

March 8, 2011

REVISED ADDENDUM NO. 1 TO INCLUDE 28 PLAN SHEETS INADVERTENTLY **OMITTED ON MARCH 7, 2011 TOTAL ATTACHMENTS: 34 TOTAL PAGES)**

March 7, 2011

All Interested Bidders:

SUBJECT: IFB #11-0579-OV / Downtown Bradenton Transit Station

Location: 601 13th Street West, Bradenton, FL

(Manatee County)

ADDENDUM #1

Bidders are hereby notified that this Addendum shall be acknowledged on page 00300-1 of the Bid Form and made a part of the above named bidding and contract documents. Bids submitted without acknowledgement of the Addendum will be considered incomplete.

The following items are issued to add to, modify, and clarify the bid and contract documents. These items shall have the same force and effect as the original bidding and contract documents, and cost involved shall be included in the bid prices. Bids to be submitted on the specified bid date, shall conform to the additions and revisions listed herein

Bidders Note: Additional questions shall not be accepted at this time as the stated deadline of March 4, 2011 has lapsed. This deadline has been established to maintain fair treatment of all potential bidders, while maintaining the expedited nature of the Economic Stimulus that the contracting of this work may achieve

Bidders Note: Twenty-Eight (28) plans sheets have been revised and are made a part of this Addendum No. 1.

Attachments:

- SchenkelShultz Architecture memorandum dated March 7, 2011 responding to questions received at the Pre-Bid / Information Conference held on February 23, 2011 and contractor's questions received via email through March 4, 2011. (4 Total Pages)
- The Engineer's Construction Cost Estimate dated March 3, 2011. (1 Total Page) It is important to note that Manatee County is currently receiving competitive bids which are up to 50% lower than the Engineer's estimates.
 - Construction Signage. (1 Total Sign).

Financial Management Department - Purchasing Division 1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205 Phone: 941-708-7527 - Fax: 941-708-7544

www.mymanatee.org

LARRY BUSTLE * MICHAEL GALLEN * JOHN R. CHAPPIE * ROBIN DISABATINO * DONNA G. HAYES * CAROL WHITMORE * JOE McCLASH District I District 2 District 3 District 4 District 5 District 7

March 7, 2011 IFB #11-0579-OV / Downtown Bradenton Transit Station Location: 601 13th Street West, Bradenton, FL (Manatee County) Addendum # 1

If you have submitted a bid prior to receiving this addendum, you may request in writing that your original, sealed bid be returned to your firm. All sealed bids received will be opened on the date stated.

END OF ADDENDUM #1

Bids will be received at the Manatee County Purchasing Division, 1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205 until 2:00 P.M. on March 17, 2011.

Sincerely,

R. C. "Rob" Cuthbert, C.P.M, CPPO

Purchasing Division Manager

Ov/ Attachments (6 Total Pages)



PROJECT NAME: DOWNTOWN BRADENTON TRANSIT STATION

Manatee County

ADDENDUM NUMBER 1

Date of Issue: March 07, 2011

Bidders are hereby notified that this Addendum shall be acknowledged on the Bid Form and made a part of the above named bidding and contract documents. Bids submitted without acknowledgement of the Addendum will be considered incomplete. The following items are issued to add to, modify, and clarify the bid and contract documents. These items shall have the same force and effect as the original bidding and contract documents, and cost involved shall be included in the bid prices. Bids to be submitted on the specified bid date, shall conform to the additions and revisions listed herein.

Attachments:

- Civil sheets revised due to permit comments: C101, C102, C103, C104, C105, C106,
 C107, C108, C109, C110, C111, C112, C113, and C114.
- Landscape sheets revised due to permit comments: L101, L102, L103, and L104.
- Structural sheets revised due to permit comments: S1.1, S1.2, S1.3, S2.1, S3.1, S4.1, and S5.1.
- Architectural sheets revised due to permit comments: A011, A101, and A201.
- Construction Signage drawing to be placed at north and south end of the site, 2 total.
- Construction Cost Estimate.

Clarifications:

Clarification 1: Specified light fixtures are preferred. If any substitutions are desired please follow our specifications and submit a substitutions request form for review and approval (spec section 01 60 10).

Clarification 2: Please note that any suggested substitution must follow our specifications and substitution request form along with our substitutions section must be followed.

Clarification 3: Modified construction sign sketch is attached to this addendum. One (1) sign shall be provided by the successful Contractor.

Clarification 4: Due to project size, only one of the following staff shall be required at the site, either project manager or superintendent.



Clarification 5: Bid item #8 scope shall include any time associated with ordering tile as directed by the owner and architect. Design team is negotiating a contract with an artist to design tile art for the 4 art walls for this project. Design team shall have design and quote from a large tile company, such as Daltile, to translate the design into tile art. Contractor shall order the tile per quote provided by the design team and be responsible for the tile and installation of the tile from order to completion of the installation. Tile will be 95% on modular backing (probably 24"x24") and contractor shall install this tile on the art walls. Bid item #8 needs to include the Contractor's fee for installation of 4 art walls worth of tile (roughly 20' wide and 25' tall, see drawings) per manufacturer's guidelines and specifications. This will be a standard installation of tile on wall. Contractor shall include all associated time, equipment, installation fees for completion of this task from ordering the tile to installation of tile on art walls.

Clarification 6: County has paid for the following permit fees: FDOT, SWFWMD, City of Bradenton Building Permit. SWFWMD permit has been obtained, FDOT permit is in final stages of revisions and approval is anticipated in the next couple of weeks. City of Bradenton Building Permit process has started and the successful contractor shall be responsible for pulling that permit and all other necessary permits besides ones listed above. City of Bradenton Utilities department has started the permit process and approval is anticipated in the next 2 weeks, contractor shall pay and pull utilities permit(s) required for the project.

Clarification 7: The overall DBE goal approved by the FTA in accordance with 49 CFR Part 26 is 2%.

Clarification 8: All testing of Construction Methods and Materials shall be in accordance with the Technical Specification and Plans which were made a part of the original bidding documents and shall be the responsibility of the successful Contractor.

Clarification 9: Temporary facilities spec section calls for multiple services and conditions for the architect and owner representative (County Project Manager). Delete the following requirements from scope: 01 50 00 (1.3)(b),(d),(e),(f),(g),(h) and replace them with 1 small 30x48 area for drawings, table and chair which will be used for either County Project Manager or Architect.

Clarification 10: Buy American clause applies to rolling stock only. Specialty exterior furniture shall remain as designed. If substitutions are desired please submit substitution request form for our review per specifications. Buy American clause applies to construction project in excess of \$100,000 per 49 CFR 661 BUY AMERICAN REQUIREMENTS.

Clarification 11: FTA Contract Clause – Seismic Safety Requirements does not apply to this project.

Clarification 12: Please see attached construction cost estimate as part of this addendum.



Questions:

Question 1: We would like to get clarification on the size of the Palms required for this project; Plan L101 calls for 3 Foxtail Palm 13' GW - not sure if this is supposed to be single trunk or double? The largest we probably can locate is a collected Palm 10' GW with 36' OAH. Per our supplier a 13' GW will be difficult to locate, this would be at least a 30 year old Palm. The largest available in the market has 4-5' GW with 18'-22' OAH. Also please confirm that Royal Palms has to be 13' GW? Please provide Over all height requirements?

Answer: All of the palms will be Royal Palms with 10' of GW. The Palm total height will be about 26', but it is important that the grey wood be a minimum of 10' on each of them.

Question 2: Please provide a spec for the brick pavers.

Answer: Spec for brick pavers has been added to the plans. See revised plans sheet C107.

Question 3: Sheet C103: Note to remove 127 SF of the West Sidewalk. Where exactly does this occur?

Answer: A thin strip of sidewalk/curb is to be removed in order to accommodate the road widening.

Question 4: Detail on Sheet C106 shows 6" reinforced concrete paving. Please indicate what reinforcing is required for the concrete paving and the concrete sidewalks.

Answer: Fiber mesh for paving. Sidewalks are a standard concrete without fiber mesh reinforcement. See revised plans.

Question 5: Please confirm that there is no new asphalt paving for this project. **Answer:** The asphalt limits are as shown on the revised plans. Through lane only.

Question 6: The plans and sections are not clear regarding the Sidewalk along the west side of the property. Are we to assume this is all existing 6" sidewalk to remain and we are only removing and replacing the curb between the existing sidewalk and the new concrete paving? **Answer:** A thin strip of sidewalk/curb is to be removed in order to accommodate the road widening. Please see revised drawings for more info.

Question 7: Sections A-A, C-C, & D-D show a 6" standing curb along the west sidewalk but Sections E-E, F-F, and G-G show a larger curb along the west sidewalk. Is there a detail for this larger curb? Where does one curb type stop and the other one start?

Answer: There is no proposed deviation from the standard curb, please see above mentioned sections for clarification.

Question 8: Sheet C109, Section A-A shows this as both brick walk and 5" concrete sidewalk. Which is this, pavers or sidewalk? If pavers, please provide a section or details.

Answer: Pavers are proposed. See revised plans.

Question 9: Do the crosswalks get the same type of stamped concrete as the $\frac{1}{2}$ circle areas. The architectural site plan describes the stamped concrete for the $\frac{1}{2}$ circle areas but refers you to the civils for the crosswalks.



Answer: No, Color and pattern of the crosswalk stamped concrete is to match as closely as possible what the City currently has in the downtown area. Some coordination with the City will be required in order to match the color.

Question 10: How do you propose to attached the red cedar slats to the tubing? **Answer:** Please use 1/4" diameter stainless steel carriage bolts with stainless steel flat washers and stainless steel locknuts with nylon inserts.

Question 11: Section 31 66 13 Helical Piles: The specifications mention a load test. Is a load test being required? Is so how many load tests are being required? **Answer:** Only one (1) load test is required (per spec section 3.11).

Question 12: Section 31 66 13 Helical Piles: Will the structural or the geotechnical engineer determine the location of the load test?

Answer: The test pile location shall be a production pile selected by owner (or else an alternate location may be allowed by mutual agreement with the structural and geotechnical engineers).

Question 13: Section 31 66 13 Helical Piles: Item 1.4.1 refers to Paragraph 3.1.8. Please provide since the specifications do not go to 3.1.8 rather they stop at 3.1.3. **Answer:** Please change the referenced section to 3.10.

Question 14: Are there any plans to perform deeper soil borings? The Soil Borings only go to 10 foot deep. The Specification 2.8.2 states the soil shall not be relied upon from the upper nine (9) foot depth of soil. Adequate soil borings are an integral component of the plate design for the helical tension piles.

Answer: Deeper borings are not planned but may be required by the specialty engineer responsible for design of the helical piles. insitu pile capacities will be verified by a load test instead of a theoretical design from deeper borings.

Question 15: If additional soil borings will not be completed, will the engineer specify a plate configuration (sizes and number of plates) in order to allow proper bidding?

Answer: Design of helical piles and plate configuration is delegated to a specialty engineer to be provided by the contractor. The specialty engineer may use the soil properties provided in the shallow boring with discretion for bidding purposes.

Above concludes Addendum No.1.

Dražen Ahmedić, AIA Associate

SSA project #0920818

Downtown Bradenton Transit Station March 02, 2011



March 3, 2011

Subject: 0920818 Downtown Bradenton Transit Plaza Cost Estimate

To All Bidders:

I have composed a rough order of magnitude cost estimate for our project with the drawings we have completed to date. Please note that this is an estimate for construction cost only which would include discretionary amount as well as art allowance. Total estimate is \$1,999,500.00.

Sincerely,

Dražen Ahmedić, AIA

Associate

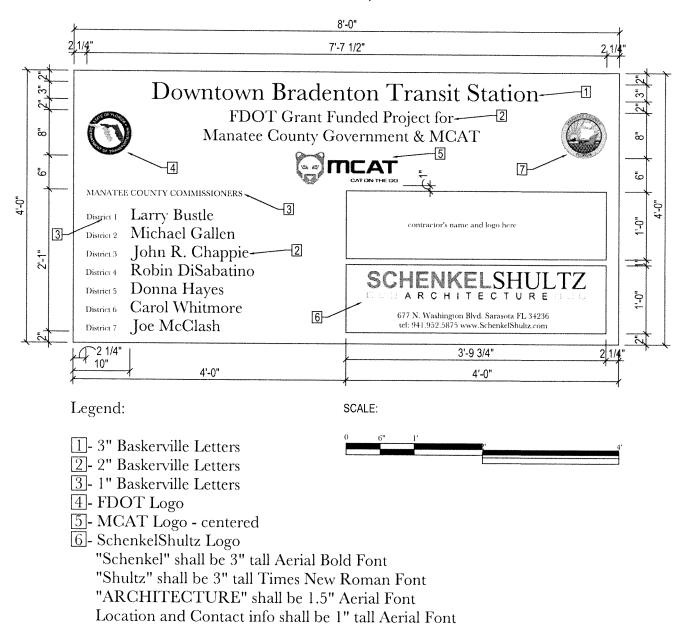
SSA project #0920818

Note:

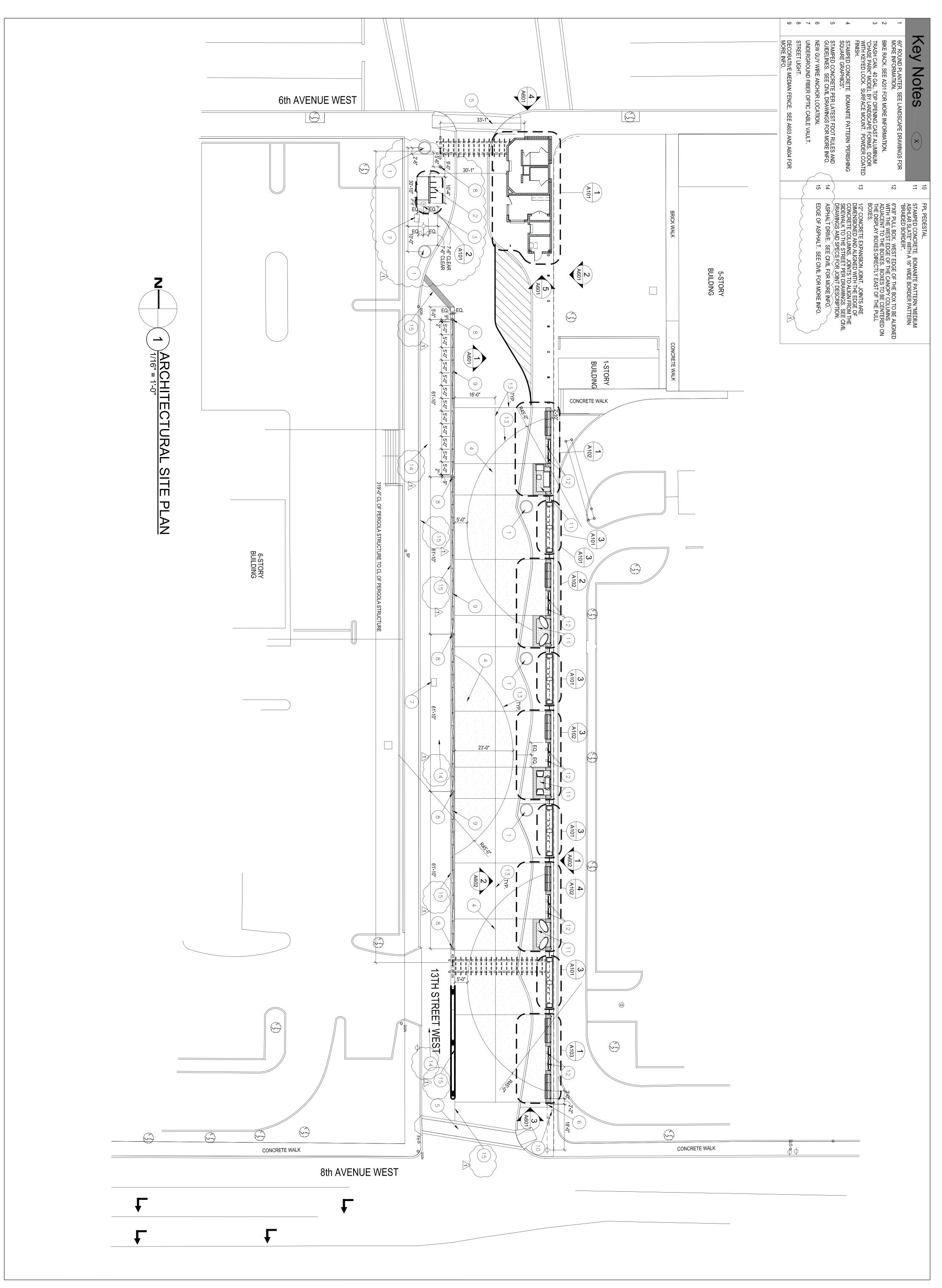
- 1- Sign shall be 4'x8'x3/4" Exterior grade plywood.
- 2- Paint all sides and edged of the sign white. Letters shall be black.
- 3- Logos shall be in color as required.

7 - Manatee County Logo

- 4- Sign shall be mounted on 2 4x4 white painted wood posts, exterior grade.
- 5- Verify the sign location with the County and the Architect.



CONSTRUCTION SIGNAGE



100% CONSTRUCTION DOCUMENTS

drawn: checked: date: 11.12.10
comm. no.: 0920818 ARCHITECTURAL SITE PLAN

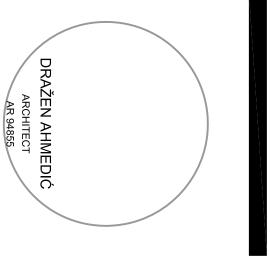
03.01.2011 UTILITY PERMIT COMMENTS

Manatee County Government 1112 Manatee Ave West 8th Floor Bradenton, Fl 34208

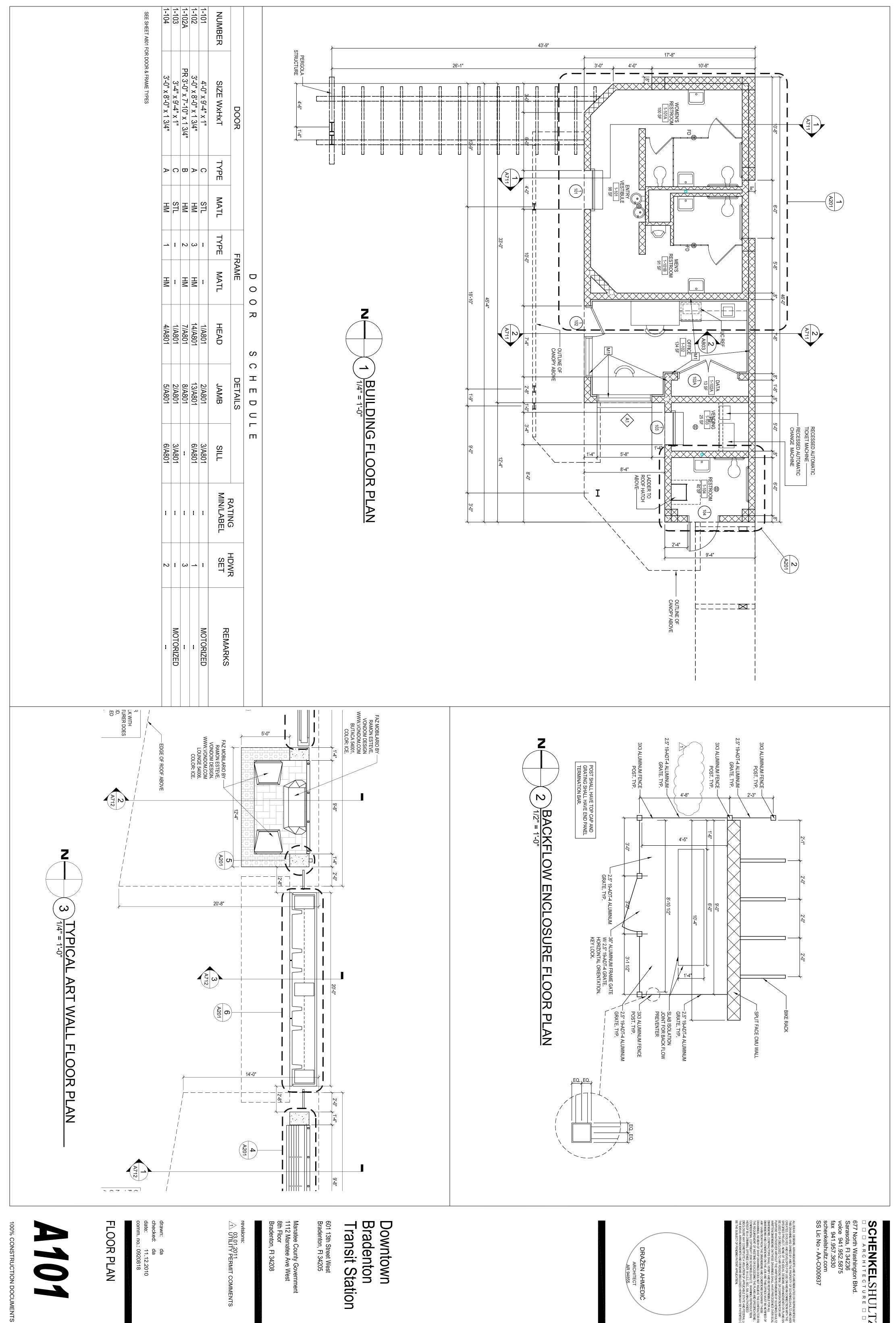
601 13th Street West Bradenton, FI 34205

Transit Station

Bradenton Downtown



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SS Lic No - AA-C000937 SCHENKELSHULTZ



M101

601 13th Street West Bradenton, FI 34205

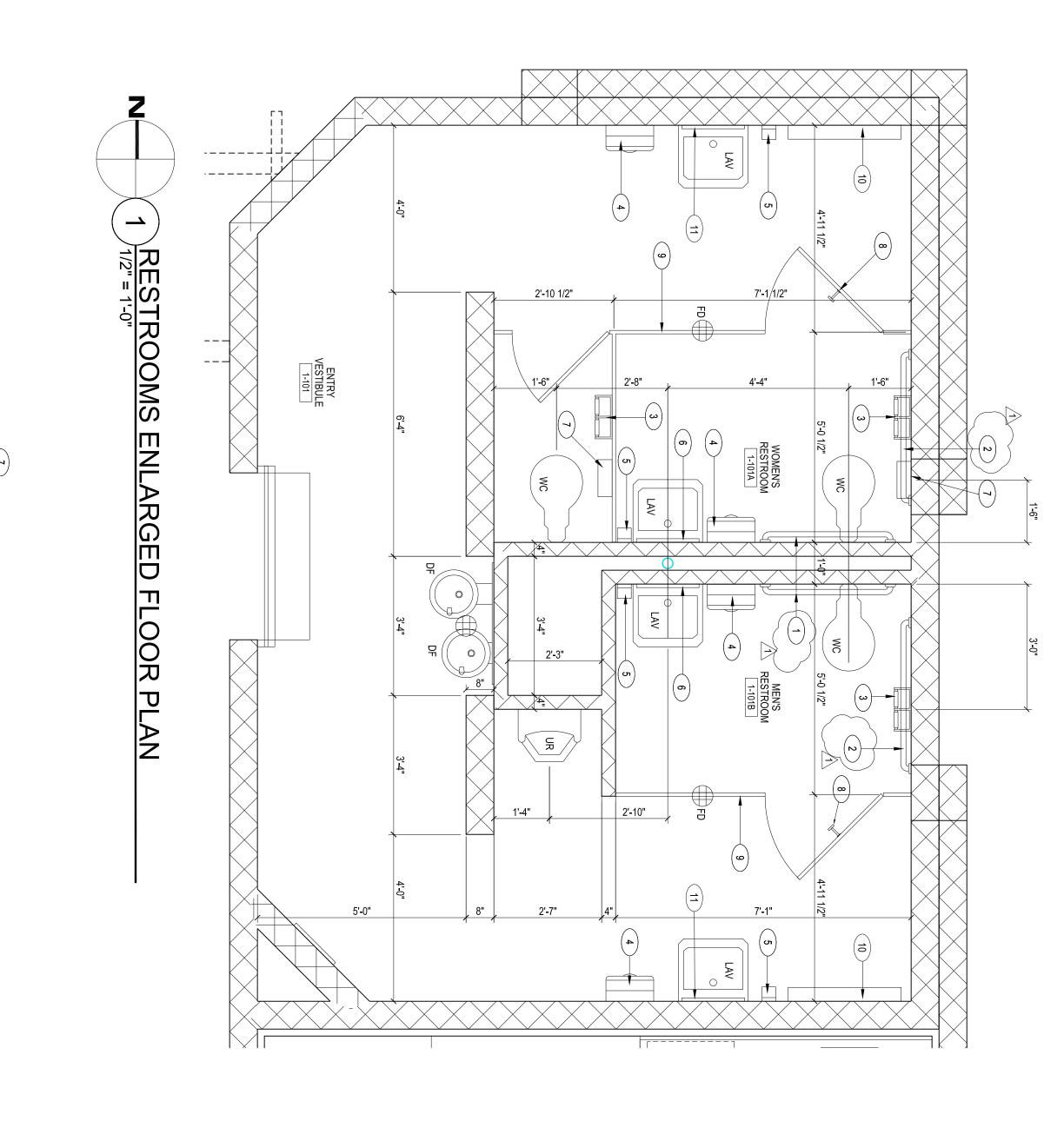
Manatee County Government 1112 Manatee Ave West 8th Floor Bradenton, Fl 34208

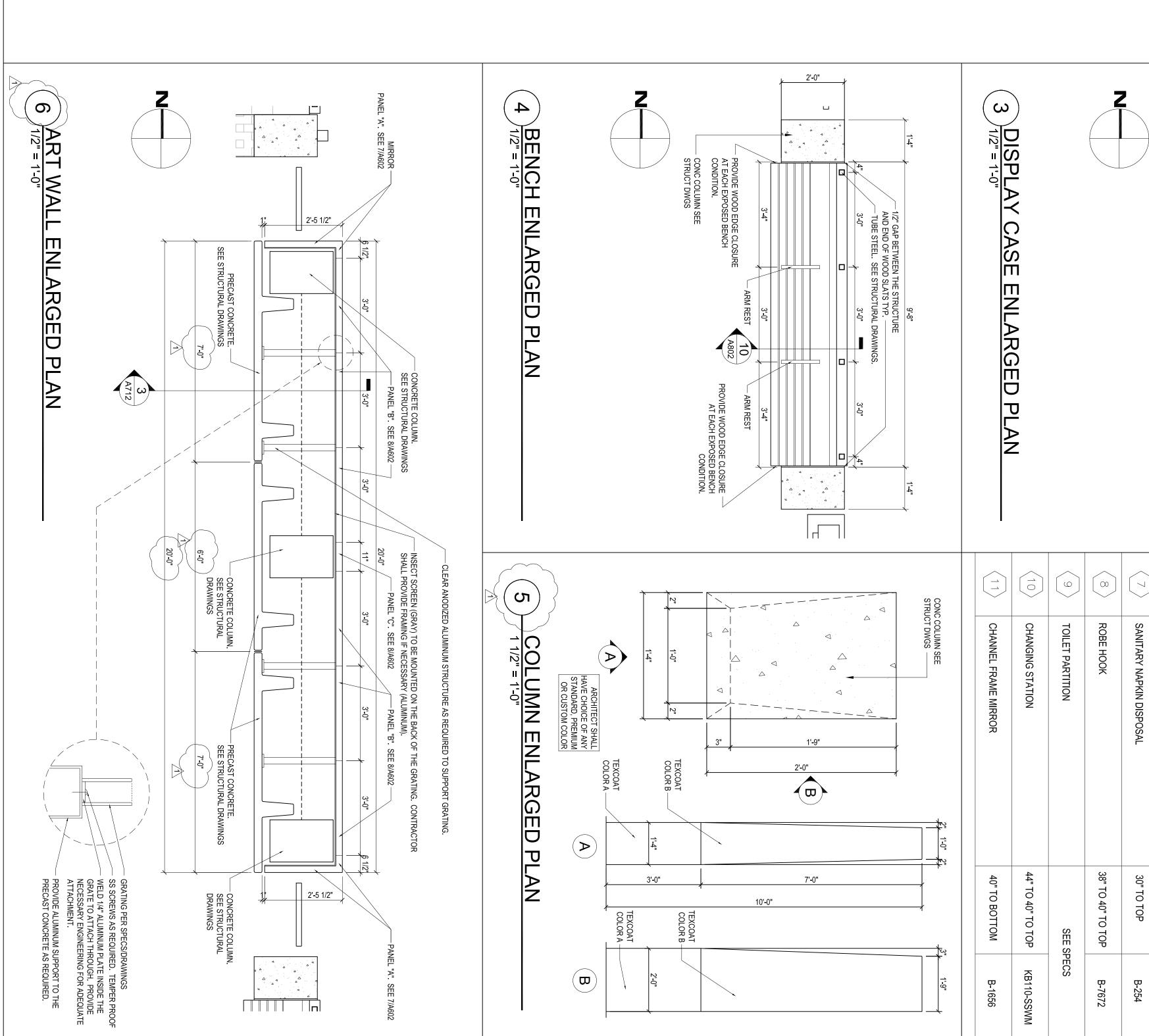
1 03.01.2011 OMMENTS

drawn: da
checked: da
date: 11.12.2010
comm. no.: 0920818 FLOOR PLAN

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DRAŽEN AHMEDIĆ ARCHITECT AR 94855





Bradenton

Transit Station

Downtown

Manatee County Government 1112 Manatee Ave West 8th Floor Bradenton, FI 34208

03.01.2011 OTILITY PERMIT COMMENTS

601 13th Street West Bradenton, FI 34205

DRAŽEN AHMEDIĆ ARCHITECT AR 94855

1'-2"

TOILET ACCESSORY SCHEDULE

TAG

ACCESSORY

MTG HGT

MODEL NO.

SCHENKELSHULTZ

33" TO **€**

B-6806

677 North Washington Blvd. Sarasota, Fl 34236 voice 941.952.5875 fax 941.957.3630 schenkelshultz.com SS Lic No - AA-C000937

33" TO €

B-6806

N

HORIZONTAL GRAB BAR - 42"

HORIZONTAL GRAB BAR - 36"

W

TOILET TISSUE DISPENSER

10" 2'2'

(n)

CHANNEL FRAME MIRROR

40" TO BOTTOM

 $50\,\%$ to top

B-132

(J)

SURFACE MOUNTED SOAP DISPENSER

4

SURFACE MOUNTED ELECTRIC HAND DRYER

48" TO BOTTOM SCREW HOLE

B-7120

 $19\frac{3}{4}$ " TO TOP

B-2740

201

100% Construction Documents

drawn: checked: date: 11.12.10
comm. no.: 0920818

ENLARGED PLANS

N

RESTROOM ENLARGED FLOOR PLAN

3'-4"

RESTROON 1-104

LADDER TO ROO HATCH ABOVE

3'-4"

1'-4"

8"

3'-4"

DRAINAGE AND GRADING NOTES

- 1 ALL CONSTRUCTION IS TO BE STAKED IN THE FIELD BY OR UNDER THE SUPERVISION OF A FLORIDA REGISTERED LAND
- 2. THE CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD WITH REPRODUCIBLE RECORD DRAWINGS SHOWING ALL IMPROVEMENT LOCATIONS AND ELEVATIONS IN ACCORDANCE WITH LATEST CITY OF BRADENTON PUBLIC WORKS DEPARTMENT AND SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD) STANDARDS. THE CONTRACTOR SHALL ALSO PROVIDE FIVE SETS OF PRINTS, SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR, OF THE RECORD DRAWINGS TO THE ENGINEER OF RECORD. THESE RECORD DRAWINGS SHALL BE CERTIFIED TO THE OWNER. APPROPRIATE GOVERNMENTAL AGENCIES AND TO 7NS ENGINEERING, LC. RECORD DRAWINGS SHALL SPECIFICALLY INCLUDE STORMWATER FACILITY LOCATIONS, INCLUDING TOP OF BANK, UNDERDRAIN AND CONTROL STRUCTURES, SHALL BE PERFORMED BY A REGISTERED LAND SURVEYOR AND REVIEWED BY THE ENGINEER OF RECORD PRIOR TO ACCEPTANCE AND PAYMENT, BENCH MARKS WITH THE ELEVATION CLEARLY AND PERMANENTLY MARKED ARE TO BE PLACED ON THE TOP OF ALL PROPOSED OLITEAU CONTROL STRUCTURES. RECORD DRAWINGS OF ALL MITIGATION AREAS INCLUDING FLEVATIONS, ZONES AND LIMITS SHALL BE PERFORMED BY A REGISTERED LAND SURVEYOR AND REVIEWED BY THE ENGINEER OF RECORD PRIOR TO ACCEPTANCE AND PAYMENT. THE RECORD DRAWINGS SHALL SPECIFICALLY INCLUDE THE SURFACE AREA OF STORMWATER FACILITY AREAS AT NORMAL WATER ELEVATION (NWL), AT HIGH WATER ELEVATION (HWL2s), TOP OF BANK AND ALL MITIGATION AND/OR LITTORAL SHELF AREAS.
- 3. ALL PIPE LENGTHS SHOWN ON PLAN VIEW ARE TO THE END OF THE MITERED END SECTION. REFER TO MITERED END SECTION DETAIL FOR LENGTH OF PIPE TO BE INCLUDED IN PRICE FOR MITERED END SECTION.
- 4. THE CONTRACTOR SHALL VERIFY TOPOGRAPHY AND SATISFY HIMSELF AS TO THE EXTENT OF FILL NECESSARY TO ACHIEVE FINISHED GRADE PRIOR TO AWARD OF CONTRACT. THERE SHALL BE NO CLAIM FOR EXTRAS
- 5. ROADSIDE UNDERDRAIN SHOWN ON PLAN IS MINIMUM AND EXTENSION SHALL BE REQUIRED AS DETERMINED NECESSARY BY THE ENGINEER OF RECORD AND/OR COBPWD DURING THE COURSE OF CONSTRUCTION.

NOTWITHSTANDING SITE PLAN REVISIONS PROMULGATED SUBSEQUENT TO AWARD OF CONTRACT.

- 6. ALL BIDDERS ARE HEREBY ADVISED THAT ALL EXCAVATION ON THIS PROJECT MUST COMPLY WITH FLORIDA STATUTE 90-96 "TRENCH SAFETY ACT", AND THAT THE COST OF COMPLIANCE IS TO BE INCLUDED IN HIS BASE BID. THE BIDDER
- 7. SUITABLE FILL MATERIAL FROM STORMWATER FACILITIES EXCAVATION SHALL BE UTILIZED FOR PROJECT FILL PER GRADING SPECIFICATIONS. UNSUITABLE MATERIAL SHALL BE PLACED IN OPEN AREAS ONLY AS DIRECTED BY THE PROJECT ENGINEER AND SOILS ENGINEER
- 8. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STRUCTURES PRIOR TO INSTALLATIONS.

SHALL INDICATE ON THE BID FORM THE COSTS ASSOCIATED WITH COMPLIANCE.

- 9. REFER TO CONSTRUCTION TECHNICAL SPECIFICATIONS FOR COMPACTION REQUIREMENTS, GRASSING/SODDING REQUIREMENTS, AND PAVING CONSTRUCTION MATERIAL SPECIFICATIONS.
- 10. ALL FILL AREAS ARE TO BE CONSTRUCTED IN 12" MAXIMUM LIFTS.
- 11. THE CONTRACTOR IS TO REVIEW SOILS TESTS AS PERFORMED BY THE SOIL CONSULTANT AND IS ENCOURAGED TO CONDUCT ON-SITE TESTING TO SATISFY HIMSELF AS TO ACTUAL LIMITS OF REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIALS PRIOR TO BIDDING.
- 12. THE MINIMUM BUILDING FINISHED FLOOR ELEVATION IS TO BE 18" ABOVE ADJACENT STREET CENTERLINE, TO FLOOD ZONE REQUIREMENTS WHERE APPLICABLE, OR AS SPECIFIED WITHIN THE PLANS.
- 13. THE CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD WITH VERIFICATION OF LOT GRADES PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.
- 14. ALL CONTROL STRUCTURES SHALL HAVE A SEPARATE TOP SLAB TO ALLOW FOR FINAL ADJUSTMENT TO DESIGN GRADE. PRECAST CONTROL STRUCTURES SHALL BE CAST SO AS TO ALLOW A MINIMUM OF 6" OF BRICK ADJUSTMENT FOR CONSTRUCTION OF THE WEIR(S).

CLEARING AND GRUBBING NOTES

1. EROSION CONTROL PREVENTIVE METHODS, SILT SCREENING AND/OR HAY BALES, TO BE IN PLACE PRIOR TO COMMENCEMENT OF EARTHWORK CONSTRUCTION TO MINIMIZE EROSION AND SEDIMENTARY RUNOFF. THE CONTRACTOR SHALL PERFORM DAILY SITE INSPECTIONS FOR ANY POTENTIAL FROSION PROBLEMS. IF ANY POTENTIAL EROSION PROBLEMS ARE ENCOUNTERED. OR HAVE OCCURRED. THE CONTRACTOR SHALL INSTALL PROPER EROSION CONTROL MEASURES IMMEDIATELY. STORMWATER TREATMENT FACILITIES ARE TO BE CONSTRUCTED EARLY IN SITE DEVELOPMENT, WITH NO UNTREATED RUNOFF OFF-SITE OCCURRING DURING

SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSTALLED AND THEN VERIFIED/INSPECTED BY CITY OF BRADENTON PUBLIC WORKS DEPARTMENT PRIOR TO COMMENCEMENT OF CONSTRUCTION.

- 2. ALL EXISTING TREES AND BRUSH DESIGNATED FOR REMOVAL ARE TO BE CLEARED AND DISPOSED OF OFFSITE. OR BURNED ON-SITE IF APPROVED BY THE DISTRICT FIRE DEPARTMENT AND COUNTY HEALTH DEPT. ALL EXISTING TREES AND UNDERBRUSH AREAS THAT ARE TO REMAIN UNDISTURBED SHALL BE PROTECTED BY BARRICADES. THE CONTRACTOR SHALL INSTALL SAID BARRICADES AT COMMENCEMENT OF CONSTRUCTION AND REMOV FOLLOWING FINAL GRADING AND LANDSCAPING.
- 3. SODDING AND/OR GRASSING TO BE COMPLETED IMMEDIATELY UPON COMPLETION OF FINISH GRADING. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DUST CONTROL.
- 4. TOPOGRAPHIC AND PROPERTY SURVEYS GIVING LOT SIZE, GROUND ELEVATIONS, OBSTRUCTIONS ON SITE. LOCATION AND DEPTHS OF SEWERS, CONDUITS, PIPES, EXISTING STRUCTURES, CURBS, PAVEMENTS, TRACTS, AND SOIL BORING DATA GIVING THE NATURE OF GROUND AND SUBSURFACE CONDITIONS HAVE BEEN OBTAINED FROM RELIABLE SOURCES. THE ACCURACY OF THIS DATA IS NOT GUARANTEED, AND IS FURNISHED SOLELY AS AND ACCOMMODATION TO THE CONTRACTOR. USE OF THIS DATA SHALL BE MADE AT THE CONTRACTOR'S DISCRETION. NO ADDITIONAL COMPENSATION WILL BE GRANTED DUE TO CONTRACTOR'S LACK OF KNOWLEDGE OF SITE CONDITIONS. PRIOR TO BID SUBMISSION. CONDUCT ANY ADDITIONAL SURVEYS AND SOIL TESTS YOU MAY DEEM NECESSARY TO VERIFY THE ACCURACY OF THE INFORMATION
- 5. PROPOSED ROADWAY AREAS TO BE CLEARED OF ALL TREES AND BRUSH, AND STRIPPED TO A MINIMUM DEPTH OF 8" AND/OR BOTTOM OF ORGANIC LAYER.
- 6. REFER TO DRAINAGE & GRADING PLAN FOR ADDITIONAL NOTES REGARDING WETLAND MITIGATION.
- 7. EXISTING WATER SERVICES ENCOUNTERED TO BE REMOVED BACK TO MAIN AND CAPPED OFF.
- 8. EXOTIC, NUISANCE VEGETATION SHALL BE REMOVED FROM THE WETLAND BUFFERS AND ALL OTHER UPLAND PORTIONS OF THE SITE.
- 9. ANY UNDERGROUND/ABOVEGROUND POLLUTANT STORAGE TANK INSTALLATION/REMOVAL MUST CONFORM TO THE REQUIREMENTS OF CHAPTER 62-761, FLORIDA ADMINISTRATIVE CODE.

UTILITY NOTES

- 1. ALL CONSTRUCTION IS TO BE STAKED IN THE FIELD BY OR UNDER THE SUPERVISION OF A FLORIDA REGISTERED LAND SURVEYOR. RECORD DRAWINGS SHALL BE PROVIDED BY THE SURVEYOR.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PRODUCTION OF REPRODUCIBLE RECORD DRAWINGS, PRIOR TO SCHEDULING OF ANY UNDERGROUND UTILITY PRESSURE TESTS, CONTRACTOR SHALL HAVE OBTAINED (FROM A PROFESSIONAL SURVEYOR) ALL NECESSARY FIELD DATA REQUIRED FOR THE PRODUCTION OF RECORD DRAWINGS. SAID RECORD DRAWINGS ARE TO MEET THE REQUIREMENTS OF MANATEE COUNTY HEALTH DEPARTMENT & CITY OF BRADENTON PUBLIC WORKS UTILITY STANDARDS AND FDEP. THE CONTRACTOR SHALL PROCESS SAID DRAWINGS THROUGH CITY OF BRADENTON PUBLIC WORKS DEPARTMENT AND UPON COMPLETION SHALL PROVIDE TWO REPRODUCIBLE MYLARS AND FIVE SETS OF PRINTS OF THE RECORD DRAWINGS, SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR TO THE ENGINEER. THESE RECORD DRAWINGS SHALL BE CERTIFIED TO THE OWNER, APPROPRIATE GOVERNMENTAL AGENCIES, AND ZNS
- IF CONSTRUCTION STAKEOUT IS PROVIDED BY THE OWNER, THE CONTRACTOR SHALL ACCURATELY RECORD THE LOCATION OF ALL WORK THAT MAY SUBSEQUENTLY BECOME CONCEALED OR INACCESSIBLE, AS WELL AS MARK OR EXPOSE UNDERGROUND FACILITIES AS NECESSARY TO FACILITATE THE PREPARATION OF THE RECORD DRAWINGS BY THE OWNER, AND PROVIDE SAID INFORMATION TO THE OWNER.
- WATERMAINS ARE TO BE PIGMENTED, COLOR BLUE, DR-18, C-900 OR C-905 PVC. WATER SERVICES, WHERE LOCATED UNDER PAVEMENT, TO BE ENCASED IN ASTM 2241, SDR-21 PVC. MAINTAIN A MINIMUM OF 36"
- 4. GRAVITY SANITARY SEWERS ARE TO BE PIGMENTED, COLOR GREEN, SDR 26, PVC AND CONFORMING TO ASTM D-3034. MAINTAIN A MINIMUM OF 36" COVER.
- GRAVITY SANITARY SEWER FORCEMAINS ARE TO BE PIGMENTED, COLOR GREEN, DR-18, C-900 OR C-905 PVC. MAINTAIN A MINIMUM OF 36" COVER
- RECLAIMED WATERMAINS ARE TO BE PIGMENTED, COLOR LAVENDER, DR-18, C-900 OR C-905 PVC. MAINTAIN
- 7. 10' HORIZONTAL AND 1.5' VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN SEWER AND WATER LINES

MEETING "TEN STATE STANDARDS, SECTION 38.31".

- 8. THE MINIMUM HORIZONTAL SEPARATION BETWEEN RECLAIMED WATERMAINS AND POTABLE WATER OR SANITARY SEWER MAINS SHALL BE 5' OUTSIDE TO OUTSIDE, THE MINIMUM VERTICAL SEPARATION BETWEEN RECLAIMED WATERMAINS & POTABLE WATER & SANITARY SEWER MAINS SHALL BE 18" FROM CROWN OF PIPE
- 9. CONTRACTOR IS RESPONSIBLE FOR ALL GOVERNMENTAL CONSTRUCTION FEES AND CHARGES. I.E. INSPECTIONS AND TESTING FEES. HOWEVER, IMPACT FEES (FIF), IF APPLICABLE, TO BE PAID BY THE OWNER.
- 10. ALL NEW TAPS TO CITY OF BRADENTON POTABLE WATER LINES SHALL INCLUDE A TEMPORARY 6" (MINIMUM) JUMPER SYSTEM, UNLESS SPECIFICALLY NOTED OTHERWISE IN THE PLANS.
- 11. JUMPER SYSTEM SHALL INCLUDE ALL NECESSARY FITTINGS, PIPE, VALVES AND BACKFLOW PREVENTER (FEBCO 870 OR APPROVED EQUAL).
- 12. STREETS, SANITARY SEWER AND POTABLE WATER WILL BE DEDICATED UPON COMPLETION AND ACCEPTANCE BY CITY OF BRADENTON FOR MAINTENANCE BY CITY OF BRADENTON PUBLIC WORKS DEPARTMENT.

GENERAL CONSTRUCTION NOTES

- 1. ALL PROPOSED CONSTRUCTION IS TO MEET OR EXCEED LATEST APPLICABLE CITY OF BRADENTON PUBLIC WORKS UTILITY STANDARDS (2009) AND IS TO MEET ENGINEER'S SPECIFICATIONS. ALL PROPOSED CONSTRUCTION IS TO BE PRIVATELY & PUBLICLY OWNED AND MAINTAINED FOLLOWING COMPLETION AND ACCEPTANCE. RIGHT OF WAY AND OTHER OFF-SITE IMPROVEMENTS SHALL BE PUBLICLY OWNED AND MAINTAINED FOLLOWING COMPLETION AND ACCEPTANCE.
- 2. THE CONTRACTOR IS TO COORDINATE THE LOCATION AND ELEVATION OF ALL FRANCHISE (VERIZON, FLP) UTILITIES IRRIGATION SERVICE SLEEVES WITH RESPECTIVE AGENCY PRIOR TO CONSTRUCTION.
- 3. THE CONTRACTOR IS TO ASSURE HIMSELF THAT ALL UNDERGROUND UTILITIES AND STORM SEWER IS CONSTRUCTED, TESTED AND OPERATIONAL PRIOR TO ANY CONSTRUCTION COVERING THESE UTILITIES.
- 4. ALL PROPOSED ELECTRICAL AND COMMUNICATION SERVICES ARE TO BE LOCATED UNDERGROUND AS DIRECTED BY RESPECTIVE AGENCY.
- 5. CURBING AT SIDEWALK INTERSECTIONS TO BE RECESSED FOR PEDESTRIAN RAMPS. RAMPS TO BE CONSTRUCTED AT TIME OF CURB RADII.
- 6. CONTRACTOR TO OBTAIN APPLICABLE PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION AND ISSUANCE OF ALL COMMENCEMENT AND/OR PROGRESS NOTICES TO GOVERNMENTAL AGENCIES DURING THE COURSE OF CONSTRUCTION, AS REQUIRED FOR INSPECTION, TESTING AND TRACKING PER APPLICABLE AGENCY PERMIT CONDITIONS.
- 8. CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH ALL PERMIT CONDITIONS AND STIPULATIONS FOR ALL LOCAL, REGIONAL AND STATE AGENCIES, INCLUDING, BUT NOT LIMITED TO, FINAL SITE PLANS, UTILITIES, DRAINAGE, FUGITIVE PARTICULATES AND EROSION.
- 9. ALL UTILITIES AND/OR DRAINAGE SHOWN AS EXISTING WERE DERIVED FROM THE BEST AVAILABLE INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE ACTUAL LOCATION, SIZE, TYPE AND AMOUNT OF EXISTING UTILITIES PRIOR TO CONSTRUCTION, THE CONTRACTOR TO NOTIFY SUNSHINE UNDERGROUND FACILITIES NOTIFICATION (1-800-432-4770), COBPWD AND FP&L 48 HOURS MINIMUM PRIOR TO START OF CONSTRUCTION FOR POSSIBLE UTILITY LOCATIONS NOT SHOWN ON
- 10. RIGHT OF WAY USE PERMIT TO BE OBTAINED BY THE CONTRACTOR FOR OFF-SITE CONSTRUCTION.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR ESTIMATING AND CALCULATING ALL CUT AND FILL QUANTITIES PRIOR TO BID SUBMISSION THE CONTRACTOR SHALL CONDUCT ANY ADDITIONAL SURVEYS AND SOIL TESTS HE DEEMS NECESSARY TO CALCULATE THE CUT AND FILL QUANTITIES PROPERLY. ADDITIONAL SURVEYS AND TESTS MADE BY THE CONTRACTOR SHALL BE MADE AT NO ADDITIONAL COST TO THE
- 12. ALL EASEMENTS AS SHOWN WITHIN THE PROJECT BOUNDARY LIMITS ARE TO BE CONSIDERED PRIVATE (UNLESS OTHERWISE STATED). EASEMENTS TO BE GRANTED IN CONJUNCTION WITH RECORD PLAT PROCESSING.
- 13. TOPOGRAPHIC AND PROPERTY SURVEYS GIVING PROPERTY SIZE, GROUND ELEVATIONS, OBSTRUCTIONS ON SITE, LOCATIONS AND DEPTHS OF SEWERS, CONDUITS, PIPES, EXISTING STRUCTURES, CURBS, PAVEMENTS, TRACTS, AND SOIL BORING DATA GIVING THE NATURE OF GROUND AND SUBSURFACE CONDITIONS HAVE BEEN OBTAINED FROM RELIABLE SOURCES. THE ACCURACY OF THIS DATA IS NOT GUARANTEED, AND IS FURNISHED SOLELY AS AN ACCOMMODATION TO THE CONTRACTOR. USE OF THIS DATA SHALL BE MADE AT THE CONTRACTOR'S DISCRETION. NO ADDITIONAL COMPENSATION WILL BE GRANTED DUE TO THE CONTRACTOR'S LACK OF KNOWLEDGE OF SITE CONDITIONS, PRIOR TO BID SUBMISSION. THE CONTRACTOR SHALL CONDUCT ANY ADDITIONAL SURVEYS AND SOILS TESTS HE MAY DEEM NECESSARY TO VERIFY THE ACCURACY OF THE INFORMATION PROVIDED.

STORMWATER POLLUTION PREVENTION PLAN INSPECTION REPORT FORM

— FDEP NPDES Stormwater Identification Number:

Inspections must occur at least once a week and within 24 hours of the end of a storm event that is 0.50 inches or greater.

Project Name: _____

FFLKIU					
Location	Rain data	Type of control (see below)	Date installed /modified	Current Condition (see below)	Corrective Action/ Other Remarks

G = Good M = Marginal, needs maintenance or replacement soon P = Poor, needs immediate maintenance or replacement C =Needs to be cleaned O =Other

Control Type Codes			
1. Silt Fence	10. Storm drain inlet protection	19. Reinforced soil retaining system	28. Tree protection
2. Earth dikes	11. Vegetative buffer strip	20. Gabion	29. Detention pond
3. Structural diversion	12. Vegetative preservation area	21. Sediment Basin	30. Retention pond
4. Swale	13. Retention Pond	22. Temporary seed / sod	31. Waste disposal / housekeeping
5. Sediment Trap	14. Construction entrance stabilization	23. Permanent seed / sod	32. Dam
6. Check dam	15. Perimeter ditch	24. Mulch	33. Sand Bag
7. Subsurface drain	16. Curb and gutter	25. Hay Bales	34. Other
8. Pipe slope drain	17. Paved road surface	26. Geotextile	
9. Level spreaders	18. Rock outlet protection	27. Rip-rap	

Inspector Information:

identified above.

Qualification

Generic Permit for Stormwater Discharge from Large and Small Construction Activities if there are not any incidents of non-compliance

"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."

The above signature also shall certify that this facility is in compliance with the Stormwater Pollution Prevention Plan and the State of Florida

Name (Responsible Authority)

STORMWATER POLLUTION PREVENTION PLAN

CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING THE "STORMWATER POLLUTION PREVENTION PLAN INSPECTION REPORT FORM", WHICH WILL BE KEPT ON SITE BY THE CONTRACTOR. INSPECTIONS MUST OCCUR AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM EVENT THAT IS 0.50 INCHES OR GREATER.

677 North Washington Blvd.

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> JEB C. MULOCK PROFESSIONAL FNGINFER #64692



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checked: J. MULOCK 11.12.2010 comm. no.: 0920818

GENERAL NOTES

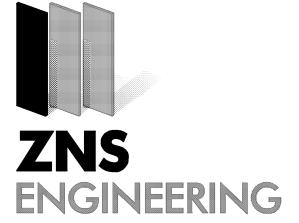


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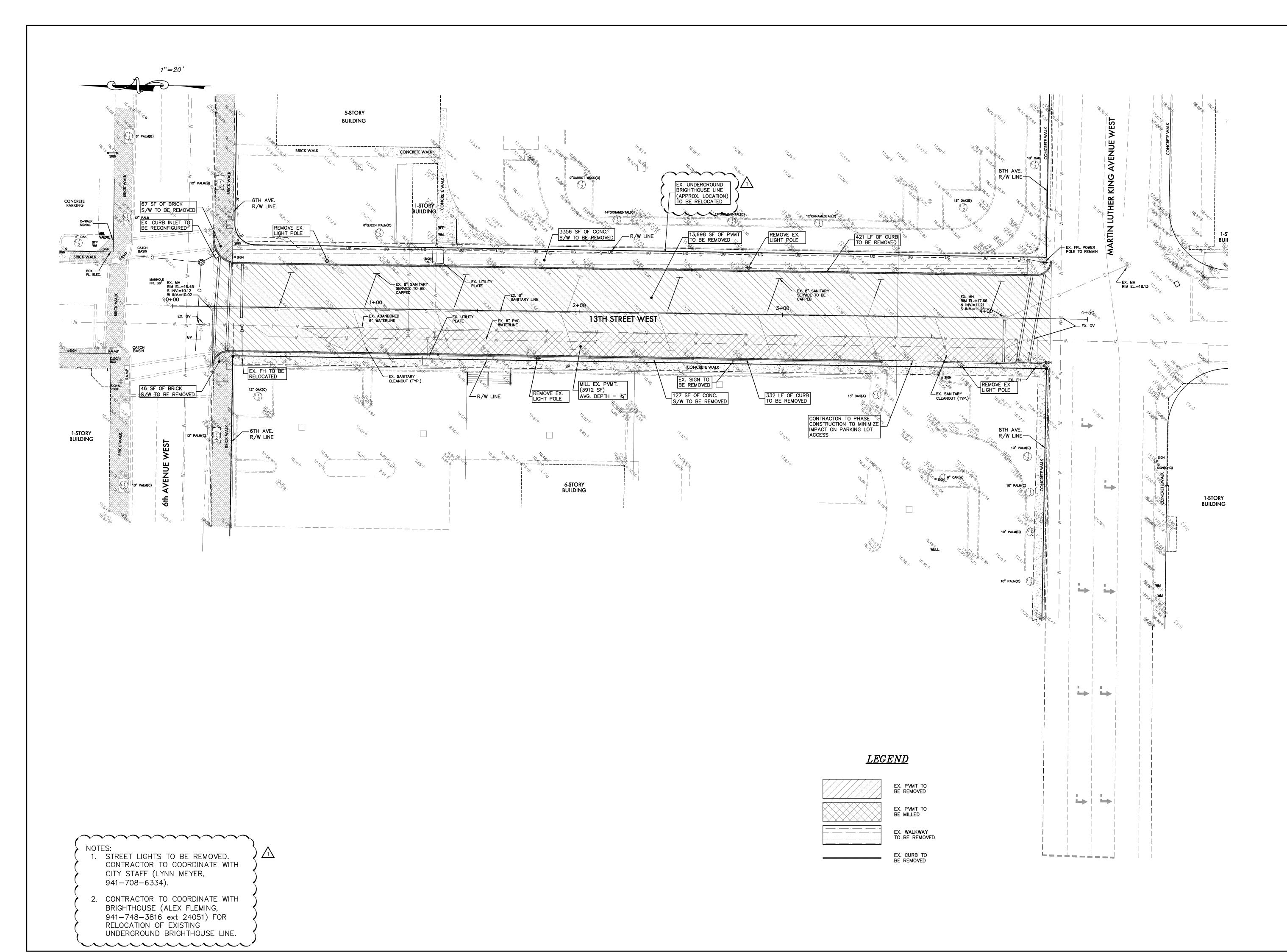
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BEST MANAGEMENT PRACTICES

C102



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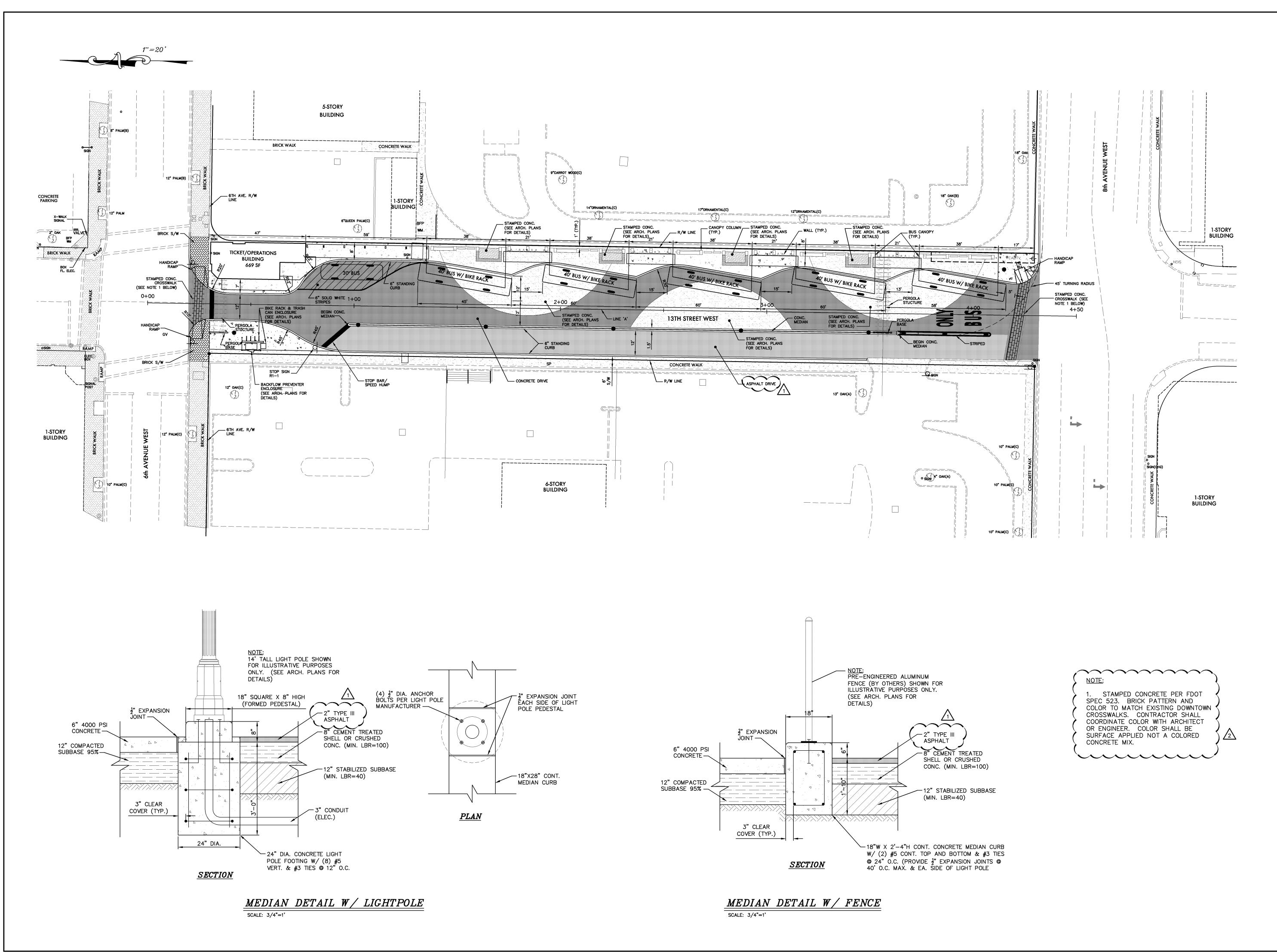
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date: 11.12.2010

comm. no.: 0920818

CLEARING AND DEMOLITION PLAN

C103



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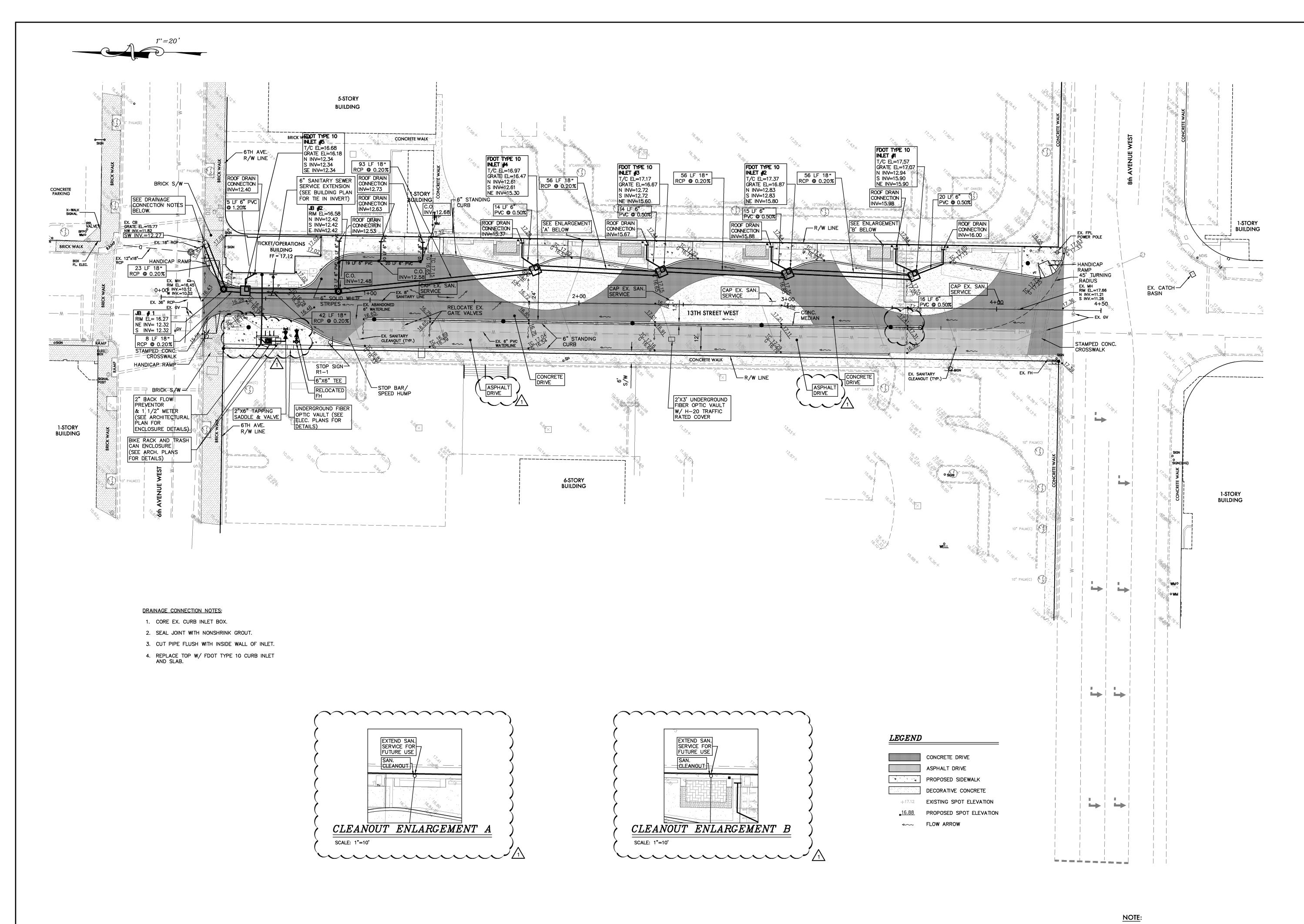
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checked: J. MULOCK
date: 11.12.2010
comm. no.: 0920818

SITE PLAN

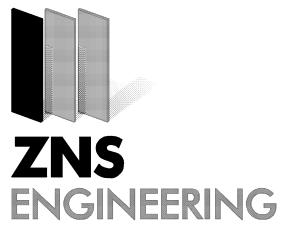
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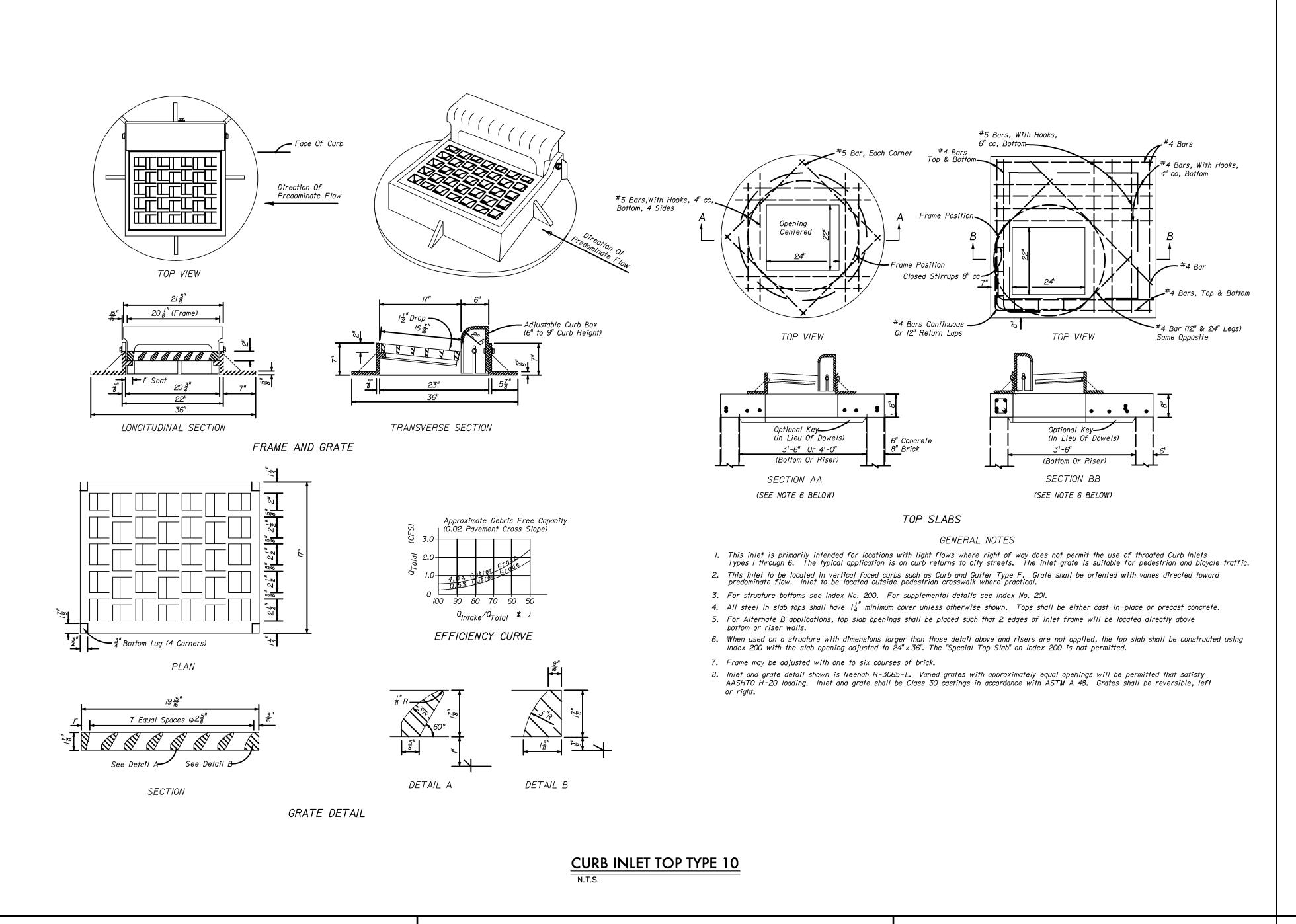
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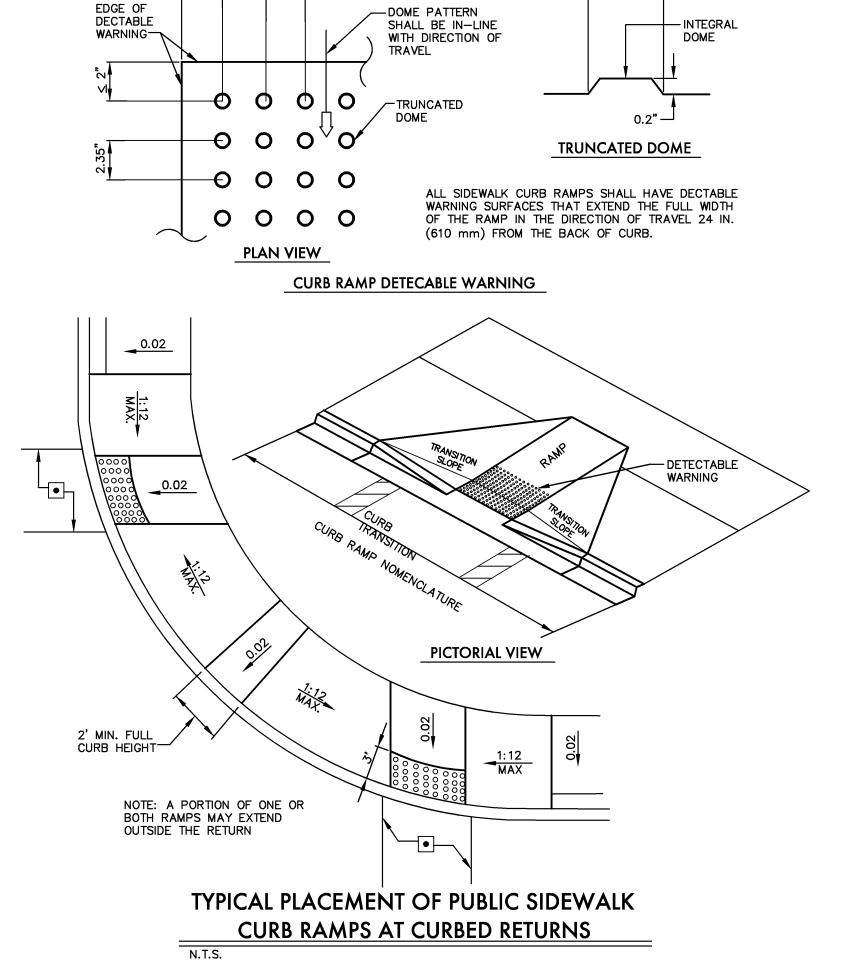
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CIVIL PLAN

ALL EX. WATERLINE AND EX. SANITARY CLEANOUT LOCATIONS ARE APPROXIMATE.

C105





0.9" --



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SCHENKELSHULTZ

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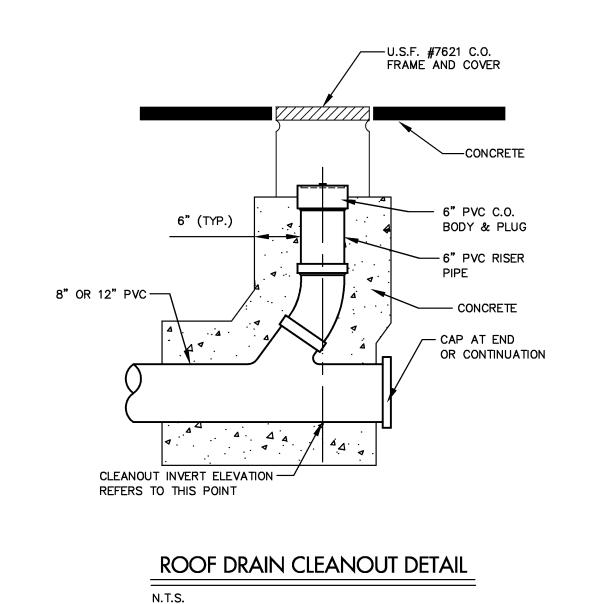
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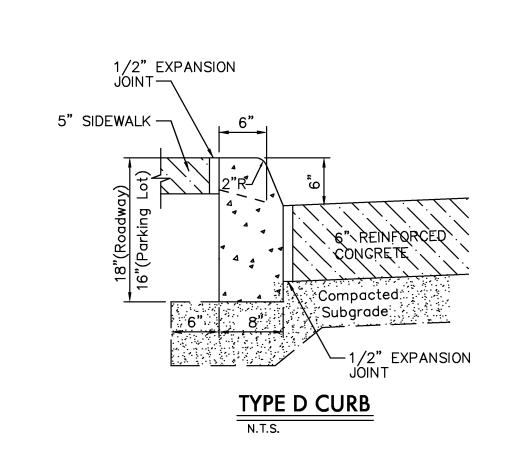
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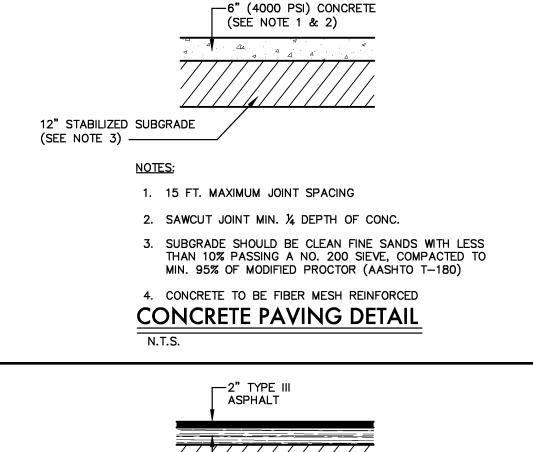
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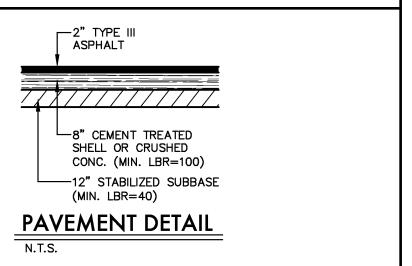
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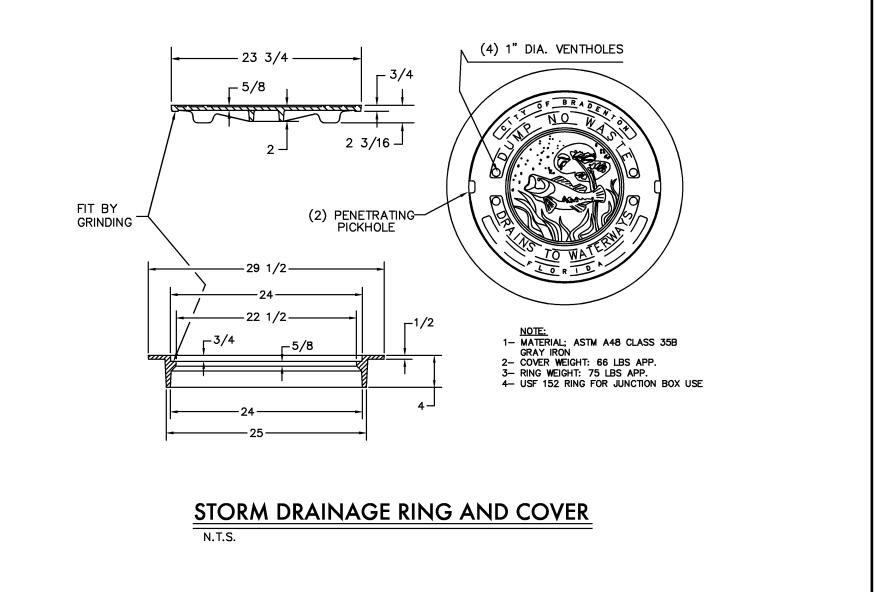
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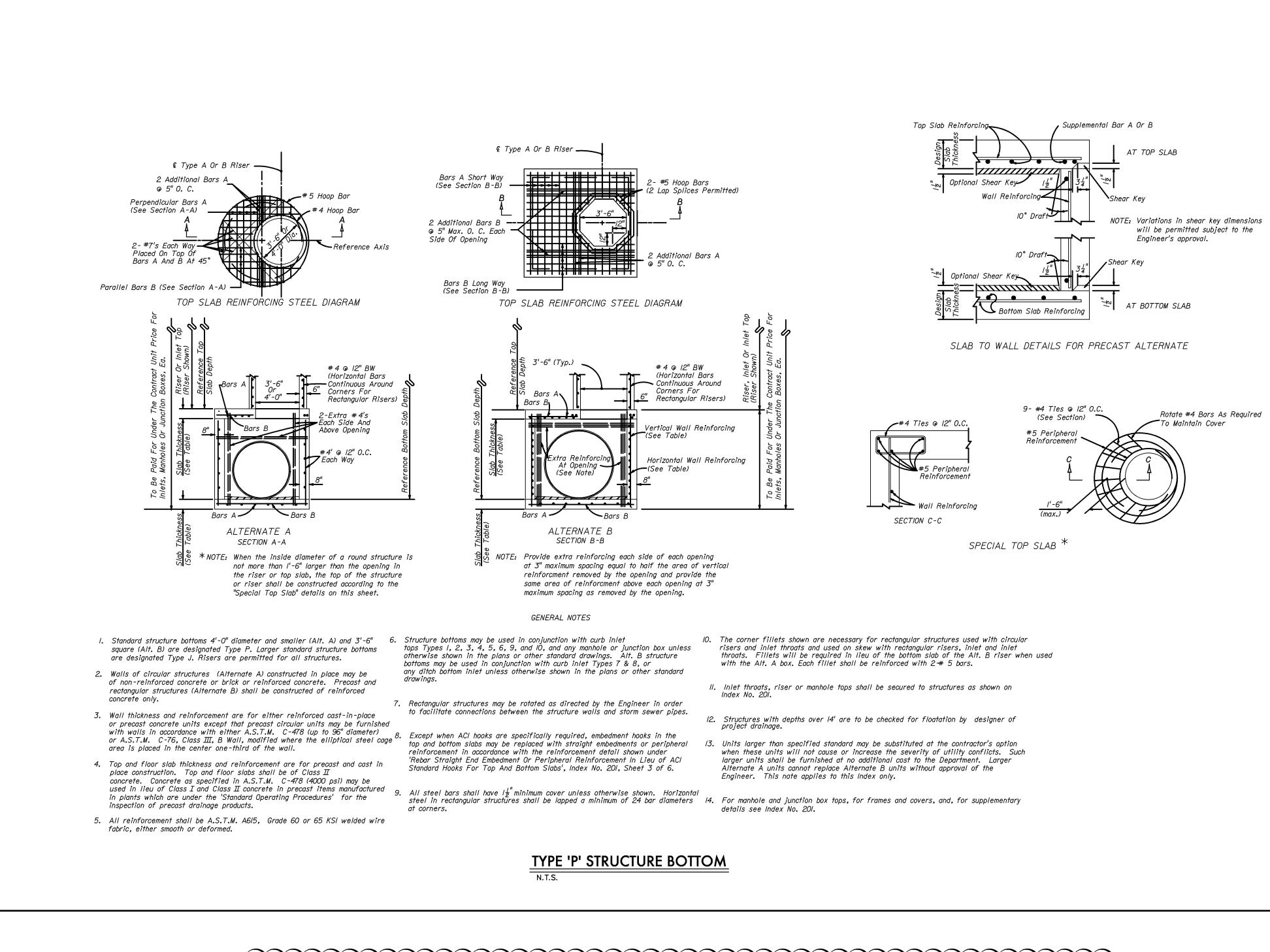


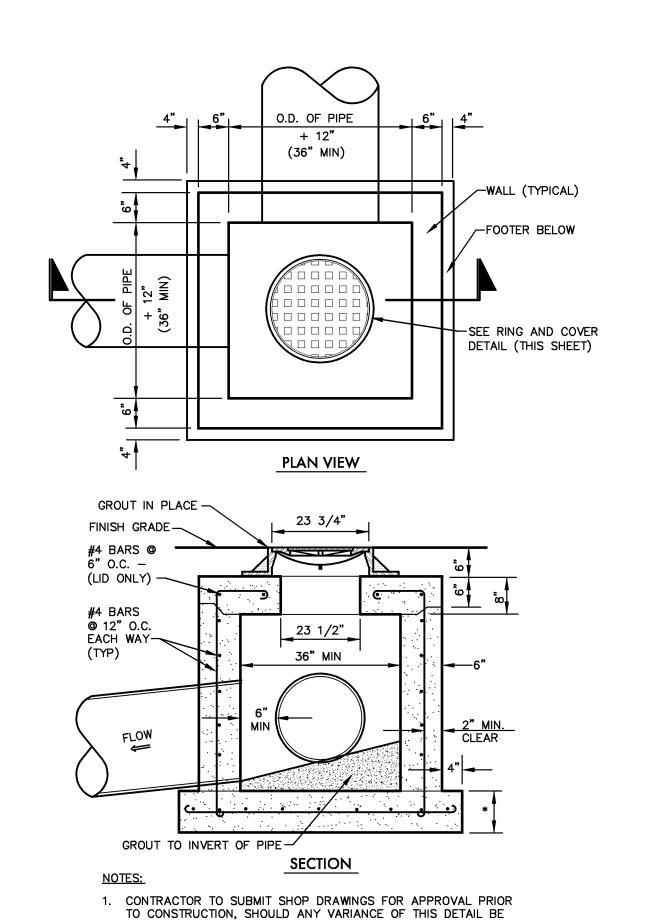












NECESSARY.

* 6" BOTTOM SLAB = NOT TRAFFIC BEARING AREAS

JUNCTION BOX DETAIL

8" BOTTOM SLAB = TRAFFIC BEARING AREAS

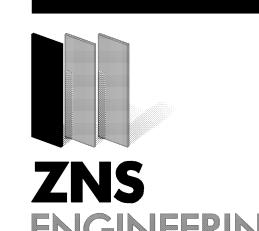
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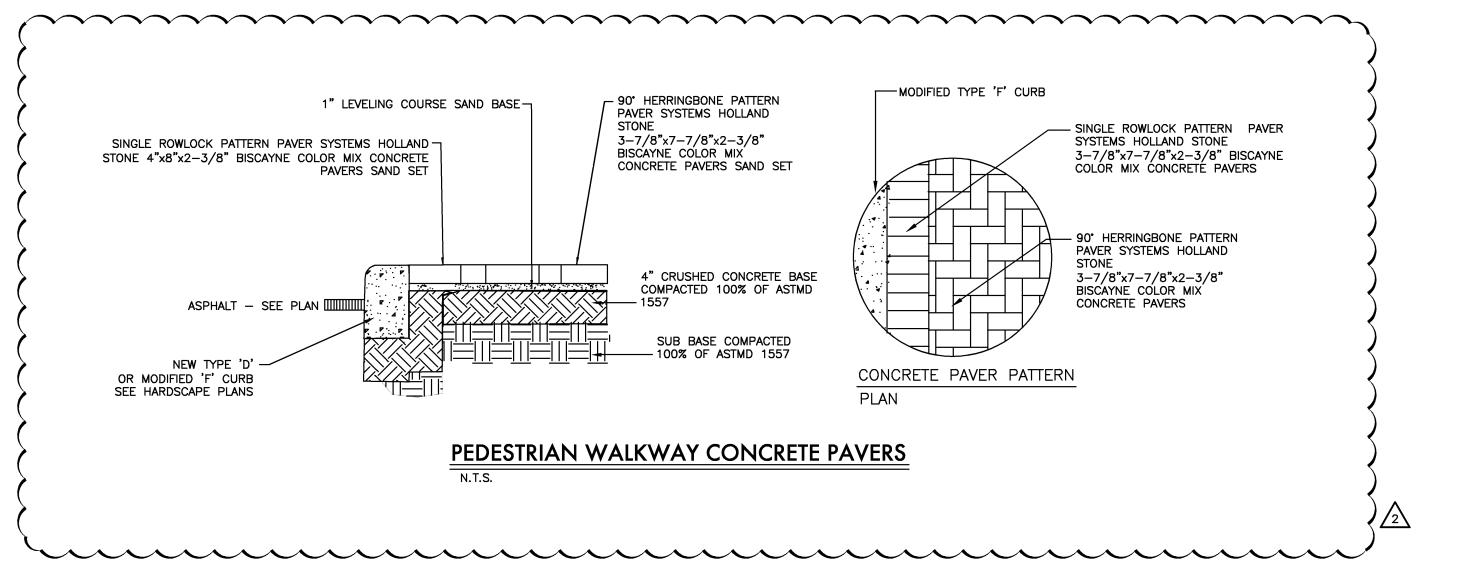
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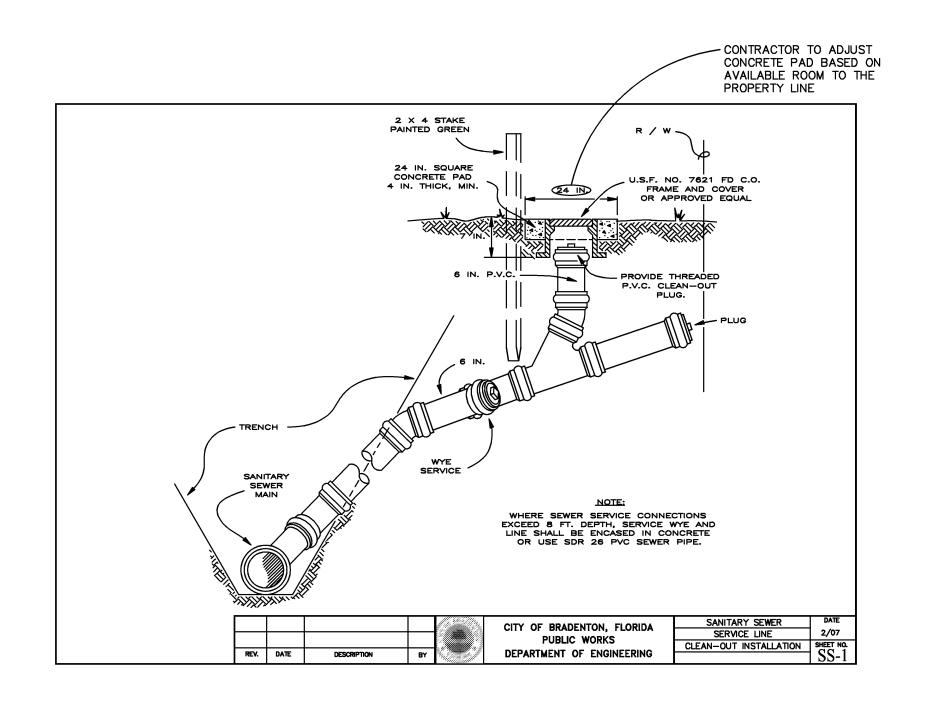
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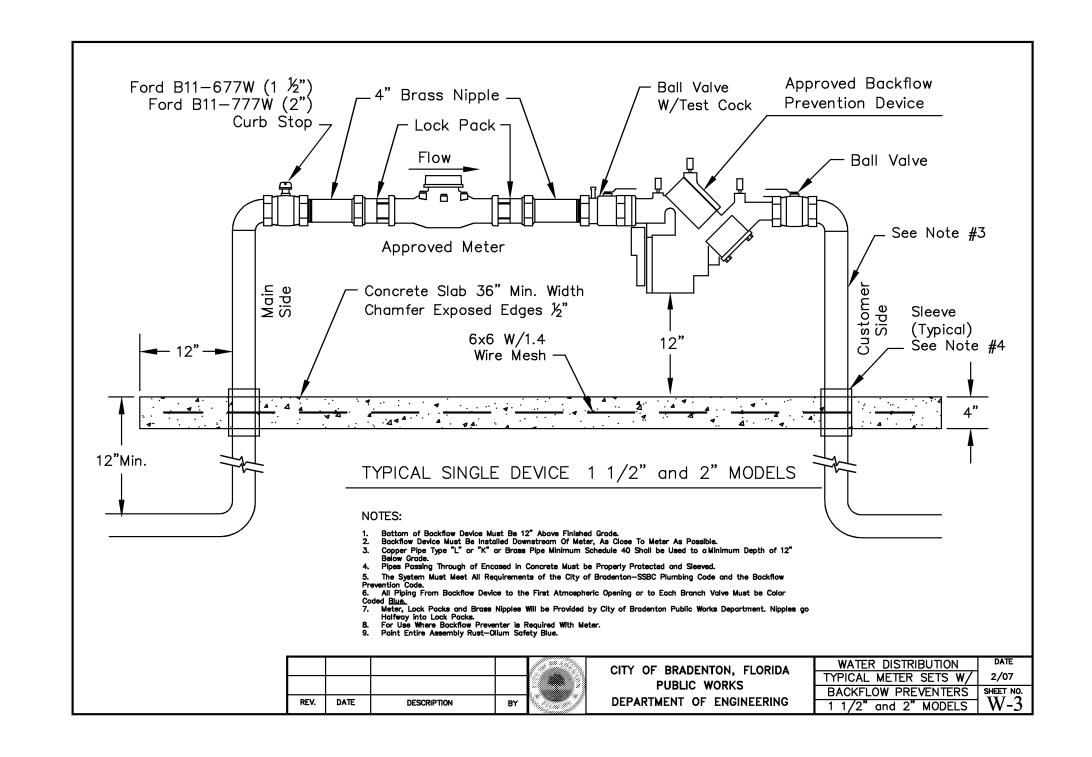
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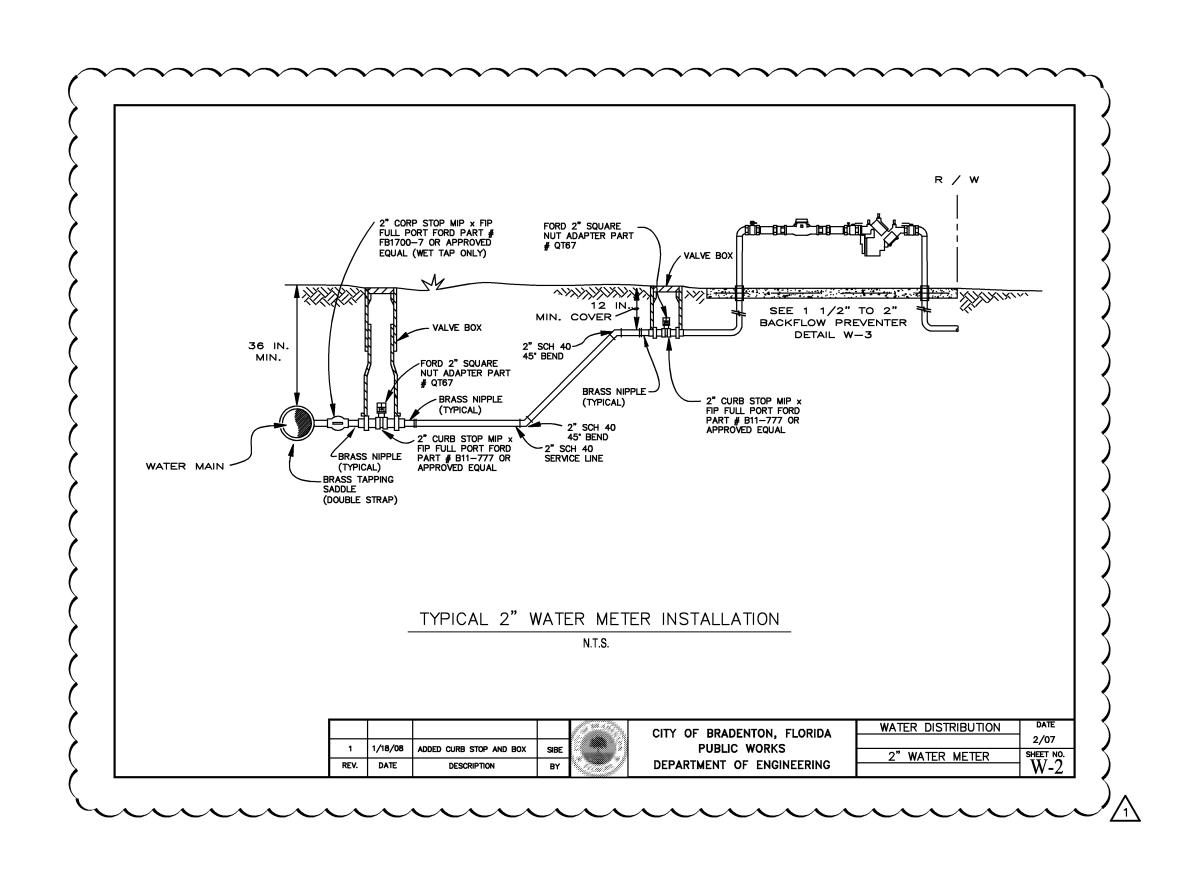
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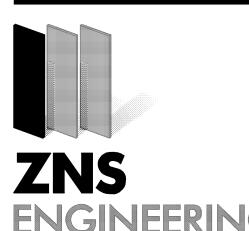
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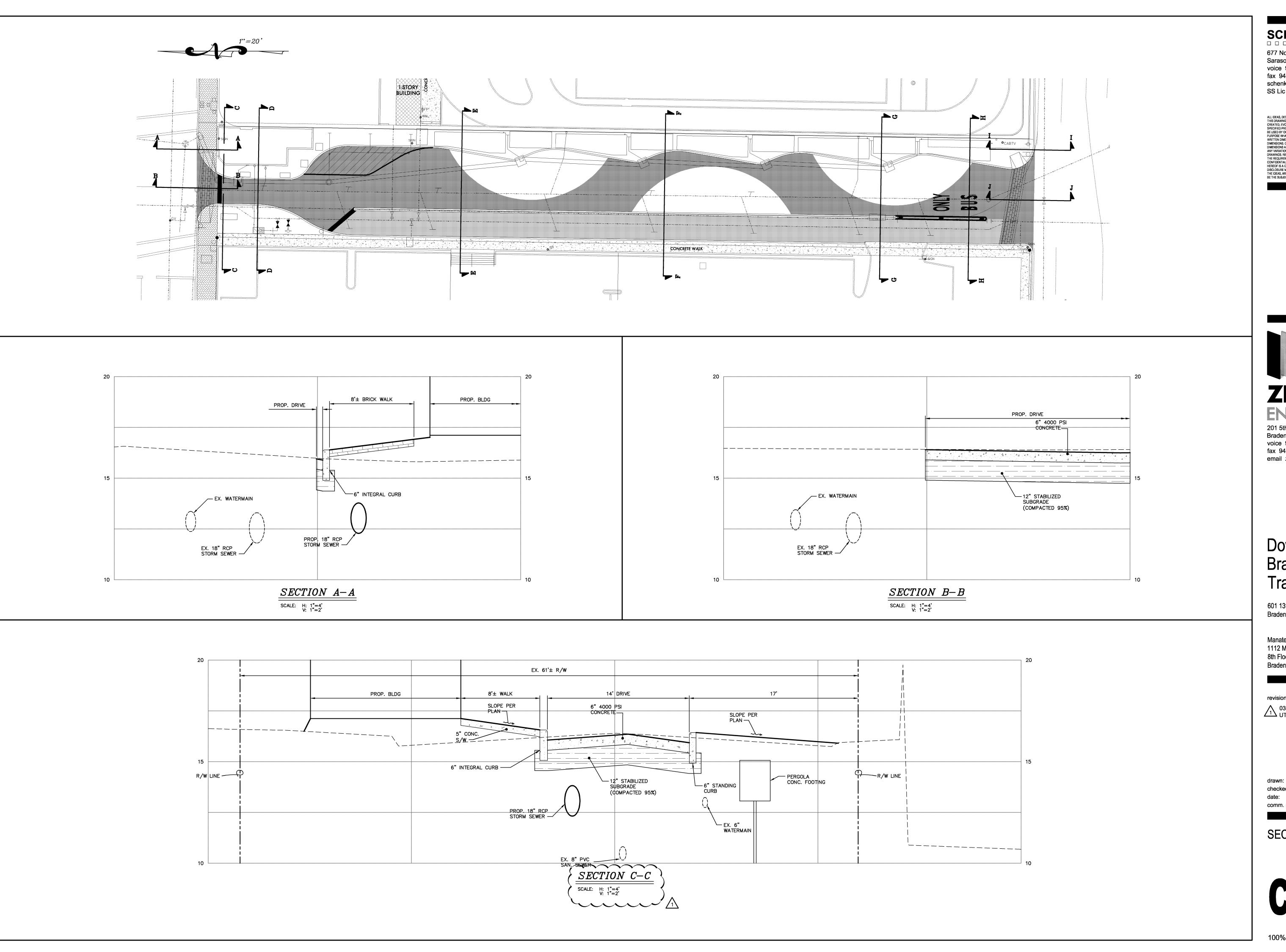
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comm. no.: 0920818

WATER & SEWER DETAILS

C108

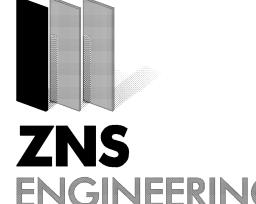


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JEB C. MULOCK
PROFESSIONAL ENGINEER #64692

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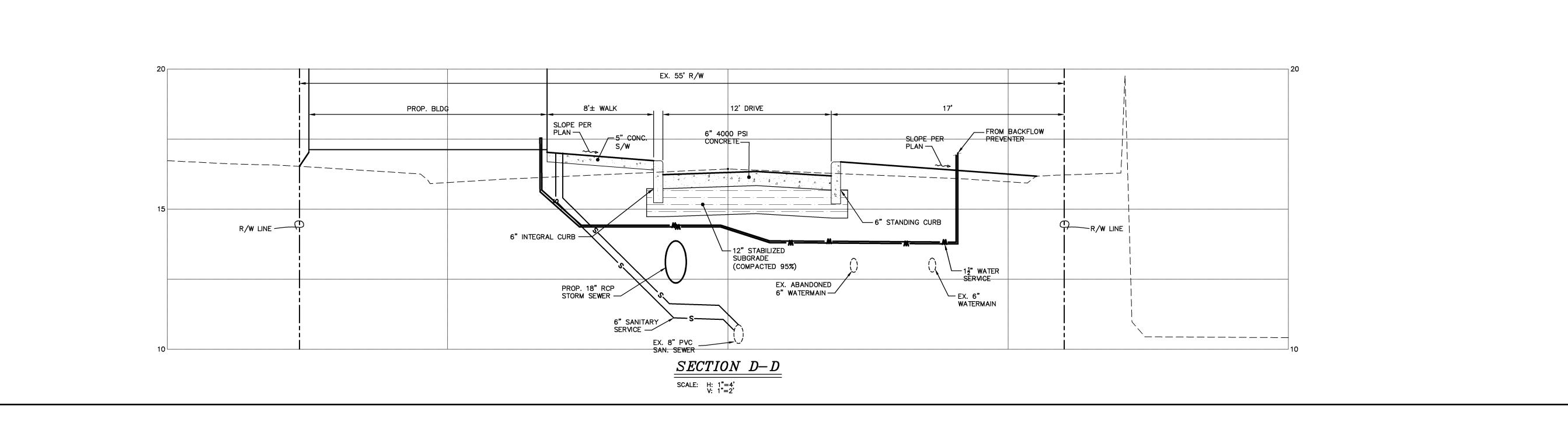
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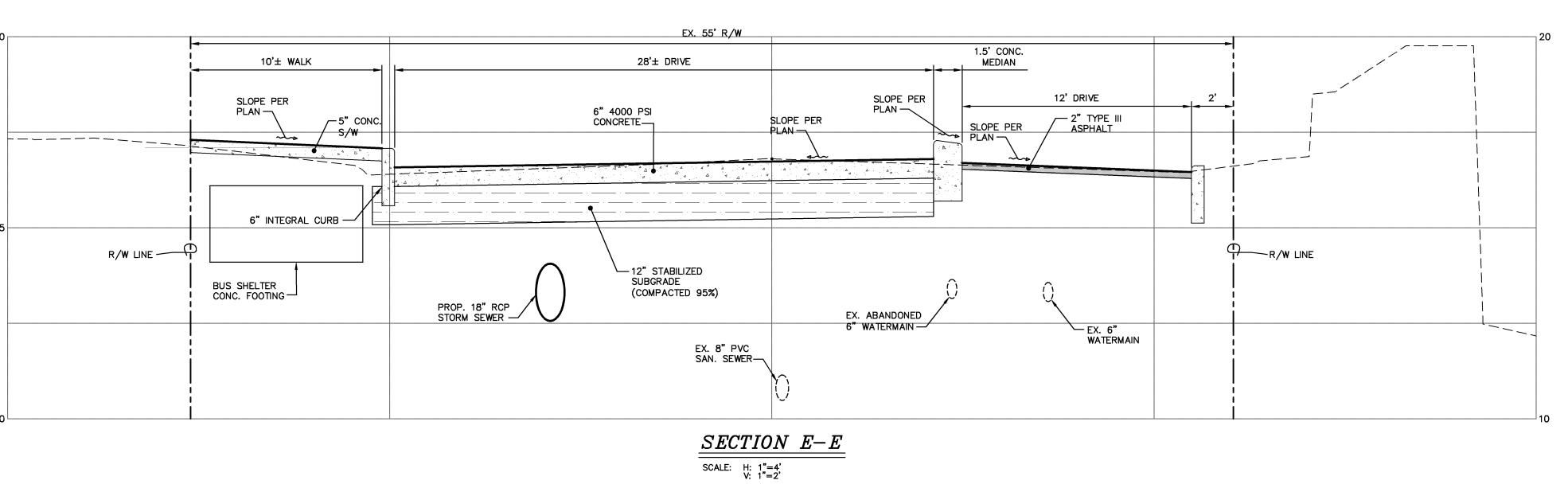
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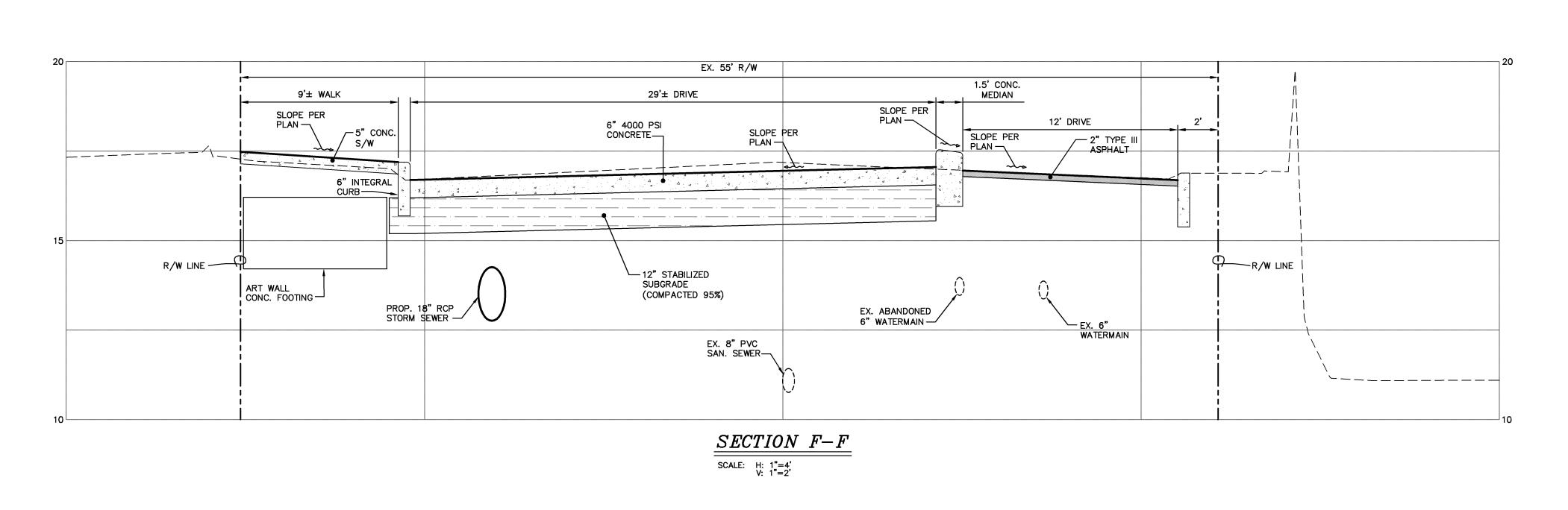
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SECTIONS

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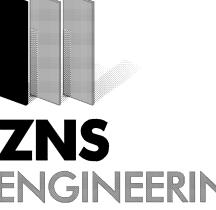


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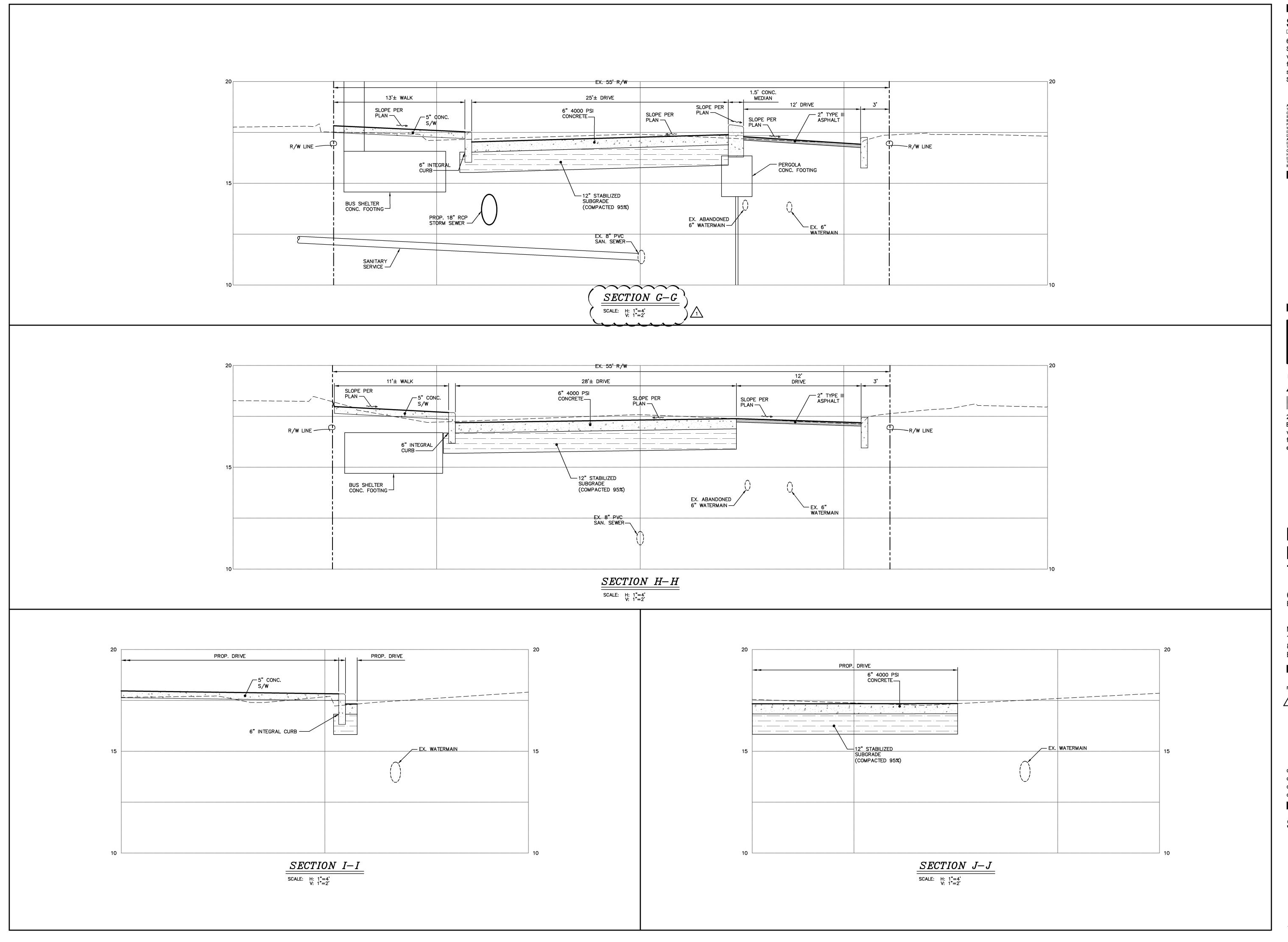
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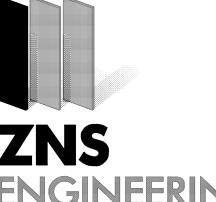


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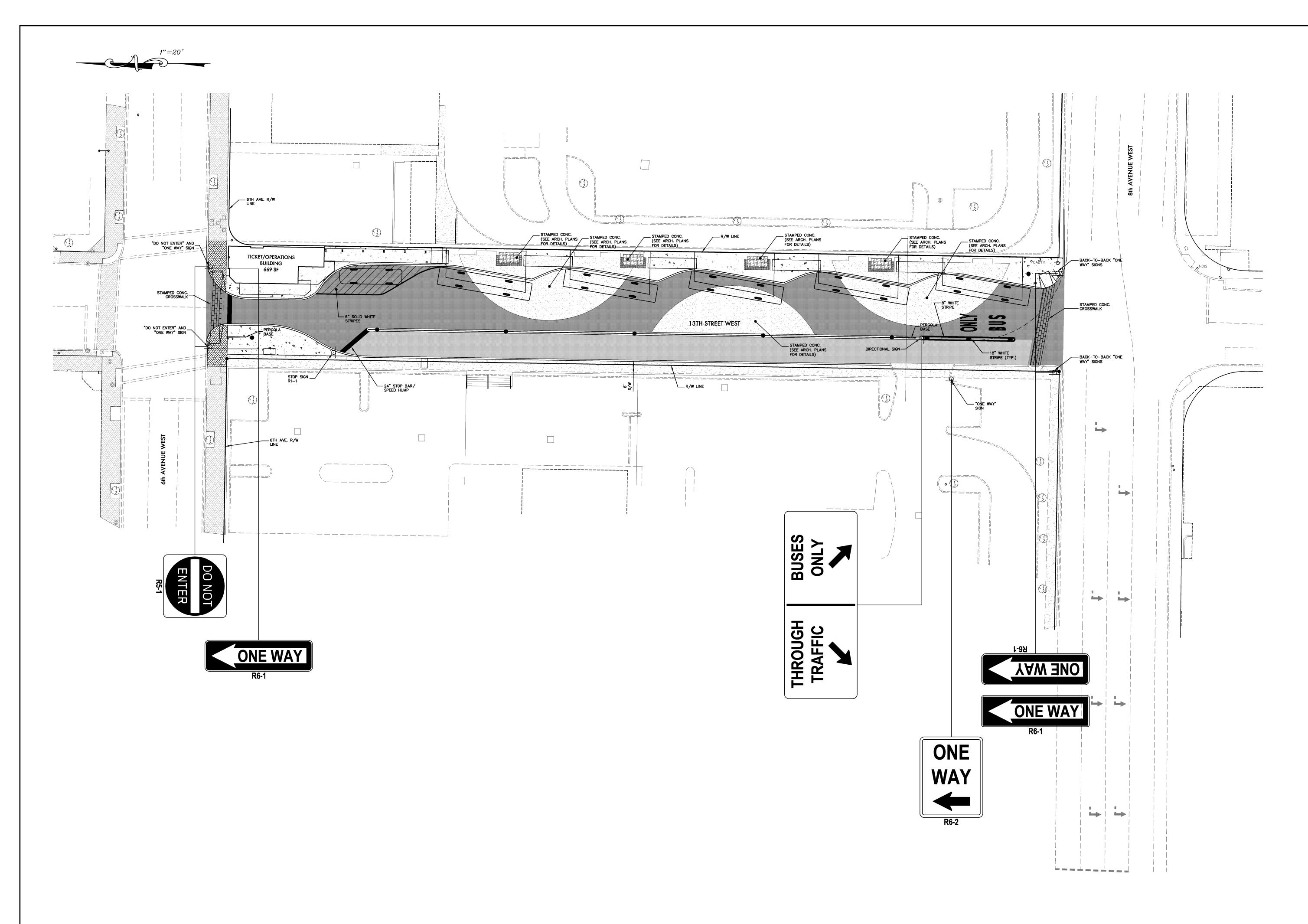
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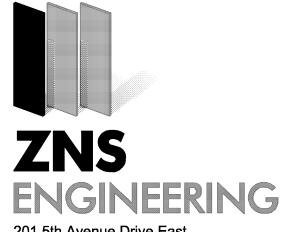


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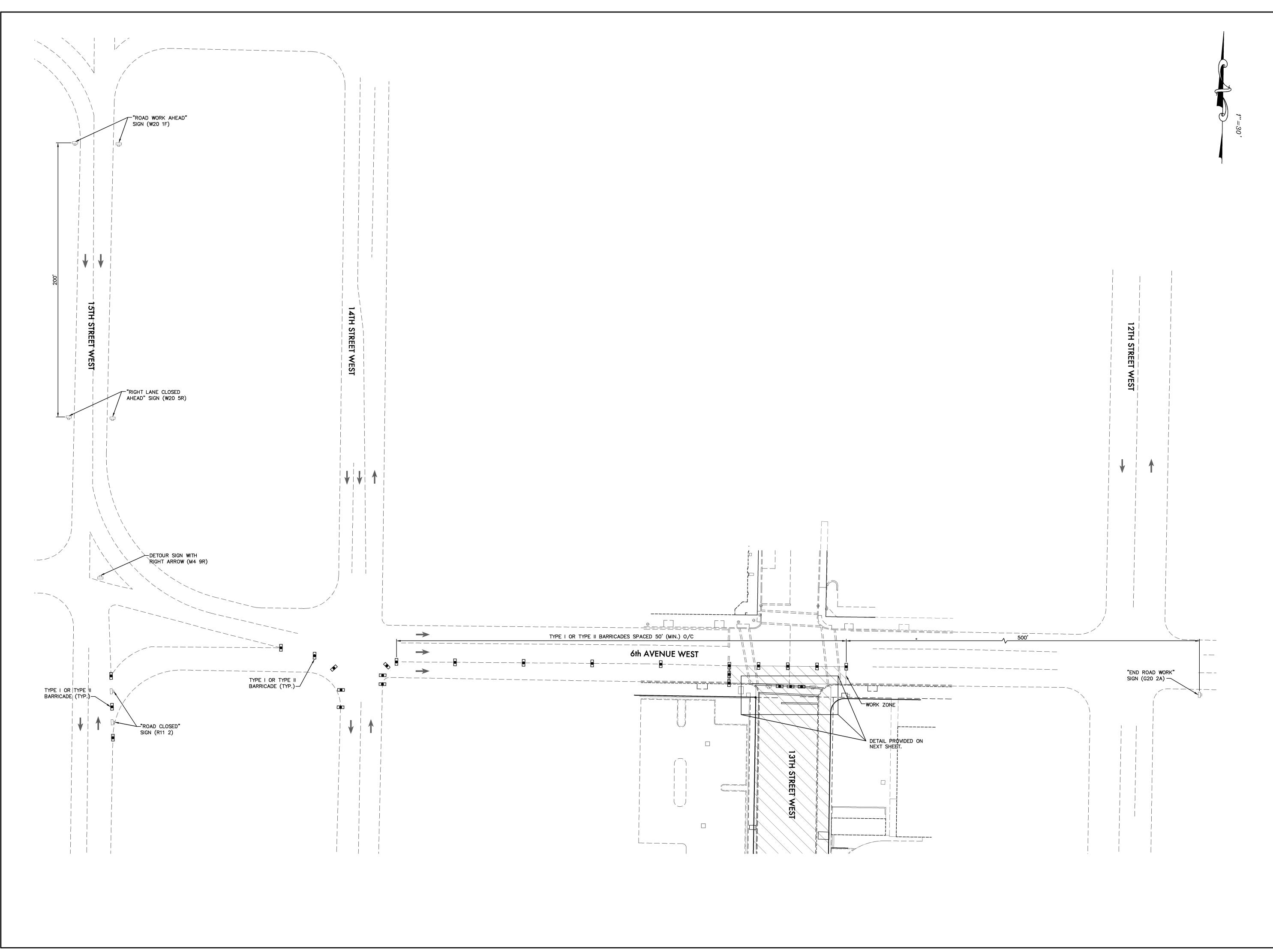
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SIGNAGE AND STRIPING PLAN

C112

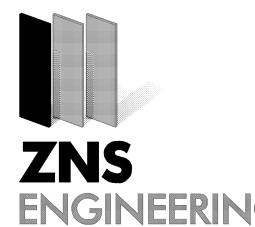


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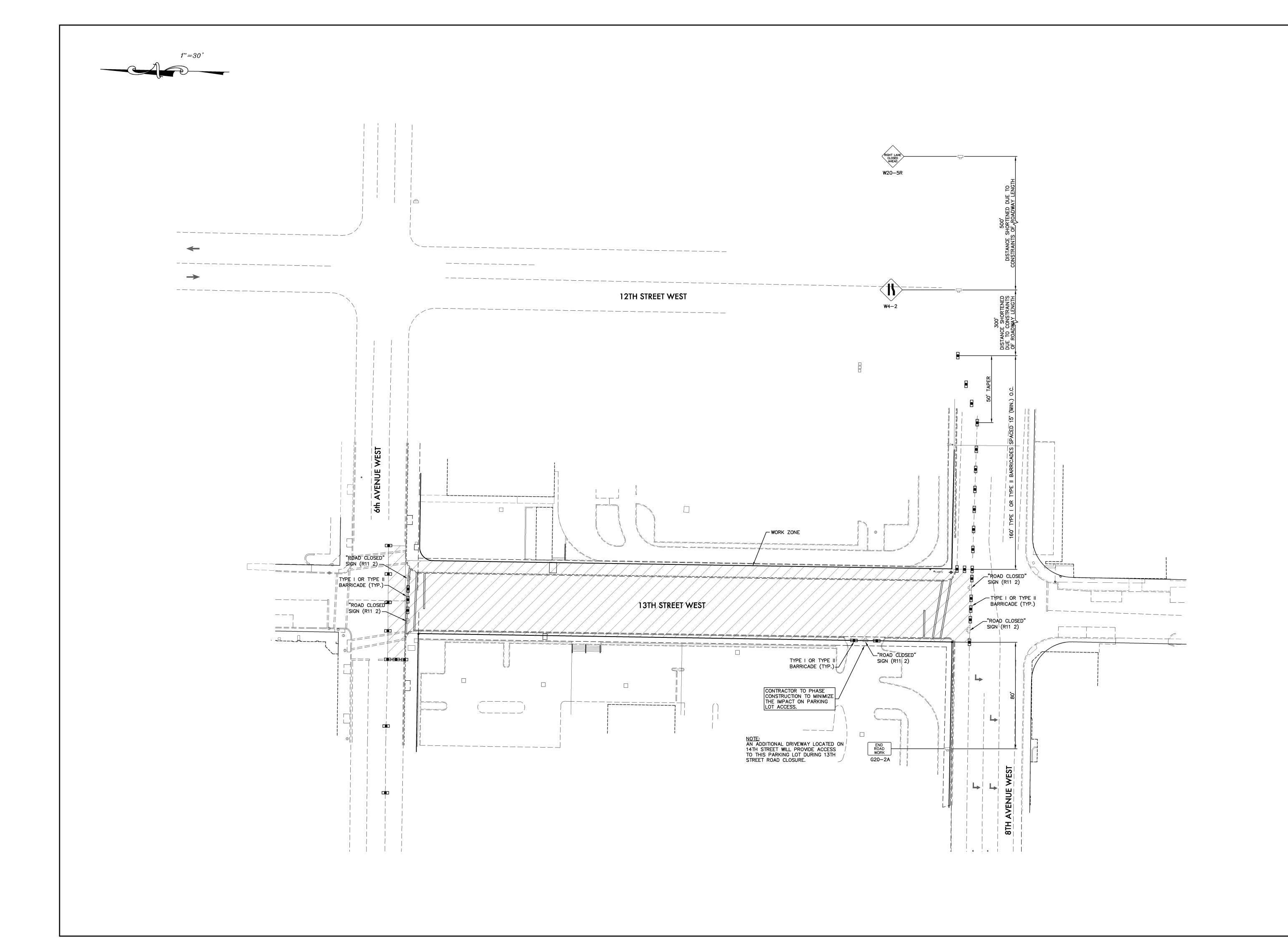
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MAINTENANCE OF TRAFFIC PLAN

C113

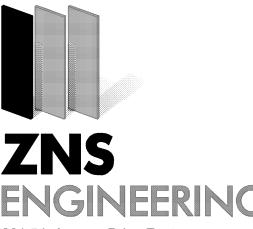


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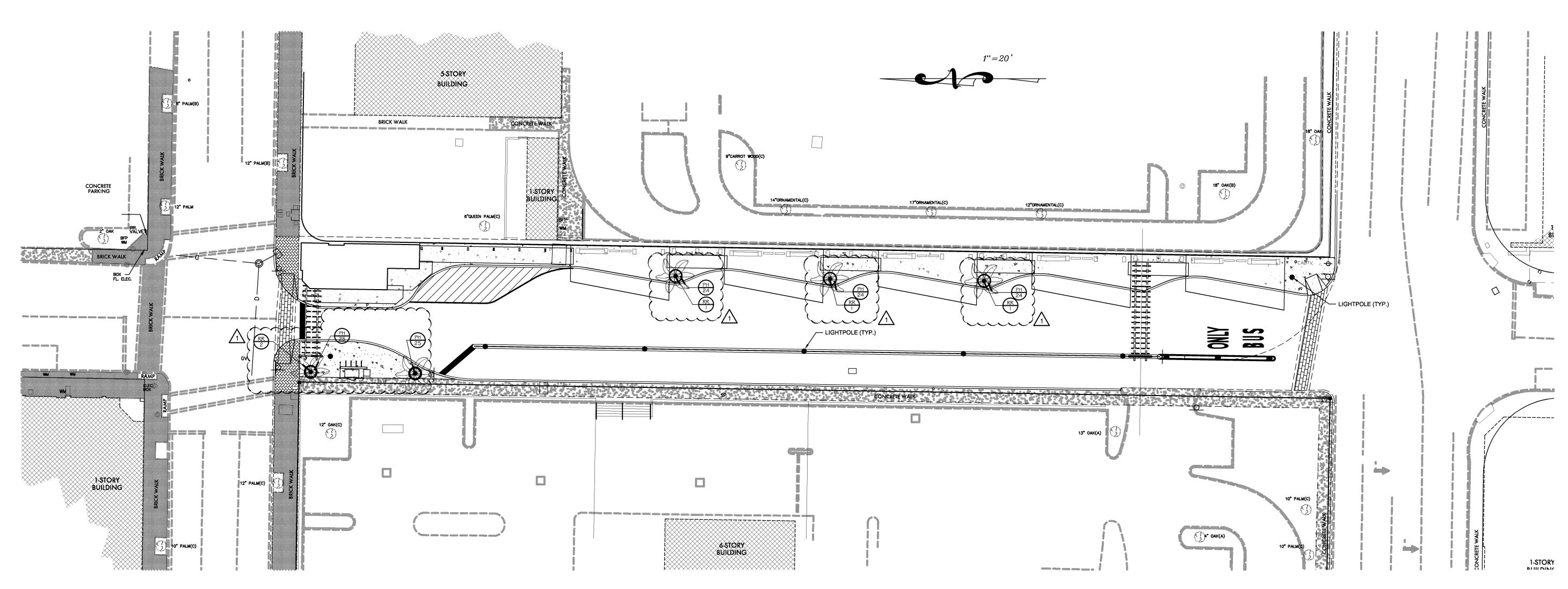
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MAINTENANCE OF TRAFFIC PLAN

C114



LANDSCAPE PLAN

TREES CODE QTY BOTANICAL NAME / COMMON NAME CONT CAL SIZE RR 5 Roystonea regia / Royal Palm Matched sizes, In 60" dia., 24" htt. conc. planters B \$ B N/A 10' GW GROUND COVERS CODE QTY BOTANICAL NAME / COMMON NAME CONT PH 122 Petunia x hybrida / Common Garden Petunia | gal@ 10" oc Mixed colors, annuals

LANDSCAPE NOTES:

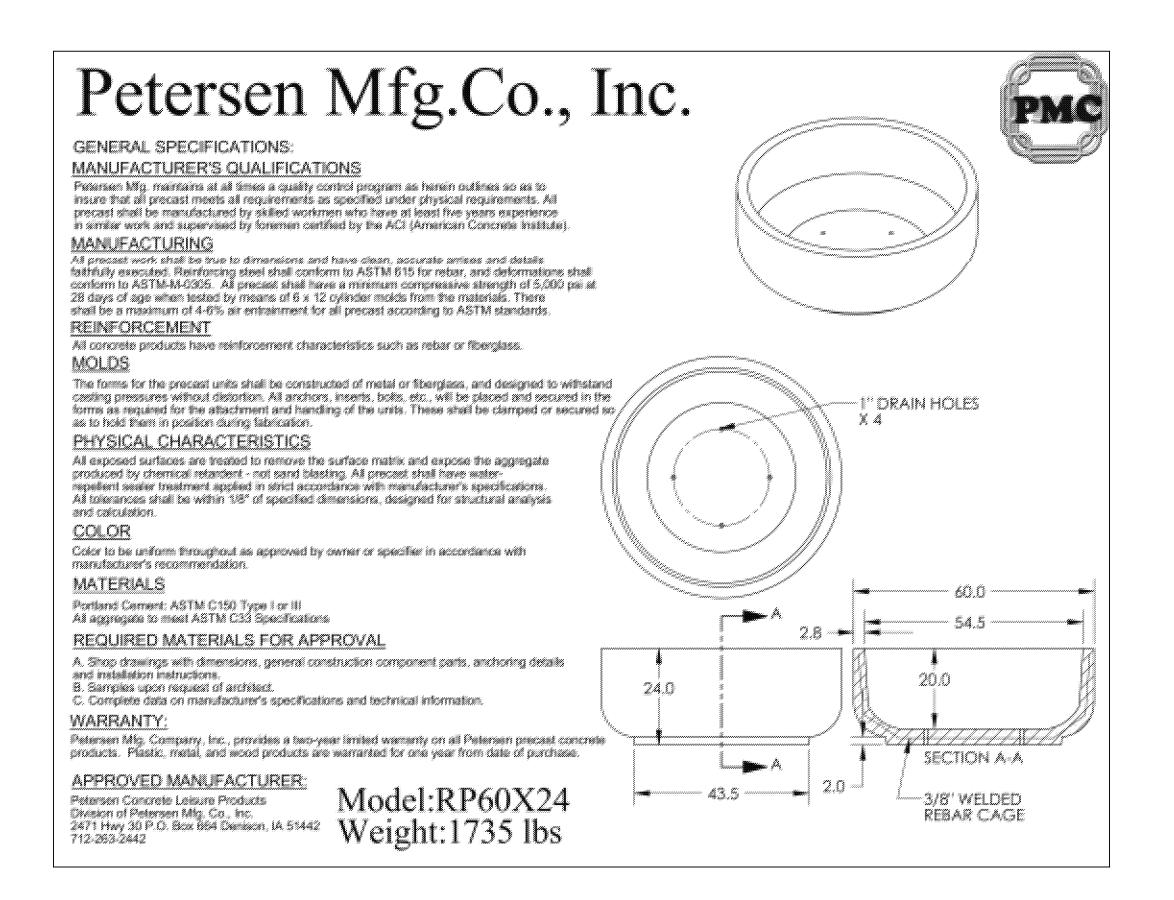
- In the event of variation between quantities shown of the plant list and the plans, the plans shall control. Improvisations made by the Landscape Contractor shall be no cause for additional costs to the owner. Sod, mulch, and topsoil quantity takeoffs shall be the responsibility of the contractor.
- 2. No substitutions shall be made without the written consent of the Owner or Landscape Architect.
- 3. Fertilizer shall be applied to all new planting areas at a rate of 1 1/4 lbs. actual nitrogen, 1 1/4 lbs. actual phosphorus, and 1 1/4 lbs. actual potash per 1,000 sq. ft. of planting area. The fertilizer shall also contain all minor trace elements suitable for the area where it is to be used.
- 4. Unit prices for all plant material shall be provided to the Landscape Architect or Owner upon request.
- 5. Topsoil material, when called for on the plans, shall be free of sticks, stones larger than 1" dia., plants, or any other debris which would be toxic or otherwise harmful to plant growth. Topsoil should be fertile, friable, and of a naturally loamy character.
- The Landscape Contractor shall take all necessary precautions to protect all existing structures on the site and shall be held responsible for any damage cause by his operations.
- It shall be the Landscape Contractor's financial responsibility to prevent plants and trees from falling or being blown over, and to replace all plants which are damaged at no additional cost to the owner for sustained winds of less than 65 MPH.
- 8. Maintenance shall begin after each plant has been installed and shall continue until final acceptance by the Landscape Architect.

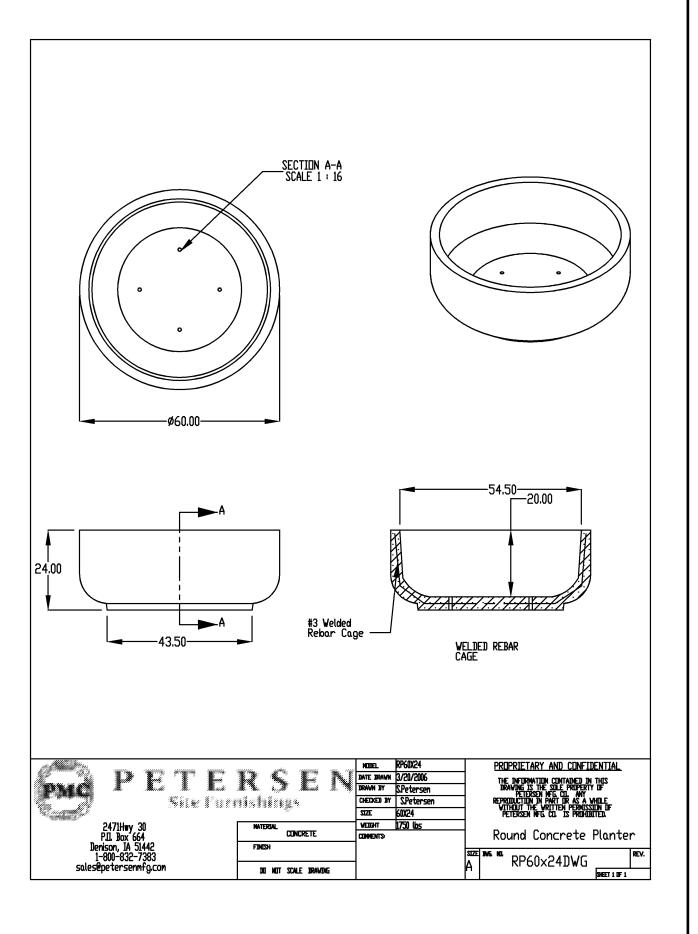
 Maintenance shall include pruning, mulching, weeding, replacement of sick or dead plants, watering (including cost of equipment such as a water-truck) and any other care which is needed for the proper growth of the plant material.

- 9. Excess waste material shall be removed daily from the site.
- 10. All plant materials used shall conform to the standards for Florida No. 1 or better as described in "Grades and Standards for Nursery Plants", State of Florida, Department of Agriculture and Consumer Services, Division of Plant Industry, 2nd edition, Feb 1998 or equal thereto as approved by the Landscape Architect.
- 11. All shrub beds and hedges shall be top-dressed with 2" of Grade 'B' Pine Bark Nugget mulch unless otherwise stated on the plans or plant schedule. Mulch shall be pulled back 4" from palm trunks.
- 12. It shall be the responsibility of the Landscape Contractor to coordinate activities with other contractors on the job site.
- 13. All plant materials shall be fully guaranteed for a period of one (1) year following final acceptance by the owner.
- installed to meet all State and Local codes and regulations.

14. All landscape materials installed within the public right of way shall be

- Contractor shall install an automatic irrigation system which provides 100% coverage of all landscaped areas. Irrigation controller shall be in ticket office.
- 16. All B & B or Field Grown material (except palms) shall be obtained from "Roots Plus" certified nurseries.
- All trimming of existing trees shall be conducted or overseen by a certified arborist.
- 18. Contractor shall contact sunshine state one call of florida system at 1-800-432-4770 for the location of underground utilities/facilities. Contractor shall verify the exact locations of said facilities prior to excavation and shall assume any and all liability for damages which may occur due to the contractor's failure to locate and preserve said facilities.





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ROBERT C. GAUSE
LANDSCAPE ARCHITECT #000942

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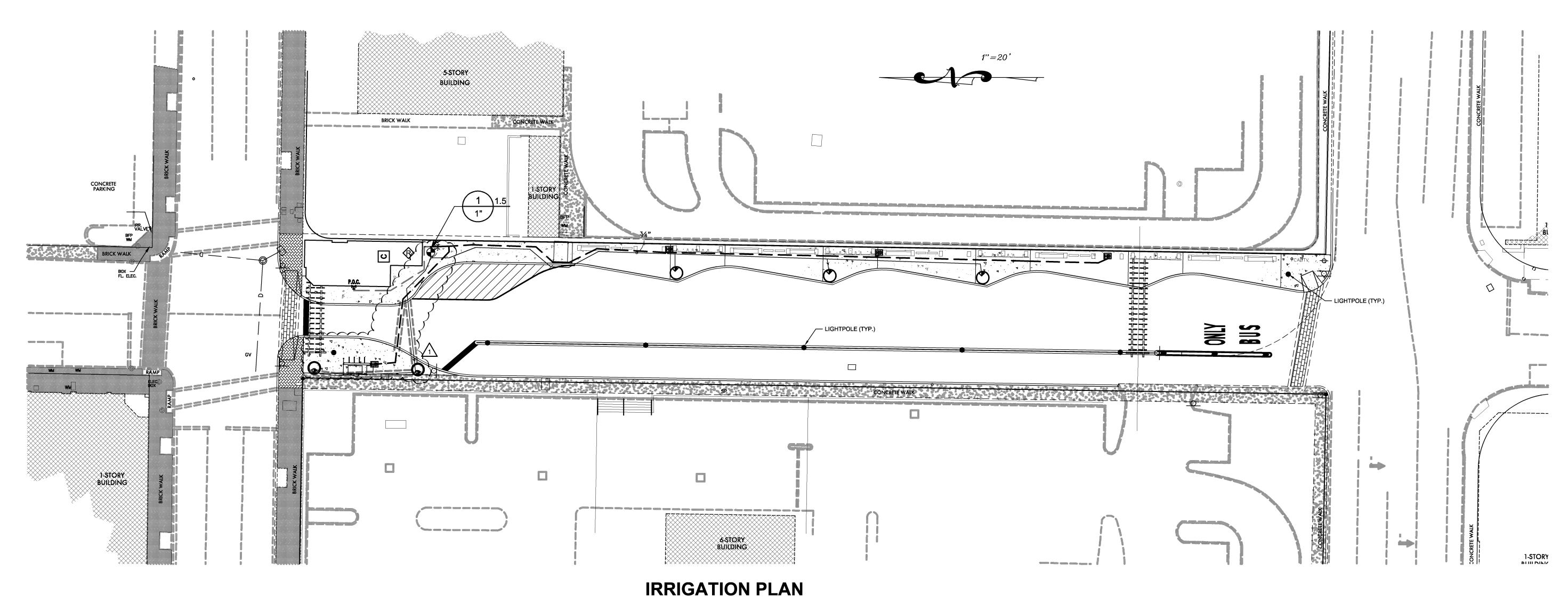
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LANDSCAPE PLAN

L101



IRRIGATION NOTES:

GENERAL:
Use of the colon following a subject heading implies the words "shall be" and has a mandatory connotation. Materials or equipment of equal quality may be substituted for those shown if approved by the Landscape Architect. MATERIAL: Contractor agrees to furnish all materials and labor

necessary to provide an operational irrigation system providing 100% coverage of all landscape areas.

VALVE BOXES: 10" w/ cover WIRE: 14 ga. suitable for direct burial (larger as needed) WIRE SPLICES: 3M DBRSK Water proof splice kit PAINT: All exposed PVC black SLEEVES: Schedule 40 PVC

PUMP: As specified FITTINGS: Schedule 40 PVC

CONSTRUCTION: Comply with all State and Local codes. Use good irrigation

Place wire under water main. Where more than one wire is placed in trench, tape wires together at 10' intervals and bottom of main at 10' intervals. Use an expansion curl within 3' of each wire connection and 100' of wire length by wrapping 5 turns of wire around a 12" pipe then withdrawing pipe. All connections must be waterproof. EXCAVATION:

Dig trenches straight and remove all debris. Depth suitable for top of pipe as follows: Laterals - 7" Mains - 12"

Sleeves - 18" Pipe trench work shall be coordinated with landscape and other contractors to avoid interference with tree, shrub and other site improvements such as concrete placement...

Remove all burrs from cut pipe, wipe clean, use cleaner on both pipe and fittings then apply glue to both, twist and ram tight. Hold until glue has set.

VALVE BOXES: Install top of box level with finish grade.

ELECTRICAL:

Contractor shall provide concrete banjos and meter boxes along with all other necessary electrical controls for proper operation of wells and controllers. All electrical controls shall be "hard wired" in galv. electrical conduit. The owner/ general contractor shall be responsible for providing power to the meter boxes.

SURGE PROTECTORS: Surge protectors shall be installed on 2-wire systems approximately every 500 lf. of wire in accordance with manufacturers

RE-USE EFFLUENT MARKINGS: All pipe and components shall be properly colored for re-use if applicable.

HEADS: Contractor to locate heads to suit field and landscape conditions. Place top of heads 1" above final grade. Install all heads plumb and rotate to most effectively cover turf and landscape. Flush before installing nozzles. Heads located along vehicular traffic ways shall be attached with 12" of flexible pipe.

CONTROLLER:

Location to be determined by owner. DECODERS:

Contractor to install decoders at valves in accordance with manufacturers recommendations on two wire systems. DRIPLINE

To be covered by mulch layer following inspection by Landscape Architect. "Spaghetti Pipe" shall be utilized as necessary to provide irrigation to root zones of individual **BACKFILLING:**

Do not backfill until leak test by contractor and general inspection by owner's representative has been performed. Backfill may be excavated material, but must be free of rocks or stones over 1" in diameter, debris or any sharp objects. **OPERATION TESTING:**

Contractor shall instruct the owner on the system operation and shall run the system in the owner's presence to assure that it is functioning properly and that all heads are in correct adjustment. **GUARANTEE:**

Unconditionally for a year after date of acceptance, except for reason of accidental damage/abuse. Necessary corrections to be made by contractor without delay at no expense to owner. Guarantee shall be extended to cover extended warranties on individual irrigation components (i.e., valves, controllers and heads) where applicable.

PERMITS: Obtained by contractor at his expense.

CLEAN UP: Maintain site clean from pipe clippings, debris and unwanted material at the end of the day.

Irrigation source shall be potable as noted in schedule.

CRITICAL ANALYSIS

Generated:	2010-06-23 13:59
P.O.C. NUMBER:01 Water Source Information:	Potable water meter
FLOW AVAILABLE Water Meter Size: Flow Available:	1" 37.50 gpm
PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available:	60.00 psi 5.00 ft I I/4" 20.00 ft 57.00 psi
DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available:	13.30 gpm 37.50 gpm 24.20 gpm
Pressure Req. at Critical Station: Loss for Fittings: Loss for Main Line: Loss for POC to Valve Elevation: Loss for Backflow: Loss for Water Meter: Critical Station Pressure at POC: Pressure Available: Residual Pressure Available:	39.16 psi 0.00 psi 0.03 psi 0.43 psi 0.00 psi 1.03 psi 40.65 psi 57.00 psi

IRRIGATION SCHEDULE

SYMBOL

STWIDGE	WITHOUT ACTOREIGNODE GDESCRITTION	\(\text{\text{q}} \) \\ \(\text{q} \) \\ \(\text{\text{q}} \) \\ \(\text{q} \) \\ \(\text{\text{q}} \) \\ \(\text{q} \) \\(\text{q} \) \\ \(\text{q} \) \\ \(\text{q} \) \\ \(\text{q} \) \\\ \(\text{q} \) \\\ \(\text{q} \) \\\ \(\text{q} \) \\\ \(\text{q} \) \\ \(\text{q} \) \\\ \(\text{q} \
◇ ◆ ◆ Ø5 1Ø 2Ø	Rain Bird XBT-6 Six multi-outlet drip emitter/bubbler Multi-outlet pressure compensating drip emitter/bubbler with I/2" FPT inlet. 05=0.5GPH, IO=I.OGPH, 20=2.OGPH at each emitter outlet.	5
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
•	Irritrol 100P with OMR-100 Electric Remote Control Valve, globe/angle configuration, with 5-100psi pressure regulator	I
НВ	Hose Bibb WOODFORD MODEL Y95, FLUSH MOUNT IN SIDEWALK	4
C	Hunter PCC-3001 Electromechanical Controller, 3 stations, indoor model.	1
♠	Hunter Solar-Sync Solar, rain freeze sensor with outdoor interface, connects to Hunter PRO-C and ICC controllers, install on roof.	I
F.O.	3/4" stubout on east side of building 3/4" water stubout from building on east side.	I
	Irrigation Lateral Line: PVC Class 200 SDR 21 Only lateral transition pipe sizes 1" and above are indicated on the plan, with all others being 3/4" in size.	324 l.f.
	Irrigation Mainline: PVC Schedule 40	369 l.f.
	Pipe Sleeve: PVC Schedule 40 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeving material. Extend sleeves 18 inches beyond edges of paving or construction.	44 .f.
\	/alve Callout	

── Valve Number

MANUFACTURER/MODEL/DESCRIPTION

QTY

SET CONTROLLER 60" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED. CONTROLLER AS SPECIFIED. SECURELY BOLT CONTROLLER TO WALL. INSTALL BACKUP BATTERIES AS REQUIRED. GROUND AS PER MFG. SPECIFICATIONS. 1/2" DIAMETER RIGID STEEL CONDUIT FOR 110 VAC ELECTRICAL SOURCE. INSTALL AS PER LOCAL ELECTRICAL 18" BEYOND -CODES. STRUCTURE OR TO BOX AS 2" DIAMETER GRAY PVC PER PLANS. CONDUIT FOR RCV WIRES. FINISHED FLOOR. LONG SWEEP ELL

INTERIOR WALL MOUNT CONTROLLER 328409.13-07 **SCHENKEL**SHULTZ

677 North Washington Blvd. Sarasota, Fl 34235 voice 941.952.5875 fax 941.957.3630 schenkelshultz.com SS Lic No - AA-C000937

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BE THE SUBJECT OF PENDING PATENT APPLICATION.

> ROBERT C. GAUSE LANDSCAPE ARCHITECT #000942

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revisions:

1 03.01.2011 ✓¹\ UTILITY PERMIT COMMENTS

drawn: RCG checked: RCG date: 11.12.2010 comm. no.: 0920818

IRRIGATION PLAN

EXISTING CONDITIONS

1.1 The Contractor should visit the site and acquaint himself with all existing conditions. Prior to bidding, bidders may make their own subsurface investigations to satisfy themselves as to site and subsurface conditions.

1.2 Before commencing work, Contractor shall verify all conditions at the job. Report any necessary corrections immediately to the Owner's representative. Do not proceed until corrections (if any are required) are made. Commencing work implies Contractor's acceptance of job conditions.

EXISTING TREES

GENERAL

2.1 Trees which exist on the site and are designated to remain, shall be protected from damage during site construction. Contractor shall be financially responsible for repair, if possible, or replacement of damaged plants with others of equal size, type, and quantity as necessary to satisfy reviewing agencies and Owner.

MASS GRADING AND FILLING

- 3.1 General site grading, filling and establishment of the rough grade 2" below proposed finished grade shall be accomplished by the General Contractor prior to commencement of work under this contract (if applicable).
- .2 The Landscape Contractor shall not begin work in any area until the rough/finished grade has been inspected and approved by the Owner and/or the Landscape Architect.

.3 SOIL TESTING

Results of any soil tests made prior to the beginning of grading are available for use by the Contractor.

LANDSCAPE PLANTING

4.1 <u>SCOPE</u>

Work consists of supplying all labor and materials as needed, import and spread topsoil, finish grading and preparation of areas for sodding and planting, the planting of grass, sod, shrubs and trees, maintenance and all related items as shown on the drawings and in accordance with these specifications.

Coordination with other contractors under parts of the project is required.

Contractor shall be responsible for all inspections of plant material that may be required by State or Federal authorities and securing of Certificates as required.

All plant lists and all material quantities are furnished for the Contractor's convenience only. Contractor shall verify all quantities required for completion of the work and shall be responsible for the supply and installation of all plants and materials indicated on drawings and specifications.

4.2 SCHEDULING OF WORK

The work shall be so coordinated with other contractors as to prevent any conflicts as to scheduling with others. Coordination of work with others is required with but not limited to the following:

- 4.2.1 Coordination between the Landscape Contractor and the Irrigation Contractor to assure
- availability of water and proper location of irrigation equipment in relation to plants.

 4.2.2 Coordination with General and Paving Contractors in regard to completion of structures,
- paving and curbing, walls, earthwork and site rough grading.
- 4.2.3 Coordination with Lighting Contractor in regard to location and adjustment of landscape lighting.

4.3 **PERSONNEL**

All planting shall be performed by personnel familiar with accepted planting procedures and under the supervision of a qualified planting foreman.

4.4 PROTECTION OF UTILITIES AND BUILDING

Prior to the preparation of planting areas or plant pits, the Contractor shall ascertain the location of all electrical cables, all utility lines, oil tanks and supply lines, so that proper precautions may be taken not to disturb or damage any subsurface improvements. In the event any are uncovered, the Contractor shall promptly notify the Landscape Architect, who shall arrange to relocate the plant material, if possible. The Contractor shall be responsible for any damage to utilities and structures and shall properly maintain the protection of same. The Contractor shall take all necessary precautions to avoid damage to the buildings or other structures while installing planting. The use of equipment within five feet of the building to move plants or materials shall be approved by the Landscape Architect prior to its use. The Contractor shall be responsible for damage to buildings or other structures by his operations.

4.5 <u>CLEAN UP</u>

The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of the work, he shall remove all his waste material and rubbish from and about the project as well as all his tools, construction equipment, machinery and surplus materials, and shall clean all grass surfaces and leave the work "broom clean" or its equivalent. If the Contractor fails to clean up, the Owner may do so and the cost thereof shall be charged to the Contractor and deducted from his final

.6 PLANTING GENERAL

6.1 <u>Site Preparation</u>

Upon completion of rough grading by others and results of soil tests, unless deemed unnecessary by Landscape Architect, the entire planting area of site shall be thoroughly disced to the top three inches of existing soil. The soil surface shall be smoothed out and the area completely watered down.

4.6.2 Top

<u>Topsoil</u>

The topsoil used for work under this section shall be cleaned of stones, sticks, plants and other foreign materials before used to prepare planting soil.

Topsoil shall be a natural, fertile, friable loamy sand soil without admixture of subsoil and shall be clean and reasonably free of clay lumps, stones, stumps, roots or similar substances two or more inches in diameter, debris, or other objects which might be a hindrance to planting operation.

Topsoil shall be subject to approval of the Landscape Architect.

Soil shall be Ph value between 6.0 and 7.5 after the admixtures have been added.

4.6.3 <u>Commercial Fertilizers</u>

Fertilizer shall be commercial grade formula 6-6-6. 50% of the nitrogen shall be acid forming derived from natural organics and all potash shall be derived from sulphate forms. Fertilizers shall be a complete product complying with State and Federal laws. Fertilizers shall be in unopened containers which shall bear the manufacturer's guaranteed statement of analysis, or a manufacturer's certificate of compliance covering analysis. Copies of the Guaranteed Statement of Analysis shall be furnished to the Landscape Architect prior to commencement of work. The following minor elements shall be included: 0.2% ZnO, 0.25% CuO, 4.0% MgO, 2.0% Fe2O3, 0.5% MnO, 0.1% B2O3

Chlorine shall constitute less than 2% of the ingredients.

4.6.4 Plant Material

The words "Plant Materials" or "Plants" refer to and include trees, shrubs, groundcover, grass, or herbaceous materials.

Plant species shall conform to those indicated on the drawings and in the specifications in accordance with <u>Standardized Plant Names</u>, latest edition.

Plants shall be sound, healthy, vigorous, free from plant diseases, insect pests, or their eggs, and shall have healthy normal root systems. Plants shall be nursery grown stock material in containers or freshly dug, balled and burlapped plants. Sabal palms are not required to be B & B, but shall have a root ball meeting required standards.

Plants shall not be pruned prior to delivery except as authorized by the Landscape Architect.

All plants shall have been transplanted or root pruned at least once in the twelve (12) months previous to contract date. Root bound container plants will not be accepted.

Immediately upon selection and approval by Landscape Architect, all major trees shall be completely root pruned at the nursery site and held in that condition for a period of 45 - 60 days. Plants shall not be further dug or transported without approval of Landscape Architect. If standard nursery practice dictates the stripping of foliage of certain species, removal of not more than one-half of foliage shall be conducted at time of root pruning. With the exception of palms, collected plants shall not be used unless authorized in writing by the Landscape Architect.

All plant material not otherwise specified as being Florida Fancy or Specimen shall be Florida No. 1 or better quality graded in accordance with <u>Grades and Standards for Nursery Plants</u> published by the State of Florida, Department of Agriculture. Plants judged to be not in accordance with said standards will be rejected. Caliper measurement, height measurement, height relation to caliper, spread, bare root and ball dimensions, number of canes, types of vines, and groundcovers, etc. shall conform to the applicable standards given in <u>USA Standard For Nursery Stock 260.1</u>, sponsored by the "American Association of Nurserymen, Inc."

Substitutions in plant species or sizes shall be made only after written authorization by the Landscape Architect. Any materials and/or work may be rejected if, in the opinion of the Landscape Architect, such work does not meet the requirements of the Specifications. All rejected materials shall be promptly removed from the site by the Contractor at his expense.

Specimen means an exceptional heavy, symmetrical, tightly knit plant, so trained or favored in its development that its appearance is unquestionably and outstandingly superior in form, number of branches, compactness and symmetry.

Plants used where symmetry is required shall be matched as nearly as possible. The Landscape Architect will inspect these plants in the nursery for tentative approval when matched plants are essential for aesthetic effects.

All plants so indicated on plant list shall be field selected by Landscape Architect at the nursery. When such plants have been located by Contractor, the Landscape Architect shall be notified and the required nursery inspections shall be scheduled.

All plant varieties specified as "patented", "registered", or "trade marked", shall have appropriate identification tag attached to each plant. Tags shall not be removed until inspected and approved by the Landscape Architect.

For any plant variety so indicated on plant list, Contractor shall submit one sample of the plant to the Landscape Architect for approval prior to transporting the total of such plants to the site.

PLANTING, GRASS

4.7.1 <u>§</u>

Sod shall be as specified on the plans (if applicable).

All sod shall be of firm texture having a compacted growth and good root development. Sod shall contain no weeds or objectionable vegetation, and be free from fungus, vermin, and diseases. Before being cut and lifted, sod shall be mowed three times with the final mowing not more than a week before cutting into uniform dimensions. Certification as to type of grass and other requirements shall be made and submitted to the Landscape Architect.

4.8 PLANTING SOIL

4.8.1 <u>General Site Plantings</u>

Soil used for backfilling around all trees, shrubs and palms shall be as shown on the planting details.

Planting soil backfill mixture shall be prepared using 2/3 approved topsoil from on or off of the site and 1/3 approved Florida Peat. To this mixture add 10 pounds of 6-6-6 fertilizer and 8 oz. of superabsorbent per cubic yard. Thoroughly mix all parts prior to placing in plant pits.

Contractor shall be responsible for adjusting nutrient levels and relative acidity in individual planting areas to properly meet growing requirements of specific plant types. All planting areas are subject to future soil testing to insure that proper cultural conditions have been provided.

4.8.2 All planting soil mixtures required for plant installations shall be considered to be a part of each plant, and the cost thereof shall be included in the unit installed price of individual plants.

4.9 MISCELLANEOUS MATERIALS

4.9.1 <u>Mulch</u>

Mulch for tree wells and planting beds shall be pine straw installed as noted in the plant schedule.

4.9.2 <u>Peat Moss</u>

Peat moss shall be imported Sphagnum peat or an approved equal.(if applicable.

4.9.3 Florida Peat

Peat shall be Florida peat specifically pulverized and processed for horticultural use and subject to approval of the Landscape Architect.

Guy Wires

Guys shall be as noted in planting details.

4.9.5 <u>Guy Hoses</u>

4.9.4

Hose for protection of trees from damage by guy wires shall be rubber garden hose in good condition

4.9.6 <u>Soil Amendments/Lime</u>

or equal.

Soil amendments shall be approved for horticultural use prior to applying or mixing with soil mixes.

4.10 SHIPMENT AND DELIVERY

- 4.10.1 Contractor shall notify Owner/Landscape Architect, in advance, when plant material is to be
- Plant material shall be protected from weather, adequately packed to prevent breakage and drying out during transit.
- 0.3 Plants shall not be planted on the job until they have been inspected at receiving site, and approved by Owners representative or Landscape Architect.

Legible tags will be attached to at least one plant of each species. Packages, boxes, or bunches of plants will be identified with a similar tag attached. Plants which do not meet specifications for quality herein stated, or plants that show improper handling, or arrive on site in an unsatisfactory condition shall be rejected. Rejected plants shall immediately be removed, disposed of by Contractor, and approved nursery stock of like variety, size, age shall be replaced by him without additional compensation.

4.10.4 Final acceptance of plant material will be given only after material is planted and after meeting requirements prescribed herein.

4.11 **GUYING AND STAKING**

It shall be the Contractor's responsibility to prevent all plants and trees from falling or being blown over, to restraighten and replant all plants which lean or fall and to replace all plants which are damaged.

The Contractor shall promptly guy or stake or otherwise insure proper support to all plant materials in the event winds may exceed 40 miles per hour. Plants blown over by sustained high winds of up to 65 miles per hour shall not be cause for additional expense to the Owner, but shall be the responsibility of the Contractor. Any such damaged plants shall be replaced by the Contractor at no additional expense to the Owner. Contractor shall not be responsible for damage due to sustained winds in excess of 65 miles per hour (i.e. Tropical storm).

When guying and staking are provided by the Contractor, it shall be in accordance with local standard acceptable nursery practice, and as specified in Contract Documents and plans.

4.12 PLANTING OF LAWN AREA

4.12.1 Sod

Under this section of these specifications, the Contractor shall perform the preparation of the areas to be sodded as hereinafter specified.

The Contractor shall smooth out all areas to establish an even grade for sod planting all areas.

Topsoil shall be evenly worked to a depth of 4" taking care to remove all rocks or other foreign material 1" or greater in all areas to be sodded.

Surface shall be rolled with a hand roller weighing not more than 100 pounds per foot of width. During the rolling, all depressions caused by settlement or rolling shall be filled with additional topsoil and the surface shall be regraded and rolled until presenting a smooth and even finish. All weeds shall be removed from topsoil prior to sodding.

Treatment of weeds with a herbicide shall not constitute removal unless performed 7 days prior to sodding and in accordance with manufacturer's instructions.

Water to a depth of 6" before planting. Sod panels shall be laid tightly together so as to make a solid lawn area. Immediately following sod laying the lawn areas shall be rolled with a lawn roller customarily used for such purposes and then thoroughly watered immediately. During delivery, prior to, and during the planting of the lawn area, the sod panels shall at all times be protected from excessive exposure of the roots to the sun. All sod shall be staked during construction and planting so as not to be damaged by sweating or excessive heat and moisture.

- Top of sod shall be even with all abutting curbs and walks after placing and rolling.
- Sod shall be thoroughly watered to prevent fertilizer from burning sod and to insure good healthy growth of

4.12.2 <u>Sodding of Sports Fields</u>

Under this section of these specifications, the Contractor shall perform the preparation of the sport field areas to be sodded with certified Bermuda 419.

The Contractor shall apply a two inch layer of loamy sand topsoil to establish final grade. Topsoil shall be fumigated with "vapam" two weeks prior to sodding to eliminate weeds and other undesirable contaminants.

Remove all rock and other foreign material 1" or greater in any dimension from the topsoil to a depth of 4" prior to installing the required 2" layer of topsoil.

Sod shall be placed, rolled, fertilized, and watered in accordance with Section 4.12.1 above.

4.12.3 <u>Survival</u>

Satisfactory survival of sod will be evidenced when the grass produces new leaf growth.

4.12.4 Sport Field Clay

Clay for ball fields shall be supplied and installed by Manatee County Parks and Recreation.

4.13 PLANTING OF TREES AND SHRUBS

- 4.13.1 Except as otherwise specified, the Contractor's work shall conform to accepted horticultural practices as used in the trade.
- 4.13.2 Plants shall be protected upon arrival at the site by being thoroughly watered and properly maintained until planted. Plants shall not remain unprotected for a period exceeding 24 hours. At all times workmanlike methods customarily in good horticultural practice shall be exercised.
- 4.13.3 Before digging of holes or beds, the location and/or arrangement of the planting shall be staked by the

 Contractor and approved by the Landscape Architect except where otherwise stated on the contract drawings.
- 4.13.4 The existence and location of underground utilities, if shown on the plans, are not guaranteed and shall be investigated and verified in the field by the Contractor before starting work. Excavation in the vicinity of existing structures and utilities shall be carefully done. The Contractor shall be held responsible for any damage to, and for maintenance and protection of, existing utilities and structures.
- 4.13.5 All tree pits shall be excavated to sizes and depth in accordance with the <u>USDA Standard For Nursery Stock</u>

 260.1 unless shown otherwise on the drawings and backfilled with the prepared planting soil mixture as specified under Section 4.8 of these specifications. The Contractor shall test fill all tree pits with water before planting to assure proper drainage percolation is available. Pits which are found not to be adequately draining shall be excavated to a depth sufficient for drainage and backfilled with

coarse sand. No allowances will be made for plants lost due to improper drainage.

- 4.13.6 All shrub, groundcover beds and landscape islands shall be excavated or amended as a unified area to a depth of 6" and backfilled with specified planting soil mixture. Individual plant pits will not be acceptable in bedded areas.
- 4.13.7 The plants shall be set on prepared planting soil backfill brought to a height permitting planting at the same depth the plants grew in the nursery. Upright plants shall be kept in a vertical position. All plants shall be handled by earth ball only. Handling by the plant itself will be cause for rejection of such

- 4.13.8 After placing the plant in the pit, the backfill shall be watered and firmly tamped to insure backfill mixture in and about all the roots. All tamping shall be such that no plants will settle lower than the depth above specified.
- 4.13.9 After filling half way on the earth ball, the burlap and any wire or rope, if applicable, shall be loosened and laid back off the top of the ball, or if too bulky cut away and removed, after which the balance of the pit shall be backfilled and tamped.
- 4.13.10 All plants shall be thoroughly watered at the time of planting and kept adequately watered until time of acceptance. The Contractor shall provide the means where water lines are not available.
- 4.13.11 Mulch shall be placed between and around specified trees and all shrubs within 24 hours after any planting and shall be indicated or noted on drawings. For individual plants, the mulch shall be spread to cover the saucer area. When in place, the mulch is to be watered thoroughly. All weeds shall be removed from the planting area prior to installation of mulch. Treatment of weeds with a herbicide shall not constitute removal.
- 4.13.12 Pruning shall be done at the time of planting and with due regard to the natural form and growth characteristics of each species. Method and amount of pruning shall be determined by the Landscape Architect. Trees with pruned terminal leaders will not be accepted.
- 4.13.13 On trees, after filling half-way on the earth ball, a minimum three (3) ounces of superabsorbent per 2" caliper shall be added to all tree pits around the earth ball and watered in. The contractor shall excavate a maximum of five (5) separate trees at the request of the Landscape Architect for the purpose of verification of use of superabsorbent and other soil amendments. If visible evidence of proper use of the amendments are not found, the contractor shall immediately excavate to a depth of 12" around all trees already in place, add the proper amounts of Terra-Sorb AG superabsorbent and other amendments and water them in thoroughly prior to backfilling. There will be no exceptions. If a follow-up inspection reveals no evidence that the soil amendments have been installed, the contractor may be fined up to \$25.00 per tree installed.
- 4.13.14 During the course of planting, excess and waste materials shall be removed daily. All reasonable precautions shall be taken to avoid damage to all structures and plants. When planting in an area that has been completed, the area shall be thoroughly cleaned up.

4.14 MAINTENANCE PRIOR TO INSPECTION FOR ACCEPTANCE

4.14.1 Maintenance shall begin immediately after each portion of seeding and sodding is executed and each plant is planted and shall continue in accordance with the following requirements.

a) <u>Sodded And Seeded Areas</u>

The Contractor shall be held responsible for maintenance of sodding and seeded area, including watering, weeding, mowing, and replanting as necessary to establish a uniform stand of the specified grasses and until acceptance. After the grass has started, all areas and parts of areas which fail to show a uniform stand of grass, for any reason whatsoever, shall be replanted, repeatedly if necessary, until all sodded areas are covered with satisfactory growth of grass and seeded areas show healthy, vigorous growth.

b) Shrub, Groundcover & Annual Beds

Plant maintenance shall include thorough watering, pruning, weeding, cultivating, mulching, tightening and repairing of guys, replacement of sick or dead plants, resetting plants to proper grades or upright position, and restoration of the planting saucer, and all other care needed for proper growth of the plants. If planting is done after lawn preparation, proper protection of lawn areas shall be provided and any damage resulting from planting operations repaired promptly.

Spraying And Dusting

During the maintenance period and until the issuance of certificate of final acceptance, the Contractor shall do all seasonal spraying and/or dusting of trees & shrubs. The materials and methods shall be in accordance with highest standard nursery practices and as recommended by the County Agent.

d) <u>Protection</u>

Newly installed planting areas and trees shall be protected against accidental trespass and damage. If any plants become damaged or injured they shall be treated or replaced as directed. No work shall be done within or over planting areas or adjacent to plants without proper safeguards and protection.

e) Damage resulting from erosion, gullies, washouts, or other causes, shall be repaired by filling with topsoil, tamping, refertilizing, reseeding and/or resodding by the Contractor at his expense if such damage occurs prior to final acceptance by the Landscape Architect.

4.15 **INSPECTION FOR ACCEPTANCE**

- Upon completion of all planting, an inspection for acceptance of work will be held. The Contractor shall notify the Landscape Architect for scheduling of the inspection ten (10) days prior to the anticipated inspection date. The Landscape Architect will decide if work is ready for inspection and will establish the time and date of inspection and notify all concerned parties to be present.
- 4.15.2 At the time of the acceptance inspection, if the materials are in whole or substantially acceptable a written notice will be given by the Landscape Architect to the Contractor that the final maintenance period and the guarantee period begins from the date of inspection.

4.16 MAINTENANCE AFTER INSPECTION FOR ACCEPTANCE

- I.16.1 The Contractor shall maintain all grass areas and plant materials for a period of thirty (30) calendar days from the date of acceptance.
- 4.16.2 All maintenance outlined under Paragraph 4.14 above shall be performed during this period.
 4.16.3 Prior to the expiration of the maintenance period, Contractor shall furnish to the Owner a
- 4.16.4 Inspection of the landscape work to determine completion of contract work, exclusive of the possible replacement of plants, will be made by the Landscape Architect at the conclusion of

the Contractor at least 10 days prior to the anticipated date.

4.16.5 <u>Acceptance</u>

After inspection, the Contractor will be notified in writing by the Landscape Architect of acceptance of all work of this section exclusive of the possible replacement of plants subject to guarantee or, if there are any deficiencies of the requirements for the completion of the work. Lawn maintenance or other work remaining to be done shall be subject to reinspection before acceptance.

respects to the specifications for new plants and shall be planted in the same manner.

the 30 day maintenance period upon written notice requesting such inspection submitted by

4.16.6 In case of substantial number of plants are sickly or dead at the time of inspection, acceptance will not be granted and the Contractor's responsibility for maintenance of all the plants shall be extended until replacements are made. Replacements shall conform in all

4.17 PLANT GUARANTEE AND REPLACEMENT

4.17.1 <u>Guarantee</u>

Plants shall be guaranteed for a period of one (1) year after the date of inspection for acceptance under Paragraph 4.15 above, and shall be alive and in satisfactory growth at the end of the guarantee period.

4.17.2 Replacement

Until the end of the guarantee period, inspection may be made by the Landscape Architect. Any plant required under this contract that is dead or not in satisfactory growth, as determined by the Landscape Architect, shall be removed from the site; these and any p

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SIGNATURE



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drawn: RCG checked: RCG date: 11.12.2010

comm. no.: 0920818

LANDSCAPE

L103

SECTION 3 - TECHNICAL SPECIFICATIONS

IRRIGATION

CONDITIONS:

- 1.1 The Contractor shall be responsible for adjusting head location, type, size and any other system components to comply with the requirements of landscaping as actually installed. Such adjustments shall be made at no cost to the Owner except for, when authorized in writing, such adjustments will be compensated at unit prices indicated in the proposal.
- 1.2 The Contractor shall be responsible for constructing the system in complete accordance with all local codes, ordinances, and laws. Any modifications made to conform with said codes, laws, and ordinances shall be completed at the Contractor's expense with no additional compensation allowed.

2. **SAFETY PROVISIONS:**

2.1 It shall be the responsibility of the Contractor to protect all persons from injury and to avoid property damage. Adequate warning devices shall be placed and maintained during the progress of the work. It shall be the Contractor's responsibility to conform to all local, state, and federal safety laws and codes including the Federal Occupational Safety and Health Act (O.S.H.A.).

EXISTING UTILITIES:

- 3.1 Temporary support, adequate protection and maintenance of all underground and surface utilities, structures, drains, sewers and other obstructions encountered in the progress of the work shall be furnished by the Contractor solely at his expense.
- 3.2 Where the grade or alignment of the pipe is obstructed by existing utility structures such as conduit, ducts, pipe branch connections to sewer mains, main drains, water services, etc., the obstruction shall be permanently supported, relocated, removed, or reconstructed by the Contractor in cooperation with the Owner of such utility. No deviation from the required line or grade shall be made without the written direction of the Landscape Architect.
- 3.3 Thrust blocking shall be installed for all pipe line fittings, bends and valves installed with compression "Ring-Tite" joints. The minimum thrust block area shall be one (1) square foot in the thrust-absorbing direction, with the minimum total volume of blocking to be one (1) cubic foot of 2,000 p.s.i. concrete. Thrust blocking shall also be utilized for all main line bends or other bends or fittings where prudent.

4. <u>PIPE INSTALLATION</u>:

- 4.1 In all cases, the installation of the irrigation system piping shall strictly conform to the manufacturer's recommendations.
- 4.1.1 Excavation shall be unclassified and shall include all materials whatsoever encountered in the excavation of trenches for pipe installation. The trench shall be of sufficient width and depth for installation of the pipe as indicated herein. The Contractor shall cause minimum disturbance to all existing conditions wherever possible; the Contractor shall bore under existing pavement and sidewalks rather than cut and restore. No pavement shall be cut without the Owner's written permission.
- 4.1.2 Pipe shall be delivered and stored on the jobsite with suitable protection against any damage to pipe and fittings.
- 4.1.3 The pipe and fittings shall be carefully inspected before installation in the trench. All rocks and unsuitable bearing material shall be made in strict accordance with the manufacturer's recommendations.
 - a. Compression Joints: The bell end shall be dry and shall have the proper compression ring installed without lubricant and in the proper position. The spigot end shall be clean and lubricated with the recommended lubricant. The spigot end shall then be pushed 'home' as indicated when the manufacturer's reference mark is flush with the end of the bell. The completed joint will then be carefully laid in the
 - b. Solvent welded joints shall be made only on clean, dry, square cut, smooth pipe sections. The fitting shall be 'dry' tested for proper size before solvent is applied. The assembly shall proceed in strict accordance with recommended procedures furnished by the manufacturer.
- 4.1.4 Pipe trench depths shall be as follows:

- 4.2 Gate Valves 2-1/2" or less in size shall be as specified on the plans.
- 4.3 Vacuum Breakers shall be as required by local codes.
- 4.4 Automatic solenoid control valves shall be as specified on the plans. The valve shall have a slow closing feature, and manual bleed with pet cock for manual operation installed. All valves shall have a manual flow control adjustment.
- 4.5 All automatic control valves shall be installed as shown on the detail for such valves and per manufacturer's specification. Once installed and wired to the controller, the Contractor shall adjust the flow controller on each valve to provide the proper flow rate and pressure on the downstream side of each valve. The control valve for mist sprinkler head sections shall be adjusted to provide approximately 30 p.s.i. dynamic pressure downstream with all heads operating. The solenoid control valve for rotary spray head sections shall be adjusted to provide approximately 30 p.s.i. dynamic pressure downstream with all heads operating.

SPRINKLER HEADS:

- 5.1 All sprinkler heads shall be furnished, installed, and operated in accordance with the plans and these Specifications. Installation shall comply with details set out herein. The Contractor shall guarantee all sprinklers and components for not less than one (1) year from installation warranting against all defects in normal material or workmanship.
- 5.2 The Contractor shall be responsible for the exact location of all sprinkler heads, acknowledging that the plans are schematic in nature. The Contractor shall accordingly place all sprinkler heads, adjust all nozzles, spray patterns and make whatever other adjustments that may be required to give the landscaped areas full, complete and proper coverage and distributions. The Contractor shall make all such adjustments and additions solely at his expense.
- 5.2.1 Pop-up Spray heads shall be as shown on the plans. Nozzle shall automatically rise 4" for operation, and shall self-retract. Construction shall be entirely of non-corroding materials, and shall be suitable for operations
- 5.2.2 Controllers shall be contained in lockable cabinets and located on structures as directed by Architect.
- 5.3 Control wiring shall be as specified by controller manufacturer. The wiring shall be installed in accordance with these plans and the manufacturer's recommendations
- 5.4 All controllers shall include a provision for system override by automatic moisture sensing devices.

approval. Initial station tuning shall be in accordance with the Landscape Architect's instructions.

5.5 All valve programming shall exactly follow the valve sequence as indicated on the plans. No deviation shall be made without the Landscape Architect's

6. OTHER IRRIGATION EQUIPMENT:

- 6.1 The Contractor shall furnish and install all other irrigation equipment called for herein and on the plans in complete accordance with these specifications and details shown on the plans.
- 6.2 Valves, including remote control valves, manual control valves, gate valves, globe valves and pressure reducing valves shall be installed in a valve access
- 6.3 At the end of the test period, the piping system shall be "blown-off" at the point most distant from the test pump.
 6.4 The acceptance of a piping section because of its passing pressure and leakage tests in no way relieves the Contractor of his responsibility for the piping. At any time during the construction or the warranty period, the Landscape Architect or Owner may order subsequent tests. Such tests and any repairs required shall be solely at the expense of the Contractor.
- As an exception to the above testing requirements, all constant pressure main lines upstream from automatic control valves including pump station shall be pressure tested at 125 p.s.i. and shall be allowed leakage as follows:

Allowable = L= NDP1/2 Leakage 3700 Where L= Gallons per hour N= Number of joints in test main D= Pipe diameter (nominal)

P= Average test pressure

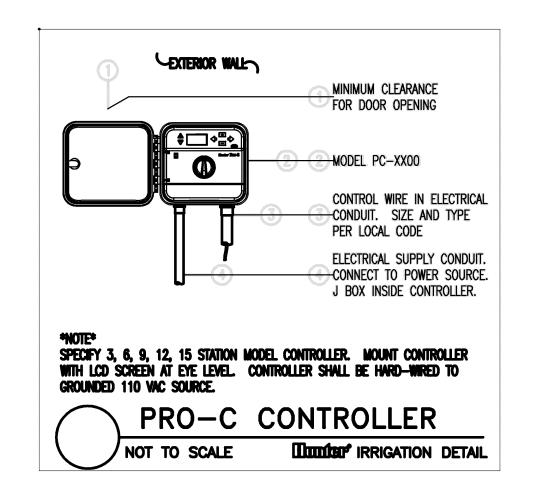
- 6.5 Periodic inspections shall be scheduled by the Contractor as the work progresses. At such time the Landscape Architect shall inspect all work for complete conformance with these specifications. The Landscape Architect shall make any additional inspections that he may deem necessary.
- 6.6 Generally, inspections should be requested by the Contractor whenever any subsurface system is complete and ready for backfill, so that the Engineer may inspect completely that system without causing excavation of the system, which would be solely the expense of the Contractor.
- 6.7 Periodic inspections shall include the examination of sprinkler location placement and the conformance of such placement to the actual in-place landscaping requirements. Any relocation required will be ordered by the Landscape Architect and carried out by the Contractor at no additional costs.

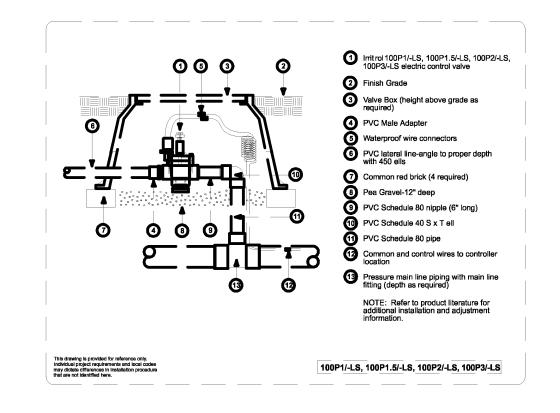
7. <u>AS-BUILT DRAWINGS</u>:

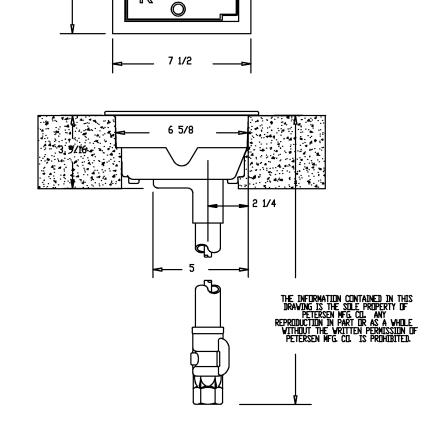
- 7.1 During the course of irrigation installation, Contractor shall prepare a reproducible set of as-built drawings for the entire system.
- 7.2 Said drawings shall be kept updated to show the accurate locations of all underground piping, valves, etc. that have been installed.
- 7.3 Upon completion of construction, the Contractor shall furnish the completed original drawings and one set of prints to the Owner, and one set of prints to the Landscape Architect.

. WARRANTY PERIOD:

8.1 The entire irrigation system shall be fully guaranteed for parts and labor by the irrigation contractor for a period of one year following final acceptance by the owner or Landscape Architect. This warranty shall be extended to cover individual irrigation components which have longer manufacturer's warranties.







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ROBERT C. GAUSE
LANDSCAPE ARCHITECT #000942

SIGNATURE



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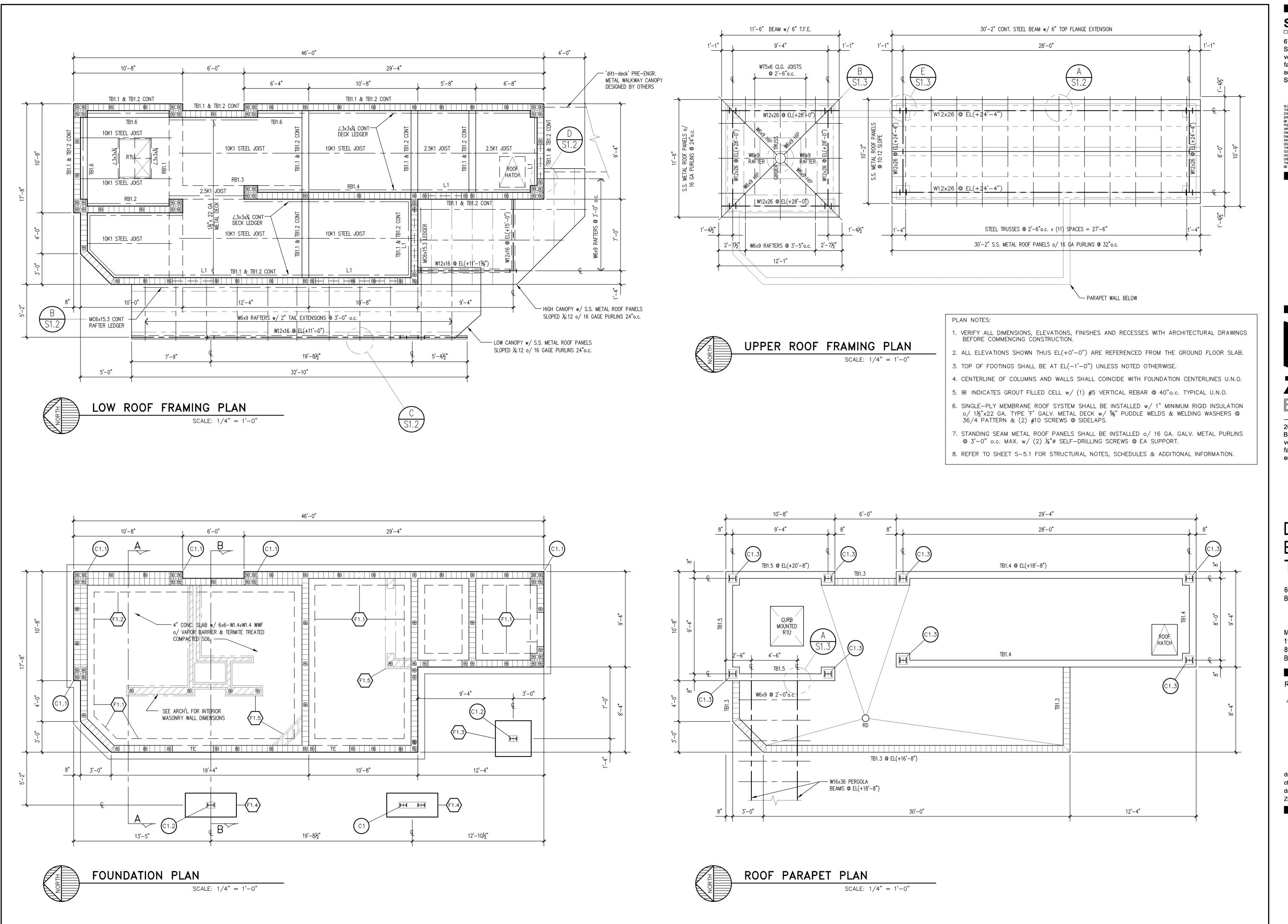
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drawn: RCG checked: RCG date: 11.12.2010

comm. no.: 0920818

LANDSCAPE AND IRRIGATION SPECIFICATION

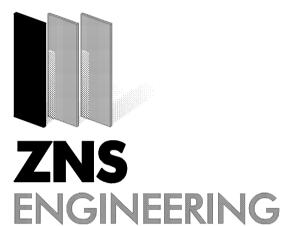
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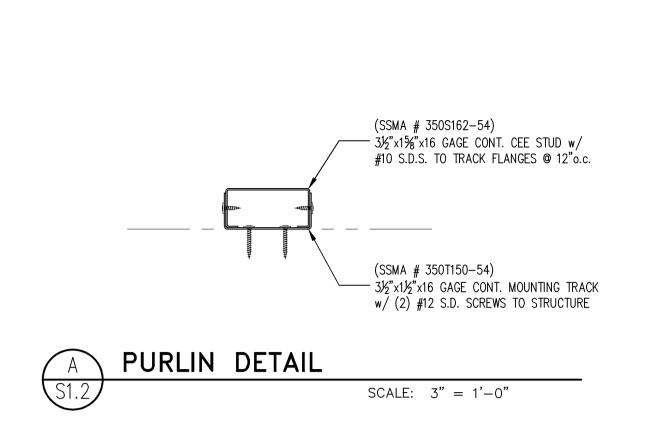
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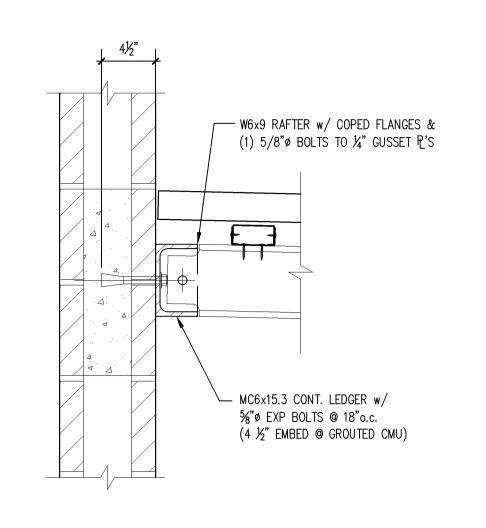
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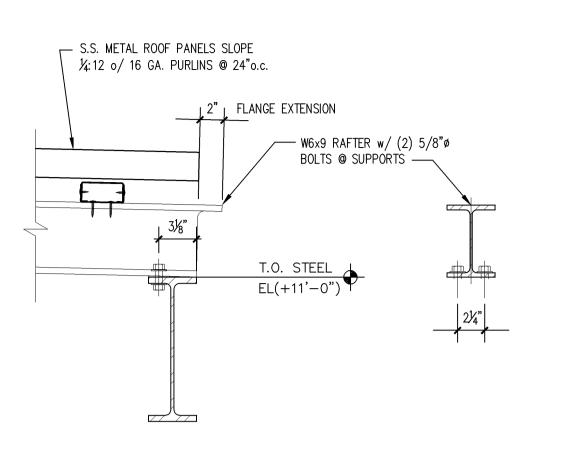
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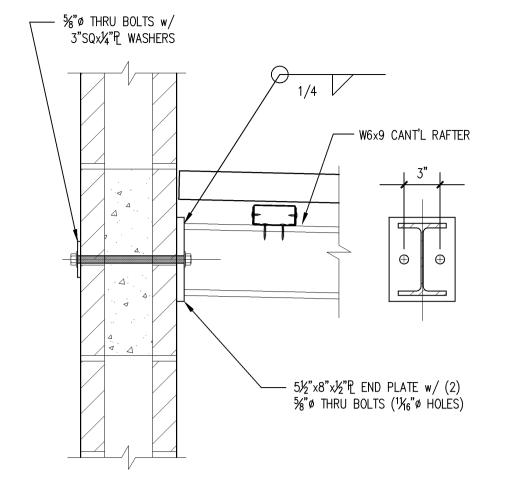
BUILDING STRUCTURE

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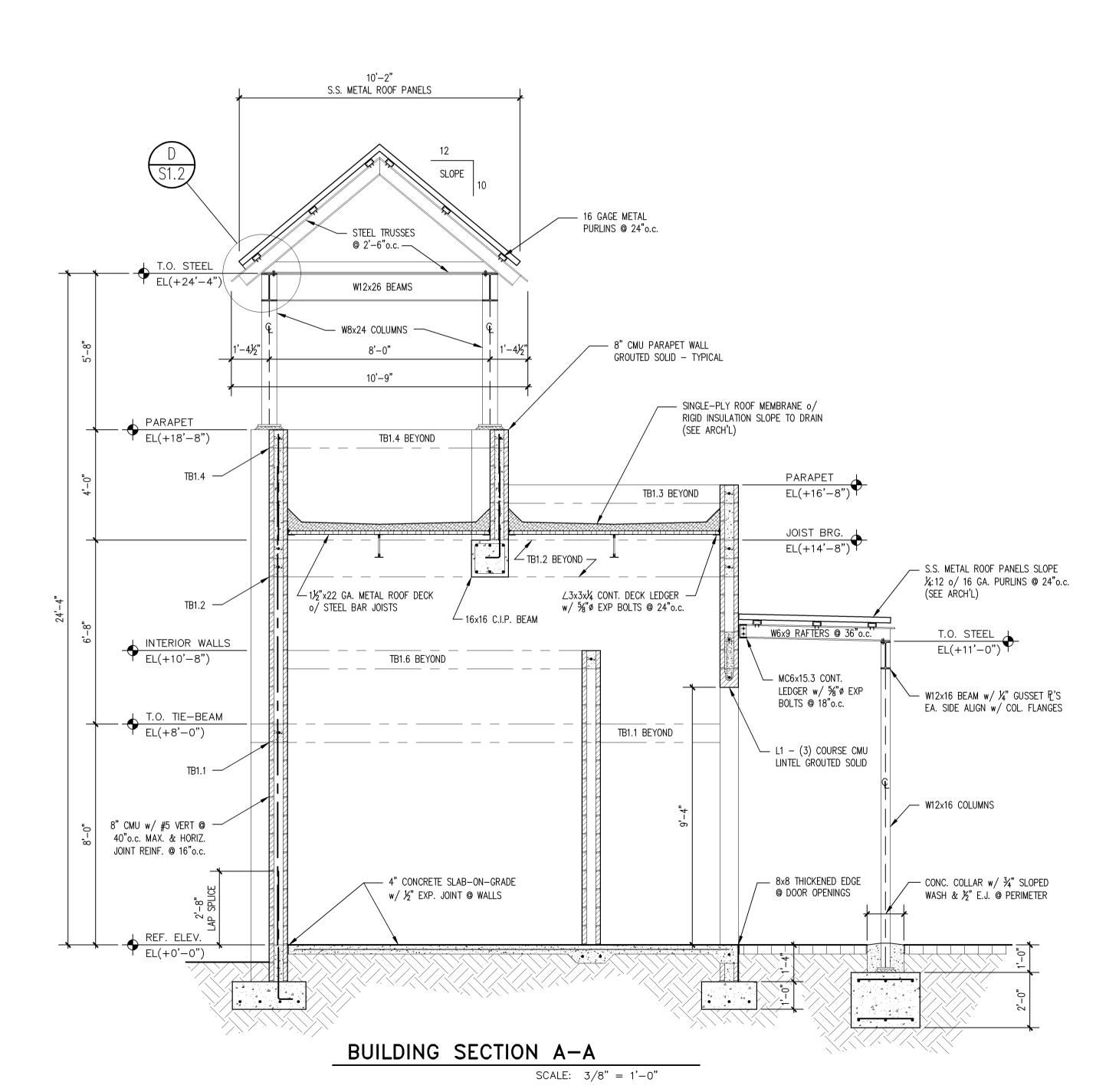


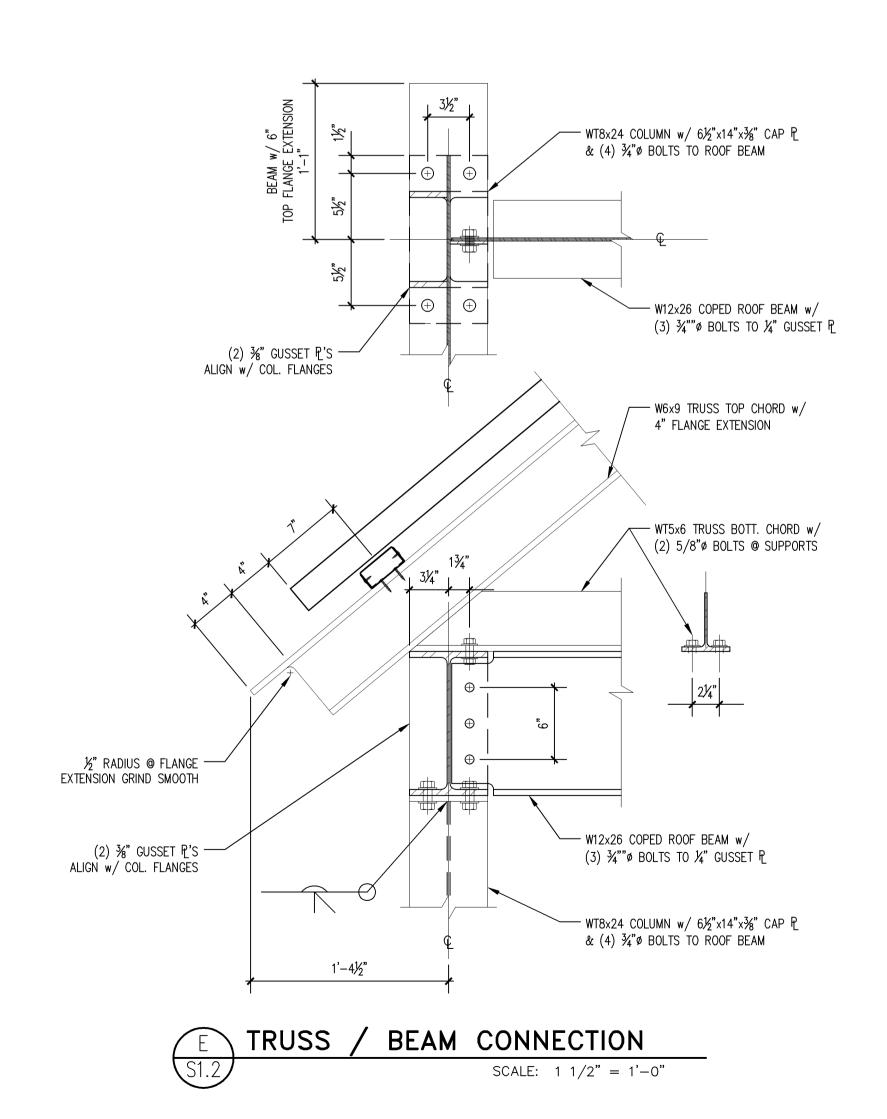








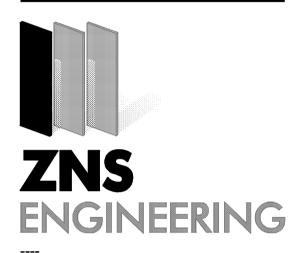




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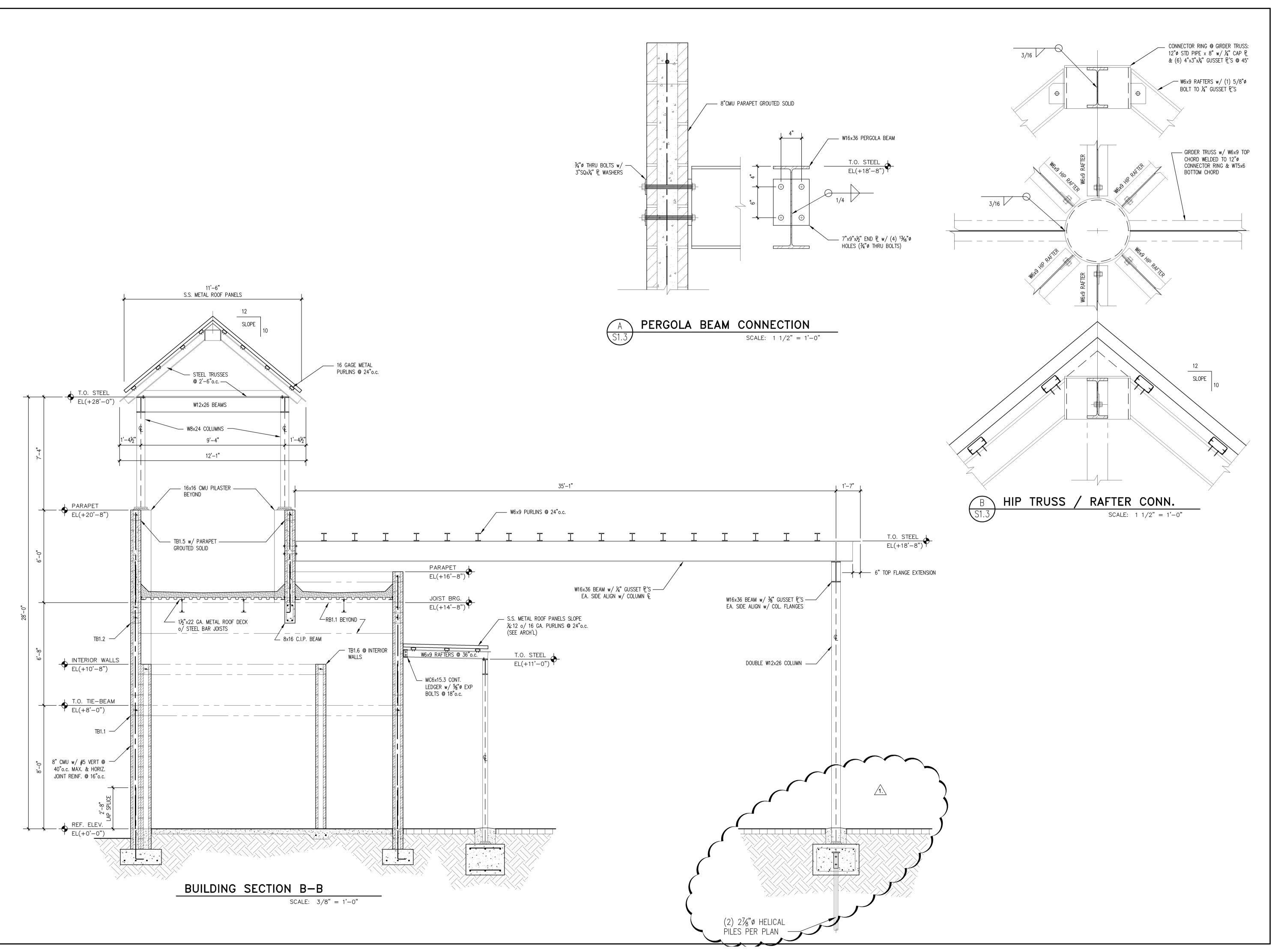
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drawn: GWW checked: date: 11.12.2010

> BUILDING STRUCTURE

ZNS file no.: 00-42278

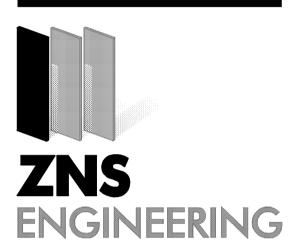
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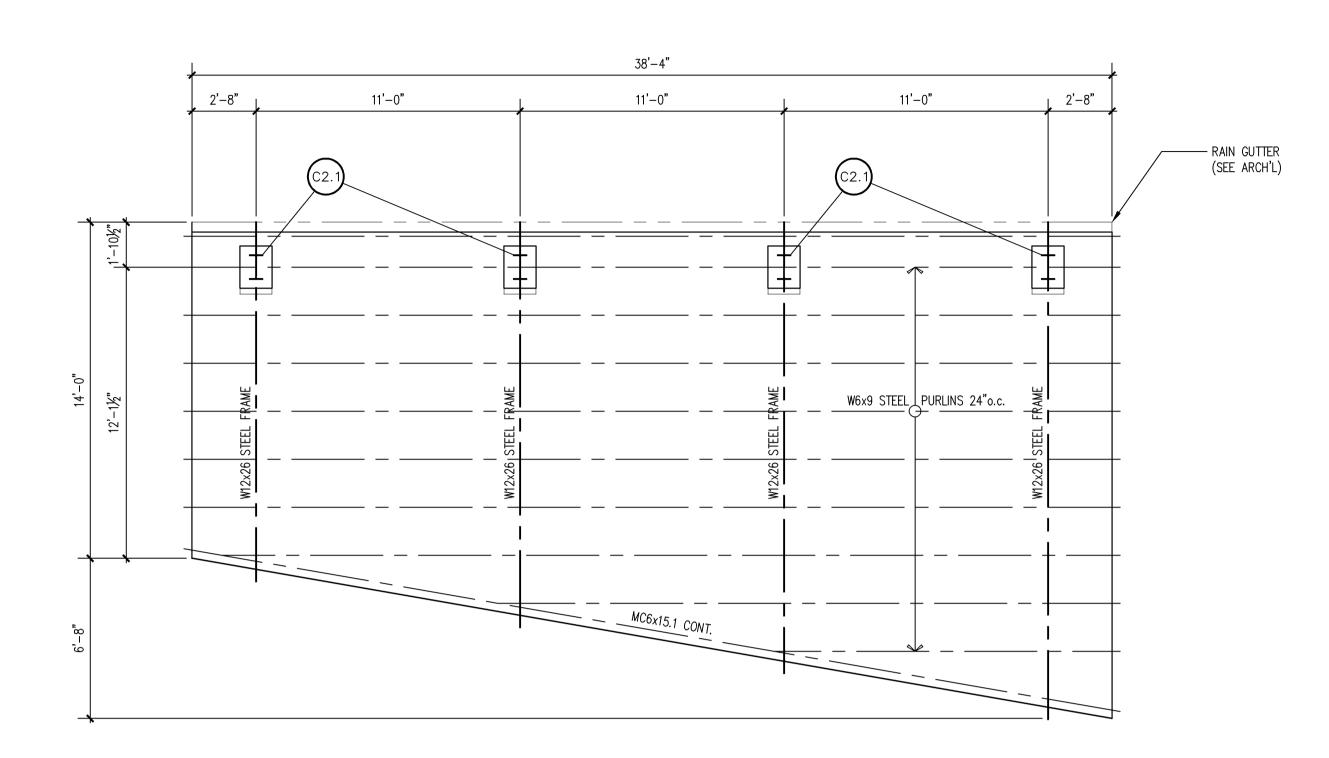
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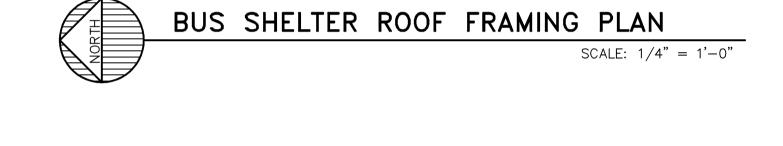
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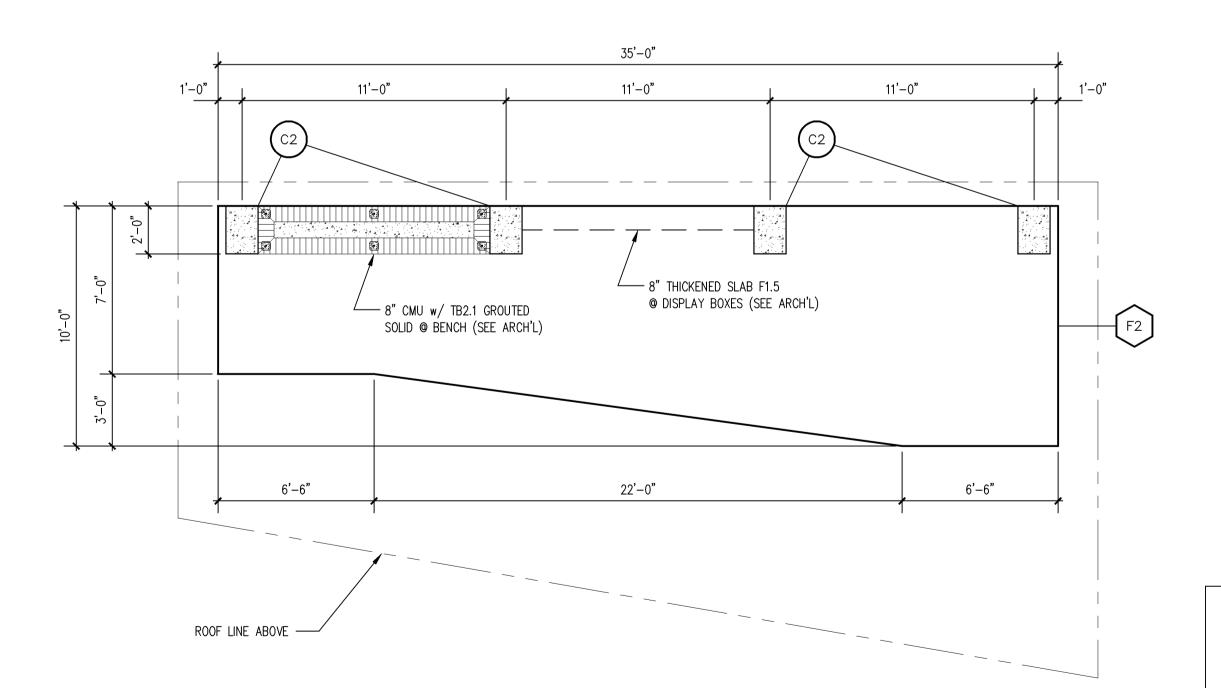
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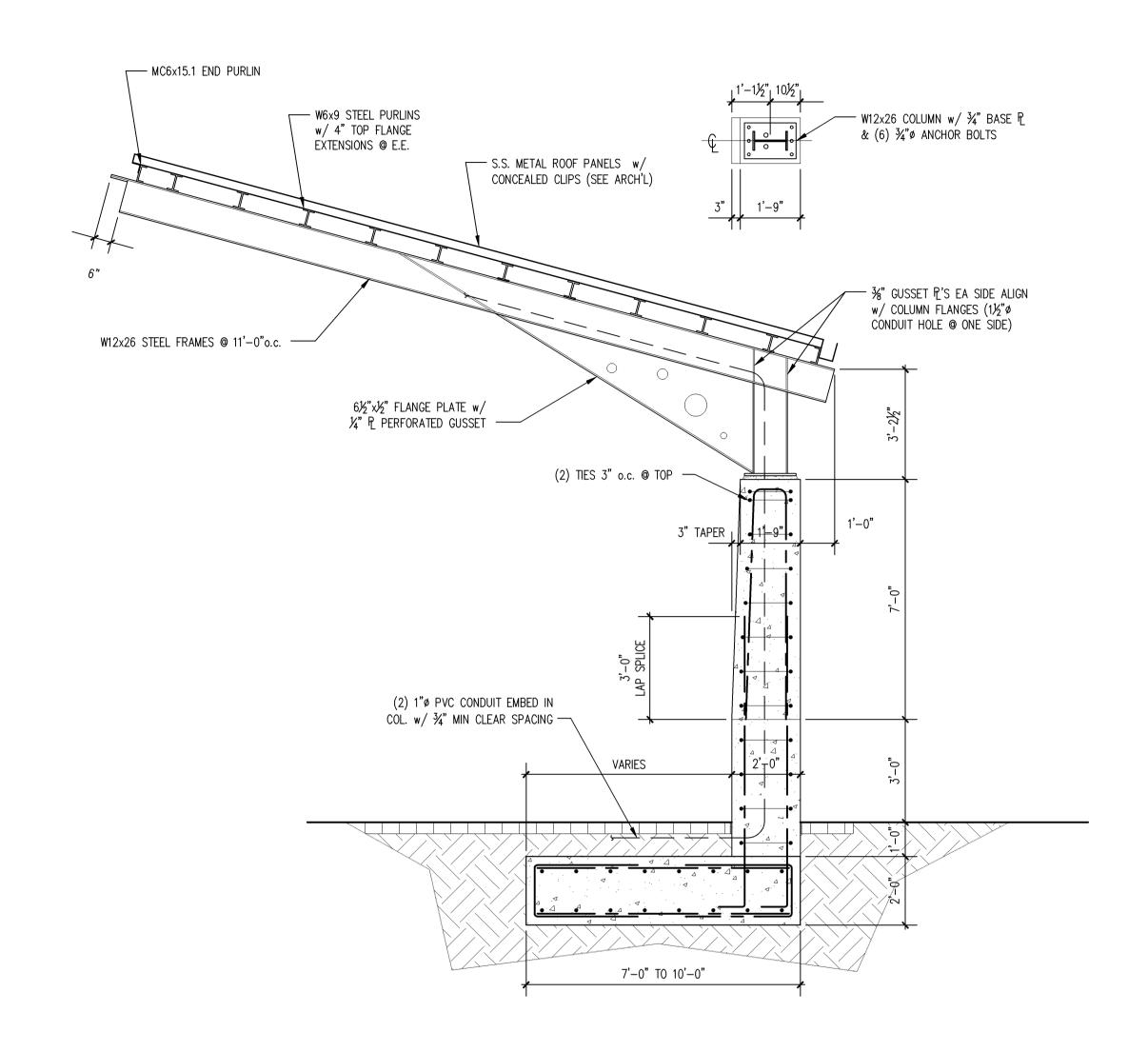
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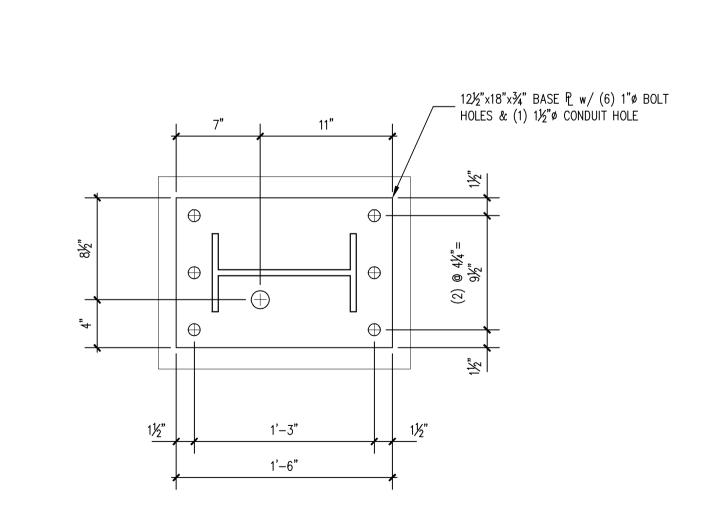








BUS SHELTER SECTION A—A SCALE: 3/8" = 1'-0"



PLAN NOTES:

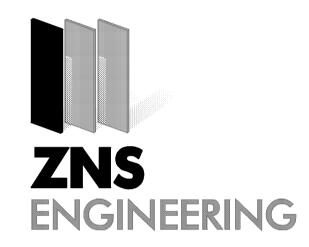
- 1. VERIFY ALL DIMENSIONS, ELEVATIONS, FINISHES AND RECESSES WITH ARCHITECTURAL DRAWINGS BEFORE COMMENCING CONSTRUCTION.
- 2. ALL ELEVATIONS SHOWN THUS EL(+0'-0") ARE REFERENCED FROM THE GROUND FLOOR SLAB.
- 3. TOP OF FOOTINGS SHALL BE AT EL(-1'-0") UNLESS NOTED OTHERWISE.
- 4. CENTERLINE OF COLUMNS AND WALLS SHALL COINCIDE WITH FOUNDATION CENTERLINES U.N.O.
- 5. 🕅 INDICATES GROUT FILLED CELL w/ (1) #5 VERTICAL REBAR @ 40"o.c. TYPICAL U.N.O.
- 6. ALL EXPOSED CONCRETE SHALL HAVE HAND RUBBED FINISH U.N.O. (SEE ARCH'L)
- 7. STANDING SEAM METAL ROOF PANELS SHALL BE INSTALLED o/ STEEL PURLINS @ 2'-0" o.c. w/ (2) 1/4" Ø SELF-DRILLING SCREWS @ EA SUPPORT.
- 8. REFER TO SHEET S-5.1 FOR STRUCTURAL NOTES, SCHEDULES & ADDITIONAL INFORMATION.



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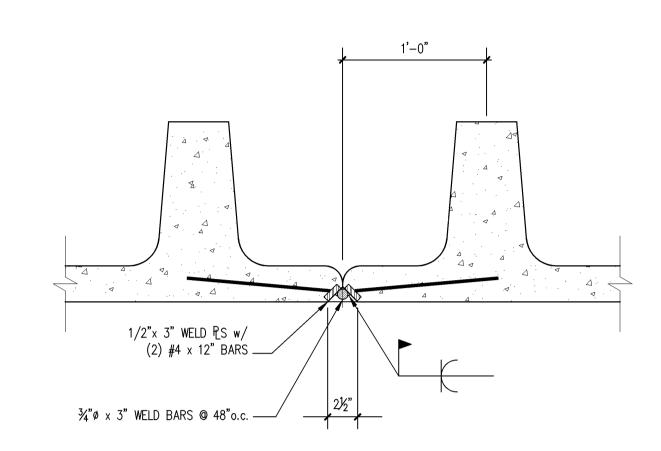
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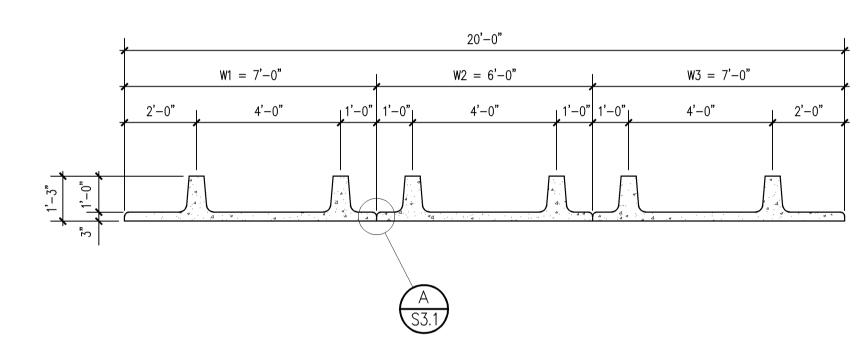
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BUS SHELTER STRUCTURE

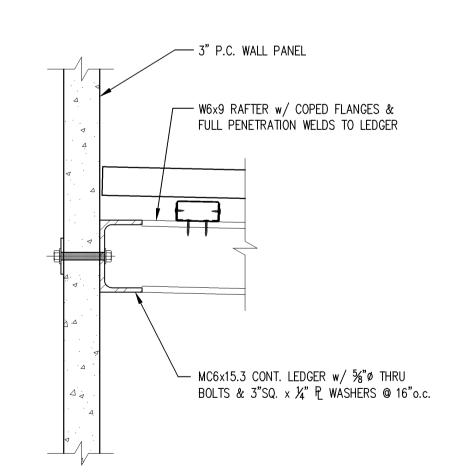
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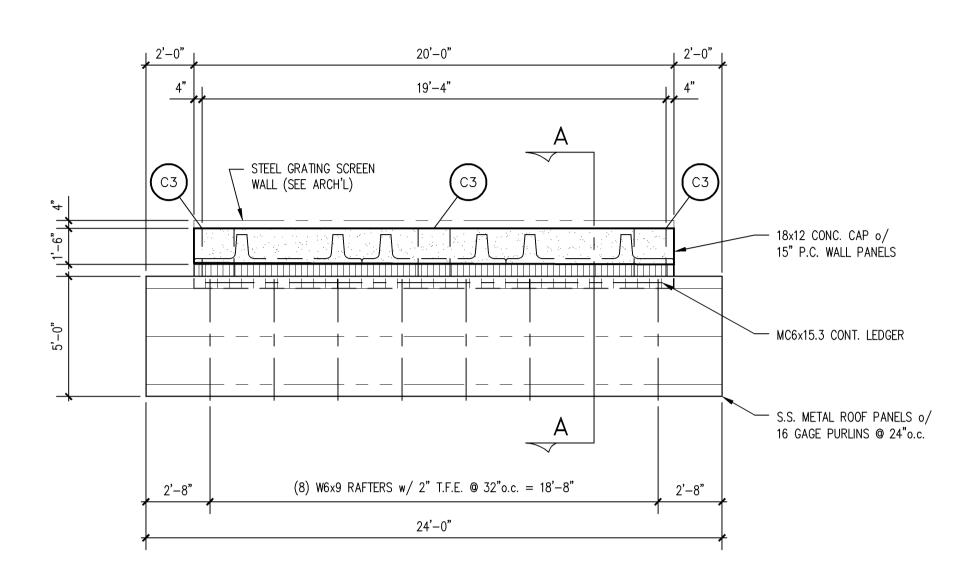




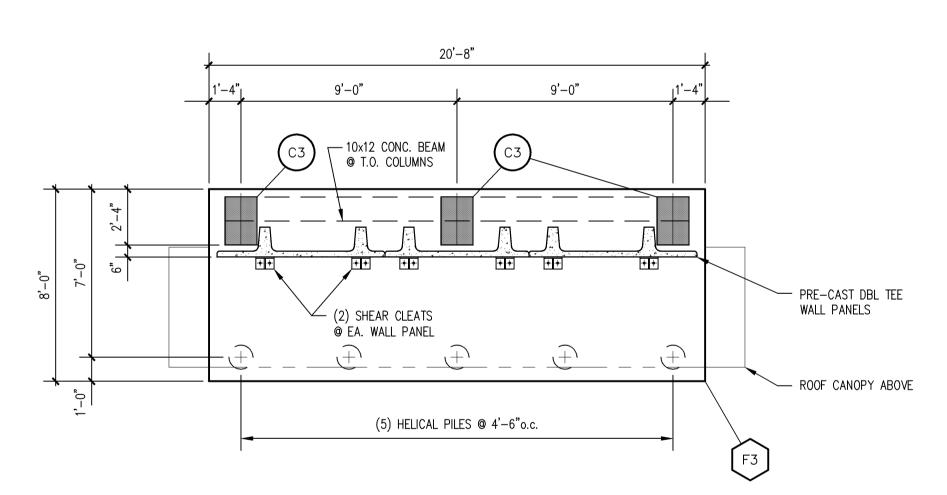


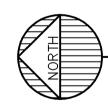










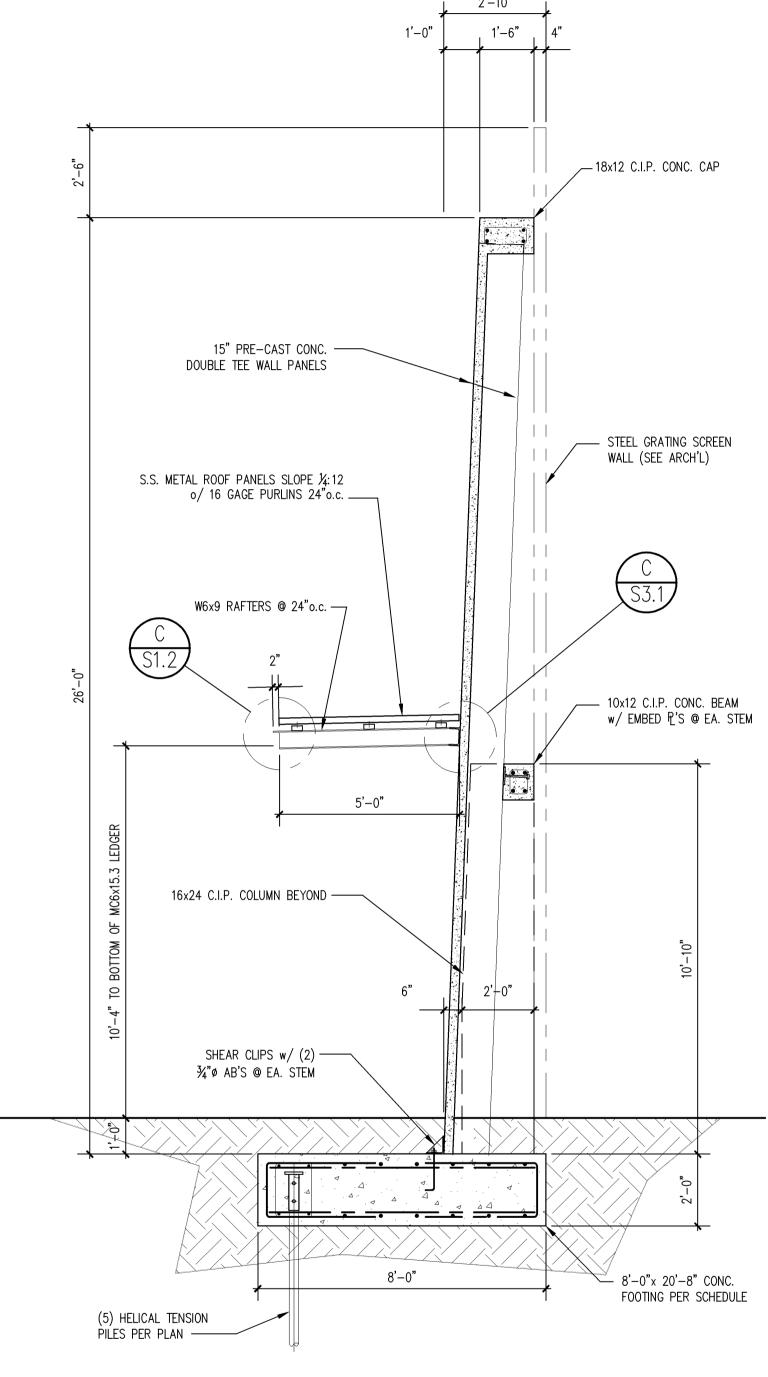


ART WALL FOUNDATION PLAN

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

PLAN NOTES:

- 1. VERIFY ALL DIMENSIONS, ELEVATIONS, FINISHES AND RECESSES WITH ARCHITECTURAL DRAWINGS BEFORE COMMENCING CONSTRUCTION.
- 2. ALL ELEVATIONS SHOWN THUS EL(+0'-0") ARE REFERENCED FROM THE GROUND FLOOR SLAB.
- 3. TOP OF FOOTINGS SHALL BE AT EL(-1'-0") UNLESS NOTED OTHERWISE.
- 4. HELICAL PILE DESIGN BY SPECIALTY ENGINEER FOR 17 KIP ALLOWABLE TENSILE CAPACITY.
- 5. P.C. WALL PANEL DESIGN BY SPECIALTY ENGINEER FOR ± 1 50 FT-KIP ULTIMATE BENDING MOMENT CAPACITY.
- 6. ALL EXPOSED CONCRETE SHALL HAVE HAND RUBBED FINISH U.N.O. (SEE ARCH'L)
- 7. STANDING SEAM METAL ROOF PANELS SHALL BE INSTALLED o/ STEEL PURLINS @ 2'-0" o.c. w/ (2) 1/4" SELF-DRILLING SCREWS @ EA SUPPORT.
- 8. REFER TO SHEET S-5.1 FOR STRUCTURAL NOTES, SCHEDULES & ADDITIONAL INFORMATION.



ART WALL SECTION A-A

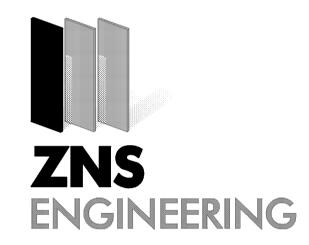
SCALE: 3/8" = 1'-0"

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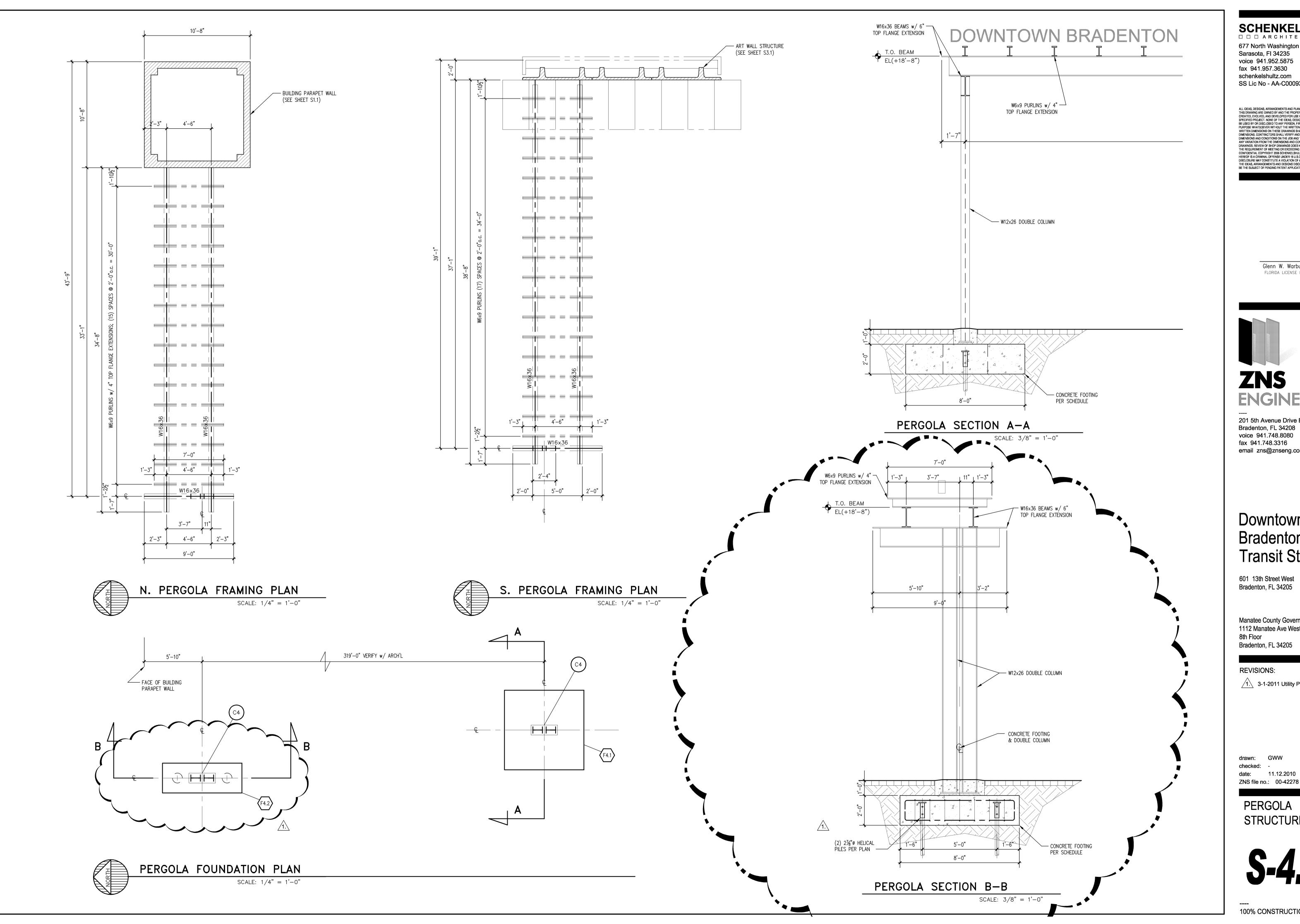
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ART WALL STRUCTURE

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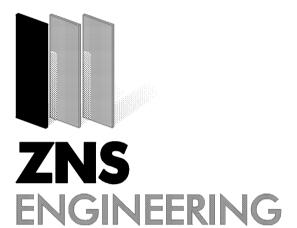
S-3.1



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REVISIONS:

1. 3-1-2011 Utility Permit Comments

date: 11.12.2010

PERGOLA STRUCTURES

STRUCTURAL NOTES

GENERAL NOTES: STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO INSURE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF

STRUCTURAL SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE 2007 FLORIDA BUILDING CODE & 2009 SUPPEMENTS UTILIZING SUPERIMPOSED LOADS AS FOLLOWS:

> LIVE LOAD - 20 psf. DEAD LOAD - 15 psf (4 psf AVAILABLE TO RESIST UPLIFT).

MECHANICAL - 10 psf.

NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIE-DOWNS.

130 MPH BASIC WIND SPEED (ASCE 7-05). EXPOSURE "B", IMPORTANCE FACTOR (I) = 1.0

BUILDING CLASSIFICATION "ENCLOSED" GCp=+/- 0.18; "OPEN" GCp=+/- 0.0

SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH THE DESIGN INTENT OF THE CONTRACT DOCUMENTS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY COMPLIANCE WITH THE CONTRACT DOCUMENTS AS TO QUANTITY, LENGTH, ELEVATIONS, DIMENSIONS, ETC. IN ALL INSTANCES THE CONTRACT DOCUMENTS WILL GOVERN OVER THE SHOP DRAWINGS UNLESS OTHERWISE SPECIFIED IN WRITING BY THE ENGINEER. ALL SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE ARCHITECT/ENGINEER. DRAWINGS SUBMITTED WITHOUT REVIEW WILL BE RETURNED UNCHECKED.

FOUNDATION DESIGN IS BASED ON 2,000 psf ALLOWABLE SOIL BEARING PRESSURE. REFER TO THE FOLLOWING SOILS REPORT FOR COMPLETE GEOTECHNICAL RECOMMENDATIONS, SITE PREPARATION REQUIREMENTS, AND FOUNDATION INSTALLATION PROCEDURES. Report by: ARDAMAN & ASSOCIATES, INC.; File No. 10-7234 dated July 2, 2010

TITLED: Geotechnical Exploration for "13th Street Bus Transfer Station, 13th Street West, Bradenton, Manatee County, Florida

SHALL BE PER AN APPROVED MIX DESIGN PROPORTIONED TO ACHIEVE A STRENGTH AT 28 DAYS AS LISTED BELOW:

3000 psi FOR FOUNDATIONS AND SLABS ON GRADE. 4000 psi FOR ALL OTHER STRUCTURAL CONCRETE.

SUBMIT PROPOSED MIX DESIGN WITH RECENT FIELD TESTS AND STATISTICAL BACK-UP DATA AS PER CHAPTER 5 OF ACI 318 FOR REVIEW PRIOR TO USE, EACH MIX SHALL BE UNIQUELY IDENTIFIED BY MIX NUMBER OR OTHER POSITIVE IDENTIFICATION AND INCLUDE A WRITTEN DESCRIPTION INDICATING WHERE EACH PARTICULAR MIX IS TO BE PLACED WITHIN THE STRUCTURE. MIX SHALL MEET THE REQUIREMENTS OF ASTM C33 FOR COARSE AGGREGATE. CONCRETE SHALL COMPLY WITH ALL THE REQUIREMENTS OF ASTM STANDARD C94 FOR

MEASURING, MIXING, TRANSPORTING, ETC. CONCRETE SHALL BE PLACED AND CURED ACCORDING TO ALL STANDARDS AND SPECIFICATIONS. CONCRETE TICKETS SHALL BE TIME STAMPED WHEN CONCRETE IS BATCHED. THE MAXIMUM TIME ALLOWED FROM THE TIME THE MIXING WATER IS ADDED UNTIL IT IS DEPOSITED IN ITS FINAL POSITION SHALL NOT EXCEED ONE AND ONE HALF (1-1/2) HOURS. IF FOR ANY REASON THERE IS A LONGER DELAY THAN THAT STATED ABOVE, THE CONCRETE SHALL BE DISCARDED. IT SHALL BE THE RESPONSIBILITY OF THE TESTING LAB TO NOTIFY THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR OF ANY NONCOMPLIANCE WITH THE ABOVE. CALCIUM CHLORIDES SHALL NOT BE UTILIZED; OTHER ADMIXTURES MAY BE USED ONLY WITH THE APPROVAL OF THE ENGINEER.

AN INDEPENDENT TESTING LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON CAST IN PLACE CONCRETE:

ASTM C143 - "STANDARD TEST METHOD FOR SLUMP OF PORTLAND CEMENT CONCRETE" WITH A MAXIMUM SLUMP OF 6 INCHES.

ASTM C39 - "STANDARD TEST METHOD FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS." A SEPARATE TEST SHALL BE CONDUCTED FOR EACH CLASS, FOR EVERY 50 CUBIC YARDS (OR FRACTION THEREOF),

PLACED PER DAY. REQUIRED CYLINDER QUANTITIES AND TEST AGE SHALL BE AS FOLLOWS:

(1) AT 7 DAYS. (2) AT 28 DAYS. AND (1) ADDITIONAL RESERVE CYLINDER TO BE TESTED UNDER THE DIRECTION OF THE ENGINEER AS REQUIRED. IF THE REQUIRED 28 DAY STRENGTH IS ACHIEVED, THE ADDITIONAL CYLINDER(s) MAY BE DISCARDED.

FORMWORK AND SHORING:

NO STRUCTURAL CONCRETE SHALL BE STRIPPED UNTIL IT HAS REACHED AT LEAST TWO-THIRDS OF THE 28 DAY DESIGN STRENGTH. DESIGN, ERECTION AND REMOVAL OF ALL FORMWORK, SHORES AND RESHORES SHALL MEET THE REQUIREMENTS SET FORTH IN ACI STANDARDS 347 AND 301.

MASONRY UNITS SHALL MEET ASTM C-90 FOR HOLLOW LOAD BEARING TYPE MASONRY WITH UNIT STRENGTH OF 1900 psi ON THE NET AREA (f'm = 1500 psi). MORTAR SHALL BE TYPE "M" OR "S" AND MEET ASTM C-270. GROUT SHALL BE 2000 psi MINIMUM COMPRESSIVE STRENGTH AND MEET ASTM C-476. UNLESS NOTED OTHERWISE, WALLS SHALL BE EIGHT INCH REINFORCED MASONRY WALL CONSTRUCTION WITH #5 VERTICAL REINFORCING BARS IN GROUT FILLED CELLS AT 48 INCHES O.C., CORNERS, ENDS" OF WALLS, AND EACH SIDE OF ALL OPENINGS. PROVIDE ACI STANDARD HOOKS FOR FOOTING DOWELS AND TERMINATION OF ALL VERTICAL REINFORCING. LAP SPLICES SHALL BE 48 BAR DIAMETERS. PROVIDE 9 GAGE GALVANIZED HORIZONTAL JOINT REINFORCING (DUR-O-WALL OR ENGINEER APPROVED SUBSTITUTION) AT ALTERNATE BLOCK COURSES.

BEAMS WITH THE PREFIX "TB" SHALL BE OF POURED AFTER THE BLOCK WALLS BELOW ARE IN PLACE. REINFORCING SHALL BE CONTINUOUS THROUGH TIE BEAMS WITH MINIMUM LAP SPLICES OF 48 BAR DIAMETERS AND BENT BARS AT CORNERS, USE METAL LATH, MORTAR, OR SPECIAL UNITS TO CONFINE CONCRETE TO AREA REQUIRED, IN ACCORDANCE WITH ACI 530.1, SECTION 4.3.3.3 (SOLID METAL OR FELT CAVITY CAPS ARE PROHIBITED).

MASONRY OPENINGS LESS THAN 6 FEET SHALL BE SPANNED WITH 8"x8" PRECAST CONCRETE LINTELS WITH 1#5 REINFORCING BAR. ALL PRECAST LINTELS SHALL BEAR A MINIMUM OF 8" AT EACH END.

SHALL BE ASTM A615 GRADE 60 DEFORMED BARS, FREE FROM OIL, SCALE AND RUST AND PLACED IN ACCORDANCE WITH THE TYPICAL BENDING DIAGRAM AND PLACING DETAILS OF ACI STANDARDS AND SPECIFICATIONS. SECURE APPROVAL OF SHOP DRAWINGS PRIOR TO COMMENCING FABRICATION. WELDED WIRE FABRIC: TO CONFORM TO ASTM A-185, FREE FROM OIL, SCALE AND RUST AND PLACED IN ACCORDANCE WITH THE TYPICAL PLACING DETAILS OF ACI STANDARDS AND SPECIFICATIONS. MINIMUM LAP SHALL BE ONE SPACE PLUS TWO INCHES.

CHEMICAL ANCHORS:

SHALL BE AN EQUAL TWO PART STRUCTURAL EPOXY, SUCH AS RAMSET "EPCON", RAWL "POWER-FAST", SIMPSON STRONG-TIE "SET", OR ENGINEER APPROVED SUBSTITUTION, INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

NO PENETRATIONS SHALL BE MADE IN ANY STRUCTURAL MEMBERS OTHER THAN THOSE LOCATED ON THESE DRAWINGS WITHOUT PREVIOUS APPROVAL OF THE ENGINEER.

STRUCTURAL STEEL:

SHALL CONFORM TO ASTM A36 or A992 & THE "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC. ALL SHOP CONNECTIONS TO BE WELDED (UTILIZING E70XX ELECTRODES) AND FIELD CONNECTIONS TO BE BOLTED, UNLESS NOTED OTHERWISE. STEEL TO RECEIVE ONÉ SHOP COAT AND ONE FIELD TOUCH UP COAT OF APPROVED PAINT, EXCEPT WHERE

GALVANIZING IS INDICATED ON THE DRAWINGS. STRUCTURAL TUBING SHALL CONFORM TO ASTM A-500, GRADE B, Fy=46 ksi. STRUCTURAL PIPE SHALL CONFORM TO ASTM A-53 GRADE B, TYPE E OR S, Fy=35 ksi ALL BOLTED CONNECTIONS SHALL CONSIST OF MINIMUM 3/4 INCH DIAMETER ASTM A-325 HIGH STRENGTH BOLTS. BEAM CONNECTIONS SHALL BE DESIGNED BY THE FABRICATOR FOR THE REACTIONS SHOWN ON THE PLANS. IF NOT SHOWN, THE FABRICATOR SHALL DESIGN THE BEAM CONNECTIONS TO SUPPORT AN END REACTION OF W/2 KIPS FROM THE TABLES IN PART 2 "ALLOWABLE UNIFORM LOADS IN KIPS FOR BEAMS LATERALLY SUPPORTED" OF THE MANUAL OF STEEL CONSTRUCTION (9TH EDITION), BUT CONNECTIONS SHALL NOT HAVE LESS THAN 2 ROWS

OF BOLTS. ANCHOR BOLTS SHALL CONFORM TO ASTM A-307 OR A-36 (THREADED ROD).

SHALL BE A-307 HOT DIPPED GALVANIZED WITH GALVANIZED WASHERS.

SHEAR STUD CONNECTORS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH AWS D1.1 "STRUCTURAL WELDING CODE", SECTION 7 - STUD WELDING. STUDS SHALL BE TYPE 'B', HEADED STUDS HAVING A MINIMUM TENSILE STRENGTH OF 60,000 psi., AND SHALL BE OF LENGTH AND DIAMETER SHOWN ON STRUCTURAL DRAWINGS.

STEEL JOISTS & JOIST GIRDERS:

SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR JOIST GIRDERS AS PUBLISHED BY THE STEEL JOIST INSTITUTE (SJI). GIRDERS SHALL BE OF THE DEPTH AND SPACING SHOWN ON THE STRUCTURAL DRAWINGS. AND UNLESS OTHERWISE NOTED, GIRDERS SHALL BE DESIGNED AS SIMPLY SUPPORTED PRIMARY MEMBERS PROPORTIONED SUCH THAT THEY MAY BE ERECTED WITHOUT BRIDGING. GIRDER PANEL POINTS SHALL BE ALIGNED WITH SECONDARY MEMBERS.

CONCRETE SUPPORTS: UNLESS NOTED OTHERWISE ON STRUCTURAL DRAWINGS, GIRDERS SHALL BEAR ON ⅔"x 7"x 1'-0" STEEL BEARING PLATES WITH A MINIMUM OF FOUR 1/2" DIAMETER x 6" LONG SHEAR STUD CONNECTORS. BEARING PLATES SHALL BE CAST INTEGRALLY WITH THE CONCRETE SUPPORTING MEMBER. MINIMUM JOIST GIRDER BEARING SHALL BE 6" WITH A MINIMUM OF (2) 1/2" x 2" FILLET WELDS TO BEARING PLATE. STEEL SUPPORTS: UNLESS NOTED OTHERWISE ON STRUCTURAL DRAWINGS, GIRDERS MAY BE DIRECTLY CONNECTED TO STEEL GIRDERS HAVING A FLANGE THICKNESS GREATER THAN 3/8". THE CONNECTION SHALL BE DESIGNED TO RESIST ALL UPLIFT AND SHEAR LOADS; HOWEVER, A MINIMUM OF TWO 3/4" DIAMETER HIGH STRENGTH BOLTS SHALL BE UTILIZED.

SUPPLIER SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR REVIEW BY THE S STRUCTURAL ENGINEER PRIOR TO FABRICATION. SHOP DRAWING SUBMITTAL SHALL INCLUDE LAYOUT, COMPONENT DESIGNATION, BRIDGING, AND PERTINENT SECTIONS AND DETAILS. SUBMITTALS SHALL BEAR THE SIGNATURE AND IMPRESSED SEAL OF A FLORIDA REGISTERED PROFESSIONAL ENGINEER.

LIGHT GAUGE METAL FRAMING:

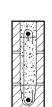
STEEL STUDS, LINTELS, AND RUNNER TRACK MEMBERS SHALL BE OF TYPE SHOWN ON THE DRAWINGS AND SPECIFICATIONS CONFORMING TO ASTM A-446 GRADE C (MINIMUM YIELD POINT 40,000 psi) WITH HOT DIPPED GALVANIZED COATING CONFORMING TO ASTM A525 (CLASS G90). GALVANIZED STEEL RUNNER TRACK SHALL BE FORMED WITH MATERIAL MEETING REQUIREMENTS OF ASTM A-446 GRADE A (MINIMUM YIELD POINT 33,000 psi) WITH HOT DIPPED GALVANIZED COATING CONFORMING ASTM A-525 (CLASS G-90). ASSEMBLY: ALL FRAMING MEMBÈRS SHALL BÉ CUT SQUARELY OR AT AN ANGLE AS

REQUIRED TO FIT SQUARELY AGAINST ABUTTING MEMBERS. MEMBERS SHALL BE HELD FIRMLY IN PLACE UNTIL PROPERLY JOINED. JOINING OF STRUCTURAL MEMBERS SHALL BE MADE WITH SELF DRILLING SCREWS OR WELDING. WIRE TYING OF FRAMING MEMBERS IN STRUCTURAL APPLICATIONS SHALL NOT BE PERMITTED. ATTACHMENT OF COLLATERAL MATERIALS TO STEEL MEMBERS SHALL BE MADE WITH SELF DRILLING SCREWS OR HARDENED SCREW SHANK NAILS. METAL LATH MAY ALSO BE CONNECTED TO STEEL BY STAPLES OR OTHER FASTENERS, IF APPROVED BY LOCAL BUILDING CODE.

INSTALLATION: STUDS SHALL SIT SQUARELY IN THE TOP AND BOTTOM RUNNER TRACK WITH FIRM ABUTMENT AGAINST TRACK WEBS. STUDS SHALL BE ALIGNED OR PLUMBED AND SECURELY FASTENED TO THE FLANGES OF BOTH TOP AND BOTTOM RUNNER TRACK.

STRUCTURAL WOOD COMPONENTS SHALL BE SOUTHERN PINE WITH MINIMUM ALLOWABLE FIBER STRESSES AS FOLLOWS: SHEAR Fv=90 psi.

BENDING Fb = 1,200 psi.ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PROTECTED OR PRESSURE TREATED IN ACCORDANCE WITH AITC-109. MEMBER SIZES SHOWN ARE NOMINAL UNLESS NOTED OTHERWISE. PLYWOOD ROOF SHEATHING IS DESIGNED AS DIAPHRAGMS AND SHALL COMPLY WITH APPLICABLE PROVISIONS OF THE FLORIDA BUILDING CODE AND FASTENED IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF TABLE 2304.9.1 UNLESS NOTED OTHERWISE.



L1 — (3) COURSE CMU LINTEL GROUTED SOLID

MARK	SIZE (WxD)	REINFORCING	REMARKS
F1.1	2'-0" x 12" CONT.	(3) #5 CONT. BOTT	TOP OF STEMWALL FOOTING LOCATED 1'-4" BELOW FLOOR SLAB
F1.2	2'-8" x 12" CONT.	(3) #5 CONT. BOTT	TOP OF STEMWALL FOOTING LOCATED 1'-4" BELOW FLOOR SLAB
F1.3	3'-6" SQ. x 24"	(4) #5 EA. WAY TOP & BOTT	
F1.4	2'-4" x 5'-0" x 24"	(4) #5 EA. WAY TOP & BOTT	
F1.5	1'-0" x 8" CONT.	(2) #5	THICKENED SLAB POURED MONOLITHIC w/ 4" FLOOR SLAB
TE	8" x 8" CONT.	(1) #5	THICKENED SLAB EDGE POURED MONOLITHIC w/ 4" FLOOR SLAB
F2	35'-0"x 7'/10' x 24"	#5 @ 12"o.c. EA. WAY TOP & BOTTOM	MATCH TOP & BOTT STEEL w/ #5 HAIRPINS 12"o.c. @ COLUMN SIDE
F3	20'-8"x 8'-0" x 24"	#5 @ 12"o.c. E.W. TOP & BOTT. w/ #5 HAIRPINS 12"o.c. @ LONG SIDES	(5) HELICAL PILES w/ 17 KIP TENSILE CAPACITY EA.
' F4.1	8'-0"x 8'-0" x 24"	#5 @ 12"o.c. EA. WAY TOP & BOTTOM	
F4.2	3'-0"x 8'-0" x 24"	(4) #5 CONT. TOP & BOTT. w/ #4 STIRRUPS @ 12"o.c.	(2) HELICAL PILES w/ 17 KIP TENSILE CAPACITY EA.
***	TOP 0	W/ #4 STIRRUPS @ 12"o.c. NOTE: F ALL FOOTINGS SHALL BE LOCATED 12 TINISHED GRADE UNLESS NOTED OTHERW	" BELOW

COLUMN SCHEDULE						
MARK	SIZE	REINFORCING / BASE PLATE	TIES	REMARKS		
C1	(2) W8x13	9"x36"x½" ½ w/ (8) %"ø x 16"x3" ANCHOR BOLTS	#3 @ 12"o.c.	DBL COLUMN SPACED 1'-9"		
C1.1	16x16 CMU	(4) #6 VERTICAL	#2 @ 8"o.c.	8x16 CMU w/ FILLED CELLS		
C1.2	W8x13	9"x14"x½" ₽ w/ (4) %"ø x 16"x3" ANCHOR BOLTS	_			
C1.3	W8x24	10"x10"x5%" F2 w/ (4) 34"ø x 30"x3" ANCHOR BOLTS	_			
C2	16x24 C.I.P.	(8) #7 VERTICAL (3 Ea. Face)	(2) #3 @ 12"o.c.	C.I.P. CONC. w/ 3" TAPER @ TOP WEST SIDE PER DETAIL		
C2.1	W12×26	10"x30"x¾" ½ w/ (8) ¾"ø x 30"x3" ANCHOR BOLTS	_	RIGID FRAME COLUMN		
C3	16x24 C.I.P.	(8) #7 VERTICAL (3 Ea. Face)	(2) #3 @ 12"o.c.	C.I.P. CONC. w/ 3" TAPER @ TOP WEST SIDE PER DETAIL		
C4	(2) W12x26	10"x30"x¾" ½ w/ (8) ¾"ø x 30"x3" ANCHOR BOLTS	-	DBL COLUMN SPACED 1'-4"		

COMPONENT & CLADDING DESIGN PRESSURES for OPEN STRUCTURES

Element		ROOF	WALLS			
Tributary Area (sq ft)	Zone 1	Zone 2	Overhang Zone 2	Overhang Zone 3	Zone 4	Zone 5
10	+7.7/-25.7	+7.7/-46.3	-43.8	-72.0	+25.7/-23.2	+25.7/-54.1
20	+7.0/-25.0	+7.0/-41.2	-43.0	-57.0	+24.5/-27.0	+24.5/-33.5
50	+5.9/-23.9	+5.9/-33.5	-42.0	-36.0	+22.7/-25.2	+22.7/-29.6
100	+5.1/-23.2	+5.1/-28.3	-41.2	-20.6	+21.1/-23.7	+21.1/-27.0

NOTES: Basic Wind Speed = 130 mph, I = 1.0, Exposure = B, Enclosure Classification = Open. Zone 1 = Roof areas not designated as zone 2/3.

Zone $\S \equiv \Re g$ within 6 feet of building exterior walls not including the overhangs. Zone 3 = Roof areas within 6 feet of building corners not including the overhangs. Zone 4 = Wall areas not designated as zone 5.

BEAM SCHEDULE						
MARK	T.O. BEAM	SIZE (WxH)	REINFORCING	STIRRUPS	REMARKS	
TB1.1	8'-8"	8"x8"	(1) #5 CONT.	-	CMU KNOCK-OUT BLOCK	
TB1.2	14'-8"	8"x16"	(1) #5 CONT. TOP & BOTT	-	TWO 8" COURSE CMU KNOCK-OUT BLOCK	
TB1.3	16'-8"	8"x8"	(1) #5 CONT.	_	CMU KNOCK-OUT BLOCK	
TB1.4	18'-8"	8"x8"	(1) #5 CONT.	-	CMU KNOCK-OUT BLOCK	
TB1.5	20'-8"	8"x8"	(1) #5 CONT.	_	CMU KNOCK-OUT BLOCK	
TB1.6	10'-8"	8"x8"	(1) #5 CONT.	-	CMU KNOCK-OUT BLOCK	
RB1.1	14'-8"	16"x16"	(2) #6 TOP HOOK E.E. & (4) #6 BOTT	#3 @ 6"o.c.	C.I.P. CONCRETE	
RB1.2	14'-8"	8"x16"	(2) #5 CONT. TOP & BOTT	#3 @ 6"o.c.	C.I.P. CONCRETE	
RB1.3	14'-8"	16"x16"	(2) #6 TOP & (3) #6 BOTT	#3 @ 6"o.c.	C.I.P. CONCRETE	
RB1.4	14'-8"	8"x16"	(2) #5 CONT. TOP & BOTT	#3 @ 6"o.c.	C.I.P. CONCRETE	
L1	VARIES	8"x24"	(1) #5 CONT. TOP & BOTT	#3 @ 8"o.c.	(2) COURSE 8" CMU K.O. BLOCK o/ 8" U-BLOCK	
TB2.1	1'-3"	8"x8"	(1) #5 CONT.	_	8" CMU CHAIR BLOCK @ TOP OF BENCH STEMWALLS	
TB3.1	9'-10"	10"x12"	(2) #6 CONT. TOP & BOTT	#3 @ 6"o.c.	C.I.P. CONCRETE w/ 2" CLEAR COVER	
TB3.2	25'-0"	18"x12"	(2) #5 CONT. TOP & BOTT	#3 @ 12"o.c.	C.I.P. CONCRETE w/ 2" CLEAR COVER	

COMPONENT & CLADDING DESIGN PRESSURES for ENCLOSED BUILDING

Element		ROOF	WALLS				
Tributary Area (sq ft)	Zone 1	Zone 2	Overhang Zone 2	Overhang Zone 3	Zone 4	Zone 5	
10	+12.4/-30.4	+12.4/-51.0	-43.8	-72.0	+30.4/-27.8	+30.4/-58.7	
20	+11.6/-29.6	+11.6/-45.8	-43.0	-57.0	+29.1/-31.7	+29.1/-38.1	
50	+10.6/-28.6	+10.6/-38.1	-42.0	-36.0	+27.3/-29.9	+27.3/-34.2	
100	+9.8/-27.8	+9.81/-32.9	-41.2	-20.6	+25.7/-28.3	+25.7/-31.7	

NOTES: Basic Wind Speed = 130 mph, I = 1.0, Exposure = B, Enclosure Classification = Enclosed. Zone 1 = Roof areas not designated as zone 2/3.

Zene $8 \equiv \text{Rean} f$ areas within 6 feet of building cortains walls not including the overhangs.

Zone 3 = Roof areas within 6 feet of building corners not including the overhangs.

Zone 4 = Wall areas not designated as zone 5.

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SCHENKELSHULTZ

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DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL

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SPECIFIED PROJECT, NONE OF THE IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL

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STRUCTURAL NOTES **SCHEDULES**