



ADDENDUM NO. 02

PROJECT NAME: Hemisfair Internal Street Improvements: Water and E. Nueva

DATE: October 8, 2014

ADDENDUM NO. 2

This addendum should be included in and be considered part of the plans and specifications for the above named project. The contractor shall be required to sign an acknowledgement of the receipt of this addendum and submit with their bid.

TCI PROJECT NO.: **40-00421**

1. Updated Project Manual Table of Contents
2. Unit Pricing Form (Form 025) is attached and revised as follows:
 - CPS ENERGY EXHIBIT GAS-5 COMPENSATION SCHEDULE will be incorporated into 025 UNIT PRICING FORM.
 - Item 101.20 – Removed Item
 - Item 101.30 – Removed Item
 - Item 200.10 – Revised quantity
 - Item 205.20 – Revised quantity
 - Item 209.10 – Revised quantity
 - Item 203.10 – Revised quantity
 - Item 506.10 – Added item
 - Item 550.10 – Added item
 - Item 618.10 – Revised quantity
 - Item 618.20 – Revised quantity
 - Item 618.50 – Revised quantity
 - Item 686.10 – Revised Item Description
 - Item 695.22 – Added Item
 - Item 7635 2001 – Revised Unit of Measure
 - Item 9002.1 – Added Item
 - Item 9002.2 – Added Item
3. Supplementary Conditions (Form 060) is attached and revised to reflect project duration of 486 Calendar Days, inclusion of Milestone 1, and Liquidated Damages schedule.
4. Revised COSA Governing Specs Table of Contents.
5. Added Special Specification Section 9002 – Temporary Suspension of Work



6. Specification section 9007 is modified as follows:

- Paragraph 1.2A section 2 is deleted/replaced with 1.2A section 3
- Paragraph 1.4D section 5 is deleted/replaced with 1.4D section 6

7. Revised sheets as follows:

- Sheet 4 – Supplemental General Notes: Revised Notes 15 and 29.
- Sheet 9-11 – Proposed Typical Sections: Adjusted notes.
- Sheet 12-13 – Project Quantity Summary: Updated Quantities
- Sheet 23 – Temporary Fence & Pedestrian Walkway: Updated roadway hatching
- Sheet 24 – Temporary Fence & Pedestrian Walkway: Updated roadway hatching
- Sheet 57 – Temporary Emergency Service Drive: Updated roadway hatching
- Sheets 59-65 – Plan and Profile: Updated roadway hatching
- Sheet 67 – Plan and Profile: Updated roadway hatching
- Sheet 71 – Grading Plan: Updated roadway hatching, Added callout for combination curb
- Sheets 72-73: Grading Plan: Updated roadway hatching
- Sheet 92 – Drainage Plan and Profile: Added note for inlet to be removed
- Sheet 112 – Environmental, Permits, Issues, and Commitments: Updated language
- Sheets 113-114 – SW3P: Updated roadway hatching
- Sheet 117 – Small Sign Plan: Updated roadway hatching
- "L" sheets are amended to include sheet L1-8 (no change to bid items or quantities)
- Sheets L1-1 through L1-7 are modified to distinguish 4-tone vehicular pavers from 4-tone pedestrian pavers
- Sheet L1-4 is modified to show new location for Madero Statue and dedication plaque. Contractor is to move the statue and plaque, as well as their associated concrete bases, and provide foundations in the new location.
- Sheet L2-2, Detail 3 is modified to replace "chatted" and "chopped" finish with "sawn"
- Sheet L2-1, expansion joint reference keys modified to refer to detail 2, sheet L2-5
- Sheet L2-3, is modified as follows:
 - Detail 2 is modified to delete 6x12 and 12x12 pavers from 4-tone pattern in vehicular areas, replacing them with 6x6 and 6x9 pavers;
 - Detail 2 is modified to delete 6x12 pavers from the 2-tone vehicular paving areas and replace them with 6x9 pavers
 - Detail 1 is deleted from this sheet and added to sheet L2-5
- Sheet L2-4, expansion and control joint reference keys modified to refer to detail 2, sheet L2-5
- Sheet L2-5, detail 2, Concrete Joints added.



- Sheet LP-0, is modified to revise quantities of Monterey Oaks on LP-4 and LP-7
- Sheet LP-4, is modified to add three (3) Monterey Oaks
- Sheet LP-7, is modified to add one (1) Monterey Oak

8. Questions/**Responses:**

- The contract documents indicate 548 calendar days and the agenda indicates 486 calendar days. Which is correct? **Contract documents will be changed to 486 calendar days**
- Will milestones be provided in the next addendum? **Yes**
- Will a Unit Pricing Form be provided for the Gas Plans? **Yes**
- Will CPS Energy provide a list of Qualified bidders for the CPS work? **Qualified contractors are those that meet the requirements outlined in the specifications.**
- Detail B on Sheet 74 show a 4" flexible base course under the concrete pavers at sidewalk areas. Can you confirm that flexible base is the correct material to be used at these locations? **Flexbase is the correct material to be used under the concrete pavers at sidewalk areas.**
- Note 6 on sheet 23 states that pedestrian walkway and grading shall be paid under 900.10 Temporary pedestrian walkway. Can a pay item be added for this? **A pay item is included on Page 4 of the 025 Unit Pricing Form**
- Can the archway that is to be removed and salvaged be cut up into 4 pieces? **7 pieces. Assumed cutting at existing welds. Four columns and three arch sections. Arch dimensions are approx. 8 ft. x (2) and 36 ft.**
- Please explain items 101.20 Partial shutdown and 101.30 Full Shutdown. **Specification will be added to the project manual.**
- Can you please confirm that the water ballasted barrier quantity of 525 each is correct? Each water ballasted barrier is typically 6' long. **The Unit for Ballasted barrier shall be changed to linear feet not each. This item comes in different lengths. Please note this is a plan field measured item.**
- When the proposed 48" RCP is tied into the box culvert in Cesar Chavez, can you please clarify how many lf of Cesar Chavez roadway from curb to curb the contractor will be responsible for milling and overlay. **This item is paid for under cut and restore and the detail is shown on Sheet 103 Storm Water Civil Details Page 3 - Detail 3**
- On sheet 94 and 98 JB 1 is labeled as a 5x5, but on the profile view it shows it as a 48" round junction box. Could you please clarify which it is supposed to be? **It is a 5 x5 junction box with a 48" riser per TxDOT standard.**
- Will the existing grate inlet at the storm drain, adjacent to JB 3, remain in place (sheet 92)? **The grate inlet shall be removed and the pipe capped (NSPI)**
- Sheet 4 Note 5, Which owners are expected to be maintained? Is there a list of the owners available? **No list of owners are available. All fences shall be coordinated with Hemisfair Park and City.**



- Sheet 4 Note 15, The note contradicts SAWS sheet 2 note 11. (“Leave Trench Open”) Could you please clarify? **Sheet 4 Note 15 shall read as " All trenches must be backfilled or plated at the end of each work day...."**
- Sheet 4 Note 23, We are requesting a Force Account or an allowance be established for the utilities, manholes, boxes, etc. Pricing from these “unknown” utilities may require engineering and time. **No force account or allowance will be provided.**
- Sheet 16 Pre Stage Note 2, There are pay items for temp fence, temp walkway, and emergency driveway
 - Can a pay item be added for Historic Structure Protect and the scope of work involved? **The pedestrian fence, longitudinal channelization devices and the water ballisted barrier serve as the Historic Structure protection and are included as pay items.**
 - If not, is pay item 7635.2001 (525 Ea) the extent of the protection? **See above response.**
 - Is the unit of measure for item 7635.2001 correct? **No. The unit should be LF.**
- Clock Tower and Hemisfair Archway (Scheduled for Removal) **The Clock Tower is not scheduled to be salvaged and can be demolished as the contractor sees fit.**
 - What is the approximate weight of the archway? **Unknown**
 - How many pieces can it be cut into? **7 pieces. Assumed cutting at existing welds. Four columns and three arch sections. Arch dimensions are approx. 8 ft. x (2) and 36 ft.**
 - Where is the location it is supposed to be shipped to? Loaded and unloaded rather than shipped. **The unloading area is located North of the Woman's Pavillion/RCA Building.**
 - Who is to unload the structures at drop off location? **Water/Nueva Contractor**
- Sheet 56,96, CPS 12&14, Station 14+10 Electric Panels shown do not indicate they are to remain, remove or protect.
 - What is the intent of this underground electric duct bank, electric box and service? **The transformer near Water St - STA 14+10 will be removed by others. The service to the Solis house will be terminated with the removal of the building. The electric duct serving the Solis house and the transformer are to be abandoned after proposed services are installed. The existing MH, transformer, and duct lines at the fire line on Water St are to remain. A proposed switch gear slab is being installed next to the existing transformer as shown on CPS Sheet 12 of 14.**
- There is a pay item for Preemption Detector (695.30), Can a pay item be added for Preemption Selector? **Yes, a pay item for Preemption Selector will be added.**
- Sheet 126 and 128 show 48’ pole and the bid tab show 44’, please clarify which is desired. **Use 48’ pole.**
- The quantities for 3” Bored Conduit and 3” Trench Conduit need to be adjusted. They need to be doubled due to the fact there are two runs in each trench. 80LF needs to be 160LF and



310LF needs to be 620LF. Please adjust. **Yes, COSA likes a redundant conduit, let's use the following quantities:**

- **618.10 80 LF**
 - **618.20 160 LF**
 - **618.50 620 LF**
- Storm drain on Cesar Chavez, note states weekend closure. This isn't all required to be done on one weekend is it? With the depth of excavation and existing utilities, this is going to take more than one week to complete. **The intent is to perform the work during weekends and open up the roadway to traffic during the week.**
 - Can an allowance for the police officers required for the Cesar Chavez shut down please be added? **Pay item will be added.**
 - If we do not understand some of the answers regarding the questions can we ask more questions, as long as they are in the scope of the original question to get clarification? Even if it is past the question due date? **The bid date and question date is being extended in Addendum 1.**



Steven D. Templer P.E.
10-08-2014



RECEIPT OF ADDENDUM NUMBER (2) IS HEREBY ACKNOWLEDGE FOR PLANS AND SPECIFICATIONS FOR CONSTRUCTION OF **Hemisfair Internal Street Improvements: Water and E. Nueva; TCI Project 40-00421**

FOR WHICH BIDS WILL BE OPENED ON **TUESDAY, OCTOBER 21, 2014 AT 2:00 P.M.**

THIS ACKNOWLEDGEMENT MUST BE SIGNED AND RETURNED WITH THE BID PACKAGE.

Company Name: _____

Address: _____

City/State/Zip Code: _____

Date: _____

Signature

Print Name/Title

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ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	100.10			MOBILIZATION	LS	1		\$ -	
	100.20			INSURANCE & BOND	LS	1		\$ -	
	101.10			PREPARING RIGHT OF WAY	LS	1		\$ -	
	103.10			REMOVE CONCRETE CURB	LF	3303		\$ -	
	103.30			REMOVE CONCRETE SIDEWALKS & DRIVEWAYS (1,000 S.F. < X < 3,000 S.F.)	SF	803		\$ -	
	103.40			REMOVE STRUCTURE (FOUNTAIN)	EA	1		\$ -	
	103.50			REMOVE AND SALVAGE (CLOCK TOWER)	EA	1		\$ -	
	103.60			REMOVE AND SALVAGE (ARCHWAY)	EA	1		\$ -	
	103.40			REMOVE MISCELLANEOUS CONCRETE	SF	200		\$ -	
	103.60			REMOVE BRICK PAVERS	SF	42250		\$ -	
	104.10			STREET EXCAVATION	CY	3043		\$ -	
	107.10			EMBANKMENT (FINAL)(ORD COMP)(TY A)	CY	5		\$ -	
	200.10			FLEXIBLE BASE (4" COMPACTED DEPTH)	SY	2984		\$ -	
	203.10			TACK COAT	GAL	345		\$ -	
	205.20			HOT MIX ASPHALTIC PAVEMENT, TYPE B (4" COMP. DEPTH)	SY	3316		\$ -	
	205.20			HOT MIX ASPHALTIC PAVEMENT, TYPE B (6" COMP. DEPTH)	SY	317		\$ -	
	209.10			CONCRETE PAVEMENT (5 1/2" DEEP)	SY	1103		\$ -	
	209.10			CONCRETE PAVEMENT (8" DEEP)	SY	2664		\$ -	
	230.10			FLEXIBLE PAVEMENT STRUCTURE REPAIR (2" COMP. DEPTH)	SY	60		\$ -	
	308.10			DRILLED SHAFTS (24")	LF	24		\$ -	
	308.10			DRILLED SHAFTS (30")	LF	11		\$ -	
	308.10			DRILLED SHAFTS (36")	LF	39		\$ -	
	401.10			REINFORCED CONCRETE PIPE (CLASS IV)(15" DIA)	LF	8		\$ -	
	401.10			REINFORCED CONCRETE PIPE (CLASS IV)(18" DIA)	LF	8		\$ -	
	401.10			REINFORCED CONCRETE PIPE (CLASS IV)(24" DIA)	LF	666		\$ -	
	401.10			REINFORCED CONCRETE PIPE (CLASS IV)(30" DIA)	LF	55		\$ -	
	401.10			REINFORCED CONCRETE PIPE (CLASS IV)(36" DIA)	LF	533		\$ -	

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	401.10			REINFORCED CONCRETE PIPE (CLASS IV)(48" DIA)	LF	83		\$ -	
	402.10			CORRUGATED POLYETHYLENE PIPE (8")	LF	377		\$ -	
	402.10			CORRUGATED POLYETHYLENE PIPE (18")	LF	351		\$ -	
	403.20			JUNCTION BOX 5'X5'X5'	EA	11		\$ -	
	403.30			JUNCTION BOX 6'X6'X6'	EA	1		\$ -	
	403.12			SPECIAL INLET (TRENCH DRAIN)	LF	270		\$ -	
	403.12			SPECIAL INLET (STORM WATER PLANTER)	EA	7		\$ -	
	413.20			FLOWABLE BACKFILL (HIGH STRENGTH)	CY	1140		\$ -	
	500.10			CONCRETE CURBING	LF	743		\$ -	
	500.10			RIBBON CURB (6")	LF	3398		\$ -	
	500.10			RIBBON CURB (12")	LF	1027		\$ -	
	502.10			CONCRETE SIDEWALKS	SY	24		\$ -	
	502.11			DETECTABLE WARNING SURFACE	EA	6		\$ -	
	506.10			CONCRETE RETAINING WALLS-COMB. TYPE (> 50 C.Y.)	CY	0.5		\$ -	
	507.2A			TEMPORARY CHAIN LINK WIRE FENCE (6' HIGH)	LF	3841		\$ -	
	525.10			LPCB (TY 2)(INSTALL/REMOVE)	LF	20		\$ -	
	525.10			LPCB (TY 1)(INSTALL/REMOVE)	LF	400		\$ -	
	530.10			BARRICADES, SIGNS & TRAFFIC HANDLING	LS	1		\$ -	
	531.10			METRO STREET NAME, BLOCK NUMBERS (HIGH DENSITY)(VARIES X 15")	EA	4		\$ -	
	531.30			R1-1 STOP (30")(HIGH DENSITY)	EA	4		\$ -	
	531.50			R1-4 ALL WAY PLATE (18"X6")(HIGH DENSITY)	EA	2		\$ -	
	531.60			R2-1 SPEED LIMIT (24"X30")(HIGH DENSITY)	EA	2		\$ -	
	531.11			R3-5 LEFT OR RIGHT ONLY (30"X36")(HIGH DENSITY)	EA	1		\$ -	
	531.14			R3-8 LANE-USE CONTROL (48"X30")(HIGH DENSITY)	EA	1		\$ -	
	531.27			R10-12 LEFT TURN YIELD ON "GREEN BALL"	EA	1		\$ -	
	531.28			R10-12 LEFT TURN YIELD ON FLASHING YELLOW	EA	1		\$ -	
	531.51			W11A-2 PED CROSSING (30"X30")(HIGH DENSITY)	EA	2		\$ -	

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	531.57			9 INCH (229MM) STREET NAME, BLOCK NUMBER (VARIES X9")(HIGH DENSITY)	EA	4		\$ -	
	531.86			W16-1P (SHARE THE ROAD) (18"X24")(HIGH DENSITY)	EA	2		\$ -	
	531.90			LEFT TURN YIELD ON FLASHING YELLOW ARROW (R-10-17T)(30"X30")	EA	1		\$ -	
	535.40			8 INCH WIDE WHITE LINE	LF	220		\$ -	
	535.50			12 INCH WIDE WHITE LINE	LF	615		\$ -	
	535.70			24 INCH WIDE WHITE LINE	LF	132		\$ -	
	535.80			RIGHT WHITE ARROW	EA	1		\$ -	
	535.90			LEFT WHITE ARROW	EA	2		\$ -	
	535.12			WORD "ONLY"	WORD	4		\$ -	
	535.13			STRAIGHT WHITE ARROW	EA	1		\$ -	
	535.22			6 INCH WIDE WHITE LINE	LF	35		\$ -	
	536.10			4 INCH WIDE YELLOW LINE (TCP)	LF	93		\$ -	
	536.20			4 INCH WIDE WHITE LINE (TCP)	LF	1060		\$ -	
	536.70			24 INCH WIDE YELLOW LINE	LF	18		\$ -	
	537.60			TRAFFIC BUTTON (TYPE I-C)	EA	57		\$ -	
	540.60			CONSTRUCTION EXITS (INSTALL/REMOVE)	SY	156		\$ -	
	540.80			SANDBAGS FOR EROSION CONTROL FENCE (6")	LF	285		\$ -	
	540.10			INLET GRAVEL FILTERS	LF	260		\$ -	
	550.10			TRENCH EXCAVATION SAFETY PROTECTION	LF	1800		\$ -	
	555.10			OFF DUTY POLICE OFFICER	HOUR	240		\$ -	
	618.10			CONDUIT (2 INCH/PVC SCHEDULE 40)	LF	80		\$ -	
	618.20			CONDUIT (3 INCH/PVC SCHEDULE 40)	LF	160		\$ -	
	618.50			CONDUIT (3 INCH/PVC SCHEDULE 40)(BORE)	LF	620		\$ -	
	620.20			ELECTRICAL CONDUCTORS (NO. 8)(BARE)	LF	940		\$ -	
	624.80			GROUND BOXES TYPE D (162922) W/ APRON	EA	5		\$ -	
	680.10			INSTALLATION OF HIGHWAY TRAFFIC SIGNAL	EA	1		\$ -	
	682.10			INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (3 SECTION) & LED MODULE	EA	8		\$ -	
	682.20			INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (4 SECTION) & LED MODULE	EA	3		\$ -	

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	682.40			INSTALL PEDESTRIAN SIGNAL SECTION (12 INCH) LED (2 IND)	EA	8		\$ -	
	683.10			LED COUNTDOWN PEDESTRIAN SIGNAL MODULE	EA	8		\$ -	
	684.10			TRAFFIC SIGNAL CABLES (TYPE A)(14 AWG)(CONDUCTOR NO. 9)	LF	2150		\$ -	
	686.10			INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 24')	EA	1		\$ -	
	686.10			INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 36')	EA	1		\$ -	
	686.10			INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 40')	EA	1		\$ -	
	686.10			INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 44')	EA	1		\$ -	
	687.10			PEDESTAL POLE ASSEMBLY	EA	4		\$ -	
	688.30			AUDIBLE PEDESTRIAN SIGNAL UNITS (WITH INTEGRATED SIGNS)	EA	8		\$ -	
	693.10			INTERNALLY LIGHTED STREET NAME SIGNS (DUAL-SIDED/6')	EA	4		\$ -	
	695.22			EMERGENCY PREEMPTION PHASE SELECTOR	EA	1		\$ -	
	695.30			EMERGENCY PREEMPTION DETECTOR	EA	4		\$ -	
	695.40			EMERGENCY PREEMPTION DETECTOR CABLE	LF	870		\$ -	
	696.02			RADAR PRESENCE DETECTION DEVICE (RPDD)	EA	4		\$ -	
	696.06			RVDD INTERFACE MODULE (2-CHANNEL)	EA	4		\$ -	
	900.10			TEMPORARY PEDESTRIAN WALKWAY	LF	437		\$ -	
	695.11			CAT 5 ETHERNET CABLE	LF	50		\$ -	
	695.12			BELDEN POWER CABLE	LF	25		\$ -	
	695.13			WIRELESS ACCESS POINT ASSEMBLY	EA	1		\$ -	
	695.14			WIRELESS BRIDGE ASSEMBLY	EA	1		\$ -	
	6007.10			REMOVAL OF TRAFFIC SIGNAL	EA	1		\$ -	
	696.11			RVDD SETUP SYSTEM	EA	1		\$ -	
	696.16			RVDD COMMUNICATIONS AND POWER CABLE	LF	1000		\$ -	
	803.00			SALVAGE AND TRANSPLANT TREE	EA	9		\$ -	

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	803.10			TRANSPLANTED TREE MAINTENANCE (3 YEARS)	YR	3		\$ -	
	803.20			TRANSPLANTED TREE STORAGE	EA	9		\$ -	
	8000 2001			STRUCTURAL SOIL	TON	740		\$ -	
	6834 2001			CHANGEABLE MESSAGE SIGN	DAYS	112		\$ -	
	0465 4001			MANH (COMPL) (PRM) (48IN)	EA	2		\$ -	
	0465 2097			INLET (COMP) (GRATE)	EA	2		\$ -	
	0531 2013			CURB RAMP (TY 10)	EA	1		\$ -	
	0618 2012			CONDT (PVC) (SCHD 40)(1")	LF	2780		\$ -	
	0618 2081			CONDUIT (PVC)(SCHD 40)(4")(CONCENCSE)	LF	30		\$ -	
	0620 2009			ELEC CONDR (NO. 6) BARE	LF	35		\$ -	
	0620 2010			ELEC CONDR (NO. 6) INSULATED	LF	70		\$ -	
	0620 2013			ELEC CONDR (NO. 10) BARE	LF	2910		\$ -	
	0620 2014			ELEC CONDR (NO. 10) INSULATED	LF	8950		\$ -	
	0624 2007			GROUND BOX TY A (122311)	EA	4		\$ -	
	0624 2008			GROUND BOX TY A (122311) W/ APRON	EA	1		\$ -	
	0628 2004			ELC SRV TY A 120/240 060 (NS)SS(E)PS(U)	EA	1		\$ -	
	0662 2041			YELLOW MED NOSE	EA	1		\$ -	
	7635 2001			WATER BALLASTED BARRIER	LF	525		\$ -	
	9002.20			PARTIAL SHUTDOWN	DAYS	16		\$ -	
	9002.10			FULL SHUTDOWN	DAYS	16		\$ -	
	9003.1a			PRE-CAST CONCRETE SPHERES, 60" DIAMETER	EA	2		\$ -	
	9003.1b			PRE-CAST CONCRETE SPHERES, 36" DIAMETER	EA	2		\$ -	
	9003.20			BENCHES, 6' LONG WITH BACK	EA	13		\$ -	
	9003.30			BENCHES, 6' LONG NO BACK	EA	4		\$ -	
	9003.40			TRASH/RECYCLING RECEPTACLES (SET OF 1 EACH)	EA	15		\$ -	
	9003.50			BOLLARDS, 4" DIAMETER X 3' HIGH	EA	180		\$ -	
	9003.60			REMOVABLE BOLLARDS	EA	17		\$ -	
	9003.70			CARIBBEAN DRUMS (SET OF 3)	EA	1		\$ -	
	9003.80			CONTRABASS CHIMES	EA	2		\$ -	
	9003.90			TREE GUARDS	EA	26		\$ -	

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	9004.10			CONCRETE SEATWALL #1 (COLOR, FINISH, AND JOINT SEALANT)	LF	9		\$ -	
	9004.20			CONCRETE SEATWALL #2	LF	15		\$ -	
	9004.30			CONCRETE SEAT BLOCK	EA	3		\$ -	
	9004.40			CONCRETE WAVEWALL	LF	10		\$ -	
	9004.50			SPECIAL CONCRETE PAVING W/COLORED ACCENTS	SF	4810		\$ -	
	9005.10			RUMBLE STRIP PAVERS	SF	2637		\$ -	
	9005.20			DETECTABLE WARNING PAVERS	SF	1210		\$ -	
	9005.30			PEDESTRIAN PAVERS (2-TONE AND 4-TONE)	SF	33163		\$ -	
	9005.40			VEHICULAR PAVERS (4-TONE)	SF	5916		\$ -	
	9006.10			CRUSHED STONE OR DECOMPOSED GRANITE	SF	2409		\$ -	
	9006.20			COBBLES FOR DISSIPATORS	SF	28		\$ -	
	9007.10			LIMESTONE SEATWALLS	CF	676		\$ -	
	9007.20			BOULDER EDGING	EA	59		\$ -	
	9008.01			CONTROLLER ELECTRICAL SERVICE (120V)	EA	1		\$ -	
	9008.02			AUTOMATIC IRRIGATION CONTROLLER (42 STATION)	EA	1		\$ -	
	9008.03			WATER TAP AND METER (3/4" SIZE)	EA	1		\$ -	
	9008.04			BACKFLOW PREVENTION DEVICE AND ENCLOSURE (3/4" SIZE)	EA	1		\$ -	
	9008.05			CONTROL WIRE	LF	1510		\$ -	
	9008.06			IRRIGATION SLEEVES (MAINLINE)	LF	770		\$ -	
	9008.07			IRRIGATION SLEEVES (LATERALS)	LF	970		\$ -	
	9008.08			IRRIGATION SLEEVES (WIRES)	LF	670		\$ -	
	9008.09			IRRIGATION PRESSURE MAINLINE (2" SIZE)	LF	1380		\$ -	
	9008.10			IRRIGATION ISOLATION GATE VALVES (2" SIZE)	EA	7		\$ -	
	9008.11			IRRIGATION QUICK COUPLING VALVE (1" SIZE)	EA	11		\$ -	
	9008.12			TREE ROOT WATERING SYSTEM (2 PER TREE)	EA	112		\$ -	
	9008.13			REMOTE CONTROL VALVE	EA	7		\$ -	
	9008.14			DRIP REMOTE CONTROL VALVE	EA	1		\$ -	
	9008.15			SUBSURFACE DRIP IRRIGATION	SF	1688		\$ -	
	9009.10			TREES: 6" CALIPER	EA	29		\$ -	

PROJECT NAME: Hemisfair Internal Streets Improvements
 Water and E. Nueva
 PROJECT NO. 40-00421

CITY OF SAN ANTONIO
 025 UNIT PRICING FORM

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
	9009.20			TREES: 10" CALIPER	EA	14		\$ -	
	9009.30			TREES: 50 GALLON	EA	12		\$ -	
	9009.40			TREES: PALM 10' HT 36" BOX	EA	4		\$ -	
	9009.50			SHRUBS, GROUNDCOVER, AND PERENNIALS: 1 GALLON	EA	412		\$ -	
	9009.60			SHRUBS, PERENNIALS: 2 GALLON	EA	26		\$ -	
	9009.70			SHRUBS, PERENNIALS: 5 GALLON	EA	29		\$ -	
	9009.80			PLANTING SOIL FOR TREE WELLS	SF	1902		\$ -	
	9009.90			PLANTING AREA SHEET MULCH	SF	1143		\$ -	
	9009.10			STORMWATER PLANTER SOIL	SF	5664		\$ -	
	9009.11			STORMWATER PLANTER SHEET MULCH	SF	1416		\$ -	
	9009.12			SOIL FERTILITY TESTING	EA	1		\$ -	
	9010 9010			LANDSCAPE FORMS LED PEDESTRIAN LIGHT POLE, 12 FT. ALCOTT, TYPE III	EA	46		\$ -	
	9011 9011			LANDSCAPE FORMS LED BOLLARD LIGHT, 3FT. 1IN., HAWTHORNE, TYPE IV	EA	16		\$ -	
	9025.00			PLANT MAINTENANCE AND WARRANTY	YR	1		\$ -	
				REMOVE AND RELOCATE EXISTING BEAR SCULPTURE	LS	1		\$ -	
Total Bid Amount (Base Roadway):								\$	-

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
SAWS SEWER BID ITEMS									
	100			MOBILIZATION	EA.	1		\$ -	
	101			PREPARATION OF RIGHT-OF-WAY	EA.	1		\$ -	
	550			TRENCH EXCAVATION PROTECTION	LF	255		\$ -	
	848			8" PVC SANITARY SEWER LINE (0'-6' DEPTH)	LF	25		\$ -	
	848			8" PVC SDR 26 PRESSURE PIPE (0'-6' DEPTH)	LF	20		\$ -	
	848			10" PVC SDR 26 PRESSURE PIPE (0'-6' DEPTH)	LF	15		\$ -	
	848			12" PVC SDR 26 PRESSURE PIPE (0'-6' DEPTH)	LF	20		\$ -	
	848			12" PVC SANITARY SEWER LINE (0'-6' DEPTH)	LF	175		\$ -	
	852.1			SANITARY SEWER MANHOLE (0'-6')	EA	4		\$ -	
	854			6" SANITARY SEWER LATERAL	LF	153		\$ -	
	854			2" SANITARY SEWER LATERAL (CONDENSATE LINES)	LF	32		\$ -	
	854.1			ONE-WAY SANITARY SEWER CLEANOUT	EA	10		\$ -	
	862			REMOVAL 12" VCP SANITARY SEWER PIPE (0'-6' DEPTH)	LF	462		\$ -	
	862			REMOVAL SANITARY SEWER MANHOLE (0'-6')	EA	5		\$ -	
	864			BYPASS PUMPING	LS	1		\$ -	
	866			SEWER MAIN TELEVISIONING INSPECTION (8"-15")	LF	255		\$ -	
Total Bid Amount (Base SAWS SEWER):								\$ -	

SAWS WATER BID ITEMS

	100			MOBILIZATION	EA	1		\$ -	
	101			PREPARATION OF RIGHT-OF-WAY	EA	1		\$ -	
	206.1			REMOVE AND REPLACE ASPHALT W/ 10" BLACKBASE	SY	9		\$ -	
	550			TRENCH EXCAVATION PROTECTION	LF	902		\$ -	
	818			8" PVC, C-900, CLASS 150, DR 18	LF	19		\$ -	
	818			12" PVC, C-900, CLASS 150, DR 18	LF	883		\$ -	
	824			RELAY 3/4" LONG SERVICE	EA	1		\$ -	
	824			NEW 1" LONG SERVICE	EA	3		\$ -	
	824			RELAY 2" LONG SERVICE	EA	1		\$ -	

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.	
	824			RELAY 4" SHORT SERVICE	EA	1		\$ -		
	824			RELAY 4" LONG SERVICE	EA	1		\$ -		
	824			RELAY 6" LONG SERVICE	EA	2		\$ -		
	824			RELAY 6" FIRE LINE	EA	1		\$ -		
	828			8" GATE VALVE, MJ	EA	1		\$ -		
	828			12" GATE VALVE, MJ	EA	5		\$ -		
	830			8" CUT-IN GATE VALVE	EA	1		\$ -		
	833			NEW METER BOX	EA	3		\$ -		
	833			NEW 4" METER VAULT, COMPLETE	EA	1		\$ -		
	834.1			FIRE HYDRANT	EA	4		\$ -		
	836			DUCTILE IRON FITTINGS	EA	2.4		\$ -		
	840			8" WATER TIE-IN	EA	3		\$ -		
	841			HYDROSTATIC TEST	EA	2		\$ -		
	844			2" TEMPORARY BLOW-OFF	EA	3		\$ -		
	844			2" PERMANENT BLOW-OFF	EA	1		\$ -		
	856.3			24" STEEL CASING	LF	120		\$ -		
	3000			REMOVAL, TRANSPORT, AND DISPOSAL OF AC PIPE	LF	808		\$ -		
Total Bid Amount (Base SAWS WATER):								\$	-	

AT&T BID ITEMS

				INSTALL 10' x 10' x 8' MANHOLE W/ 2 EXTENSIONS*	EA	1		\$ -	
				INSTALL 4' x 8' x 6' MANHOLE W/ EXTENSION*	EA	1		\$ -	
				INSTALL 4' x 8' x 9' MANHOLE W/ EXTENSION*	EA	1		\$ -	
				REMOVE MANHOLE	EA	4		\$ -	
				INSTALL 4" SCH 40 PVC	LF	6948		\$ -	
				TELECOM DUCT BANK	LF	1497		\$ -	
				TRENCH EXCAVATION PROTECTION	LF	2778		\$ -	
				ELECTRONIC MARKER - EM	EA	7		\$ -	
				TRACER TAPE	LF	1497		\$ -	
				CUT & RESTORE PAVEMENT (ASPHALT)	SY	67			

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.	
				CONCRETE ENCASEMENT (2000 psi)	CY	87		\$ -		
* ADJUSTMENT AND BRACING OF EXISTING CONDUIT IS SUBSIDIARY TO INSTALLATION OF MANHOLE.										
Total Bid Amount (Base AT&T):								\$	-	

CPS ENERGY BID ITEMS

				7' x 7' x 7' MANHOLE W/ EXTENSION	EA	2		\$ -		
				8' x 8' x 8' MANHOLE W/ EXTENSION	EA	2		\$ -		
				10' x 10' x 10' MANHOLE W/ EXTENSION	EA	1		\$ -		
				10' x 10' x 12' MANHOLE W/ EXTENSION	EA	1		\$ -		
				15' x 7' SWITCH GEAR	EA	1		\$ -		
				REMOVE MANHOLE	EA	2		\$ -		
				5" SCH 40 PVC	LF	6708		\$ -		
				4" SCH 40 PVC	LF	14664		\$ -		
				2" SCH 40 PVC	LF	2571		\$ -		
				ELECTRIC DUCT BANK	LF	1965		\$ -		
				TEMPORARY SPECIAL SHORING	SF	50		\$ -		
				TRENCH EXCAVATION PROTECTION	SF	3542		\$ -		
				TRACER TAPE	EA	15		\$ -		
				CUT & RESTORE PAVEMENT (ASPHALT)	LF	1928		\$ -		
				CONCRETE ENCASEMENT (2000 psi)	SY	31		\$ -		
				CONCRETE ENCASEMENT (2000 psi)	CY	258		\$ -		
Total Bid Amount (Base CPS E):								\$	-	

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
CPS ENERGY GAS BID ITEMS									
				INSTALL GAS MAIN OR CASING (DISTANCE AS MEASURED ALONG THE TOP OF TRENCH) 4" PLASTIC PIPE AND TRACER WIRE	FT	13		\$ -	
				INSTALL GAS MAIN OR CASING (DISTANCE AS MEASURED ALONG THE TOP OF TRENCH) 8" PLASTIC PIPE AND TRACER WIRE	FT	896		\$ -	
				RERUN AND LOWER GAS SERVICE OFF NEW MAIN (MAIN TO 1 FT. INSIDE PROP. LINE) SIZES 1" THROUGH 4" SHORT SIDE	EA	1		\$ -	
				RERUN AND LOWER GAS SERVICE OFF NEW MAIN (MAIN TO METER) SIZES 1" THROUGH 4" SHORT SIDE	EA	1		\$ -	
				RERUN AND LOWER GAS SERVICE OFF NEW MAIN (MAIN TO METER) SIZES 1" THROUGH 4" LONG SIDE	EA	1		\$ -	
				INSTALL SERVICE STUB (MAIN TO 1 FT. INSIDE PROP. LINE) SIZES 1" THROUGH 4" SHORT SIDE	EA	3		\$ -	
				INSTALL SERVICE STUB (MAIN TO 1 FT. INSIDE PROP. LINE) SIZES 1" THROUGH 4" LONG SIDE	EA	1		\$ -	

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
				CIVIC STREET RESTORATION ADJUSTMENT, WHEN REQUIRED. TO BE USED AS DIRECTED BY THE CPS REPRESENTATIVE					
				FLOWABLE FILL	CY	55		\$ -	
				CIVIC STREET RESTORATION ADJUSTMENT, WHEN REQUIRED. TO BE USED AS DIRECTED BY THE CPS REPRESENTATIVE					
				ASPHALT	SY	4		\$ -	
				CIVIC STREET RESTORATION ADJUSTMENT, WHEN REQUIRED. TO BE USED AS DIRECTED BY THE CPS REPRESENTATIVE					
				CONCRETE/FLATWORK	SY	4		\$ -	
				SOIL REMOVAL AND DISPOSAL					
				REMOVE EXCESS SPOILS FROM SITE AND DELIVER TO AN APPROVED LANDFILL (THIS ITEM TO BE UTILIZED AT THE DISCRETION OF THE CPS ENERGY REPRESENTATIVE)	CY	100		\$ -	
								\$ -	
Total Bid Amount (Base CPS G):								\$	-

ITSD BID ITEMS

				2' x 4' x 2.5' HANDHOLE	EA	3		\$ -	
				4" SCH 80 PVC	LF	3260		\$ -	
				TELECOM DUCT BANK	LF	815		\$ -	
				TRENCH EXCAVATION PROTECTION	SF	1562		\$ -	
				ELECTRONIC MARKER - EM	EA	2		\$ -	
				TRACER TAPE	LF	815		\$ -	
				CONCRETE ENCASEMENT (2000 psi)	CY	36		\$ -	
Total Bid Amount (Base ITSD):								\$	-

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 Water and E. Nueva
 PROJECT NO. 40-00421

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 025 UNIT PRICING FORM

ALT. NO.	ITEM NO.	DESC. CODE	S.P. NO	BID ITEM DESCRIPTION	UNIT OF MEASURE	APPROX. QUANTITIES	UNIT BID PRICE	AMOUNT	ITEM SEQUENCE NO.
TWC BID ITEMS									
				INSTALL 2' x 3' x 4' VAULT	EA	6		\$ -	
				4" SCH 40 PVC	LF	2870		\$ -	
				TELECOM DUCT BANK	LF	1435		\$ -	
				TRENCH EXCAVATION PROTECTION	SF	2428		\$ -	
				ELECTRONIC MARKER - EM	EA	4		\$ -	
				TRACER TAPE	LF	1435		\$ -	
				CONCRETE ENCASEMENT (2000 psi)	CY	53		\$ -	

Total Bid Amount (Base TWC): \$ -

Total Bid Amount: \$ -

_____ certifies that the unit prices shown on this complete computer print-out for all of the bid items and the alternates contained in this proposal are the unit prices intended and that its bid will be tabulated using these unit prices and no other information from this print-out.

_____ Acknowledged and agrees that the total bid amount shown will be read as its total bid and further agrees that the official total bid amount will be determined by multiplying the unit bid prices shown in this print-out by the respective estimated quantities shown in the proposal and then totaling all of the extended amounts. _____ agrees to the terms, conditions, and requirements of the bidder's bid proposal.

Signed: _____ Date: _____

Title: _____

SUPPLEMENTAL CONDITIONS

1. **When submitting a bid in person, visitors to City Hall must allow time for security measures.** Visitors to City Hall will be required to enter through the east side of the building. The public will pass through a metal detector and x-ray machine located in the lobby. All packages, purses and carried items will be scanned during regular business hours of 7 a.m. to 7 p.m. After the public proceeds through the metal detector, they will sign in and receive a visitor's badge. For those that might require the use of a ramp, entry is available on the south side of the building (Dolorosa side). Security will meet the visitor in the basement with a hand scanner.
2. **Scope of the Work** - The Contractor shall furnish all the materials and perform all the Work called for in the Contract Documents and more specifically described in the Plans and Specification for the Project entitled.
3. The Contractor shall begin Work at the job site within seven (7) calendar days after the date of the Owner's written Authorization to Proceed issued by the Owner's Representative.
4. **Liquidated Damages for Delay in Milestone 1, Substantial Completion & Final Completion:** Contractor shall pay Owner the sum indicated on the table below for each and every calendar day of unexcused delay in achieving Milestone 1, Substantial Completion/Final Completion beyond the Scheduled Completion/Final Completion Dates. Any sums due and payable hereunder by Contractor shall be payable, not as a penalty, but as Liquidated Damages representing an estimate of delay damages likely to be sustained by Owner, estimated at the time of executing the Contract. Such Liquidated Damages shall apply regardless of whether Contractor has been terminated by Owner prior to Milestone 1 or Substantial Completion, so long as Contractor's actions or inactions contributed to the delay. Such Liquidated Damages shall be in addition to and not in preclusion of any recovery of actual damages resulting from other defects in Contractor's performance hereunder for matters other than delays in Milestone 1, Substantial Completion and/or Final Completion. When Owner reasonably believes that Milestone 1, Substantial Completion and/or Final Completion will be inexcusably delayed, Owner shall be entitled, but not required, to withhold from any amounts otherwise due to Contractor an amount then believed by Owner to be adequate to recover liquidated damages applicable to such delays. If and when Contractor overcomes the delay in achieving Milestone 1, Substantial Completion and/or Final Completion, or any part thereof, for which Owner has withheld payment, Owner promptly shall release to Contractor those funds withheld but no longer applicable in excess of actual Liquidated Damages incurred.

Liquidated Damages

Contractual Milestone	Contractual Milestone Description and Requirements	From	To	Liquidated Damages
1	Substantial Completion of Phase 1, Stage 1 work, to include completion of roadway such that two-way vehicular access can be opened for the duration of the Project in the zone shown on Sheet 22 of the plans.	NTP	April 3, 2015	\$1,000.00 per day
2	Substantial Completion	NTP	486 calendar days	\$1,000.00 per day
3	Final Completion	Substantial Completion	30 calendar days	500.00 per day

5. **The Contract Sum** - The Owner shall pay the Contractor for the proper performance of the Contract, subject to additions and deduction provided therein, the Contract sum is listed in the Purchase Order.
6. **Partial Payment** - Each month, the Owner shall make a progress payment as approved by the Owner's Representative in accordance with the General Conditions.
7. **Acceptance and Final Payment** - Final Payment shall be due on final Owner acceptance of the Project Work, provided the Contract has been completed by Contractor as provided in the General Conditions. Before issuance of the final payment, the Contractor shall submit an affidavit and reasonable additional supporting evidence if required, as satisfactory to the Director of Finance, City of San Antonio, that all labor payrolls, construction materials and supply bills, subcontractors, and other indebtedness connected with the Work have been paid in full, or that an outstanding debt is being disputed and that the corporate surety or its agent is processing the outstanding claim and is willing to defend and/or indemnify the City should the City make final Contract payment.
8. Contractor shall comply with Standard Specification 1000 in its invoicing.

LIST OF GOVERNING SPECIFICATIONS

CITY OF SAN ANTONIO Standard Specifications for Construction (June 2008), or latest revisions.

Governing Specifications are located on the following website:

<http://www.sanantonio.gov/cims/standardspecificationsV2.asp>, including all Special Provisions unless otherwise noted.

100	MOBILIZATION
101	PREPARING RIGHT-OF-WAY
103	REMOVE CONCRETE
104	STREET EXCAVATION
107	EMBANKMENT
200	FLEXIBLE BASE
203	TACK COAT
205	HOT MIX ASPHALTIC CONCRETE PAVEMENT
209	CONCRETE PAVEMENT
230	BASE AND PAVEMENT REPLACEMENT
308	DRILLED SHAFTS AND UNDER-REAMED FOUNDATIONS
401	REINFORCED CONCRETE PIPE
402	HIGH DENSITY CURROGATED POLYETHYLENE PIPE
403	STORM SEWER JUNCTION BOXES AND INLETS
413	FLOWABLE FILL
414	FLEXIBLE PIPE-TO-MANHOLE CONNECTOR
500	CONCRETE CURB, GUTTER, AND CONCRETE CURB AND GUTTER
502	CONCRETE SIDEWALKS
507	CHAIN LINK WIRE FENCE
526	FIELD OFFICE
530	BARRICADES, SIGNS AND TRAFFIC HANDLING
531	SIGNS
535	HOT APPLIED THERMOPLASTIC PAVEMENT MARKINGS
536	PREFORMED PAVEMENT MARKINGS
537	RAISED PAVEMENT MARKERS
540	TEMPORARY EROSION, SEDIMENTATION AND WATER POLLUTION PREVENTION & CONTROL
550	TRENCH EXCAVATION SAFETY PROTECTION
618	CONDUIT
620	ELECTRICAL CONDUCTORS
624	GROUND BOXES
680	INSTALLATION OF HIGHWAY TRAFFIC SIGNALS
682	VEHICLE AND PEDESTRIAN SIGNAL HEADS
683	LED COUNTDOWN PEDESTRIAN SIGNAL MODULE
684	TRAFFIC SIGNAL CABLES
686	TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)
687	PEDESTAL POLE ASSEMBLIES

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688	PEDESTRIAN DETECTORS AND VEHICLE LOOP DETECTORS
693	INTERNALLY LIGHTED STREET NAME SIGN ASSEMBLIES
695	EMERGENCY VEHICLE TRAFFIC SIGNAL PRIORITY CONTROL SYSTEM
700	COST LOADED PROJECT SCHEDULES
1000	WEB PORTAL

SPECIAL SPECIFICATIONS – CITY OF SAN ANTONIO

696	RADAR VEHICLE DETECTION DEVICES (RVDD)
900	TEMPORARY PEDESTRIAN WALKWAY
02630	PRE-SLOPED CHANNEL DRAIN SYSTEM
6007	REMOVING TRAFFIC SIGNALS
9002	TEMPORARY SUSPENSION OF WORK

SPECIAL SPECIFICATIONS – LANDSCAPING, IRRIGATION, AND HARDSCAPE

803	TREE TRANSPLANTING
SS8000	CU-STRUCTURAL SOIL
9003	SITE FURNISHINGS
9004	LANDSCAPE CONCRETE: COLOR, FINISHES, SEALANTS, AND COATINGS
9005	UNIT PAVERS
9006	CRUSHED STONE OR DECOMPOSED GRANITE AND COBBLES
9007	STONE MASONRY
9008	IRRIGATION
9009	PLANTING
9010	LANDSCAPE FORMS PEDESTRIAN LIGHT
9011	LANDSCAPE HAWTHORN BOLLARD LIGHT
9025	ORGANIC LANDSCAPE MAINTENANCE

ITEM 9002

Temporary Suspension of Work

This item shall govern for the complete suspension of work throughout the entire project or for the partial suspension of work throughout select portions of the project as established by the engineer.

Temporary Suspension of Work: The Engineer may suspend the work, wholly or in part, and will provide notice and reasons for the suspension in writing. Suspend and resume work only as directed in writing.

When part of the work is suspended, the Engineer may suspend working day charges only when conditions not under the control of the Contractor prohibit the performance of critical activities. When all of the work is suspended for reasons not under the control of the Contractor, the Engineer will suspend working day charges.

Project Schedule Update: If work has been suspended, wholly or in part, the Contractor shall incorporate time suspensions into the monthly Project Schedule updates.

Measurement: This item will be measured by the day of work suspension, wholly or in part.

Payment: The temporary suspension of work implemented in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Temporary Suspension of Work." This price is full compensation for any required demobilization; covering of trenches; opening of lanes, sidewalks, bicycle paths (to include all costs associated therewith); payment for equipment, insurance and salaries during said work suspension; Project Schedule updates, remobilization, and other documentation as may be required.

Bid Items:

Item 9002.1 – Temporary Suspension of Work in whole – per day.

Item 9002.2 - Temporary Suspension of Work in part – per day.

ITEM 9007

Stone Masonry

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes the following applications of stone masonry:
 - 1. Limestone Seatwalls placed on aggregate base
 - 2. Boulder Edging at stormwater planters

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
 - 1. For stone varieties proposed for use on Project, include test data indicating compliance with physical properties required by referenced ASTM standards.
- B. Samples for Verification:
 - 1. For limestone, provide at least three samples for each type of stone, exhibiting extremes of the full range of color and other visual characteristics expected in completed Work. Samples will establish the standard by which stone provided will be judged.
 - 2. For boulder edging, provide photos of proposed material, representative of color, form, and size, and including something to indicate scale. Show a minimum of 5 representative boulders.
- C. List of Materials Used in Constructing Mockups: List generic product names together with manufacturers, manufacturers' product names, sources of supply, and other information as required to identify materials used. Include source of aggregates.
 - 1. Submittal is for information only. Neither receipt of list nor approval of mockups constitutes approval of deviations from the Contract Documents unless such deviations are specifically brought to the attention of Architect and approved in writing.

- D. Qualification Data: For qualified Installer.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who employs experienced stonemasons and stone fitters.
- B. Cutting and Setting Drawings: The stone supplier shall prepare and submit to the Architect for approval, complete cutting and setting drawings for all of the stone work. Such drawings shall show in detail the sizes, sections and dimensions of stone, the arrangement of joints and any other necessary details. All jointing as shown by the architect on the contract drawings shall be followed, unless modifications are agreed upon in writing, or indicated upon the approval of shop drawings. If the contract drawings do not show the intent of the jointing, it will be the stone supplier's responsibility to establish the jointing in accordance with industry standards and practice. The general contractor shall furnish all field dimensions necessary for stone cutting. Provisions for the anchoring, dowelling, and cramping of work, in keeping with standard practices, and for the support of stone by shelf angles and loose steel when required shall be indicated on the cutting and setting drawings.
- C. Source Limitations for Stone: Obtain limestone stone, regardless of finish, from one quarry with resources to provide materials of consistent quality in appearance and physical properties.
- D. Mockups: Build mockups to demonstrate aesthetic effects and set quality standards for materials and execution.
 - 1. Limestone seatwall:
 - a. Build mock-up approximately 60 inches (1500 mm) long by height as indicated on drawings by full thickness, including face and backup wythes and accessories. Show stepped height condition at grade change.
 - 2. Boulder edging at stormwater planters:
 - a. Build mock-up showing placement of all stones for one stormwater planter, including mortar.
 - 3. Protect accepted mockups from the elements with weather-resistant membrane.
 - 4. Approval of mockups is for color, texture, and blending of stone; tooling of joints; and aesthetic qualities of workmanship.
 - a. Approval of mockups is also for other material and construction qualities Architect specifically approves in writing.
 - b. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 - 5. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- E. Preinstallation Conference: Conduct conference at Project site with Landscape Architect and Owner's Representative.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- B. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil.

1.6 PROJECT CONDITIONS

- A. Protection of Stone Masonry: During construction, cover tops of walls, projections, and sills with waterproof sheeting at end of each day's work. Cover partially completed stone masonry when construction is not in progress.
 - 1. Extend cover a minimum of 24 inches (600 mm) down both sides and hold cover securely in place.
- B. Stain Prevention: Immediately remove mortar and soil to prevent them from staining the face of stone masonry.
 - 1. Protect base of walls from rain-splashed mud and mortar splatter by coverings spread on the ground and over the wall surface.
 - 2. Protect sills, ledges, and projections from mortar droppings.
 - 3. Protect surfaces of window and door frames, as well as similar products with painted and integral finishes, from mortar droppings.
 - 4. Turn scaffold boards near the wall on edge at end of each day to prevent rain from splashing mortar and dirt on completed stone masonry.
- C. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Remove and replace stone masonry damaged by frost or freezing conditions. Comply with cold-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.
 - 1. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F (4 deg C) and above and will remain so until masonry has dried, but not less than 7 days after completing cleaning.
- D. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.

1.7 COORDINATION

- A. Advise installers of other work about specific requirements for placement of reinforcement, veneer anchors, flashing, and similar items to be built into stone masonry.

PART 2 - PRODUCTS

2.1 LIMESTONE

- A. Limestone: Comply with ASTM C 568.
 - 1. Products: Subject to compliance with requirements, stone varieties that may be incorporated into the Work include, but are not limited to, the following:
 - a. Limestone shall be Leuders variety as available from I-10 Stone Source
7193 Heuerman, San Antonio, Texas .78256
www.i10stonesource.com
- B. Match Architect's samples for color, finish, and other stone characteristics relating to aesthetic effects.

2.2 BOULDERS

- A. Boulders shall be stones 12”-16” diameter, equal or similar to “Granite Bay Cobble” and approved by the Landscape Architect. Granite Bay Cobble, available at Keller Materials, 1920 SE Loop 410 San Antonio, Texas 78220, 210-648-4221, www.kellermaterials.com.
- B. Stones shall be tagged in the stone supply yard for review and approval by Landscape Architect prior to delivery to site.
- C. Stones shall meet the following:
 - 1. Maximum Absorption per ASTM C 97: 3 percent.
 - 2. Minimum Compressive Strength per ASTM C 170: 4000 psi (28 MPa).

2.3 MASONRY CLEANERS

- A. Proprietary Acidic Cleaner: Manufacturer's standard-strength cleaner designed for removing mortar and grout stains, efflorescence, and other new construction stains from stone masonry surfaces without discoloring or damaging masonry surfaces; expressly approved for intended use by cleaner manufacturer and stone producer.

2.4 FABRICATION

- A. Fabricate stone to comply with sizes, shapes, and tolerances recommended by applicable stone association or, if none, by stone source, for faces, edges, beds, and backs.
- B. All limestone shall be cut accurately to shape and dimension and full to the square with jointing as shown on approved drawings

City of San Antonio Special Specifications for Construction

- C. Cut or select stone to produce pieces of thickness, size, and shape indicated, including details on Drawings. Dress joints (bed and vertical) straight and at right angle to face unless otherwise indicated.
- D. Cut and drill sinkages and holes in stone for anchors and supports.
- E. Carefully inspect stone at quarry or fabrication plant for compliance with requirements for appearance, material, and fabrication. Replace defective units before shipment.
 - 1. Clean sawed backs of stone to remove rust stains and iron particles.
- F. Thickness of Stone: Provide thickness indicated, but not less than the following:
 - 1. Thickness: 4 inches (100 mm) plus or minus 1/2 inch (13 mm) for all stones except flagstones. Thickness does not include projection of pitched faces.
 - 2. Limestone Flagstones to be: 2 inch (50 mm) plus or minus 1/4 inch (6 mm).
- G. Finish exposed faces and edges of stone to comply with requirements indicated for finish and to match approved samples and mockups.
 - 1. Finish: As indicated on the drawings.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces indicated to receive stone masonry, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
- B. Examine substrate to verify that, inserts, reinforcement, and other items installed in substrates and required for or extending into stone masonry are correctly installed.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean dirty or stained stone surfaces by removing soil, stains, and foreign materials before setting. Clean stone by thoroughly scrubbing with fiber brushes and then drenching with clear water. Use only mild cleaning compounds that contain no caustic or harsh materials or abrasives.

3.3 SETTING OF STONE MASONRY, GENERAL

- A. Perform necessary field cutting and trimming as stone is set.
 - 1. Use power saws to cut stone that is fabricated with saw-cut surfaces. Cut lines straight and true, with edges eased slightly to prevent snipping.

2. Use hammer and chisel to split stone that is fabricated with split surfaces. Make edges straight and true, matching similar surfaces that were shop or quarry fabricated.
 3. Pitch face at field-split edges as needed to match stones that are not field split.
- B. Sort stone before it is placed in wall to remove stone that does not comply with requirements relating to aesthetic effects, physical properties, or fabrication, or that is otherwise unsuitable for intended use.
- C. Arrange stones with color and size variations uniformly dispersed for an evenly blended appearance.
- D. Set stone to comply with requirements indicated on Drawings. Install supports, fasteners, and other attachments indicated or necessary to secure stone masonry in place. Set stone accurately in locations indicated with edges and faces aligned according to established relationships and indicated tolerances.
- E. Maintain uniform joint widths except for variations due to different stone sizes and where minor variations are required to maintain bond alignment if any. Lay walls with joints not less than 1/4 inch (6 mm) at narrowest points or more than 5/8 inch (16 mm) at widest points.
- F. Coat limestone with cementitious dampproofing as follows:
1. Stone at Grade: Beds, joints, and back surfaces to at least 12 inches (300 mm) above finish-grade elevations.
 2. Stone Extending below Grade: Beds, joints, back surfaces, and face surfaces below grade.
 3. Allow cementitious dampproofing formulations to cure before setting dampproofed stone. Do not damage or remove dampproofing in the course of handling and setting stone.
- G. Place weep holes and vents in joints where moisture may accumulate.

3.4 BOULDER EDGING

- A. Stones shall be set to comply with requirements indicated on Drawings and as directed by the Owner's Representative. Anchors, supports, and other attachments shall be installed as indicated or necessary to secure stones in place. Any anchors, supports or accessories shall be shimmed and adjusted to set stones to produce the effect established in the mock-up.

3.5 CONSTRUCTION TOLERANCES

- A. Variation from Plumb: For vertical lines and surfaces, do not exceed 1/4 inch in 10 feet (6 mm in 3 m) or more. For external corners, expansion joints, control joints, and other conspicuous lines, do not exceed 1/4 inch in 20 feet (6 mm in 6 m) or 1/2 inch in 40 feet (13 mm in 12 m) or more.

- B. Variation from Level: For bed joints and horizontal grooves, and other conspicuous lines, do not exceed 1/4 inch in 20 feet (6 mm in 6 m) or 1/2 inch in 40 feet (13 mm in 12 m) or more.
- C. Measure variation from level, plumb, and position shown in plan as variation of the average plane of the face of each stone from level, plumb, or dimensioned plane.
- D. Variation in Plane between Adjacent Stones: Do not exceed one-half of tolerance specified for thickness of stone.

3.6 POINTING

- A. Prepare stone-joint surfaces for pointing with mortar by removing dust and mortar particles. Where setting mortar was removed to depths greater than surrounding areas, apply pointing mortar in layers not more than 3/8 inch (10 mm) deep until a uniform depth is formed.
- B. Point stone joints by placing and compacting pointing mortar in layers not more than 3/8 inch (10 mm) deep. Compact each layer thoroughly and allow to become thumbprint hard before applying next layer.
- C. Tool joints, when pointing mortar is thumbprint hard, with a smooth jointing tool to produce the following joint profile:
 - 1. Joint Profile: Concave, Smooth, flat face slightly below edges of stone or as indicated].

3.7 ADJUSTING AND CLEANING

- A. Remove and replace stone masonry of the following description:
 - 1. Broken, chipped, stained, or otherwise damaged stone. Stone may be repaired if methods and results are approved by Landscape Architect.
 - 2. Defective joints.
 - 3. Stone masonry not matching approved samples and mockups.
 - 4. Stone masonry not complying with other requirements indicated.
- B. Replace in a manner that results in stone masonry matching approved samples and mockups, complying with other requirements, and showing no evidence of replacement.
- C. In-Progress Cleaning: Clean stone masonry as work progresses. Remove mortar fins and smears before tooling joints.
- D. Final Cleaning: After mortar is thoroughly set and cured, clean stone masonry as follows:
 - 1. Test cleaning methods on mockup; leave one-half of panel uncleaned for comparison purposes. Obtain Architect's approval of sample cleaning before cleaning stone masonry.

2. Protect adjacent stone and nonmasonry surfaces from contact with cleaner by covering them with liquid strippable masking agent, polyethylene film, or waterproof masking tape.
3. Wet wall surfaces with water before applying cleaner; remove cleaner promptly by rinsing thoroughly with clear water.
4. Clean stone masonry by bucket and brush hand-cleaning method described in BIA Technical Note No. 20 Revised II, using job-mixed detergent solution.
5. Clean stone masonry with proprietary acidic cleaner applied according to manufacturer's written instructions.
6. Clean limestone masonry to comply with recommendations in ILI's "Indiana Limestone Handbook."

3.8 EXCESS MATERIALS AND WASTE

- A. Excess Stone: Stack excess stone where directed by Owner for Owner's use.
- B. Disposal as Fill Material: Dispose of clean masonry waste, including excess or soil-contaminated sand, by crushing and mixing with fill material as fill is placed.
 1. Crush masonry waste to less than 4 inches (100 mm) in greatest dimension.
 2. Mix masonry waste with at least two parts of specified fill material for each part of masonry waste. Fill material is specified in Division 31 Section "Earth Moving."
 3. Do not dispose of masonry waste as fill within 18 inches (450 mm) of finished grade.
- C. Excess Masonry Waste: Remove excess clean masonry waste that cannot be used as fill, as described above, and other waste, and legally dispose of off Owner's property.

PART 4 - MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

- A. Limestone seatwalls shall be measured by the cubic foot, to the nearest foot. Only the limestone seatwalls shown on the plans or approved by the Engineer will be measured for payment.
- B. Limestone acequia markers shall be measured by each unit in sizes shown on the plans.
- C. Boulder edging shall be measured by each boulder unit in sizes shown on the plans.

4.2 PAYMENT

- A. The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Limestone Seatwalls," "Limestone Acequia Markers," and "Boulder Edging". This price is full compensation for furnishing the tools, equipment, materials, testing, labor, and

City of San Antonio Special Specifications for Construction

incidentals required to provide crushed stone or decomposed granite, and boulder edging meeting the requirements of the plans.

BID ITEMS:

9007.1 Limestone Seatwalls

9007.2 Boulder Edging

THE FOLLOWING CHANGES ARE MADE TO THE CITY OF SAN ANTONIO'S GENERAL NOTES:

ADDITIONAL NOTES

1. ANY NECESSARY REMOVAL, RELOCATION, AND/OR SALVAGING OF SIGNS, BOLLARDS, FENCES, AND LANDSCAPING, BENCHES, LAMPS, KIOSKS, BLOCKS, OR PAVERS, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE PAID FOR UNDER PREPARING RIGHT-OF-WAY (ITEM 101).
2. THE CONTRACTOR WILL NOTIFY STORM WATER ENGINEERING AT LEAST 24 HOURS PRIOR TO THE INSTALLATION OF ANY DRAINAGE FACILITY WITHIN A FLOODPLAIN, DRAINAGE EASEMENT OR STREET RIGHT-OF-WAY NOT INDICATED ON THE CONSTRUCTION PLANS. ANY DAMAGE TO EXISTING DRAINAGE SYSTEMS, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AT HIS EXPENSE. THE CONTRACTOR WILL NOTIFY STORM WATER ENGINEERING AT 210-207-8052 AS SOON AS CONFLICTS WITH UTILITIES ARE ENCOUNTERED OR ANY DRAINAGE SYSTEM IS DAMAGED DURING CONSTRUCTION.
3. CONSTRUCTION SPOILS WILL NOT BE ALLOWED TO BE DEPOSITED ANYWHERE WITHIN A DRAINAGE EASEMENT, RIGHT-OF-WAY, OR FLOODPLAIN WITHIN THE LIMITS OF THE PROJECT AND SHALL BE DISPOSED OFFSITE IN COMPLIANCE WITH CURRENT APPLICABLE REGULATIONS.
4. NO STRUCTURE, FENCES, WALLS, LANDSCAPING, OR OTHER OBSTRUCTIONS THAT IMPEDE DRAINAGE SHALL BE PLACED WITHIN THE LIMITS OF EXISTING DRAINAGE EASEMENTS.
5. CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING THE RELOCATION OF PRIVATE FENCES WITH THE RESPECTIVE PROPERTY OWNER IN ORDER TO MAINTAIN PROPERTY AND CONTENTS SECURE TO THE PROPERTY OWNER'S SATISFACTION. ANY MEASURES AGREED UPON, INCLUDING BUT NOT LIMITED TO, TEMPORARY FENCES, SECURITY GUARD, ETC., BETWEEN THE PROPERTY OWNER AND THE CONTRACTOR SHALL BE PROVIDED AT CONTRACTOR'S EXPENSE. THERE WILL BE NO SEPARATE PAYMENT FOR SCHEDULING AND COORDINATION EFFORTS.
6. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNER/REPRESENTATIVES WITH A 48-HOUR ADVANCED NOTICE OF ANY UTILITY DOWNTIMES DUE TO CONSTRUCTION. THERE WILL BE NO SEPARATE PAYMENT FOR SCHEDULING OR COORDINATION EFFORTS.
7. THE CONTRACTOR SHALL USE A LICENSED IRRIGATION CONTRACTOR FOR ALL IRRIGATION SYSTEM WORK.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY BRICK, WOOD, ROCK, CONCRETE, OR WROUGHT IRON FENCES, WALLS, AND SIGNS ON PRIVATE PROPERTY THAT ARE DAMAGED AS A RESULT OF CONSTRUCTION. CONTRACTOR SHALL REPLACE WITH EQUIVALENT QUALITY OF MATERIALS AND CONSTRUCTION AND PROVIDE CONSISTENCY WITH REMAINING STRUCTURE TO THE OWNER'S SATISFACTION.
9. ALL WATER VALVE AND WATER METER ADJUSTMENTS SHALL BE SUBSIDIARY TO PERTINENT BID ITEMS.
10. ALL ADJUSTMENTS TO ELECTRIC PEDESTAL AND GROUND BOXES SHALL BE SUBSIDIARY TO PERTINENT BID ITEMS.
11. ANY NECESSARY PRUNING OF TREES OR REMOVAL OF TREES AND STUMPS, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE PAID FOR UNDER PREPARING RIGHT-OF-WAY (ITEM 101).
12. CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING OR CAPPING ALL EXISTING IRRIGATION LINES AT THE RIGHT-OF-WAY AND THE REMOVAL, WITHOUT DAMAGE, OF THE FOLLOWING ITEMS BUT NOT LIMITED TO, SPRINKLER HEADS, TIMERS AND BACKFLOW PREVENTERS. IF DAMAGE DOES OCCUR, CONTRACTOR SHALL BE REQUIRED TO REPLACE AND INSURE THAT ITEMS GET DELIVERED TO THE OWNER. THERE IS NO SEPARATE PAY ITEM FOR THIS WORK.
13. CONTRACTOR SHALL PROVIDE TREE PROTECTION LEVEL II A FENCE PROTECTION IN ACCORDANCE WITH CITY OF SAN ANTONIO STANDARDS AND DETAILS.
14. REMOVAL OF EXISTING CONCRETE PAVEMENT ENCOUNTERED DURING EXCAVATION SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO ITEM 104 STREET EXCAVATION.
15. ALL TRENCHES MUST BE BACKFILLED OR PLATED AT THE END OF EACH WORK DAY. THE CONTRACTOR SHALL NOT LEAVE ANY OPEN TRENCHES DURING NON-WORKING HOURS.
16. CONTRACTOR IS REQUIRED TO VERIFY PROJECT ELEVATIONS AND PROJECT SURVEY CONTROLS.
17. "MATCH EXISTING" SHALL BE UNDERSTOOD TO SIGNIFY VERTICAL AND HORIZONTAL ALIGNMENT.
18. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES DURING CONSTRUCTION.
19. A MINIMUM 3:1 SAFETY SLOPE SHALL BE PLACED ALONG ALL VERTICAL CUTS GREATER THAN 1" WITHIN THE CLEAR ZONE PER THE TXDOT GUIDELINES FOR THE TREATMENT OF PAVEMENT DROP-OFFS IN WORK ZONES. CLEAR ZONE IS DEFINED AS 30' FROM EDGE OF TRAVEL LANE.
20. CONTRACTOR SHALL BE RESTRICTED FROM USING VIBRATORY ROLLER WITHIN PROJECT LIMITS. ANY DAMAGE TO ADJACENT FACILITIES DUE TO CONTRACTOR COMPACTING OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
21. CONCRETE PAVEMENT QUANTITIES SHOWN ON PLAN AND PROFILE SHEETS ARE FULL COMPENSATION FOR INSTALLATION, MATERIALS, LABOR, EQUIPMENT, INCIDENTALS, AND ALL OTHER PERTINENT ITEMS AS DEFINED IN ITEM 209. ANY DENOTED SURFACE FINISHES SHALL BE PER LANDSCAPE PLANS AND SPECIFICATIONS.
22. ALL EXISTING UTILITIES ARE TO BE ABANDONED OR RELOCATED UNLESS OTHERWISE NOTED ON THE PLANS.
23. CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING UTILITIES UNTIL NEW UTILITY IS IN PLACE AND OPERATIONAL. ALL UTILITIES SHALL REMAIN OPERATIONAL AND PROVIDE CONTINUAL UNINTERRUPTED SERVICES FOR THE DURATION OF CONSTRUCTION. CONTRACTOR SHALL PROVIDE PROPER SHORING, BRACING, OR OTHER SUITABLE SUPPORT FOR UTILITY LINES DURING CONSTRUCTION. METHOD MUST BE APPROVED BY THE OWNER OF THE UTILITY. NO SEPERATE PAY ITEM.
24. EXISTING PUBLIC UTILITIES REQUIRING RELOCATION OR ADJUSTMENT TO CONFORM TO PROJECT ALIGNMENT OR GRADES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. CONTRACTOR SHALL COORDINATE WITH THE PROPER UTILITY COMPANY. ADJUSTMENT TO PROJECT GRADES OF ALL EXISTING MANHOLES THAT ARE TO REMAIN IN PLACE SHALL BE THE CONTRACTOR'S RESPONSIBILITY. NO SEPARATE PAY ITEM.
25. PRIOR TO CONSTRUCTION ALL HISTORIC STRUCTURES SHALL HAVE PROTECTIVE MEASURES INSTALLED AS SHOWN ON PLANS.
26. PRIOR TO THE START OF WORK, CALL 207-1111 TO SCHEDULE A PRE-CONSTRUCTION AND FENCING INSPECTION. [SEC. 35-477 (5) (c)] FAILURE TO SCHEDULE A FENCING INSPECTION PRIOR TO THE START OF WORK MAY RESULT IN A STOP WORK ORDER, A PENALTY OF \$2,000.00, OR BOTH. REFERENCED THE AP# ASSOCIATED WITH THE APPROVED PERMIT.
27. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A LICENSED TREE MAINTENANCE PROFESSIONAL THROUGHOUT THE PROJECT PER CITY OF SAN ANTONIO ORDINANCE ARTICLE VIII SEC. 21-171.
28. SEE LANDSCAPE PLANS AND SPECS. FOR CONCRETE SEATWALL AND SPECIAL CONCRETE PAVING JOINT SEALANT PRODUCT, COLOR, AND SUBMITTAL REQUIREMENTS.
29. JOINT PATTERN FOR CONCRETE PAVEMENT SHALL CONSIST OF A LONGITUDINAL CONSTRUCTION JOINT ALONG THE CENTERLINE OF ROADWAY. LONGITUDINAL 1/4" SCORING LINES SHALL BE PLACE ALONG CENTER OF EACH LANE. TRANSVERSE 1/4" SCORING LINES SHALL BE PLACED 5' O.C. PERPENDICULAR TO CENTERLINE. TRANSVERSE SCORING LINES SHALL BE LAID OUT SUCH THAT SLIVERS OF 2 1/2' OR LESS ARE NOT CREATED. SLIVERS OF 2 1/2' WILL NOT BE ALLOWED. CONTRACTOR SHALL SUBMIT JOINTING PLAN FOR APPROVAL PRIOR TO PLACEMENT OF CONCRETE PAVEMENT. ALL JOINTING SCORING SHALL BE SUBSIDIARY TO CONCRETE PAVING PAY ITEM.
30. REMOVAL OF STRUCTURES TO INCLUDE BUT NOT LIMITED TO FOUNDATIONS, ELECTRICAL, SUPPORTS, PIPING, APRONS, CONCRETE, AND ANY OTHER INCIDENTALS. THIS WORK SHALL BE SUBSIDIARY TO REMOVAL ITEMS.

DELETED NOTES

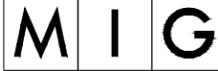
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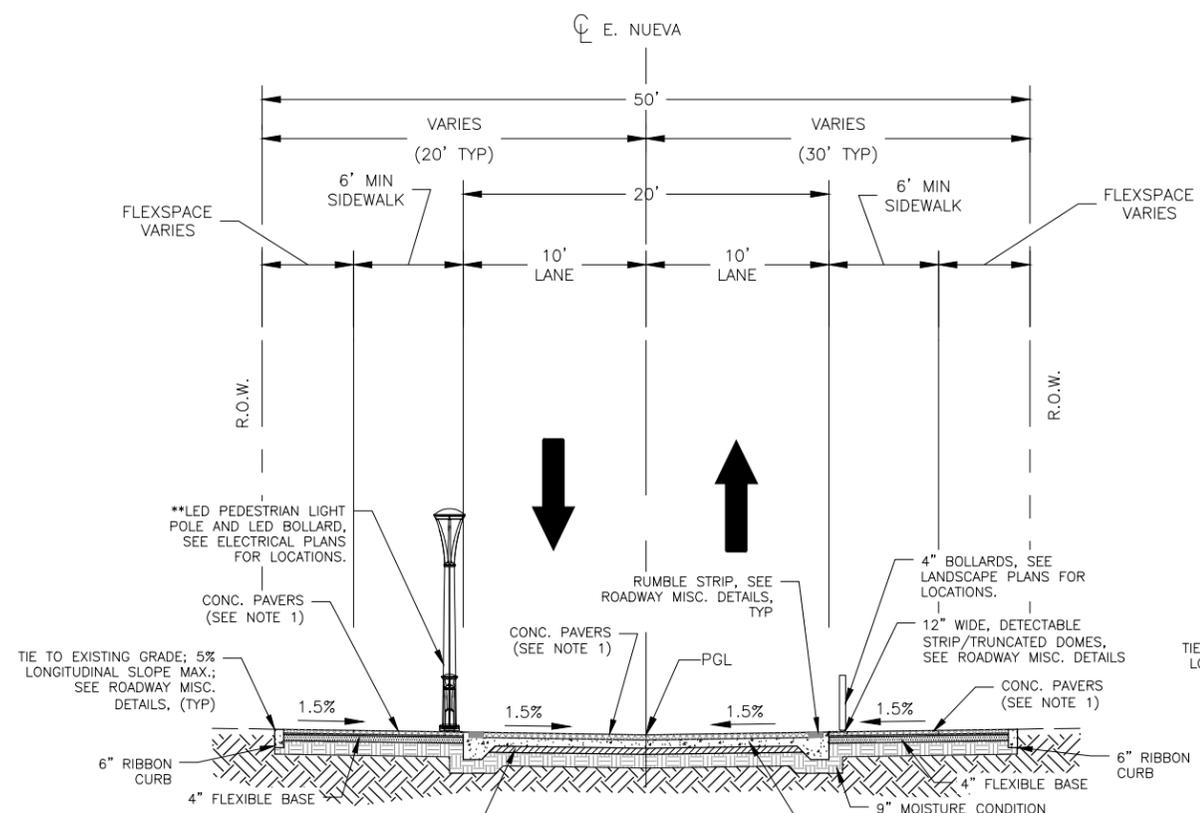
1. REPLACE COSA DRAINAGE - 207-8048 FROM GENERAL NOTES NO. 10 WITH COSA STORM WATER ENGINEERING - 207-8052.

NOTE TO CONSULTANT

NOTES TO REVIEWERS

NOTES TO CONTRACTOR

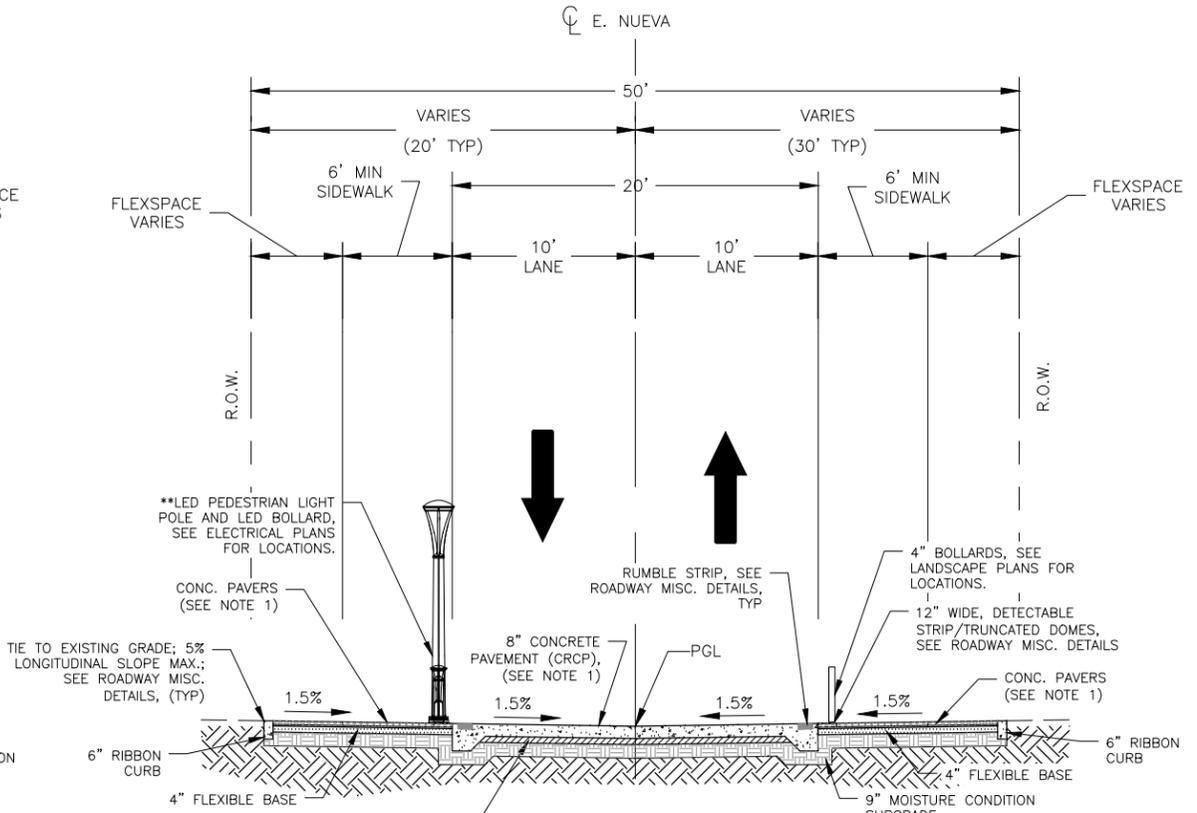
 CITY OF SAN ANTONIO TRANSPORTATION AND CAPITAL IMPROVEMENTS				
			800 HEARST AVENUE BERKELEY, CA 94710 TEL 510/845-7549 FAX 510/845-8750 www.migcom.com	
			HDR, Inc. 1020 NE Loop 410, Suite 400 San Antonio, TX 78209 Texas P.E. Firm Registration No. F-754	
				
HEMISFAIR INTERNAL STREETS				
SUPPLEMENTAL GENERAL NOTES				
DSN: JMG	CK: SDT	DATE	JOB NO.	SHEET NO.
DRN: CRA	CK: -	SEPT. 2014	218609	4



PROPOSED E. NUEVA

- STA 11+64.55 TO 12+28.30
- STA 12+67.85 TO 12+77.86
- STA 13+92.18 TO 14+02.18
- STA 15+00.30 TO 15+10.30
- STA 16+22.92 TO 16+32.92
- STA 16+74.91 TO 16+83.93
- STA 17+83.93 TO 17+93.93
- STA 18+82.07 TO 19+18.73

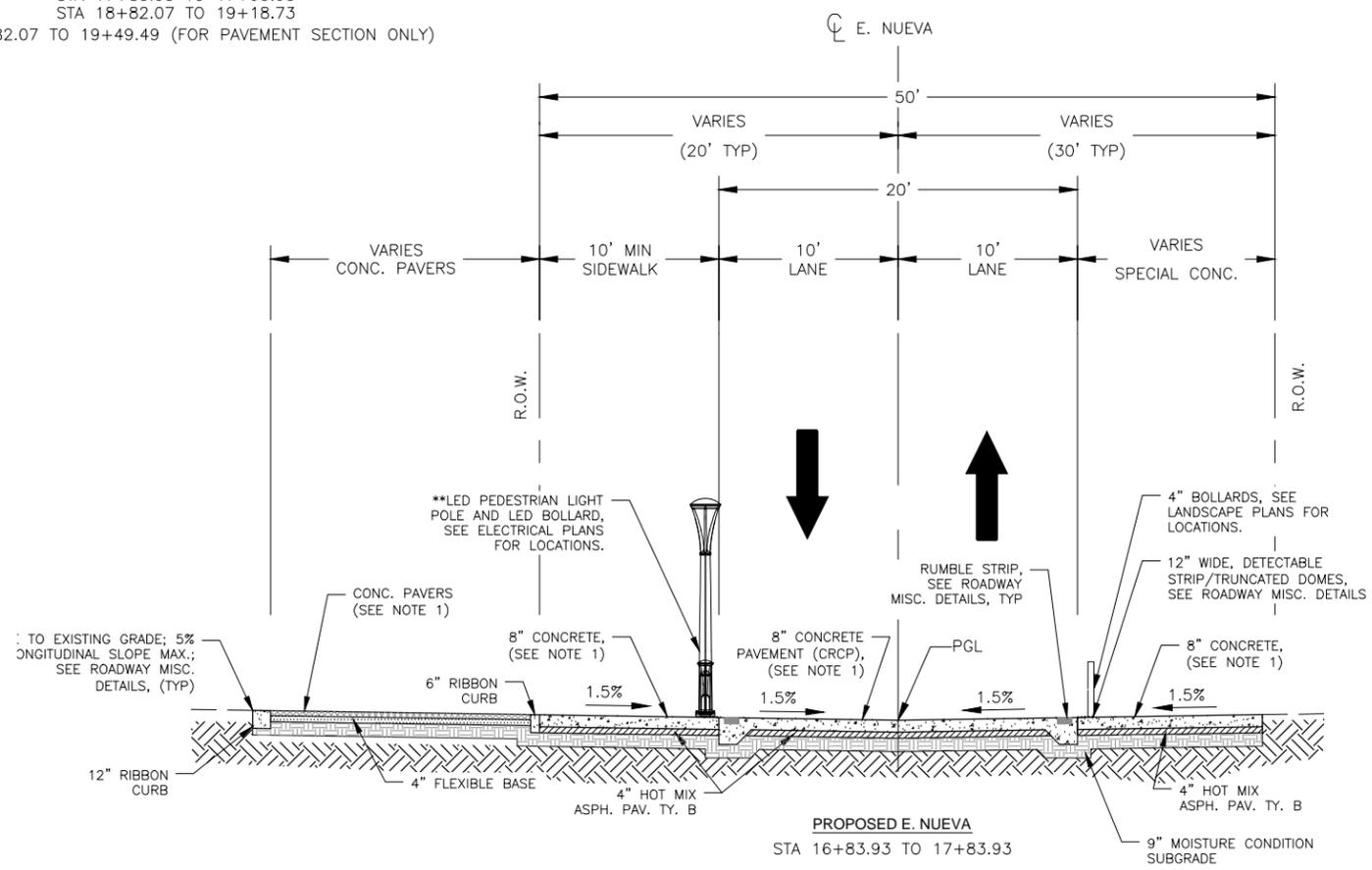
STA 18+82.07 TO 19+49.49 (FOR PAVEMENT SECTION ONLY)



PROPOSED E. NUEVA

- STA 12+28.30 TO 12+67.85
- STA 12+77.86 TO 13+92.18
- STA 14+02.18 TO 15+00.30
- STA 15+10.30 TO 16+22.92
- STA 16+32.92 TO 16+74.91
- STA 17+93.93 TO 18+82.07

- NOTES:
1. PAVERS TO BE PLACED ON 1" BED OF SAND. SEE LANDSCAPE PLANS FOR FINISHED SURFACE TEXTURING AND PATTERNS.
 2. SEE ROADWAY MISC. DETAIL SHEET FOR LIGHT POLE AND BOLLARD FOUNDATION DETAILS.
 - ** 3. PEDESTRIAN LIGHT POLES, LED BOLLARDS, AND 4" BOLLARDS ARE LOCATED ON BOTH SIDES OF ROADWAY.
 4. REINFORCEMENT FOR 5 1/2" CRCP SHALL BE SAME AS SLAB THICKNESS (1) OF 7". SEE CRCP(1)-13 STANDARD DETAIL SHEET.



PROPOSED E. NUEVA

STA 16+83.93 TO 17+83.93

CITY OF SAN ANTONIO
TRANSPORTATION AND CAPITAL IMPROVEMENTS

MIG
800 HEARST AVENUE
BERKELEY, CA 94710
TEL 510/845-7549
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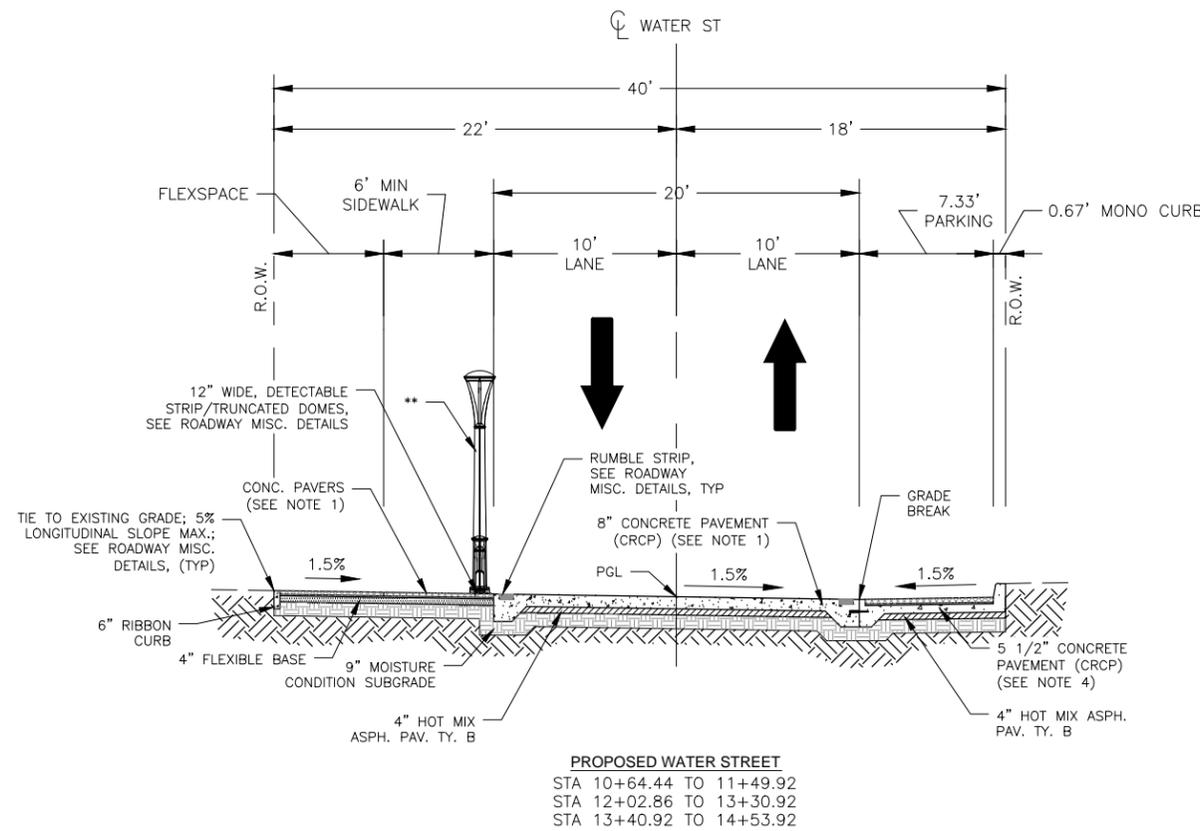
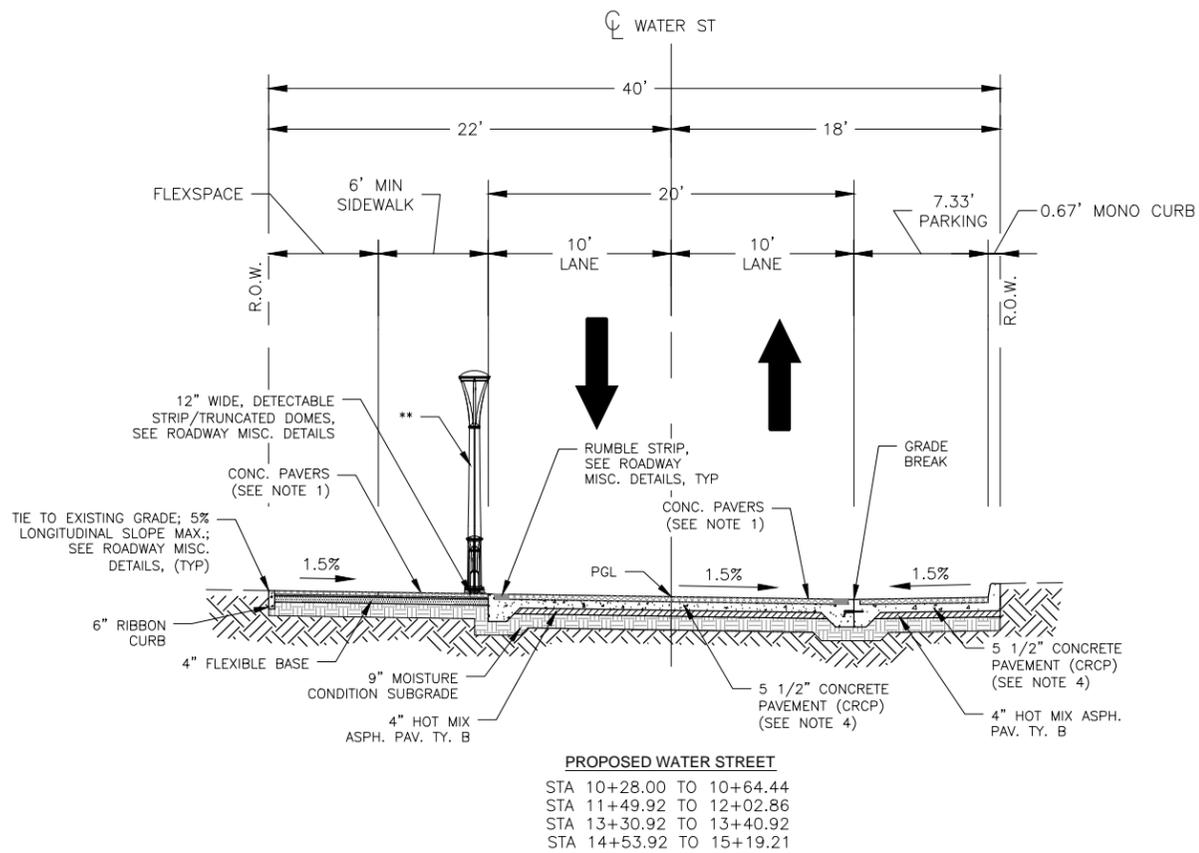
HDR
HDR, Inc.
1020 NE Loop 410, Suite 400
San Antonio, TX 78209 Texas
P.E. Firm Registration No. F-754

STATE OF TEXAS
JOSE M. GONZALEZ
97348
PROFESSIONAL ENGINEER
10/7/14

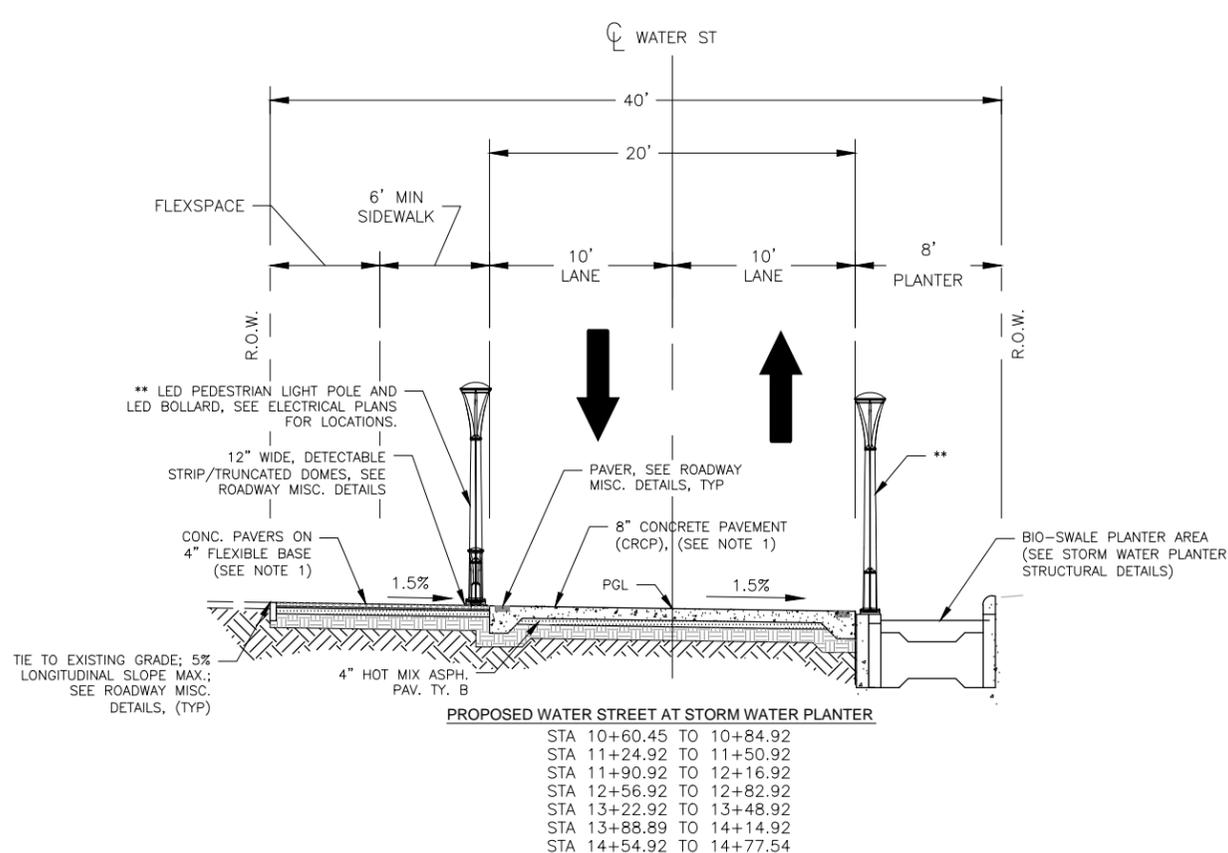
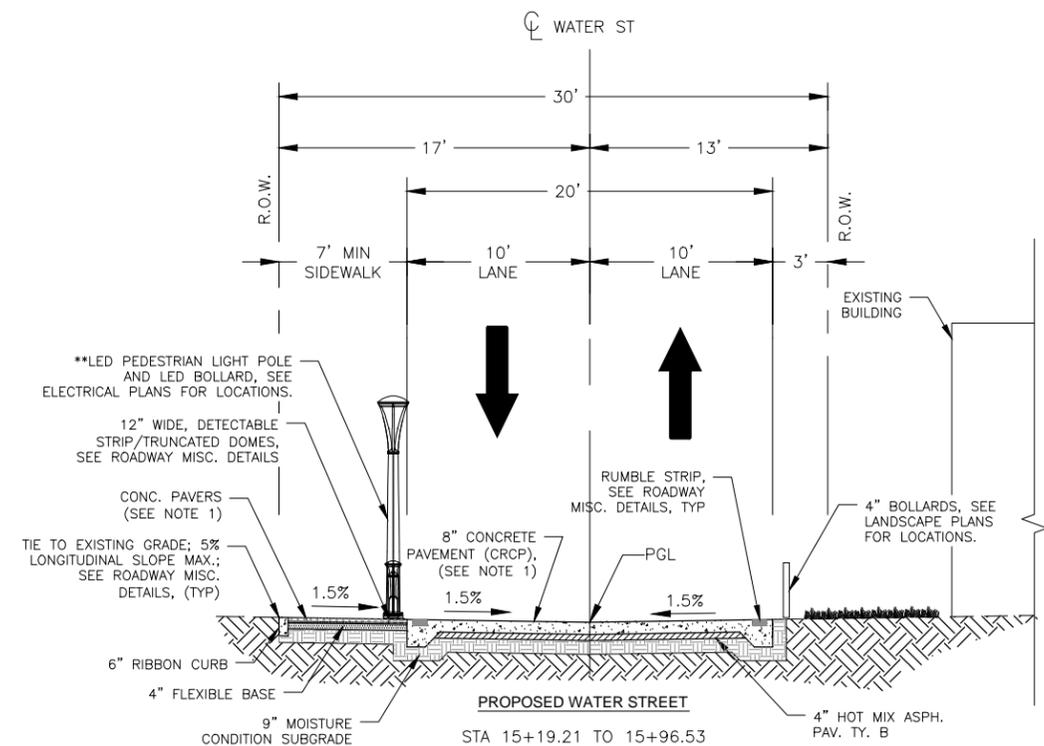
HEMISFAIR INTERNAL STREETS

**PROPOSED
TYPICAL SECTIONS
E. NUEVA**

N.T.S.		SHEET 1 OF 3		
DSN: JMG	CK: SDT	DATE	JOB NO.	SHEET NO.
DRN: CRA	CK: -	SEPT. 2014	218609	9



- NOTES:
- PAVERS TO BE PLACED ON 1" BED OF SAND. SEE LANDSCAPE PLANS FOR FINISHED SURFACE TEXTURING AND PATTERNS.
 - SEE ROADWAY MISC. DETAIL SHEET FOR LIGHT POLE AND BOLLARD FOUNDATION DETAILS.
 - PEDESTRIAN LIGHT POLES, LED BOLLARDS, AND 4" BOLLARDS ARE LOCATED ON BOTH SIDES OF ROADWAY.
 - REINFORCEMENT FOR 5 1/2" CRCP SHALL BE SAME AS SLAB THICKNESS (T) OF 7". SEE CRCP(1)-13 STANDARD DETAIL SHEET.



CITY OF SAN ANTONIO
 TRANSPORTATION AND CAPITAL IMPROVEMENTS

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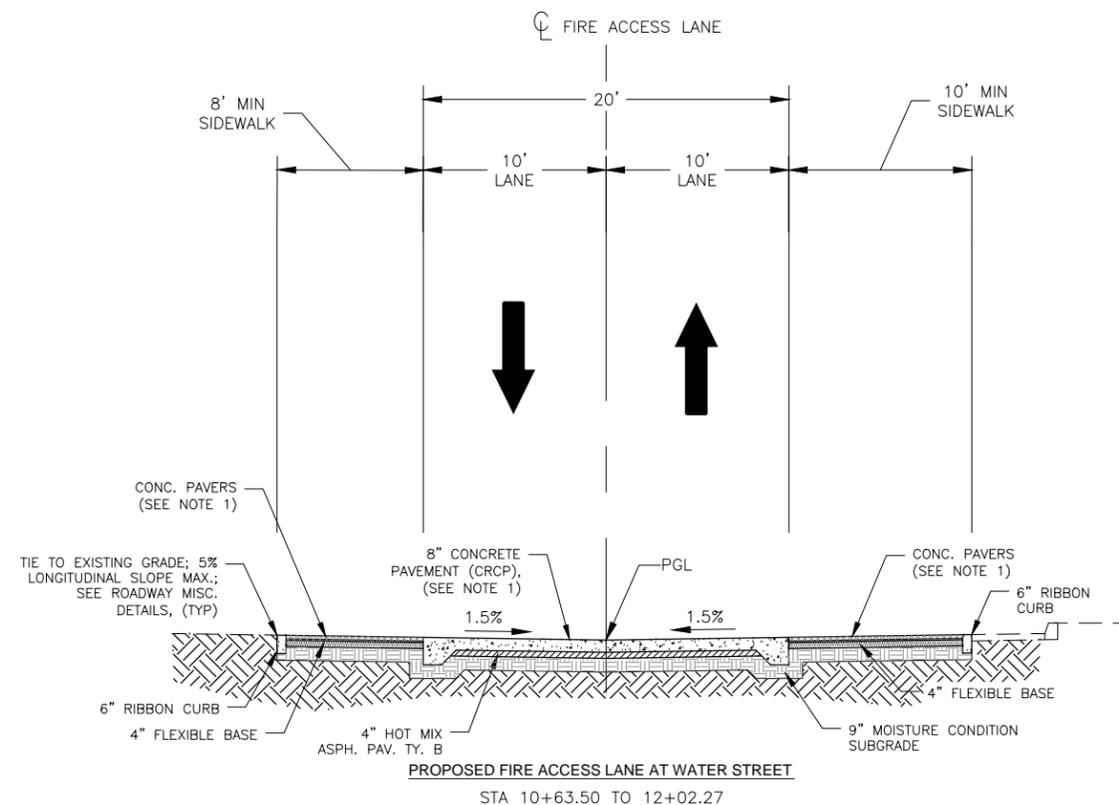
STATE OF TEXAS
 JOSE M. GONZALEZ
 97348
 PROFESSIONAL ENGINEER
 10/7/14

HEMISFAIR INTERNAL STREETS

**PROPOSED
 TYPICAL SECTIONS
 WATER STREET**

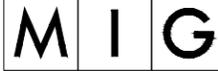
N.T.S. SHEET 2 OF 3

DSN: JMG	CK: SDT	DATE	JOB NO.	SHEET NO.
DRN: CRA	CK: -	SEPT. 2014	218609	10



NOTES:

1. PAVERS TO BE PLACED ON 1" BED OF SAND. SEE LANDSCAPE PLANS FOR FINISHED SURFACE TEXTURING AND PATTERNS.
2. SEE ROADWAY MISC. DETAIL SHEET FOR LIGHT POLE AND BOLLARD FOUNDATION DETAILS.
- ** 3. PEDESTRIAN LIGHT POLES, LED BOLLARDS, AND 4" BOLLARDS ARE LOCATED ON BOTH SIDES OF ROADWAY.
4. REINFORCEMENT FOR 5 1/2" CRCP SHALL BE SAME AS SLAB THICKNESS (T) OF 7". SEE CRCP(1)-13 STANDARD DETAIL SHEET.

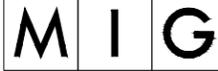
 CITY OF SAN ANTONIO TRANSPORTATION AND CAPITAL IMPROVEMENTS	800 HEARST AVENUE BERKELEY, CA 94710 TEL 510/845-7549 FAX 510/845-8750 www.migcom.com
	HDR HDR, Inc. 1020 NE Loop 410, Suite 400 San Antonio, TX 78209 Texas P.E. Firm Registration No. F-754
	
HEMISFAIR INTERNAL STREETS PROPOSED TYPICAL SECTIONS FIRE ACCESS LANE AT WATER STREET	
N.T.S. SHEET 3 OF 3	
DSN: JMG CK: SDT DATE: JOB NO. SHEET NO. DRN: CRA CK: - SEPT. 2014 218609 11	

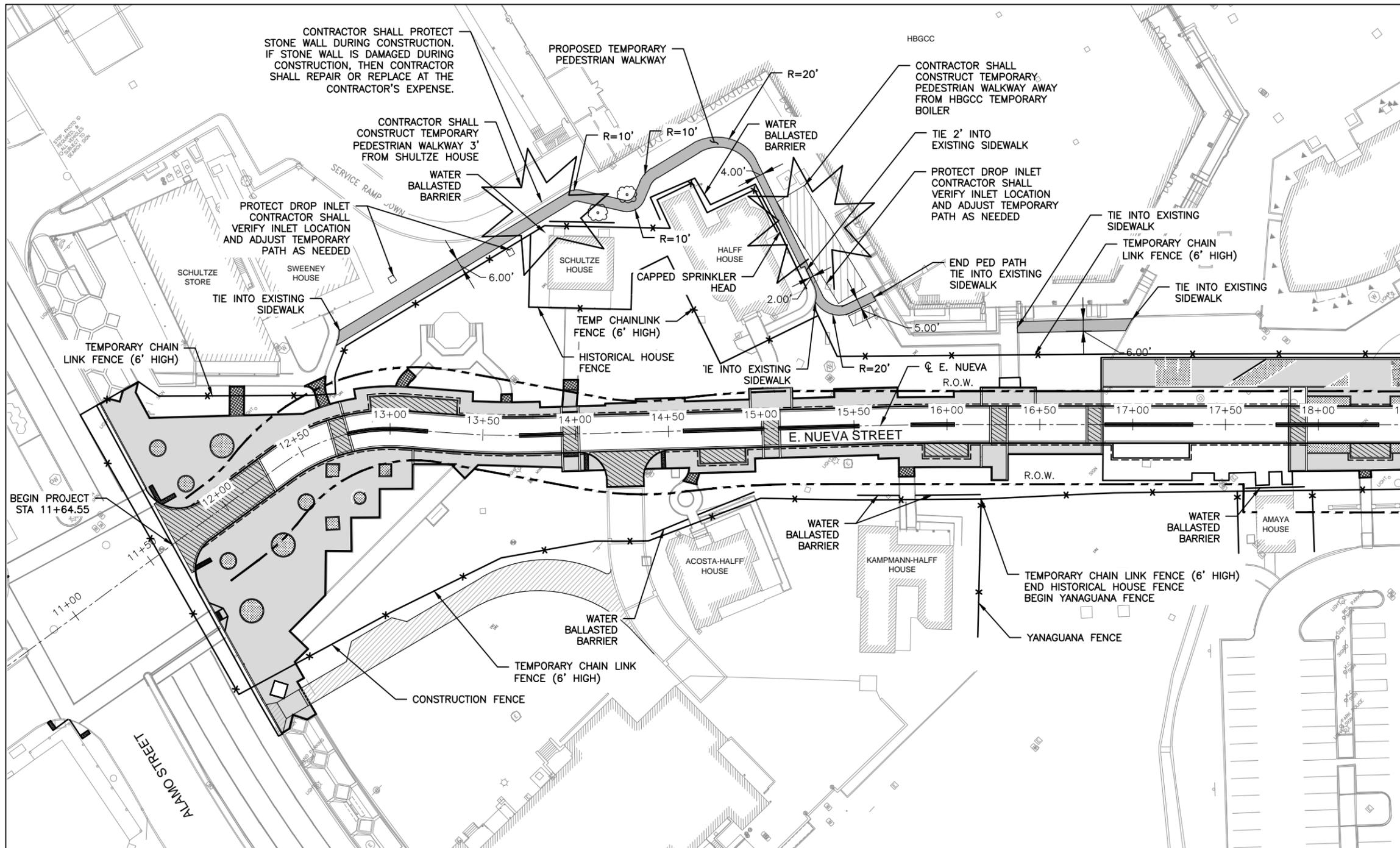
ESTIMATE AND QUANTITY SUMMARY			
ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
100.10	MOBILIZATION	L.S.	1
100.20	INSURANCE & BOND	L.S.	1
101.10	PREPARING RIGHT OF WAY	L.S.	1
103.10	REMOVE CONCRETE CURB	L.F.	3303
103.30	REMOVE CONCRETE SIDEWALKS & DRIVEWAYS (1,000 S.F. < X < 3,000 S.F.)	S.F.	803
103.40	REMOVE STRUCTURE (FOUNTAIN)	EA	1
103.50	REMOVE AND SALVAGE (CLOCK TOWER)	EA	1
103.60	REMOVE AND SALVAGE (ARCHWAY)	EA	1
103.40	REMOVE MISCELLANEOUS CONCRETE	S.F.	200
103.60	REMOVE BRICK PAVERS	S.F.	42250
104.10	STREET EXCAVATION	C.Y.	3043
107.10	EMBANKMENT (FINAL)(ORD COMP)(TY A)	C.Y.	5
200.10	FLEXIBLE BASE (4" COMPACTED DEPTH)	S.Y.	2984
203.10	TACK COAT	GAL.	364
205.20	HOT MIX ASPHALTIC PAVEMENT, TYPE B (4" COMP. DEPTH)	S.Y.	3316
205.20	HOT MIX ASPHALTIC PAVEMENT, TYPE B (6" COMP. DEPTH)	S.Y.	317
209.10	CONCRETE PAVEMENT (5 1/2" DEEP)	S.Y.	1103
209.10	CONCRETE PAVEMENT (8" DEEP)	S.Y.	2664
230.10	FLEXIBLE PAVEMENT STRUCTURE REPAIR (2" COMP. DEPTH)	S.Y.	60
308.10	DRILLED SHAFTS (24")	L.F.	24
308.10	DRILLED SHAFTS (30")	L.F.	11
308.10	DRILLED SHAFTS (36")	L.F.	39
401.10	REINFORCED CONCRETE PIPE (CLASS IV)(15" DIA)	L.F.	8
401.10	REINFORCED CONCRETE PIPE (CLASS IV)(18" DIA)	L.F.	8
401.10	REINFORCED CONCRETE PIPE (CLASS IV)(24" DIA)	L.F.	666
401.10	REINFORCED CONCRETE PIPE (CLASS IV)(30" DIA)	L.F.	55
401.10	REINFORCED CONCRETE PIPE (CLASS IV)(36" DIA)	L.F.	533
401.10	REINFORCED CONCRETE PIPE (CLASS IV)(48" DIA)	L.F.	83
402.10	CORRUGATED POLYETHYLENE PIPE (8")	L.F.	377
402.10	CORRUGATED POLYETHYLENE PIPE (18")	L.F.	351
403.20	JUNCTION BOX 5'X5'X5'	EA	11
403.30	JUNCTION BOX 6'X6'X6'	EA	1
403.12	SPECIAL INLET (TRENCH DRAIN)	LF	270
403.12	SPECIAL INLET (STORM WATER PLANTER)	EA	7
413.20	FLOWABLE BACKFILL (HIGH STRENGTH)	C.Y.	1140
500.10	CONCRETE CURBING	L.F.	743
500.10	RIBBON CURB (6")	L.F.	3398
500.10	RIBBON CURB (12")	L.F.	1027
502.10	CONCRETE SIDEWALKS	S.Y.	24
502.11	DETECTABLE WARNING SURFACE	EA	6
506.10	CONCRETE RETAINING WALLS-COMB. TYPE (> 50 C.Y.)	C.Y.	1
507.2A	TEMPORARY CHAIN LINK WIRE FENCE (6' HIGH)	L.F.	3841
525.10	LPCB (TY 2)(INSTALL/REMOVE)	LF	20
525.10	LPCB (TY 1)(INSTALL/REMOVE)	LF	400
530.10	BARRICADES, SIGNS & TRAFFIC HANDLING	L.S.	1
531.10	METRO STREET NAME, BLOCK NUMBERS (HIGH DENSITY)(VARIES x 15")	EA	4
531.30	R1-1 STOP (30")(HIGH DENSITY)	EA.	4
531.50	R1-4 ALL WAY PLATE (18"x6")(HIGH DENSITY)	EA.	2
531.60	R2-1 SPEED LIMIT (24"x30")(HIGH DENSITY)	EA.	2
531.11	R3-5 LEFT OR RIGHT ONLY (30"x36")(HIGH DENSITY)	EA.	1
531.14	R3-8 LANE-USE CONTROL (48"x30")(HIGH DENSITY)	EA.	1
531.27	R10-12 LEFT TURN YIELD ON "GREEN BALL"	EA.	1
531.28	R10-12 LEFT TURN YIELD ON FLASHING YELLOW	EA.	1
531.51	W11A-2 PED CROSSING (30"x30")(HIGH DENSITY)	EA.	2
531.57	9 INCH (229mm) STREET NAME, BLOCK NUMBER (VARIES x9")(HIGH DENSITY)	EA.	4
531.86	W16-1P (SHARE THE ROAD) (18"x24")(HIGH DENSITY)	EA.	2
531.90	LEFT TURN YIELD ON FLASHING YELLOW ARROW (R-10-17T)(30"X30")	EA.	1
535.40	8 INCH WIDE WHITE LINE	L.F.	220
535.50	12 INCH WIDE WHITE LINE	L.F.	615
535.70	24 INCH WIDE WHITE LINE	L.F.	132
535.80	RIGHT WHITE ARROW	EA	1
535.90	LEFT WHITE ARROW	EA	2
535.12	WORD "ONLY"	WORD	4
535.13	STRAIGHT WHITE ARROW	EA	1
535.22	6 INCH WIDE WHITE LINE	L.F.	35
536.10	4 INCH WIDE YELLOW LINE (TCP)	L.F.	93
536.20	4 INCH WIDE WHITE LINE (TCP)	L.F.	1060
536.70	24 INCH WIDE YELLOW LINE	L.F.	18
537.60	TRAFFIC BUTTON (TYPE L-C)	EA	57
540.60	CONSTRUCTION EXITS (INSTALL/REMOVE)	S.Y.	156
540.80	SANDBAGS FOR EROSION CONTROL FENCE (6")	L.F.	285
540.10	INLET GRAVEL FILTERS	L.F.	260

550.10	TRENCH EXCAVATION SAFETY PROTECTION	L.F.	1800
555.10	OFF DUTY POLICE OFFICER	HR	240
618.10	CONDUIT (2 INCH/PVC SCHEDULE 40)	L.F.	80
618.20	CONDUIT (3 INCH/PVC SCHEDULE 40)	L.F.	160
618.50	CONDUIT (3 INCH/PVC SCHEDULE 40)(BORE)	L.F.	620
620.20	ELECTRICAL CONDUCTORS (NO. 8)(BARE)	L.F.	940
624.80	GROUND BOXES TYPE D (162922) W/ APRON	EA	5
680.10	INSTALLATION OF HIGHWAY TRAFFIC SIGNAL	EA	1
682.10	INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (3 SECTION) & LED MODULE	EA	8
682.20	INSTALL VEHICLE SIGNAL SECTION WITH BACK PLATE (4 SECTION) & LED MODULE	EA	3
682.40	INSTALL PEDESTRIAN SIGNAL SECTION (12 INCH) LED (2 IND)	EA	8
683.10	LED COUNTDOWN PEDESTRIAN SIGNAL MODULE	EA	8
684.10	TRAFFIC SIGNAL CABLES (TYPE A)(14 AWG)(CONDUCTOR NO. 9)	LF	2150
686.10	INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 24')	EA	1
686.10	INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 36')	EA	1
686.10	INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 40')	EA	1
686.10	INSTALL TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)(1 ARM 48')	EA	1
687.10	PEDESTAL POLE ASSEMBLY	EA	4
688.30	AUDIBLE PEDESTRIAN SIGNAL UNITS (WITH INTEGRATED SIGNS)	EA	8
693.10	INTERNALLY LIGHTED STREET NAME SIGNS (DUAL-SIDED/6')	EA	4
695.22	EMERGENCY PREEMPTION PHASE SELECTOR	EA	1
695.30	EMERGENCY PREEMPTION DETECTOR	EA	4
695.40	EMERGENCY PREEMPTION DETECTOR CABLE	LF	870
696.02	RADAR PRESENCE DETECTION DEVICE (RPDD)	EA	4
696.06	RVDD INTERFACE MODUAL (2-CHANNEL)	EA	4
695.11	CAT 5 ETHERNET CABLE	LF	50
695.12	BELDEN POWER CABLE	LF	25
695.13	WIRELESS ACCESS POINT ASSEMBLY	EA	1
695.14	WIRELESS BRIDGE ASSEMBLY	EA	1
696.11	RVDD SETUP SYSTEM	EA	1
696.16	RVDD COMMUNICATIONS AND POWER CABLE	LF	1000
803.00	Salvage and Transplant Tree	EA	9
803.10	Transplanted tree maintenance (3 years)	YR	3
803.20	Transplanted tree storage	EA	9
900.10	TEMPORARY PEDESTRIAN WALKWAY	LF	437
0465 4001	MANH (COMPL) (PRM) (48IN)	EA	2
0465 2097	INLET (COMP) (GRATE)	EA	2
0618 2012	CONDT (PVC) (SCHD 40)(1")	LF	2780
0618 2081	CONDUIT (PVC)(SCHD 40)(4")(CONCENCSE)	LF	30
0620 2009	ELEC CONDR (NO. 6) BARE	LF	35
0620 2010	ELEC CONDR (NO. 6) INSULATED	LF	70
0620 2013	ELEC CONDR (NO. 10) BARE	LF	2910
0620 2014	ELEC CONDR (NO. 10) INSULATED	LF	8950
0624 2007	GROUND BOX TY A (122311)	EA	4
0624 2008	GROUND BOX TY A (122311) W/ APRON	EA	1
0628 2004	ELC SRV TY A 120/240 060 (NS)SS(E)PS(U)	EA	1
0662 2041	YELLOW MED NOSE	EA	1
6834 2001	CHANGEABLE MESSAGE SIGN	DAYS	112
7635 2001	WATER BALLASTED BARRIER	LF	525
8000 2001	STRUCTURAL SOIL	TON	740
9010 9010	LANDSCAPEFORMS LED PEDESTRIAN LIGHT POLE, 12 FT. ALCOTT, TYPE III	EA	46
9011 9011	LANDSCAPEFORMS LED BOLLARD LIGHT, 3FT. 1IN., HAWTHORNE, TYPE IV	EA	16
9002.10	Temporary Suspension of Work in whole	DAYS	16
9002.20	Temporary Suspension of Work in part	DAYS	16
9003.1a	Pre-cast concrete spheres, 60" diameter	EA	2
9003.1b	Pre-cast concrete spheres, 36" diameter	EA	2
9003.20	Benches, 6' long with back	EA	13
9003.30	Benches, 6' long no back	EA	4
9003.40	Trash/Recycling Receptacles (set of 1 each)	EA	15
9003.50	Bollards, 4" diameter x 3' high	EA	180
9003.60	Removable Bollards	EA	17
9003.70	Caribbean Drums (set of 3)	EA	1
9003.80	Contrabass Chimes	EA	2
9003.90	Tree Guards	EA	26
9004.10	Concrete Seatwall #1 (color, finish, and joint sealant)	LF	9
9004.20	Concrete Seatwall #2	LF	15
9004.30	Concrete Seat Block	EA	3
9004.40	Concrete Wavewall	LF	10
9004.50	Special Concrete Paving w/Colored Accents	SF	4810
9005.10	Rumble Strip Pavers	SF	2637
9005.20	Detectable Warning Pavers	SF	1210
9005.30	Pedestrian Pavers (2-Tone and 4-Tone)	SF	33163
9005.40	Vehicle Pavers (4-Tone)	SF	5916
9006.10	Crushed stone or decomposed granite	SF	2409

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	HDR, Inc. 1020 NE Loop 410, Suite 400 San Antonio, TX 78209 Texas P.E. Firm Registration No. F-754	
HEMISFAIR INTERNAL STREETS		
PROJECT QUANTITY SUMMARY		
SHEET 1 OF 2		
DSN: JMG DRN: CRA	CK: SDT CK: -	DATE: SEPT. 2014 JOB NO.: 218609 SHEET NO.: 12

ESTIMATE AND QUANTITY SUMMARY			
9006.20	Cobbles for dissipators	SF	28
9007.10	Limestone Seatwalls	CF	676
9007.20	Boulder Edging	EA	59
9008.01	Controller Electrical Service (120V)	EA	1
9008.02	Automatic Irrigation Controller (42 Station)	EA	1
9008.03	Water Tap and Meter (3/4" Size)	EA	1
9008.04	Backflow Prevention Device and Enclosure (3/4" Size)	EA	1
9008.05	Control Wire	LF	1510
9008.06	Irrigation Sleeves (Mainline)	LF	770
9008.07	Irrigation Sleeves (Laterals)	LF	970
9008.08	Irrigation Sleeves (Wires)	LF	670
9008.09	Irrigation Pressure Mainline (2" size)	LF	1380
9008.10	Irrigation Isolation Gate Valves (2" size)	EA	7
9008.11	Irrigation Quick Coupling Valve (1" size)	EA	11
9008.12	Tree Root Watering System (2 per tree)	EA	112
9008.13	Remote Control Valve	EA	7
9008.14	Drip Remote Control Valve	EA	1
9008.15	Subsurface Drip Irrigation	SF	1688
9009.10	Trees: 6" caliper	EA	29
9009.20	Trees: 10" caliper	EA	14
9009.30	Trees: 50 gallon	EA	12
9009.40	Trees: palm 10' ht 36" box	EA	4
9009.50	Shrubs, groundcover, and perennials: 1 gallon	EA	412
9009.60	Shrubs, perennials: 2 gallon	EA	26
9009.70	Shrubs, perennials: 5 gallon	EA	29
9009.80	Planting soil for tree wells	SF	1902
9009.90	Planting area sheet mulch	SF	1143
9009.10	Stormwater planter soil	SF	5664
9009.11	Stormwater planter sheet mulch	SF	1416
9009.12	Soil Fertility Testing	EA	1
9025.00	Plant Maintenance and Warranty	YR	1
	Remove and relocate existing Bear Sculpture	LS	1

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HEMISFAIR INTERNAL STREETS				
PROJECT QUANTITY SUMMARY				
SHEET 2 OF 2				
DSN: JMG	CK: SDT	DATE	JOB NO.	SHEET NO.
DRN: CRA	CK: -	SEPT. 2014	218609	13



MATCHLINE STA 18+50

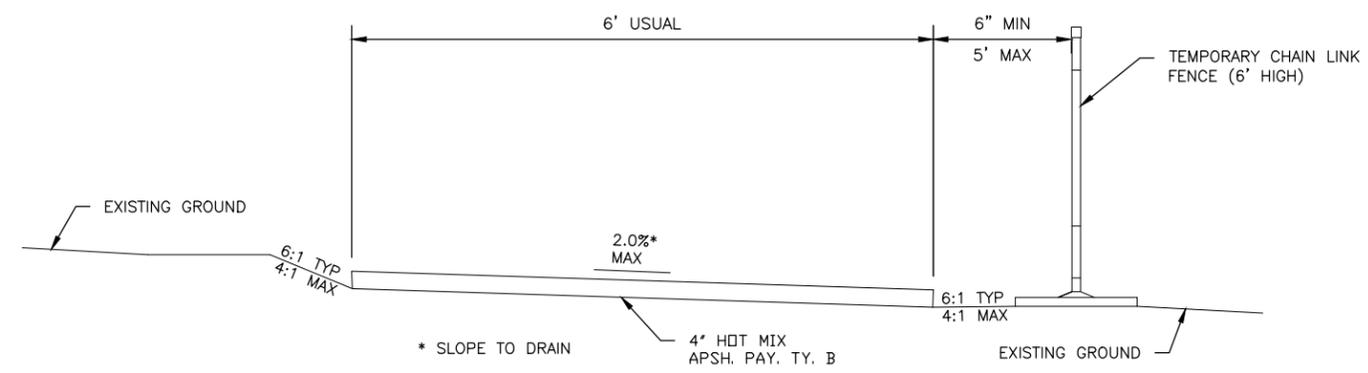
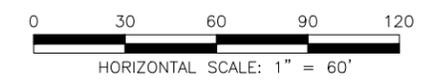
NOTES:

1. CONTRACTOR TO REMOVE AND RESET BRICKS WITHIN EXISTING SIDEWALK TO MAKE FLUSH WITH EXISTING CURB. THIS SHALL BE SUBSIDIARY TO ITEM 900.10 - TEMPORARY PEDESTRIAN WALKWAY.
2. CONTRACTOR SHALL INSTALL TEMPORARY PEDESTRIAN PATH PER DETAIL TO MAINTAIN PEDESTRIAN ACCESS THROUGH PROJECT SITE. PATH SHALL BE PLACED BETWEEN ALAMO ST. AND WATER ST. NORTH OF THE PROPOSED E. NUEVA ROADWAY.
3. CONTRACTOR SHALL SUBMIT A PROPOSED ALIGNMENT PLAN BASED ON FIELD CONDITIONS TO THE CITY FOR APPROVAL PRIOR TO INSTALLING.
4. PEDESTRIAN WALKWAY SHALL MEET THE FOLLOWING CRITERIA:
CROSS SLOPE: 2% MAX
RUNNING SLOPE: 5% MAX
5. CROSS SLOPE OF WALKWAY SHALL NOT EXCEED 2%. DIRECTION OF CROSS SLOPE SHALL MATCH EXISTING DRAINAGE FLOW PATTERNS AND SHALL NOT OBSTRUCT DRAINAGE.
6. PEDESTRIAN WALKWAY AND GRADING SHALL BE PAID FOR IN ACCORDANCE WITH ITEM 900.10. TEMPORARY PEDESTRIAN WALKWAY.
7. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE TO EXISTING INLETS.
8. CONTRACTOR TO REMOVE AND RESET BRICKS WITHIN EXISTING SIDEWALK TO MAKE FLUSH WITH EXISTING CURB.

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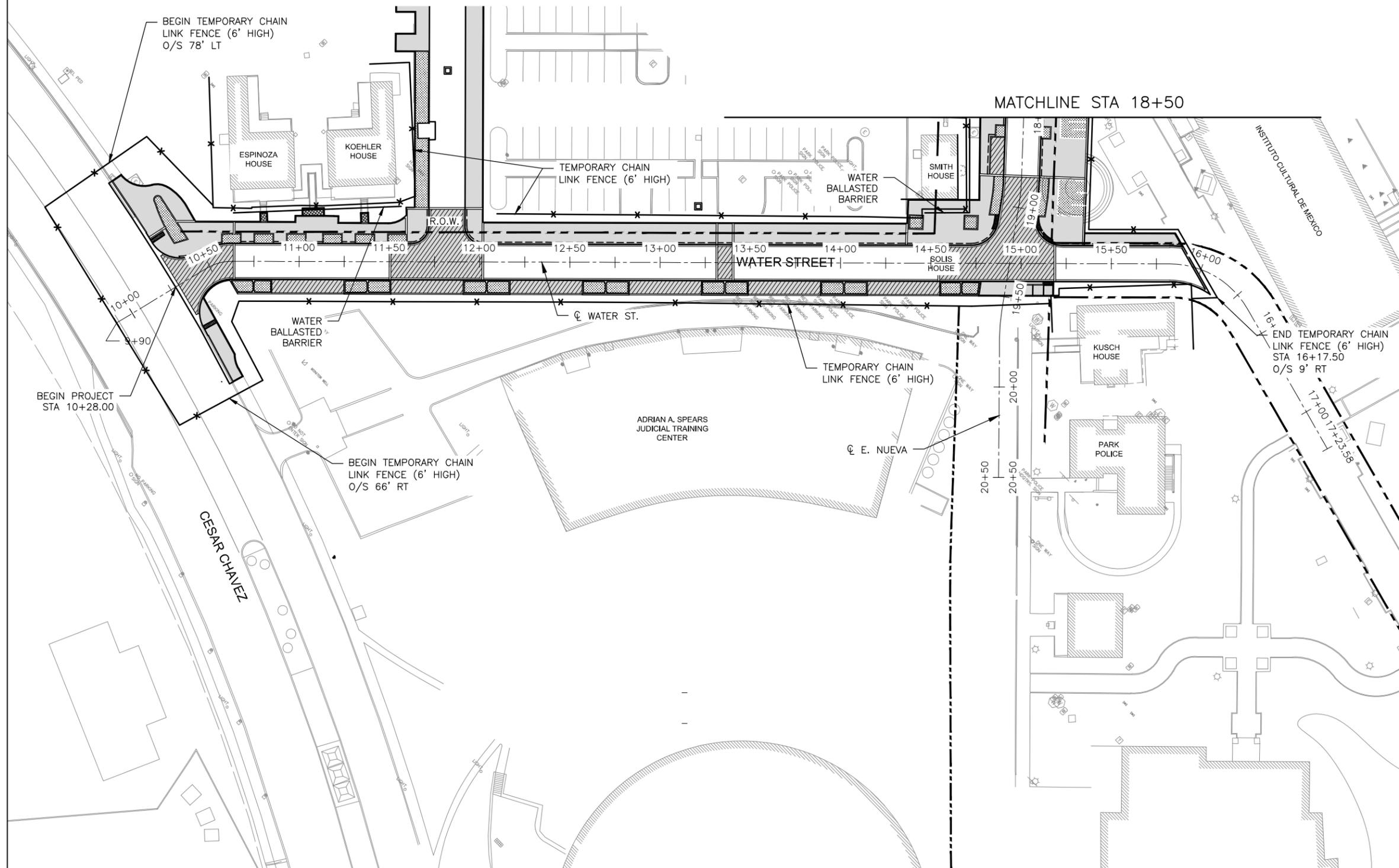
TEMPORARY PEDESTRIAN WALKWAY DETAIL
SCALE: NTS

HEMISFAIR INTERNAL STREETS

TEMPORARY FENCE & PEDESTRIAN WALKWAY

DSN: JMM	CK: SDT	DATE	JOB NO.	SHEET NO.
DRN: CRA	CK: -	SEPT. 2014	218609	23

SHEET 1 OF 1



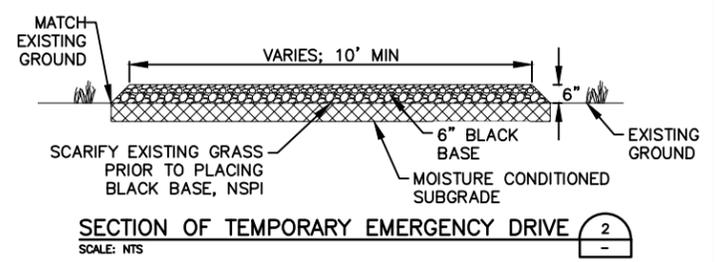
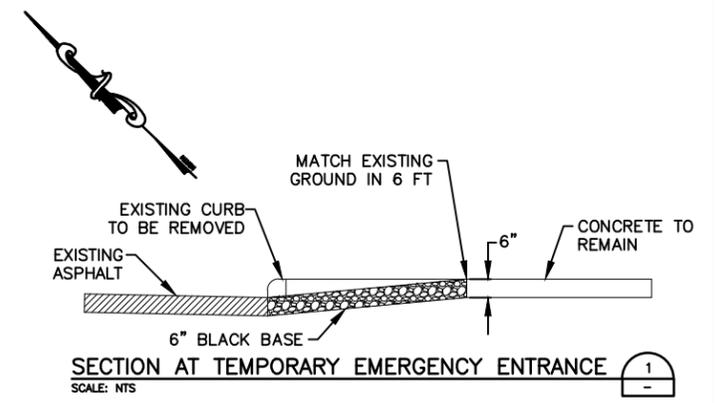
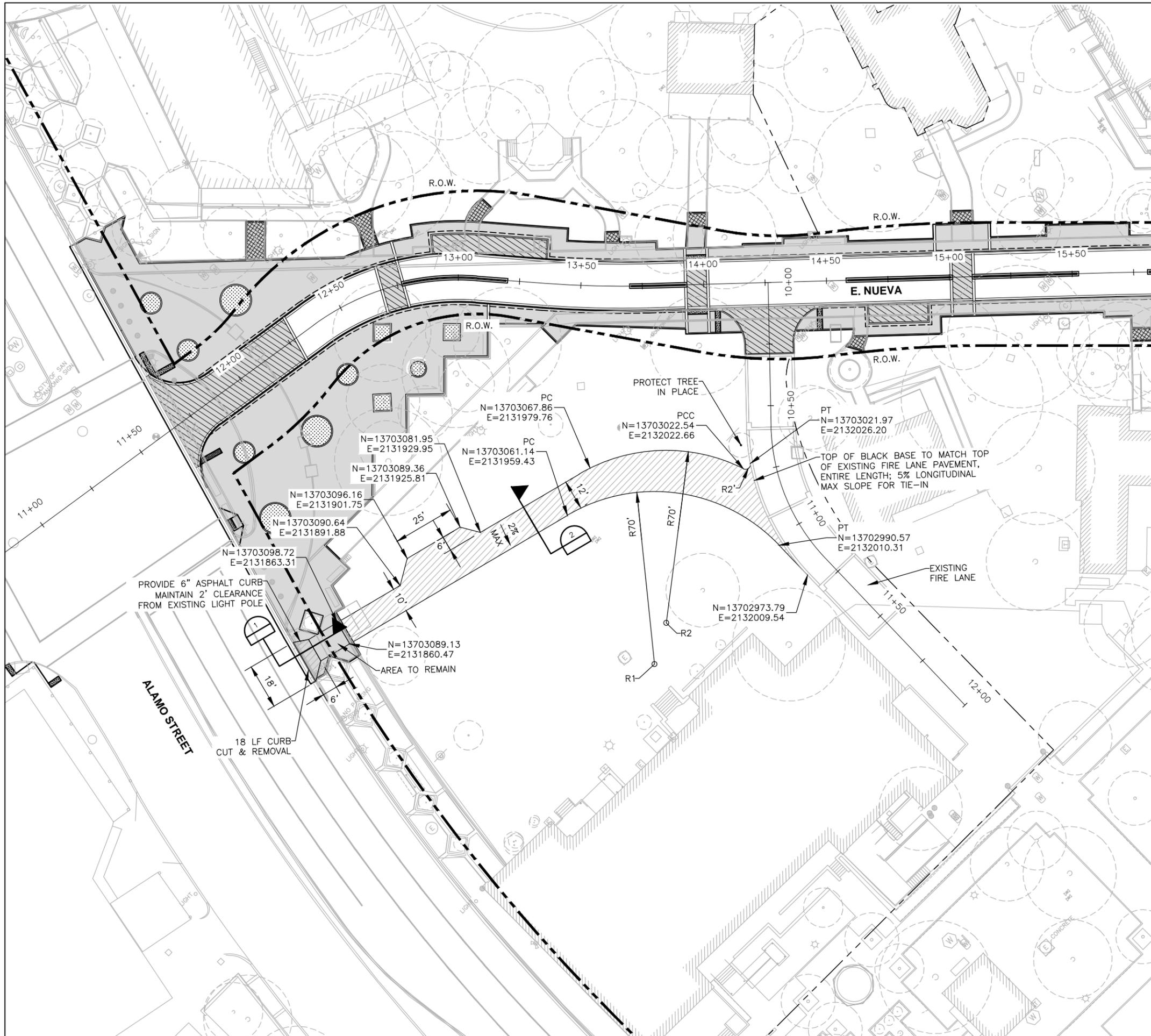
MATCHLINE STA 18+50

NOTES:

1. CONTRACTOR TO REMOVE AND RESET BRICKS WITHIN EXISTING SIDEWALK TO MAKE FLUSH WITH EXISTING CURB.

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<p>HDR</p>	<p>HDR, Inc. 1020 NE Loop 410, Suite 400 San Antonio, TX 78209 Texas P.E. Firm Registration No. F-754</p>			
<p>0 30 60 90 120 HORIZONTAL SCALE: 1" = 60'</p>				
<p>STATE OF TEXAS JOSE M. GONZALEZ 87348 PROFESSIONAL ENGINEER 10/7/14</p>				
<p>HEMISFAIR INTERNAL STREETS</p> <p>TEMPORARY FENCE & PEDESTRIAN WALKWAY</p>				
<p>DSN: JMM DRN: CRA</p>	<p>CK: SDT CK: -</p>	<p>DATE SEPT. 2014</p>	<p>JOB NO. 218609</p>	<p>SHEET NO. 24</p>

SHEET 2 OF 2



POINT TABLE

POINT #	NORTHING	EASTING	RADIUS
R1	13702993.7819	2131940.3853	70'
R2	13703001.9007	2131955.7734	70'

6" BLACK BASE

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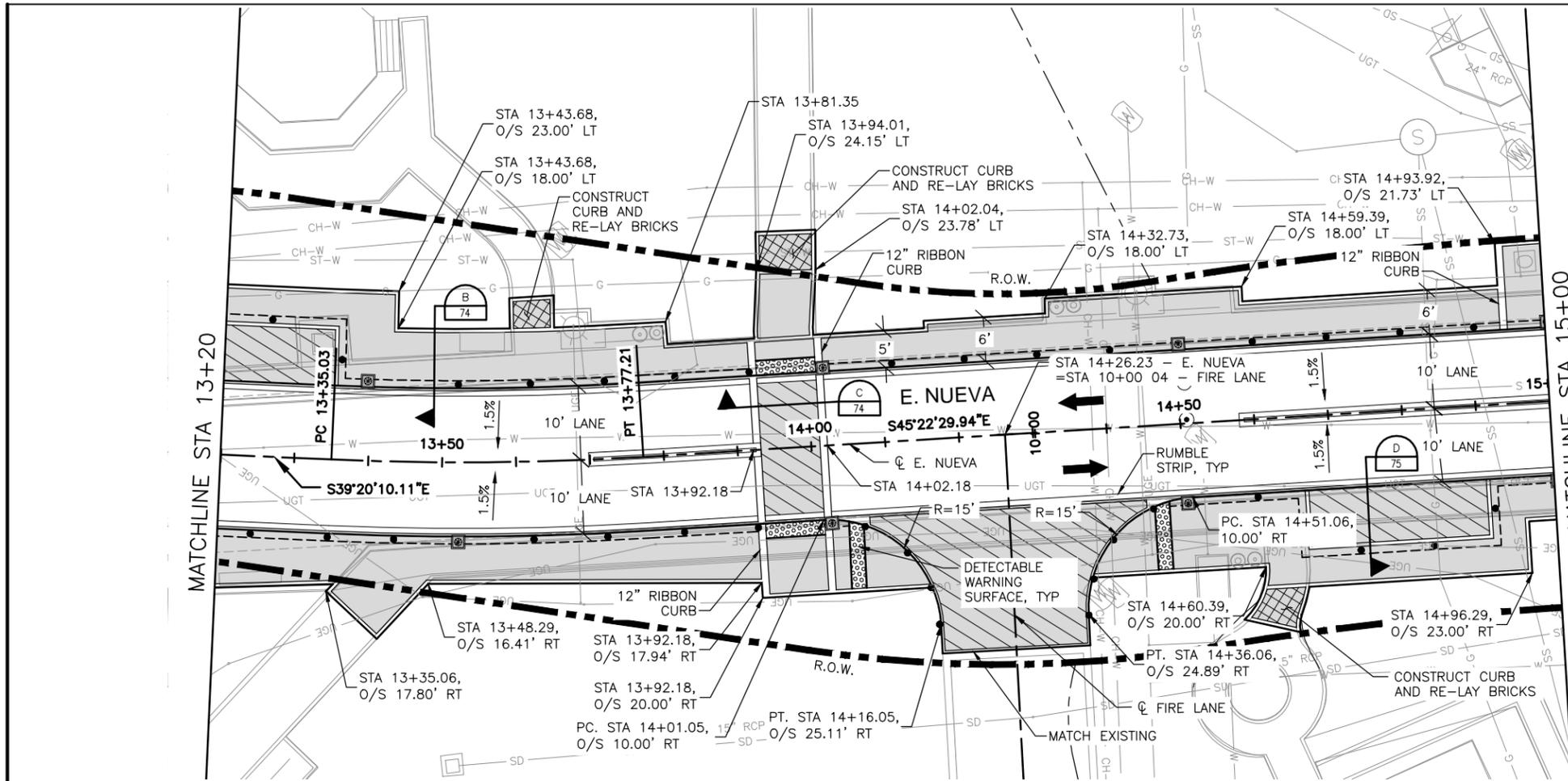
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STATE OF TEXAS
JOSE M. GONZALEZ
PROFESSIONAL ENGINEER
10/7/14

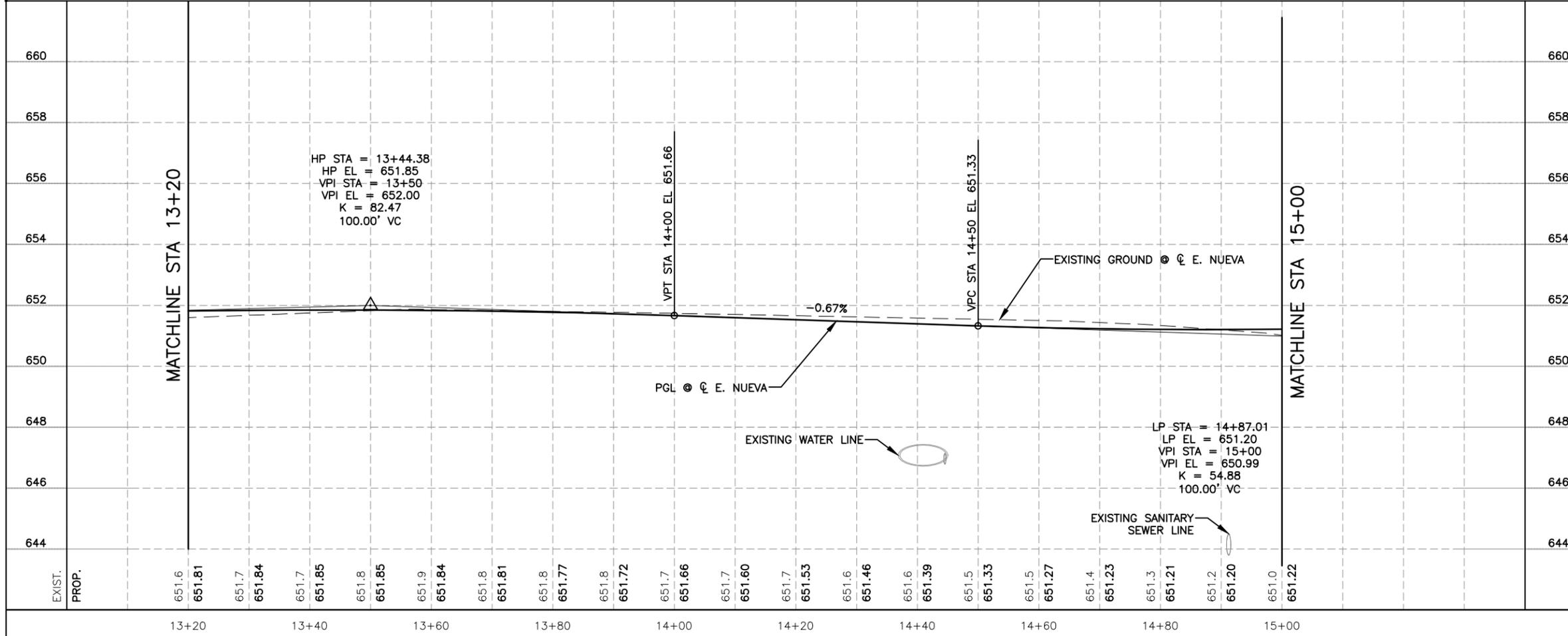
HEMISFAIR INTERNAL STREETS
TEMPORARY EMERGENCY SERVICE DRIVE



LEGEND

- CONC. PAVERS ON FLEX BASE
- CONC. PAVERS ON CONCRETE
- BRICKS TO BE RE-LAYED
- PLANTER AREA
- R.O.W.
- DETECTIBLE WARNING LIMIT
- REMOVABLE BOLLARD
- 4" BOLLARD
- LED LIGHT POLE, SEE ELECTRICAL PLANS
- LED LIGHT BOLLARD, SEE ELECTRICAL PLANS
- EXISTING TREE
- DIRECTION OF TRAFFIC; NOT TO BE PAINTED

- NOTES**
- N. S. P. I. = NO SEPARATE PAY ITEM
 - FOR DRAINAGE SYSTEM DETAILS & REQUIREMENTS, SEE DRAINAGE SHEETS.
 - ALL RADII ARE MEASURED TO THE FACE OF CURB.
 - FINISHED PAVEMENT GRADE ELEVATIONS SHOWN ARE AT FACE OF CURB/GUTTER LINE.
 - CONTRACTOR TO REFERENCE LANDSCAPE PLANS FOR BOLLARD TYPES AND LOCATIONS, AND PAVER TYPES AND PATTERNS.
 - ALL SAWCUTS SHALL BE SUBSIDIARY TO PERTINENT BID ITEMS.
 - ALL STATIONS AND OFFSETS ARE RELATIVE TO E. NUEVA ALIGNMENT UNLESS OTHERWISE INDICATED.
 - LIMITS OF SIDEWALK REMOVAL, CONTRACTOR TO REMOVE AND RE-SET EXISTING PAVERS/CONCRETE TO MATCH PROPOSED SIDEWALK WITHIN 10 FEET OUTSIDE OF ROW AT 5% MAXIMUM, LONGITUDINAL SLOPE.
 - NO SAWCUTTING OF PAVERS ALLOWED. PAVERS SHALL BE REINSTALLED TO MATCH EXISTING PATTERN.
 - ALL RIBBON CURB IS 6" UNLESS NOTED OTHERWISE.



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0 10 20 30 40
HORIZONTAL SCALE: 1" = 20'

0 2 4 6 8
VERTICAL SCALE: 1" = 4'

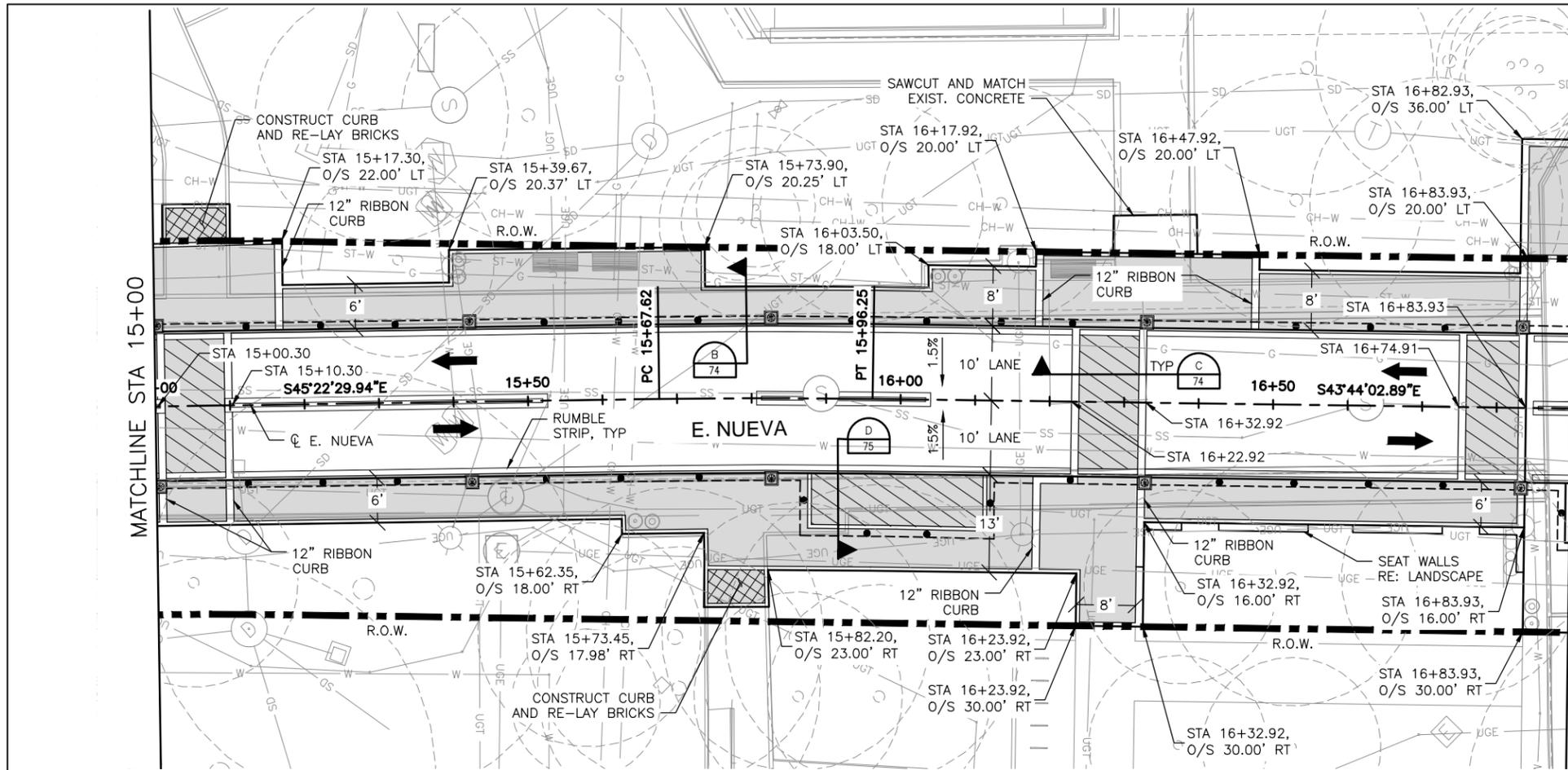
STATE OF TEXAS
JOSE M. GONZALEZ
PROFESSIONAL ENGINEER
10/7/14

HEMISFAIR INTERNAL STREETS

PLAN AND PROFILE
E. NUEVA
STA 13+20 TO 15+00

SCALE: 1"=20'-H
1"=4'-V

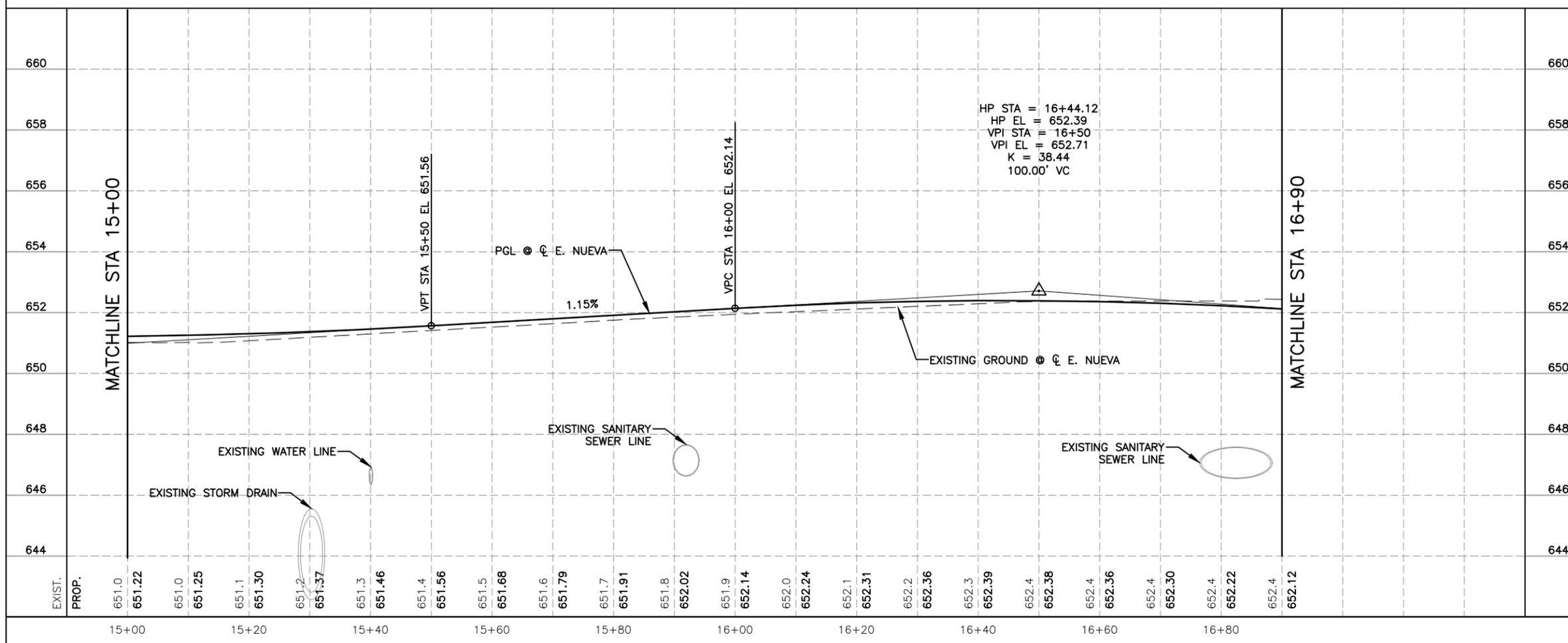
DSN: JMG CK: SDT DATE: SEPT. 2014 JOB NO. 218609 SHEET NO. 59



LEGEND

- CONC. PAVERS ON FLEX BASE
- CONC. PAVERS ON CONCRETE
- BRICKS TO BE RE-LAYED
- PLANTER AREA
- R.O.W.
- DETECTIBLE WARNING LIMIT
- REMOVABLE BOLLARD
- 4" BOLLARD
- LED LIGHT POLE, SEE ELECTRICAL PLANS
- LED LIGHT BOLLARD, SEE ELECTRICAL PLANS
- EXISTING TREE
- DIRECTION OF TRAFFIC; NOT TO BE PAINTED

- NOTES:
- N. S. P. I. = NO SEPARATE PAY ITEM
 - FOR DRAINAGE SYSTEM DETAILS & REQUIREMENTS, SEE DRAINAGE SHEETS.
 - ALL RADII ARE MEASURED TO THE FACE OF CURB.
 - FINISHED PAVEMENT GRADE ELEVATIONS SHOWN ARE AT FACE OF CURB/GUTTER LINE.
 - CONTRACTOR TO REFERENCE LANDSCAPE PLANS FOR BOLLARD TYPES AND LOCATIONS, AND PAVER TYPES AND PATTERNS.
 - ALL SAWCUTS SHALL BE SUBSIDIARY TO PERTINENT BID ITEMS.
 - ALL STATIONS AND OFFSETS ARE RELATIVE TO E. NUEVA ALIGNMENT UNLESS OTHERWISE INDICATED.
 - LIMITS OF SIDEWALK REMOVAL, CONTRACTOR TO REMOVE AND RE-SET EXISTING PAVERS/CONCRETE TO MATCH PROPOSED SIDEWALK WITHIN 10 FEET OUTSIDE OF ROW AT 5% MAXIMUM, LONGITUDINAL SLOPE.
 - NO SAWCUTTING OF PAVERS ALLOWED. PAVERS SHALL BE REINSTALLED TO MATCH EXISTING PATTERN.
 - ALL RIBBON CURB IS 6" UNLESS NOTED OTHERWISE.



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HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

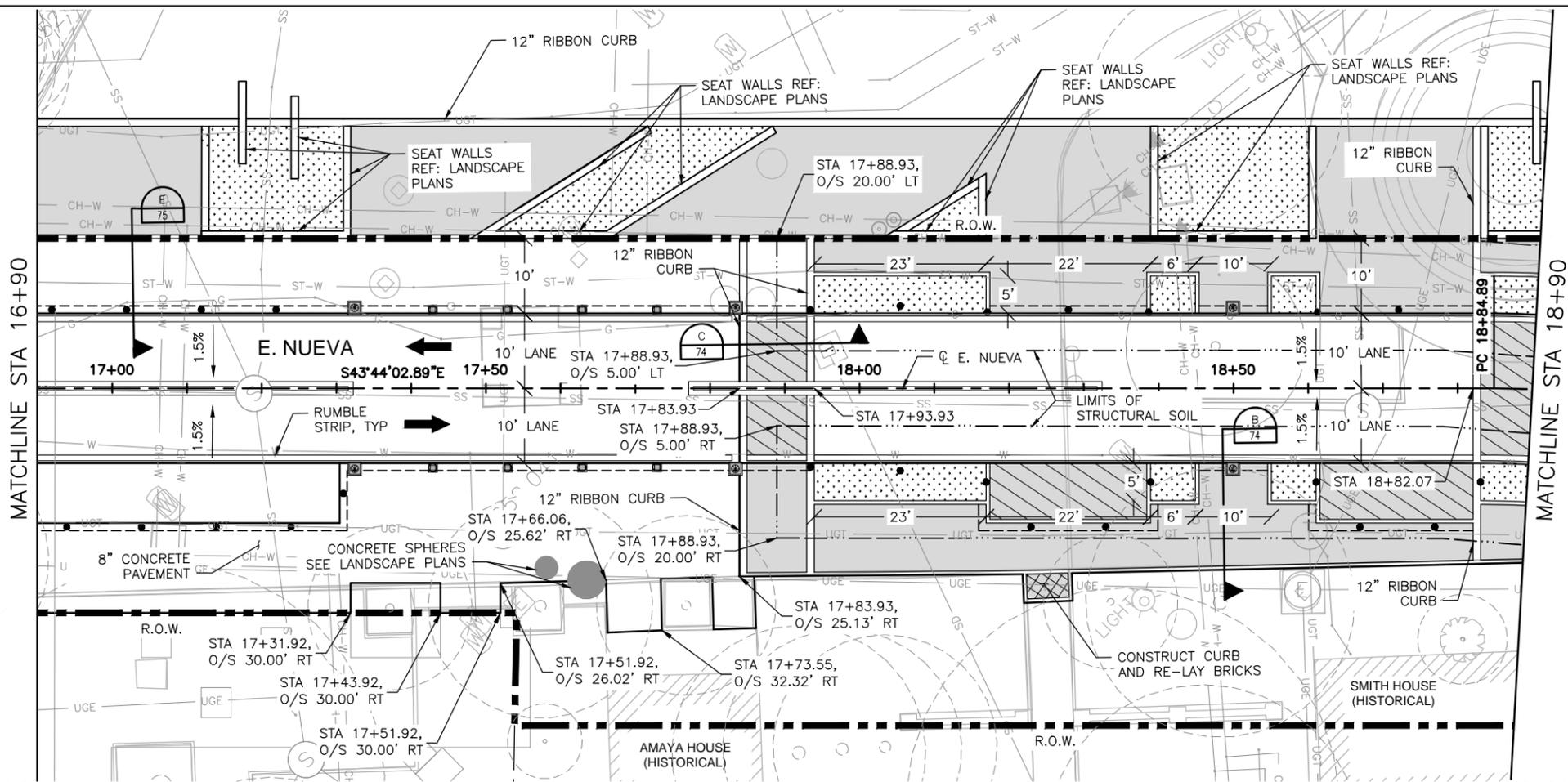
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HEMISFAIR INTERNAL STREETS

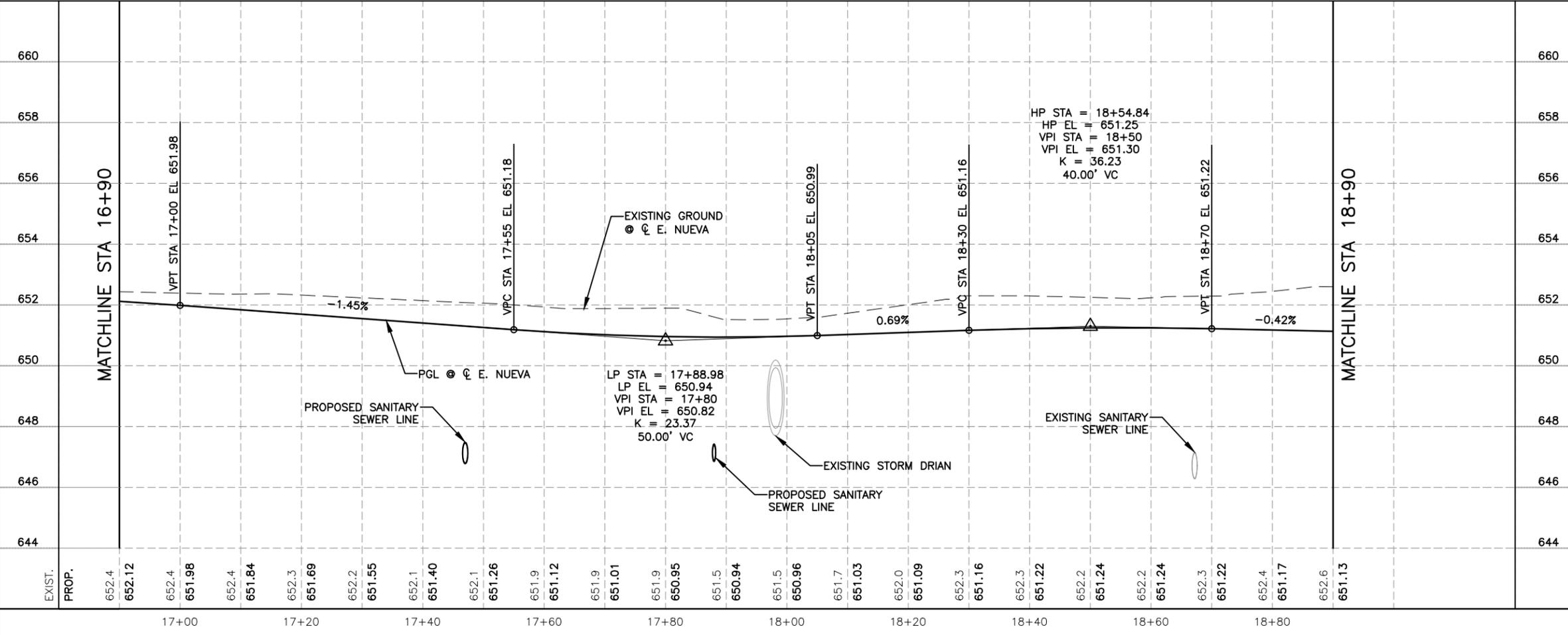
PLAN AND PROFILE
E. NUEVA
STA 15+00 TO 16+90

SCALE: 1"=20'-H
1"=4'-V

DSN: JMG	CK: SDT	DATE	JOB NO.	SHEET NO.
DRN: CRA	CK: -	SEPT. 2014	218609	60



- LEGEND**
- CONC. PAVERS ON FLEX BASE
 - CONC. PAVERS ON CONCRETE
 - BRICKS TO BE RE-LAYED
 - PLANTER AREA
 - R.O.W.
 - DETECTIBLE WARNING LIMIT
 - REMOVABLE BOLLARD
 - 4" BOLLARD
 - LED LIGHT POLE, SEE ELECTRICAL PLANS
 - LED LIGHT BOLLARD, SEE ELECTRICAL PLANS
 - EXISTING TREE
 - DIRECTION OF TRAFFIC; NOT TO BE PAINTED
 - LIMITS OF STRUCTURAL SOIL, SEE ROADWAY MISC. DETAILS
- NOTES**
- N. S. P. I. = NO SEPARATE PAY ITEM
 - FOR DRAINAGE SYSTEM DETAILS & REQUIREMENTS, SEE DRAINAGE SHEETS.
 - ALL RADII ARE MEASURED TO THE FACE OF CURB.
 - FINISHED PAVEMENT GRADE ELEVATIONS SHOWN ARE AT FACE OF CURB/GUTTER LINE.
 - CONTRACTOR TO REFERENCE LANDSCAPE PLANS FOR BOLLARD TYPES AND LOCATIONS, AND PAVER TYPES AND PATTERNS.
 - ALL SAWCUTS SHALL BE SUBSIDIARY TO PERTINENT BID ITEMS.
 - ALL STATIONS AND OFFSETS ARE RELATIVE TO E. NUEVA ALIGNMENT UNLESS OTHERWISE INDICATED.
 - LIMITS OF SIDEWALK REMOVAL, CONTRACTOR TO REMOVE AND RE-SET EXISTING PAVERS/CONCRETE TO MATCH PROPOSED SIDEWALK WITHIN 10 FEET OUTSIDE OF ROW AT 5% MAXIMUM, LONGITUDINAL SLOPE.
 - NO SAWCUTTING OF PAVERS ALLOWED. PAVERS SHALL BE REINSTALLED TO MATCH EXISTING PATTERN.
 - ALL RIBBON CURB IS 6" UNLESS NOTED OTHERWISE.



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San Antonio, TX 78209 Texas
P.E. Firm Registration No. F-754

0 10 20 30 40
HORIZONTAL SCALE: 1" = 20'

0 2 4 6 8
VERTICAL SCALE: 1" = 4'

STATE OF TEXAS
JOSE M. GONZALEZ
PROFESSIONAL ENGINEER
10/7/14

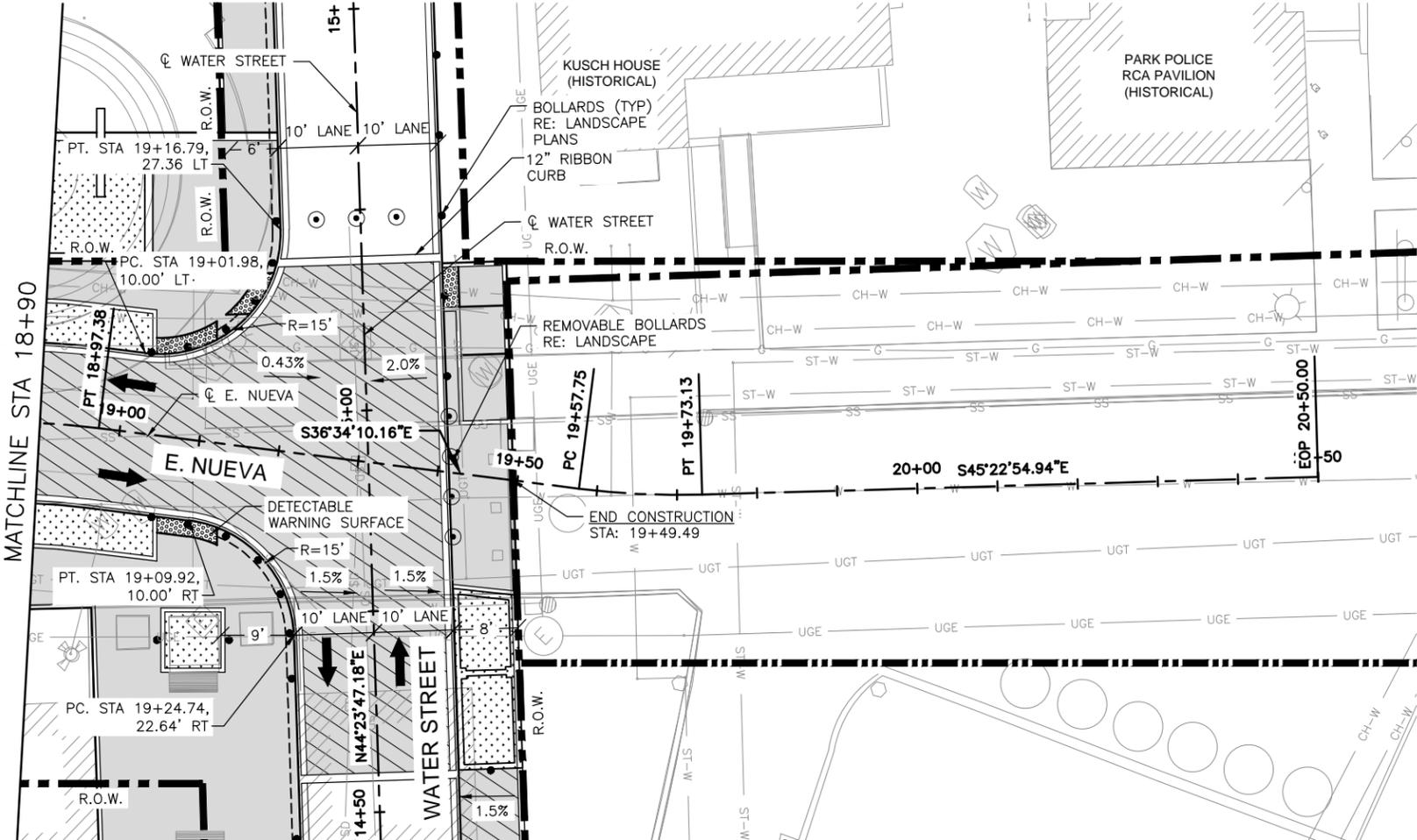
HEMISFAIR INTERNAL STREETS

PLAN AND PROFILE
E. NUEVA
STA 16+90 TO 18+90

SCALE: 1"=20'-H
1"=4'-V

DSN: JMG CK: SDT DATE: SEPT. 2014 JOB NO. 218609 SHEET NO. 61

SHEET 4 OF 5

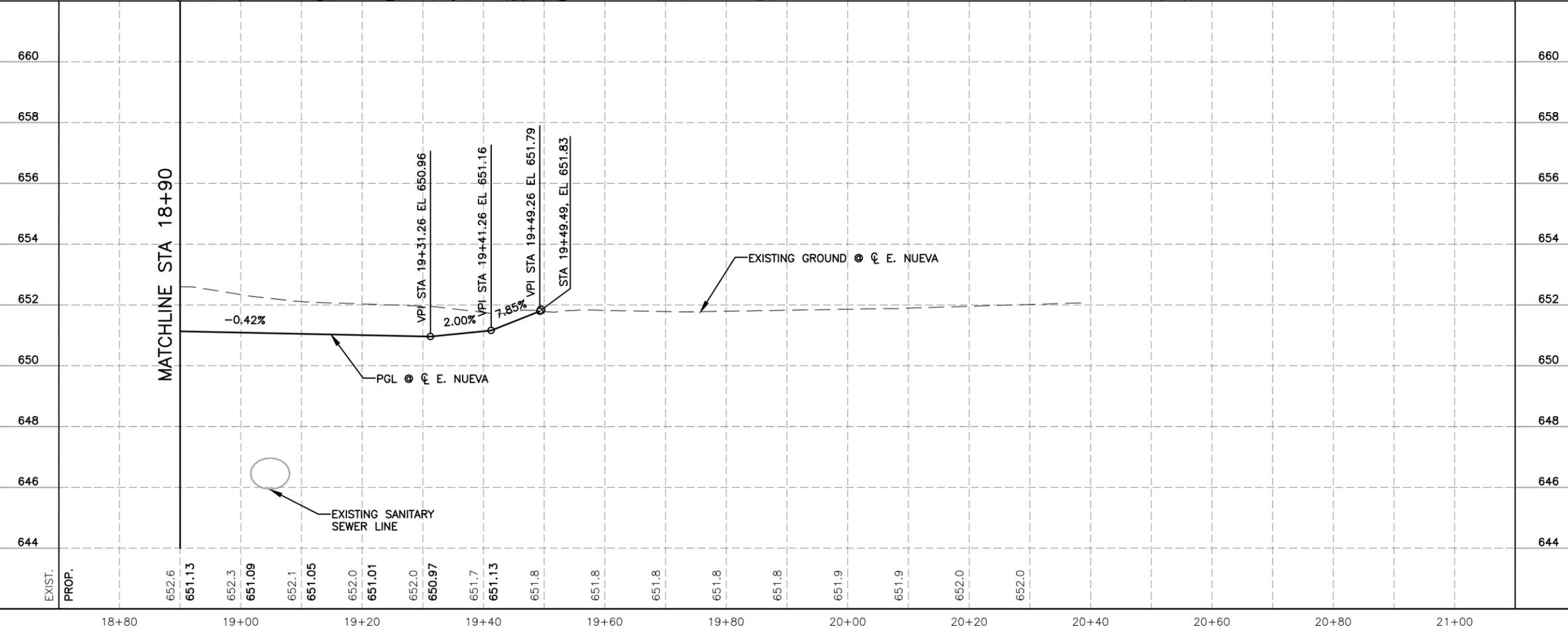


LEGEND

- CONC. PAVERS ON FLEX BASE
- CONC. PAVERS ON CONCRETE
- BRICKS TO BE RE-LAYED
- PLANTER AREA
- R.O.W.
- DETECTABLE WARNING LIMIT
- REMOVABLE BOLLARD
- 4\"/>

NOTES

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- NO SAWCUTTING OF PAVERS ALLOWED. PAVERS SHALL BE REINSTALLED TO MATCH EXISTING PATTERN.
- ALL RIBBON CURB IS 6\"/>



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0 10 20 30 40
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0 2 4 6 8
VERTICAL SCALE: 1" = 4'

STATE OF TEXAS
JOSE M. GONZALEZ
PROFESSIONAL ENGINEER
10/7/14

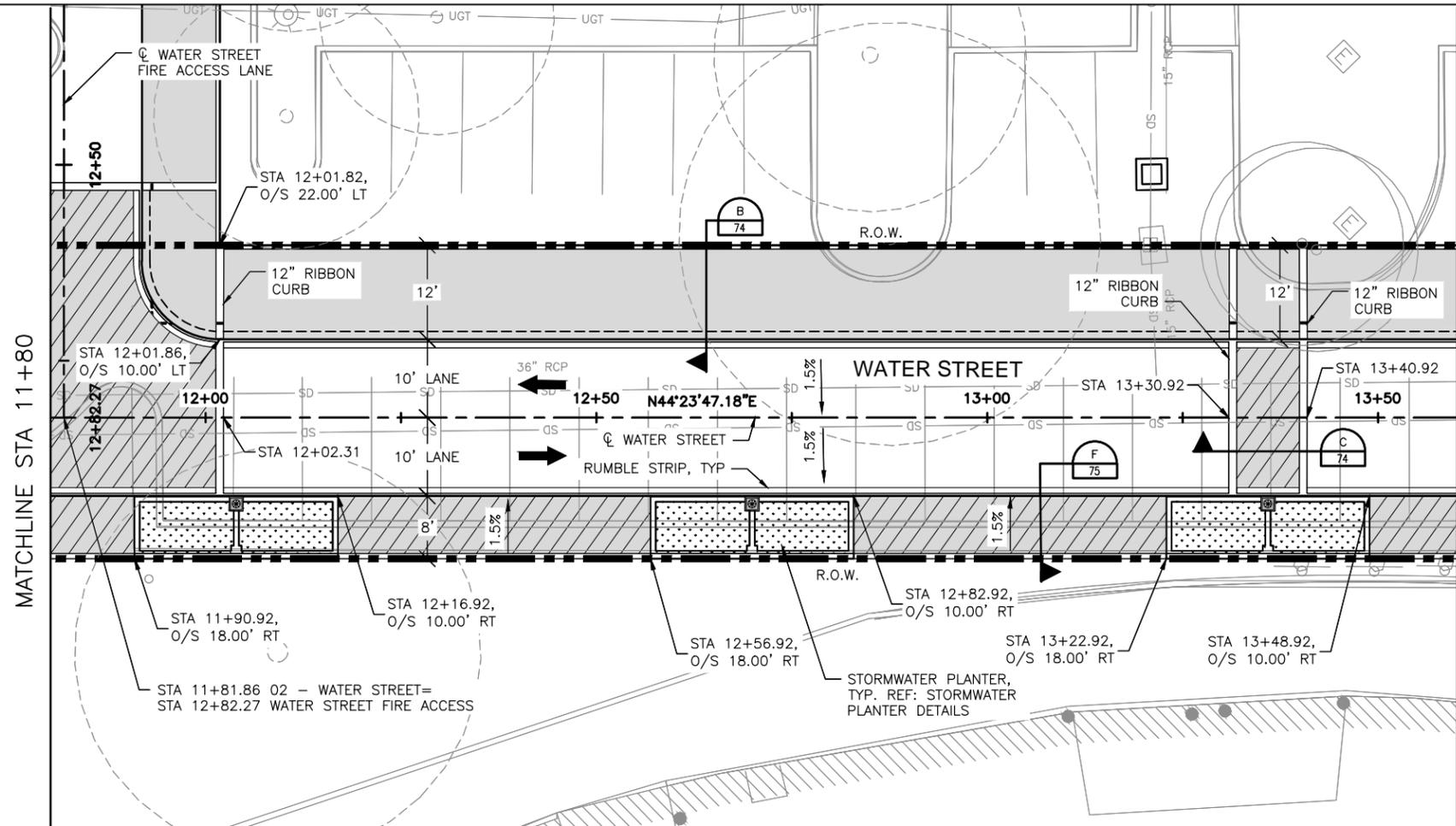
HEMISFAIR INTERNAL STREETS

PLAN AND PROFILE
E. NUEVA
STA 18+90 TO END

SCALE: 1"=20' -H
1"=4' -V

DSN: JMG CK: SDT DATE: SEPT. 2014 JOB NO. 218609 SHEET NO. 62

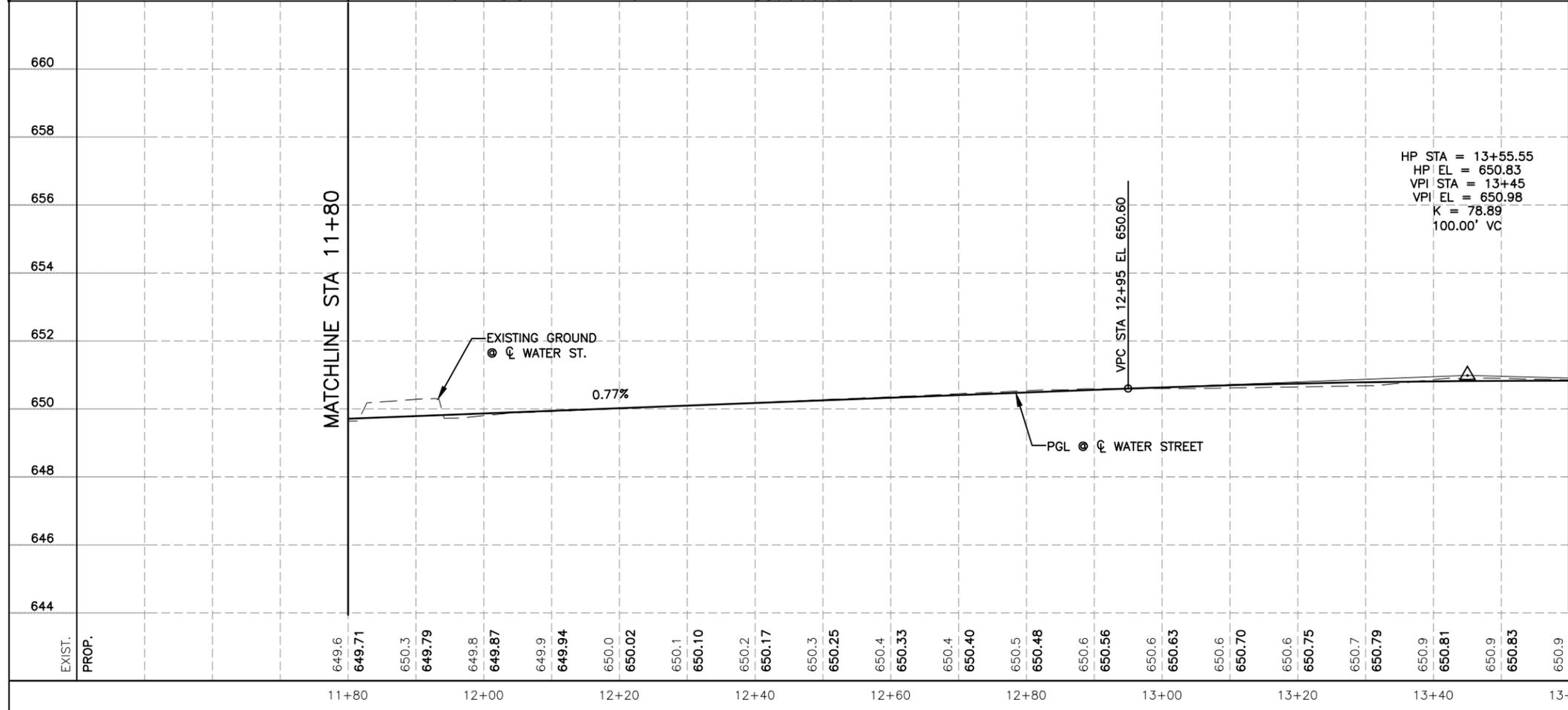
SHEET 5 OF 5



LEGEND

- CONC. PAVERS ON FLEX BASE
- CONC. PAVERS ON CONCRETE
- BRICKS TO BE RE-LAYED
- PLANTER AREA
- R.O.W.
- DETECTIBLE WARNING LIMIT
- REMOVABLE BOLLARD
- 4" BOLLARD
- LED LIGHT POLE, SEE ELECTRICAL PLANS
- LED LIGHT BOLLARD, SEE ELECTRICAL PLANS
- EXISTING TREE
- DIRECTION OF TRAFFIC; NOT TO BE PAINTED

- NOTES**
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 - ALL SAWCUTS SHALL BE SUBSIDIARY TO PERTINENT BID ITEMS.
 - ALL STATIONS AND OFFSETS ARE RELATIVE TO WATER STREET ALIGNMENT UNLESS OTHERWISE INDICATED.
 - LIMITS OF SIDEWALK REMOVAL; CONTRACTOR TO REMOVE AND RE-SET EXISTING PAVERS/CONCRETE TO MATCH PROPOSED SIDEWALK WITHIN 10 FEET OUTSIDE OF ROW AT 5% MAXIMUM, LONGITUDINAL SLOPE.
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HP STA = 13+55.55
 HP EL = 650.83
 VPI STA = 13+45
 VPI EL = 650.98
 K = 78.89
 100.00' VC

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0 10 20 30 40
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0 2 4 6 8
 VERTICAL SCALE: 1" = 4'

STATE OF TEXAS
 JOSE M. GONZALEZ
 97348
 LICENSED PROFESSIONAL ENGINEER
 10/7/14

HEMISFAIR INTERNAL STREETS

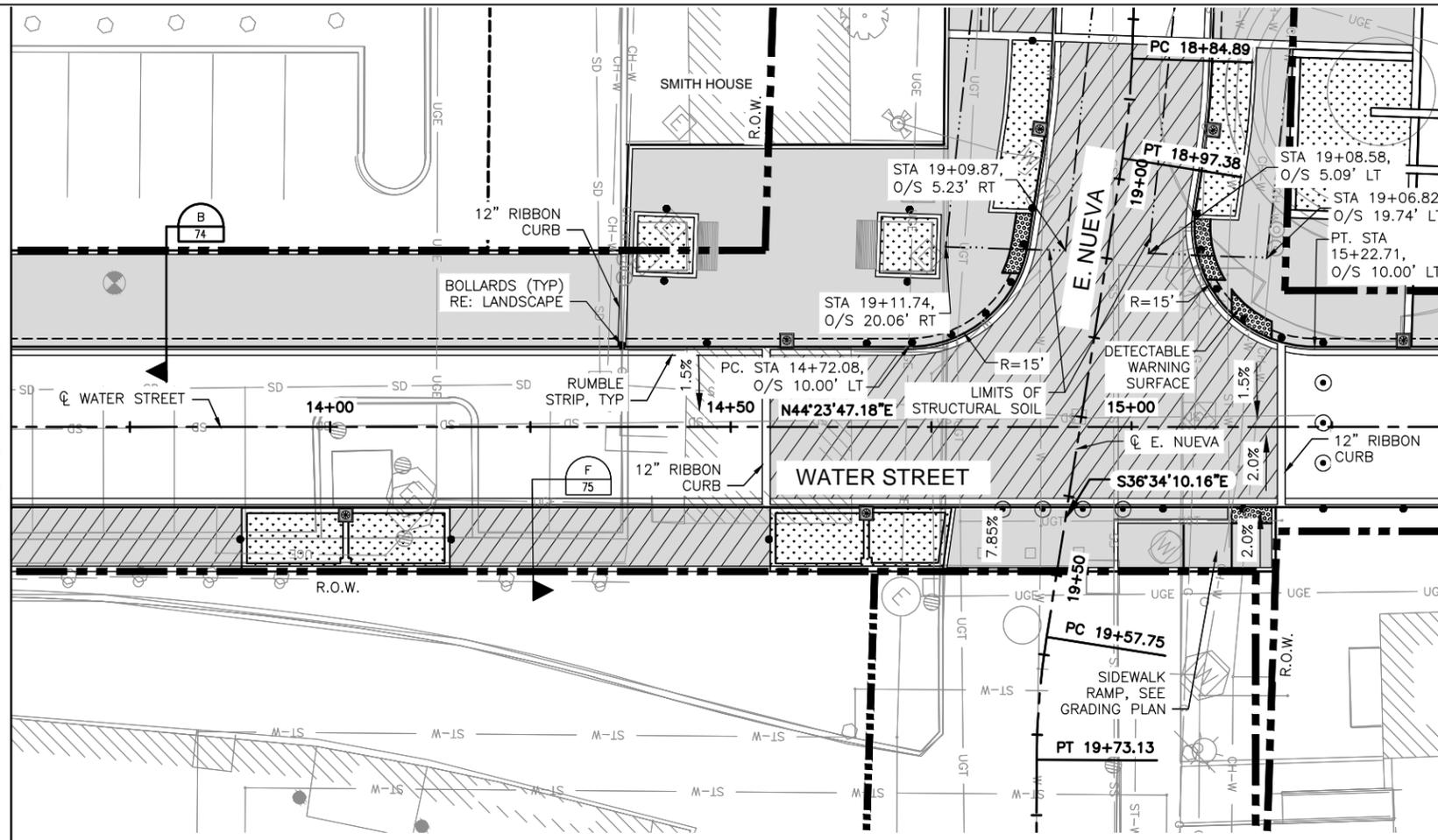
PLAN AND PROFILE
WATER STREET
 STA 11+80 TO 13+60

SCALE: 1"=20'-H
 1"=4'-V

DSN: JMG CK: - DATE: SEPT. 2014 JOB NO. 218609 SHEET NO. 64
 DRN: CRA CK: -

SHEET 2 OF 4

MATCHLINE STA 13+60



MATCHLINE STA 15+40

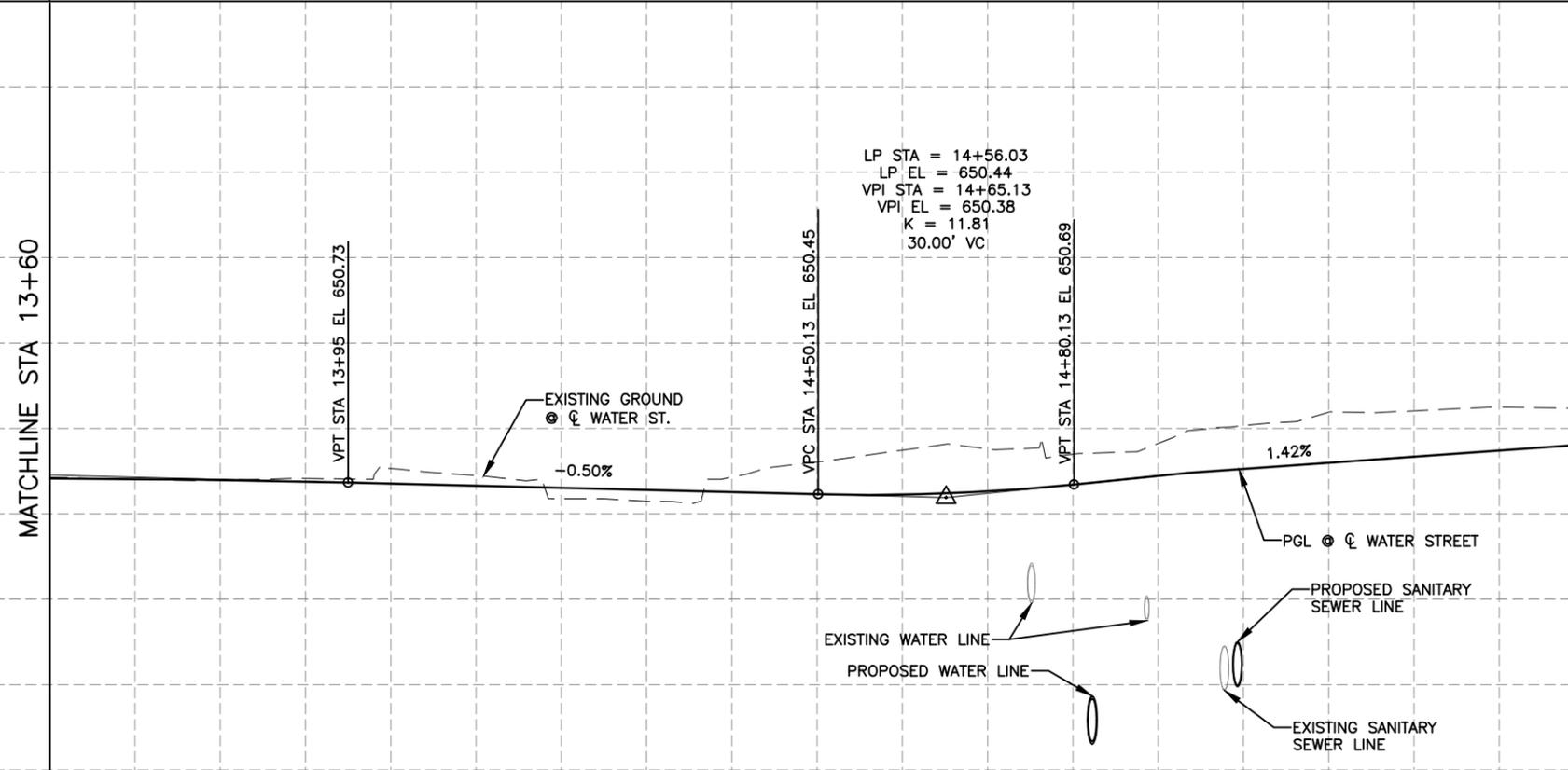
LEGEND

- CONC. PAVERS ON FLEX BASE
- CONC. PAVERS ON CONCRETE
- BRICKS TO BE RE-LAYED
- PLANTER AREA
- R.O.W.
- DETECTABLE WARNING LIMIT
- REMOVABLE BOLLARD
- 4" BOLLARD
- LED LIGHT POLE, SEE ELECTRICAL PLANS
- LED LIGHT BOLLARD, SEE ELECTRICAL PLANS
- EXISTING TREE
- DIRECTION OF TRAFFIC; NOT TO BE PAINTED
- LIMITS OF STRUCTURAL SOIL, SEE ROADWAY MISC. DETAILS

NOTES

1. N. S. P. I. = NO SEPARATE PAY ITEM
2. FOR DRAINAGE SYSTEM DETAILS & REQUIREMENTS, SEE DRAINAGE SHEETS.
3. ALL RADII ARE MEASURED TO THE FACE OF CURB.
4. FINISHED PAVEMENT GRADE ELEVATIONS SHOWN ARE AT FACE OF CURB/GUTTER LINE.
5. CONTRACTOR TO REFERENCE LANDSCAPE PLANS FOR BOLLARD TYPES AND LOCATIONS.
6. ALL SAWCUTS SHALL BE SUBSIDIARY TO PERTINENT BID ITEMS.
7. ALL STATIONS AND OFFSETS ARE RELATIVE TO WATER STREET ALIGNMENT UNLESS OTHERWISE INDICATED.
8. LIMITS OF SIDEWALK REMOVAL; CONTRACTOR TO REMOVE AND RE-SET EXISTING PAVERS/CONCRETE TO MATCH PROPOSED SIDEWALK WITHIN 10 FEET OUTSIDE OF ROW AT 5% MAXIMUM, LONGITUDINAL SLOPE.
9. NO SAWCUTTING OF PAVERS ALLOWED. PAVERS SHALL BE REINSTALLED TO MATCH EXISTING PATTERN.
10. ALL RIBBON CURB IS 6" UNLESS NOTED OTHERWISE.

MATCHLINE STA 13+60



MATCHLINE STA 15+40

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0 10 20 30 40
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0 2 4 6 8
VERTICAL SCALE: 1" = 4'

STATE OF TEXAS
JOSE M. GONZALEZ
97348
PROFESSIONAL ENGINEER
10/7/14

HEMISFAIR INTERNAL STREETS

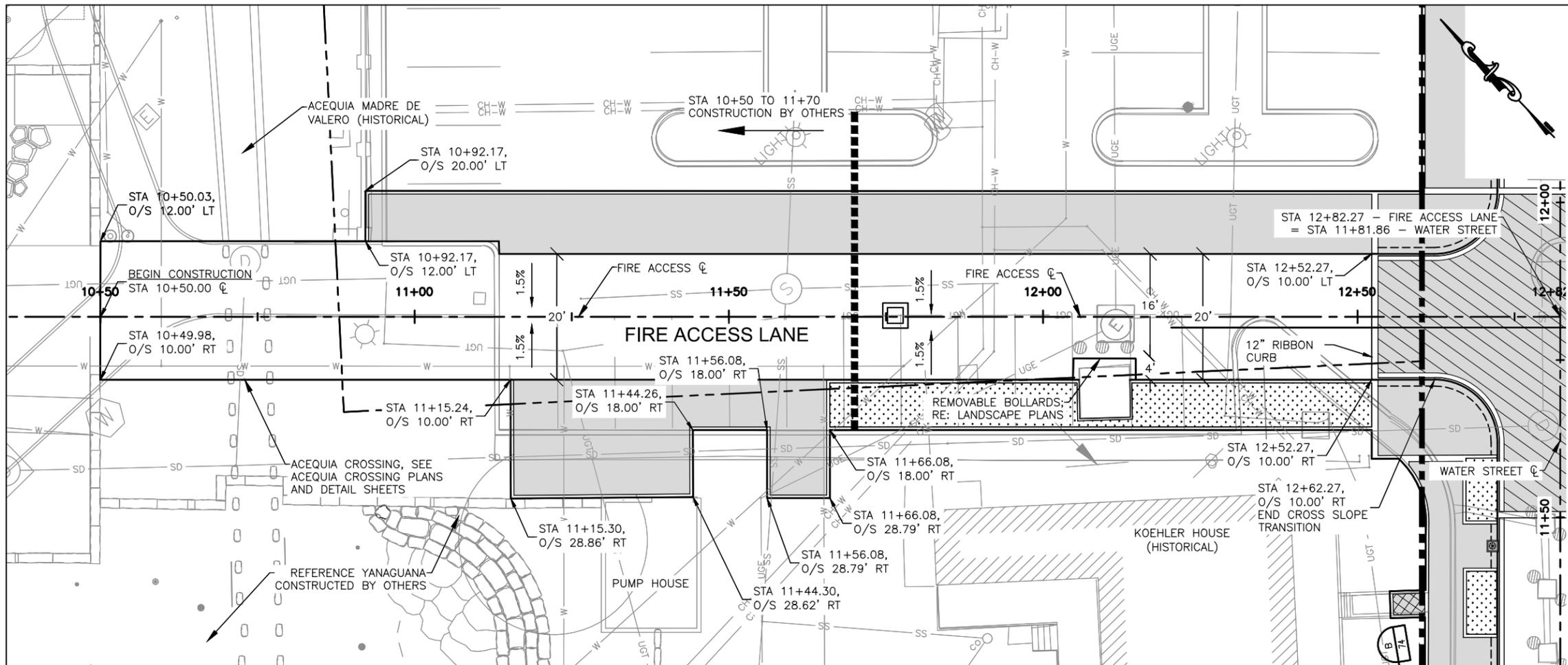
PLAN AND PROFILE
WATER STREET
STA 13+60 TO 15+40

SCALE: 1"=20' -H
1"=4' -V

DSN: JMG CK: - DATE: SEPT. 2014 JOB NO. 218609 SHEET NO. 65

SHEET 3 OF 4

EXIST.	PROP.	650.9	650.83	650.8	650.82	650.8	650.79	650.8	650.75	651.1	650.71	650.9	650.66	650.4	650.61	650.3	650.56	650.9	650.51	651.2	650.46	651.5	650.45	651.5	650.52	651.4	650.68	651.6	650.89	652.1	651.05	652.4	651.19	652.4	651.34	652.5	651.48	652.5	651.62
		13+60		13+80				14+00				14+20					14+40				14+60				14+80				15+00				15+20				15+40		

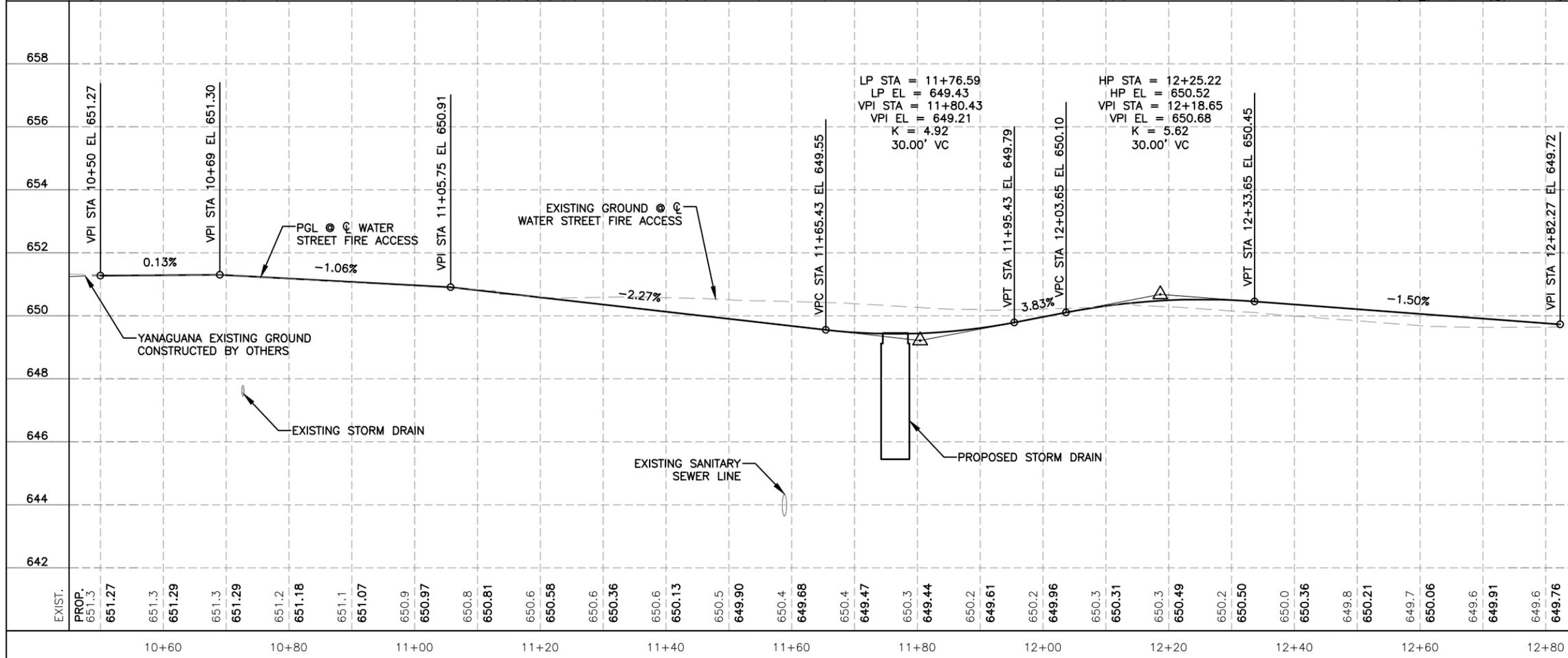


LEGEND

- CONC. PAVERS ON FLEX BASE
- CONC. PAVERS ON CONCRETE
- BRICKS TO BE RE-LAYED
- PLANTER AREA
- R.O.W.
- DETECTIBLE WARNING LIMIT
- REMOVABLE BOLLARD
- 4" BOLLARD
- LED LIGHT POLE, SEE ELECTRICAL PLANS
- LED LIGHT BOLLARD, SEE ELECTRICAL PLANS
- EXISTING TREE
- DIRECTION OF TRAFFIC; NOT TO BE PAINTED

NOTES

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6. ALL SAWCUTS SHALL BE SUBSIDIARY TO PERTINENT BID ITEMS.
7. ALL STATIONS AND OFFSETS ARE RELATIVE TO ACCESS FIRE LANE ALIGNMENT UNLESS OTHERWISE INDICATED.
8. LIMITS OF SIDEWALK REMOVAL; CONTRACTOR TO REMOVE AND RE-SET EXISTING PAVERS/CONCRETE TO MATCH PROPOSED SIDEWALK WITHIN 10 FEET OUTSIDE OF ROW AT 5% MAXIMUM, LONGITUDINAL SLOPE.
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0 10 20 30 40
HORIZONTAL SCALE: 1" = 20'

0 2 4 6 8
VERTICAL SCALE: 1" = 4'

STATE OF TEXAS
JOSE M. GONZALEZ
PROFESSIONAL ENGINEER
10/7/14

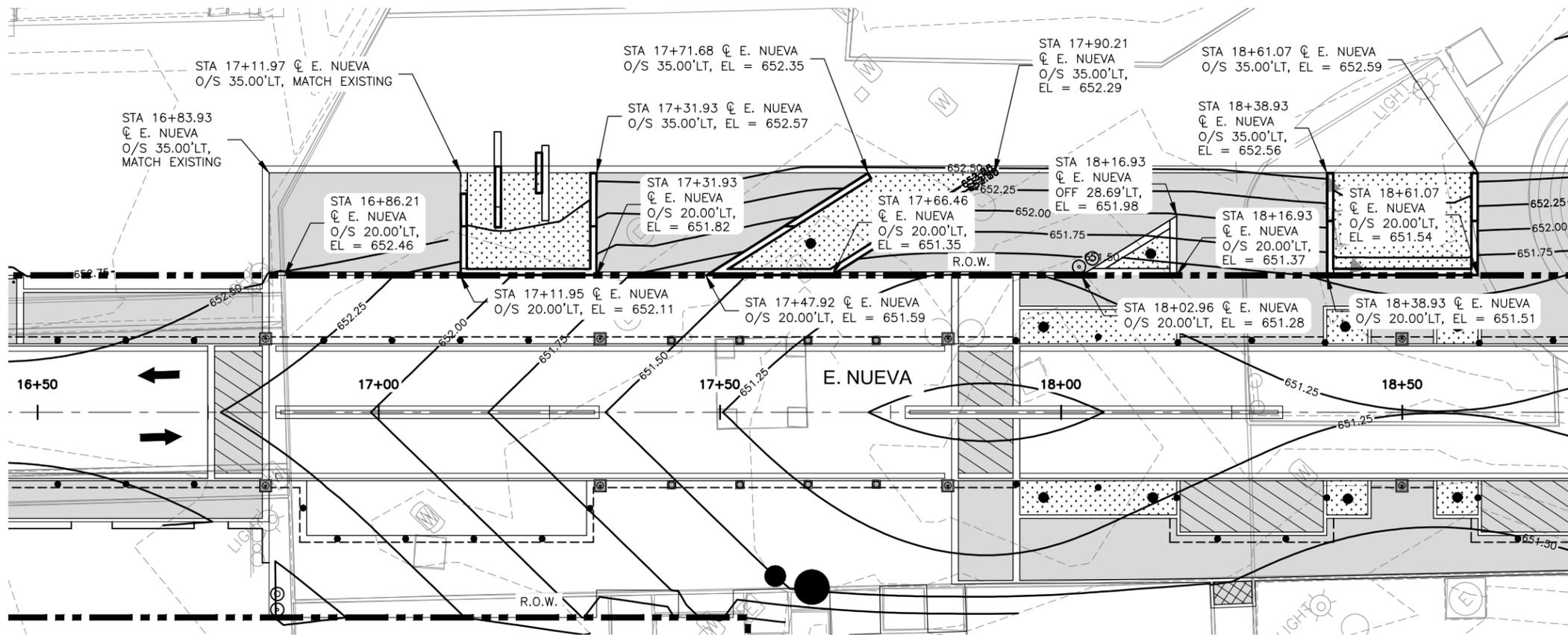
HEMISFAIR INTERNAL STREETS

PLAN AND PROFILE
FIRE ACCESS LANE
AT WATER STREET
STA 10+50 TO END

SCALE: 1"=20'-H
1"=4'-V

SHEET 1 OF 1

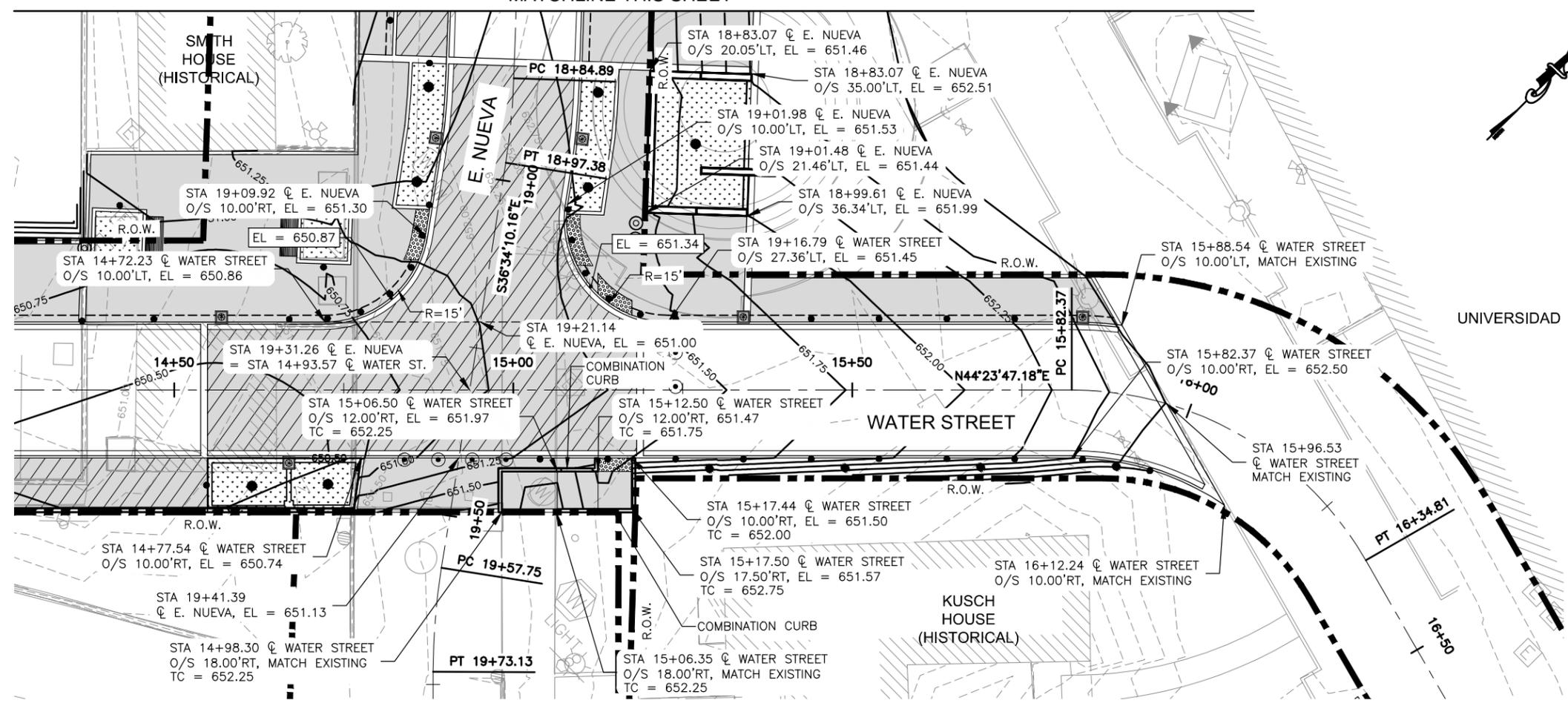
DSN: JMG	CK: SDT	DATE	JOB NO.	SHEET NO.
DRN: CRA	CK: -	SEPT. 2014	218609	67



- LEGEND**
- CONC. PAVERS ON FLEX BASE
 - CONC. PAVERS ON CONCRETE
 - BRICKS TO BE RE-LAYED
 - R.O.W.
 - 650.00 --- EXISTING CONTOUR
 - 650.00 --- PROPOSED CONTOUR

- NOTES**
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 4. FINISHED PAVEMENT GRADE ELEVATIONS SHOWN ARE AT FACE OF CURB/GUTTER LINE
 5. CONTRACTOR TO REFERENCE LANDSCAPE PLANS FOR CONCRETE FINISHES.
 6. ALL SAWCUTS SHALL BE SUBSIDIARY TO PERTINENT BID ITEMS.
 7. ALL STATIONS AND OFFSETS ARE RELATIVE TO E. NUEVA ALIGNMENT UNLESS OTHERWISE INDICATED.
 8. CONTRACTOR SHALL FIELD VERIFY ALL ELEVATIONS TO ENSURE PROPER DRAINAGE AND TYING TO EXISTING.

MATCHLINE THIS SHEET



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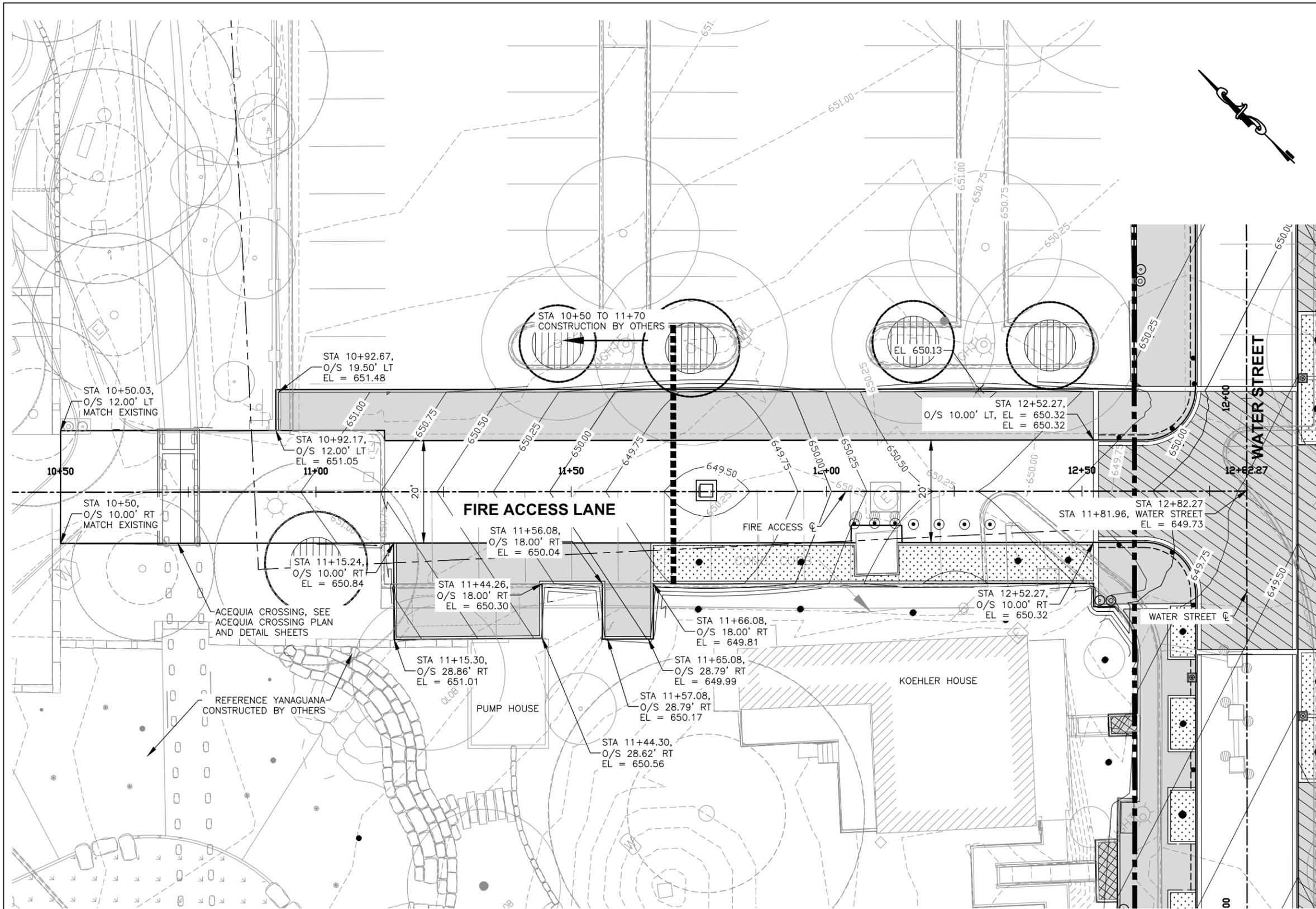
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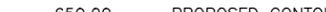
HEMISFAIR INTERNAL STREETS
GRADING PLAN
E. NUEVA & WATER STREET

SHEET 2 OF 4

DSN: RAW	CK: -	DATE	JOB NO.	SHEET NO.
DRN: CRA	CK: -	SEPT. 2014	218609	71



LEGEND

-  CONC. PAVERS ON FLEX BASE
-  CONC. PAVERS ON CONCRETE
-  BRICKS TO BE RE-LAYED
-  R.O.W.
-  650.00 --- EXISTING CONTOUR
-  650.00 — PROPOSED CONTOUR

NOTES

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8. CONTRACTOR SHALL FIELD VERIFY ALL ELEVATIONS TO ENSURE PROPER DRAINAGE AND TYING TO EXISTING.



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HORIZONTAL SCALE: 1" = 20'

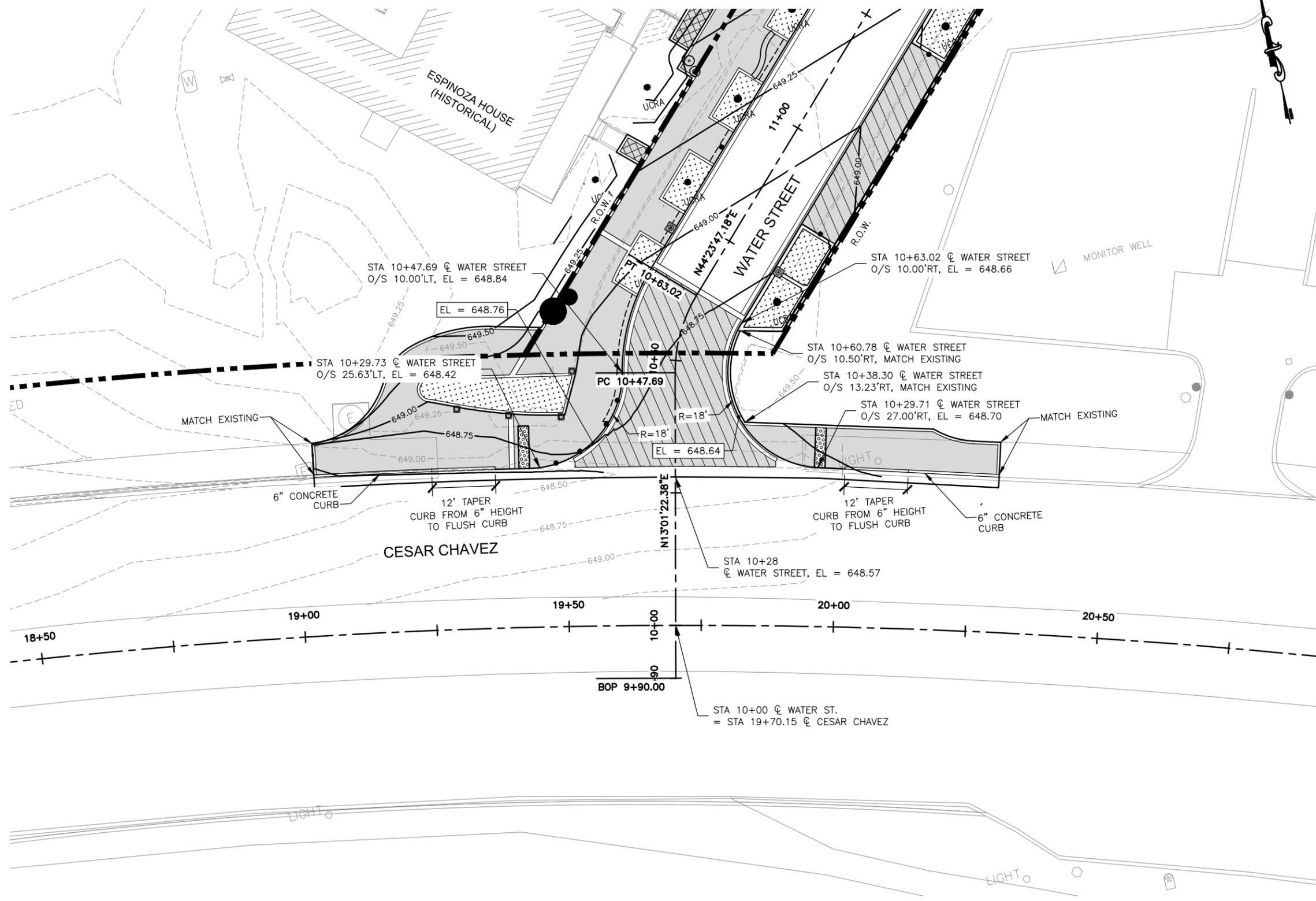


HEMISFAIR INTERNAL STREETS

**GRADING PLAN
WATER STREET FIRE
ACCESS LANE**

SHEET 3 OF 4

DSN: JMG	CK: SDT	DATE	JOB NO.	SHEET NO.
DRN: CRA	CK: -	SEPT. 2014	218609	72



LEGEND

-  CONC. PAVERS ON FLEX BASE
-  CONC. PAVERS ON CONCRETE
-  BRICKS TO BE RE-LAYED

-  R.O.W.
-  650.00 EXISTING CONTOUR
-  650.00 PROPOSED CONTOUR

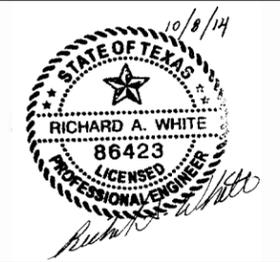
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8. CONTRACTOR SHALL FIELD VERIFY ALL ELEVATIONS TO ENSURE PROPER DRAINAGE AND TYING TO EXISTING.

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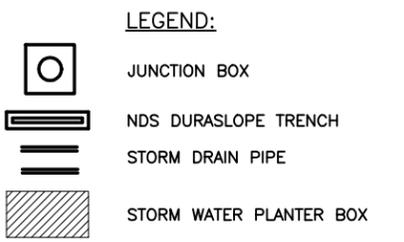
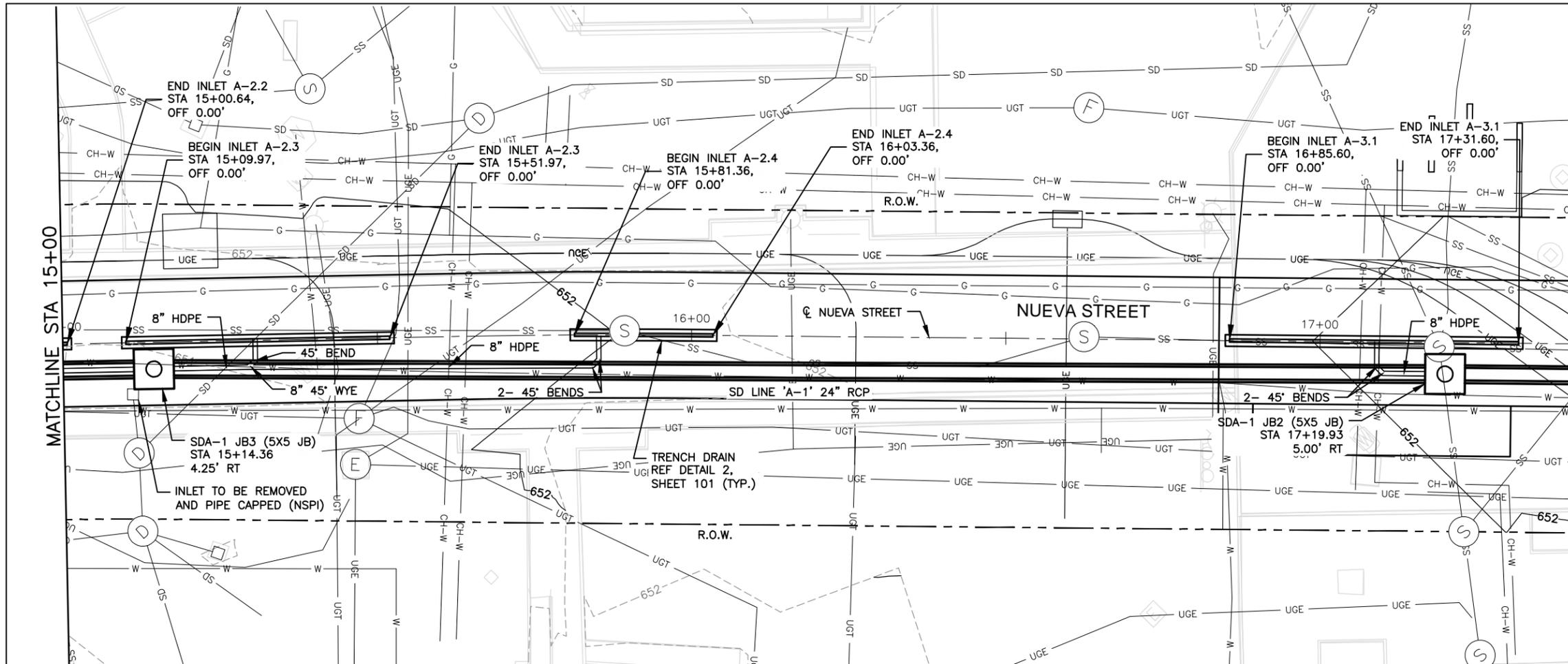
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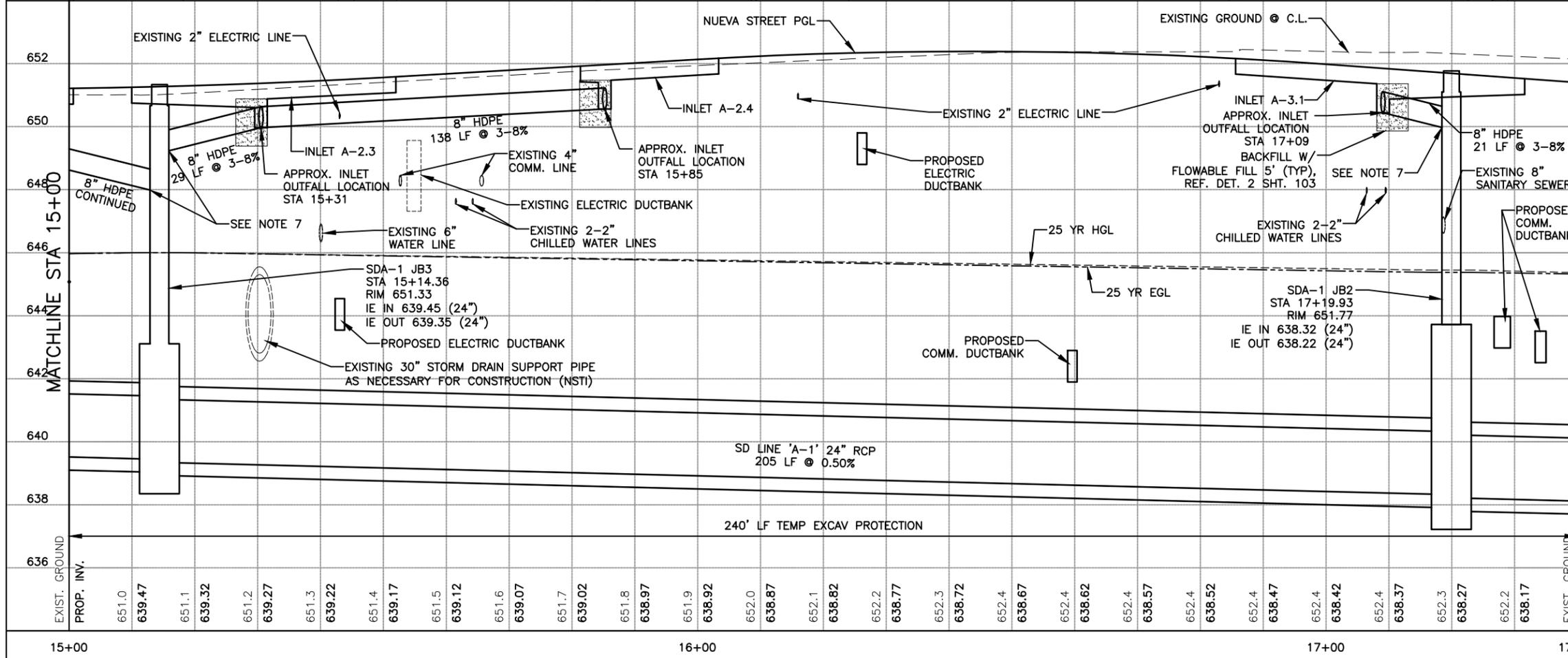
HEMISFAIR INTERNAL STREETS
GRADING PLAN
WATER STREET & CESAR CHAVEZ

DSN:	RAW	CK:	SDT	DATE	JOB NO.	SHEET NO.
DRN:	CRA	CK:	-	SEPT. 2014	218609	73

SHEET 4 OF 4



- NOTES**
1. ALL RCP IS CLASS 4 (IV) UNLESS NOTED OTHERWISE.
 2. STA AND OFFSET CALLOUTS FOR MANHOLES ARE TO CENTER OF STRUCTURE. RIM ELEVATIONS ARE TOP OF COVER.
 3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE THROUGHOUT THE DURATION OF CONSTRUCTION.
 4. UTILITIES SHOWN ARE FOR REFERENCE PURPOSES ONLY AND DO NOT REPRESENT ACTUAL LOCATION.
 5. CONTRACTOR SHALL FIELD VERIFY ALL ELEVATIONS PRIOR TO CONSTRUCTION OF STORM DRAIN AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
 6. CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTORS TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTORS IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH AS A MINIMUM OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIALLY, CONTRACTOR AND/OR CONTRACTORS INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH EM-385 AND OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.
 7. MANHOLE RISER FOR JUNCTION BOXES MUST BE PRECAST WITH WATER TIGHT CONNECTION TO ACCEPT 8" HDPE OR 18" HDPE AS SHOWN ON PLANS. SEE COSA SPEC 414.



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HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

STATE OF TEXAS
1950
RONALD J. BRANYON
REGISTERED PROFESSIONAL ENGINEER

HEMISFAIR INTERNAL STREETS
DRAINAGE
PLAN AND PROFILE
SD 'A-1'
STA 15+00 TO 17+40

SCALE: 1"=20'-H
1"=4'-V

SHEET 2 OF 3

DSN: RJB	CK: -	DATE	JOB NO.	SHEET NO.
DRN: CRA	CK: -	SEPT. 2014	218609	92

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I. STORMWATER POLLUTION PREVENTION-CLEAN WATER ACT SECTION 402

Texas Pollutant Discharge Elimination System (TPDES) TXR 150000: Stormwater Discharge Permit or Construction General Permit (CGP) required for projects with 1 or more acres disturbed soil. Projects with any disturbed soil must protect for erosion and sedimentation in accordance with Item 1122.

No Action Required Required Action

Action No.

- Prevent stormwater pollution by controlling erosion and sedimentation in accordance with TPDES Permit TXR 150000.
- Comply with the Storm Water Pollution Prevention Plan (SW3P) and revise when necessary to control pollution or required by the Engineer.
- Post Construction Site Notice (CSN) with SW3P information on or near the site, accessible to the public and Texas Commission on Environmental Quality (TCEQ), Environmental Protection Agency (EPA) or other inspectors.
- When Contractor project specific locations (PSL's) increase disturbed soil area to 5 acres or more, Contractor shall submit Notice of Intent (NOI) to TCEQ and the Engineer.

5. NOI required: Yes No

Note: If amount of soil disturbance changes, permit requirements may change.

II. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

NPDES required for projects disturbing 1 or more acres of land but is part of a common plan of development or sale that will ultimately disturb 1 or more acres of land.

No Action Required Required Action

Action No.

- Prevent stormwater pollution by controlling erosion and sedimentation in accordance with NPDES.
- Comply with the Storm Water Pollution Prevention Plan (SW3P) and revise when necessary to control pollution or required by the Engineer.
- A notice must be posted which should include the NPDES Permit tracking number contact name and phone number for obtaining additional project information.
- EPA NOI required Yes No

III. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404

US Army Corps of Engineers (USACE) Permit required for filling, dredging, excavating or other work in any potential USACE jurisdictional water, such as, rivers, creeks, streams, or wetlands.

The Contractor shall adhere to all of the terms and conditions associated with the following permit(s):

- No Permit Required
- Nationwide Permit (NWP) 14 - Pre-construction Notice (PCN) not Required
- Nationwide Permit 14 - PCN Required
- Individual 404 Permit Required
- Other Nationwide Permit Required: NWP# _____

Required Actions: List waters of the US permit applies to, location in project and check Best Management Practices (BMPs) planned to control erosion, sedimentation and post-project total suspended solids (TSS).

401 Best Management Practices: (Not applicable if no USACE permit)

Erosion	Sedimentation	Post-Construction TSS
<input type="checkbox"/> Temporary Vegetation	<input type="checkbox"/> Silt Fence	<input type="checkbox"/> Vegetative Filter Strips
<input type="checkbox"/> Blankets/Matting	<input type="checkbox"/> Rock Berm	<input type="checkbox"/> Retention/Irrigation Systems
<input type="checkbox"/> Mulch	<input type="checkbox"/> Triangular Filter Dike	<input type="checkbox"/> Extended Detention Basin
<input type="checkbox"/> Sodding	<input type="checkbox"/> Sand Bag Berm	<input type="checkbox"/> Constructed Wetlands
<input type="checkbox"/> Interceptor Swale	<input type="checkbox"/> Straw Bale Dike	<input type="checkbox"/> Wet Basin
<input type="checkbox"/> Diversion Dike	<input type="checkbox"/> Brush Berms	<input type="checkbox"/> Erosion Control Compost
<input type="checkbox"/> Erosion Control Compost	<input type="checkbox"/> Erosion Control Compost	<input type="checkbox"/> Mulch Filter Berm and Socks
<input type="checkbox"/> Mulch Filter Berm and Socks	<input type="checkbox"/> Mulch Filter Berm and Socks	<input type="checkbox"/> Compost Filter Berm and Socks
<input type="checkbox"/> Compost Filter Berm and Socks	<input type="checkbox"/> Compost Filter Berm and Socks	<input type="checkbox"/> Vegetation Lined Ditches
	<input type="checkbox"/> Stone Outlet Sediment Traps	<input type="checkbox"/> Sand Filter Systems
	<input type="checkbox"/> Sediment Basins	<input type="checkbox"/> Sedimentation Chambers

III. CULTURAL RESOURCES

Cultural resources fall under the Antiquities Code of Texas and/or the National Historic Preservation Act, as amended in 1966. If a previously unidentified archeological site is encountered during construction work, activities should be immediately stopped in the vicinity and the City Archeologist (210-207-7306) notified and/or the SHPO

No Action Required Required Action

Action No.

- Temporary protective fencing and other suitable barriers should be placed around all historic structures within or near the project area during all phases of the construction process.
- If any damage or contact with any historic structure occurs during construction activities, the contractor must stop work immediately and notify the City Inspector who in turn will notify OHP, TCI, and HPARC.
- The contractor is required to coordinate all excavation activities prior to commencement with Archeologists, when monitoring is required.

IV. VEGETATION RESOURCES

Preserve native vegetation to the extent practical.

No Action Required Required Action

Action No.

- Ensure that a tree permit is in place for this project, if required.
- Follow the tree preservation/mitigation plan provided in the design plan set. If there are any questions or concerns, please contact the City Arborist at 207-0278, before any work begins.

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS.

No Action Required Required Action

Action No.

- MIGRATORY BIRD NESTS: Schedule construction activities as needed to meet the following requirements:
 - Do not remove or destroy any active migratory bird nests (nests containing eggs and/or flightless birds) at any time of year. If there are any active nests, they shall not be removed until the nests become inactive.
 - On/in structures, if there are any active nests, they shall not be removed until all nests become inactive. After inactive nests are removed and/or before nest activity begins, deterrent materials may be applied to the structures to prevent future nest building.
-
-
-

If any of the listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact the Engineer immediately. The work may not remove active nests from bridges and other structures during nesting season of the birds associated with the nests. If caves or sinkholes are discovered, cease work in the immediated area, and contact the Engineer immediately.

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

General (applies to all projects):

Comply with the Hazard Communication Act (the Act) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropriate for any hazardous materials used.

Obtain and keep on-site Material Safety Data Sheets (MSDS) for all hazardous products used on the project, which may include, but are not limited to the following categories: Paints, acids, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labelling as required by the Act.

Maintain an adequate supply of on-site spill response materials, as indicated in the MSDS. In the event of a spill, take actions to mitigate the spill as indicated in the MSDS, in accordance with safe work practices, and contact the COSA Inspector immediately. The Contractor shall be responsible for the proper containment and cleanup of all product spills.

Contact the COSA Inspector if any of the following are detected:

- * Dead or distressed vegetation (not identified as normal)
- * Trash piles, drums, canister, barrels, etc.
- * Undesirable smells or odors
- * Evidence of leaching or seepage of substances

Hazardous Materials or Contamination Issues Specific to this Project:

No Action Required Required Action

Action No.

Although COSA environmental investigation did not identify impacted media requiring disposal to the landfill, the City wishes for the contractor to transport any soil generated from excavation activities to a City designated at 856 Gembler Rd., San Antonio, Texas 78219. Also, there is the potential for encountering nuisance odors and vapors during any excavation activities in E. Nueva (formerly Goliad) from STA 1+00 to 2+75 (sewer plans) and STA 18+25 to 19+25 (water, storm drainage and gas plans). COSA will provide environmental oversight during any infrastructure improvement to verify the absence or presence of impacted soil. The Contractor must notify the City Inspector 48-hrs. prior starting the excavation in this area.

Does the project involve the demolition of a span bridge?

Yes No (No further action required)

If "Yes", a pre-demolition notification must be submitted to the Texas Department of State Health Services, 20 calendar days prior to the demolition of the bridge(s) on the project.

VII. OTHER ENVIRONMENTAL ISSUES

(includes regional issues such as Edwards Aquifer District, etc.)

No Action Required Required Action

Action No.

- Asbestos Cement (AC) Pipe is located within the project limits. Refer to AC Pipe Specifications (SAWS Spec. 3000) for handling, transportation, and disposal methods.

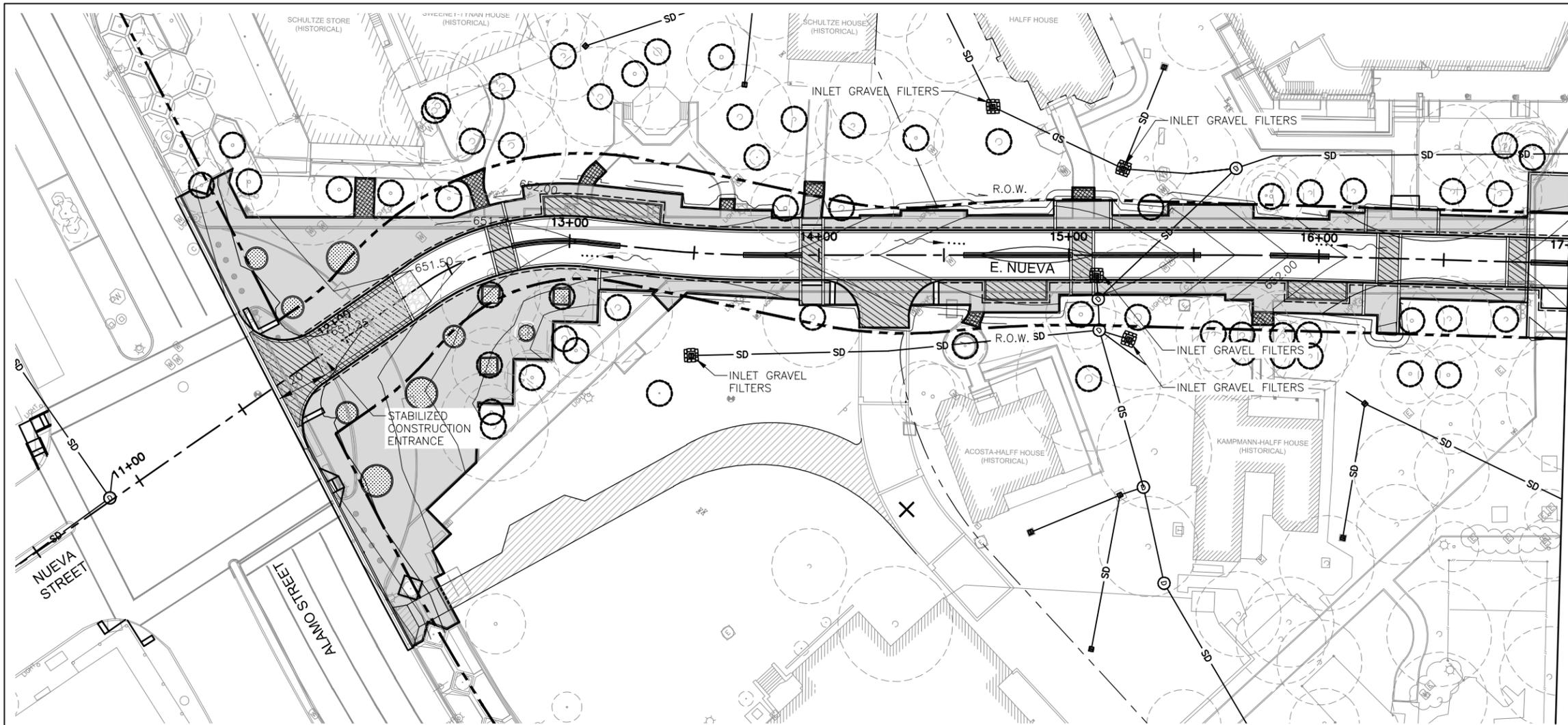
Hemisfair Area Streets Redevelopment
(Water and Nueva)
August 2014



ENVIRONMENTAL_PERMITS,
ISSUES_AND_COMMITMENTS

EPIC

FILE: epic_August_2012.dgn	DN: TxDOT	CK: TxDOT	DW: BW	CK: JAB
© TxDOT August 2012	CONT	SECT	JOB	HIGHWAY
REVISIONS				
	---	---	---	---
	DIST	COUNTY		SHEET NO.
	---	-----		_ 112 _

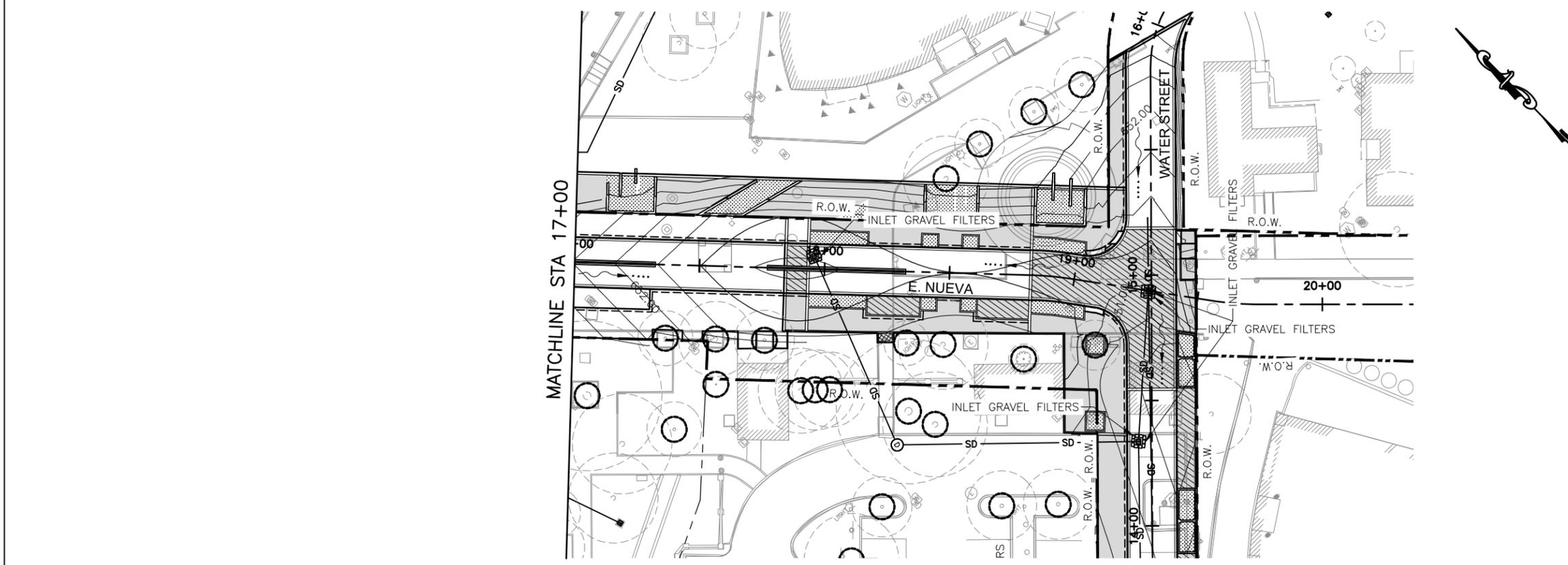


MATCHLINE STA 17+00

LEGEND

- R.O.W.
- EXISTING TREE
- TREE PROTECTION, RE: LANDSCAPE PLANS
- ☒ GRAVEL FILTRATION BAGS
- GFB — GRAVEL FILTRATION BAGS
- ▨ STABILIZED CONSTRUCTION ENTRANCE

- NOTE:
1. PLACE MINIMUM 2 SANDBAGS ON EACH SIDE OF EXISTING AND PROPOSED INLET.
 2. INSTALL SW3P DEVICES IN ACCORDANCE WITH CONSTRUCTION PHASING.



MATCHLINE STA 17+00

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HDR

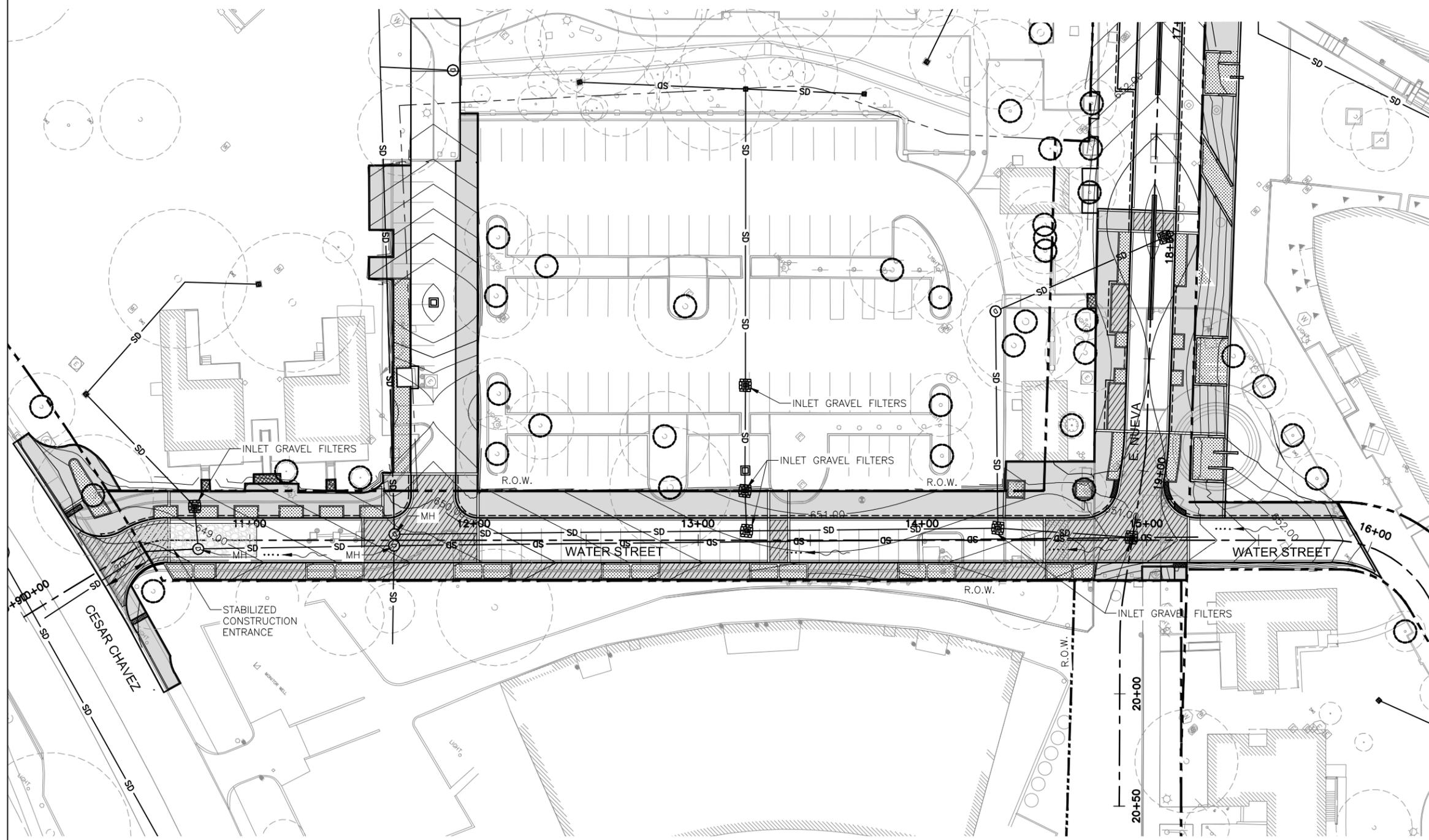
HDR, Inc.
1020 NE Loop 410, Suite 400
San Antonio, TX 78209 Texas
P.E. Firm Registration No. F-754

HORIZONTAL SCALE: 1" = 50'

HEMISFAIR INTERNAL STREETS

SW3P
E. NUEVA STREET

SCALE: 1"=50'		SHEET 1 OF 2	
DSN: JMG	CK: SDT	DATE	JOB NO.
DRN: KRK	CK: -	SEPT. 2014	218609
			SHEET NO. 113



LEGEND

-  R.O.W.
-  EXISTING TREE
-  TREE PROTECTION, RE: LANDSCAPE PLANS
-  GRAVEL FILTRATION BAGS
-  GFB
-  GRAVEL FILTRATION BAGS
-  STABILIZED CONSTRUCTION ENTRANCE

NOTE:

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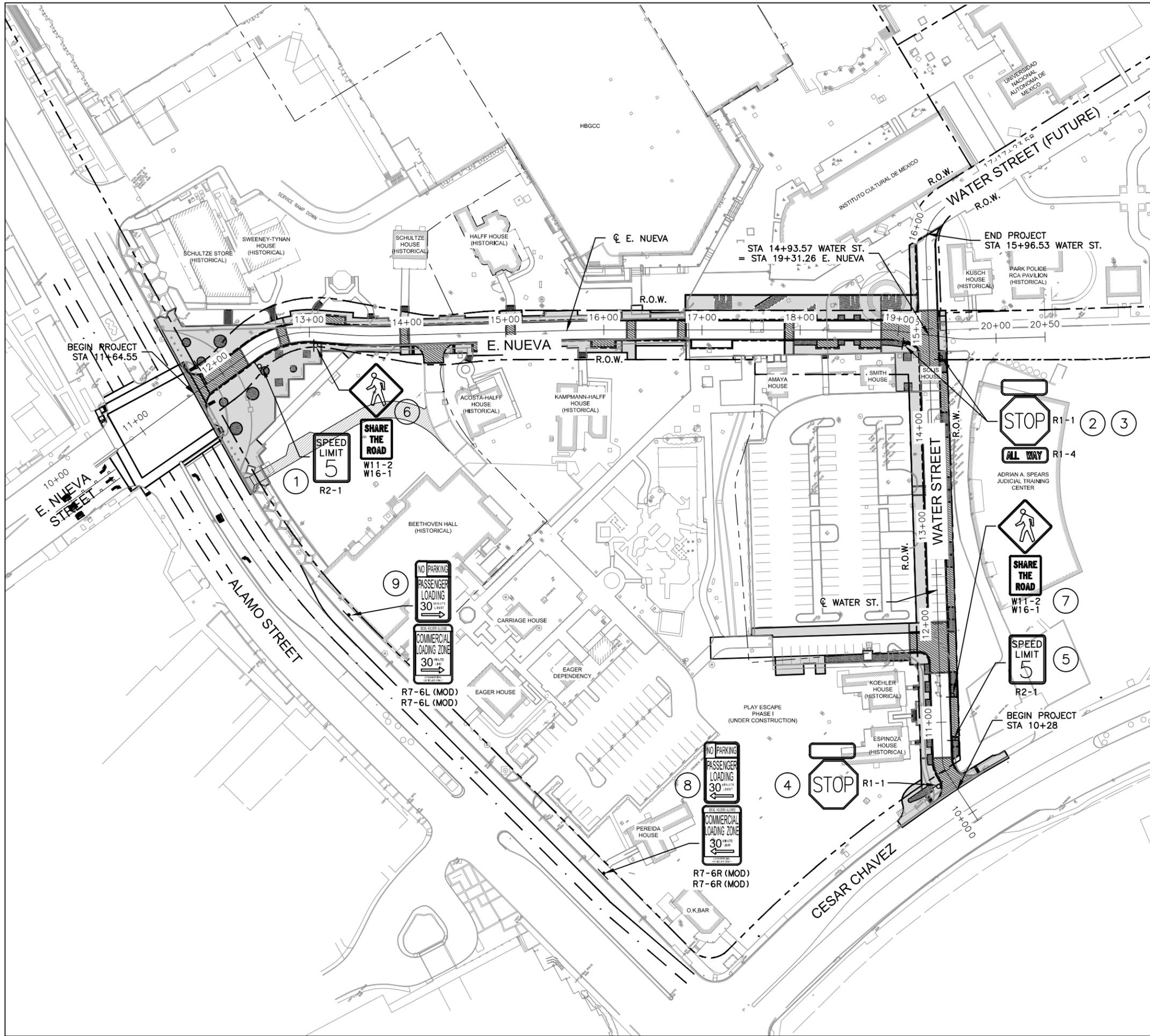


STATE OF TEXAS
Professional Engineer Seal for **JOSE M. GONZALEZ**, License No. 97348, dated 10/7/14.

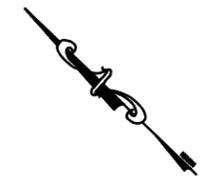
HEMISFAIR INTERNAL STREETS

**SW3P
WATER STREET**

SCALE: 1"=50'		SHEET 2 OF 2		
DSN: JMG	CK: SDT	DATE	JOB NO.	SHEET NO.
DRN: KRK	CK: -	SEPT. 2014	218609	114



- LEGEND**
- R.O.W.
 - EXISTING BUILDINGS
 - EXISTING CURB
 - PROPOSED SIGN
 - RELOCATE SIGN



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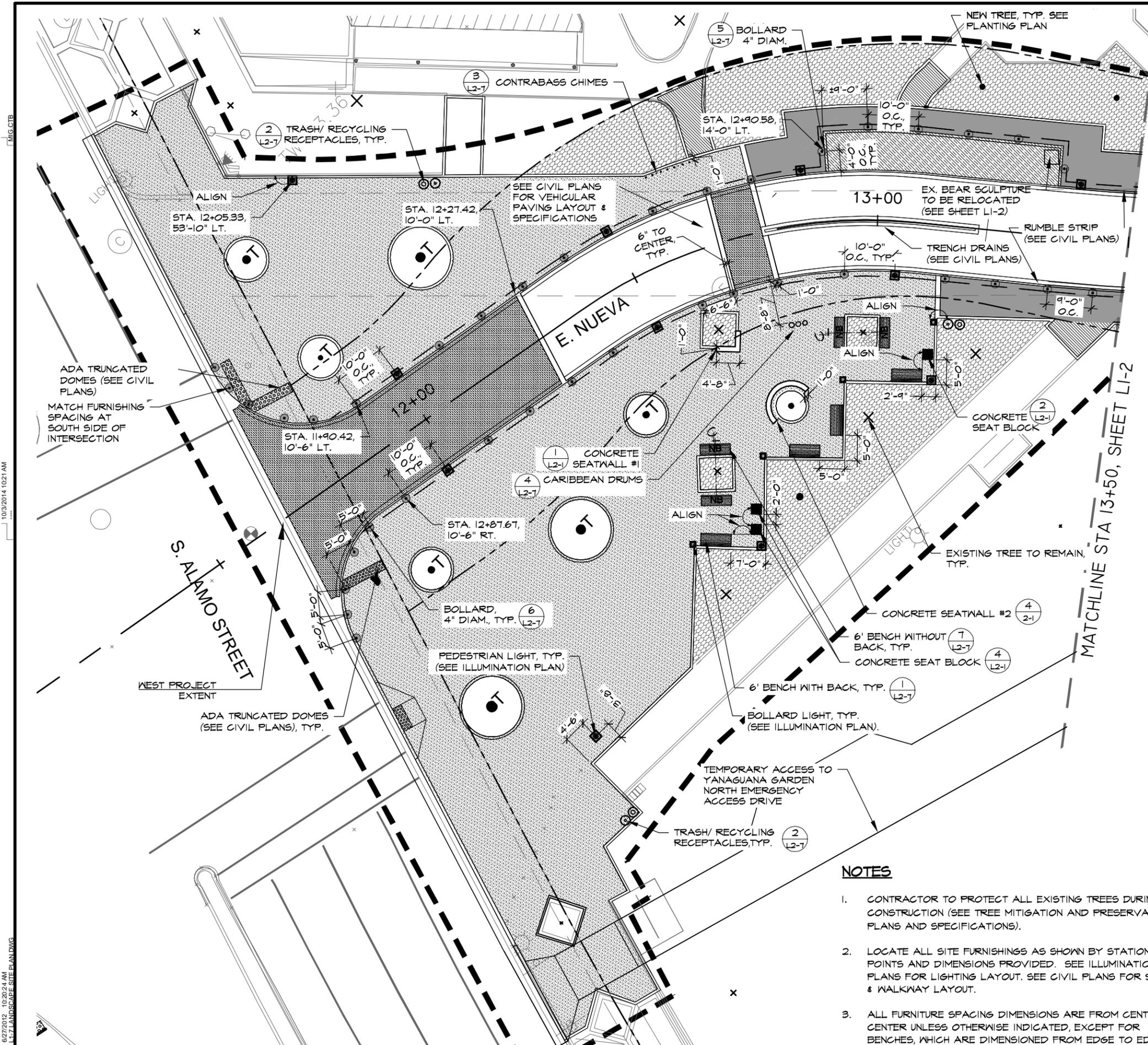
HORIZONTAL SCALE: 1" = 100'

HEMISFAIR INTERNAL STREETS

SMALL SIGN PLAN

DSN: JMG	CK: SDT	DATE	JOB NO.	SHEET NO.
DRN: CRA	CK: -	SEPT. 2014	218609	117

SHEET 1 OF 1



LEGEND

	SPECIAL PAVERS , 2-TONE, PEDESTRIAN SEE SPECS.
	SPECIAL PAVERS , 2-TONE, VEHICULAR, SEE SPECS.
	SPECIAL PAVERS , 4-TONE, PEDESTRIAN SEE SPECS.
	SPECIAL PAVERS , 4-TONE, VEHICULAR SEE SPECS.
	EXISTING PAVERS, RELAY TO MEET FLUSH WITH NEW (SEE CIVIL PLANS)
	SPECIAL CONCRETE PAVING, SEE SPECS.
	CRUSHED STONE PAVING (SEE SPECS.)
	STORMWATER PLANTER (SEE PLANTING DRAWINGS)
	EX. LANDSCAPE TO REMAIN (SEE SPECS. FOR REPAIR/REPLACE INFO.)
	BOLLARD, 4" DIAMETER (6) (L2-7)
	REMOVABLE BOLLARD (5) (L2-7)
	BOLLARD LIGHT (SEE ILLUMINATION PLAN)
	PEDESTRIAN LIGHT (SEE ILLUMINATION PLAN)
	EXISTING TREE TO REMAIN
	6' BENCH WITH BACK (7) (L2-7)
	6' BENCH WITHOUT BACK (2) (L2-7)
	TRASH/RECYCLING RECEPTACLES (1) (L2-7)
	NEW TREE (SEE PLANTING PLAN)
	TRANSPLANTED MATURE TREE (SEE TREE TRANSPLANT PLAN)
	CONSTRUCTION FENCE/BARRIER AT HISTORIC HOMES
	LIMIT OF WORK
	PROPERTY LINE/RIGHT OF WAY
	MATCH LINE

NOTES

- CONTRACTOR TO PROTECT ALL EXISTING TREES DURING CONSTRUCTION (SEE TREE MITIGATION AND PRESERVATION PLANS AND SPECIFICATIONS).
- LOCATE ALL SITE FURNISHINGS AS SHOWN BY STATION POINTS AND DIMENSIONS PROVIDED. SEE ILLUMINATION PLANS FOR LIGHTING LAYOUT. SEE CIVIL PLANS FOR STREET & WALKWAY LAYOUT.
- ALL FURNITURE SPACING DIMENSIONS ARE FROM CENTER TO CENTER UNLESS OTHERWISE INDICATED, EXCEPT FOR BENCHES, WHICH ARE DIMENSIONED FROM EDGE TO EDGE



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TEL: 210.692.9221

0 10 20 30 40
HORIZONTAL SCALE: 1" = 20'

100% CONSTRUCTION DOCUMENTS

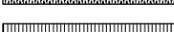
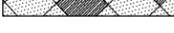
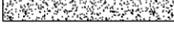
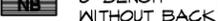
HEMISFAIR INTERNAL STREETS IMPROVEMENT - WATER STREET & E. NUEVA LANDSCAPE SITE PLAN E. NUEVA STREET

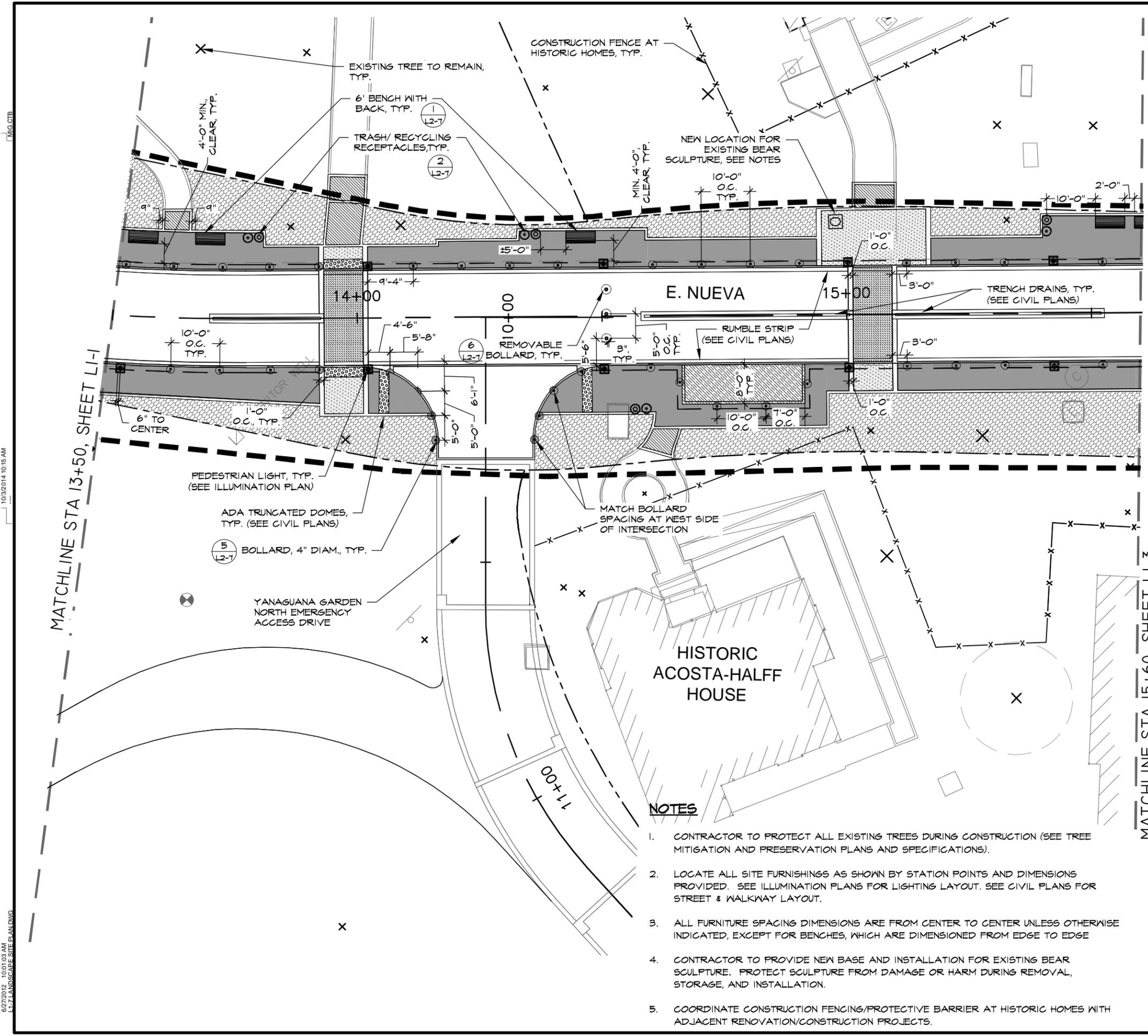
STA 11+80 TO STA 13+50 SHEET 1 OF 7

DSN: MM	CK: JP	DATE	JOB NO.	SHEET NO.
DRN: AM	CK: JP	SEPT. 2014		L1-1

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 L2-LANDSCAPE SITE PLANNING
 10/30/2014 10:21 AM
 TMIG.CTB

LEGEND

-  SPECIAL PAVERS , 2-TONE, PEDESTRIAN
SEE SPECS.
 -  SPECIAL PAVERS , 2-TONE, VEHICULAR,
SEE SPECS.
 -  SPECIAL PAVERS , 4-TONE, PEDESTRIAN
SEE SPECS.
 -  SPECIAL PAVERS , 4-TONE, VEHICULAR
SEE SPECS.
 -  EXISTING PAVERS, RELAY TO MEET FLUSH
WITH NEW (SEE CIVIL PLANS)
 -  SPECIAL CONCRETE PAVING, SEE SPECS.
 -  CRUSHED STONE PAVING
(SEE SPECS.)
 -  STORMWATER PLANTER (SEE
PLANTING DRAWINGS)
 -  EX. LANDSCAPE TO REMAIN (SEE
SPECS. FOR REPAIR/REPLACE INFO.)
-
-  BOLLARD, 4" DIAMETER (6) (L2-7)
 -  REMOVABLE BOLLARD (5) (L2-7)
 -  BOLLARD LIGHT (SEE ILLUMINATION PLAN)
 -  PEDESTRIAN LIGHT (SEE ILLUMINATION PLAN)
 -  EXISTING TREE TO REMAIN
 -  6" BENCH WITH BACK (7) (L2-7)
 -  6" BENCH WITHOUT BACK (2) (L2-7)
 -  TRASH/RECYCLING RECEPTACLES (1) (L2-7)
 -  NEW TREE (SEE PLANTING PLAN)
 -  TRANSPLANTED MATURE TREE (SEE TREE TRANSPLANT PLAN)
 -  PROPERTY LINE/RIGHT OF WAY
 -  MATCH LINE
 -  CONSTRUCTION FENCE/BARRIER AT HISTORIC HOMES
 -  LIMIT OF WORK



NOTES

1. CONTRACTOR TO PROTECT ALL EXISTING TREES DURING CONSTRUCTION (SEE TREE MITIGATION AND PRESERVATION PLANS AND SPECIFICATIONS).
2. LOCATE ALL SITE FURNISHINGS AS SHOWN BY STATION POINTS AND DIMENSIONS PROVIDED. SEE ILLUMINATION PLANS FOR LIGHTING LAYOUT. SEE CIVIL PLANS FOR STREET & WALKWAY LAYOUT.
3. ALL FURNITURE SPACING DIMENSIONS ARE FROM CENTER TO CENTER UNLESS OTHERWISE INDICATED, EXCEPT FOR BENCHES, WHICH ARE DIMENSIONED FROM EDGE TO EDGE
4. CONTRACTOR TO PROVIDE NEW BASE AND INSTALLATION FOR EXISTING BEAR SCULPTURE. PROTECT SCULPTURE FROM DAMAGE OR HARM DURING REMOVAL, STORAGE, AND INSTALLATION.
5. COORDINATE CONSTRUCTION FENCING/PROTECTIVE BARRIER AT HISTORIC HOMES WITH ADJACENT RENOVATION/CONSTRUCTION PROJECTS.



CITY OF SAN ANTONIO
TRANSPORTATION AND CAPITAL IMPROVEMENTS



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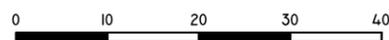
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HORIZONTAL SCALE: 1" = 20'

100% CONSTRUCTION DOCUMENTS

HEMISFAIR INTERNAL
STREETS IMPROVEMENT -
WATER STREET & E. NUEVA
LANDSCAPE SITE PLAN
E. NUEVA STREET

STA 13+50 TO STA 15+60 SHEET 2 OF 7

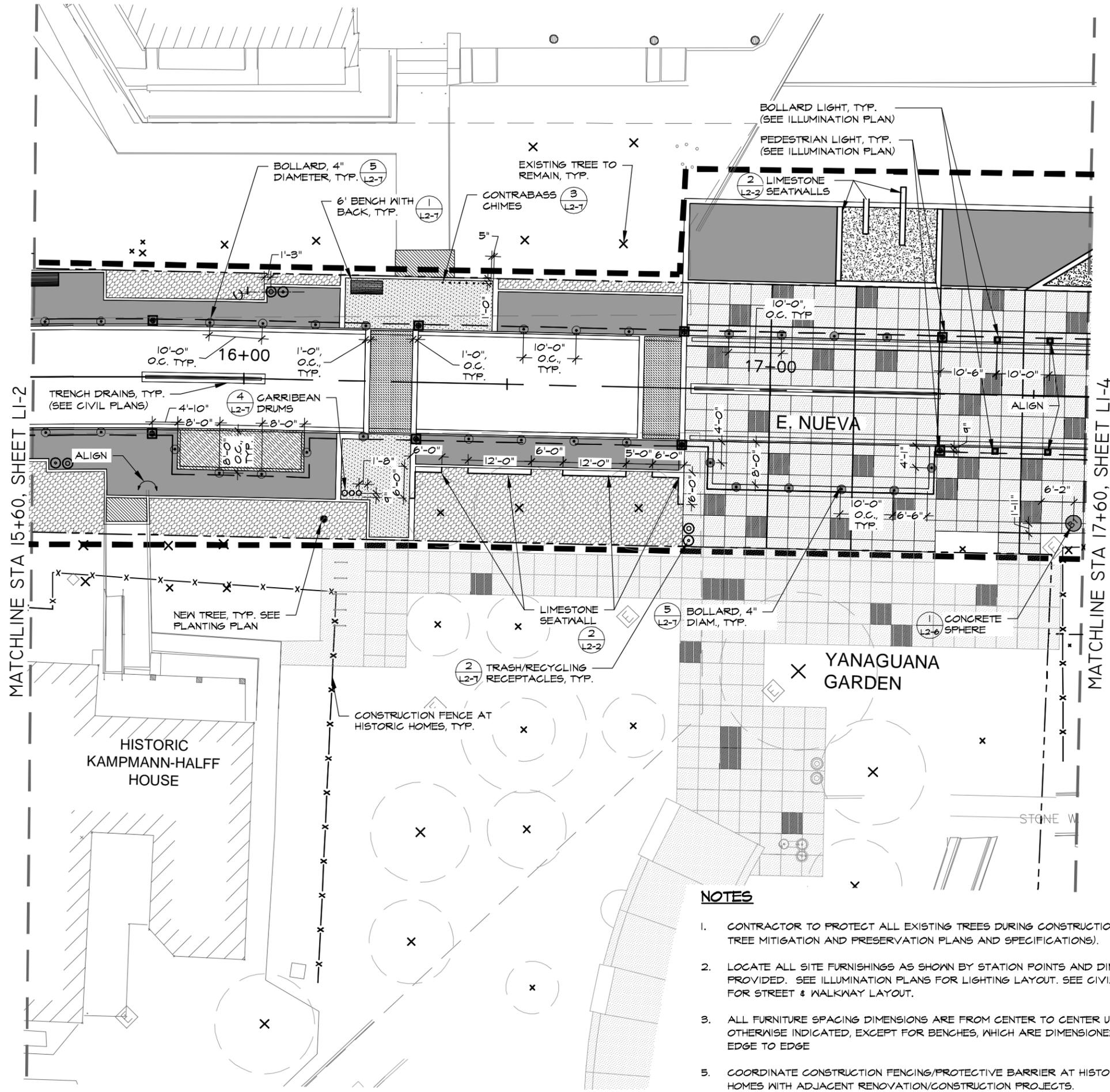
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DRN: AM	CK: JP	SEPT. 2014		L1-2

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 LANDSCAPE SITE PLANNING

LMIG.CTB

10/30/2014 10:15 AM

6/27/2013 15:01:03 AM
L2 LANDSCAPE SITE PLANNING

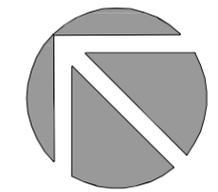


LEGEND

- SPECIAL PAVERS, 2-TONE, PEDESTRIAN SEE SPECS.
- SPECIAL PAVERS, 2-TONE, VEHICULAR, SEE SPECS.
- SPECIAL PAVERS, 4-TONE, PEDESTRIAN SEE SPECS.
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- PEDESTRIAN LIGHT (SEE ILLUMINATION PLAN)
- EXISTING TREE TO REMAIN (+)
- PROPERTY LINE/RIGHT OF WAY (---)
- MATCH LINE (---)
- 6' BENCH WITH BACK (7) (L2-7)
- 6' BENCH WITHOUT BACK (2) (L2-7)
- TRASH/RECYCLING RECEPTACLES (1) (L2-7)
- NEW TREE (SEE PLANTING PLAN) (•)
- TRANSPLANTED MATURE TREE (SEE TREE TRANSPLANT PLAN) (•T)
- CONSTRUCTION FENCE/BARRIER AT HISTORIC HOMES (-x-)
- LIMIT OF WORK (---)

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0 10 20 30 40
HORIZONTAL SCALE: 1" = 20'

100% CONSTRUCTION DOCUMENTS

**HEMISFAIR INTERNAL
STREETS IMPROVEMENT -
WATER STREET & E. NUEVA
LANDSCAPE SITE PLAN
E. NUEVA STREET**

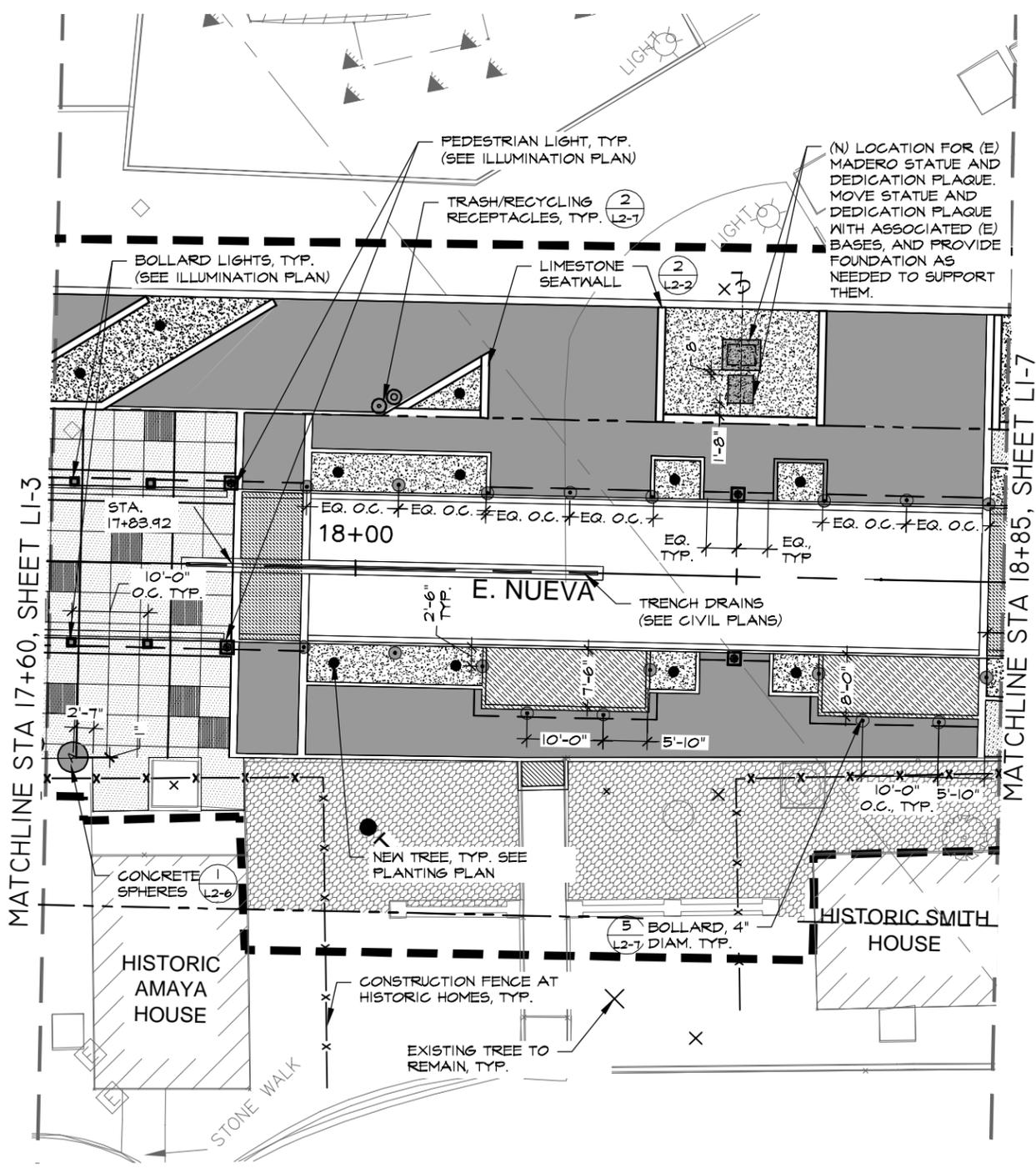
STA 15+60 TO STA 17+60 SHEET 3 OF 7

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DRN: AM	CK: JP	SEPT. 2014		L1-3

10/3/2014 10:15 AM

10/3/2014 10:15 AM

6/27/2013 15:01:03 AM
L1-LANDSCAPE SITE PLANNING



LEGEND

	SPECIAL PAVERS , 2-TONE, PEDESTRIAN SEE SPECS.
	SPECIAL PAVERS , 2-TONE, VEHICULAR, SEE SPECS.
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	CONSTRUCTION FENCE/BARRIER AT HISTORIC HOMES
	LIMIT OF WORK

NOTES

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- LOCATE ALL SITE FURNISHINGS AS SHOWN BY STATION POINTS AND DIMENSIONS PROVIDED. SEE ILLUMINATION PLANS FOR LIGHTING LAYOUT. SEE CIVIL PLANS FOR STREET & WALKWAY LAYOUT.
- ALL FURNITURE SPACING DIMENSIONS ARE FROM CENTER TO CENTER UNLESS OTHERWISE INDICATED, EXCEPT FOR BENCHES, WHICH ARE DIMENSIONED FROM EDGE TO EDGE
- COORDINATE CONSTRUCTION FENCING/PROTECTIVE BARRIER AT HISTORIC HOMES WITH ADJACENT RENOVATION/CONSTRUCTION PROJECTS.



CITY OF SAN ANTONIO
TRANSPORTATION AND CAPITAL IMPROVEMENTS

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TEL 510/845-7549
FAX 510/845-8750
www.migcom.com

HDR HDR Engineering, Inc.
1020 NE Loop 410, Suite 400
San Antonio, TX 78209
Texas Firm No. F-754

Bender Wells Clark Design
830 N. Alamo St.
San Antonio, TX 78215
TEL: 210.692.9221

0 10 20 30 40
HORIZONTAL SCALE: 1" = 20'

100% CONSTRUCTION DOCUMENTS

**HEMISFAIR INTERNAL
STREETS IMPROVEMENT -
WATER STREET & E. NUEVA
LANDSCAPE SITE PLAN
E. NUEVA STREET**

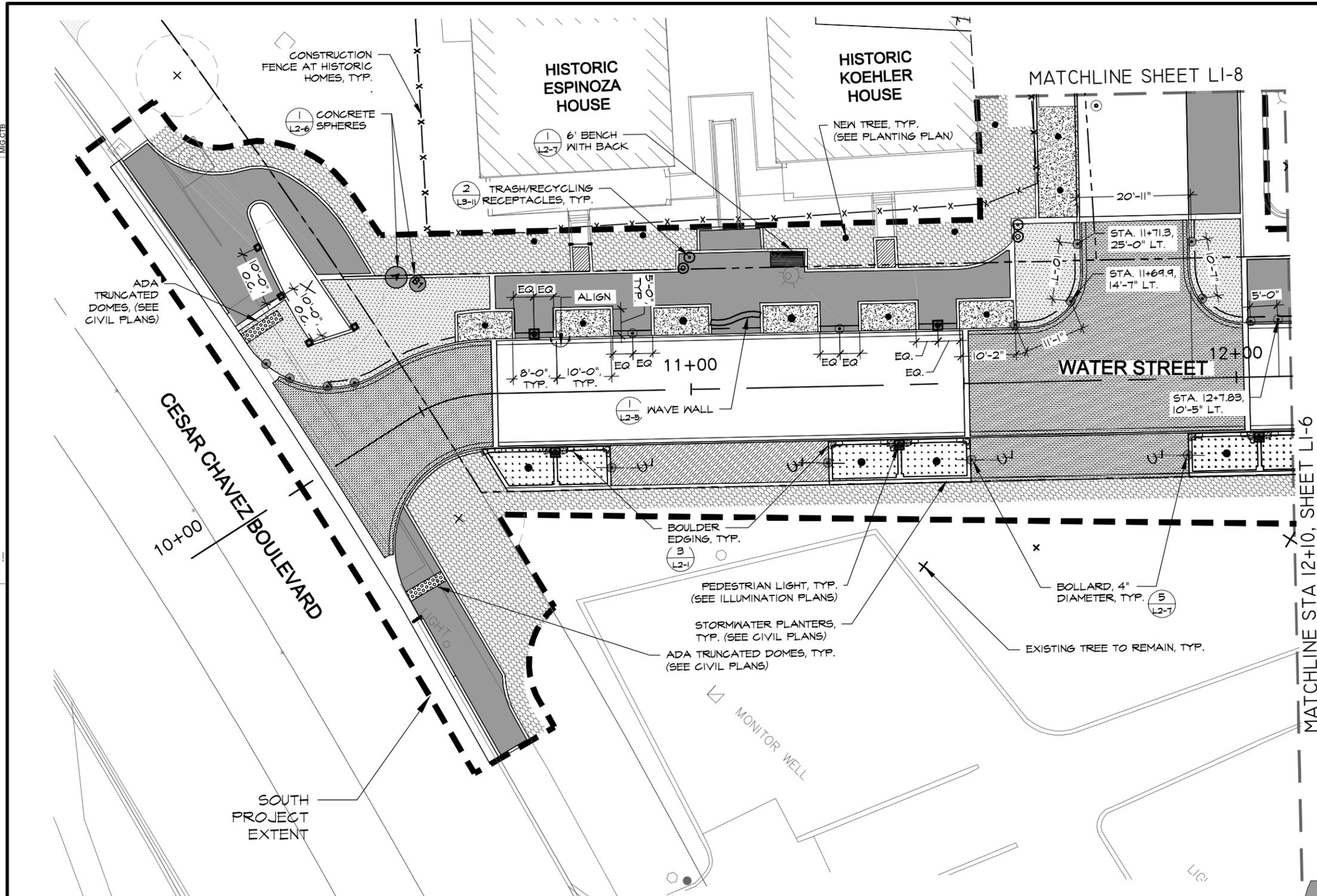
STA 17+60 TO STA 18+85 SHEET 4 OF 7

DSN: MM	CK: JP	DATE	JOB NO.	SHEET NO.
DRN: AM	CK: JP	SEPT. 2014		L1-4

LEGEND

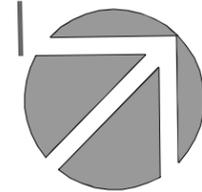
	SPECIAL PAVERS , 2-TONE, PEDESTRIAN SEE SPECS.
	SPECIAL PAVERS , 2-TONE, VEHICULAR, SEE SPECS.
	SPECIAL PAVERS , 4-TONE, PEDESTRIAN SEE SPECS.
	SPECIAL PAVERS , 4-TONE, VEHICULAR SEE SPECS.
	EXISTING PAVERS, RELAY TO MEET FLUSH WITH NEW (SEE CIVIL PLANS)
	SPECIAL CONCRETE PAVING, SEE SPECS.
	CRUSHED STONE PAVING (SEE SPECS.)
	STORMWATER PLANTER (SEE PLANTING DRAWINGS)
	EX. LANDSCAPE TO REMAIN (SEE SPECS. FOR REPAIR/REPLACE INFO.)

	BOLLARD, 4" DIAMETER (6) L2-7		6' BENCH WITH BACK (7) L2-7
	REMOVABLE BOLLARD (5) L2-7		6' BENCH WITHOUT BACK (2) L2-7
	BOLLARD LIGHT (SEE ILLUMINATION PLAN)		TRASH/RECYCLING RECEPTACLES (1) L2-7
	PEDESTRIAN LIGHT (SEE ILLUMINATION PLAN)		NEW TREE (SEE PLANTING PLAN)
	EXISTING TREE TO REMAIN		TRANSPLANTED MATURE TREE (SEE TREE TRANSPLANT PLAN)
	PROPERTY LINE/RIGHT OF WAY		CONSTRUCTION FENCE/BARRIER AT HISTORIC HOMES
	MATCH LINE		LIMIT OF WORK



NOTES

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2. LOCATE ALL SITE FURNISHINGS AS SHOWN BY STATION POINTS AND DIMENSIONS PROVIDED. SEE ILLUMINATION PLANS FOR LIGHTING LAYOUT. SEE CIVIL PLANS FOR STREET & WALKWAY LAYOUT.
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0 10 20 30 40
HORIZONTAL SCALE: 1" = 20'

100% CONSTRUCTION DOCUMENTS

HEMISFAIR INTERNAL STREETS IMPROVEMENT - WATER STREET & E. NUEVA LANDSCAPE SITE PLAN WATER STREET

STA 10+00 TO STA 12+10 SHEET 5 OF 7

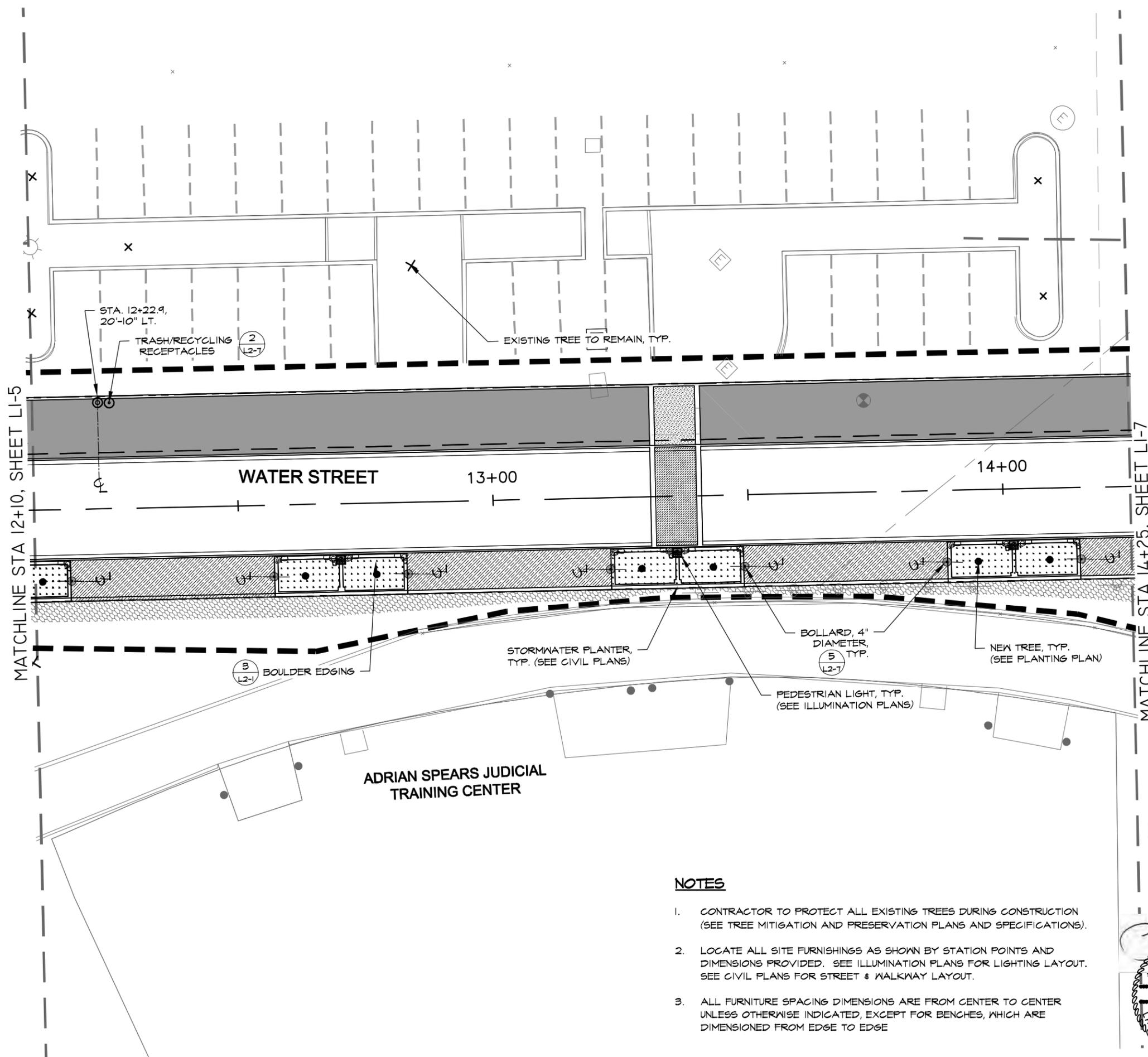
DSN: AM	CK: JP	DATE	JOB NO.	SHEET NO.
DRN: AM	CK: JP	SEPT. 2014		L1-5

6/27/2013 10:01:03 AM
 L2 LANDSCAPE SITE PLANNING
 10/3/2014 10:16 AM
 MIG.CTB

10/3/2014 10:16 AM

10/3/2014 10:16 AM

6/27/2013 15:01:03 AM
L2 LANDSCAPE SITE PLAN.DWG



LEGEND

	SPECIAL PAVERS , 2-TONE, PEDESTRIAN SEE SPECS.
	SPECIAL PAVERS , 2-TONE, VEHICULAR, SEE SPECS.
	SPECIAL PAVERS , 4-TONE, PEDESTRIAN SEE SPECS.
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	CRUSHED STONE PAVING (SEE SPECS.)
	STORMWATER PLANTER (SEE PLANTING DRAWINGS)
	EX. LANDSCAPE TO REMAIN (SEE SPECS. FOR REPAIR/REPLACE INFO.)
	BOLLARD, 4" DIAMETER (6) L2-7
	REMOVABLE BOLLARD (5) L2-7
	BOLLARD LIGHT (SEE ILLUMINATION PLAN)
	PEDESTRIAN LIGHT (SEE ILLUMINATION PLAN)
	EXISTING TREE TO REMAIN
	PROPERTY LINE/RIGHT OF WAY
	MATCH LINE
	6' BENCH WITH BACK (7) L2-7
	6' BENCH WITHOUT BACK (2) L2-7
	TRASH/RECYCLING RECEPTACLES (1) L2-7
	NEW TREE (SEE PLANTING PLAN)
	TRANSPLANTED MATURE TREE (SEE TREE TRANSPLANT PLAN)
	-X- CONSTRUCTION FENCE/BARRIER AT HISTORIC HOMES
	--- LIMIT OF WORK

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0 10 20 30 40
HORIZONTAL SCALE: 1" = 20'

100% CONSTRUCTION DOCUMENTS

**HEMISFAIR INTERNAL
STREETS IMPROVEMENT -
WATER STREET & E. NUEVA
LANDSCAPE SITE PLAN
WATER STREET**

STA 12+10 TO STA 14+25 SHEET 6 OF 7

DSN: AM	CK: JP	DATE	JOB NO.	SHEET NO.
DRN: AM	CK: JP	SEPT. 2014		L1-6

NOTES

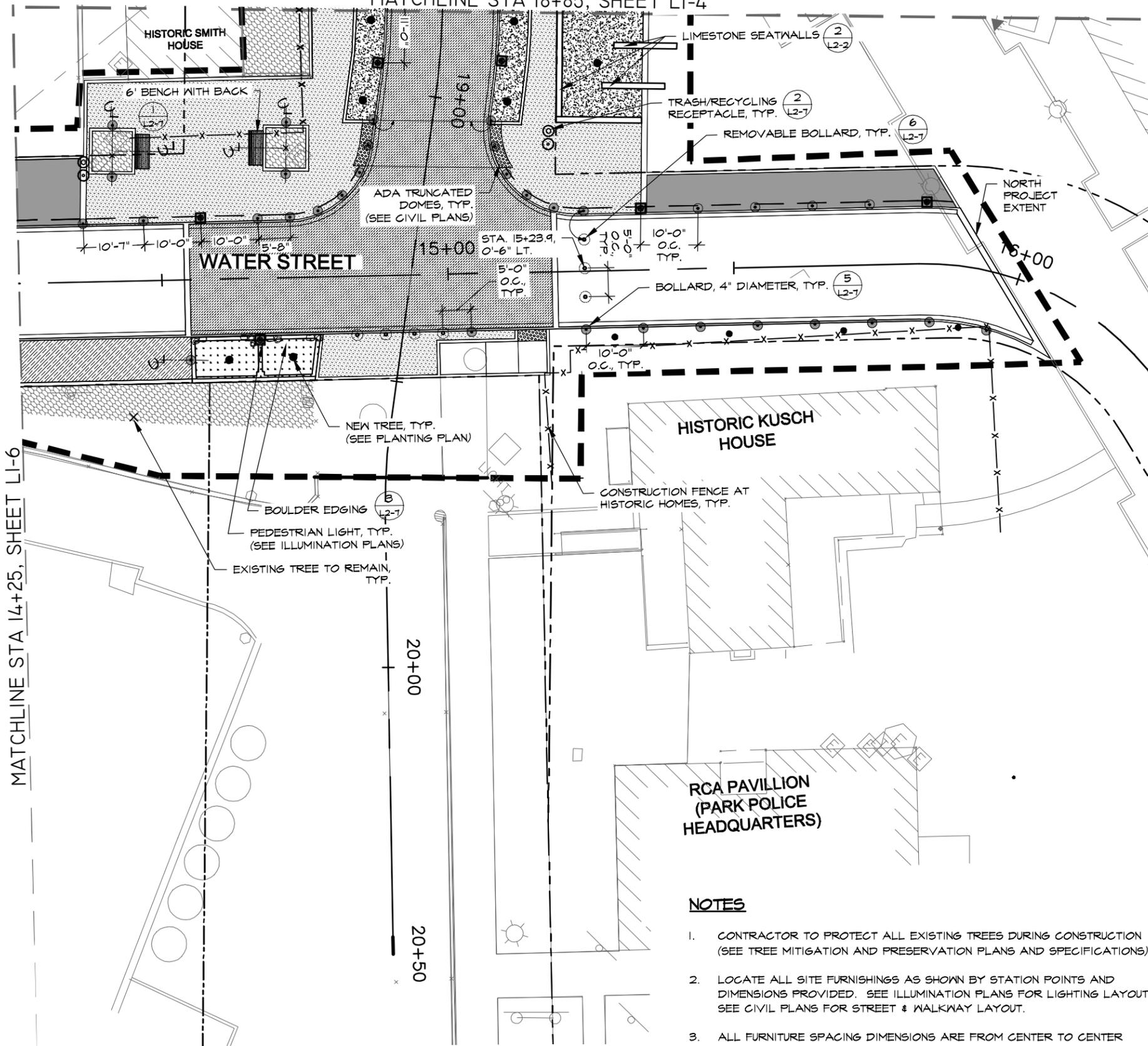
1. CONTRACTOR TO PROTECT ALL EXISTING TREES DURING CONSTRUCTION (SEE TREE MITIGATION AND PRESERVATION PLANS AND SPECIFICATIONS).
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NORTH

J. R. Pickel

STATE OF TEXAS
JAMES R. PICKEL
2171
REGISTERED
LANDSCAPE ARCHITECT
10/04/14

MATCHLINE STA 18+85, SHEET LI-4



LEGEND

- SPECIAL PAVERS , 2-TONE, PEDESTRIAN SEE SPECS.
- SPECIAL PAVERS , 2-TONE, VEHICULAR, SEE SPECS.
- SPECIAL PAVERS , 4-TONE, PEDESTRIAN SEE SPECS.
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- 6' BENCH WITHOUT BACK (2) L2-7
- TRASH/RECYCLING RECEPTACLES (1) L2-7
- NEW TREE (SEE PLANTING PLAN)
- TRANSPLANTED MATURE TREE (SEE TREE TRANSPLANT PLAN)
- CONSTRUCTION FENCE/BARRIER AT HISTORIC HOMES
- LIMIT OF WORK
- PROPERTY LINE/RIGHT OF WAY
- MATCH LINE

HISTORIC KUSCH HOUSE

RCA PAVILLION (PARK POLICE HEADQUARTERS)

NOTES

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0 10 20 30 40
HORIZONTAL SCALE: 1" = 20'

100% CONSTRUCTION DOCUMENTS

HEMISFAIR INTERNAL STREETS IMPROVEMENT - WATER STREET & E. NUEVA LANDSCAPE SITE PLAN WATER STREET

STA STA 14+25 TO STA 16+00 SHEET 7 OF 7

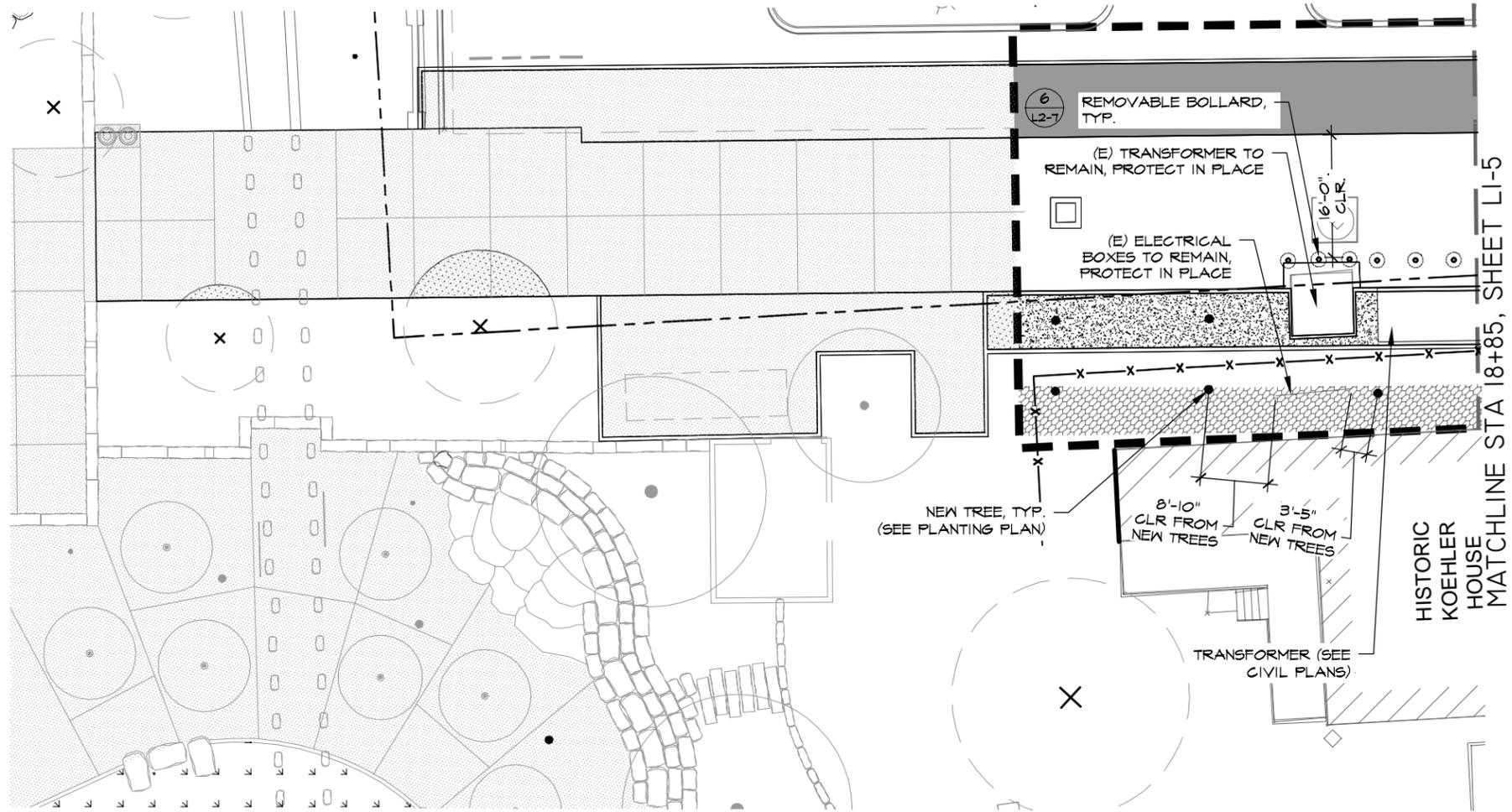
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DRN: AM	CK: JP	SEPT. 2014		L1-7

6/27/2013 10:01:03 AM
 L1-7 LANDSCAPE SITE PLANNING
 10/30/2014 10:16 AM
 MIG.CTB

10/3/2014 10:17 AM

10/3/2014 10:17 AM

6/27/2013 15:01:03 AM
L2-LANDSCAPE SITE PLANNING



LEGEND

- SPECIAL PAVERS , 2-TONE, PEDESTRIAN SEE SPECS.
- SPECIAL PAVERS , 2-TONE, VEHICULAR, SEE SPECS.
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- REMOVABLE BOLLARD (L2-7)
- BOLLARD LIGHT (SEE ILLUMINATION PLAN)
- PEDESTRIAN LIGHT (SEE ILLUMINATION PLAN)
- EXISTING TREE TO REMAIN
- NEW TREE, TYP. (SEE PLANTING PLAN)
- TRANSPLANTED MATURE TREE (SEE TREE TRANSPLANT PLAN)
- TRANSPLANTED MATURE TREE (SEE TREE TRANSPLANT PLAN)
- 6' BENCH WITH BACK (L2-7)
- 6' BENCH WITHOUT BACK (L2-7)
- TRASH/RECYCLING RECEPTACLES (L2-7)
- NEW TREE (SEE PLANTING PLAN)
- TRANSPLANTED MATURE TREE (SEE TREE TRANSPLANT PLAN)
- PROPERTY LINE/RIGHT OF WAY
- MATCH LINE
- CONSTRUCTION FENCE/BARRIER AT HISTORIC HOMES
- LIMIT OF WORK

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0 10 20 30 40
HORIZONTAL SCALE: 1" = 20'

100% CONSTRUCTION DOCUMENTS

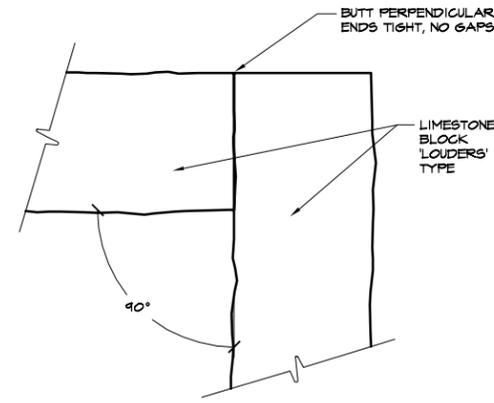
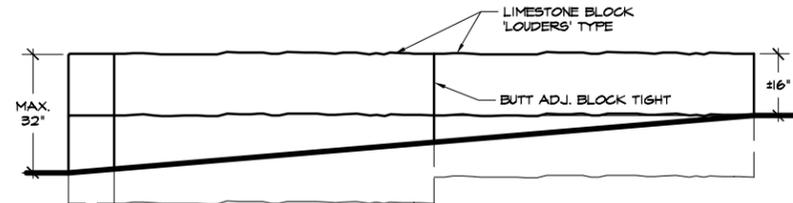
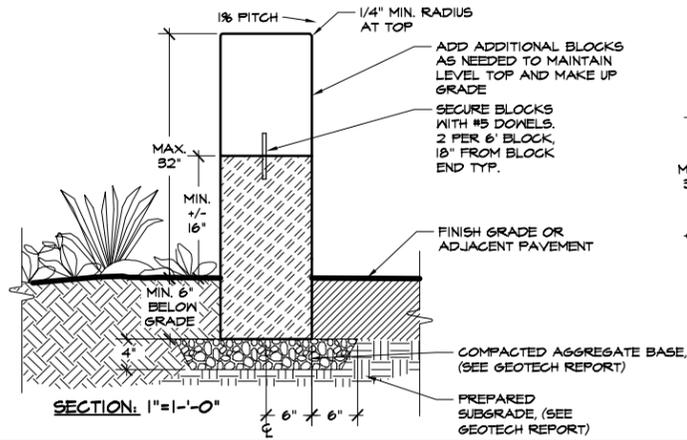
**HEMISFAIR INTERNAL
STREETS IMPROVEMENT -
WATER STREET & E. NUEVA
LANDSCAPE SITE PLAN
WATER STREET**

FIRE ACCESS LANE SHEET 8 OF 7

DSN: MM	CK: JP	DATE	JOB NO.	SHEET NO.
DRN: AM	CK: JP	SEPT. 2014		L1-8

NOTES:
 1. SEE (3) FOR LIMESTONE FINISH SCHEDULE
 (L2-2)

2. PROVIDE TIES, CUTTINGS & INSTALLATION SHOP DRAWING, INCLUDING #5 DOWEL TIES.



LIMESTONE FINISH SCHEDULE

LIMESTONE SEATWALLS	
Top	Sawn
Front Face	Natural
Back Face	Natural
Exposed End Face	Sawn
Bottom & Joint Edge	Sawn
Top Edges	Eased

2 LIMESTONE SEAT WALL

AS NOTED

3 LIMESTONE FINISH SCHEDULE

Scale: N/A

10/20/14 10:17 AM

4/9/2014 9:42:28 AM L2-2 CONSTRUCTION DETAILS.DWG



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100% CONSTRUCTION DOCUMENTS

HEMISFAIR INTERNAL
 STREETS IMPROVEMENT -
 WATER STREET & E. NUEVA
 CONSTRUCTION DETAILS

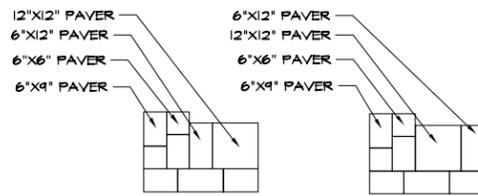


DSN: MM	CK: JP	DATE	JOB NO.	SHEET NO.
DRN: AM	CK: JP	SEPT. 2014		L2-2

SHEET 2 OF 7

1 NONE
[MIG]CIB

- NOTES:**
- PAVERS SHOWN AT NOMINAL DIMENSIONS. SEE SPECS FOR EXACT PAVER SIZE, MANUFACTURER, COLOR, AND INSTALLATION INFORMATION.
 - PROVIDE MIN 10'X10' MOCK-UP ON SITE FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO DELIVERING OR INSTALLING PROJECT PAVERS. (SEE SPECS FOR INFO.)
 - 2-TONE PAVING PATTERN SHALL BE "RANDOM," RUNNING BOND ACHIEVED BY THE FOLLOWING:
 - NO IDENTICAL ROWS IN EVERY 10 ROWS
 - PROVIDE 50% OF PAVERS IN EACH COLOR (SEE SPECS.)
 - PROVIDE SAME COLOR PAVER FOR NO LESS THAN 1/3 OF THE TOTAL NUMBER OF PAVERS IN A SINGLE ROW
 - 4-TONE PAVING PATTERN SHALL BE "RANDOM," ACHIEVED BY THE FOLLOWING:
 - EACH A&B, C&D PATTERN CONTAINS ALL 4 SPECIFIED COLORS
 - PROVIDE ONE 6X9 PAVER IN "CHARCOAL" WITHIN EACH A&B, C&D PATTERN, USE NO OTHER "CHARCOAL" PAVERS
 - NO IDENTICAL A OR B, C OR D COLOR COMBINATIONS ARE ADJACENT.



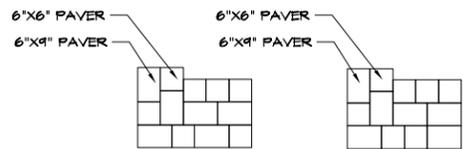
TYPE: A
(4 SQ. FT.)

- 12 X 12 = 1
- 6 X 12 = 2
- 6 X 9 = 4
- 6 X 6 = 2

TYPE: B
(4 SQ. FT.)

- 12 X 12 = 1
- 6 X 12 = 2
- 6 X 9 = 4
- 6 X 6 = 2

4-TONE PEDESTRIAN PAVER: PATTERN TYPES



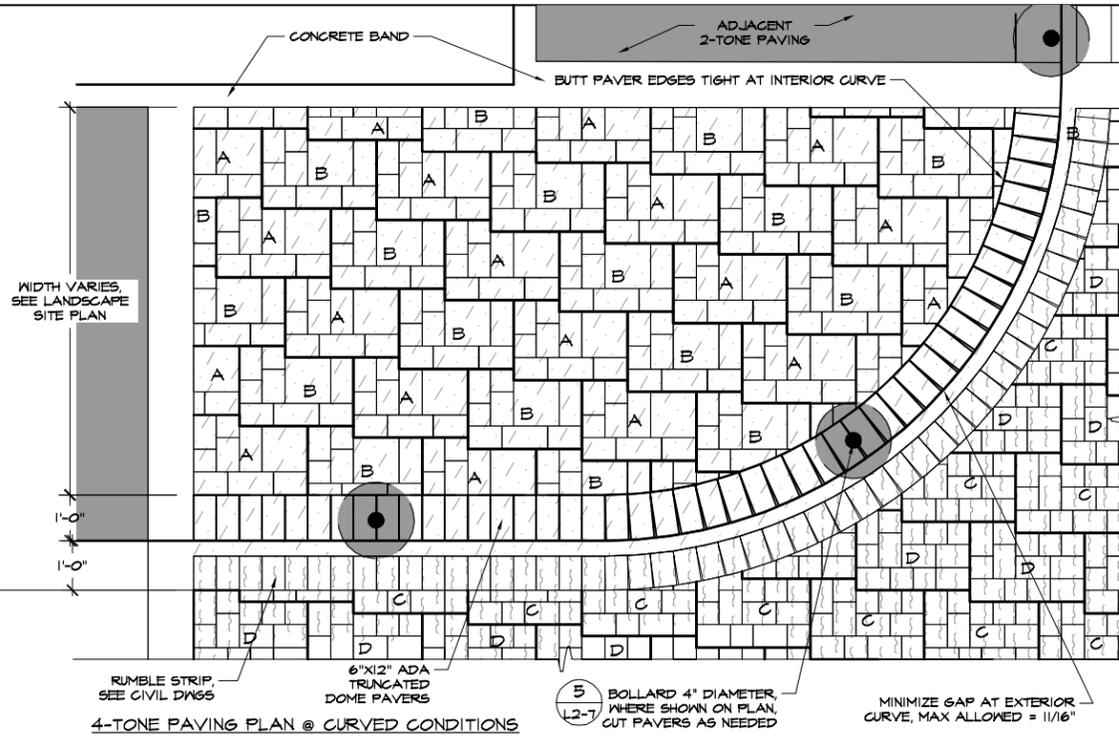
TYPE: C
(4 SQ. FT.)

- 6 X 9 = 6
- 6 X 6 = 7

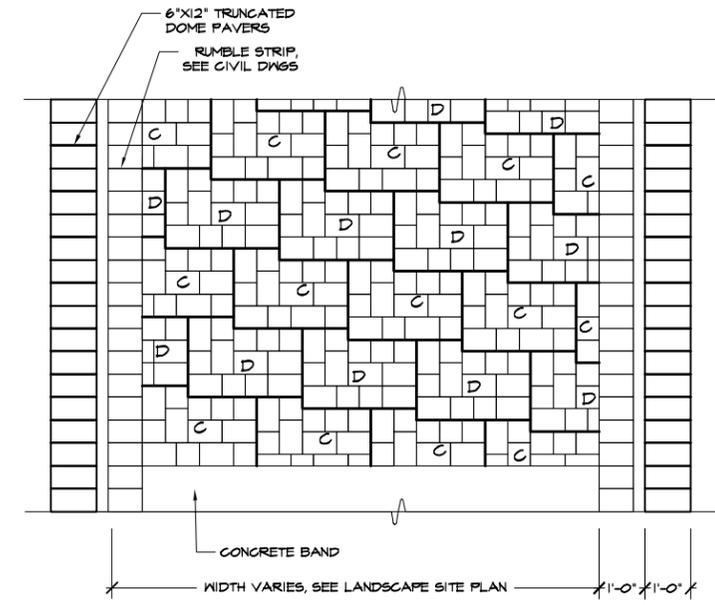
TYPE: D
(4 SQ. FT.)

- 6 X 9 = 6
- 6 X 6 = 7

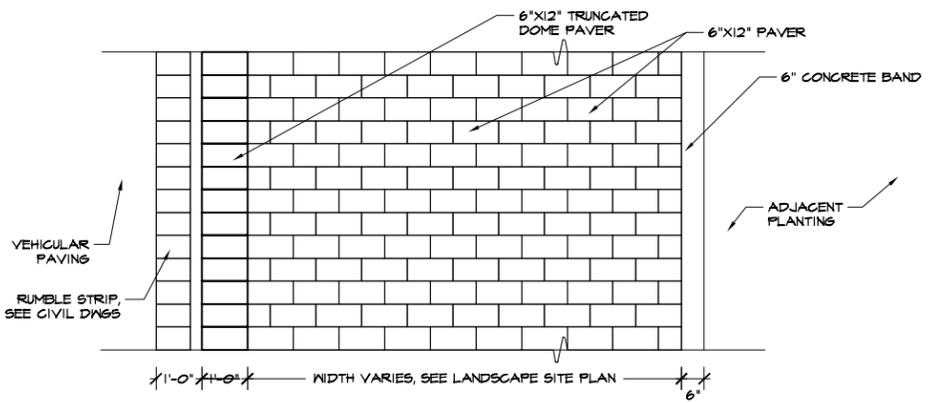
4-TONE VEHICULAR PAVER: PATTERN TYPES



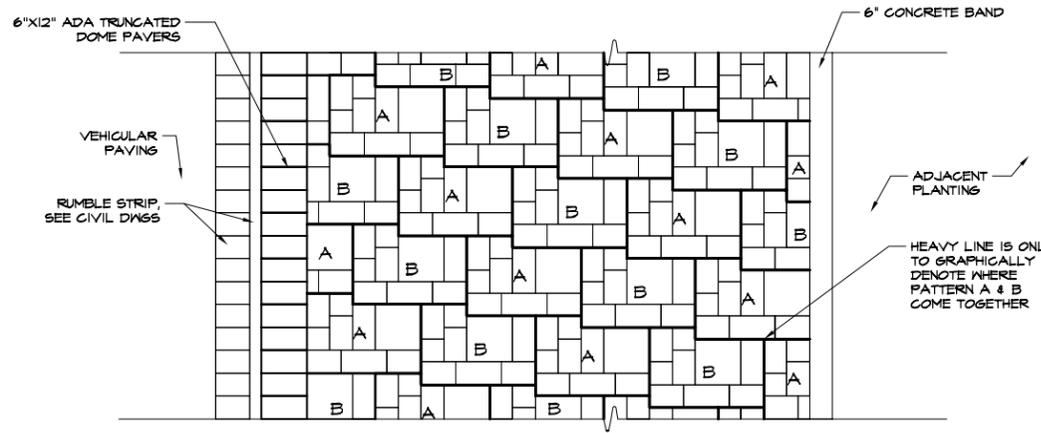
4-TONE PAVING PLAN @ CURVED CONDITIONS



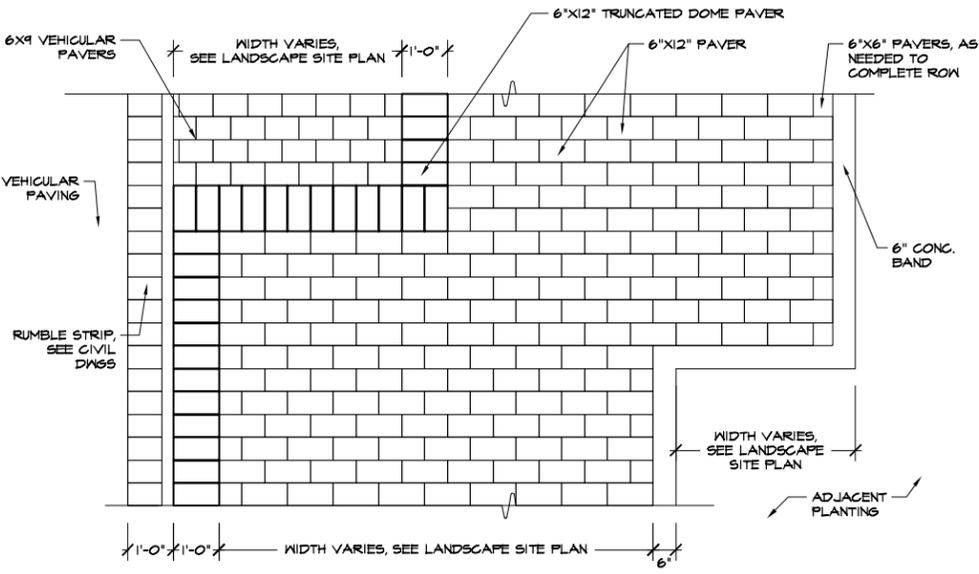
4-TONE PAVING PLAN @ VEHICULAR AREAS



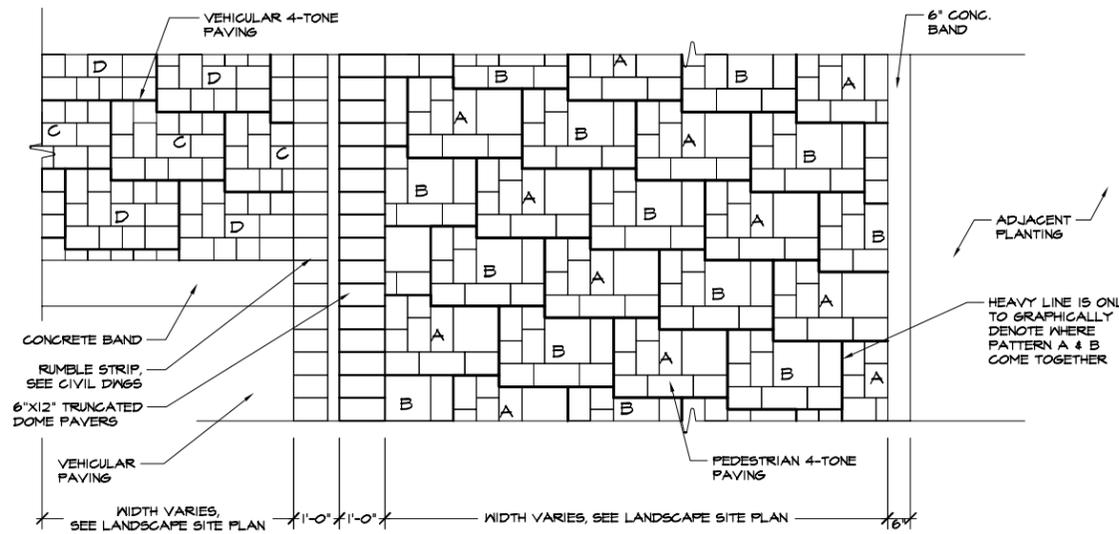
2-TONE PAVING PLAN @ PEDESTRIAN SIDEWALK



4-TONE PAVING PLAN @ PEDESTRIAN SIDEWALK



2-TONE PAVING PLAN @ PEDESTRIAN WALK WITH TRUNCATED DOME PAVER DIRECTION CHANGE



4-TONE PAVING PLAN @ PEDESTRIAN CROSSINGS

10/30/2014 10:18 AM

4/9/2014 10:02:27 AM
L2-3 CONSTRUCTION DETAILS.DWG

1 4-TONE & 2-TONE PAVING PATTERNS

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

CITY OF SAN ANTONIO
TRANSPORTATION AND CAPITAL IMPROVEMENTS

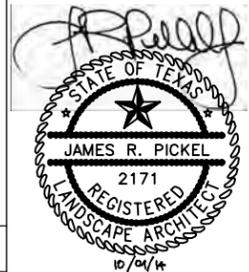
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100% CONSTRUCTION DOCUMENTS

**HEMISFAIR INTERNAL
STREETS IMPROVEMENT -
WATER STREET & E. NUEVA
CONSTRUCTION DETAILS**



DSN: AM	CK: ---	DATE	JOB NO.	SHEET NO.
DRN: AM	CK: ---	SEPT. 2014		L2-3

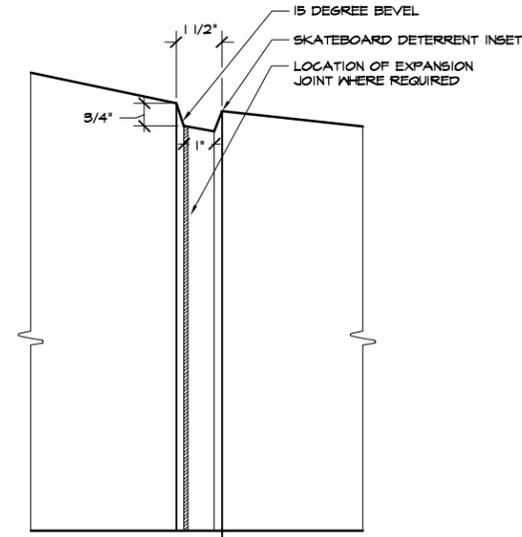
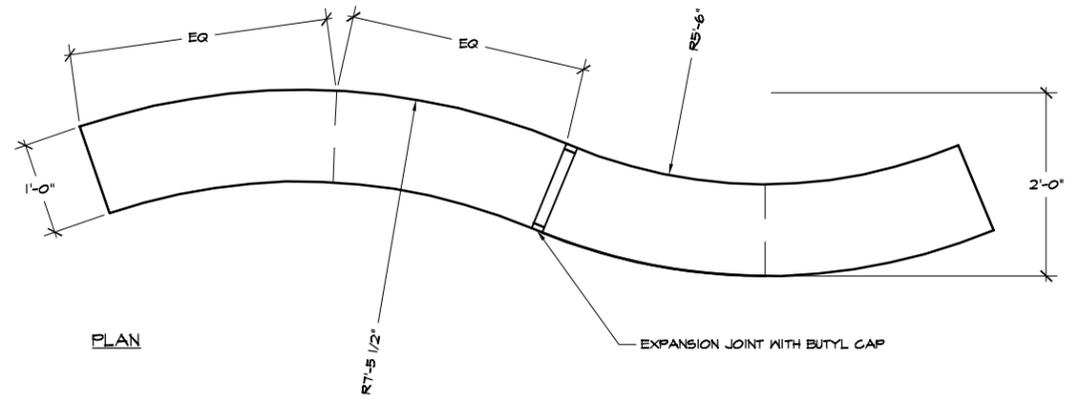
SHEET 3 OF 7

1 NONE
1 MISCTB

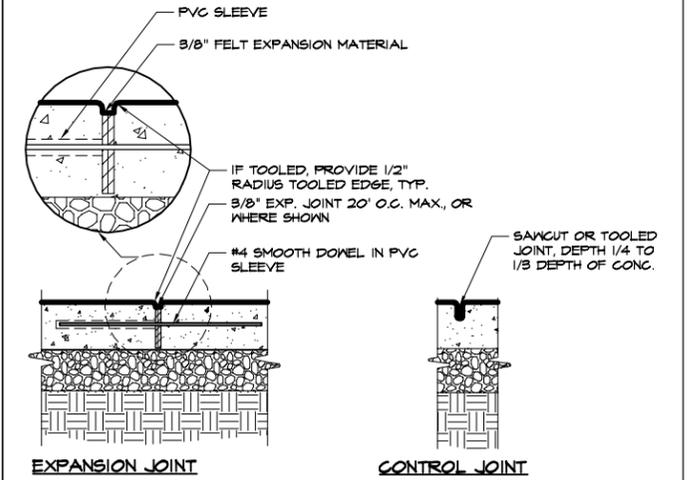
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8/12/2014 10:04:00 AM
L2-5 CONSTRUCTION DETAILS.DWG

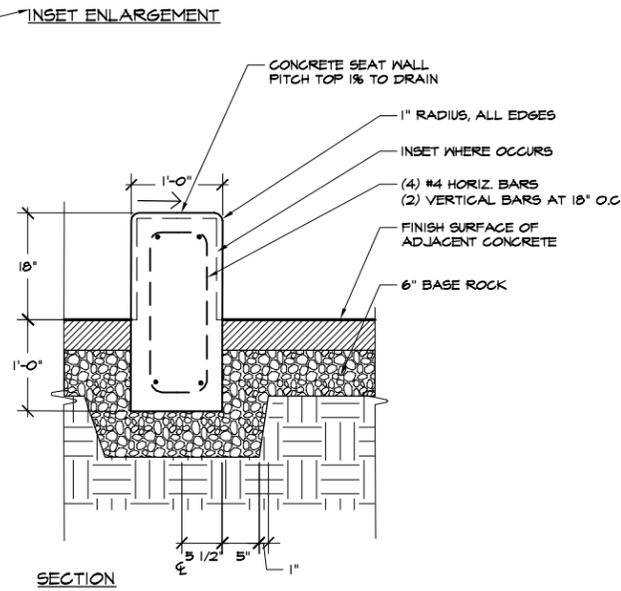
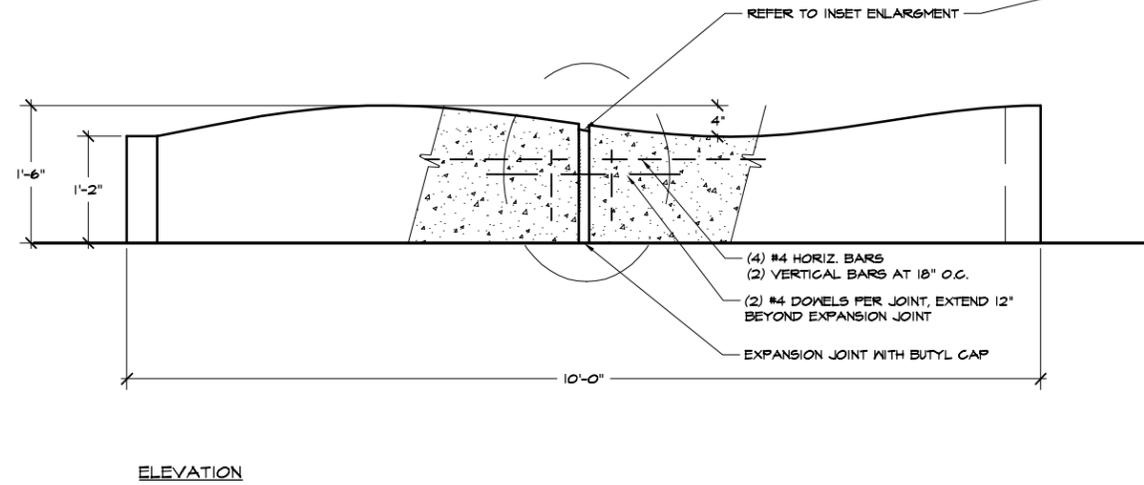
NOTES:
1. SEE SPECS. FOR INTEGRAL COLOR AND FINISH INFORMATION.



NOTES:
1. PROVIDE CONTROL JOINTS @ 8'-0" MAX SO THERE IS NO FIELD OF CONCRETE WITH ASPECT RATIO GREATER THAN 1.5 TO 1.
2. PROVIDE EXPANSION JOINT WHERE CONCRETE PAVING MEETS VERTICAL SURFACE, TYP.



2 CONCRETE JOINTS Scale: 3/4" = 1'-0"



SECTION Scale: 1/2" = 1'-0"

1 WAVE WALL

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DRN: AM	CK: JP	SEPT. 2014		L2-5

SHEET 5 OF 7

PLANTING SCHEDULE

QUANTITIES BY SHEET

PLANTING NOTES

Key	Common Name	Botanical Name	Size / Remarks	LP-1	LP-2	LP-3	LP-4	LP-5	LP-6	LP-7	LP-8
TREES											
CE	Cedar Elm	<i>Ulmus crassifolia</i>	6" cal., 14' ht., full					4	6	2	
MO	Monterrey Oak	<i>Quercus polymorpha</i>	10" cal., 18' ht., full	3		1	3	6		5	
LCO	Lacey Oak	<i>Quercus laceyi (syn. Q glaucooides)</i>	6" cal., 12' ht., 6' sp.				8			4	5
TXP	Texas Sabal Palm	<i>Sabal texana</i>	12' ht.					4			
UNDERSTORY TREES											
ANO	Anacacho orchid	<i>Bauhinia congesta</i>	50 gal., full, upright		1						
MXP	Mexican Plum	<i>Prunus mexicana</i>	50 gal., full, upright		1						4
MTL	Texas Mt. Laurel	<i>Sophora secundiflora</i>	50 gal., full, upright		4						
TXR	Texas Redbud	<i>Cercis canadensis x texensis</i>	50 gal., full, upright	1		1					
*Note: All trees are to be boxed or containerized, nursery grown specimens and shall be approved prior to installation.											
BLB	Bulbine	<i>Bulbine frutescens</i>	1 gal. (1'-O.C.)								
FRB	Firebush	<i>Hamelia patens</i>	2 gal. (3'-O.C.)								
DWR	Dwarf Ruelia	<i>Ruellia brittoniana 'katie'</i>	1 gal. (1'-O.C.)								
MBS	Mealy Bluse Sage	<i>Salvia farinacea</i>	2 gal. (3'-O.C.)					10	12	4	
PLB	Plumbago	<i>Plumbago auriculata</i>	5 gal. (4'-O.C.)		29						
SMALL FORBS & GROUNDCOVER											
PIR	Purple Iris	<i>Iris brevicaulis</i>	1 gal. (1'-O.C.)					19	18	5	
PIG	Pigeonberry	<i>Rvina humilis</i>	2 gal. (2'-O.C.)								
SKU	Skullcap	<i>Scutellaria suffrutescens</i>	1 gal. (1'-O.C.)								
ORNAMENTAL GRASSES & GRASS-LIKE FORBS											
CS	Cherokee Sedge	<i>Carex cherokeensis</i>	1 gal. (12"-O.C.)					32	56	12	
AFI	African Iris	<i>Dietes bicolor</i>	1 gal. (1'-O.C.)					14	15		
LG	Lovegrass	<i>Eragrostis elliotti</i>	1 gal. (2'-O.C.)								
SMU	Seep Muhly	<i>Muhlenbergia reverchonii</i>	2 gal. (3'-O.C.)								
SLL	Splitlawn Sedge	<i>Carex Tumulicola</i>	1 gal. (1'-O.C.)								
MFG	Mexican Feather Grass	<i>Nassella tenuissimo</i>	1 gal. (1'-O.C.)					77	164		

1. ALL PLANT MATERIAL LOCATIONS SHALL BE STAKED IN THE FIELD BY THE CONTRACTOR AND APPROVED BY THE OWNER'S REPRESENTATIVE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
2. FINE GRADING SHALL BE PERFORMED IN ALL AREAS TO BE PLANTED. FINE GRADING SHALL INCLUDE THE REMOVAL OF DEBRIS, ROCKS, ETC., FROM THE SITES AND INSURE POSITIVE DRAINAGE IN ALL AREAS TO BE PLANTED.
3. THE CONTRACTOR SHALL VERIFY ALL BUILDING SETBACK LINES, EASEMENT LINES, AND VISIBILITY LINES IN THE FIELD PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES IN THE FIELD PRIOR TO COMMENCEMENT OF WORK.
5. PROVIDE POSITIVE DRAINAGE AWAY FROM ALL SITE FEATURES.
6. REPAIR AND/OR REPLACE ANY EXISTING PLANT MATERIAL DAMAGED DURING CONSTRUCTION.

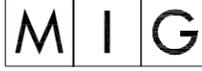
APPURTANENCES

SOIL Lawn / Turf areas: A minimum of 4" of soil amendments and 4" of approved weed-free topsoil.
Bedding / Shrub areas: A minimum of 8" soil amendments. Refer to Specifications

MULCH Hard Wood Bark Mulch: minimum 4" depth see specifications

MULCH Decomposed Granite Gravel Mulch: Compacted down to a 3" min layer depth. (Approx. 644sf)
Clean, hard, durable particles or fragments of decomposed granite, reddish brown to gold in color. Free of clay lumps, organic material and deleterious material. Grading requirements: Sieve Analysis (ASTM C-136) Sample to be submitted (in 5gal. buckets) available from Hoffman Construction Company, Fredericksburg, Texas (830) 997-4048 or approved substitution.

PLANTING PLANS INDICATE PLANTING LOCATIONS & QUANTITIES. AREAS OF GROUNDCOVER AND PERENNIALS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE REQUIRED NUMBER OF PLANTS TO COVER THE AREAS SHOWN ON PLANS.

 CITY OF SAN ANTONIO TRANSPORTATION AND CAPITAL IMPROVEMENTS				
 800 HEARST AVENUE BERKELEY, CA 94710 TEL 510/845-7549 FAX 510/845-8750 www.migcom.com		 HDR Engineering, Inc. 1020 NE Loop 410, Suite 400 San Antonio, TX 78209 Texas Firm No. F-754		
 Bender Wells Clark Design 830 N. Alamo St. San Antonio, TX 78215 TEL: 210.692.9221				
100% CONSTRUCTION DOCUMENTS				
HEMISFAIR INTERNAL STREETS IMPROVEMENT - WATER STREET & E. NUEVA LANDSCAPE PLANTING SCHEDULE				
DSN: LCC	CK: BBW	DATE	JOB NO.	SHEET NO.
DRN: BV		SEPT. 2014		LP-0



