN PRIOR TO COMMENCEMENT OF CONSTRUCTION)

CONTROLS

THIS PLAN UTILIZES BEST MANAGEMENT PRACTICES TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUN OFF. AN EROSION AND TURBIDITY PLAN HAS BEEN PREPARED TO INSTRUCT THE CONTRACTOR ON PLACEMENT OF THESE CONTROLS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL AND MAINTAIN THE CONTROLS PER PLAN AS WELL AS ENSURING THE PLAN IS PROVIDING THE PROPER PROTECTION AS REQUIRED BY FEDERAL, STATE AND LOCAL LAWS. REFER TO "CONTRACTORS RESPONSIBILITY" FOR A VERBAL DESCRIPTION OF THE CONTROLS THAT MAY BE IMPLEMENTED.

STORM WATER MANAGEMENT

STORM WATER DRAINAGE WILL BE PROVIDED BY A SERIES OF PIPES AND INLETS CONVEYING RUNOFF TO THE STORMWATER RETENTION PONDS FOR THE PROJECT. AREAS WHICH ARE NOT TO BE CONSTRUCTED ON, BUT WILL BE REGRADED SHALL BE STABILIZED IMMEDIATELY AFTER GRADING IS COMPLETE. THE SITE DISCHARGES TO A DRY DETENTION SYSTEM. WHERE PRACTICAL, TEMPORARY SEDIMENT BASINS WILL BE USED TO INTERCEPT SEDIMENT BEFORE ENTERING THE PERMANENT DETENTION BASIN. THIS IS IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH BY THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT FOR THIS TYPE OF DEVELOPMENT AT THE TIME OF PERMITTING.

TIMING OF CONTROLS/MEASURES

REFER TO "CONTRACTORS REQUIREMENTS" FOR THE TIMING OF CONTROL/MEASURES.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL LAWS RELATED TO STORM WATER MANAGEMENT AND EROSION AND TURBIDITY CONTROLS, THE FOLLOWING PERMITS HAVE BEEN OBTAINED (TO BE FILLED IN PRIOR TO COMMENCEMENT OF CONSTRUCTION).

F.D.E.P. DREDGE/FILL PERMIT # ____________
A.C.O.E. DREDGE/FILL PERMIT # ____________
S.W.F.W.M.D. M.S.S.W. PERMIT # ____________
N.P.D.E.S PERMIT # ____________

POLLUTION PREVENTION PLAN CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNED:______________________________
OWNER/OPERATOR

DATED:______________________

CONTRACTOR'S REQUIREMENTS

GENERAL

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS. DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING THE SYSTEM INTO OPERATION.

SEQUENCE OF MAJOR ACTIVITIES:

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCES AS REQUIRED
3. CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT BASIN
4. CONSTRUCT SEDIMENTATION BASIN
5. CONTINUE CLEARING AND GRUBBING
6. STOCK PILE TOP SOIL IF REQUIRED
7. PERFORM PRELIMINARY GRADING ON SITE AS REQUIRED
8. STABILIZE DENUDED AREAS AND STOCKPILES AS SOON AS PRACTICABLE
9. INSTALL UTILITIES, STORM SEWER, CURBS & GUTTER.
10. APPLY BASE TO PROJECT
11. COMPLETE GRADING AND INSTALL PERMANENT SEEDING/SOD AND PLANTING
12. COMPLETE FINAL PAVING
13. REMOVE ACCUMULATED SEDIMENT FROM BASINS
14. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION SWALES/DIKES AND RESEED/SOD AS REQUIRED

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE EROSION & TURBIDITY CONTROL PLAN.

CONTROLS

IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED , MAINTAINED AND FUNCTIONING PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE. THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN AND ADD ADDITIONAL CONTROL MEASURES, AS REQUIRED,TO ENSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND TURBIDITY CONTROL REQUIREMENTS. THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE IMPLEMENTED BY THE CONTRACTOR AS REQUIRED BY THE EROSION AND TURBIDITY CONTROL PLAN AND AS REQUIRED TO MEET THE EROSION AND TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT SITE BY THE REGULATORY AGENCIES.

EROSION AND SEDIMENT CONTROLS
STABILIZATION PRACTICES

1. FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.
2. BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE.
3. LEVEL SPREADER: A LEVEL SPREADER MAY BE USED WHERE SEDIMENT-FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS. THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL LIP IS STABILIZED. THE WATER SHOULD NOT BE ALLOWED TO RECONCENTRATE AFTER RELEASE.
4. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY.
5. EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL NOT EXCEED 10 ACRES. THIS REQUIREMENT MAY BE WAIVED FOR LARGE PROJECTS WITH AN EROSION CONTROL PLAN WHICH DEMONSTRATES THAT OPENING OF ADDITIONAL AREAS WILL NOT SIGNIFICANTLY AFFECT OFF-SITE DEPOSIT OF SEDIMENTS.

CONTROLS CONT'D.

6. INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.
7. TEMPORARY SEEDING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 30 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING.
8. TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.
9. TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY GRASSING SHALL BE THE SAME MIX & AMOUNT REQUIRED FOR PERMANENT GRASSING IN THE CONTRACT SPECIFICATIONS.
10. TEMPORARY REGRASSING : IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 85 PERCENT UNIFORM GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.
11. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.
12. PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.
13. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED OR SODDED.

STRUCTURAL PRACTICES

1. TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT-TRAPPING FACILITY.
2. TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP SHALL BE INSTALLED IN AN DRAINAGEWAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA.
   THE FOLLOWING SEDIMENT TRAPS MAY BE CONSTRUCTED EITHER INDEPENDENTLY OR IN CONJUNCTION WITH A TEMPORARY DIVERSION DIKE:
   A. BLOCK & GRAVEL SEDIMENT FILTER - THIS PROTECTION IS APPLICABLE WHERE HEAVY FLOWS AND/OR WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.
   B. GRAVEL SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES & UNPROTECTED AREAS.
   C. DROP INLET SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (S < 5%) AND WHERE SHEET OR OVERLAND FLOWS (Q < 0.5 CFS) ARE TYPICAL. THIS METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS SUCH AS IN STREET OR HIGHWAY MEDIANS.
3. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE FLOW COULD CAUSE EROSION & SEDIMENT PROBLEM TO THE RECEIVING WATER BODY. SILT FENCES ARE TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE DISCHARGING STRUCTURE AS SHOWN ON THE OUTLET PROTECTION DETAIL.
4. SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 10 OR MORE DISTURBED ACRES AT ONE TIME, THE PROPOSED STORM WATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS. THESE SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINED UNTIL FINAL STABILIZATION OF THE SITE.

NOTE:

THE 3,600 CUBIC FEET OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. ANY TEMPORARY SEDIMENT BASINS CONSTRUCTED MUST BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR STRUCTURAL FILL. ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

OTHER CONTROLS

WASTE DISPOSAL

ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE CONSTRUCTION SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE SITE SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS,WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

SANITARY WASTE

ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NEEDED TO PREVENT POSSIBLE SPILLAGE. THE WASTE WILL BE COLLECTED AND DEPOSED OF IN ACCORDANCE WITH STATE AND LOCAL WASTE DISPOSAL REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.

OFFSITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

☐ Concrete	☐ Fertilizers	☐ Wood
☐ Asphalt	☐ Petroleum Based Products	☐ Masonry Blocks
☐ Tar	☐ Cleaning Solvents	☐ Roofing Materials
☐ Detergents	☐ Paints	☐ Metal Studs
☐ ______	☐ ______	☐ ______

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF:

GOOD HOUSEKEEPING

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT:

* AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
* ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
* PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
* SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
* WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
* MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
* THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL.

HAZARDOUS PRODUCTS

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

* PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
* ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
* IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

SPILL PREVENTION CONT'D.

PRODUCT SPECIFIC PRACTICES
THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:

PETROLEUM PRODUCTS
ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS
FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED AREA. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS
ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS
WASHING OF VEHICLES SHOULD BE CONDUCTED USING PRACTICES THAT WILL PREVENT DIRECT, UNTREATED DISCHARGES OF WASTEWATER AND HAZARDOUS WASTES TO SURFACE AND GROUND WATERS. A DESIGNATED AREA MUST BE CREATED SPECIFICALLY FOR WASHING VEHICLES THAT WILL BE LAID WITH FILTER FABRIC, CRUSHED STONE (DOT GRAVEL #2 AND UP) AND COVERED WITH LINED BERM.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (i.e. KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL.

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IF APPLICABLE, IN THE OFFICE TRAILER ONSITE.

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

* NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.
* ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.
* ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF
* BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
* SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
* DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.

MAINT./INSP. PROCEDURES CONT'D.

* THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB, WHICHEVER COMES FIRST.
* TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
* A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED.
  THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND AND EROSION PLANS, OR STORM WATER MANAGEMENT PLANS.
  THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.
* THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
* PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE. SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

NON-STORM WATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

* WATER FROM WATER LINE FLUSHING
* PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).
* UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER.

RESPONSIBLE FOR/DUTIES	GENERAL CONTRACTOR	SUB-CONTRACTOR	SUB-CONTRACTOR	SUB-CONTRACTOR	SUB-CONTRACTOR	SUB-CONTRACTOR
BUSINESS NAME AND ADDRESS OF CONTRACTOR & ALL SUBS						
DATE						
SIGNATURE						

DAVE M. SCHMITT
FLORIDA REG. NUMBER
48274

BESSOLO
DESIGN GROUP, INC.
ARCHITECTURE ■ DEVELOPMENT
License #AA-C002117
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■ ST. PETERSBURG, FL 33702 ■
727 894-4453 www.bessolo.com

PROFESSIONAL SEAL

KEVIN J. BESSOLO
AR12069

IVEY LANE APARTMENTS SANITARY
SYSTEM RECONSTRUCTION PROJECT
CITY OF ORLANDO, FLORIDA

ISSUED

DATE:	ISSUED FOR:

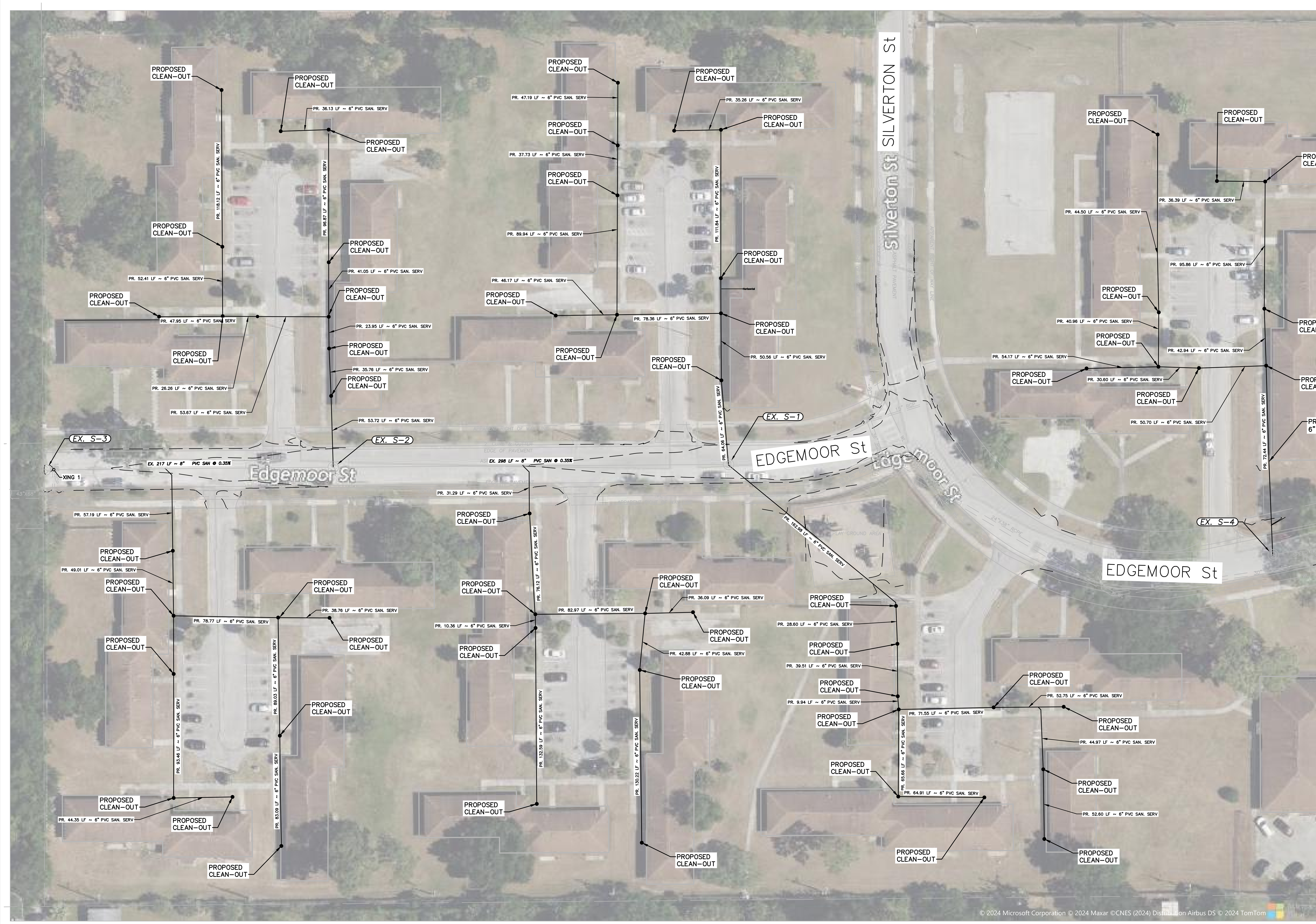
REVISIONS

NO:	DATE:	DESCRIPTION

PROJECT NO: BDG-2
DRAWN BY: JT
PROJECT MANAGER: RW
CHECKED BY: KB
DATE: FEB 2024
SCALE: NONE

SHEET 6

SWPPP



0 20' 40' 80'
SCALE: 1" = 40'

MATCH LINE "A" SEE SHEET 8

SANITARY STRUCTURE DATA

EX. S-1
STANDARD MANHOLE
48" DIAMETER MANHOLE
N: 1530223.04
E: 515212.95
TOP EL: 97.40
W INV EL: 89.12

EX. S-2
STANDARD MANHOLE
48" DIAMETER MANHOLE
N: 1530220.95
E: 514915.06
TOP EL: 96.41
E INV EL: 88.07
W INV EL: 88.01

EX. S-3
STANDARD MANHOLE
48" DIAMETER
N: 1530218.93
E: 514698.20
TOP EL: TO BE FIEL VERIFIED
E INV EL: TO BE FIEL VERIFIED

EX. S-4
STANDARD MANHOLE
48" DIAMETER MANHOLE
N: 1530154.77
E: 515623.47
TOP EL: 97.55
E INV EL: 93.75

THIS SHEET

KEY MAP

DAVE M. SCHMITT
FLORIDA REG. NUMBER
48274

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IVEY LANE APARTMENTS SANITARY SYSTEM RECONSTRUCTION PROJECT CITY OF ORLANDO, FLORIDA

ISSUED	
DATE:	ISSUED FOR:

REVISIONS		
NO:	DATE:	DESCRIPTION

PROJECT NO: BDG-2
DRAWN BY: JT
PROJECT MANAGER: RW
CHECKED BY: KB
DATE: FEB 2024
SCALE: 1" = 40'

SHEET 7

UTILITY PLAN-1

N

0 20' 40' 80'

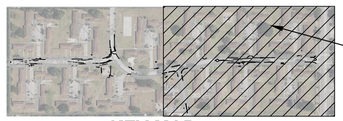
SCALE: 1" = 40'

SANITARY STRUCTURE DATA

EX. S-5
STANDARD MANHOLE
48" DIAMETER MANHOLE
N: 1530215.83
E: 515918.95
TOP EL: 97.56
W INV EL: 92.62
E INV EL: 92.55

EX. S-6
STANDARD MANHOLE
48" DIAMETER MANHOLE
N: 1530232.22
E: 516249.80
TOP EL: 98.39
W INV EL: 91.54
E INV EL: 91.41

EX. S-7
STANDARD MANHOLE
48" DIAMETER MANHOLE
N: 1530235.07
E: 516653.78
TOP EL: 97.94 TO BE FIELD VERIFIED
W INV EL: TO BE FIELD VERIFIED



KEY MAP
NTS

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KEVIN J. BESSOLO
AR12069

IVEY LANE APARTMENTS SANITARY SYSTEM RECONSTRUCTION PROJECT
CITY OF ORLANDO, FLORIDA

ISSUED	
DATE:	ISSUED FOR:

REVISIONS		
NO:	DATE:	DESCRIPTION

PROJECT NO: BDG-2
DRAWN BY: JT
PROJECT MANAGER: RW
CHECKED BY: KB
DATE: FEB 2024
SCALE: 1" = 40'

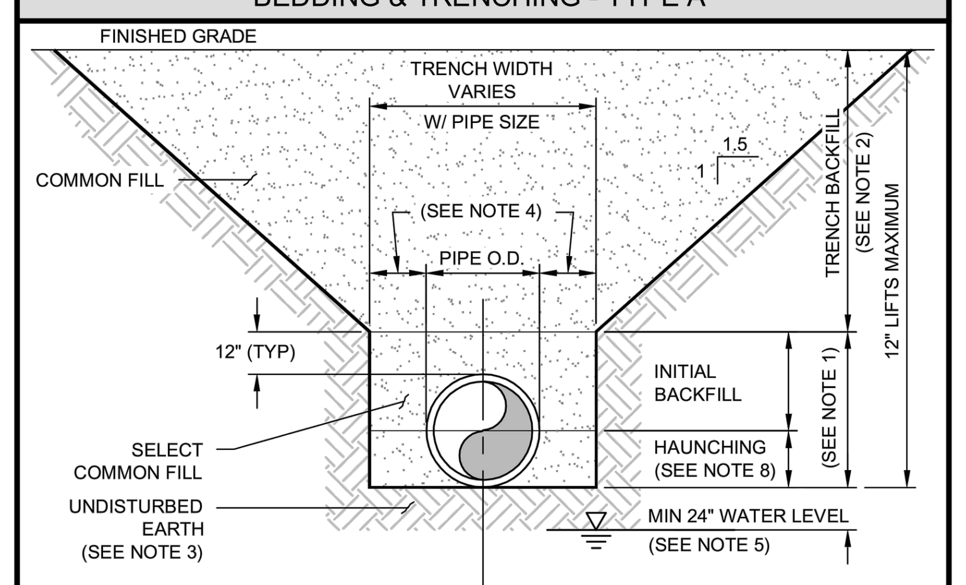
DAVE M. SCHMITT
FLORIDA REG. NUMBER
48274

SHEET 8

UTILITY PLAN-2

APPENDIX A STANDARD DRAWINGS

BEDDING & TRENCHING - TYPE A



NOTES:

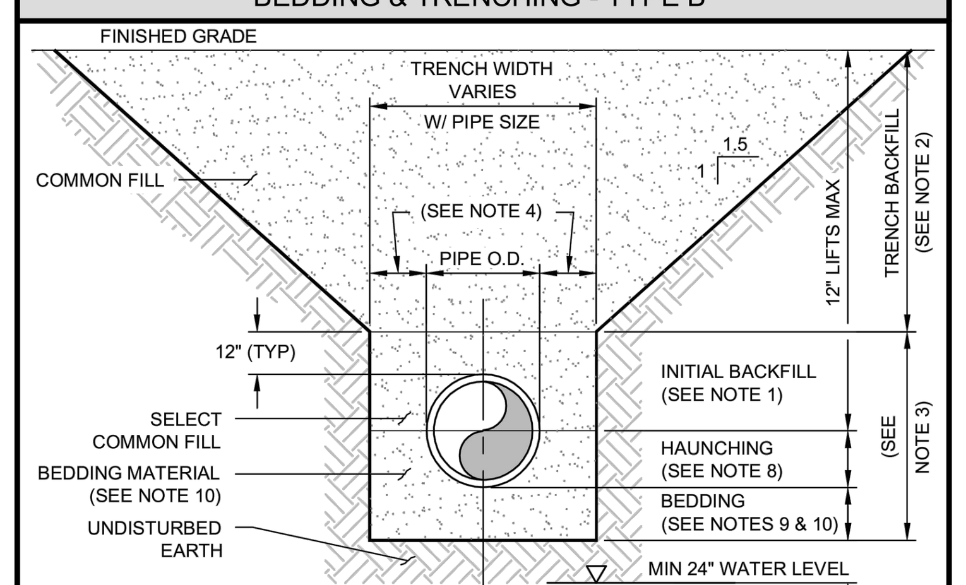
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO MIN 95% (98% UNDER PAVEMENT OR FUTURE PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO MIN 95% (98% UNDER PAVEMENT OR FUTURE PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL IN ACCORDANCE WITH "TYPE B" BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY UTILITIES.
4. 15-IN MAX. (12-IN MIN.) FOR PIPE DIAMETER LESS THAN 24-IN AND 24-IN MAX (12-IN MIN) FOR PIPE DIAMETER 24-IN AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION. DEWATERING AS REQUIRED.
6. ALL PIPE SHALL BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
8. FOR GRAVITY SEWER, THE FIRST LIFT SHALL BE PLACED TO THE SPRING LINE OF THE PIPE AND COMPACTED BY HAND TAMP.
9. CONTRACTOR SHALL USE BEDDING AND TRENCHING - TYPE B DETAIL FOR OVER EXCAVATION AND WHEN UNSUITABLE MATERIALS ARE ENCOUNTERED IN THE EXCAVATION.

ORANGE COUNTY UTILITIES FIGURE A101

STANDARDS & CONSTRUCTION SPECIFICATIONS MANUAL 10/10/2021

APPENDIX A STANDARD DRAWINGS

BEDDING & TRENCHING - TYPE B



NOTES:

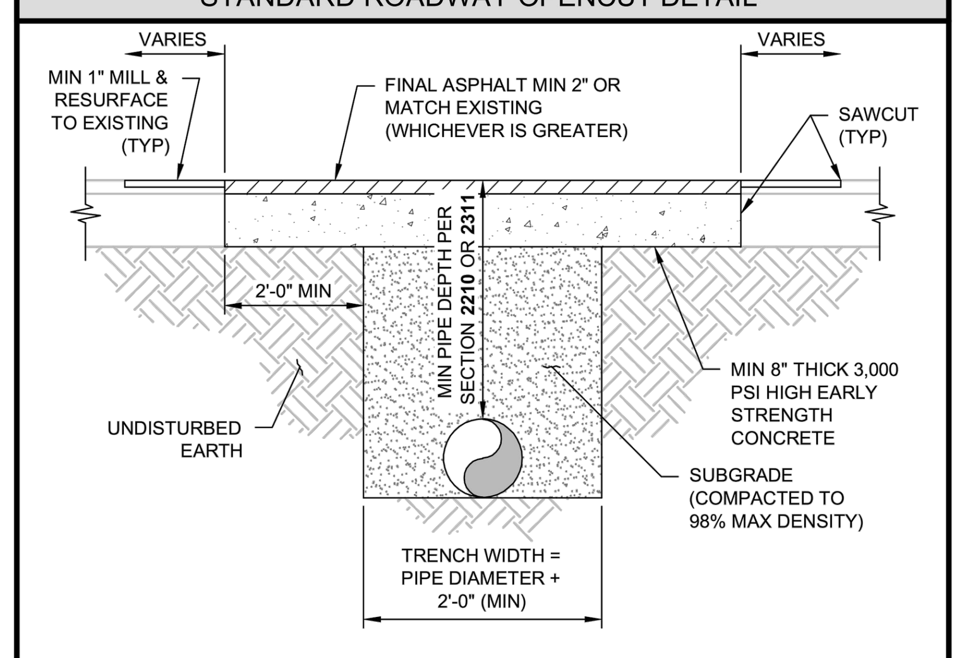
1. INITIAL BACKFILL: SELECT COMMON FILL COMPACTED TO MIN 95% (98% UNDER PAVEMENT OR FUTURE PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO MIN 95% (98% UNDER PAVEMENT OR FUTURE PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL IN ACCORDANCE WITH "TYPE B" BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY UTILITIES.
4. 15-IN MAX. (12-IN MIN.) FOR PIPE DIAMETER LESS THAN 24-IN AND 24-IN MAX (12-IN MIN) FOR PIPE DIAMETER 24-IN AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION. DEWATERING AS REQUIRED.
6. ALL PIPE SHALL BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF R/W UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
8. FOR GRAVITY SEWER, THE FIRST LIFT SHALL BE PLACED TO THE SPRING LINE OF THE PIPE AND COMPACTED BY HAND TAMP.
9. BEDDING DEPTH SHALL BE 4-IN MINIMUM FOR PIPE DIAMETER UP TO 12-IN AND 6-IN MINIMUM FOR PIPE DIAMETER 16-IN AND LARGER.
10. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF REQUIRED BEDDING MATERIAL BELOW THE PIPE. UTILITIES SHALL DETERMINE REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION IN THE FIELD.

ORANGE COUNTY UTILITIES FIGURE A102

STANDARDS & CONSTRUCTION SPECIFICATIONS MANUAL 10/10/2021

APPENDIX A STANDARD DRAWINGS

STANDARD ROADWAY OPENCUT DETAIL



NOTES:

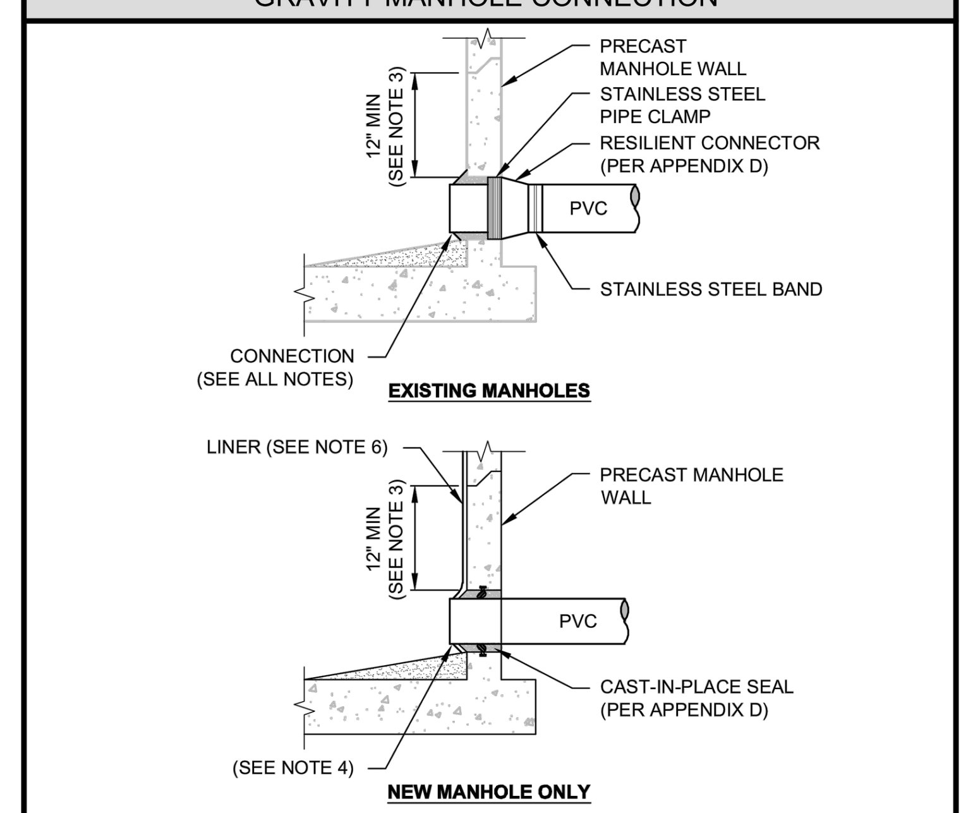
1. LONGITUDINAL CUTS SHALL REQUIRE OVERLAY/RESURFACE OF THE COMPLETE WIDTH OF THE TRAVELED WAY.
2. CUTS AT AN INTERSECTION OF STREETS SHALL REQUIRE A COMPLETE OVERLAY/ RESURFACING TO THE END OF ALL RETURN RADII AND ALSO TO A POINT TEN (10) FEET BEYOND THE CUT, WHICHEVER IS GREATER.
3. ACTUAL REQUIREMENTS WILL BE AS STATED ON THE APPROVED PERMIT AND DRAWINGS.
4. BASE REPLACEMENT SHALL BE 8-IN THICK 3,000 PSI HIGH EARLY STRENGTH CONCRETE.
5. ASPHALT CONCRETE SURFACE MATERIAL SHALL BE REPLACED WITH THE SAME TYPE OF MATERIAL THAT EXISTED AT THE TIME OF REMOVAL, OR AS APPROVED BY THE COUNTY PUBLIC WORKS DEPARTMENT.
6. MINIMUM ASPHALTIC CONCRETE SURFACE OVERLAY THICKNESS SHALL BE 1-IN OR AS APPROVED BY THE COUNTY ENGINEER OR FDOT.
7. ALL JOINT CUTS SHALL BE MECHANICALLY SAW CUT.
8. IF PERMANENT ASPHALT IS NOT APPLIED WITHIN 24-HRS OF WORK, MIN 2" TEMPORARY COLD PATCH REQUIRED.
9. SUB-GRADE TO BE COMPACTED TO 98% MIN DENSITY AS DETERMINED BY AASHTO T-180. CUT TO BE REPLACED WITH 3,000 PSI HIGH EARLY STRENGTH CONCRETE TO TOP OF EXISTING BASE. CUT AREA TO BE PLATED OR PROTECTED THE DAY OF THE POUR. EXISTING SURFACE TO BE SAW CUT A MINIMUM 5-FT BEYOND BASE CUT.

ORANGE COUNTY UTILITIES FIGURE A124

STANDARDS & CONSTRUCTION SPECIFICATIONS MANUAL 10/10/2021

APPENDIX A STANDARD DRAWINGS

GRAVITY MANHOLE CONNECTION



NOTES:

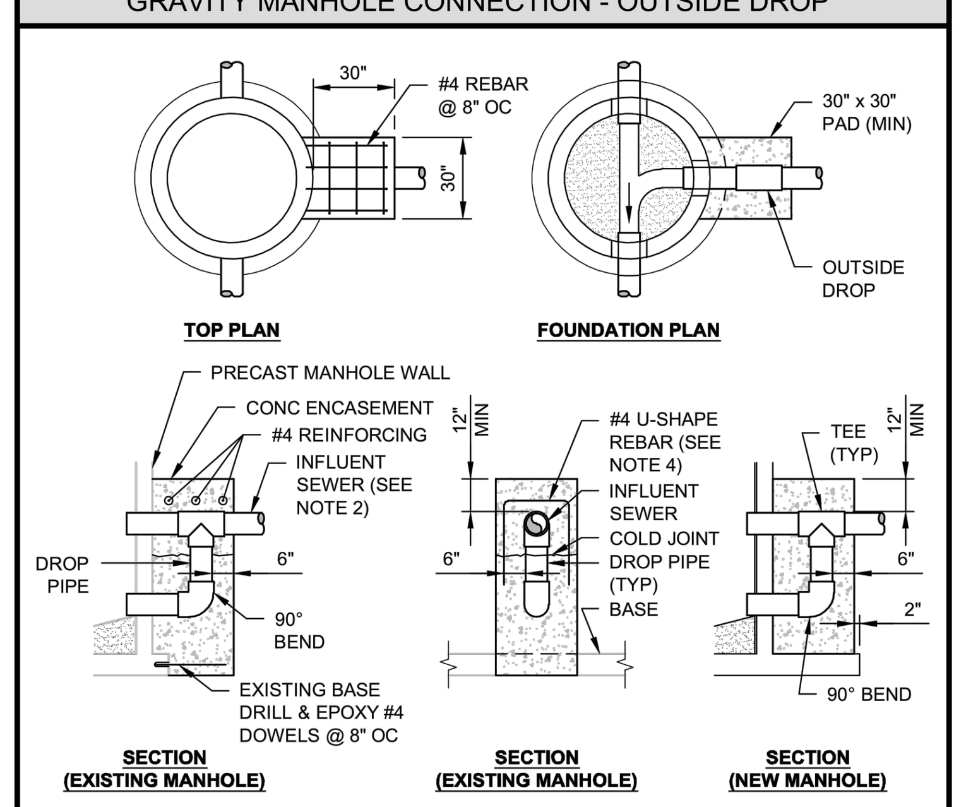
1. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT LINES WHICH HAVE AN INVERT 2-FT OR MORE ABOVE THE MANHOLE INVERT. SEE FIG **A302-2**.
2. CONTRACTOR SHALL COORDINATE THE PRESENCE OF UTILITIES INSPECTOR DURING EXCAVATION, CORING AND CONNECTIONS TO EXISTING MANHOLES.
3. ALL PIPE CONNECTIONS SHALL HAVE A MINIMUM OF 12-IN SEPARATION FROM ALL JOINTS AND CORES.
4. PIPE SHALL PROTRUDE INTO MANHOLE 2-IN TO 4-IN. THE CONTRACTOR SHALL BEVEL MUD FROM EDGE OF PIPE TO WALL.
5. CONNECTIONS ON EXISTING MANHOLES, REFER TO SECTION **3113** FOR EXCAVATIONS FOR STRUCTURES.
6. MANHOLE SHALL BE COATED OR LINED IN ACCORDANCE WITH SECTIONS **2310** & **3119**.

ORANGE COUNTY UTILITIES FIGURE A302-1

STANDARDS & CONSTRUCTION SPECIFICATIONS MANUAL 10/10/2021

APPENDIX A STANDARD DRAWINGS

GRAVITY MANHOLE CONNECTION - OUTSIDE DROP



NOTES:

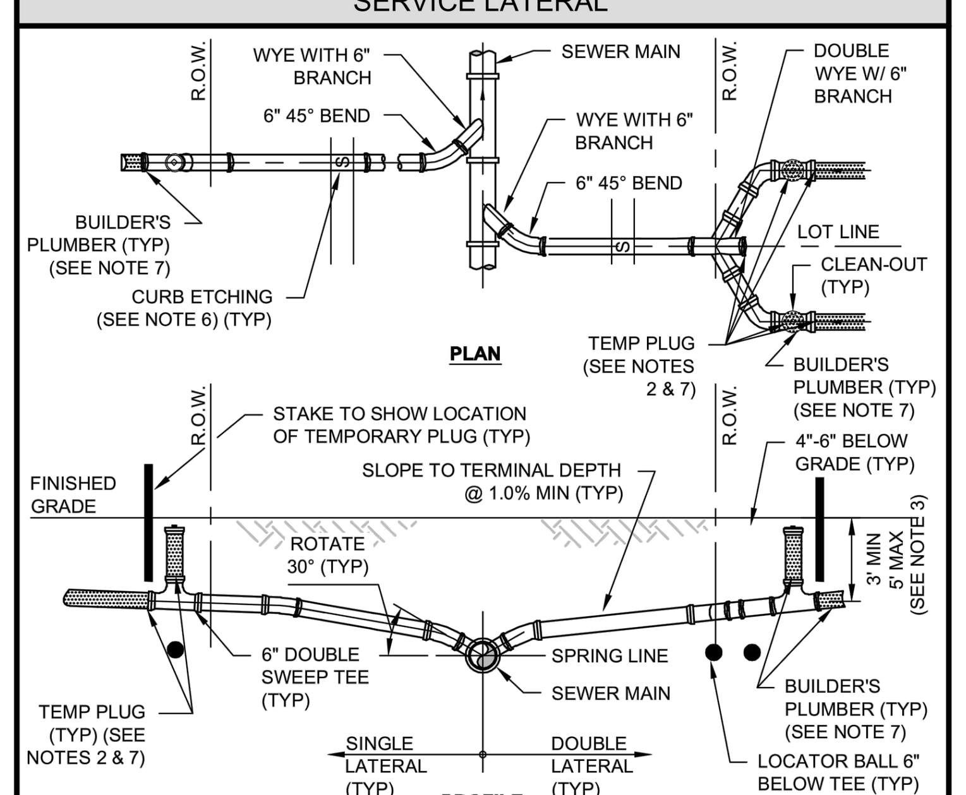
1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT LINES WHICH HAVE AN INVERT 2-FT OR MORE ABOVE THE MANHOLE INVERT.
3. CONTRACTOR SHALL COORDINATE THE PRESENCE OF UTILITIES INSPECTOR DURING EXCAVATION, CORING AND CONNECTIONS TO EXISTING MANHOLES.
4. FORM AND POUR CONCRETE TO BOTTOM OF TEE. INSTALL A MINIMUM OF TWO (2) U-SHAPE REBAR MIN 8-IN BELOW TEE. INSTALL GRAVITY MAIN, FORM & CAP OFF W/ CONCRETE MIN 12-IN ABOVE INFLUENT PIPE.
5. ALL PIPE CONNECTIONS SHALL HAVE A MINIMUM OF 12-IN SEPARATION FROM ALL JOINTS AND CORES.

ORANGE COUNTY UTILITIES FIGURE A302-2

STANDARDS & CONSTRUCTION SPECIFICATIONS MANUAL 10/10/2021

APPENDIX A STANDARD DRAWINGS

SERVICE LATERAL



NOTES:

1. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
2. SERVICE LATERAL AND DOUBLE SWEEP TEES SHALL BE CAPPED BY DEVELOPER'S SITE-WORK CONTRACTOR.
3. TEE & WYE SHALL BE NO SHALLOWER THAN 3-FT AND NO DEEPER THAN 5-FT.
4. LOCATOR BALLS TO BE INSTALLED BY DEVELOPER'S SITE-WORK CONTRACTOR, TWO PER DOUBLE SERVICE AND ONE PER SINGLE SERVICE AT MINIMUM.
5. ALL FITTINGS SHOWN ARE TO BE INSTALLED.
6. SERVICE CONNECTIONS SHALL BE PERMANENTLY MARKED BY CUTTING AN "S" IN THE CURB DIRECTLY OVER THE LATERAL.
7. BUILDER'S PLUMBER WILL REMOVE PLUG(S), INSTALL CLEANOUT ON DOUBLE SWEEP TEE, AND CONNECT SERVICE LATERAL TO HOUSE. NO DIRT OR DEBRIS SHALL ENTER THE SERVICE LATERAL THROUGHOUT CONSTRUCTION.

ORANGE COUNTY UTILITIES FIGURE A306-1

STANDARDS & CONSTRUCTION SPECIFICATIONS MANUAL 10/10/2021

DAVE M. SCHMITT
FLORIDA REG. NUMBER
48274

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PROFESSIONAL SEAL

KEVIN J. BESSOLO
AR12069

IVEY LANE APARTMENTS SANITARY SYSTEM RECONSTRUCTION PROJECT CITY OF ORLANDO, FLORIDA

ISSUED

DATE:	ISSUED FOR:

REVISIONS

NO:	DATE:	DESCRIPTION

PROJECT NO: BDG-2
DRAWN BY: JT
PROJECT MANAGER: RW
CHECKED BY: KB
DATE: FEB 2024
SCALE: NONE

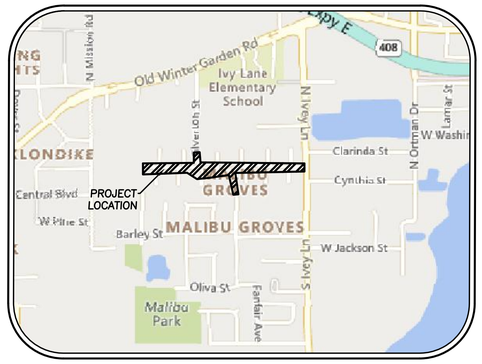
SHEET 9

UTILITY DETAILS

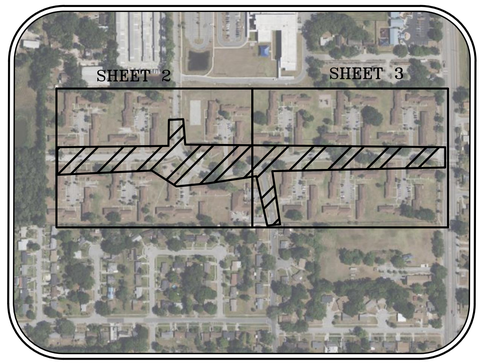
OHA TO2 IVEY LANE SANITARY SEWER LINE REPLACEMENT

SECTION 29, TOWNSHIP 22 SOUTH, RANGE 29 EAST
ORANGE COUNTY, FLORIDA.

VICINITY MAP
NOT TO SCALE



SHEET LAYOUT
SHEET 1 COVER & KEY MAP
SHEETS 2–4 TOPOGRAPHIC DETAILS



LEGEND & ABBREVIATIONS:

CT	= BURIED CABLE TV PEDESTAL	TH	= TEST HOLE
T	= BURIED TELEPHONE PEDESTAL	TR	= TRANSFORMER ON SLAB
CO	= CLEAN OUT	WM	= WATER METER
DMH	= DRAINAGE MANHOLE	WV	= WATER VALVE
E	= ELECTRIC FIXTURE	-III-	= METAL FENCE
EM	= ELECTRIC SERVICE METER	-BCL-	= BURIED CABLE LINE
FH	= FIRE HYDRANT	-BE-	= BURIED ELECTRIC LINE
GM	= GAS METER	-BTE-	= BURIED TELEPHONE DUCT
HH	= HAND HOLE	-GM-	= GAS MAIN
LP	= LIGHT POLE	-UNK-	= UNKNOWN UTILITY LINE
NDS	= NAIL W/DISC	-WL-	= WATER LINE
UP	= UTILITY POLE	-SAN-	= SANITARY SEWER
SMH	= SANITARY MANHOLE	ELEV	= ELEVATION

DESCRIPTION:
A portion of Section 29, Township 22 South, Range 29 East, lying in Orange County, Florida.

SURVEYOR'S REPORT:

1. Utility locations shown hereon are based on field locations of markings by Southeastern Surveying & Mapping Corp. Field markings are based on signals received from Ground Penetrating Radar (GPR) and electronic equipment. Locations are approximate and Test Holes should be performed for verification
2. Easements or rights of way that appear on recorded plans or that have been furnished to the surveyor by others have been incorporated into this drawing with appropriate notation. Other easements may be discovered by a search of the Public Records.
3. Minimum Horizontal Accuracy for this survey is in accordance with the STANDARDS OF PRACTICE set forth by the Board of Professional Surveyors and Mappers in Chapter 5J-17 requirements of Florida Administrative Code. The map and measurement methods used for this survey meet or exceed this requirement. The dimensions shown hereon are in United States survey feet and decimals thereof.
4. This survey does not determine ownership of the lands shown hereon.
5. Underground foundations have not been located.
6. Survey map and report or the copies thereof are not valid without the original signature and seal or the electronic signature and seal of a Florida Licensed Surveyor and Mapper, and if shown hereon is in compliance with Florida Administrative Code 5J-17.062 and Florida Statute 472.025.
7. Features shown by symbol as indicated in the legend are not to scale.
8. Additions or deletions to survey maps or reports by other than the signing party or parties is prohibited without written consent of the signing party or parties.
9. Vertical information shown hereon refers to Florida Department of Transportation (FDOT) Control Monument 755062, being a 3.5" brass FDOT survey disk, stamped D5PNC 755062; Having a published elevation of 103.81 North American Vertical Datum of 1988 (NAVD88)
10. Horizontal positions for all features shown on the map are relative to North American Datum of 1983 (NAD83), 1990 adjustment, State Plane Coordinate System, Florida East Zone. Control point used for this survey is a Florida Department of Transportation (FDOT) Control Monument 755062, being a 3.5" brass FDOT survey disk, stamped D5PNC 755062; distances shown are GRID distances.
11. This Survey was performed without benefit of an abstract, title search, title opinion or title commitment. A title search may reveal additional information affecting the parcel as shown.
12. Improvements and Topographic features shown hereon are limited to areas per specific instructions of the client.
13. Right of Way information shown hereon was determined by information obtained on the Orange County Property Appraisers web site. No Right of Way documentation was provided by client.
14. Drainage information shown hereon is based on historic GIS data collected by SSMC for Orange County

NOTICE OF LIABILITY:
This survey is certified to those individuals shown on the face thereof. Any other use, benefit or reliance by any other party is strictly prohibited and restricted. Surveyor is responsible only to those certified and hereby disclaims any other liability and hereby restricts the rights of any other individual or firm to use this survey, without express written consent of the surveyor.

EDWIN MUNOZ JR., PSM
Registered Land Surveyor
Number 6582

SSMC SUE • SURVEY • GIS

SOUTHEASTERN SURVEYING AND MAPPING CORPORATION
6500 All American Boulevard
Orlando, Florida 32810-4350
PHONE: (407) 292-8580
e-mail: info@southeasternsurveying.com
Certification Number LB2108

REVISION	REVISION DATE	BY
Added pavement & structure details	2/19/24	AA
Added Test Hole info	2/28/24	AA

SHEET NUMBER 1 OF 3
NOT VALID WITHOUT SHEETS 1 THROUGH 3

Utility Exhibit

Project:
24 Fanfair Avenue
Orlando, Florida 32811

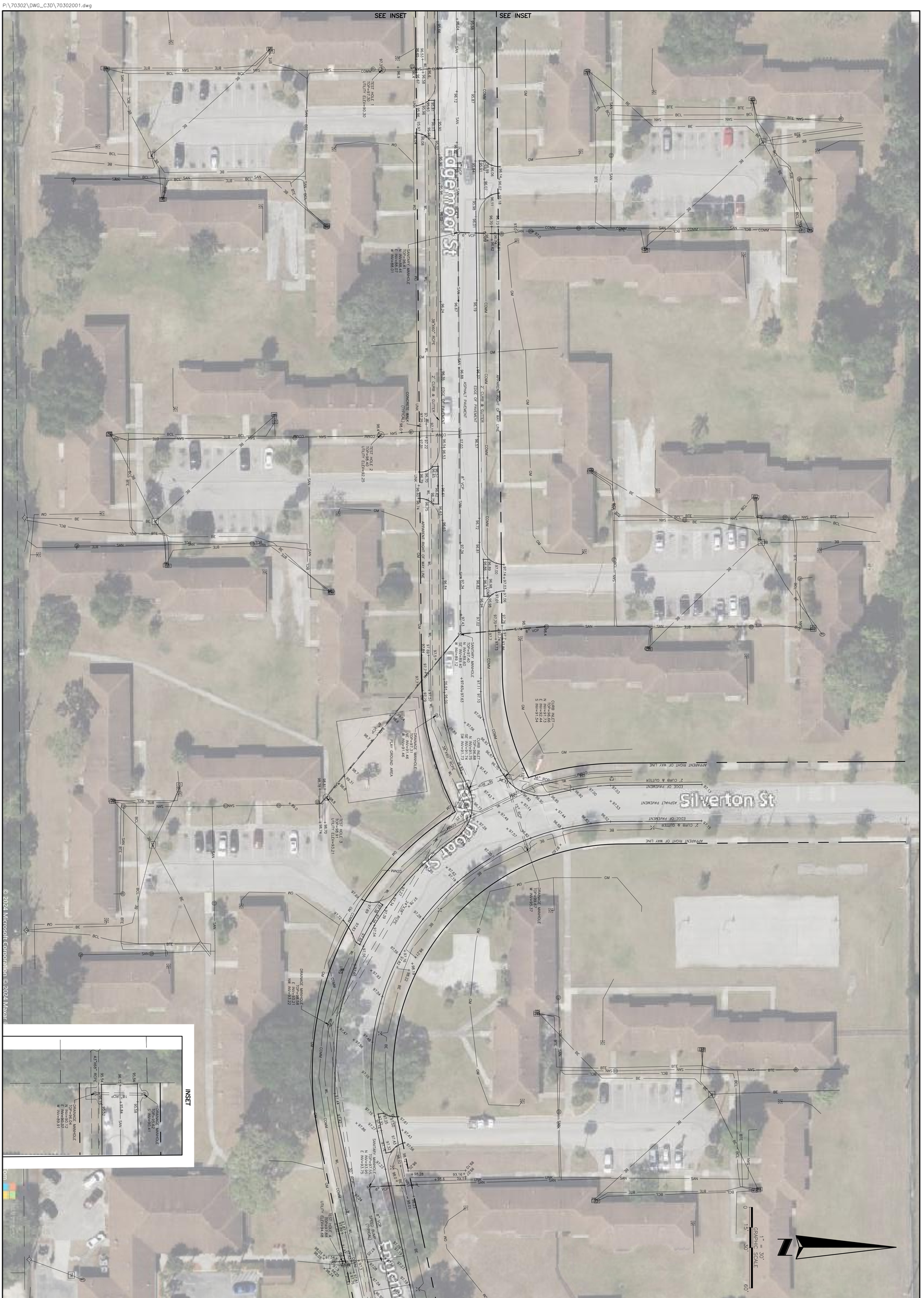
Field Date: January 09, 20224
Drawn By: CWS
Scale: 1" = 30'

Certified to:
Bessolo Design Group, Inc.

DRAWING NUMBER
70302001
SHEET NUMBER
1 OF 3

P:\70302\DWG_CSD\70302001.dwg

P:\70302\DWG_C3D\70302001.dwg



SEE SHEET 1 FOR NOTES, LEGEND AND DESCRIPTION.

Utility Exhibit

Project:

24 Fanfair Avenue
Orlando, Florida 32811

Field Date: January 09, 20224 | Drawn By: CWS | Scale: 1" = 30'

REVISION DATE	REVISION	BY
2/19/24	Added pavement & structure details	AA
2/28/24	Added Test Hole info	AA

SOUTHEASTERN SURVEYING AND MAPPING CORPORATION
6500 All American Boulevard
Orlando, Florida 32810-4350
(407) 292-8580
e-mail: info@southeasternsurveying.com
Certification Number LB2108

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SHEET NUMBER 2 OF 3
NOT VALID WITHOUT SHEETS
1 THROUGH 3

DRAWING NUMBER
70302001
SHEET NUMBER
2 of 3

P:\70302\DWG_C3D\70302001.dwg

DRAWING NUMBER
70302002001
SHEET NUMBER
3 OF 3

SEE SHEET 1 FOR NOTES, LEGEND AND DESCRIPTION.

Utility Exhibit

Project:
24 Fanfair Avenue
Orlando, Florida 32811

Field Date: January 09, 20224 | Drawn By: CWS | Scale: 1" = 30'

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Certification Number LB2108

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SHEET NUMBER 3 OF 3
NOT VALID WITHOUT SHEETS
1 THROUGH 3