

CITY OF HOUSTON
GENERAL SERVICES DEPARTMENT
PARKS CAPITAL IMPROVEMENT PROGRAM
DOW ELEMENTARY PARK
1900 KANE STREET HOUSTON TX 77007

WBS No.F-000870-0001

SEPTEMBER 27, 2018

SUBMITTED FOR:
BID AND CONSTRUCTION

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 - C - 2.0A IMPERVIOUS COVER
 - C - 3.0 GRADING PLAN
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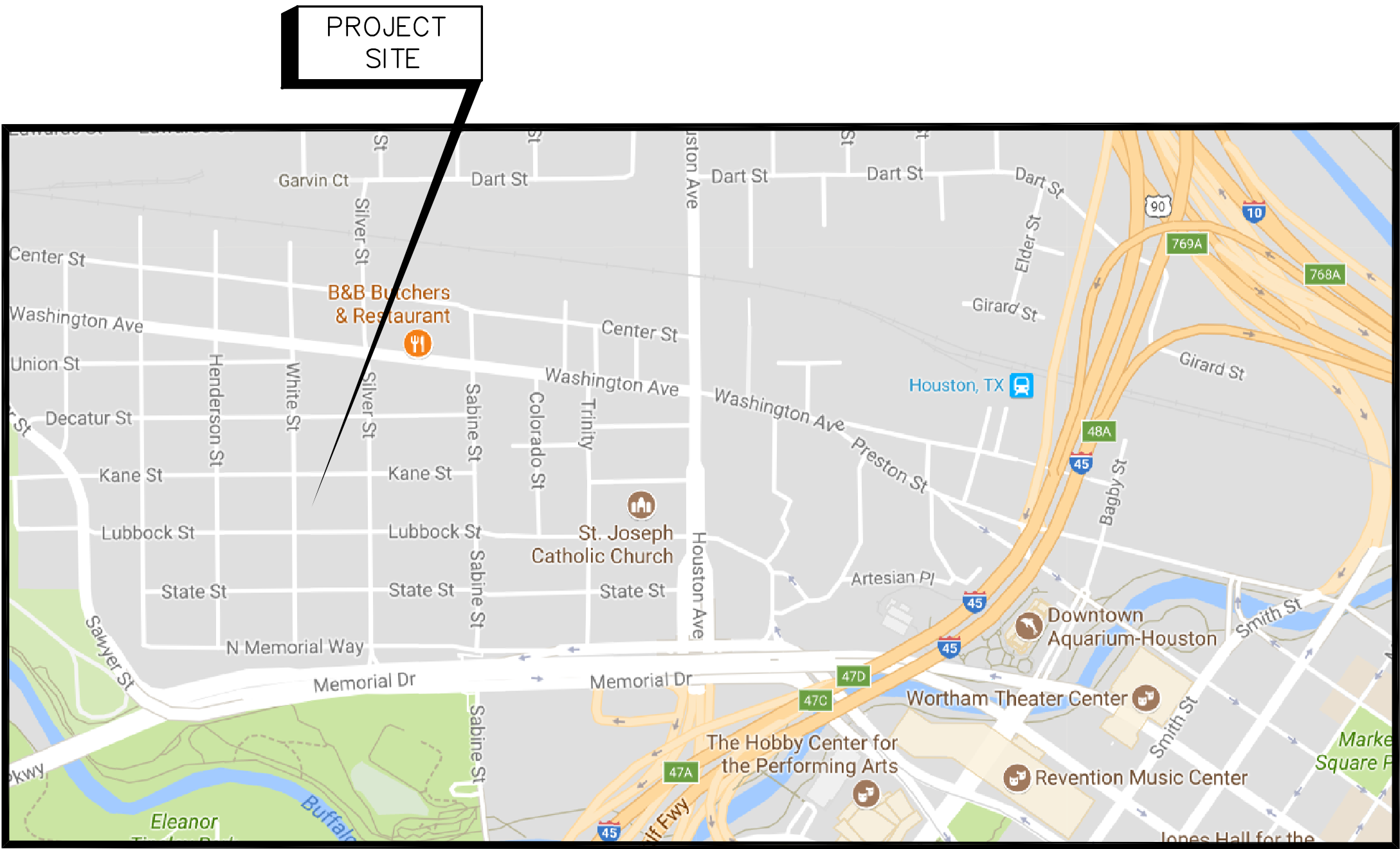
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 - EL - 1.1 ELECTRICAL LIGHTING PLAN
 - EP - 1.1 ELECTRICAL POWER PLAN
 - P - 1.1 PLUMBING PLAN

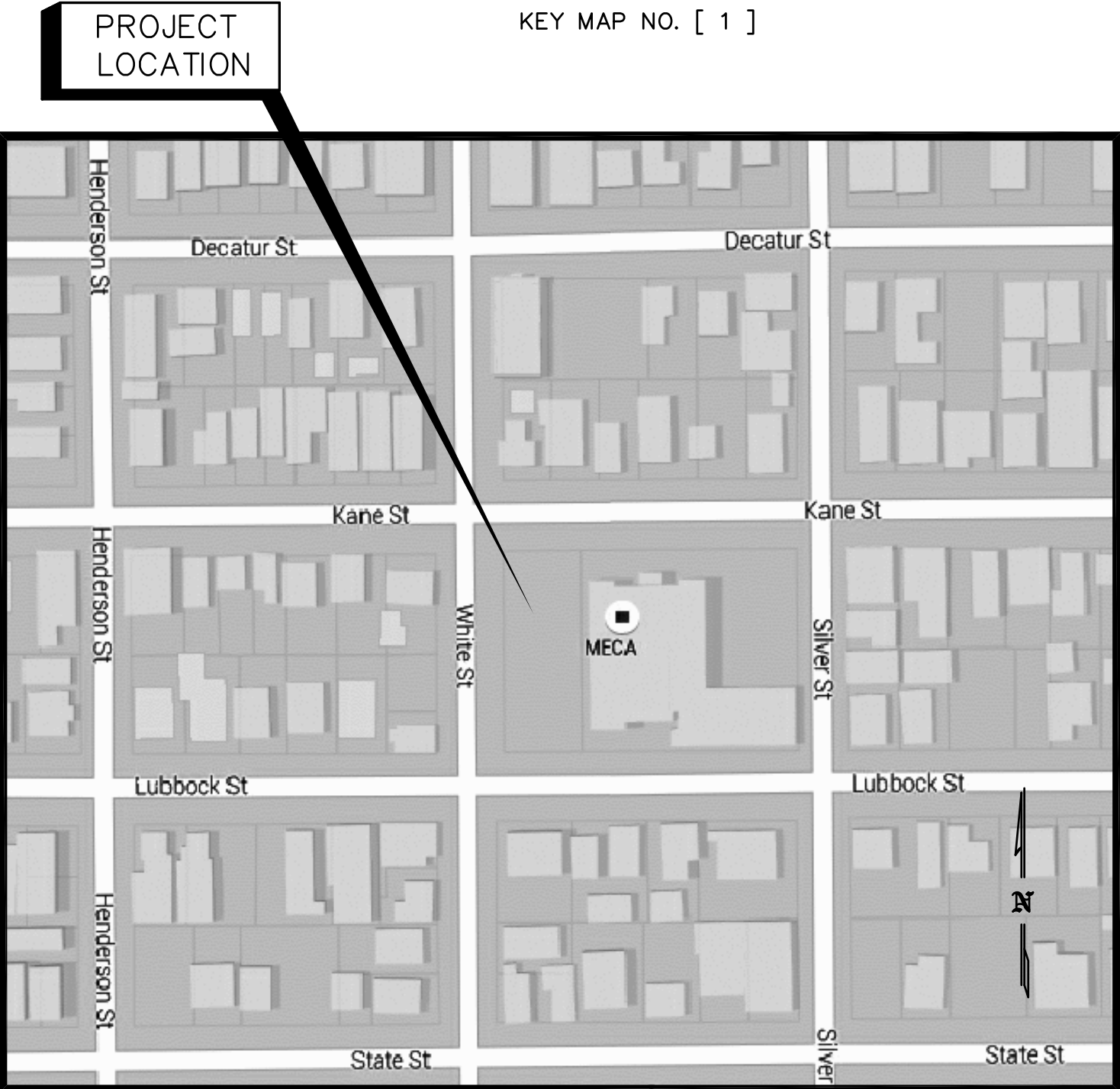
CONTRACTING AUTHORITY
FOR THE
CITY OF HOUSTON:
GENERAL SERVICES DEPARTMENT

C. J. MESSIAH, JR - DIRECTOR

CITY DWG. No: _____
SHEET No. 1 OF 40 SHEETS



VICINITY MAP
KEY MAP NO. [1]



LOCATION MAP
KEY MAP NO. [2]

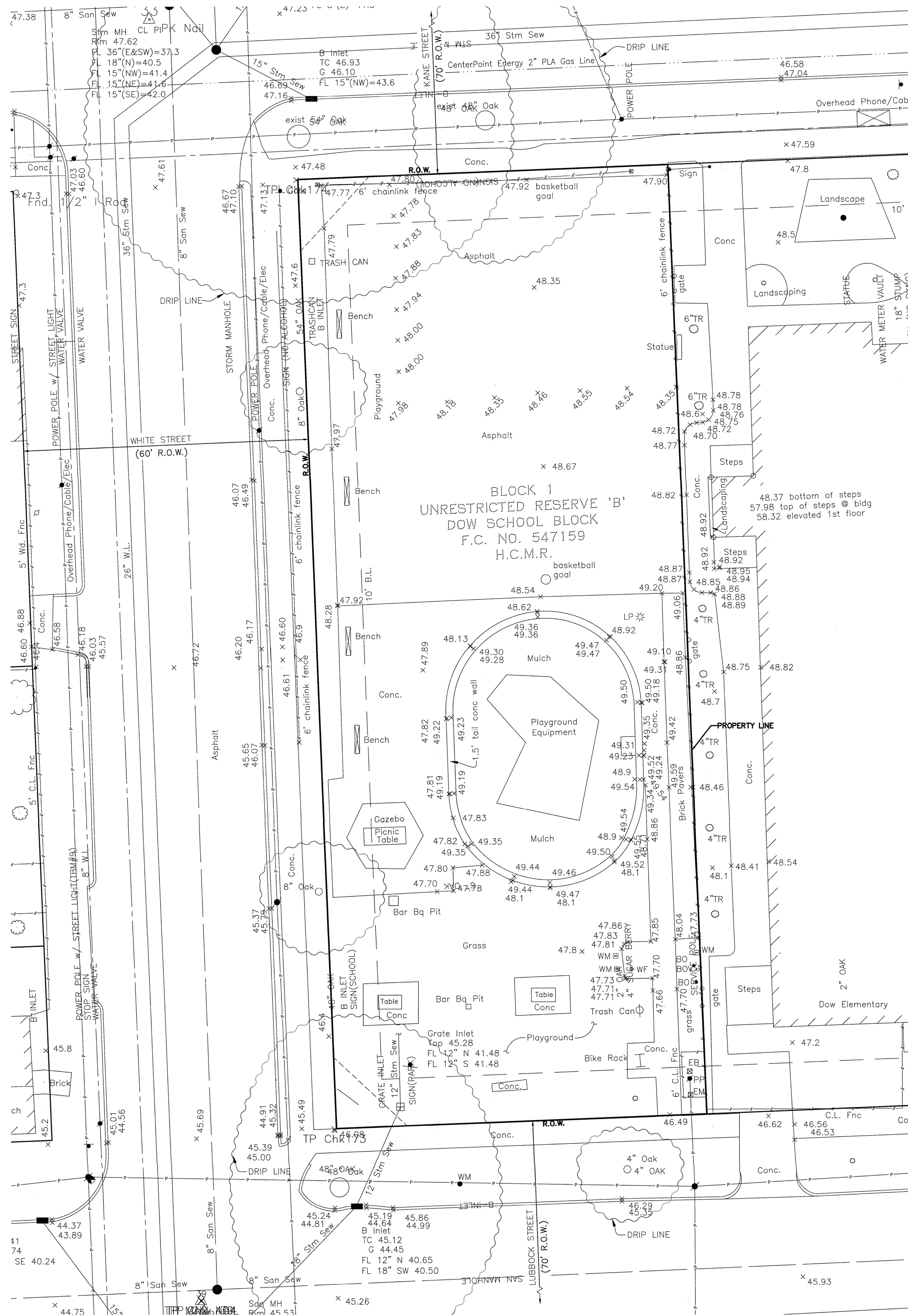


MAYOR
SYLVESTER TURNER

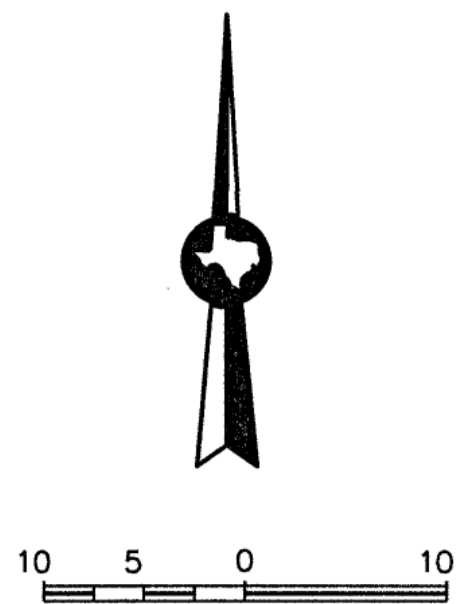
CONTROLLER
CHRIS B. BROWN

DISTRICT COUNCIL MEMBERS			AT-LARGE COUNCIL MEMBERS	
BRENDA STARDIG DISTRICT A	JERRY DAVIS DISTRICT B	ELLEN COHEN DISTRICT C	MIKE KNOX POSITION 1	DAVID ROBINSON POSITION 2
DWIGHT BOYKINS DISTRICT D	DAVE MARTIN DISTRICT E	STEVE LE DISTRICT F	MICHAEL KUBOSH POSITION 3	AMANDA EDWARDS POSITION 4
GREG TRAVIS DISTRICT G	KARLA CISNEROS DISTRICT H	ROBERT GALLEGOS DISTRICT I	JACK CHRISTIE POSITION 5	
MIKE LASTER DISTRICT J	MARTHA CASTEX-TATUM DISTRICT K			

STEPHEN WRIGHT - DIRECTOR
PARKS AND RECREATION DEPARTMENT



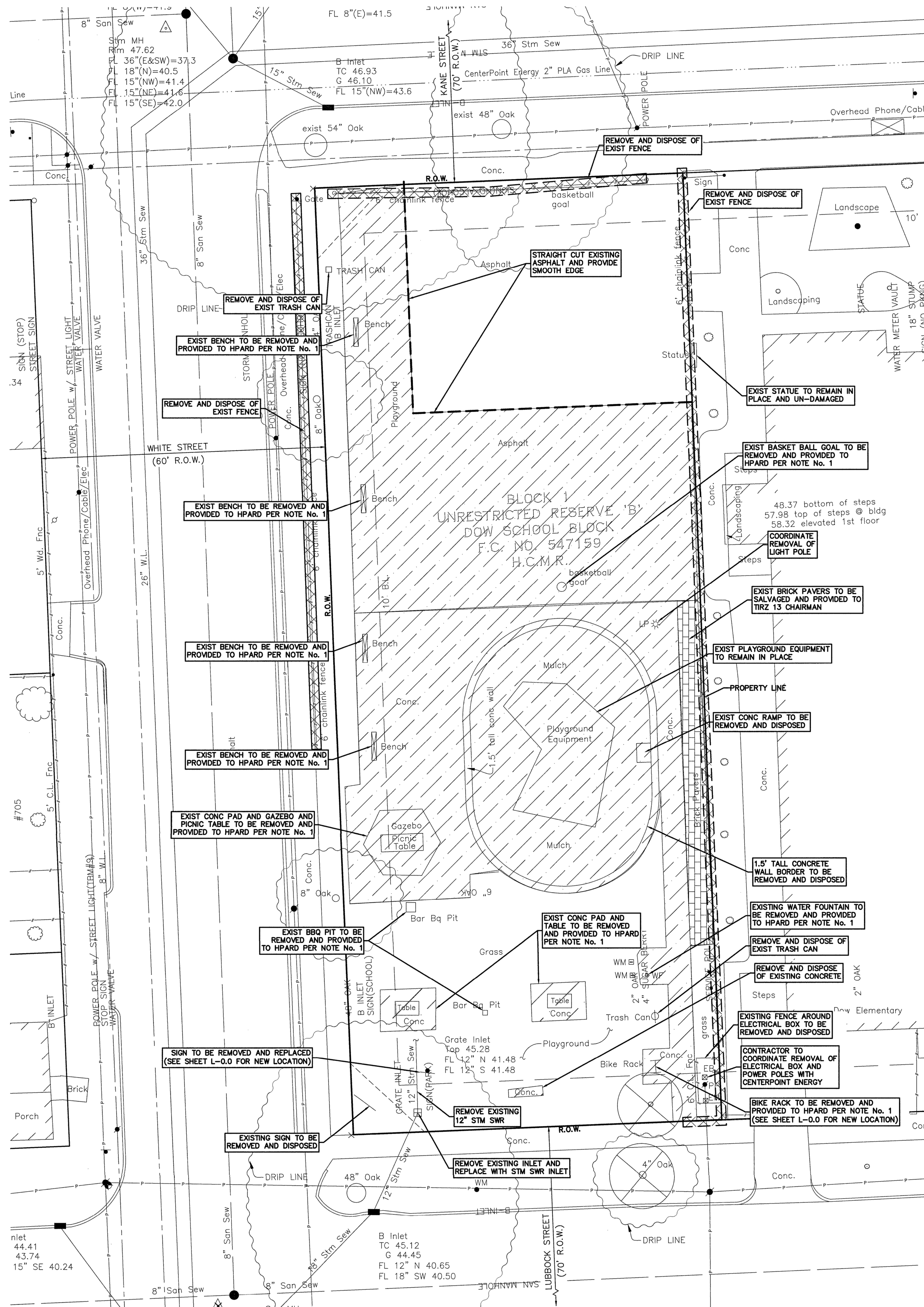
WARNING
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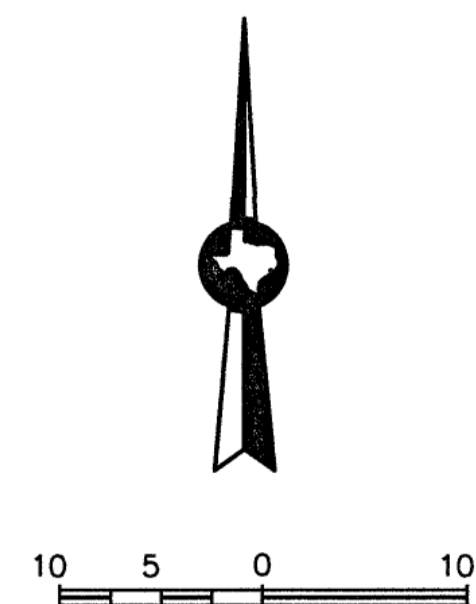
NOTE:
DRINKING FOUNTAIN WATER LINE IS LOCATED IN THE VICINITY OF THE PROPOSED DRINKING FOUNTAIN.

ISSUE LOG		
NO.	DATE	DESCRIPTION
1	04.03.2015	100% DD
2	09.04.2015	HPARD & GSD
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4	03.14.2017	95% CD
5	06.15.2017	100% CD
6	12.18.2017	ISSUE FOR PERMITS
7	01.26.2018	PERMIT COMMENT RESPONSE
asakura robinson		
asakura robinson company LLC		
Planning Urban Design Landscapes Architecture		
1400 West Loop East, Suite A		
Houston, Texas 77007		
P: 713.425.9644		
www.asakura-robinson.com		
[METALAB]		
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		www.insightstructures.com
ELECTRICAL ENGINEER	DOMINION INTERESTS INC.	1919 Decatur
		Houston TX 77007
		P: 713.626.7155
		www.dominioninterests.com
SEAL:		
Parks Capital Improvement Program		
for City of Houston		
General Services Department and		
Parks & Recreation Department		
PARK NAME:		
DOW ELEMENTARY PARK		
1900 Kane Street Houston TX 77007		
TIRZ #13		
CITY OF HOUSTON		
GENERAL SERVICES DEPARTMENT		
REVIEWED:		
N/A		
PROJECT MANAGER		
HERMANN PARK CONSERVANCY		
DATE:		
WBS. No. [L-NNNN-NN-3]		
SCALE: [AS NOTED]		
DRAWN BY:		
CHECKED BY:		
SHEET TITLE:		
SURVEY SITE PLAN		
SHEET NO.:		
C - 0.0		
CITY DWG. NO.:		

P:\021-001-00\Drawings\DOW School\Cl 0 DEMO PLAN.dwg Mar 28, 2018-4:25pm Edited by: epesquera



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- LEGEND**
- REMOVE AND DISPOSE OF INCLUDING BUT NOT LIMITED TO EXISTING ASPHALT PAVEMENT, CONCRETE PAVEMENT, CONCRETE WALL, MULCH AND BRICK PAVERS.
 - BRICK PAVERS TO BE SALVAGED AND PROVIDED TO TIRZ 13 CHAIRMAN

- NOTE:**
- HPARD HAS OF FIRST SALVAGE OF ANY ITEM TO BE DEMOLISHED. TIRZ 13 HAS SECOND RIGHTS TO ANY ITEM BEING DEMOLISHED. NOTIFY HPARD TIRZ 13 AND LANDSCAPE ARCHITECT PRIOR TO CONDUCTING DEMOLITION ACTIVITIES.
 - SEE SHEET L-1.0 FOR TREE PROTECTION AND MITIGATION PLAN.
 - CONTRACTOR SHALL COORDINATE WITH OWNER AND ENGINEER THE DELINEATION AND DEPTH OF EXCAVATION TO ENSURE CUT AND FILL BALANCE.
 - EXISTING STORM SEWER AND WATER LINE LOCATION TO BE FIELD VERIFIED BY CONTRACTOR.

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7	01.26.2018	PERMIT COMMENT RESPONSE

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SEAL:

Parks Capital Improvement Program
for City of Houston
General Services Department and
Parks & Recreation Department

PARK NAME: **DOW ELEMENTARY PARK**
1900 Kane Street Houston TX 77007
TIRZ #13

CITY OF HOUSTON
GENERAL SERVICES
DEPARTMENT

REVIEWED: _____
N/A
PROJECT PROGRAM MANAGER: _____
HERNAN PARR CONSERVANCY
PROJECT MANAGER: _____

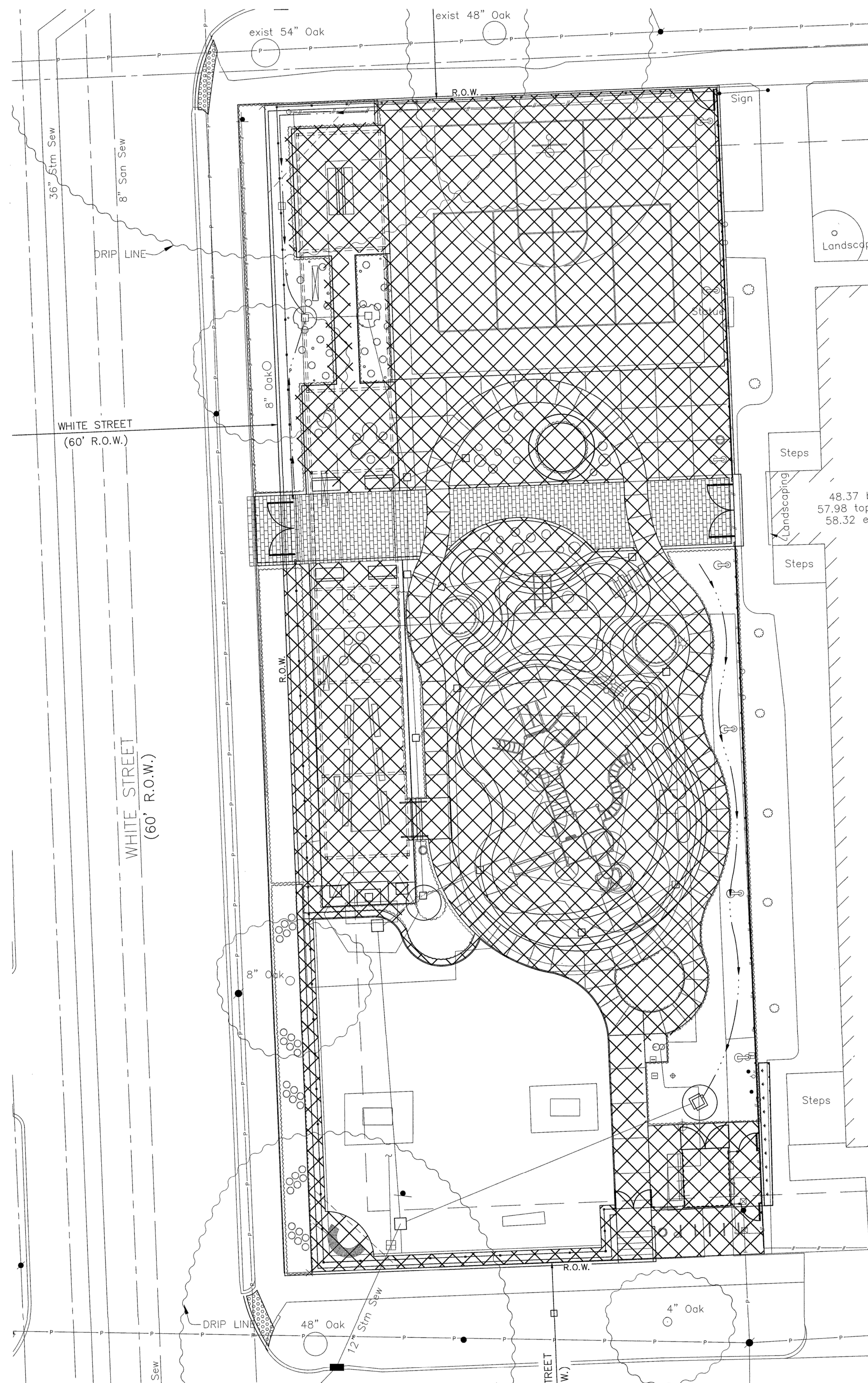
DATE: _____
WBS. No.: [L-NNNN-NN-3]
SCALE: [AS NOTED]
DRAWN BY: _____
CHECKED BY: _____

SHEET TITLE: **DEMOLITION PLAN**


SHEET NO.: **C - 1.0**


CITY DWG. NO.: _____

PROPOSED IMPERVIOUS AREA



LEGEND

 PROPOSED IMPERVIOUS AREA (0.23 ACRES)

 EXISTING IMPERVIOUS AREA (0.25 ACRES)

asakura robinson LLC
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 10655 Westoflake Drive
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 P. 713.784.4500
www.ehramc.com

**STRUCTURAL
ENGINEER**
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www.insightstructures.com

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ENGINEER**
 DOMINION INTERESTS INC.
 CONSULTING ENGINEERS
 1919 Decatur
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PARK NAME :
DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13

REVIEWED :	
_____	N/A
PARKS PROGRAM MANAGER	HERMANN PARK CONSERVANCY

PROJECT MANAGER	

SHEET TITLE :
**IMPERVIOUS
COVER**

SHEET NO. :
C - 2.0A
CITY DWG. NO. :



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10 5 0 10

LEGEND

- ME 50.50 MATCH EXISTING ELEV
SW 48.00 PROPOSED TOP OF SIDEWALK ELEV
TC 50.50 PROPOSED TOP OF CURB ELEV
TP 50.00 PROPOSED TOP OF PAVEMENT ELEV
B 50.00 PROPOSED PLAYGROUND BASE ELEV (BELOW RUBBER BERMS)
TG 47.00 PROPOSED TOP OF GRATE ELEV
FG 49.50 PROPOSED FINISHED GRADE ELEV
FL 49.00 PROPOSED FLOW LINE ELEV
HP 49.00 PROPOSED HIGH POINT ELEV
MEG MATCH EXISTING GRADE
PROPOSED DIRECTION OF FLOW
OVERFLOW LOCATION
PROPOSED CONTOUR (RUBBER BERM)
EXISTING CONTOUR
EXISTING ELEVATION

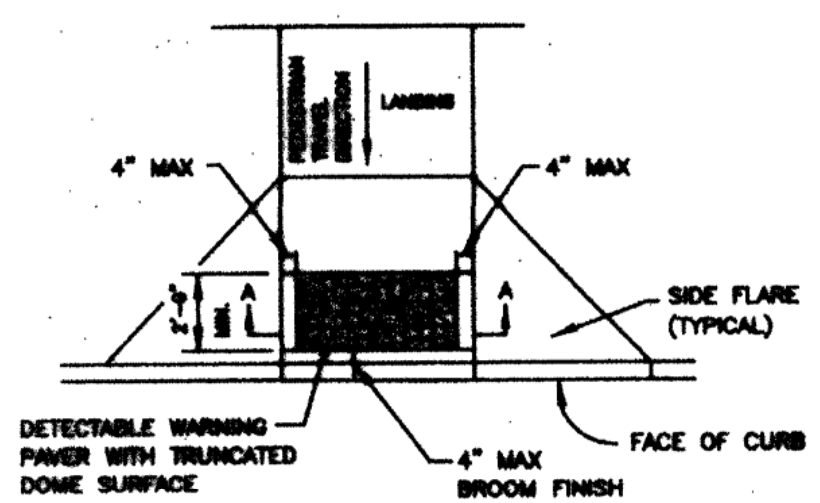
- ALL SIDEWALKS AND HANDICAP ACCESSIBLE ROUTES SHALL BE CONSTRUCTED IN ACCORDANCE TO A.D.A. REQUIREMENTS
ANY LANDSCAPING, DECKING OR OTHER ADJUTMENTS BY OTHERS MUST HAVE POSITIVE DRAINAGE AWAY FROM THE BUILDINGS AND MUST ADHERE TO THE DRAINAGE PATTERN SHOWN ON THIS GRADING PLAN, AND GENERAL GRADED TO DRAIN TO PREVENT FLOODING.
ALL PROPOSED CURBS ARE 6" UNLESS NOTED OTHERWISE
FILL TO BE PLACED ON PROOF ROLLED SITE STRIPPED FROM ORGANICS AND COMPACTED TO 95% PROCTOR DENSITY.

NOTES:

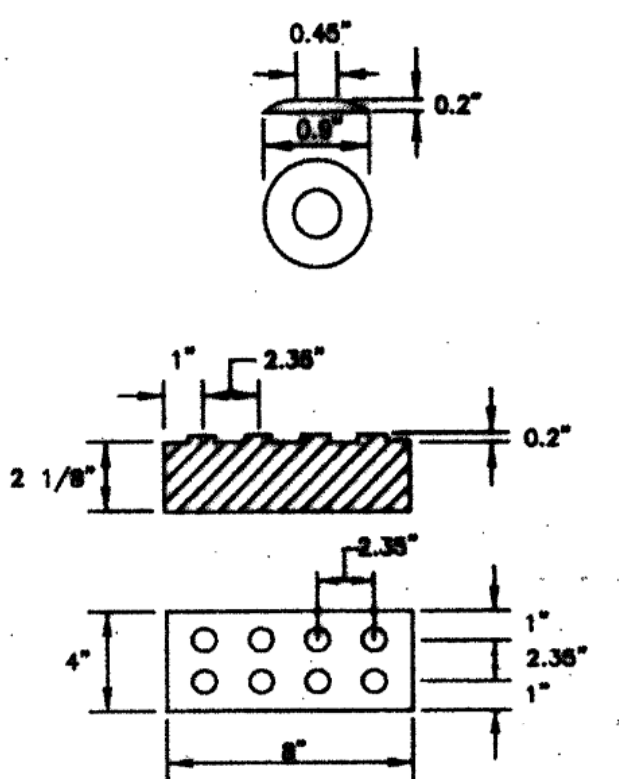
1. SIDEWALK SHALL HAVE A MAXIMUM 2% CROSS SLOPE UNLESS OTHERWISE INDICATED.
2. DRINKING FOUNTAIN WATER LINE IS LOCATED IN THE VICINITY OF THE PROPOSED DRINKING FOUNTAIN.

GENERAL NOTES (PAVERS)

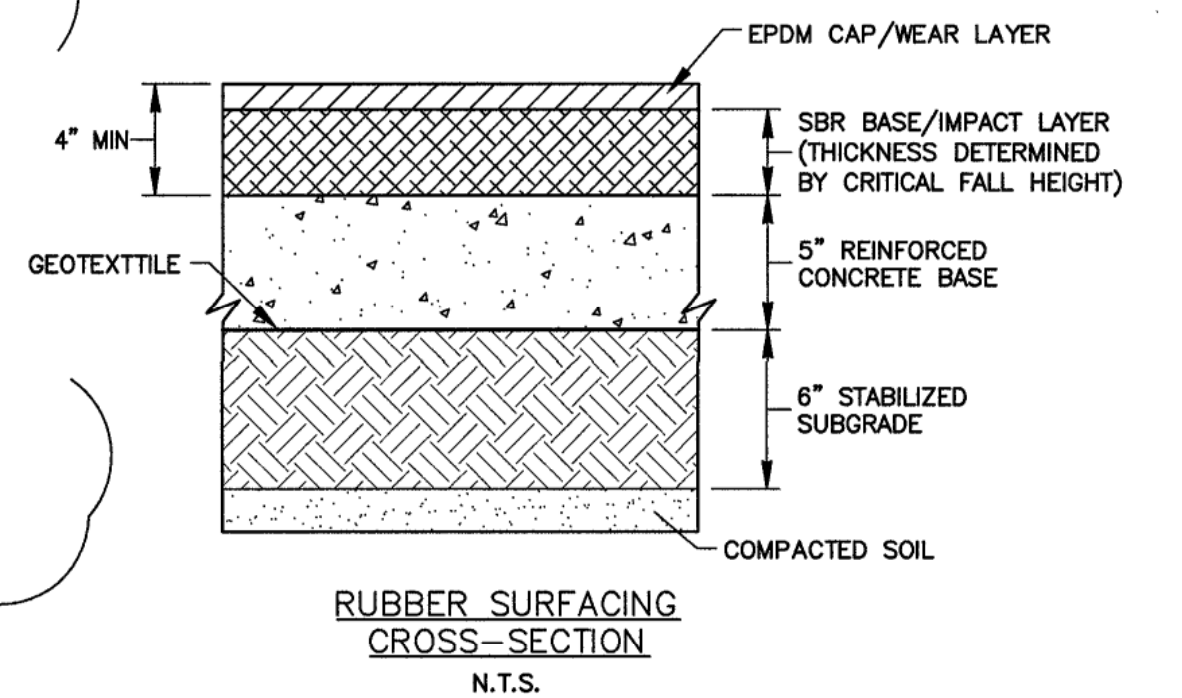
1. FURNISH DETECTABLE WARNING PAVEMENT UNITS MEETING ALL REQUIREMENTS OF ASTM C-836, C-833, LAY IN A TWO BY TWO UNIT BASKET WEAVE PATTERN OR AS DIRECTED.
2. LAY FULL-SIZE UNITS FIRST FOLLOWED BY CLOSURE UNITS CONSISTING OF AT LEAST 25 PERCENT OF A FULL UNIT, CUT DETECTABLE WARNING PAVEMENT UNITS USING A POWER SAW.



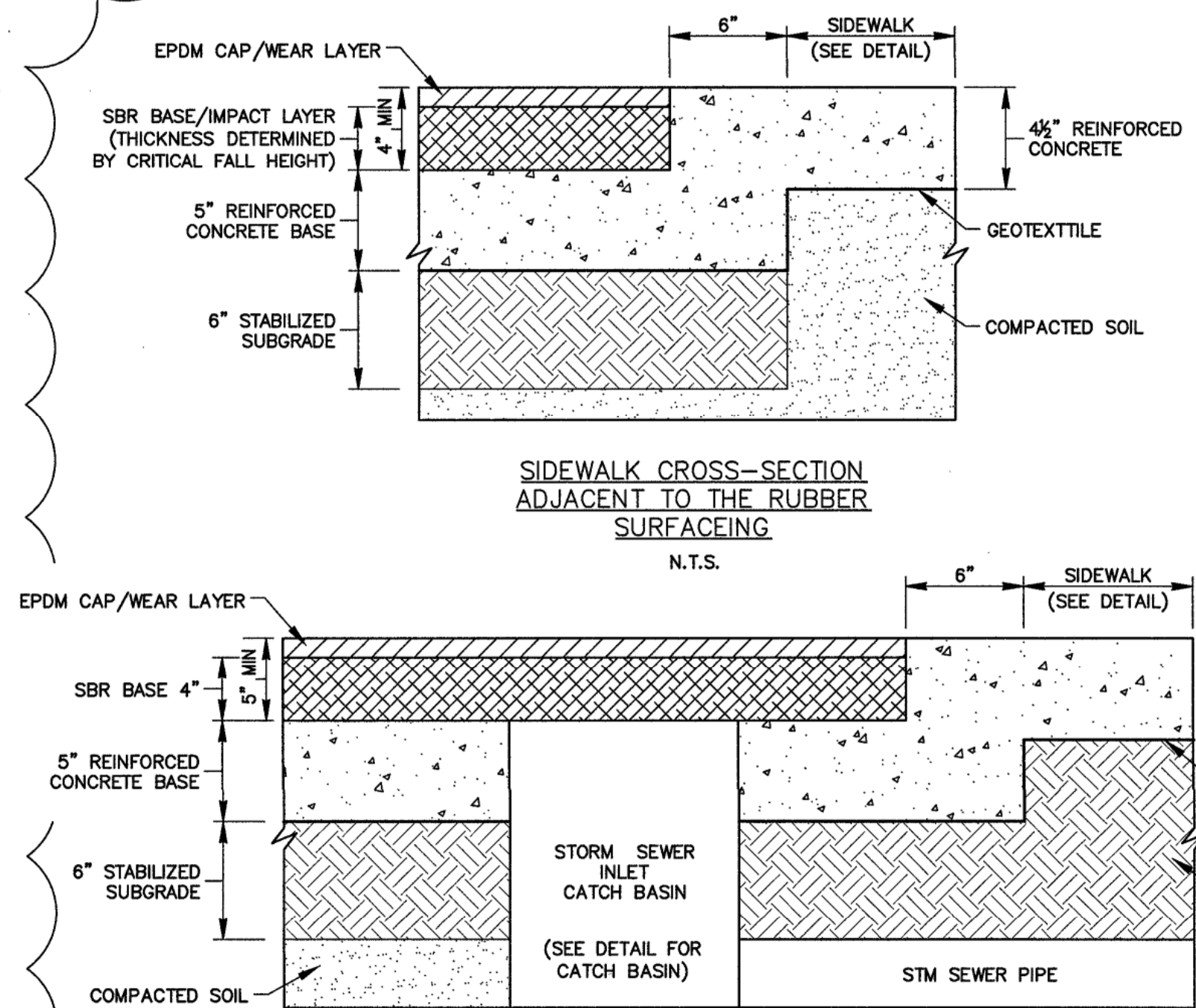
DETECTABLE WARNING PAVEMENT (OPTION)



DETECTABLE WARNING PAVEMENT



SIDEWALK CROSS-SECTION ADJACENT TO THE RUBBER SURFACING



CATCH BASIN CROSS-SECTION BELOW RUBBER SURFACE

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7	01.26.2018	PERMIT COMMENT RESPONSE
8	04.02.2018	PERMIT COMMENT RESPONSE #2

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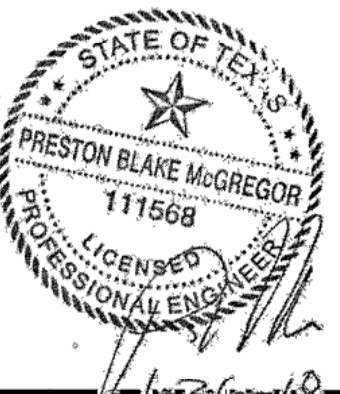
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CONSULTING ENGINEERS
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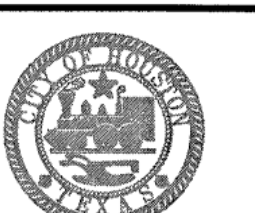
SEAL:



Parks Capital Improvement Program
for City of Houston
General Services Department and
Parks & Recreation Department

PARK NAME:

DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13



CITY OF HOUSTON
GENERAL SERVICES
DEPARTMENT

REVIEWED:

PARKS PROGRAM MANAGER: N/A
HERMANN PARK CONSERVANCY
PROJECT MANAGER:

DATE: [L-NNNN-NN-3]
WBS. No.: [AS NOTED]
SCALE: [AS NOTED]
DRAWN BY:
CHECKED BY:

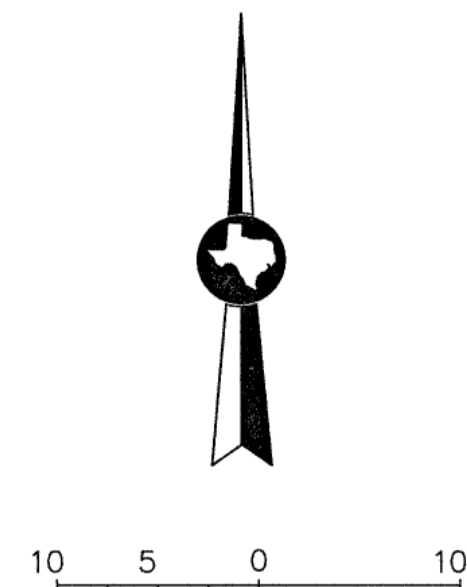
SHEET TITLE:
GRADING PLAN

SHEET NO.:

C - 3.0



CITY DWG. NO.:

P-3821



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	04.02.2018	PERMIT COMMENT RESPONSE #2

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ENGINEER

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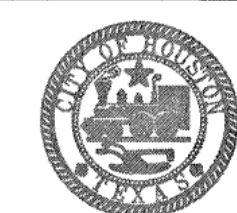
ELECTRICAL
ENGINEER

DOMINION INTERESTS INC.
CONSULTING ENGINEERS
1919 Decatur
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A circular professional engineer seal for the State of Texas. The outer ring contains the text "STATE OF TEXAS" at the top and "LICENSED PROFESSIONAL ENGINEER" at the bottom, separated by stars. In the center, there is a five-pointed star. Below the star, the name "PRESTON BLAKE MCGREGOR" is written in a curved path, and the license number "111568" is written in a straight path. The seal is stamped over a signature and the date "1-26-10".

**Parks Capital
Improvement
Program**
for City of Houston
General Services Department and
Parks & Recreation Department

DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13



CITY OF HOUSTON
GENERAL SERVICES
DEPARTMENT

	N/A
PARKS PROGRAM MANAGER	HERMANN PARK CONSERVANCY

DATE : _____
WBS. No : _____ [L-NNNN-NN-3]
SCALE : _____ [AS NOTED]
DRAWN BY : _____
CHECKED BY : _____

**STORM WATER
POLLUTION
PREVENTION PLAN**

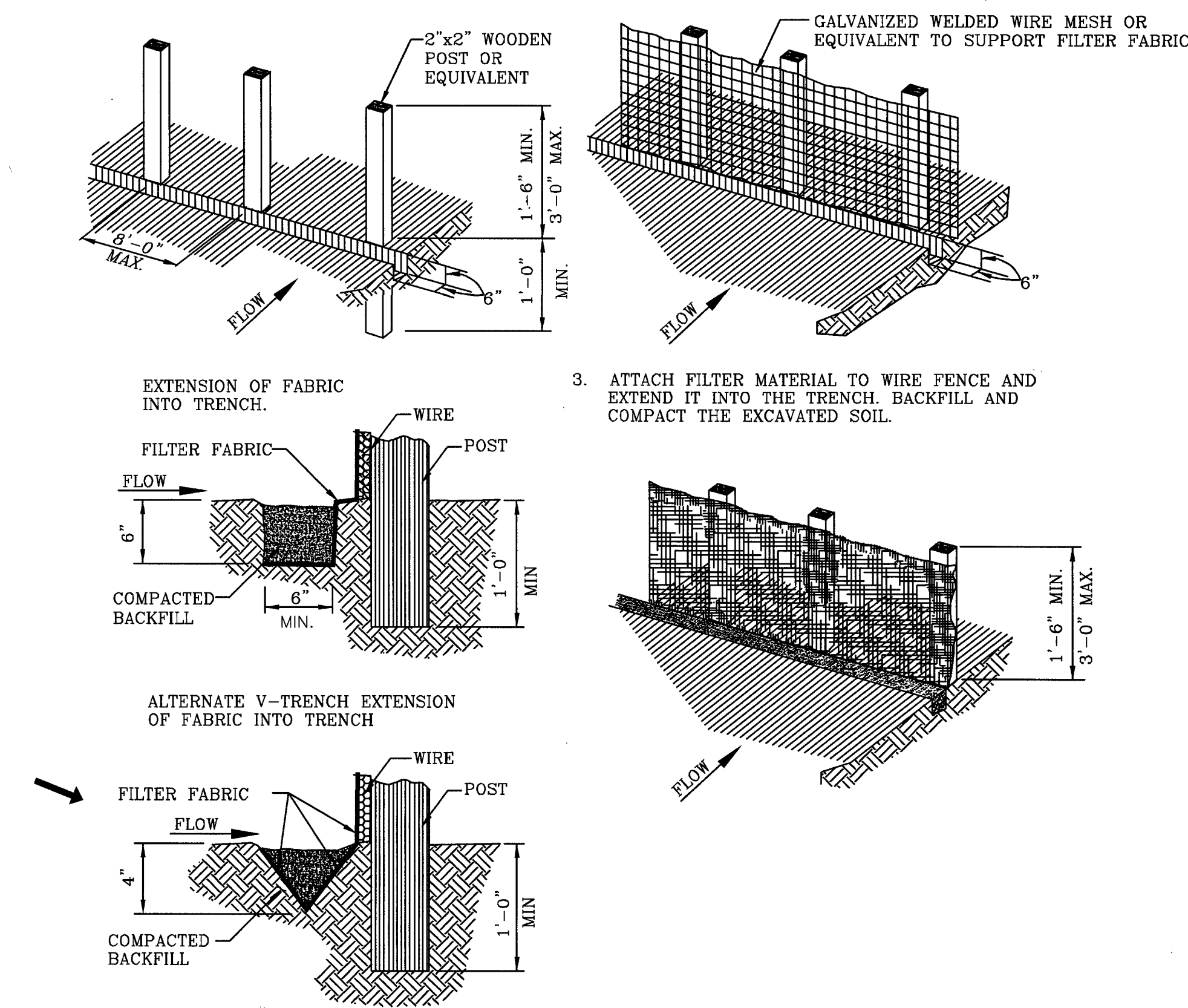
C - 4.0

P-3821

THE PROPERTY OWNER OR THE CONTRACTOR SHALL CONTACT THE HARRIS COUNTY STORM WATER QUALITY PERMITTING SECTION AT 713-956-3000 FOR A PRE-CONSTRUCTION INSPECTION PRIOR TO COMMENCING ANY CLEARING OR CONSTRUCTION ACTIVITIES ON THE SITE.

1. SET POSTS AT REQUIRED SPACING AND DEPTH. EXCAVATE 6" x 6" TRENCH UPSLOPE ALONG THE LINE OF POSTS.

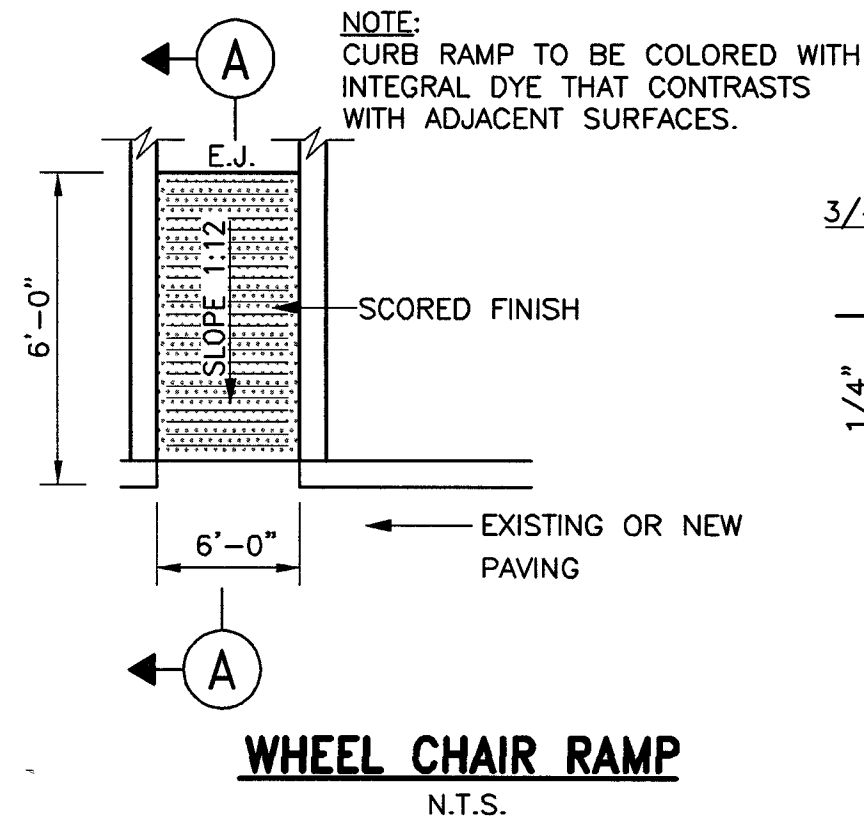
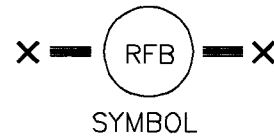
2. SECURE MESH FENCING TO POSTS



GENERAL NOTES:

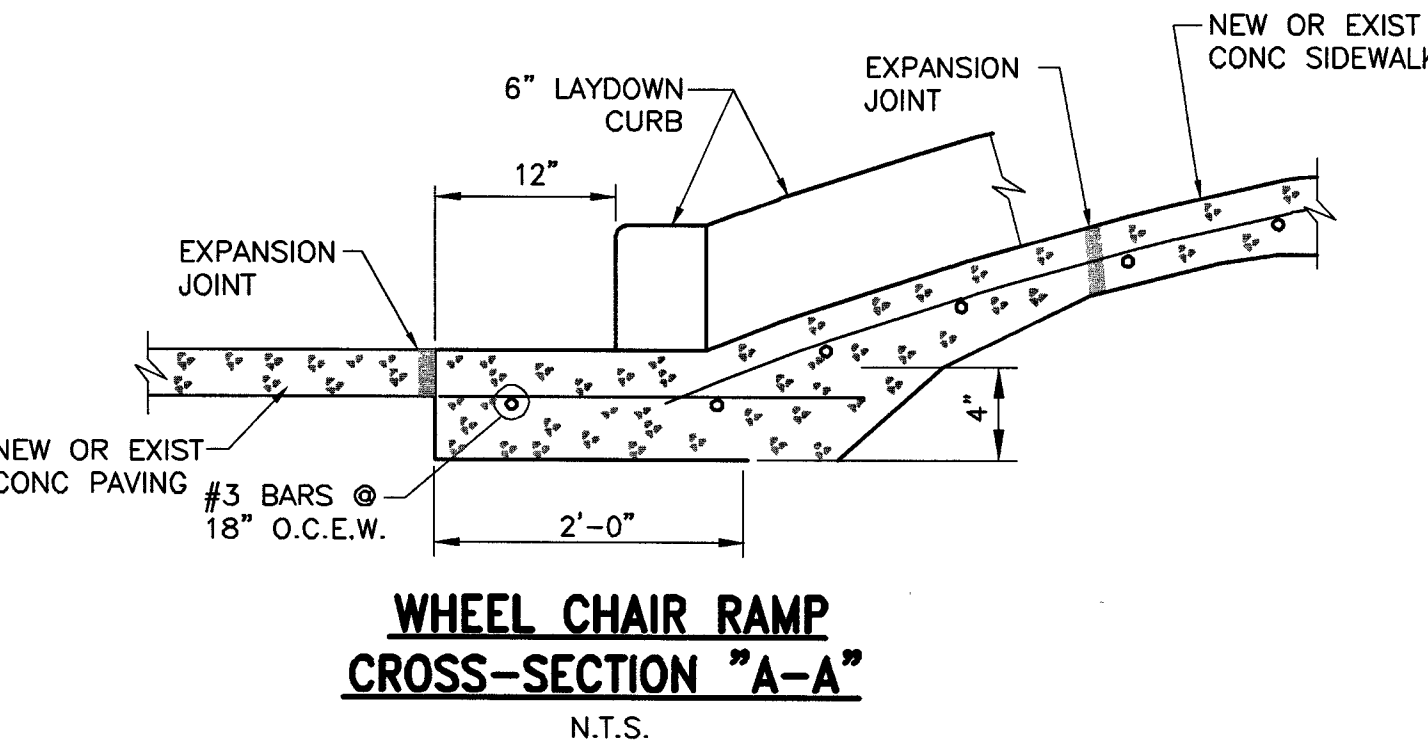
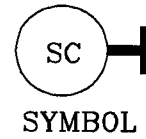
1. SECURELY FASTEN MESH FENCING TO POSTS WITH STAPLES OR TIE WIRES.
2. SECURELY FASTEN FILTER FABRIC TO MESH FENCING.
3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, OVERLAP 6 INCHES AT A POST, FOLD TOGETHER, AND ATTACH TO A POST.
4. REMOVE SEDIMENT DEPOSITS WHEN SILT REACHES ONE-THIRD OF THE HEIGHT OF THE FENCE IN DEPTH.

REINFORCED FILTER FABRIC BARRIER

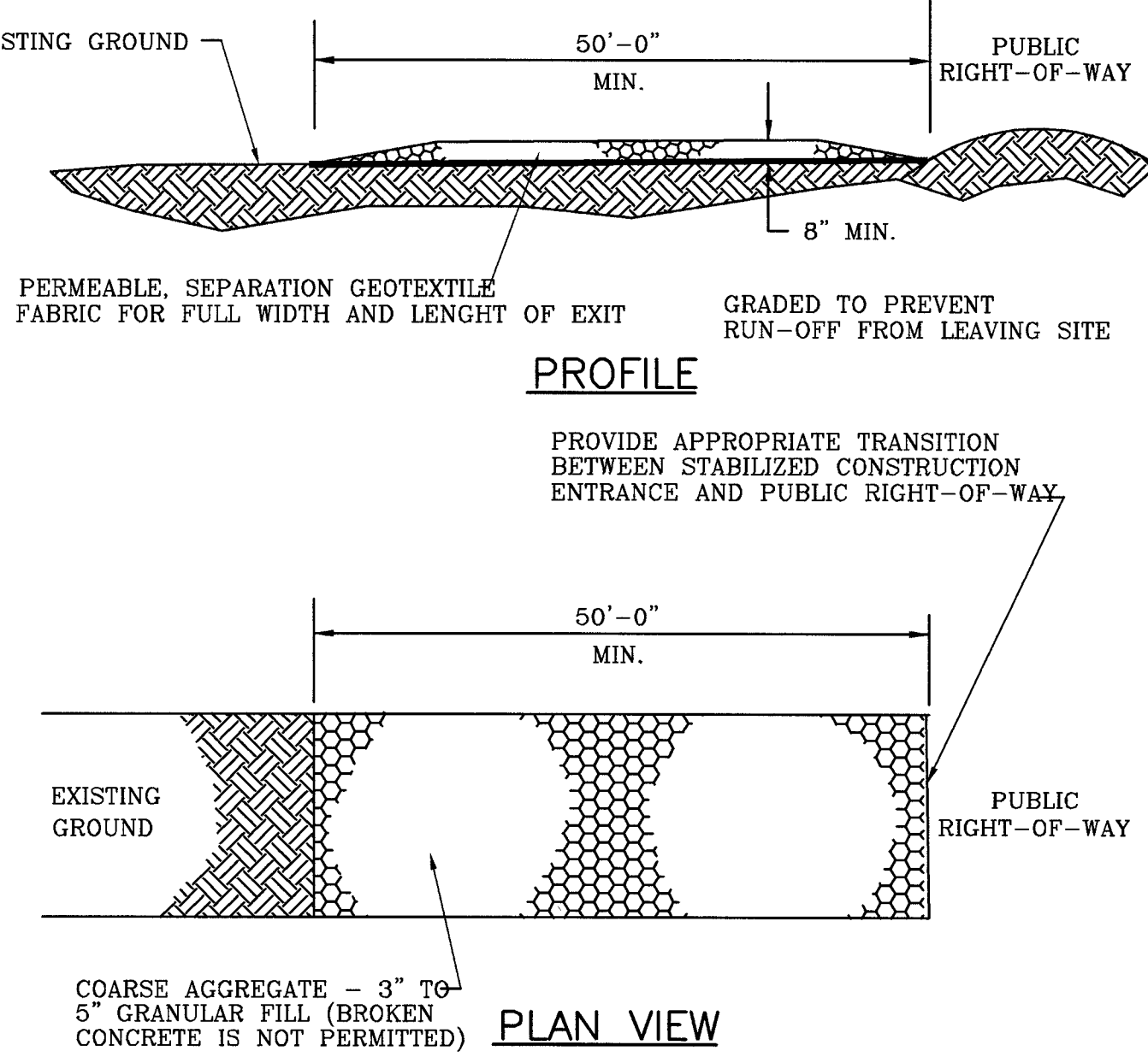


WHEEL CHAIR RAMP
N.T.S.

STABILIZED CONSTRUCTION ACCESS



WHEEL CHAIR RAMP
CROSS-SECTION "A-A"
N.T.S.



GENERAL NOTES:

1. MINIMUM LENGTH IS AS SHOWN ON CONSTRUCTION DRAWINGS OR 50 FEET, WHICHEVER IS MORE.
2. CONSTRUCT AND MAINTAIN CONSTRUCTION EXIT WITH CONSTANT WIDTH ACROSS ITS LENGTH, INCLUDING ALL POINTS OF INGRESS OR EGRESS.
3. UNLESS SHOWN ON THE CONSTRUCTION DRAWINGS, STABILIZATION FOR OTHER AREAS WILL HAVE THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION EXIT.
4. WHEN SHOWN ON THE CONSTRUCTION DRAWINGS, WIDEN OR LENGTHEN STABILIZED AREA TO ACCOMMODATE A TRUCK WASHING AREA. PROVIDE OUTLET SEDIMENT TRAP FOR THE TRUCK WASHING AREA.
5. PROVIDE PERIODIC TOP DRESSING WITH ADDITIONAL COARSE AGGREGATE TO MAINTAIN THE REQUIRED DEPTH OR WHEN SURFACE BECOMES PACKED WITH MUD.
6. PERIODICALLY TURN AGGREGATE TO EXPOSE A CLEAN DRIVING SURFACE.
7. ALTERNATIVE METHODS OF CONSTRUCTION INCLUDE:
 - CEMENT STABILIZED SOIL: COMPACTED CEMENT STABILIZED SOIL, LIMESTONE AGGREGATE, OR OTHER FILL MATERIAL IN AN APPLICATION OF THICKNESS OF 8 INCHES
 - WOOD MATS: OAK OR OTHER HARDWOOD TIMBERS PLACED EDGE TO EDGE AND ACROSS SUPPORT WOODEN BEAMS WHICH ARE PLACED ON TOP OF EXISTING SOIL IN AN APPLICATION THICKNESS OF 6 INCHES.
 - STEEL MATS: PERFORATED MATS PLACED ACROSS PERPENDICULAR SUPPORT MEMBERS.

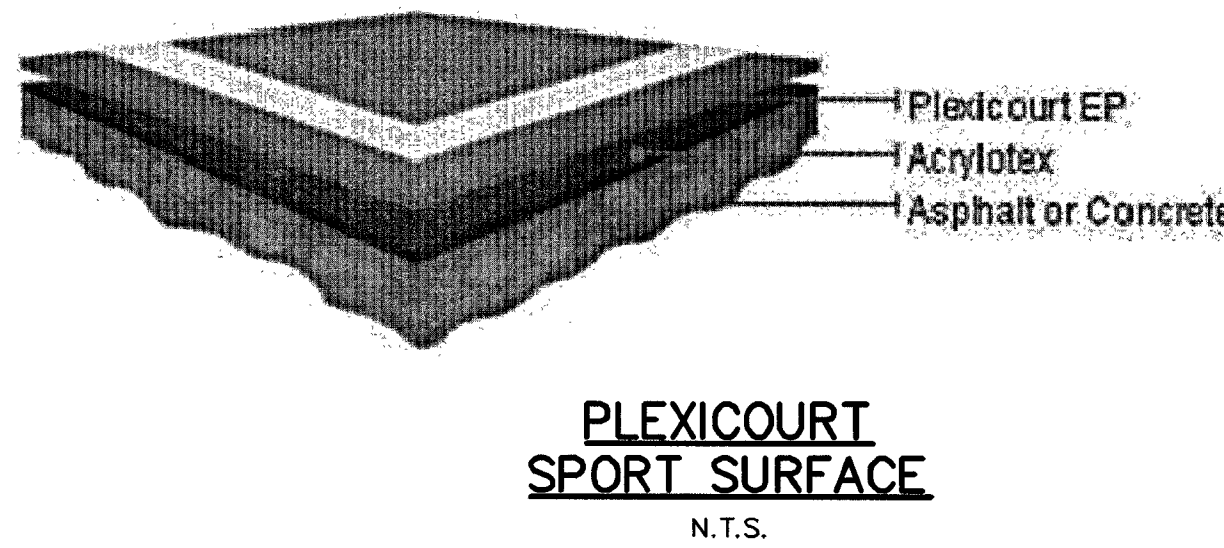
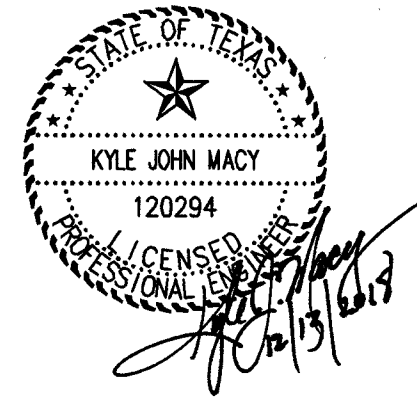
INLET PROTECTION BARRIERS FOR STAGE II INLETS



GENERAL NOTES:

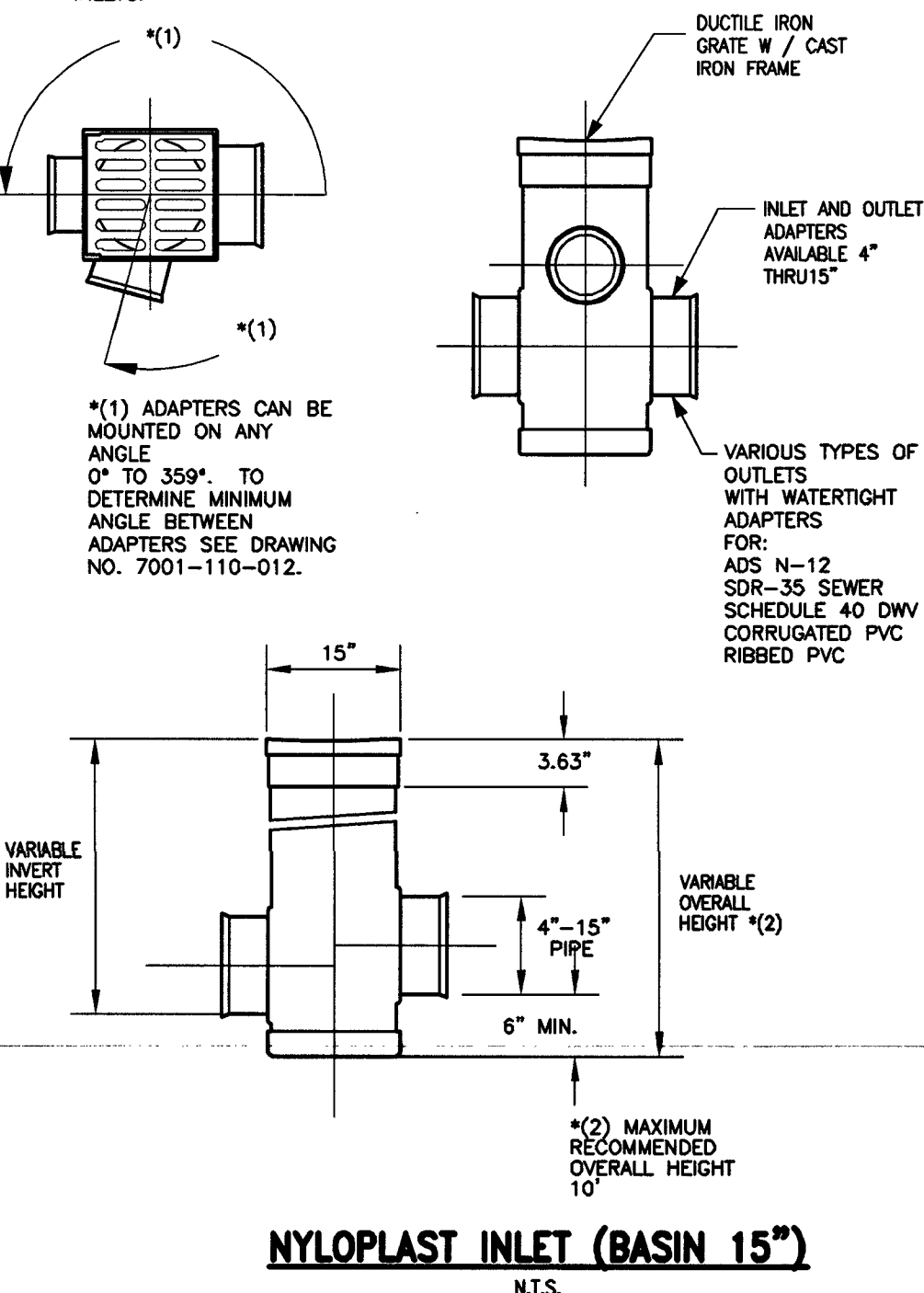
1. BAGS OR WATTLES CAN BE USED FOR THIS APPLICATION.
2. PROVIDE WOVEN OR UNWOVEN GEOTEXTILE FILTER FABRIC FOR BAGS.
3. PROVIDE COARSE SAND AND AGGREGATE MIX FOR FILL MATERIAL FOR BAGS. USE ONLY PARTICLES CONSISTING OF CLEAN, HARD, DURABLE MATERIALS FREE FROM ADHERENT COATINGS, SALT, ALKALI, DIRT, CLAY, LOAM, SHALE, SOFT OR FLAKY MATERIALS, OR ORGANIC AND INJURIOUS MATTER.
4. REMOVE SEDIMENT DEPOSIT WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE BARRIER.

12.13.2018 ADDITION INLET DETAIL
FOR REVISION ONLY



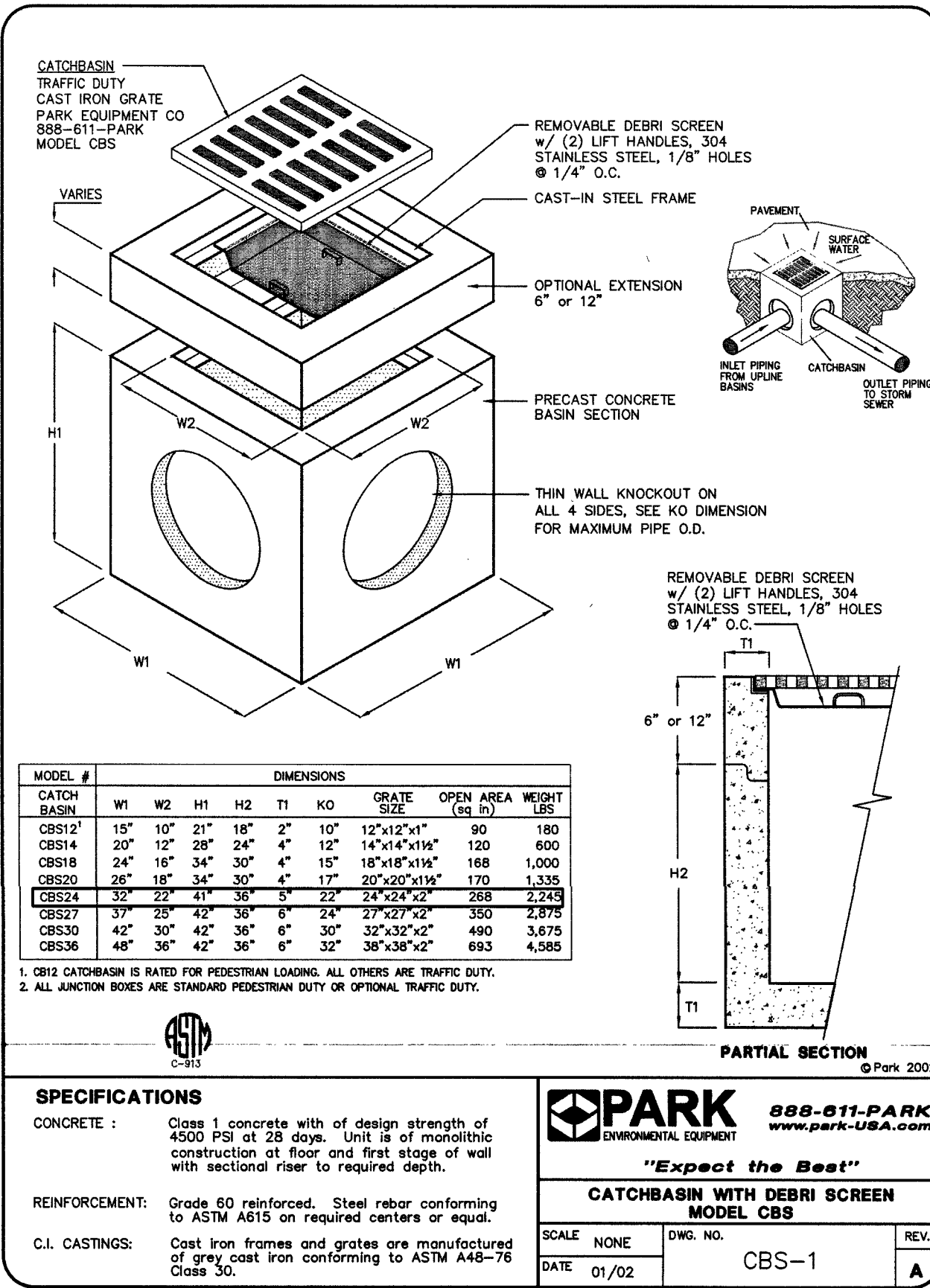
PLEXICOURT
SPORT SURFACE
N.T.S.

- NOTES:
1. BACKFILL STRUCTURES 24" ON SIDES AND 12" ON BOTTOM WITH CEMENT SAND.
 2. GROUT BOTTOM OF INLETS W/ NON-SHRINK GROUT TO BOTTOM OF LOWEST LEAD TO AVOID STANDING WATER IN INLETS.



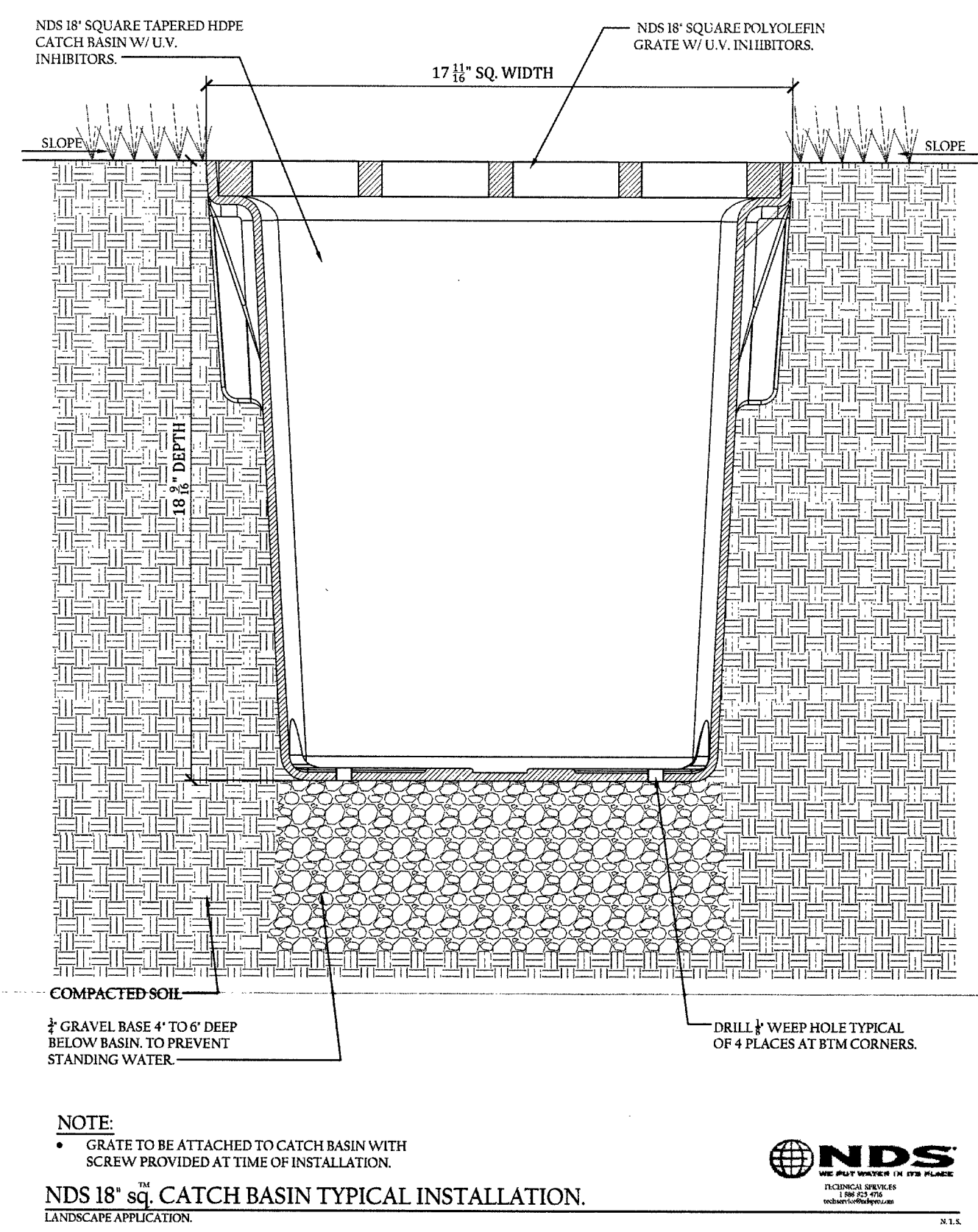
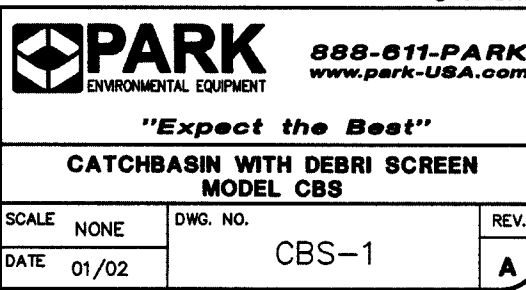
NYLOPLAST INLET (BASIN 15")
N.T.S.

NOTE: USE PEDESTRIAN FRIENDLY GRATE

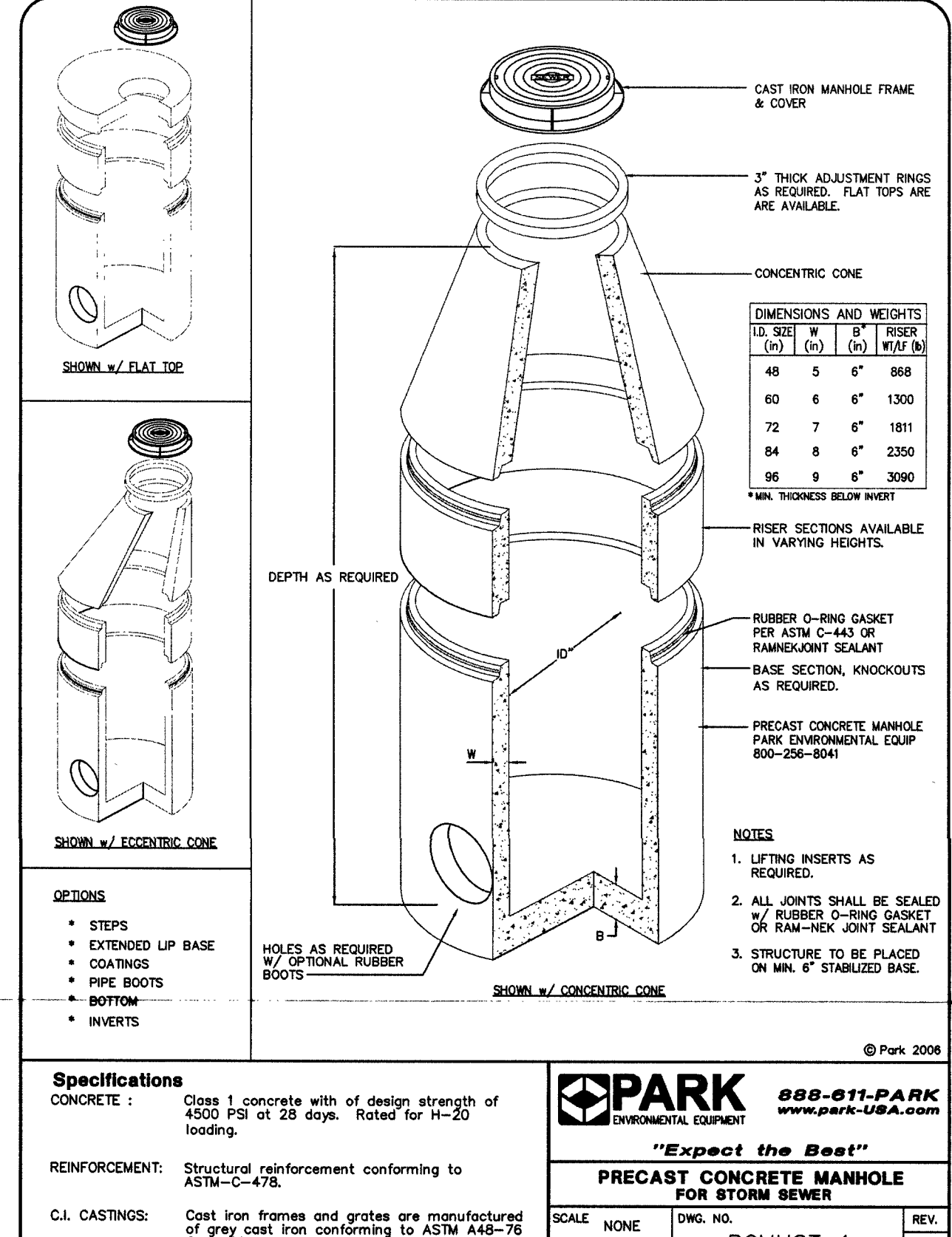


MODEL #	W1	W2	H1	H2	TI	NO	GRATE SIZE	OPEN AREA	WEIGHT
CBS12	12"	12"	24"	24"	2"	10	12"x12"	90	180
CBS14	14"	14"	28"	28"	2"	12	14"x14"	120	240
CBS16	16"	16"	32"	32"	2"	14	16"x16"	168	336
CBS18	18"	18"	36"	36"	2"	16	18"x18"	216	432
CBS20	20"	20"	40"	40"	2"	18	20"x20"	270	540
CBS22	22"	22"	44"	44"	2"	20	22"x22"	330	660
CBS24	24"	24"	48"	48"	2"	22	24"x24"	396	792
CBS26	26"	26"	52"	52"	2"	24	26"x26"	468	936
CBS28	28"	28"	56"	56"	2"	26	28"x28"	544	1088
CBS30	30"	30"	60"	60"	2"	28	30"x30"	630	1260

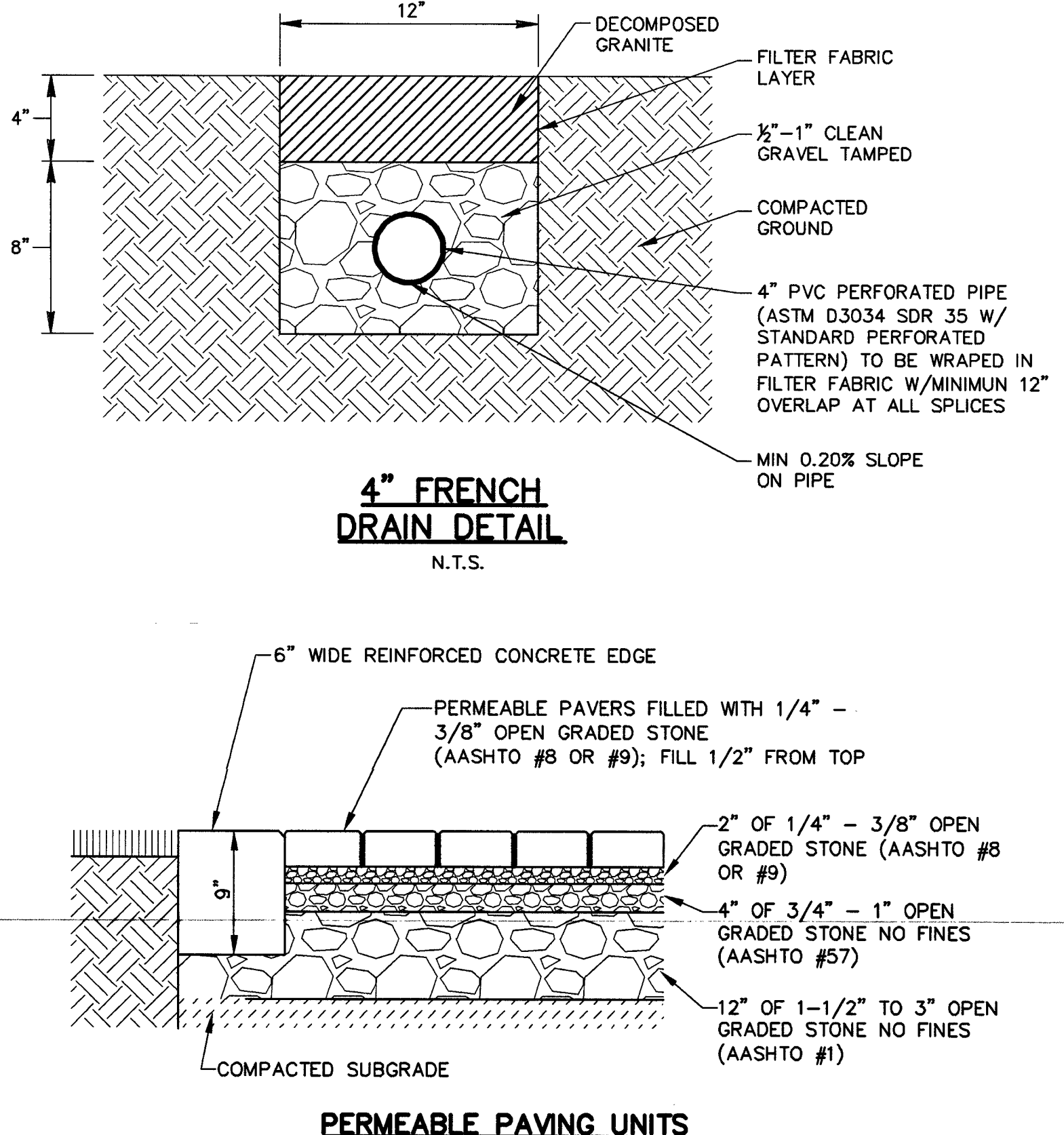
1. GRATE OVERLAP IS 1/4" FOR PERMANENT LANDING. ALL OTHERS ARE TRAFFIC DUTY.
2. ALL ANCHOR BOLTS ARE STANDARD TRAFFIC DUTY OR SPECIAL TRAFFIC DUTY.



NOTE:
• GRATE TO BE ATTACHED TO CATCH BASIN WITH SCREEN PROVIDED AT TIME OF INSTALLATION.
NDS 18" SQ. CATCH BASIN TYPICAL INSTALLATION.
LANDSCAPE APPLICATION



Specifications:
CONCRETE: Class 1 concrete with design strength of 4500 PSI at 28 days. Unit is of modular construction of floor and first stage of wall with sectioned rise to required depth.
REINFORCEMENT: Grade 60 reinforced. Steel rebar conforming to ASTM A615 or equivalent.
C.I. CASTINGS: Cast iron frames and grates are manufactured of grey cast iron conforming to ASTM A48-78 Class 30.



4" FRENCH
DRAIN DETAIL
N.T.S.

PERMEABLE PAVING UNITS
N.T.S.

ISSUE LOG		
NO.	DATE	DESCRIPTION
1	04.03.2015	100% DD
2	09.04.2015	HPARD & GSD
3	10.27.2016	75% PLANS
4	03.14.2017	95% CD
5	06.15.2017	100% CD
6	12.18.2017	ISSUE FOR PERMITS
7	10.12.2018	ISSUE FOR CONSTRUCTION
8	01.26.2018	PERMIT COMMENT RESPONSE
9	04.02.2018	PERMIT COMMENT RESPONSE #2

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SEAL:

Parks Capital Improvement Program
for City of Houston
General Services Department and
Parks & Recreation Department

PARK NAME: **DOW ELEMENTARY PARK**
1800 Kane Street Houston TX 77007
TIRZ #13

CITY OF HOUSTON
GENERAL SERVICES
DEPARTMENT

REVIEWED: _____

DATE: _____

WBS. No.: [L-MNNN-NN-3]

SCALE: [AS NOTED]

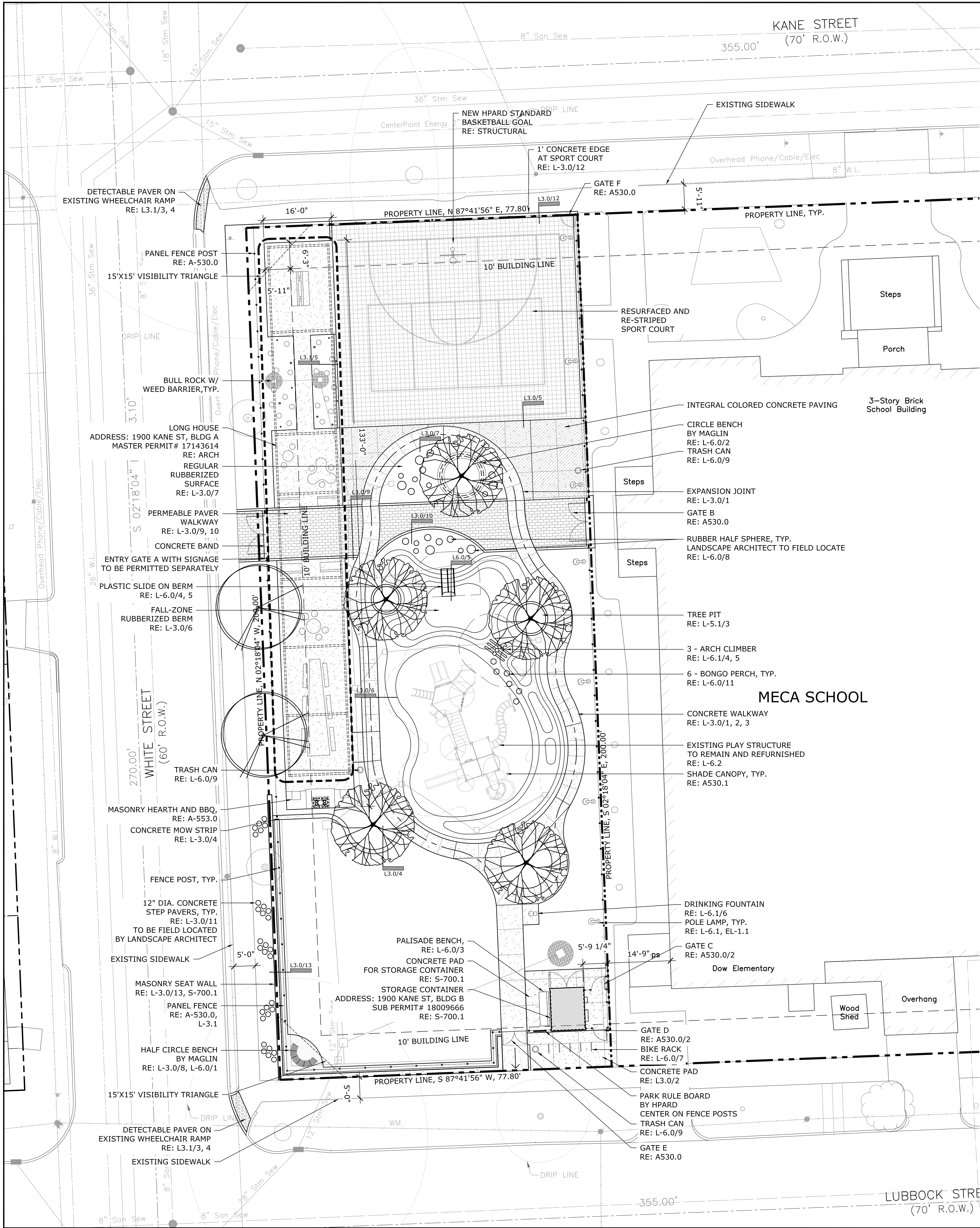
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CHECKED BY: _____

SHEET TITLE:
CIVIL DETAILS

SHEET NO.: **C - 5.0**

CITY DWG. NO.: _____



LEGEND

- CONCRETE PAVING
- BASKETBALL COURT RESURFACE WITH PELXIPAVE COLOR TBD
- DECOMPOSED GRANITE
- FALL-ZONE RUBBER SURFACE
- TYP. RUBBER SURFACE
- INTEGRAL COLORED CONCRETE PAVING

CONCRETE PAVING (SQUARE FEET) - RIGHT-OF-WAY	1953.37 SQ. FT.
SIDEWALK (LINEAL FEET) - RIGHT OF WAY	376 LF
CONCRETE/DECORATIVE PAVING AND WALKWAY (SQUARE FEET) - ON SITE	3642.97 SQ. FT.
COLORED CONCRETE	587.69 SQ. FT.
PAVER AREA	714.84 SQ. FT.
RUBBERIZED AREA	3075.10 SQ. FT.
RESURFACED AREA	2727.52 SQ. FT.

PARKING ORDINANCE	
PARK ACREAGE	0.36
EXISTING OFF-STREET PARKING	0
EXISTING ON-STREET PARKING	8
REQUIRED PARKING	0
PROPOSED PARKING	0

BICYCLE SPACE	
PARK SIZE	15,550 SQ. FT.
# REQUIRE SPACE	1 (1 FOR 5,000 - 25,000 SQ. FT.)
# PROPOSED SPACE	10

1 REFERENCE PLAN

Scale: 1"=10'-0"

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8	09.27.2018	BID & CONSTRUCTION

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SEAL:

Parks Capital Improvement Program
for City of Houston
General Services Department and
Parks & Recreation Department

PARK NAME :
DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13

CITY OF HOUSTON
GENERAL SERVICES
DEPARTMENT

REVIEWED :

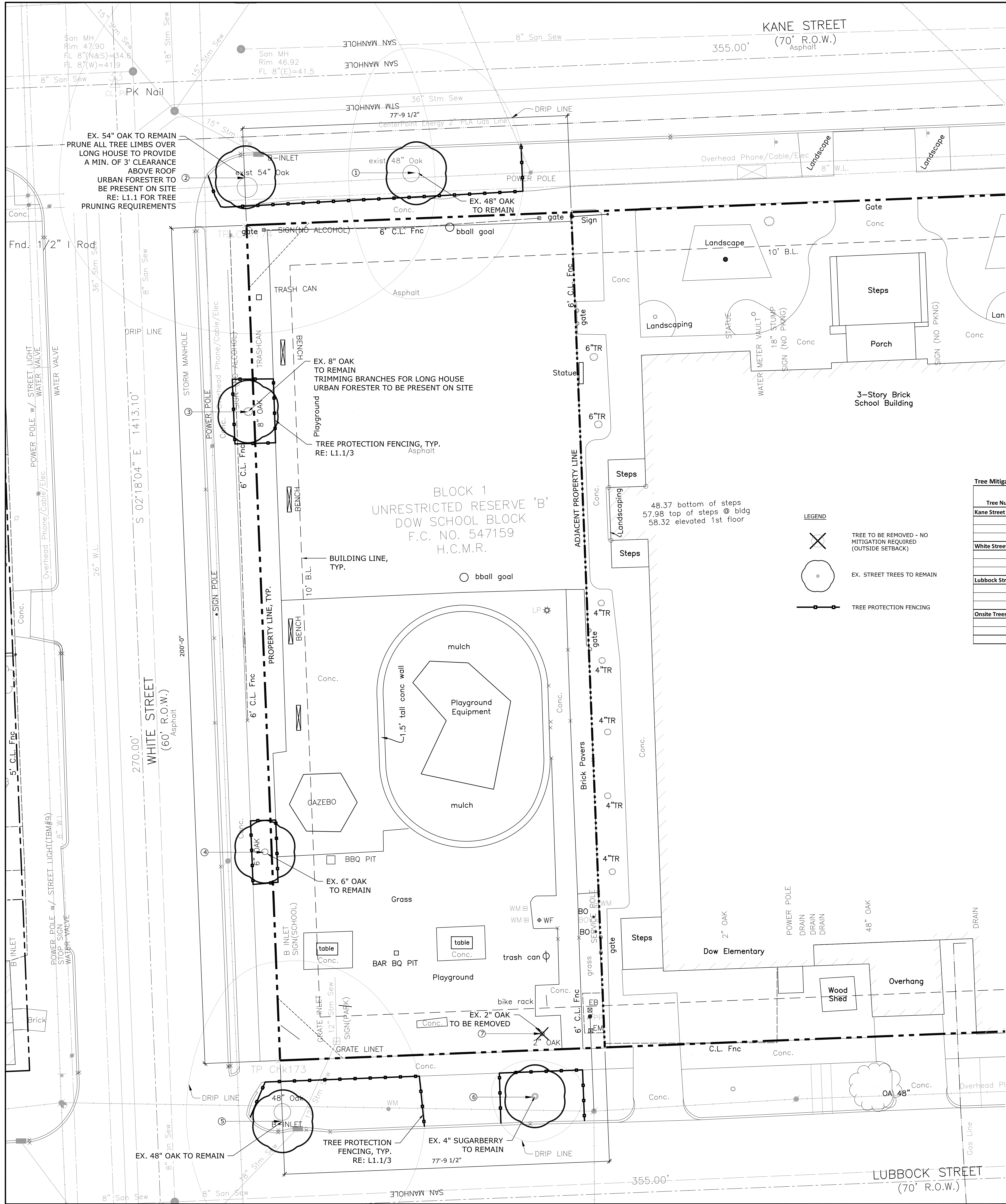
PARKS PROGRAM MANAGER	N/A
HERMANN PARK CONSERVANCY	
PROJECT MANAGER	

DATE : _____
WBS. No : [F-000870-0001]
SCALE : [AS NOTED]
DRAWN BY : _____
CHECKED BY : _____

SHEET TITLE :
SITE PLAN

SHEET NO. :
L - 0.0

CITY DWG. NO. : _____



Tree Mitigation Table											
Tree Number	Caliper	Species	Location	Status	Action	Mitigation Credits (tree bank inches)	Street Tree (site tree credits)	Parking Lot Tree (site tree credits)	Mitigation	Payment	Required Inches to Mitigate
Kane Street											
1	48"	Live Oak / Quercus virginiana	ROW	AVG	TO REMAIN				N		0
2	54"	Live Oak / Quercus virginiana	ROW	AVG	TO REMAIN				N		0
White Street											
3	8"	Live Oak / Quercus virginiana	ROW	AVG	TO REMAIN				N		0
4	6"	Live Oak / Quercus virginiana	ROW	AVG	TO REMAIN				N		0
Lubbock Street											
5	48"	Live Oak / Quercus virginiana	ROW	N/A	TO REMAIN				N		0
6	4"	Sugarberry / Celtis laevigata	ROW	N/A	TO REMAIN				N		0
Onsite Trees											
7	2"	Live Oak / Quercus virginiana	ON SITE	N/A	REMOVE				N		0
TOTAL REQUIRED MITIGATION											0

CITY OF HOUSTON
DEPARTMENT OF PLANNING & DEVELOPMENT

LANDSCAPE ANALYSIS FORM
(PLEASE ATTACH TO PERMIT SITE PLAN)

Non-single family residential
(Self may create an artificial lot)

1. TREE AND SHRUB PLANTING REQUIREMENTS
A. STREET TREES: Sec. 33-126 (a)
Length of property line in lineal feet as measured along each street separately.

STREET NAME	LINEAL FEET	TREE REQUIRED	EQUIVALENT CREDITS*	EX-STREET TREES TO REMAIN	NEW STREET TREES	TOTAL
KANE STREET	76	3	0	2	0	2
WHITE STREET	200	7	2	2	2	6
LUBBOCK STREET	76	3	0	2	0	2

TOTAL STREET TREES REQUIRED13

TOTAL STREET TREES PROPOSED2

EQUIVALENT CREDITS*8

DEFICIT / NET-3

B. PARKING LOT TREES: Sec. 33-127 (a)
50% of parking lot trees must be large trees. Each parking space must be within 120' of a tree.

TREE PLANTING REQUIREMENTS FOR PARKING LOT: 1 tree / 10 parking spaces	# OF SPACES	TREE REQUIREMENT	EQUIVALENT CREDITS*	LARGE TREES	SMALL TREES	TOTAL TREES PLANTED
TOTAL NUMBER OF PROPOSED PARKING SPACES	10	N/A	N/A	N/A	N/A	N/A

C. PARKING LOT SHRUBS: Sec. 33-127 (b)
75% of the shrubs must be planted along the perimeter of the parking lot. (Shrubs are required for new and/or the expanded portion of parking lot)

SHRUB REQUIREMENTS: 10 shrubs / 1 street tree	REQUIREMENT	TOTAL SHRUB PLANTED
STREET TREE PLANTING REQUIREMENT	N/A	N/A

D. LANDSCAPE BUFFER: Sec. 33-128 (1)
Wood, concrete masonry opaque screening fence (min. 6')
Sec. 33-128(2) Evergreen Screening
A 6" high wood, concrete masonry opaque screening fence or 15' wide evergreen planting strip along total length of line adjacent to existing single family residential, or limit of expansion adjacent to existing single family. (Site plan must show land use on all sides of property)

CREDIT WORKSHEET: Sec. 33-123 (a) Tree planting equivalency credits

	STREET	PARKING
1. Number of proposed trees exceeding 4" in caliper 2. Each 4" tree is (1) credit.	2	N/A
2. Depositing of monies with Parks and Recreation Department. \$500 per tree. Proposed credits cannot exceed 30% of tree planting requirement above. Amount to be deposited: Proposed Credits x \$500.00 = \$	0	N/A
3. Preservation of on-site trees, per the following schedule in caliper: 0 minimum 4" - 6" 2 trees x greater than 6" but less than 12" 3 trees x 12" and greater 4 trees x Total number of tree credits for this option trees.	0	N/A
4. Credit for preserving existing right of way street trees	6	N/A
5. Proposed total number of tree credits (to receive credit, documentation must be provided in conformance with Section 33-123).	8	N/A

1 TREE PROTECTION PLAN Scale: 1"=10'-0"

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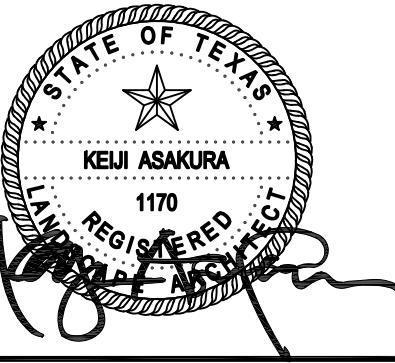
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SEAL:



Parks Capital Improvement Program
for City of Houston
General Services Department and
Parks & Recreation Department

PARK NAME:

DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13



CITY OF HOUSTON
GENERAL SERVICES
DEPARTMENT

REVIEWED:

PARKS PROGRAM MANAGER N/A
HERMANN PARK CONSERVANCY

PROJECT MANAGER

DATE: _____
WBS. No.: [F-000870-0001]
SCALE: [AS NOTED]
DRAWN BY: _____
CHECKED BY: _____

SHEET TITLE:

TREE
PROTECTION
PLAN

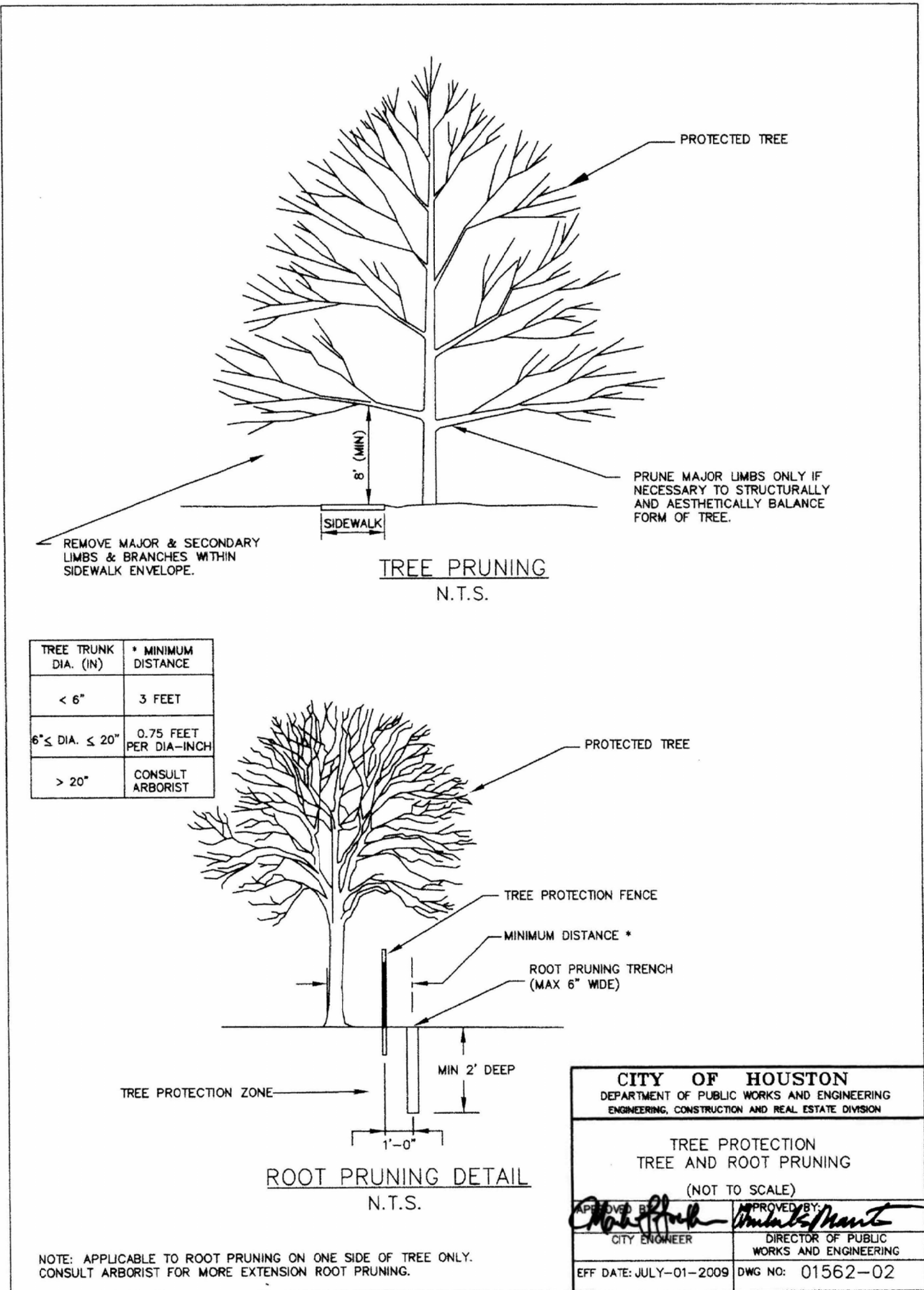
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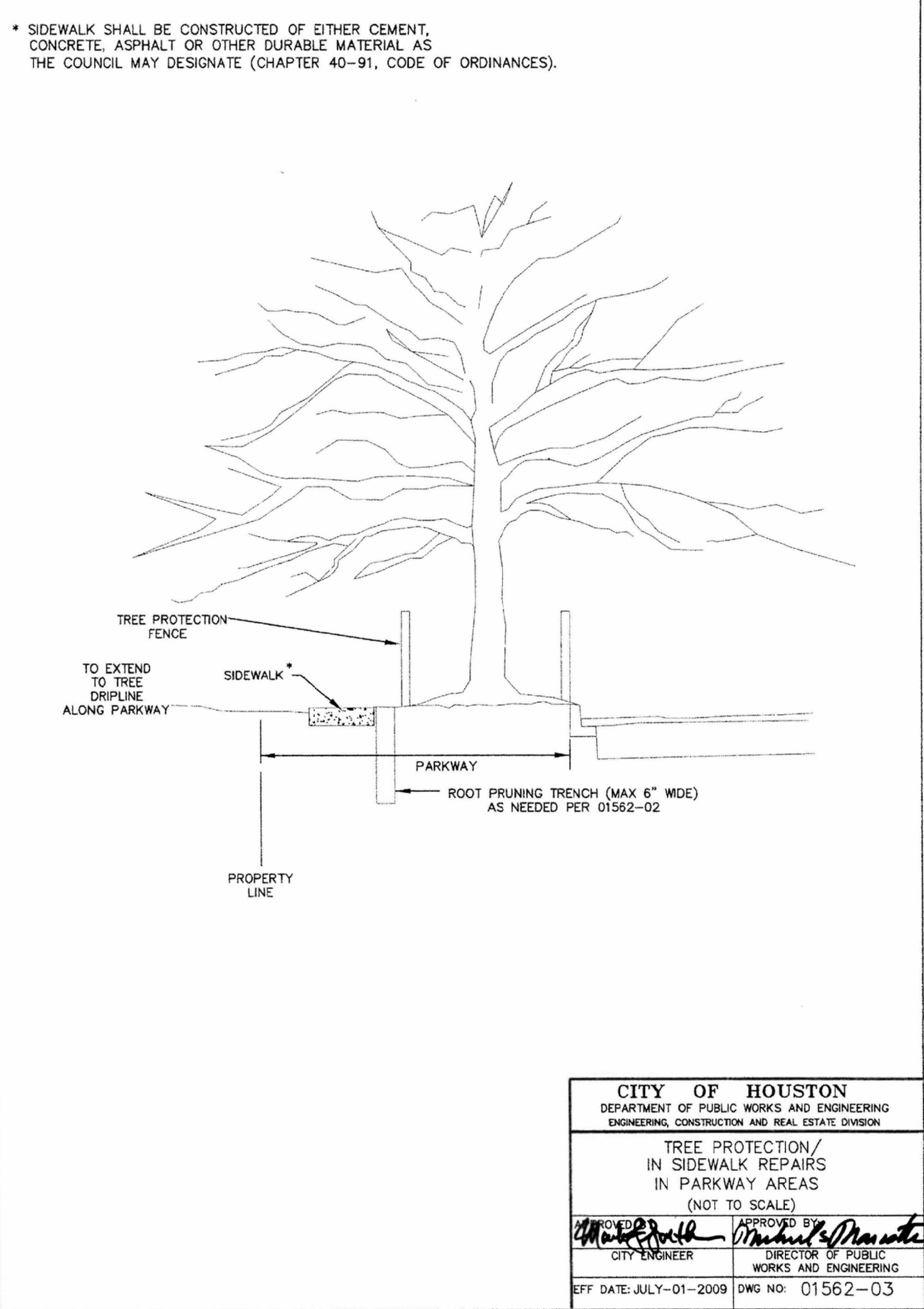
CITY DWG. NO.:

TREE PROTECTION NOTES:

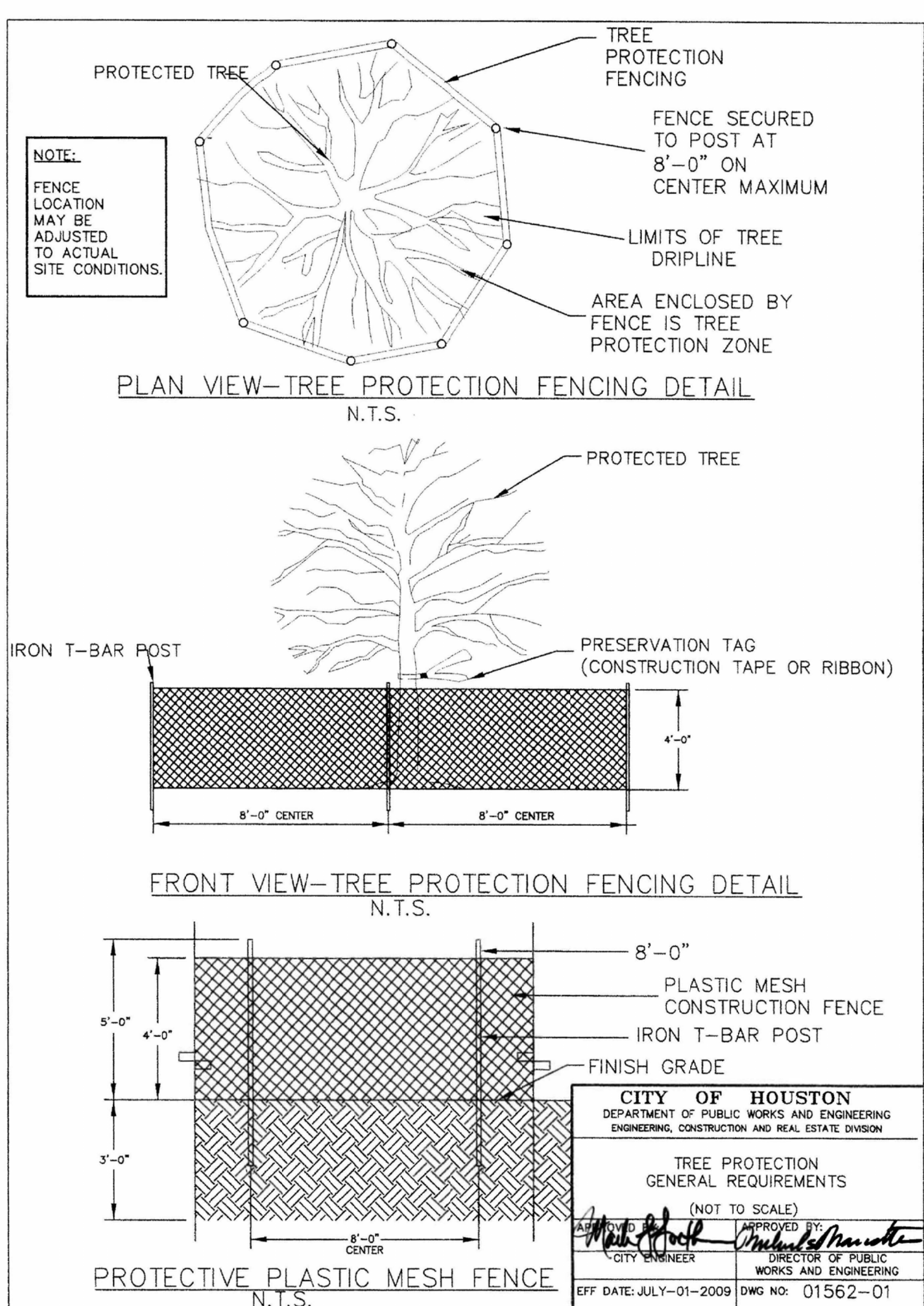
- IT IS CRUCIAL THAT TREE PROTECTION FENCE MUST BE ERECTED PRIOR TO ANY SITE DEMOLITION BEGIN.
- TREE PROTECTION FENCE SHALL BE A MIN. 5'-0" HIGH CHAIN LINK FENCE MOUNTED ON VERTICAL PIPES DRIVEN 2'-0" MIN. INTO THE GROUND, AT APPROX. 6'-8" O.C. REFER TO PLAN FOR LOCATIONS
- PROTECTION FENCE SHALL BE PLACED AROUND CRITICAL ROOT ZONE OF ALL TREES TO BE RETAINED.
- UPON APPROVAL BY OWNER OR LANDSCAPE ARCHITECT. OTHER FENCING MATERIAL MAY BE USED IN LIEU OF CHAIN LINK FENCE. SUCH AS:
 - T-POSTS AT 8'-0" O.C. W/ 4' HT. BRIGHT ORANGE, LIGHT WEIGHT, REUSABLE MESH SAFETY FENCING MADE OF HIGH DENSITY POLYETHYLENE WITH 1 1/2" X 3" SIZE MESH OR SIMILAR MATERIAL.
- UNDER NO CIRCUMSTANCES, DO NOT DRIVE OR PARK MACHINERY ON TREE ROOTS OR UNDER THE DRIPLINE.
- AVOID DISTURBING ROOTS IN CRITICAL ROOT ZONE. IF ROOT CUTTING IS NECESSARY OR ANY DAMAGED ROOTS OCCURRED, THEY SHALL BE CUT CLEANLY WITH AN AXE A FEW INCHES CLOSER TO THE TRUNK. ANY COVERED/EXPOSED OR PRUNED TREE ROOTS MUST BE COVERED IMMEDIATELY WITH DIRT AND MULCH TO PREVENT ROOTS FROM DRYING OUT.
- NO STORAGE OR CONCRETE DUMPING IS PERMITTED ON TREE ROOTS AND/OR UNDER DRIPLINE.
- NO BUILDING MATERIALS ARE TO BE STACKED OR STOCKPILED WITHIN THE DRIPLINE OR WITHIN 6 FEET OF ANY TREE TO BE PRESERVED, WHICHEVER IS GREATER.
- TOPSOIL SHALL NOT BE STOCKPILED WITHIN THE DRIP LINE OR WITHIN 6 FEET OF ANY TREE TO BE PRESERVED, WHICHEVER IS GREATER.
- AVOID DISTURBING ROOTS IN CRITICAL ROOT ZONE. ANY DAMAGED ROOTS SHALL BE CUT CLEANLY WITH AN AXE A FEW INCHES CLOSER TO THE TRUNK.
- ANY UNCOVERED/EXPOSED TREE ROOTS SHALL BE IMMEDIATELY COVERED WITH MULCH.
- ANY UNDERSTORY CLEARING WITHIN SIX FEET OF EXISTING TREE TRUNKS SHOULD BE DONE BY HAND.
- CITY OF HOUSTON URBAN FORESTER MUST BE PRESENT AND APPROVE ANY ROOT CUTTING.
- CONTRACTOR IS REQUIRED TO HIRE AN URBAN FORESTER TO MONITOR AND ASSIST WITH FIELD LAYOUT (EXACT LOCATIONS OF FENCING, ROOT PRUNING, AND ZERO CURB CUTBACK) OF THE TREE PRESERVATION PROGRAM DURING DEMOLITION AND CONSTRUCTION TO ENSURE TREE PROTECTION PROCEDURES AND TECHNIQUES ARE PRACTICED AS SPECIFIED TO ADDRESS CONCERNS AND CONDITIONS WHICH OCCUR IN THE FIELD. AT A APPROX., THE INDIVIDUAL RESPONSIBLE FOR MONITORING AND FIELD LAYOUT OF THE TREE PROTECTION SHALL HAVE AN APPROX. OF 5 YEARS OF EXPERIENCE AS A CONSULTANT, AND SHALL NOT BE AFFILIATED WITH A TREE CARE CONTRACTOR IN THE HOUSTON AREA. QUALIFICATIONS OF THE SELECTED URBAN FORESTER SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND CITY OF HOUSTON URBAN FORESTRY DEPARTMENT.
- PROPOSED UTILITY WITHIN TREE PROTECTION ZONE SHALL BE EITHER BORE PIT, TUNNELING OR TRENCH EXCAVATION PER CITY OF HOUSTON OR CONTRACTOR ARBORIST RECOMMENDATION.
- ALL CLEARANCE PRUNING AND ROOT PRUNING MUST BE REVIEWED AND APPROVED AT SITE AFTER THE SITE IS SURVEYED BEFORE PERFORMING BY HPARD, URBAN FORESTRY.
- ALL PRUNING MUST BE PERFORMED IN ACCORDANCE WITH ANSI A300 (PART 1) - 2021 AMERICAN NATIONAL STANDARD FOR TREE CARE OPERATIONS (PRUNING), OR LATEST APPROVED VERSION. THIS DOCUMENT MAY BE OBTAINED ONLINE FOR A FEE AT WWW.ANSI.ORG.
- PRUNING SHALL BE DONE WITH CLEAN, SHARP TOOLS. TO PREVENT BARD TEARS, THE WEIGHT OF THE BRANCH SHALL BE REMOVED BEFORE MAKING FINAL PRUNING CUT.
- ONLY COLLAR CUTS ARE ACCEPTABLE. NO FLUSH CUTS OR STUB CUTS WILL BE ALLOWED.
- ALL BRANCHES THAT ARE BROKEN OR DAMAGED DURING CONSTRUCTION SHALL BE REMOVED.
- PRUNING CUTS OR DAMAGED AREAS ON AN OAK TREE SHALL BE PAINTED WITHIN FIVE MINUTES WITH A STANDARD TREE WOUND DRESSING. TREE WOUND DRESSING SHALL BE EITHER TREEKOTE AEROSOL OR TANGLEFOOT PRUNING SEALER (OR APPROVED EQUAL). THE ALSO APPLIES TO WOUNDS CREATED BY CONSTRUCTION VEHICLES OR EQUIPMENT.



1 TREE AND ROOT PRUNING
 NTS



2 TREE PROTECTION / IN SIDEWALK
 REPAIRS IN PARKWAY AREAS
 NTS



3 TREE PROTECTION FENCING
 GENERAL REQUIREMENTS
 NTS

ISSUE LOG

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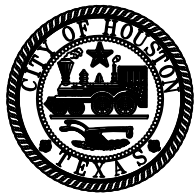


Parks Capital
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PARK NAME :

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 TIRZ #13



CITY OF HOUSTON
 GENERAL SERVICES
 DEPARTMENT

REVIEWED :

PARS PROGRAM MANAGER N/A
HERMANN PARK CONSERVANCY

PROJECT MANAGER

DATE : _____

WBS. No : [F-000870-0001]

SCALE : [AS NOTED]

DRAWN BY : _____

CHECKED BY : _____

DATE : _____

WBS. No : [F-000870-0001]

SCALE : [AS NOTED]

DRAWN BY : _____

CHECKED BY : _____

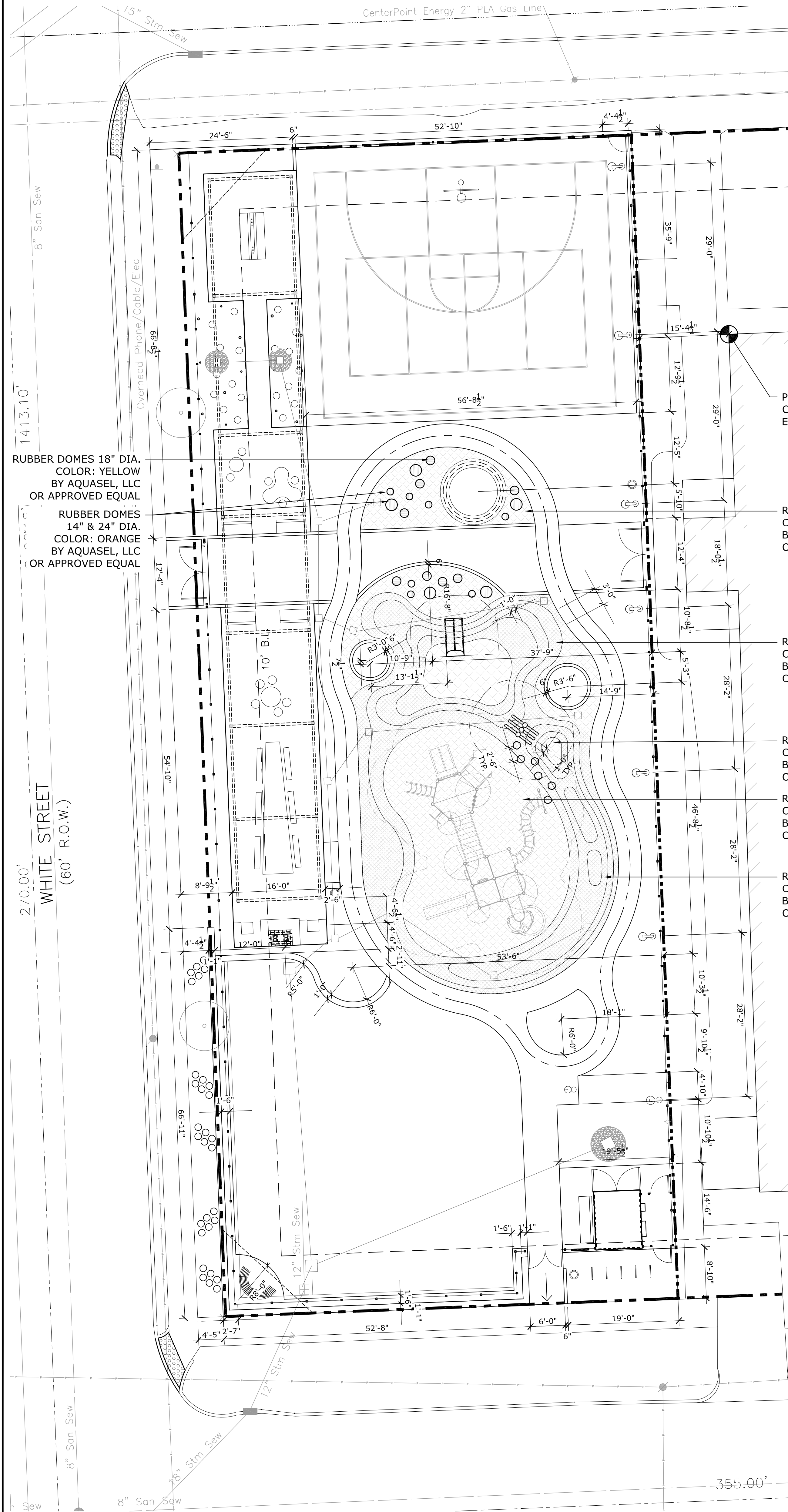
SHEET TITLE :

TREE
 PROTECTION
 DETAILS

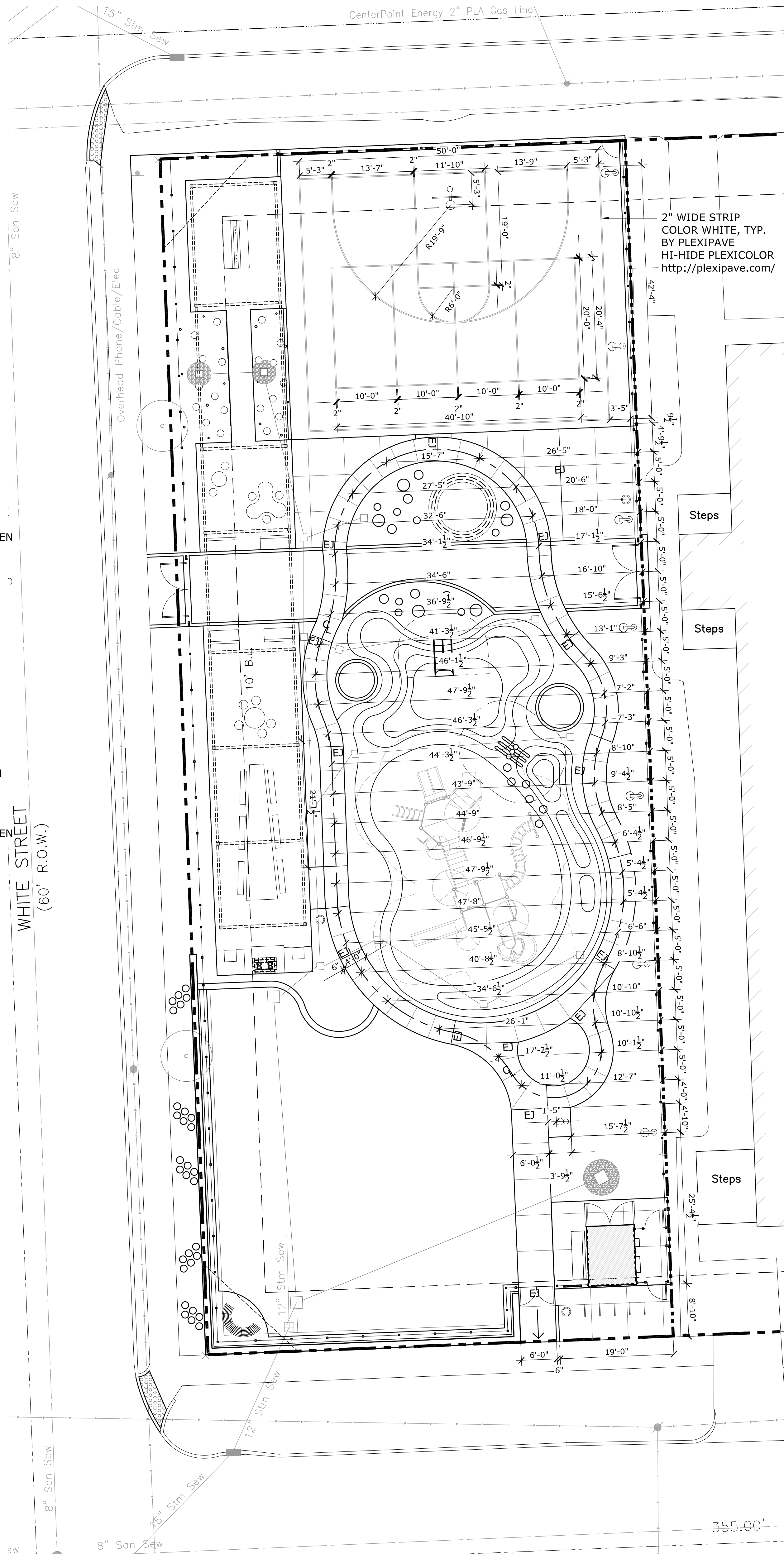
SHEET NO. :

L - 1.1

CITY DWG. NO. : _____



1 DIMENSION PLAN - AREA
Scale: 1"=10'-0"



2 DIMENSION PLAN - PATH AND SPORT COURT
Scale: 1"=10'-0"

CONSTRUCTION NOTES :

1. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THE PLANS, AND CONSULTING WITH SITE SUPERINTENDENT, APPROPRIATE AGENCIES, IN ORDER TO DETERMINE THE LOCATION OF ALL UNDERGROUND UTILITIES, PIPES, AND STRUCTURES. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF SAID UTILITIES.
2. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE ACCURATE LOCATION OF PROPERTY LINES, EASEMENTS, AND SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.
3. CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT CONSTRUCTIONS AREA DISCREPANCIES AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATIONS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH SUBCONTRACTORS, AS REQUIRED TO ACCOMPLISH ALL CONSTRUCTION OPERATIONS. ALL PIPING, CONDUIT, SLEEVES, ETC., SHALL BE SET IN PLACE PRIOR TO INSTALLATION OF CONSTRUCTION ITEMS.
5. IF APPLICABLE, ALL EXISTING TREES AND TREE PRESERVATION AREAS SHALL BE PROTECTED PRIOR AND DURING CONSTRUCTION WITH TEMPORARY FENCING AS FOLLOWS. FENCE PROTECTION SHALL BE PLACED AROUND DRIP LINE OF ALL CLUSTERS OF TREES TO BE RETAINED. PROTECTION FENCE SHALL BE 5' METAL CHAIN LINK FENCE WITH POSTS AT 8'-0" O.C. CONTRACTOR MAY USE 4' T-POST WITH 4' ORANGE FIBERGLASS FENCING OR SIMILAR MATERIAL ONLY WITH PRIOR APPROVAL BY OWNER OR LANDSCAPE ARCHITECT.
6. CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OF ANY EXISTING MATERIALS THAT ARE DAMAGED DURING CONSTRUCTION. MATERIALS INCLUDE EITHER HARDSCAPE AND LANDSCAPE.
7. ALL DIMENSIONS ARE MEASURED FROM FACE OF VERTICAL ELEMENTS. DIMENSIONS TAKEN FROM ROAD EDGE ARE FROM BACK OF CURB (B.O.C.) UNLESS OTHERWISE NOTED ON PLANS.
8. ALL CONSTRUCTION ITEMS FORMED WITH A COMPACTED SUBGRADE AND/OR REINFORCING STEEL SHALL BE OBSERVED AND APPROVED PRIOR TO INSTALLATION BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
9. WHEN IN DOUBT, CONTRACTOR SHALL STAKE THE LOCATIONS OF ALL SIDEWALKS, WALLS, OR ANY HARDSCAPE ELEMENT FOR APPROVAL BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO COMMENCING CONSTRUCTION.
10. WHEN REQUIRED BY OWNER, CONTRACTOR SHALL SUBMIT 4'X 4' SAMPLES (OR SIZE AS REQUESTED BY OWNER), OF ALL PAVING WITH JOINTS IN PLACE, PAVING ALTERNATES, FINISH AND COLORS. ALL SAMPLES SHALL BE APPROVED BY OWNER'S AUTHORIZED REPRESENTATIVE, PRIOR TO CONSTRUCTION.
11. EXPANSION JOINTS SHALL BE PLACED IN ALL CASES WHERE CONCRETE OR NEW PAVING ABUTS VERTICAL STRUCTURES OR CONCRETE CURB.

ISSUE LOG		
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1	04.03.2015	100% DD
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8	09.27.2018	BID & CONSTRUCTION

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[METALAB]

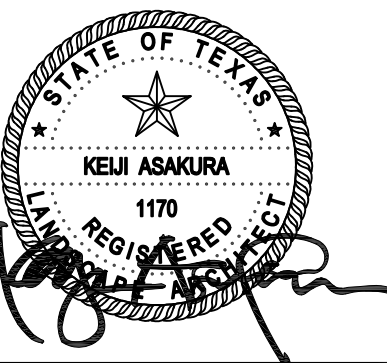
2003 Kane Street
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SEAL:



Parks Capital Improvement Program

for City of Houston
General Services Department and
Parks & Recreation Department

PARK NAME :

DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13



CITY OF HOUSTON
GENERAL SERVICES
DEPARTMENT

REVIEWED :

PARCS PROGRAM MANAGER: N/A
HERNANN PARK CONSERVANCY

PROJECT MANAGER

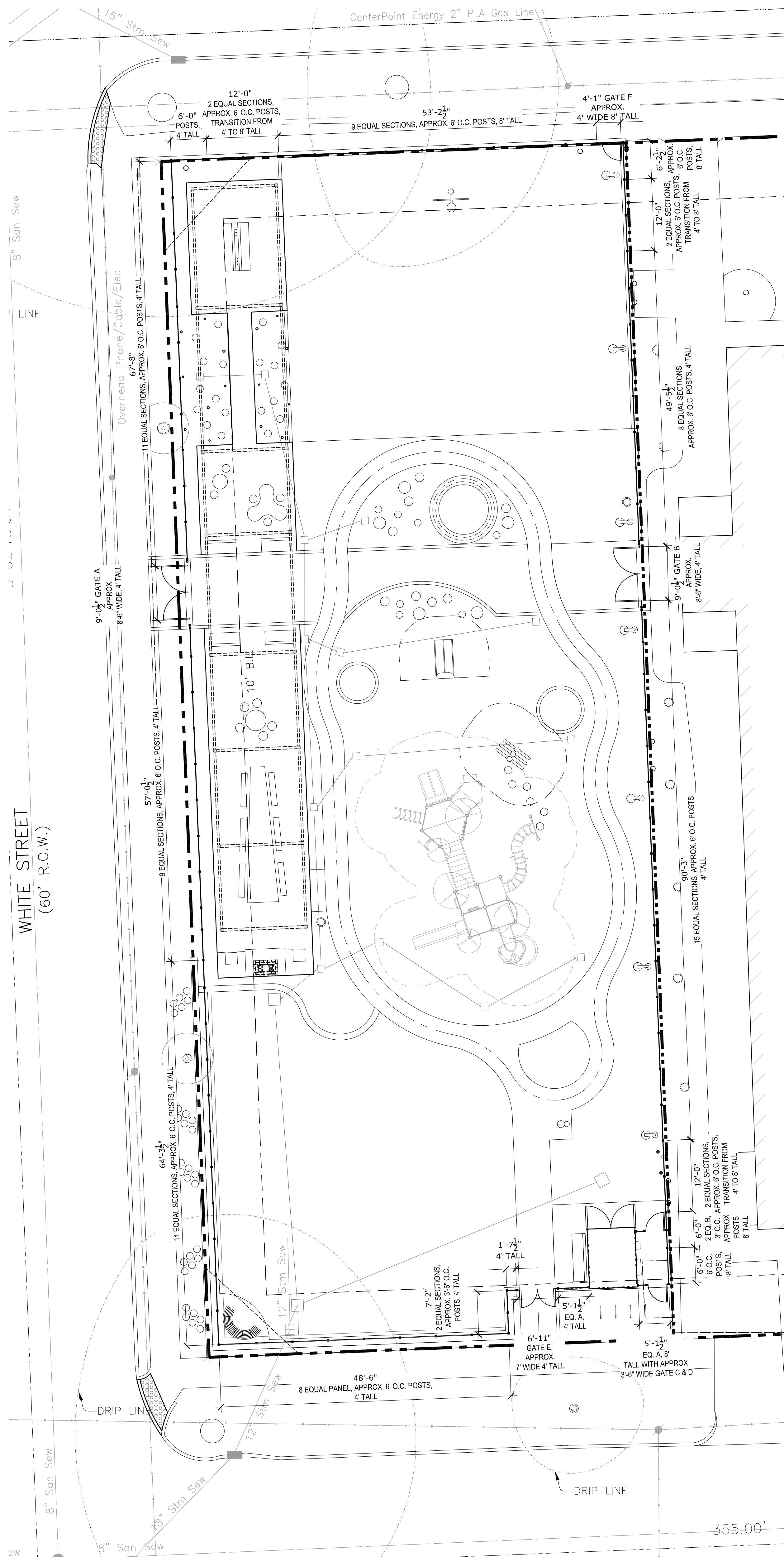
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SHEET TITLE :
LAYOUT PLANS

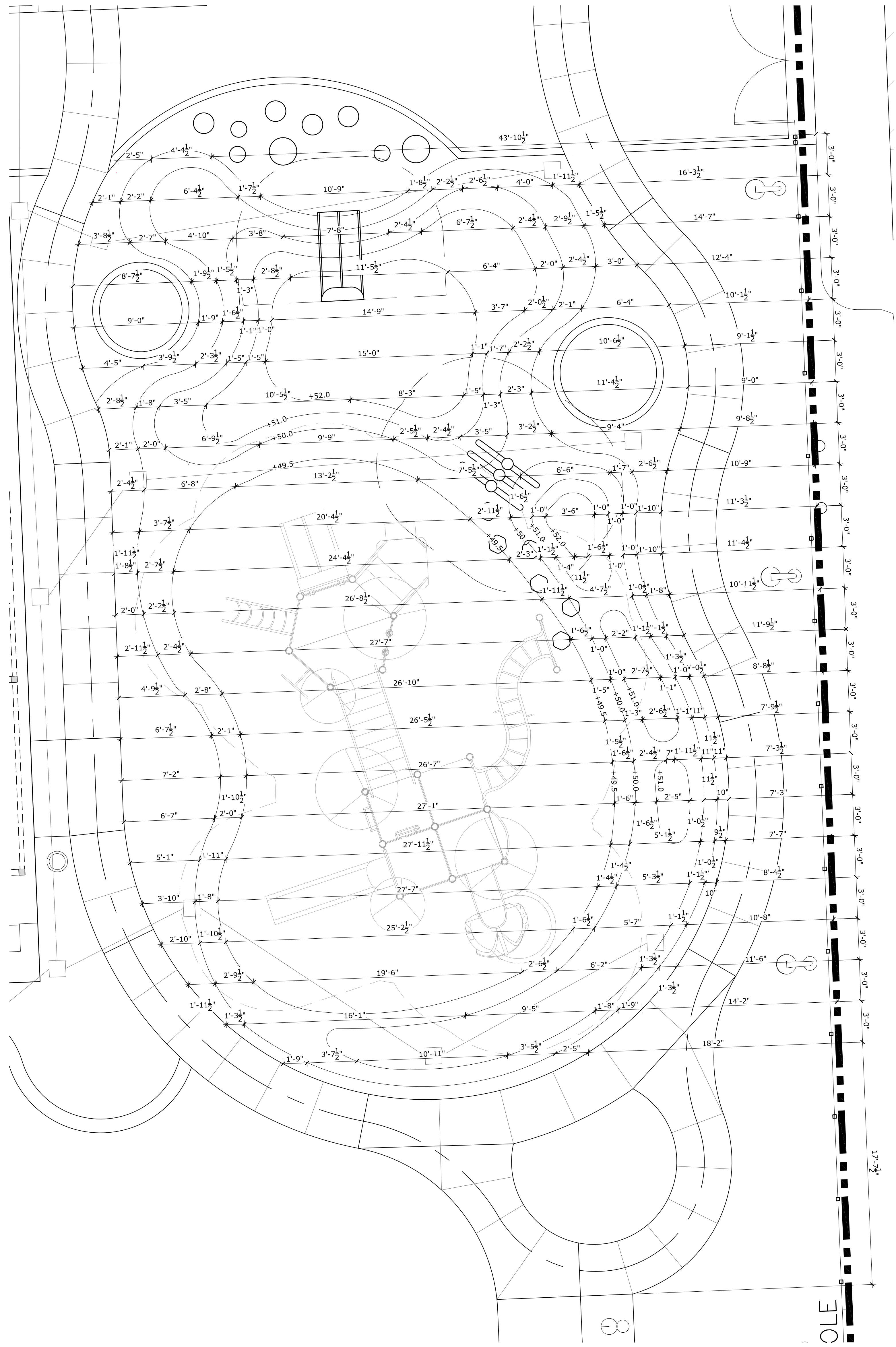
SHEET NO. :

L - 2.0

CITY DWG. NO. :



1 DIMENSION PLAN - FENCE AND GATES
Scale: 1"=10'-0"



2 DIMENSION PLAN - BERMS
Scale: 1/4"=1'-0"

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CITY OF HOUSTON
GENERAL SERVICES
DEPARTMENT

REVIEWED :

PARKS PROGRAM MANAGER _____ N/A
HERNAN PARK CONCERNACY

PROJECT MANAGER _____

DATE : _____
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SCALE : [AS NOTED]
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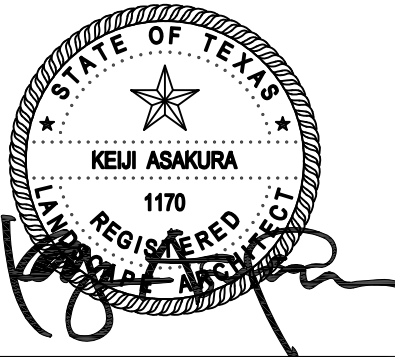
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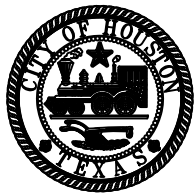


Parks Capital Improvement Program

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1900 Kane Street Houston TX 77007
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CITY OF HOUSTON GENERAL SERVICES DEPARTMENT

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PARKS PROGRAM MANAGER N/A
HERNANN PARK CONSERVANCY

PROJECT MANAGER

DATE : _____

WBS. No : [F-000870-0001]

SCALE : [AS NOTED]

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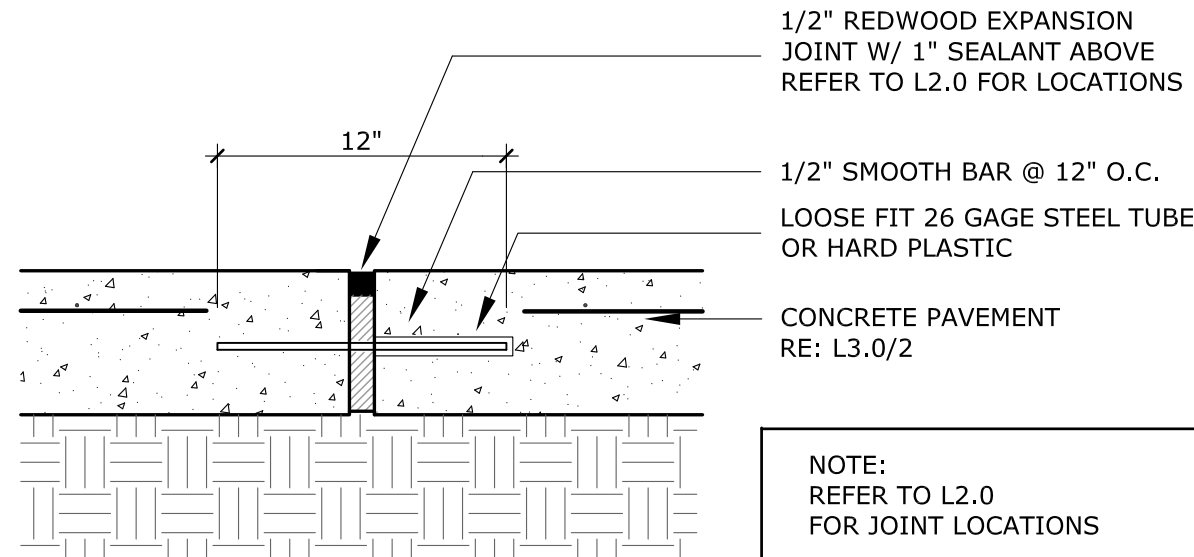
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HARDSCAPE DETAILS

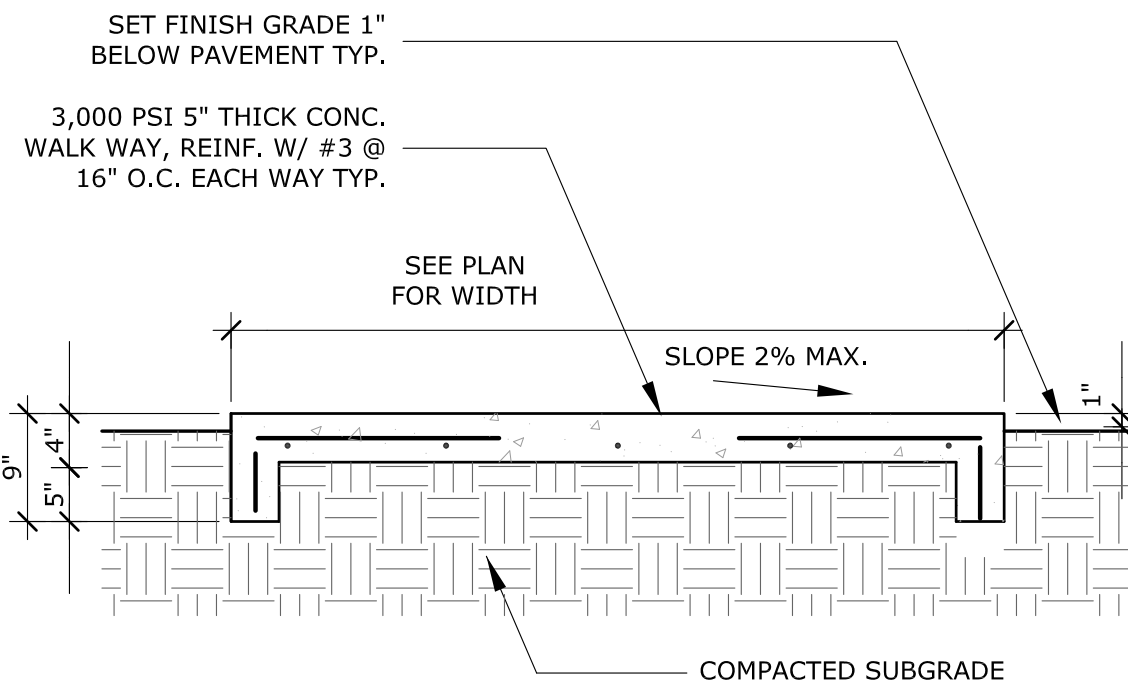
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L - 3.0

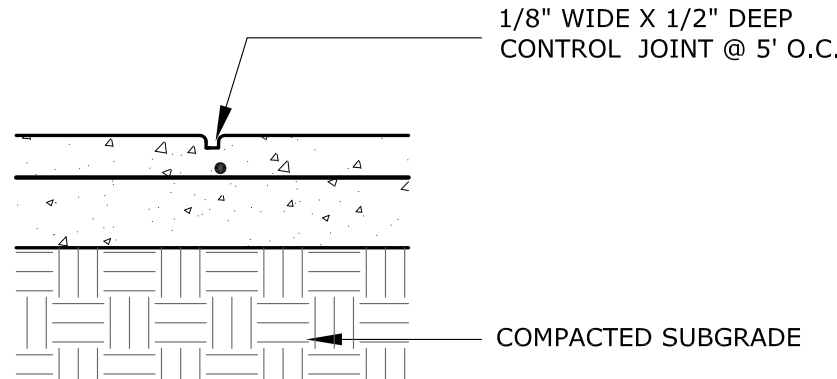
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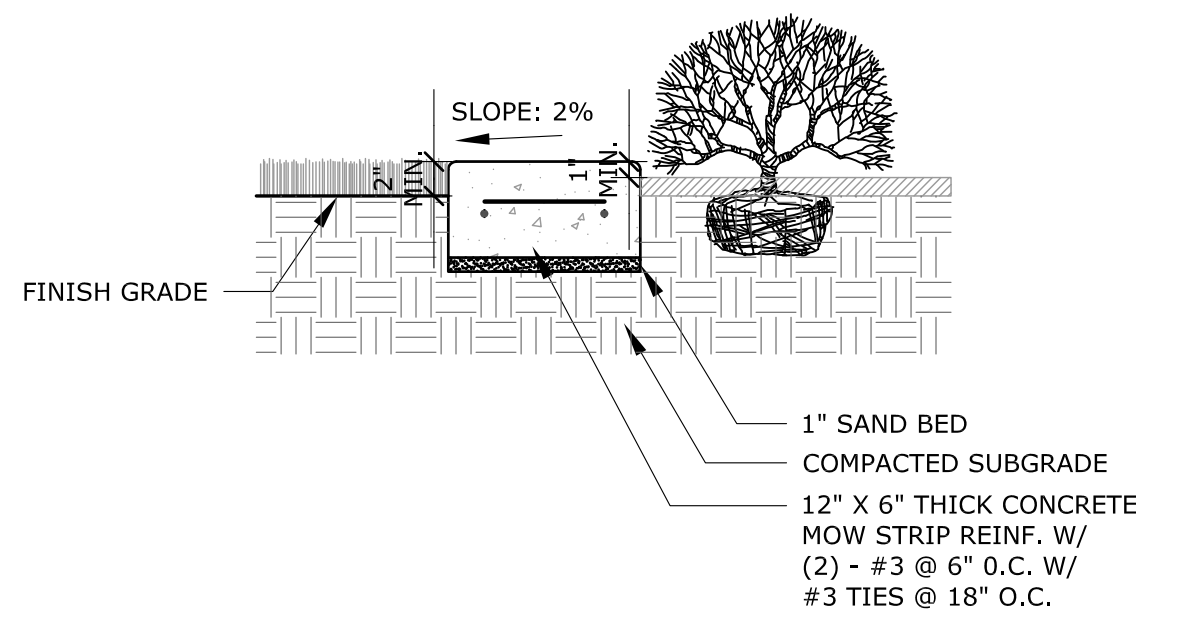
1 TYP. EXPANSION JOINT DETAIL
Scale: 1 1/2"=1'-0"



2 TYP. CONCRETE SIDEWALKS
Scale: 3/4"=1'-0"

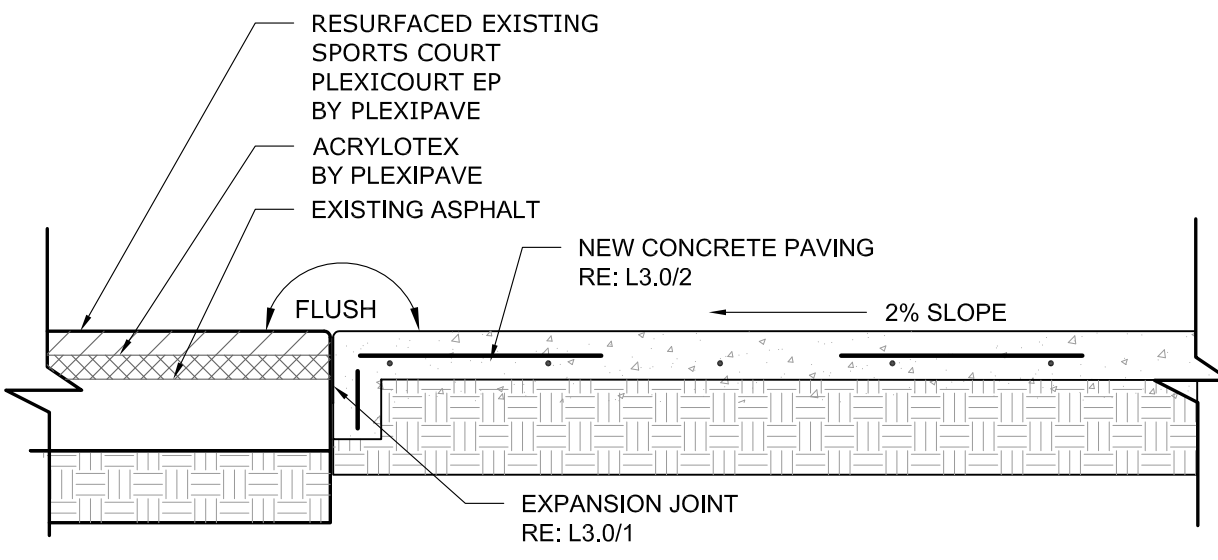


3 TYP. CONTROL JOINT DETAIL
Scale: 1 1/2"=1'-0"

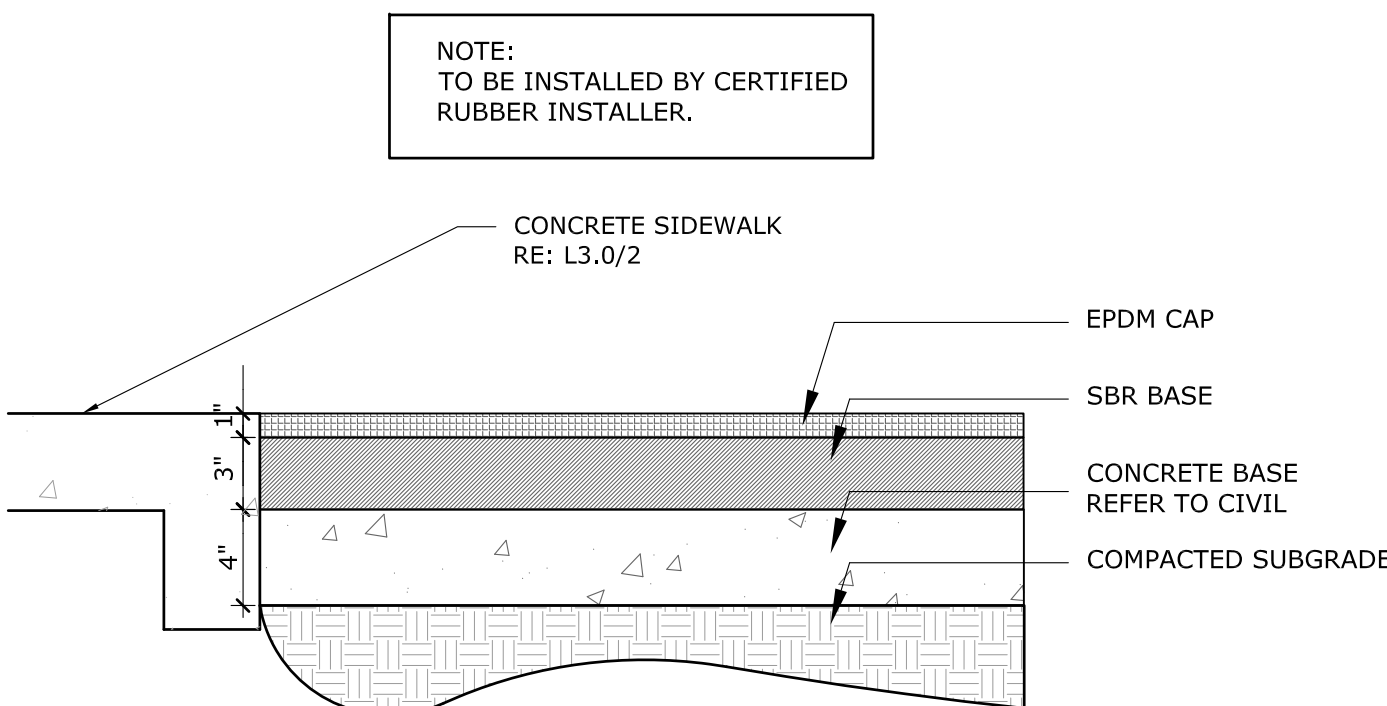


4 TYP. CONCRETE MOW STRIP
SCALE: 1"=1'-0"

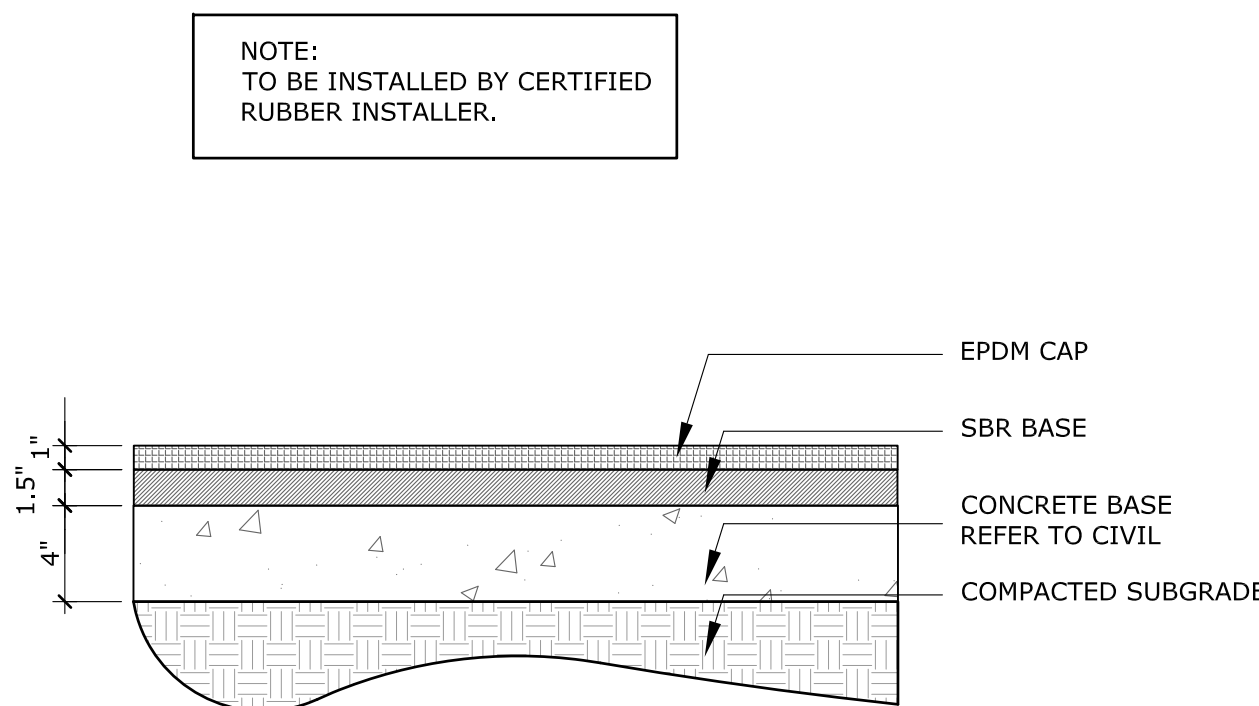
NOTE:
SPACING OF CONTROL JOINT ON CURB IS
5', SPACING OF EXPANSION JOINT IS 20'.
RE: L3.0/1, 3



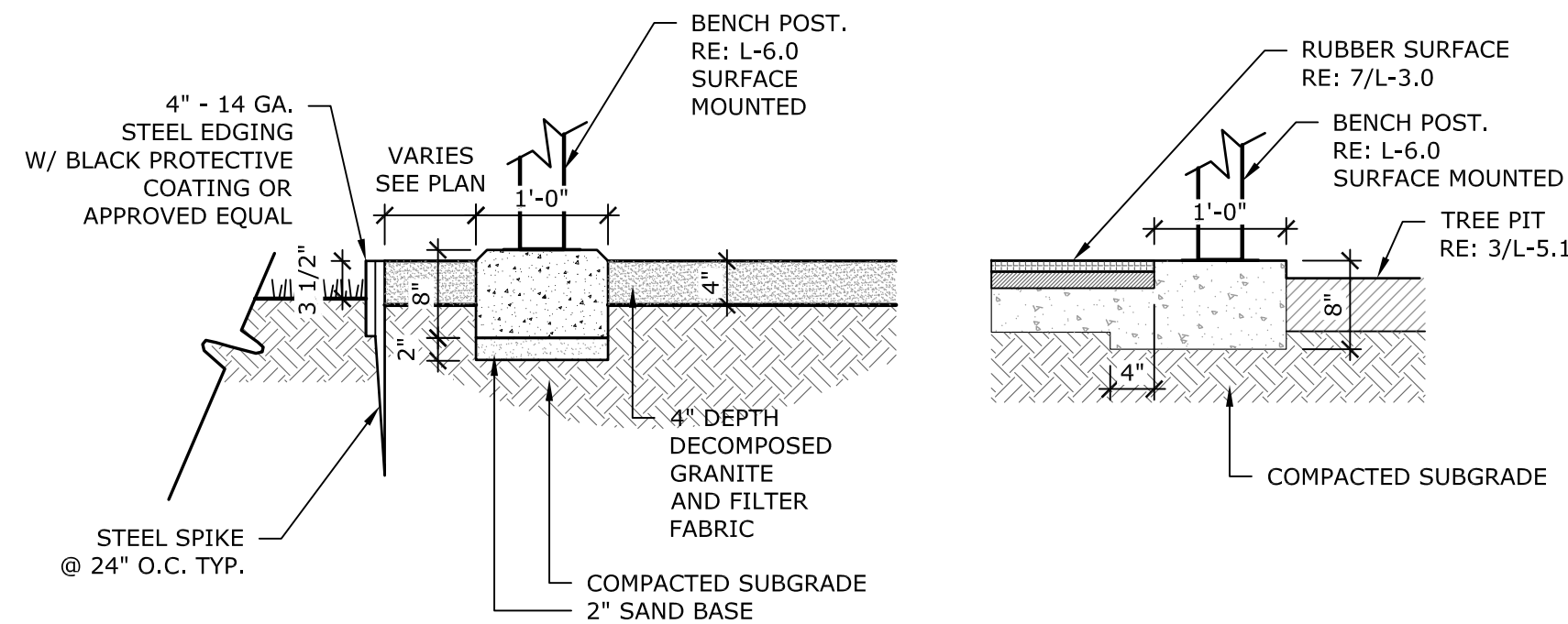
5 EXISTING ASPHALT AT NEW CONCRETE PAVING
Scale: 3/4"=1'-0"



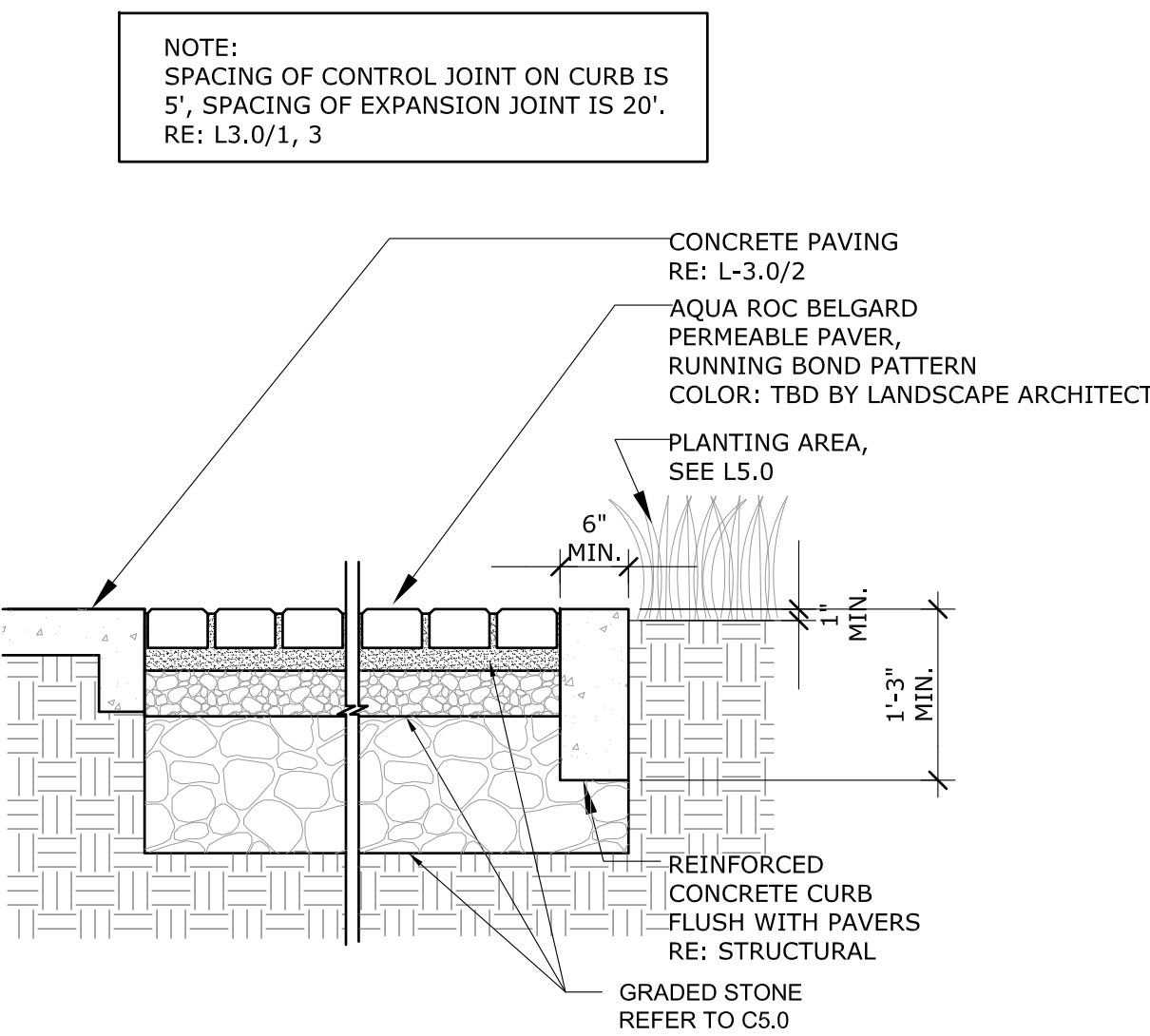
6 FALL ZONE POURED-IN-PLACE
RUBBER SURFACE DETAIL
Scale: 1 1/2"=1'-0"



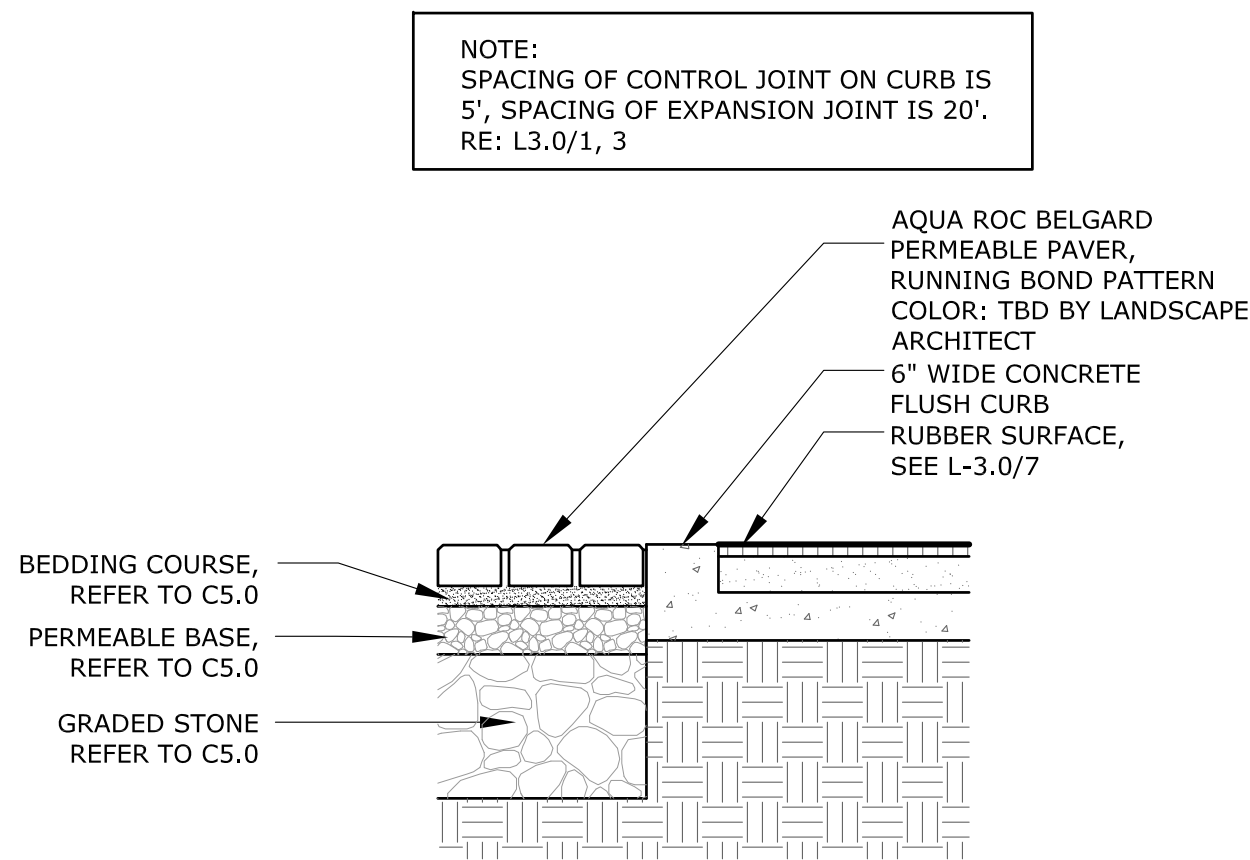
7 TYP. POURED-IN-PLACE
RUBBER SURFACE DETAIL
Scale: 1 1/2"=1'-0"



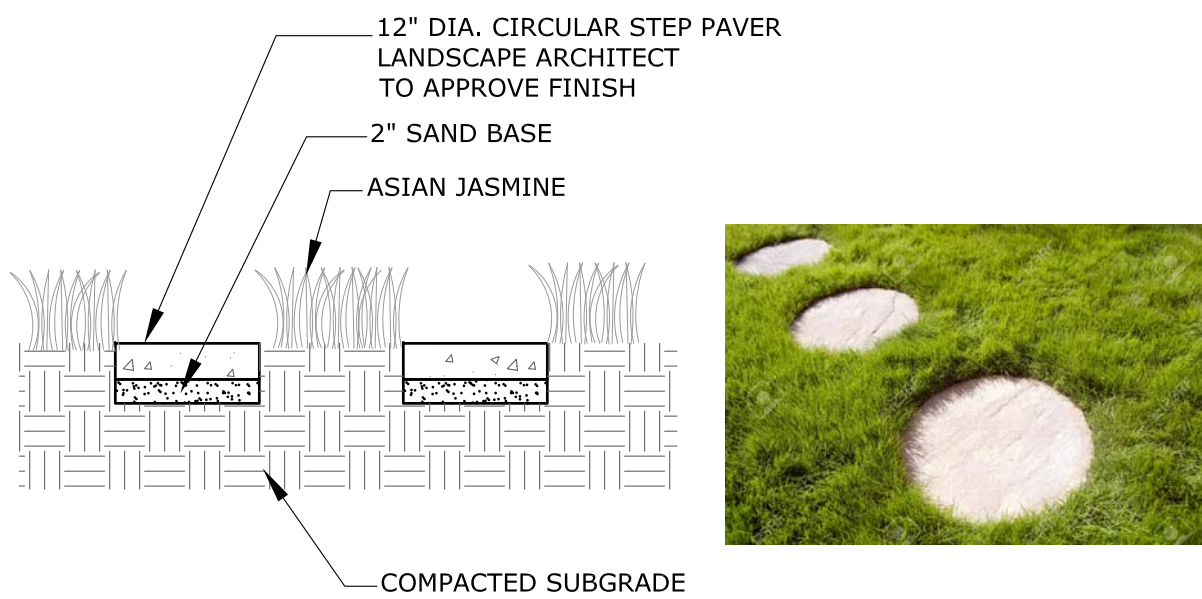
8 RIBBON CURB AT BENCH
3/4"= 1'-0"



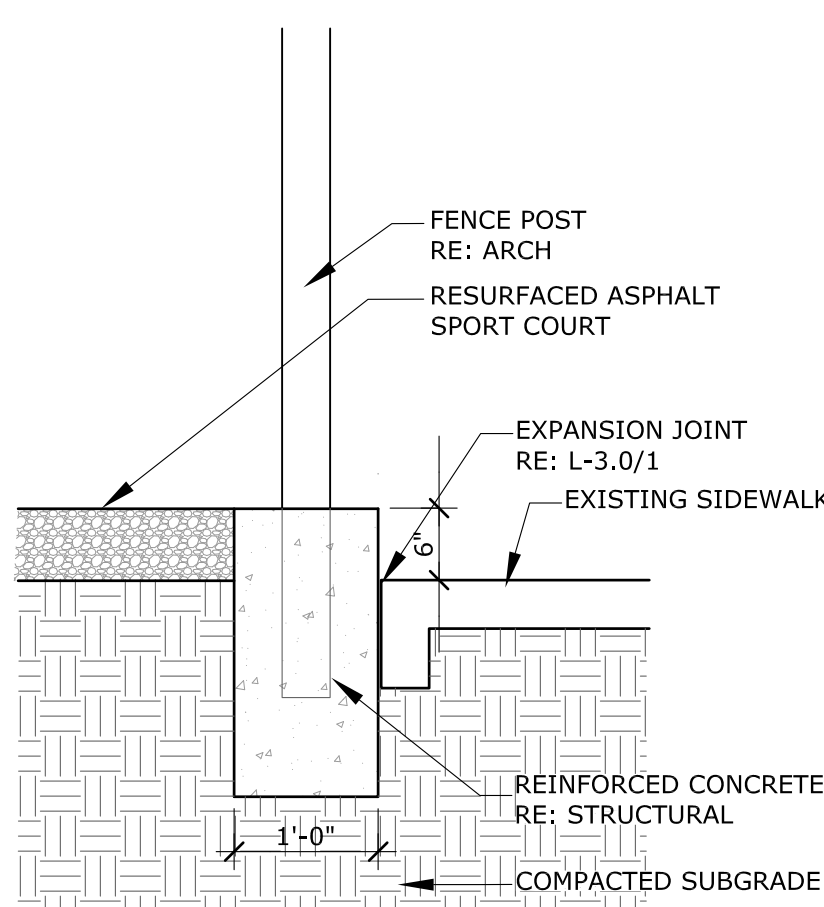
9 PERMEABLE PAVING DETAIL
Scale: 3/4" = 1'-0"



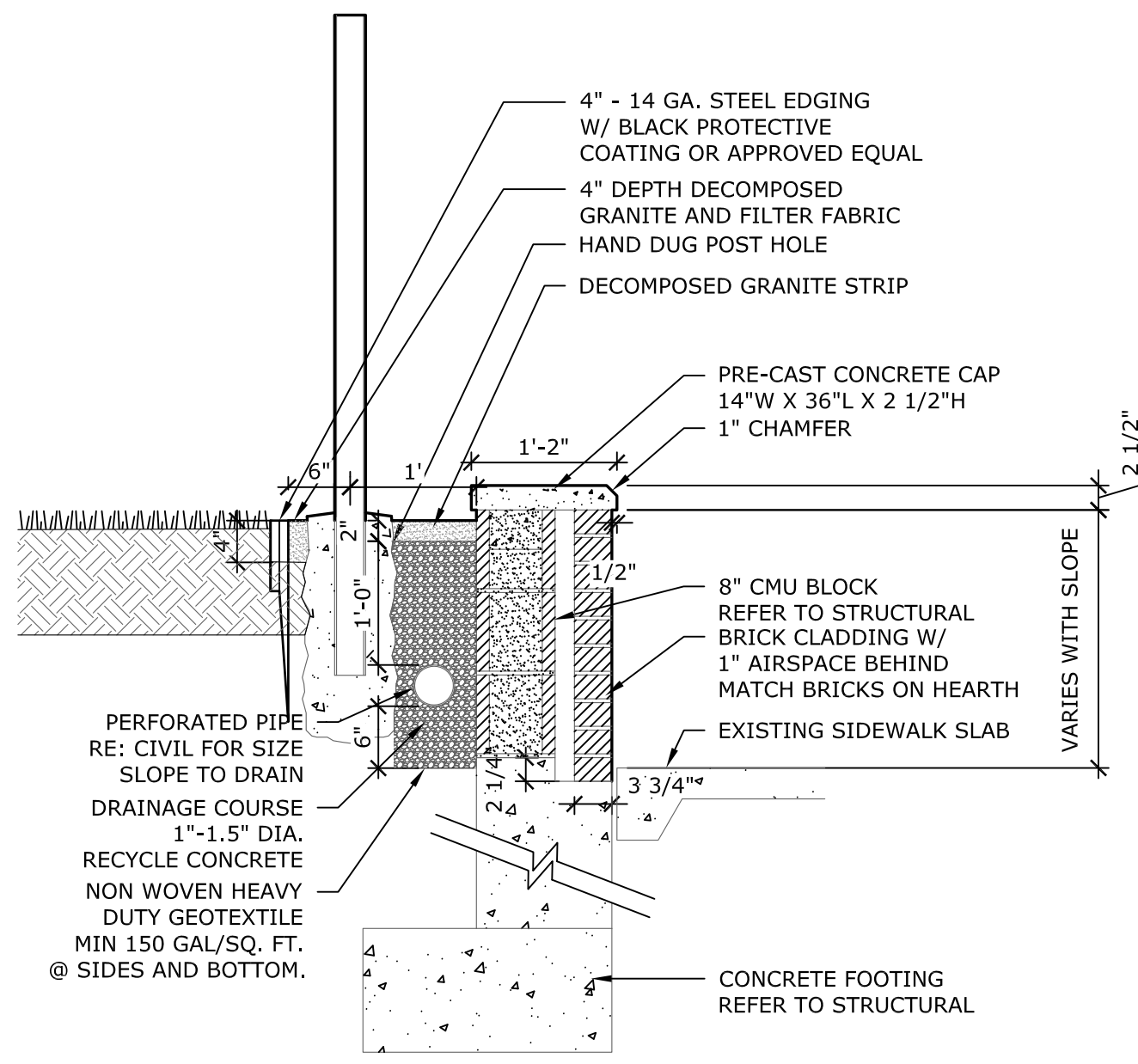
10 PERMEABLE PAVING DETAIL
Scale: 3/4" = 1'-0"



11 STEP PAVER DETAIL
Scale: 3/4" = 1'-0"



12 FENCE POST AT CONCRETE EDGE
Scale: 3/4" = 1'-0"



13 SEATWALL WITH FENCE
Scale: 3/4" = 1'-0"

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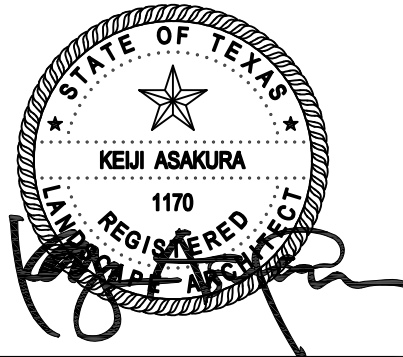
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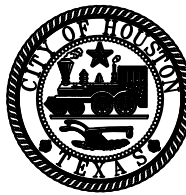
SEAL:



Parks Capital Improvement Program
for City of Houston
General Services Department and
Parks & Recreation Department

PARK NAME :

DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13



CITY OF HOUSTON
GENERAL SERVICES
DEPARTMENT

REVIEWED :

PARKS PROGRAM MANAGER N/A
HERMANN PARK CONSERVANCY

PROJECT MANAGER

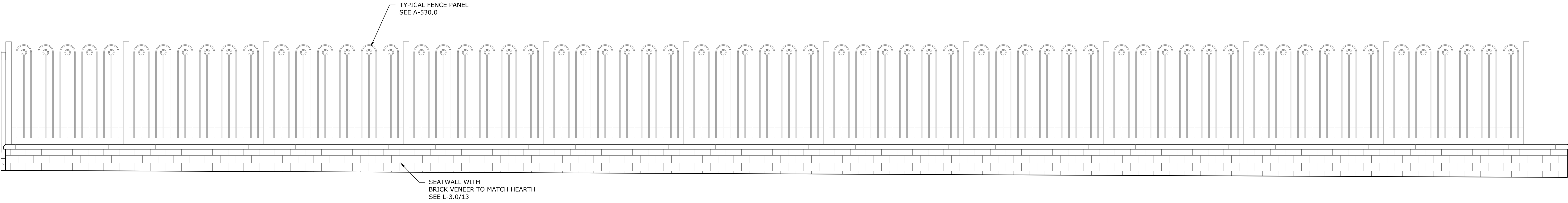
DATE :
WBS. No : [F-000870-0001]
SCALE : [AS NOTED]
DRAWN BY :
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SHEET TITLE :
**HARDSCAPE
DETAILS**

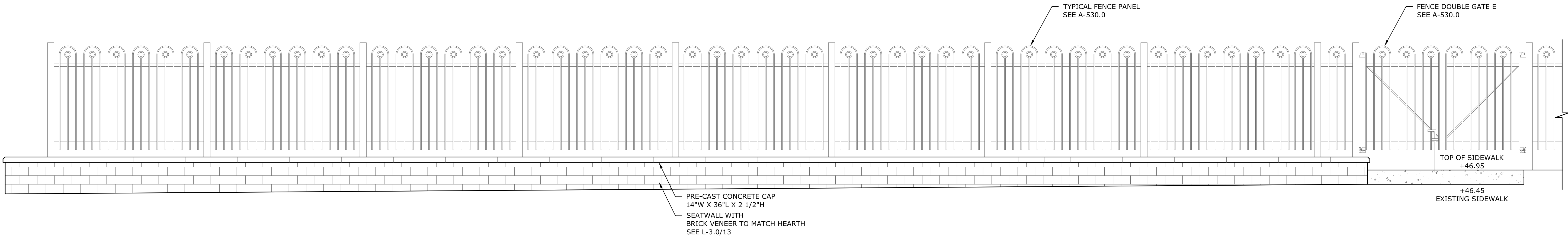
SHEET NO. :

L - 3.1

CITY DWG. NO. :

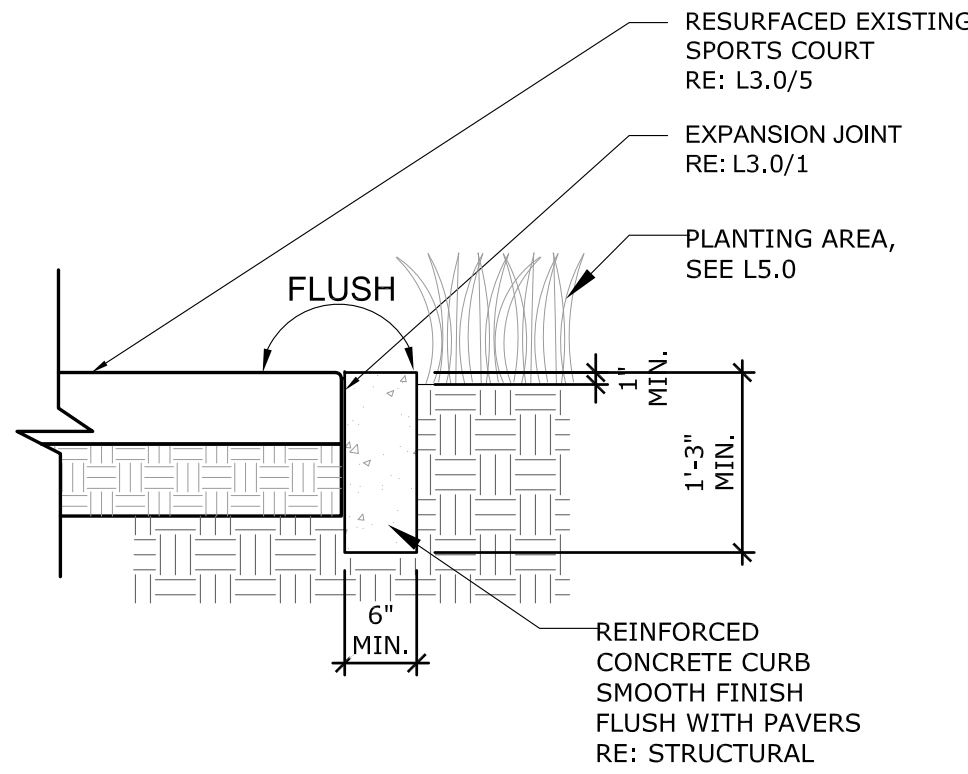


1 FENCE AND SEATWALL WEST ELEVATION
Scale: 1/2"=1'-0"

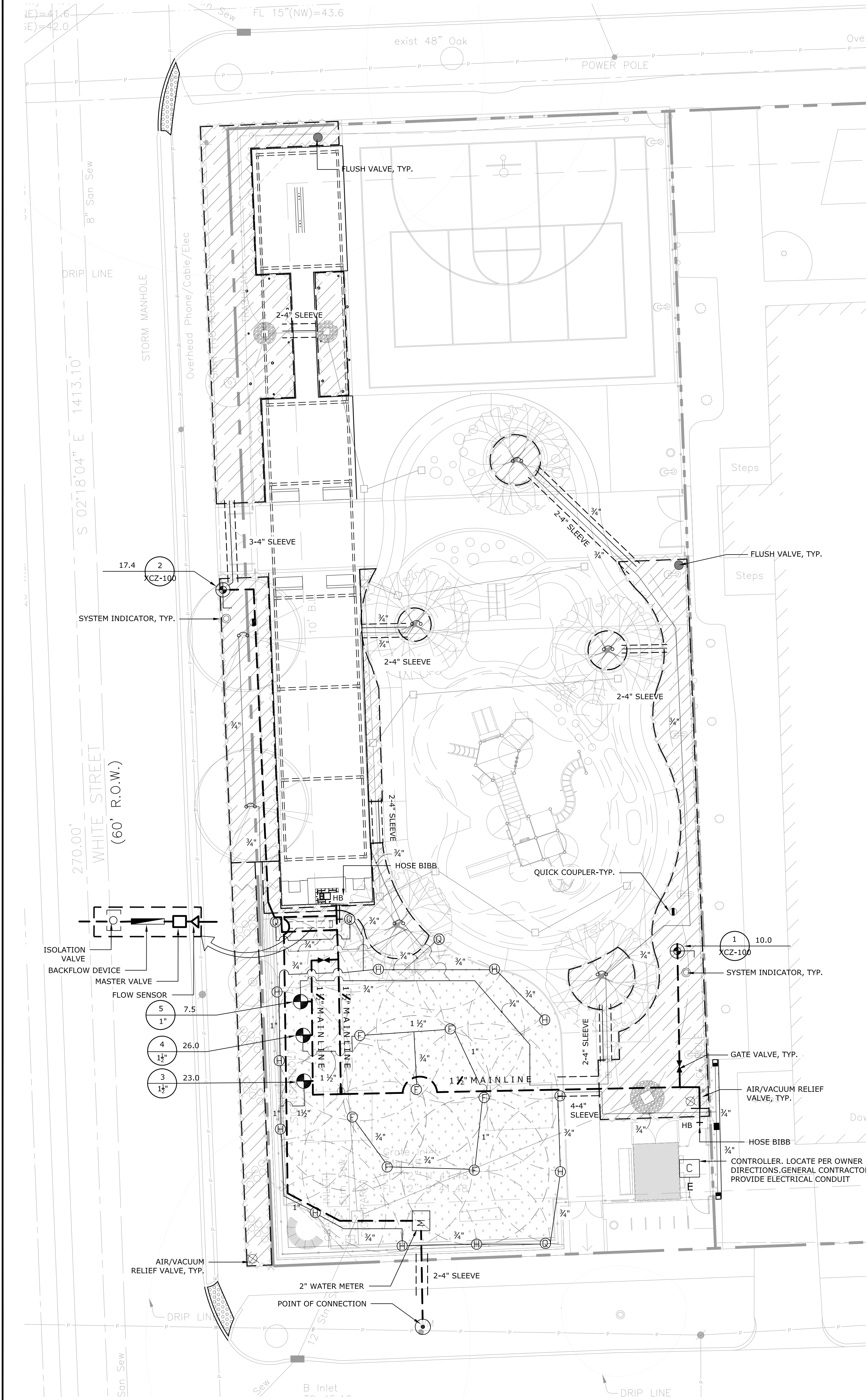


2 FENCE AND SEATWALL SOUTH ELEVATION
Scale: 1/2"=1'-0"

NOTE:
SPACING OF CONTROL JOINT ON CURB IS
5', SPACING OF EXPANSION JOINT IS 20'.
RE: L3.0/1, 3



5 EXISTING ASPHALT AT CONCRETE CURB
Scale: 3/4"=1'-0"



IRRIGATION NOTES :

- PLANS AS SHOWN ARE DIAGRAMMATIC ONLY. ALL IRRIGATION VALVES, MAINLINES, QUICK COUPLERS, HEADS, ETC. ARE TO BE PLACED IN PLANTING AREAS. GATE VALVES AND REMOTE CONTROL VALVES SHALL BE PLACED IN SHRUB OR TALL GRASS AREAS WHERE POSSIBLE.
- LOCATE AND STAKES ALL UNDERGROUND CONDUITS AND UTILITIES ASSOCIATED WITH BUT NOT LIMITED TO: CTMS, CTMS POWER SUPPLY, LIGHTING, SIGNAL WIRES AND DETECTORSGAS, ELECTRICAL, TELEPHONE, FIBER OPTICS, ETC.
- LOCATE AND STAKES EXISTING GROUND BOXES, INLETS, CULVERTS, MANHOLES, ETC. WITHIN THE PROJECT AREA WITH A 4" WOODEN STAKE PAINTED ORANGE. MAINTAIN THE STAKES IN PLACE FOR DURATION OF CONTRACT. REMOVE STAKES AS DIRECTED BY LANDSCAPE ARCHITECT.
- CONDUCT A COMPLETE INVENTORY AND ANALYSIS OF SITE CONDITIONS, INCIDENTAL CONSTRUCTION SUCH AS BORING, MAINLINE ADJUSTMENT, SIDEWALK REMOVAL AND REPLACEMENT, UTILITY ADJUSTMENTS, ETC., WILL NOT BE PAID FOR SEPERATELY UNLESS SHOWN ON PLANS.
- SEE IRRIGATION SCHEDULE AND DETAILS SHEETS FOR MATERIALS SPECIFICATIONS, SIZES AND REQUIREMENTS.
- AT ANY TIME DURING ALL PHASES OF THE CONTRACT, ANY MATERIALS OR WORK PERFORMED NOT IN ACCORDANCE WITH THE PLANS AND SPEFICATIONS WILL BE REPLACED AND/OR REWORKED UNTIL IN COMPLIANCE.
- DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS ILLUSTRATED ON THE PLAN WHEN FIELD ANALYSIS REVEALS CONDITIONS AND/OR DIFFERENCES THAT MIGHT NOT HAVE BEEN CONSIDERED IN TH ENGINEERING. ANY ADJUSTMENTS DUE TO THE FAILURE TO COMPLY WITH PLANS AND SPECIFICATIONS SHOWN WILL BE AT THE CONTRACTORS EXPENSE.
- THE CONTRACTOR SHALL AT ALL TIMES PROTECT HIS WORK FROM DAMAGE AND THEFT AND REPLACE ALL DAMAGED OR STOLEN PARTS AT HIS EXPENSE UNTIL RECEIPT OF CERTIFICATION OF SUBSTANTIAL COMPLETION.
- THE CONTRACTOR SHALL PROVIDE AND COORDINATE THE INSTALLATION OF 4" AND 6" SCH. 40 P.V.C. SLEEVES, AS SHOWN ON THE PLANS WITH GENERAL CONTRACTOR. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF METALLIC SLEEVES FEATURES SUCH AS CURB, WALKS, WALLS, ETC.
- ALL LATERAL LINE PIPING UNDER PAVING SHALL BE RUN THROUGH SCHEDULE 40 PVC INSTALLED PRIOR TO INSTALLATION OF PAVING.
- PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS. NO SUBSTITUTIONS OF SMALLER SIZES WILL BE PERMITTED. ALL DAMAGED OR REJECTED PIPES SHALL BE REMOVED FROM SITE AND REPLACED IMMEDIATELY UPON REJECTION.
- CONTRACTOR SHALL FLUSH AND ADJUST THE SYSTEM FOR OPTIMUM PERFORMANCE. THIS INCLUDES ADJUSTING THE PRESSURE REGULATING VALVE TO OBTAIN OPTIMUM PRESSURE, AND ADJUSTING NOZZLES FOR PROPER COVERAGE.
- ADJUST RADIUS & ANGLE OF HEADS SO THAT WATER DOES NOT HIT BUILDINGS, WALLS, OR STREETS AS MUCH AS POSSIBLE.
- ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR SHALL REVISE AND REPAIR PARTS OF THE SYSTEM DISTURBED DURING CONSTRUCTION BEFORE FINAL INSPECTION BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE.
- FILL AND GRADE SMOOTH ALL HOLES, DEPRESSIONS, AND RUTS THAT ARE THE RESULT OF WORK PERFORMED UNDER THIS CONTRACT. ALL AREAS ARE TO PROVIDE POSITIVE DRAINAGE AND OUTFALL.
- THE CONTRACTOR SHALL CONSULT WITH LANDSCAPE ARCHITECT BEFORE INITIATING ANY PROPOSED MODIFICATIONS TO THE SYSTEM AS SHOWN ON THE PLANS.
- ALL MATERIALS AND EQUIPMENT SHALL CONFORM TO APPLICABLE CODES AND REQUIREMENTS OF THE STATE OF TEXAS, CITY OF HOUSTON AND/OR THE COUNTY PROJECT IS LOCATED.
- EXTREME CARE SHALL BE EXERCISED WHEN EXCAVATING NEAR TREES. NO MECHANICAL TRENCHING SHALL BE PERMITTED BELOW THE CANOPY OF EXISTING TREES. CONTRACTOR SHALL ADJUST TRENCH PATH/OR EXCAVATE BY HAND TO AVOID DAMAGE TO EXISTING TREE ROOTS.
- ALL SPRINKLER EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
- MAINLINE SHALL BE CAPPED AT LIMIT OF WORK AND CONTROLLER WIRES SHALL RUN FROM CONTROLLER TO LIMIT OF WORK AND PLACED IN PULL BOX FOR FUTURE PHASES IF APPLICABLE.
- IRRIGATION IN TEXAS IS REGULATED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) (MC-178) P.O. BOX 13087 AUSTIN TX, 78711-3087. www.tceq.state.tx.us
- CONTRACTOR TO INSTALL IRRIGATION HEADS AT 12" AWAY FROM BLDG FOUNDATION. ALL SHRUB/GROUND COVER HEADS SHALL BE ON 18" POPUP RISER.
- CONTRACTOR TO PROVIDE AS BUILT DRAWINGS AFTER INSTALLATION. THE DRAWING SHOULD OUTLINE EACH ZONE CLEARLY.
- ALL WIRED SPLICE SHALL BE PLACED IN A VALVE BOX.
- LOCATE MOISTURE SENSOR WITHIN 3' DIA OF WIRED SPLICE BOX. MARKED MOISTURE SENSOR LOCATIONS WITH A COLOR MARKER ON SITE.
- CONTRACTOR TO PROVIDE ONE EXTRA RED WIRE FROM CONTROLLER TO FURTHEST VALVE.
- FURNISH THE LANDSCAPE ARCHITECT A SET OF AS-BUILT DRAWINGS ON REPRODUCIBLE 24X36 FILM BASE SHEETS UPON COMPLETION OF THE INSTALLATION OF THE IRRIGATION SYSTEM. THE AS-BUILT DRAWINGS WILL BE VERIFIED THAT THEY ARE A TRUE RECORD OF THE PROJECT CONDITIONS. SHOW ALL VALVE LOCATIONS ON DRAWINGS BY TRIANGULATION FROM A FIXED OBJECT. SHOW ACTUAL LOCATION OF MAIN AND LATERAL LINES FROM A FIXED OBJECT.
- PROVIDE INSTRUCTIONS COVERING FULL OPERATION, CARE AND MAINTENANCE OF THE EQUIPMENT, INCLUDING A SCHEDULE SHOWING TIME EACH VALVE IS OPEN TO PROVIDE DETERMINED AMOUNT OF WATER, AND INSTRUCT PERSONNEL DESIGNATED BY ARCHITECT IN PROPER OPERATION OF THE SYSTEM.
- 4" FOR GRASS. 12" FOR SHRUB/GROUND COVER.
- CONTRACTOR TO PROVIDE POWER.
- CONTRACTOR TO PROVIDE A FULLY OPERABLE, FUNCTIONING SYSTEM.
- IRRIGATION CONTRACTOR WILL PLACE IN-GROUND BOXES FOR VALVES AND QUICK COUPLERS ALONG THE LAWN EDGE PER OWNER'S REQUEST TO PRESERVE OPEN LAWN FOR PLAY.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER	MODEL NO./MANUFACTURER	PSI	RADIUS	GPM
	RAINBIRD OR EQUAL	ROOT ZONE WATERING SYSTEM RWS-M-B-C-1402	25	1'-3'	0.5
	RAINBIRD OR EQUAL	XFS ON-SURFACE DRIPLINE @ 12" EMITTER & ROW SPACING	20	SEE DRAWINGS	0.60 GPH
	RAIN BIRD	1804-PRS-HE VAN15 FOR GRASS 1812-PRS-HE VAN 15 FOR SHRUB/GROUND COVER	30	15'	3.70, 1.85, 0.93
	RAIN BIRD	CENTER STRIP 15 SST / SIDE STRIP - 15 LCS & 15 RCS	30	5' x 15'	1.21, 0.49
	RED AND WHITE	LINE SIZE GATE VALVE			
	APPROVED	MAIN LINE -18" MIN. COVER (TO BE SCHEDULE 40 PVC, SEE SPECIFICATION FOR SCHEDULE 80 PVC)			
	APPROVED	CLASS 200 PVC LATERAL LINE- MIN 12" COVER (1/2" DIA. PIPE TO BE CLASS 315)			
	HYDROPOINT 12-48 STATIONS	WEATHERTRAK ET PRO 3 12 STATIONS OUTDOOR WITH WEATHER TRAX ET EVERY WHERE SERVICE & FLOW SENSOR, IN WALL MOUNTED STAINLESS STEEL ENCLOSURE. CONTRACTOR TO LOCATE CONTROLLER PER OWNER DIRECTIONS. http://hydropoint.com			
	RAINBIRD	OPERIND - SYSTEM INDICATOR X17500			
	RAINBIRD OR EQUAL	FLUSH VALVE			
	RAINBIRD OR EQUAL	AIR/VACUUM RELIEF VALVE			
	APPROVED	LOCKABLE HOSE BIB * CONTRACTOR TO PROVIDE PRODUCT SUBMITTAL AND GET APPROVAL PRIOR TO INSTALLATION.			
	FEBCO	2" #765 PRESSURE BACKFLOW PREVENTER(with STRONG BOX enclosure SBBC-22 AL, include lock & key)			
	APPROVED	SCH40 PVC SLEEVE SIZE AS SHOWN ON PLAN			
		VALVE STATION NUMBER SYSTEM GALLONAGE VALVE SIZE			
	RAINBIRD	100/150-PEB SERIES VALVE REMOTE CONTROL VALVE (SIZE AS NOTED ON PLAN)			
	RAINBIRD	XCZ-100-PRB-COM CONTROL KIT WITH 25 PSI PRESSURE REGULATOR			
	DATA INDUSTRIAL	FLOW SENSOR: 2" DATA INDUSTRIAL			
	RAINBIRD	MASTER VALVE : PEB SERIES			
	RAINBIRD	1" 5-LRC BRASS QUICK COUPLING VALVE OR EQUAL PROVIDE WASTE WATER CAUTION STICKERS, PURPLE LID & CAP			
	APPROVED	2" WATER METER VERIFY LOCATION ON SITE			
	APPROVED	BRASS ISOLATION VALVE			
	APPROVED	2" ELECTRICAL CONDUIT FOR WIRES FROM CONTROLLER TO VALVES			

NOTES:
- ALL VALVE BOX TO BE RECTANGLE 12X18 OR LARGER, CARSON BRAND.

DESIGN PRESSURE: 45 PSI

ISSUE LOG

NO.	DATE	DESCRIPTION
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2	09.04.2015	50% CD
3	10.10.2016	75% CD
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6	11.03.2017	100% CD
7	12.18.2017	PERMIT SET
8	09.27.2018	BID & CONSTRUCTION

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SEAL:



Parks Capital Improvement Program
for City of Houston
General Services Department and
Parks & Recreation Department

PARK NAME :

DOW SCHOOL PARK
1900 Kane Street Houston TX 77007
TIRZ #13



CITY OF HOUSTON
GENERAL SERVICES
DEPARTMENT

REVIEWED :

N/A
PARKS PROGRAM MANAGER HERMAN PARK CONCERNENCY

PROJECT MANAGER

DATE : _____
WBS. No. : [L-NNNN-NN-3]
SCALE : [AS NOTED]
DRAWN BY : _____
CHECKED BY : _____

SHEET TITLE :

IRRIGATION PLAN

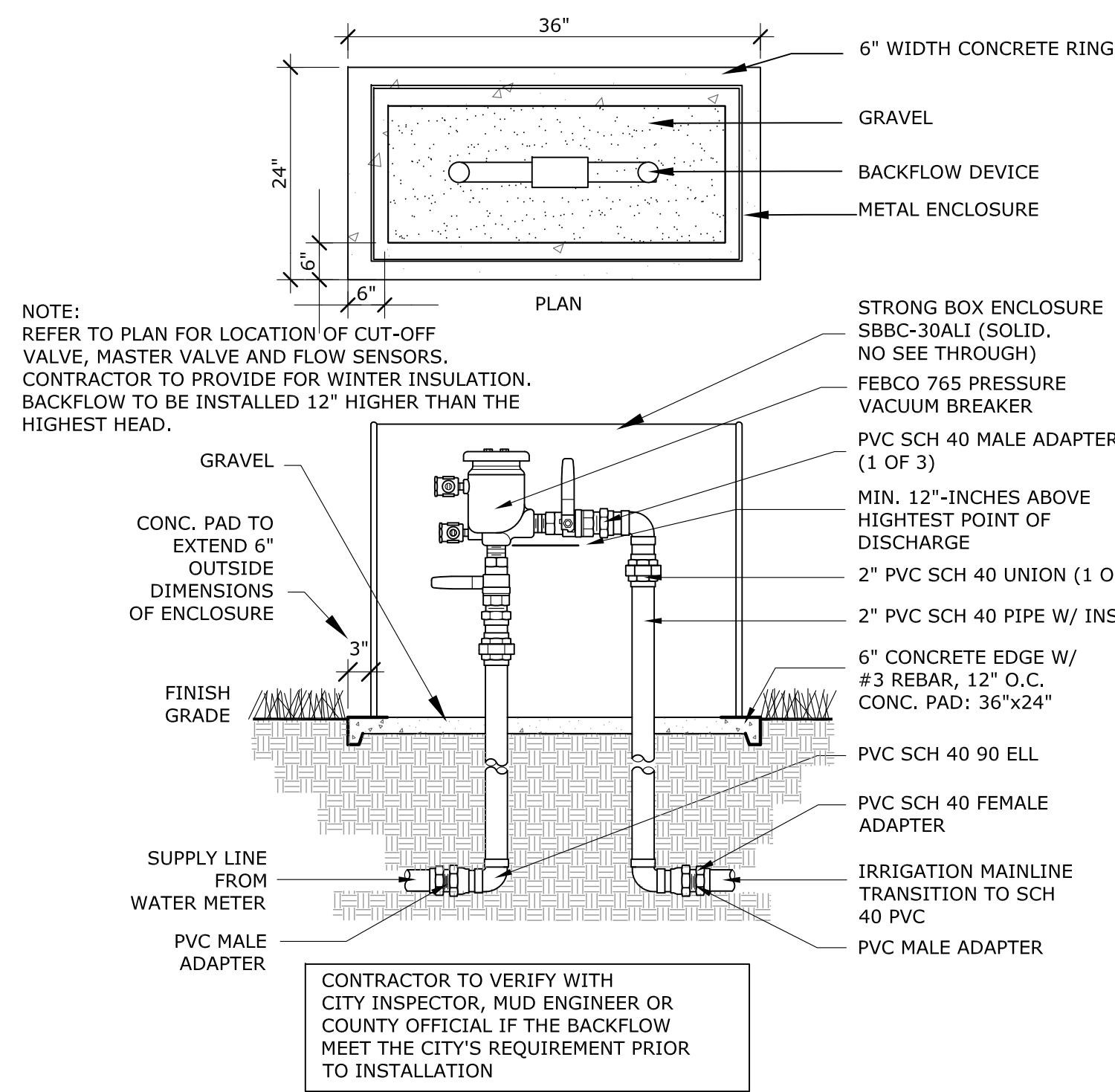
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L - 4.0

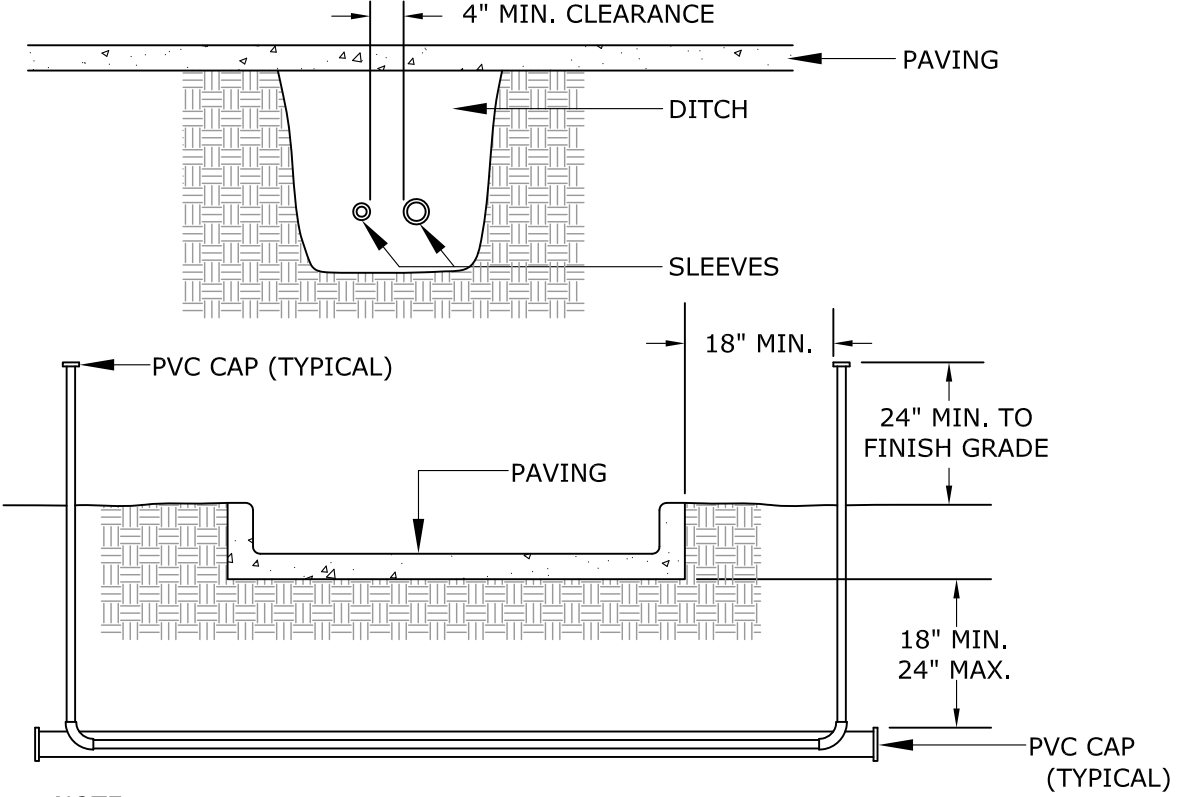
CITY DWG. NO. :

1 IRRIGATION PLAN

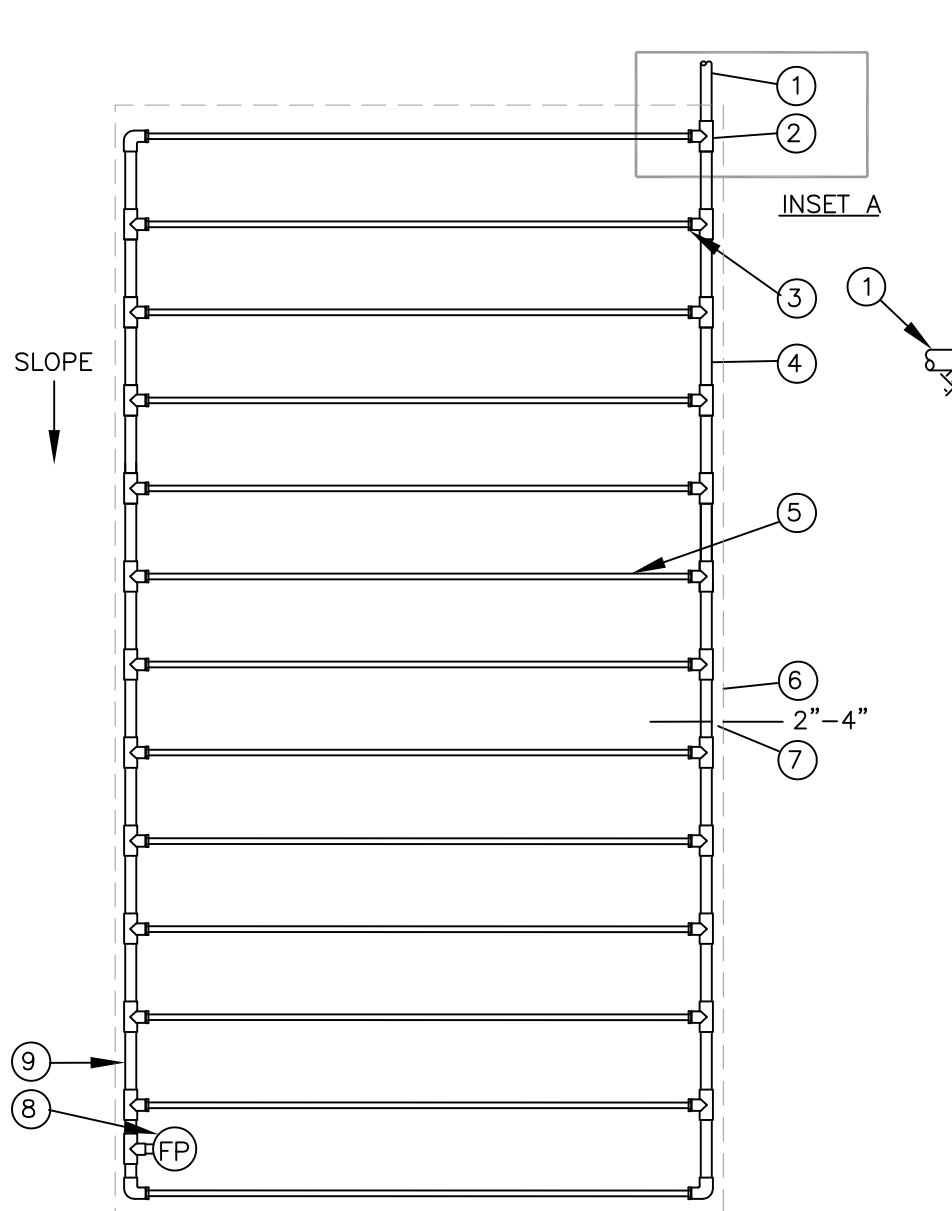
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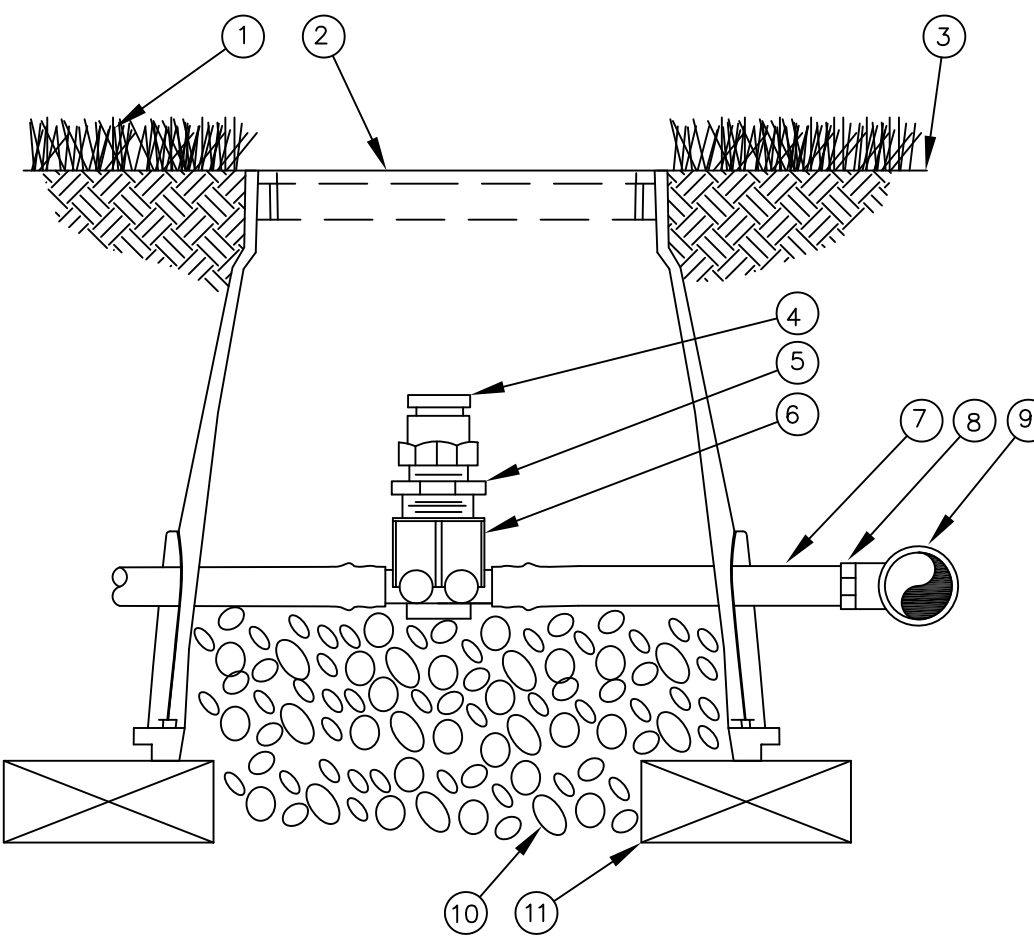
1 BACKFLOW PREVENTER
Scale: NTS



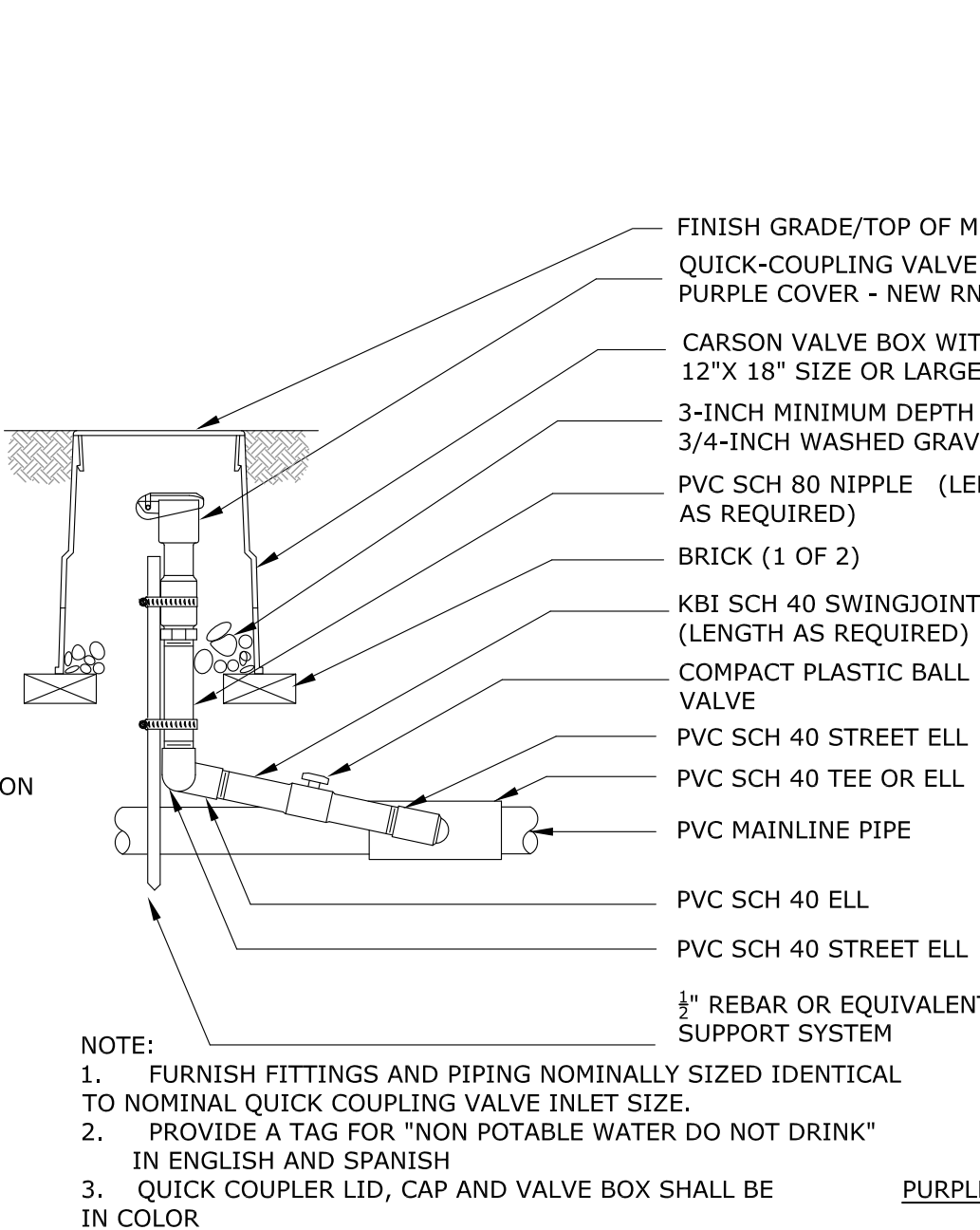
5 SLEEVING
Scale: NTS



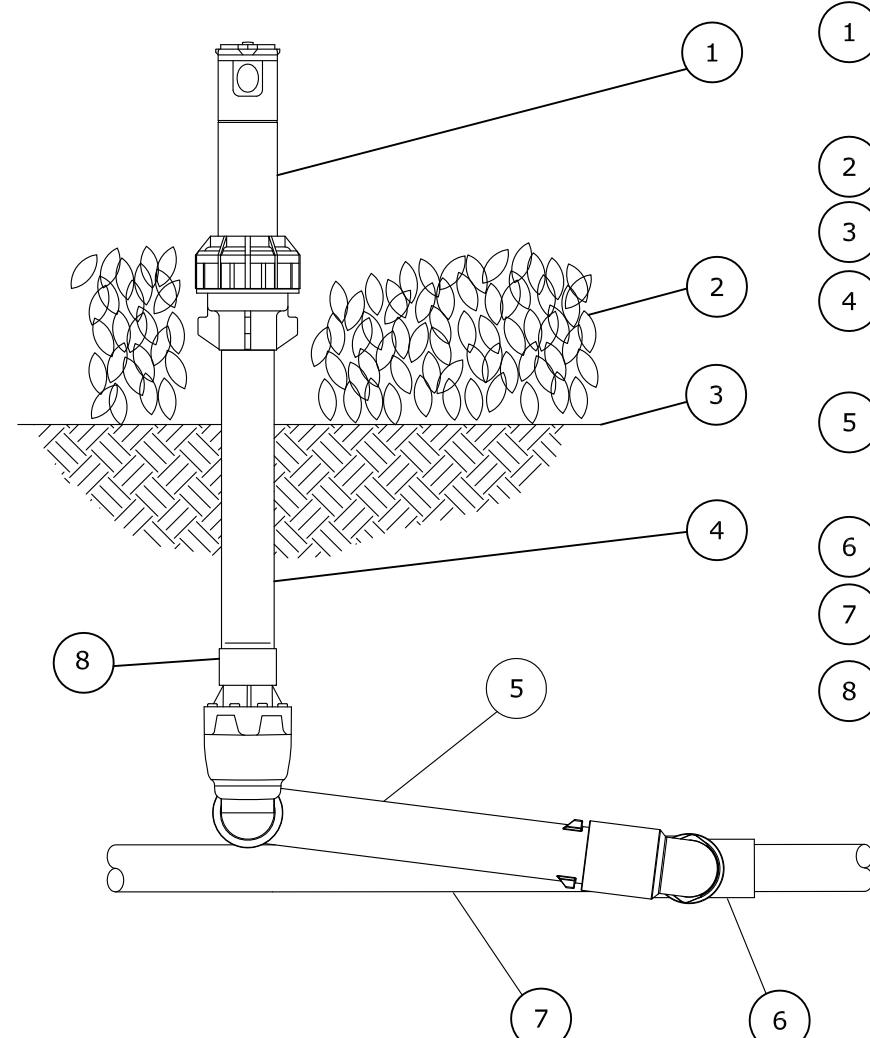
10 XFD ON-SURFACE DRIPLINE DOWN SLOPE LAYOUT
Scale: NTS



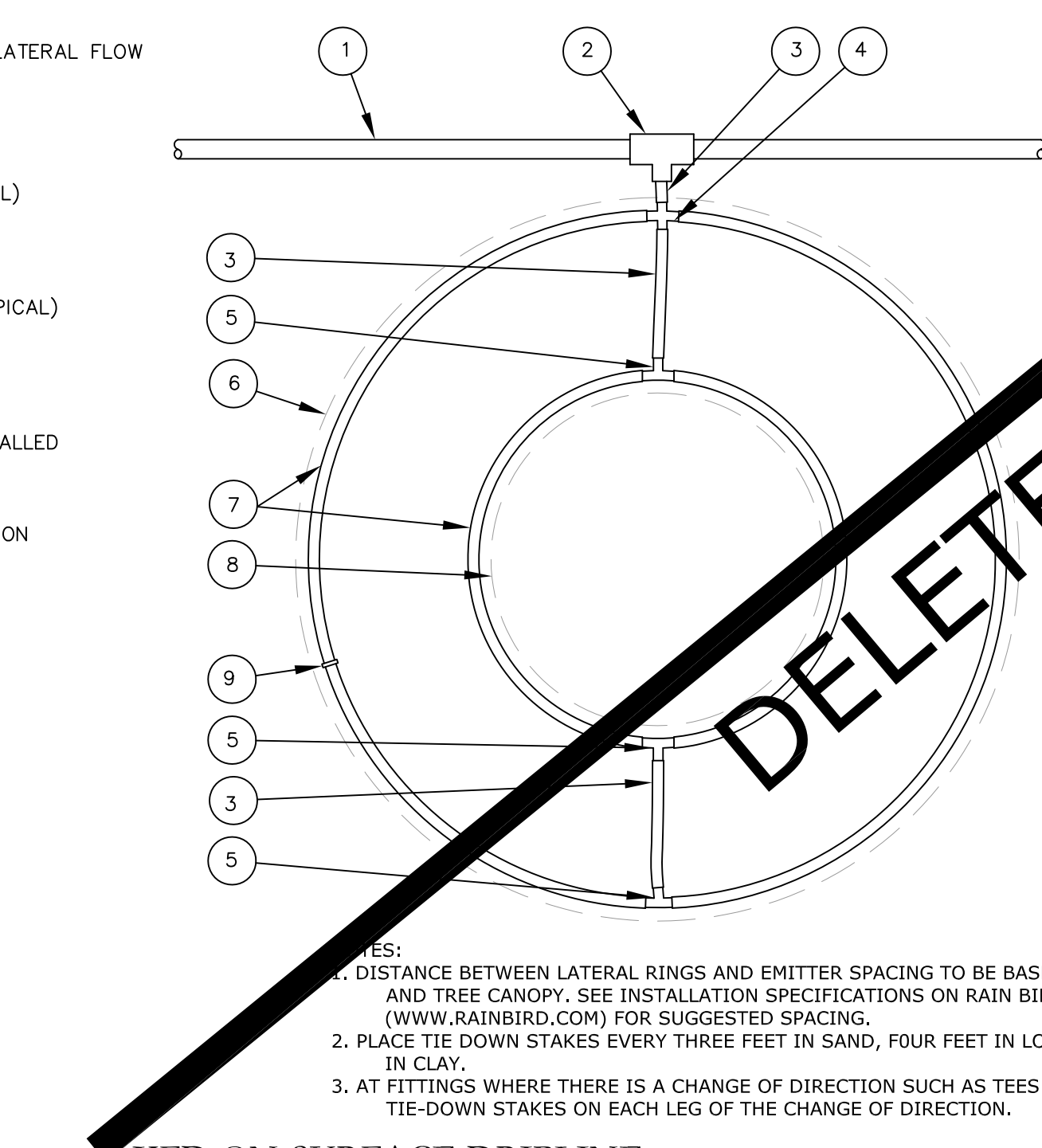
12 1/2" AIR RELIEF VALVE
Scale: NTS



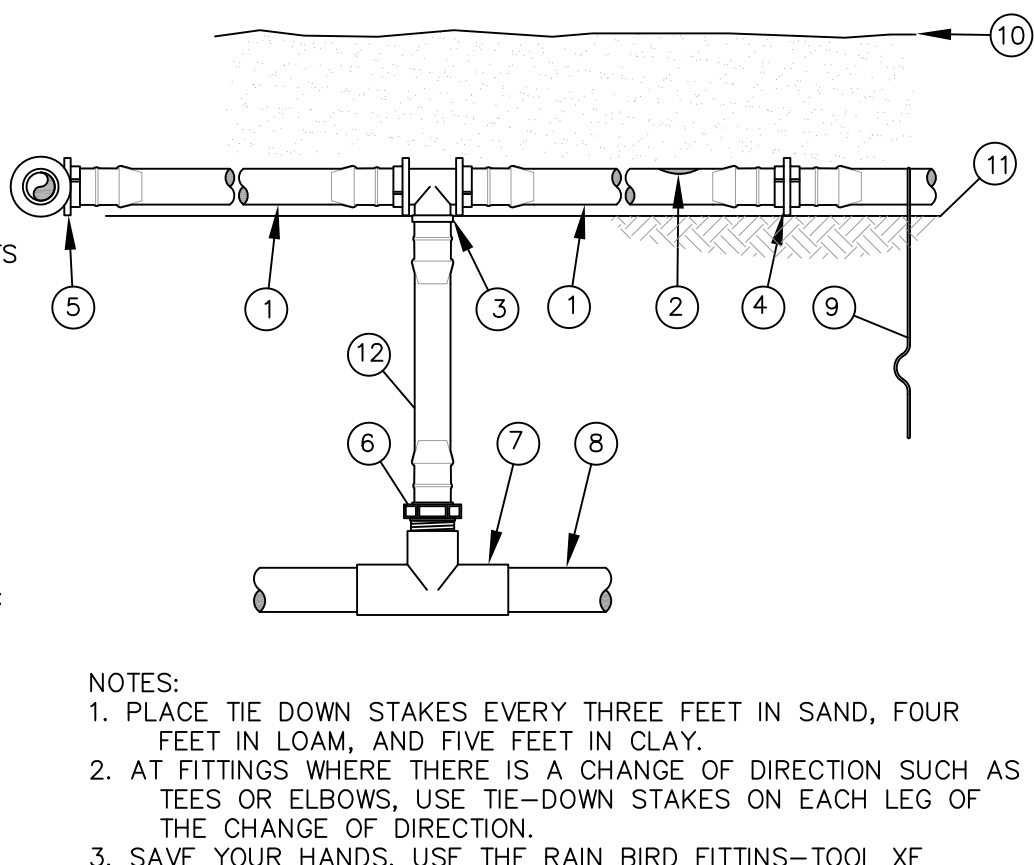
2 QUICK COUPLING VALVE
Scale: NTS



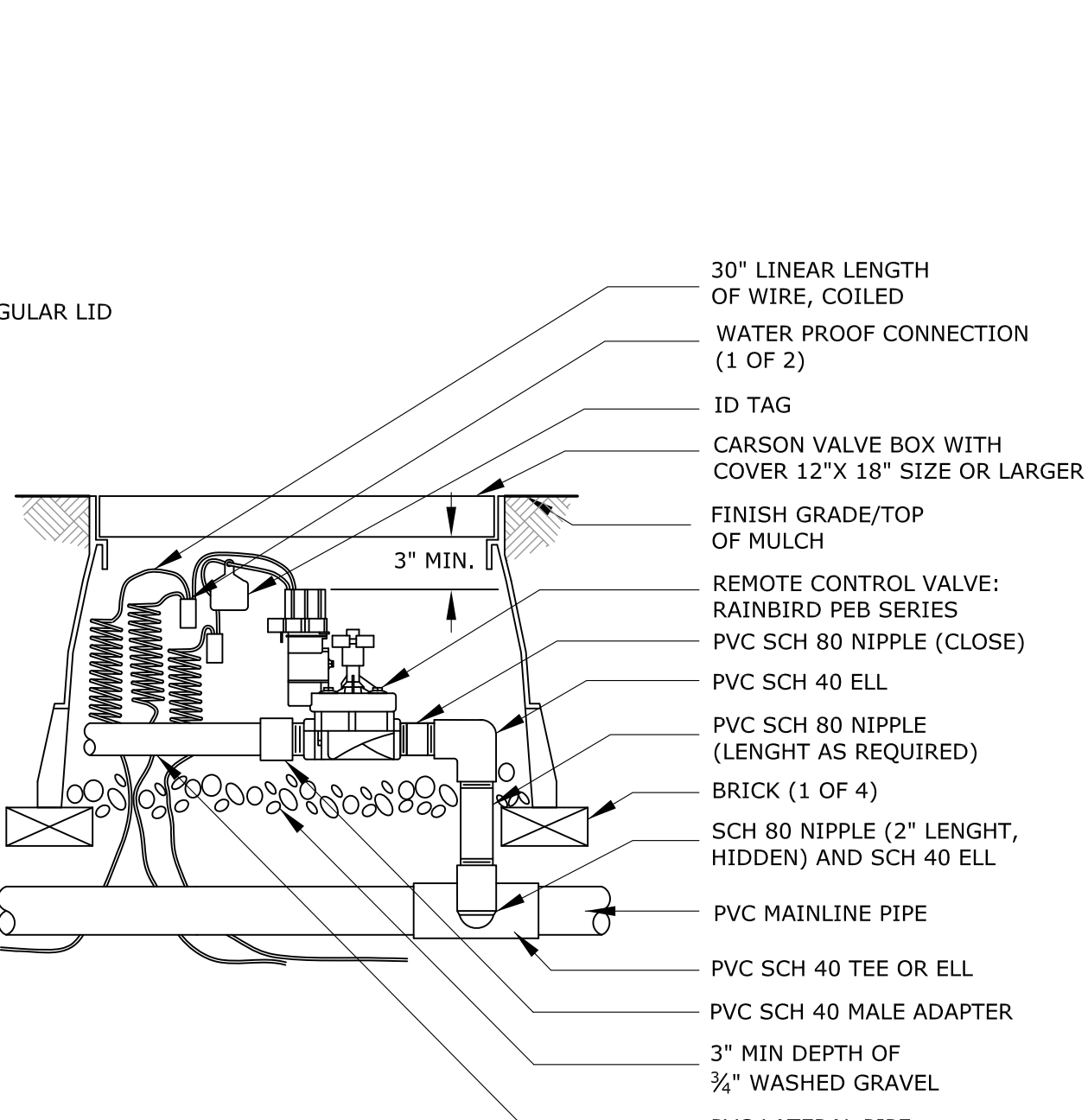
6 ROTOR POP-UP
Scale: NTS



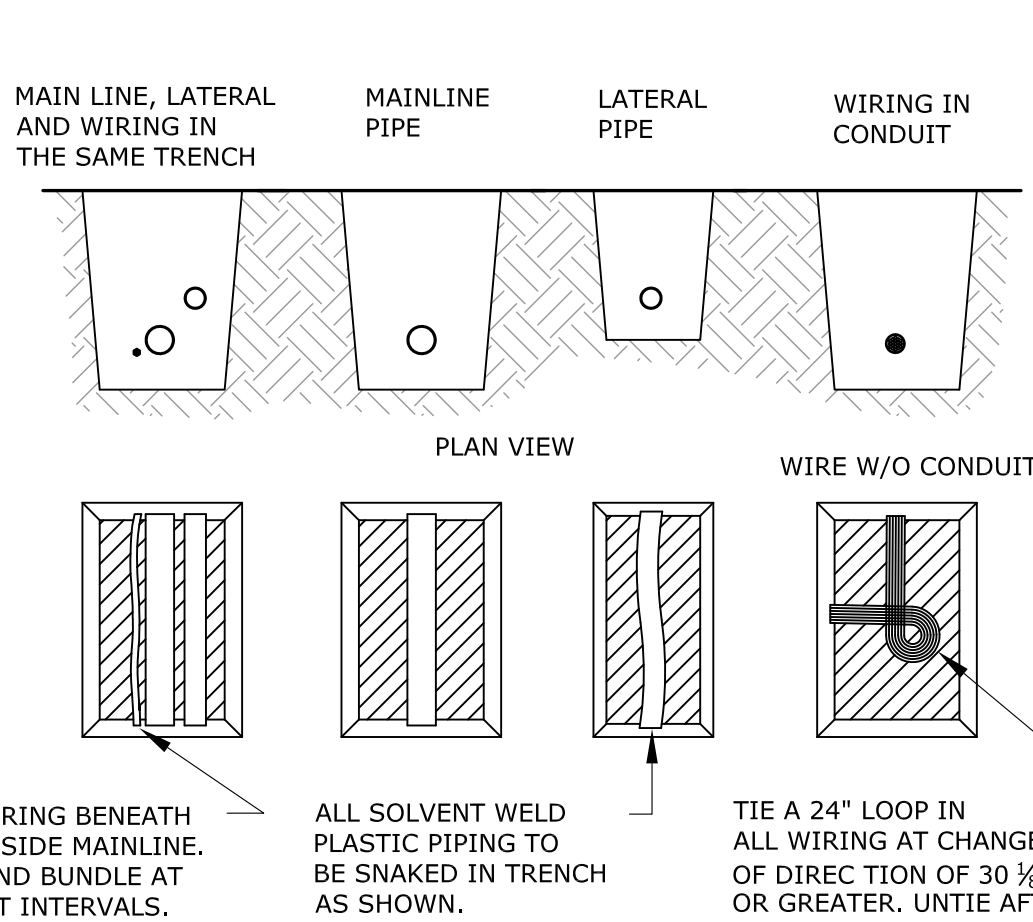
11 XFD ON-SURFACE DRIPLINE AROUND TREE
Scale: NTS



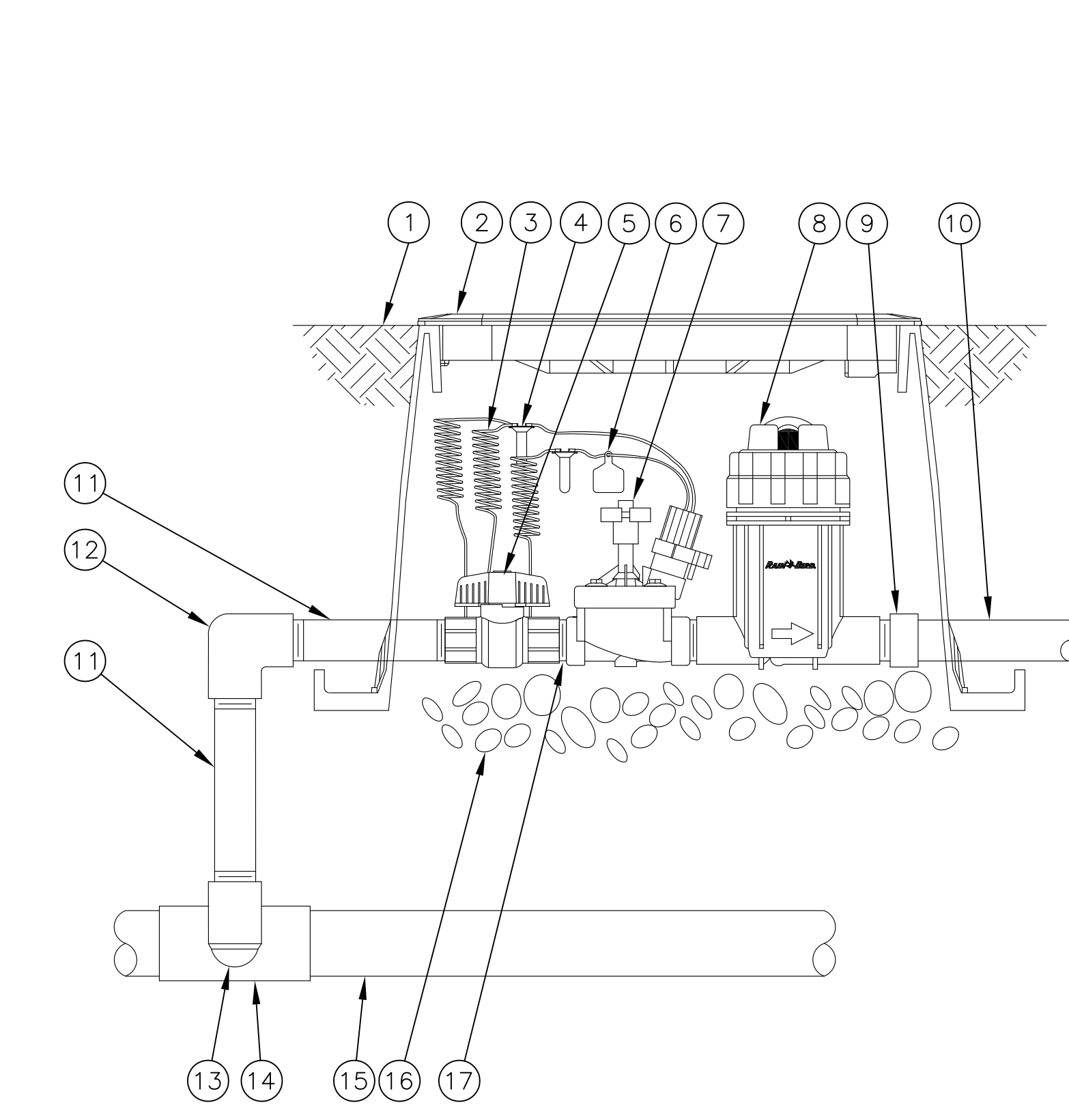
13 XFD ON-SURFACE DRIPLINE RISER ASSEMBLY
Scale: NTS



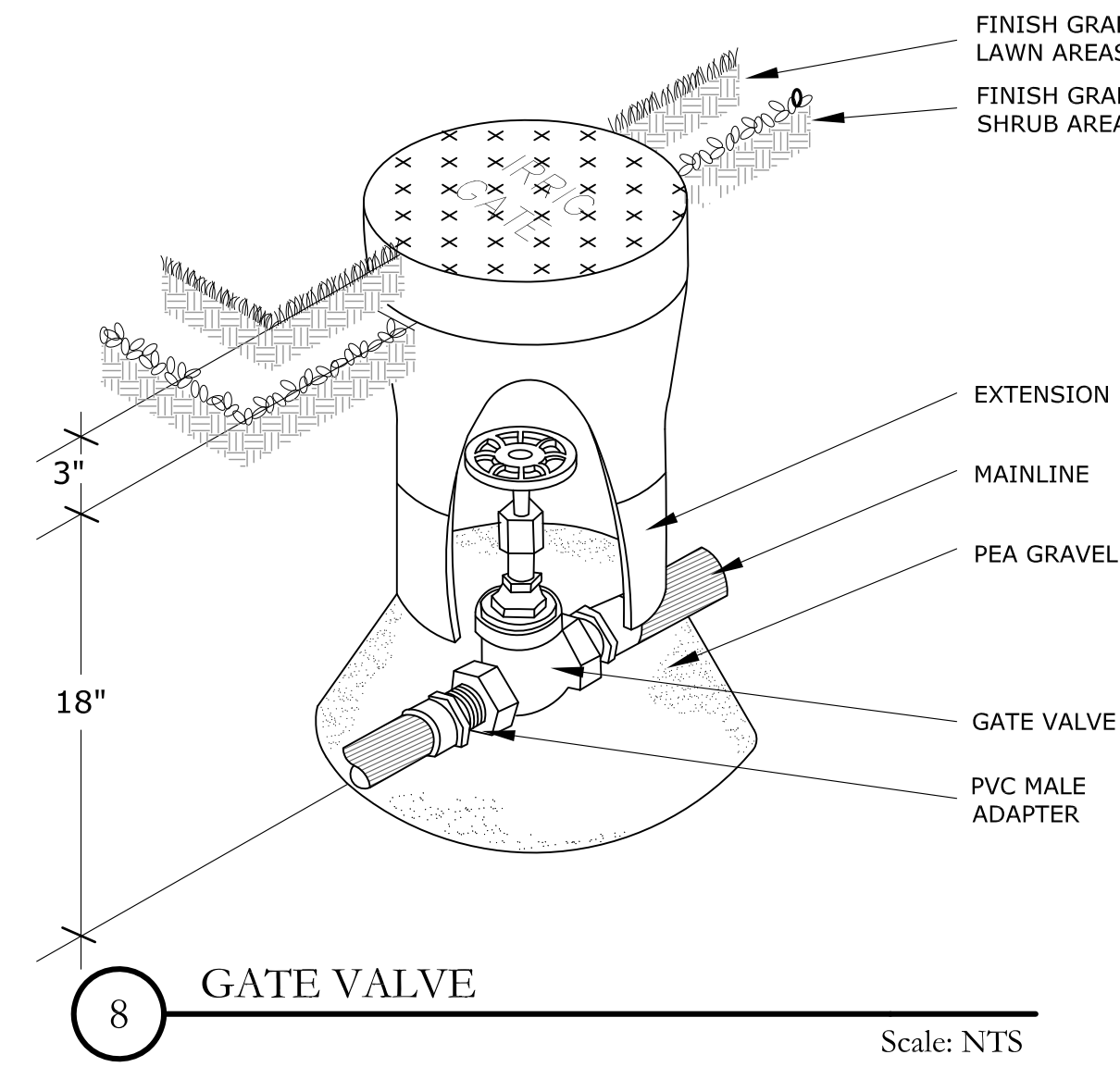
3 REMOTE CONTROL VALVE
Scale: NTS



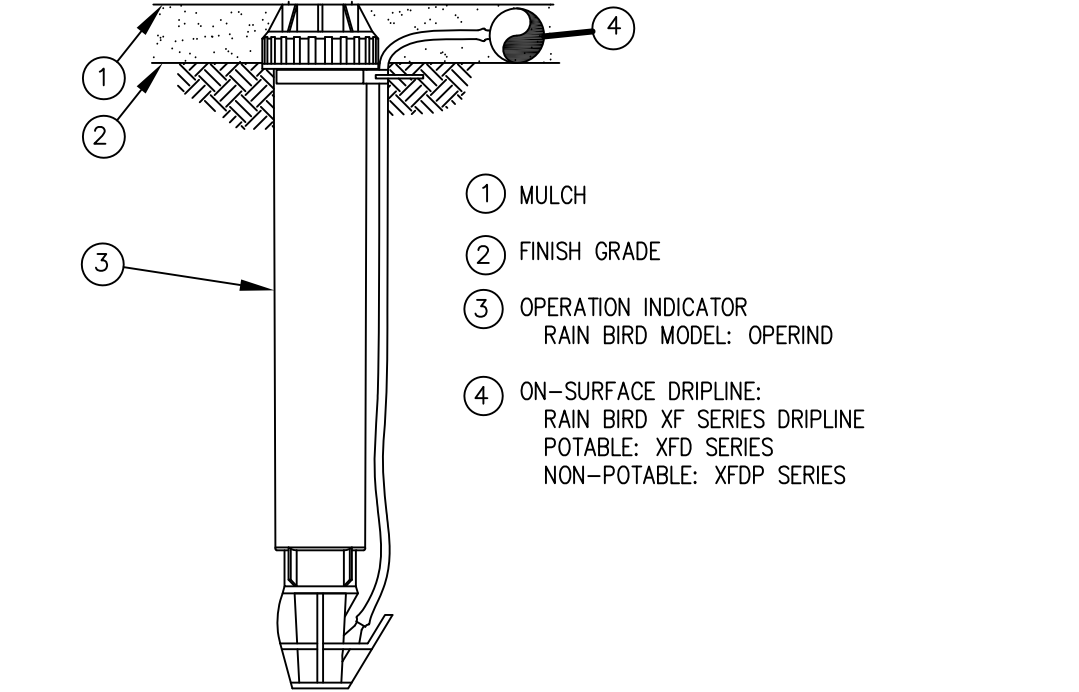
7 PIPE & WIRE TRENCHING
Scale: NTS



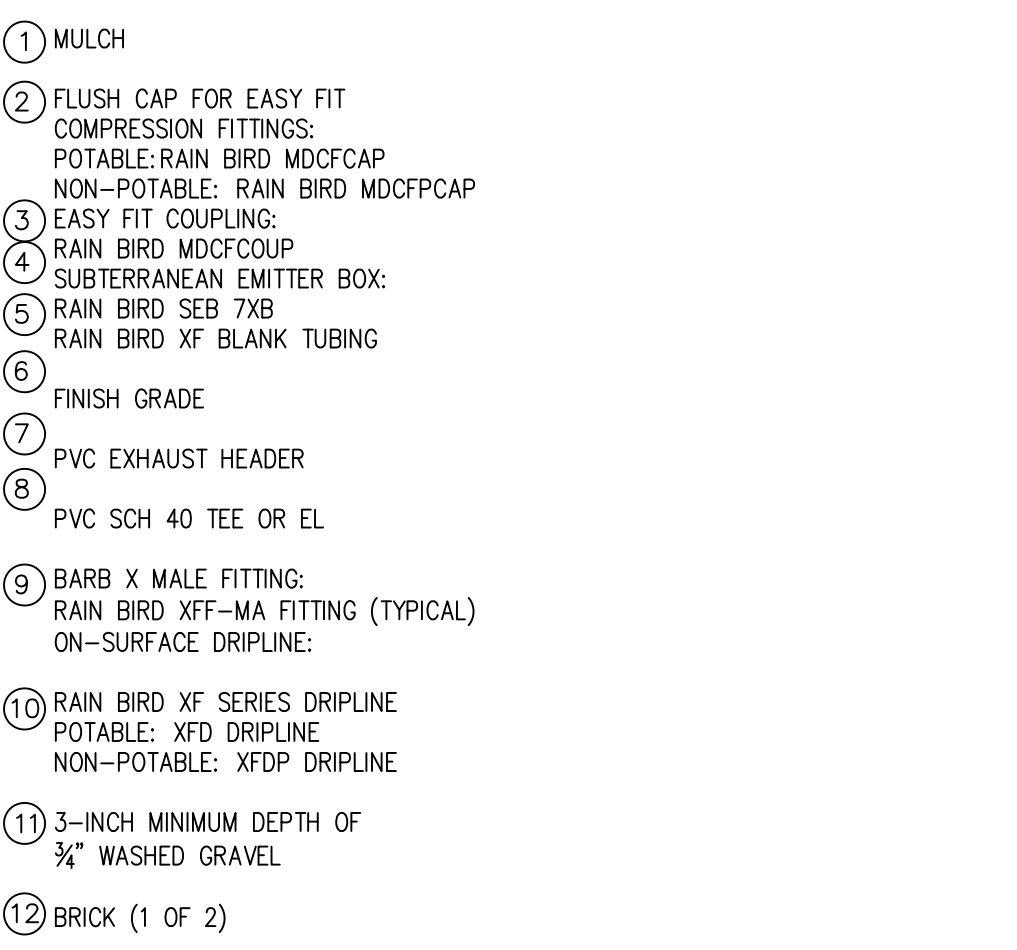
4 RAINBIRD XCZ-PRB-100-COM DRIP CONTROL ZONE KIT
Scale: NTS



8 GATE VALVE
Scale: NTS



9 XFD ON-SURFACE DRIPLINE OPERATION INDICATOR
Scale: NTS



A DETAIL 2ND LINE
SCALE

- 1 FINISH GRADE/TOP OF MULCH
- 2 VALVE BOX WITH COVER: RAIN BIRD VB-STD
- 3 30-INCH LINEAR LENGTH OF WIRE, COILED
- 4 WATERPROOF CONNECTION: RAIN BIRD DB SERIES
- 5 1-INCH BALL VALVE (INCLUDED IN XCZ-PRB-100-COM KIT) ID TAG
- 6 REMOTE CONTROL VALVE: RAIN BIRD PESB (INCLUDED IN XCZ-PRB-100-COM KIT) PRESSURE REGULATING QUICK CHECK BASKET FILTER: RAIN BIRD PRB-QKCHK-100 (INCLUDED IN XCZ-PRB-100-COM KIT)
- 7 PVC SCH 40 FEMALE ADAPTOR
- 8 LATERAL PIPE
- 9 PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
- 10 PVC SCH 40 TEE OR ELL
- 11 MAINLINE PIPE
- 12 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
- 13 PVC SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND PVC SCH 40 ELL
- 14 PVC SCH 40 TEE OR ELL
- 15 MAINLINE PIPE
- 16 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
- 17 PVC SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND PVC SCH 40 ELL

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for City of Houston
General Services Department and
Parks & Recreation Department

PARK NAME :
DOW SCHOOL PARK
1900 Kane Street Houston TX 77007
TIRZ #13

CITY OF HOUSTON

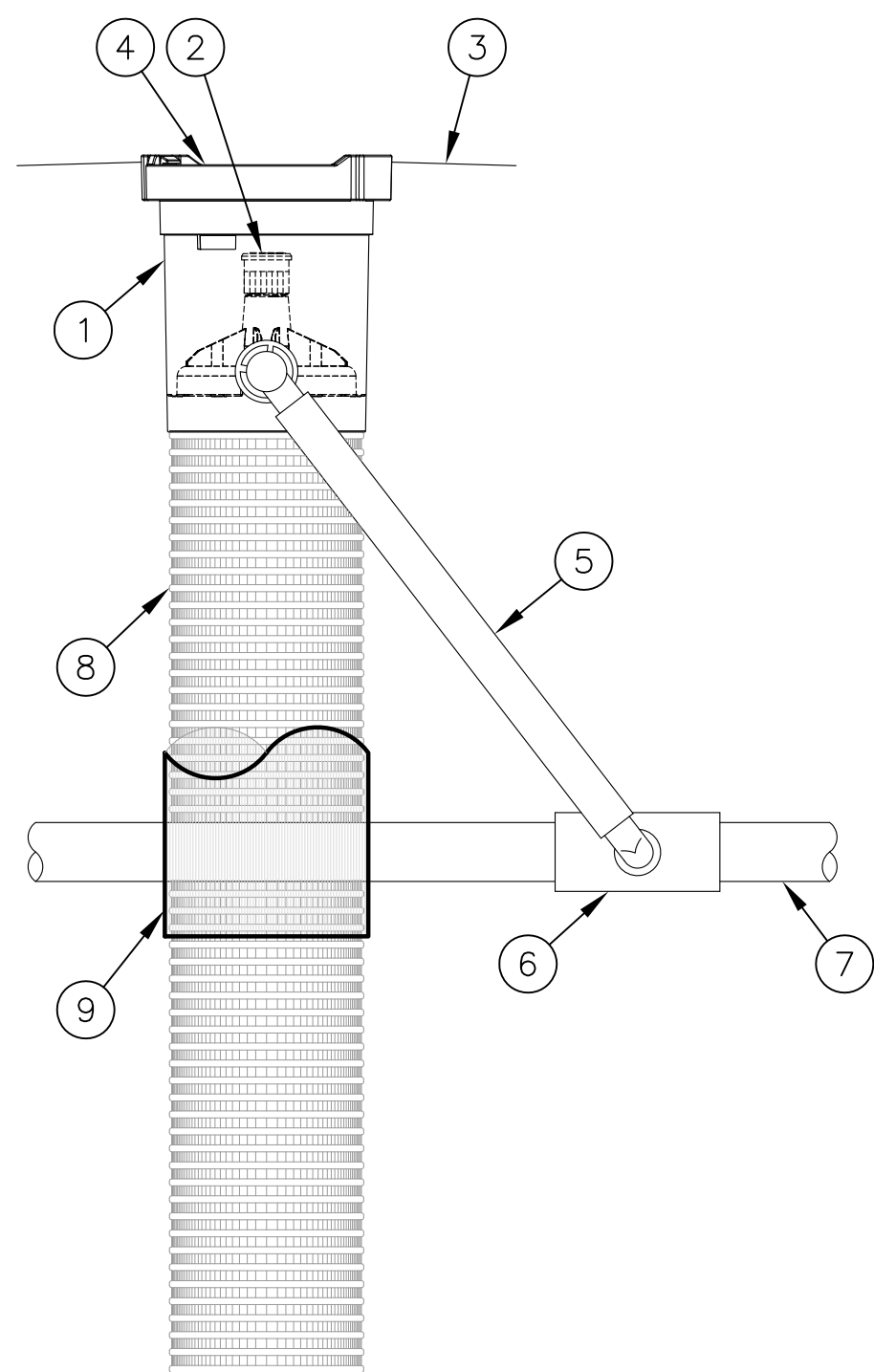
GENERAL SERVICES
DEPARTMENT

REVIEWED :
N/A
PARKS PROGRAM MANAGER
HERMANN PARK CONCERNACY
PROJECT MANAGER

DATE :
WBS. No. : [L-NNNN-NN-3]
SCALE : [AS NOTED]
DRAWN BY :
CHECKED BY :

SHEET TITLE : IRRIGATION DETAILS

SHEET NO. :
L - 4.1
CITY DWG. NO. :



- ① RAIN BIRD RWS-M-B-1402 (INCLUDES RETAINER, 18" (45,7 CM) TUBE, 0.5 GPM (1,9 L/M) BUBBLER, 4" (10,2 CM) GRATE, 1/2" (1,3 CM) M NPT INLET SPIRAL BARB ELBOW)
- ② BUBBLER: RAIN BIRD 1402 0.5 GPM (1,9 L/M) (INCLUDED)
- ③ FINISH GRADE/TOP OF MULCH
- ④ 4" (10,2 CM) LOCKING GRATE (INCLUDED)
- ⑤ 1/2" (1,3 CM) SWING ASSEMBLY: RAIN BIRD SA-125050 OR
1/2" (1,3 CM) SWING PIPE: RAIN BIRD SP SERIES WITH 1/2" (1,3 CM) MALE NPT x 0.490" BARB ELBOW: RAIN BIRD SBE-050
- ⑥ PVC SCH 40 TEE OR EL
- ⑦ PVC OR POLYETHYLENE LATERAL PIPE
- ⑧ 4" (10,2 CM) WIDE X 18" (45,7 CM) LONG RIGID BASKET WEAVE CANISTER (INCLUDED)
- ⑨

OPTIONAL SOCK (RWS-SOCK) FOR SANDY SOILS

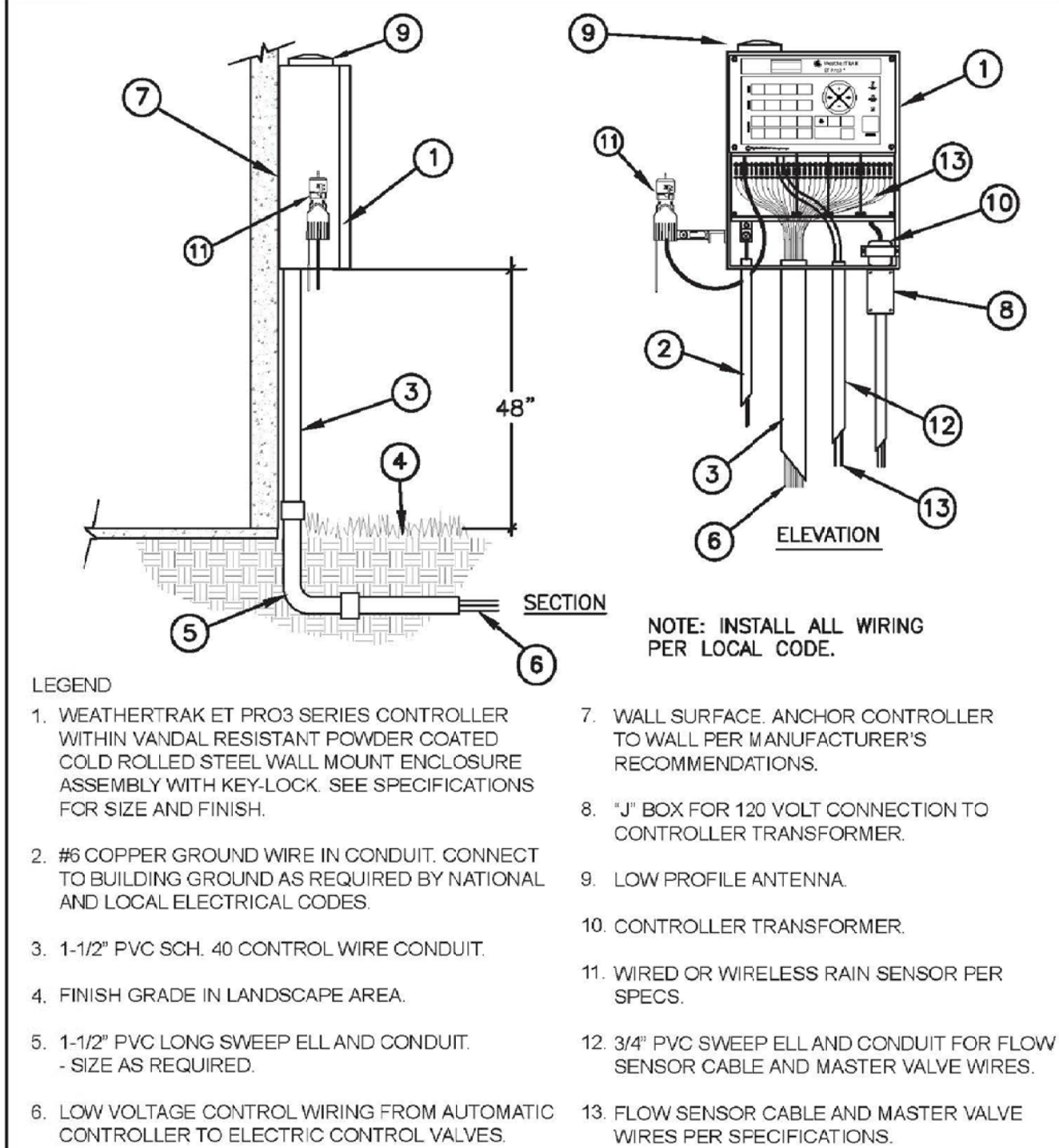
RAIN BIRD RWS-M-B-1402 (INCLUDES RETAINER, 18" (45,7 CM) TUBE, 0.5 GPM (1,9 L/M) BUBBLER & CHECK VALVE ON RISER, 4" (10,2 CM) GRATE, 1/2" (1,3 CM) M NPT INLET SPIRAL BARB ELBOW

NOTES:

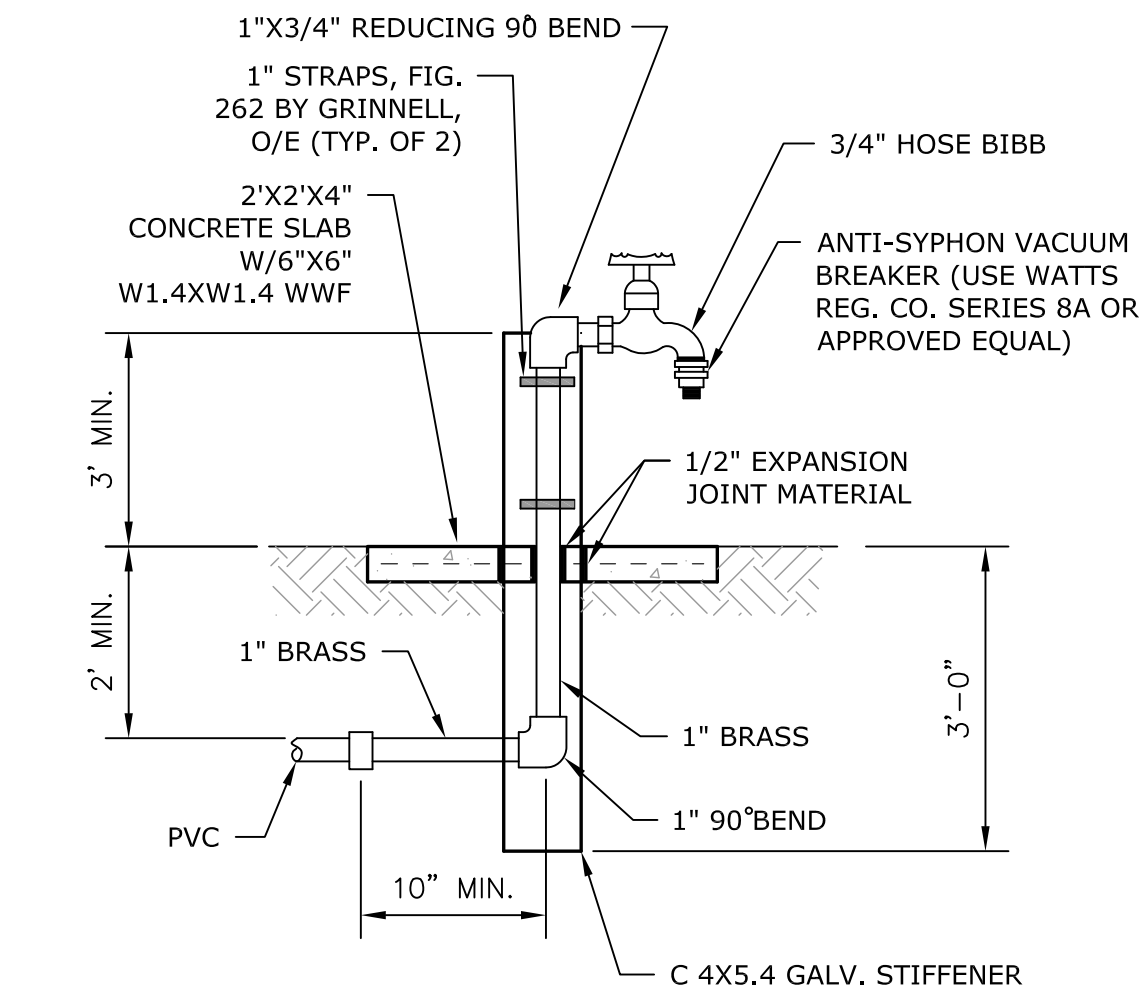
1. 4" (10,2 CM) GRATE IS ALSO AVAILABLE IN PURPLE (RWS-GRATE-P).
2. INSTALL PRODUCT SO THAT THE GRATE IS EVEN WITH FINISH GRADE OR TOP OF MULCH.
3. OPTIONAL SAND SOCK (RWS-SOCK) IS 34" (86,4 CM) IN LENGTH, CUT TO LENGTH NEEDED TO COVER MESH BASKET AREA.
4. WHEN INSTALLING IN EXTREMELY HARD OR CLAY SOILS, ADD 3/4" (1,9 CM) GRAVEL UNDER AND AROUND THE UNIT TO ALLOW FASTER WATER INFILTRATION AND ROOT PENETRATION.
5. ONCE RWS-M HAS BEEN INSTALLED FILL THE BASKET WITH PEA GRAVEL BEFORE LOCKING LID.

1 RAINBIRD ROOT WATERING SYSTEM
Scale: NTS

NOTE:
- INCLUDE 5 YEARS OF ET SERVICE AND A 5 YEAR EXTENDED WARRANTY



2 WALL MOUNT WEATHERTRAK IRRIGATION CONTROLLER
Scale: NTS



3 HOSE BIB DETAIL
SCALE: NTS

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CITY OF HOUSTON
GENERAL SERVICES
DEPARTMENT

REVIEWED :

N/A
PARKS PROGRAM MANAGER HERMANN PARK CONCERNENCY

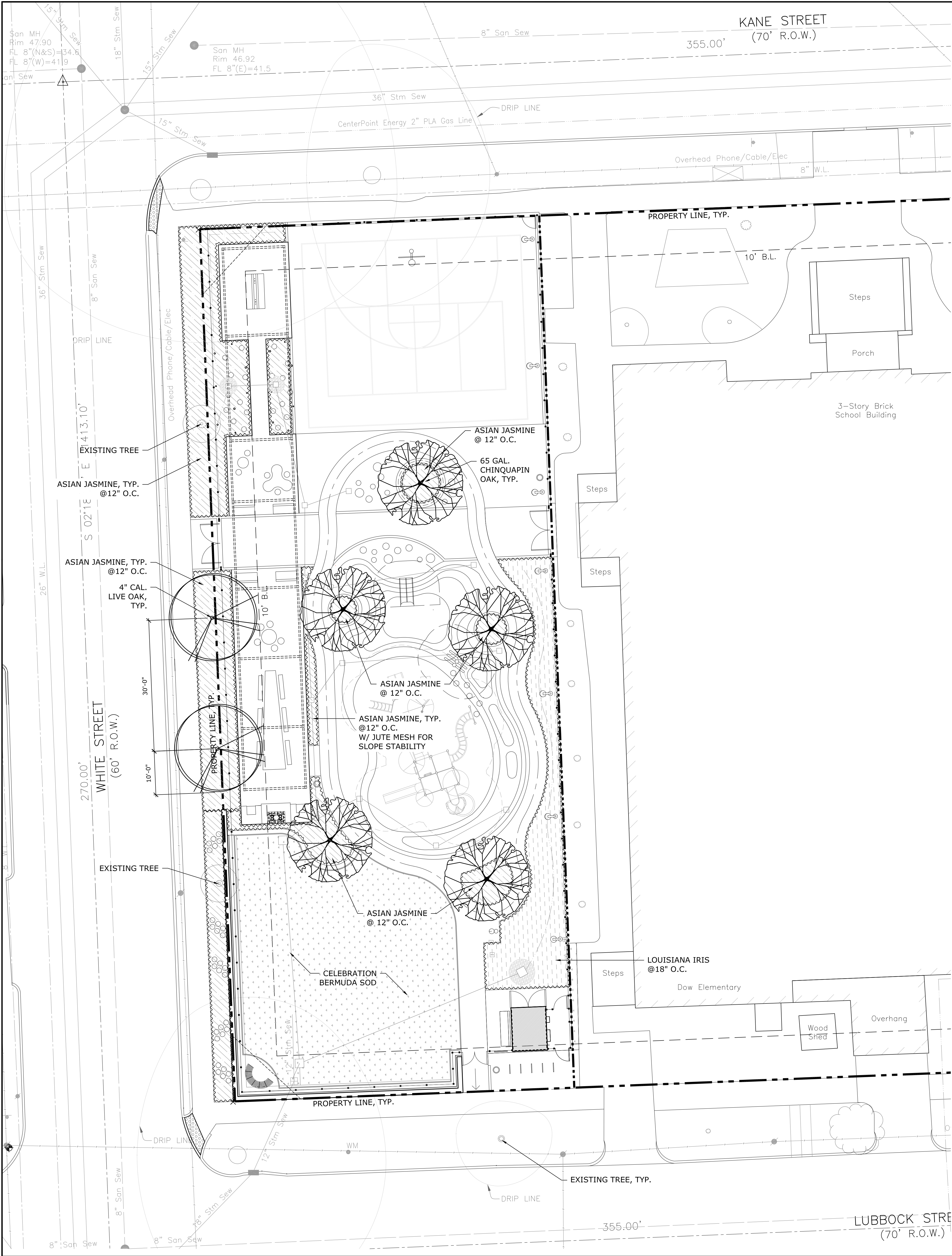
PROJECT MANAGER

DATE :
WBS. No : [L-NNNN-NN-3]
SCALE : [AS NOTED]
DRAWN BY :
CHECKED BY :

SHEET TITLE :
**IRRIGATION
DETAILS**

SHEET NO. :
L - 4.2

CITY DWG. NO. :



PLANT LEGEND

	2" CAL. CHINQUAPIN OAK		LOUISIANA IRIS, 1 GAL.
	4" CAL. LIVE OAK		ASIAN JASMINE, 1 GAL.
	EXISTING TREE		CELEBRATION BERMUDA GRASS

PLANT SCHEDULE

QUANTITY	COMMON NAME / BOTANICAL NAME	SIZE CALIPER	HEIGHT	SPREAD	COMMENTS
TREES					
5	CHINQUAPIN OAK QUERCUS MUEHLENBERGII	2" CAL. 65 GAL.	10'-12"	6'-8"	CONTAINER GROWN, FULL & WELL BRACHED PLANTED
2	LIVE OAK QUERCUS VIRGINIANA	4" CAL. 65 GAL.	12'-14"	8'-10'	CONTAINER GROWN, FULL & WELL BRACHED PLANTED
GROUND COVER					
1976 SF	ASIAN JASMINE TRACHELOSPERMUM ASIATICUM	1 GAL.	10"-12"	10"-12"	CONTAINER GROWN, FULL & WELL ROOTED PLANTED @ 12" O.C. TRIANGULATED SPACING
685 SF	LOUISIANA IRIS IRIS ser Hexagonae	1 GAL.	18"-24"	10"-12"	CONTAINER GROWN, FULL & WELL ROOTED PLANTED @ 18" O.C. TRIANGULATED SPACING
GRASS					
2516 SF	CELEBRATION BERMUDA GRASS 'CELEBRATION' BERMUDA GRASS	N/A	N/A	N/A	SOLID SOD AS SHOWN

CITY OF HOUSTON
DEPARTMENT OF PLANNING & DEVELOPMENT
LANDSCAPE ANALYSIS FORM
(PLEASE ATTACH TO PERMIT SITE PLAN)

Non-single family residential
(Staff may create an artificial lot)

1. TREE AND SHRUB PLANTING REQUIREMENTS
A. STREET TREES: Sec. 33-126 (a)

STREET NAME	LINEAR FEET	TREE REQUIRED	EQUIVALENT CREDITS*	EX STREET TREES TO REMAIN	NEW STREET TREES	TOTAL
KANE STREET	78	3	0	2	0	2
WHITE STREET	200	7	2	2	2	6
LUBBOCK STREET	78	3	0	2	0	2
TOTAL STREET TREES REQUIRED						13
TOTAL STREET TREES PROPOSED						2
EQUIVALENT CREDITS*						8
DEFICIT / NET						-3

B. PARKING LOT TREES: Sec. 33-127 (a)

50% of parking lot trees must be large trees. Each parking space must be within 120' of a tree.						
TREE PLANTING REQUIREMENTS FOR PARKING LOT: 1 tree / 10 parking spaces						
TOTAL NUMBER OF PROPOSED PARKING SPACES	# OF SPACES	TREE REQUIREMENT	EQUIVALENT CREDITS*	LARGE TREES	SMALL TREES	TOTAL TREES PLANTED
N/A	/ 10	N/A	N/A	N/A	N/A	N/A

C. PARKING LOT SHRUBS: Sec. 33-127 (b)

75% of the shrubs must be planted along the perimeter of the parking lot. (Shrubs are required for new and/or the expanded portion of parking lot)		
SHRUB REQUIREMENTS: 10 shrubs / 1 street tree		
STREET TREE PLANTING REQUIREMENT	REQUIREMENT	TOTAL SHRUB PLANTED
N/A	N/A	N/A

D. LANDSCAPE BUFFER: Sec. 33-128 (1)

Wood shed, concrete masonry opaque screening fence (min. 6')
Sec. 33-128(2) Evergreen Screening
A 6' high wood, concrete masonry opaque screening fence or 15' wide evergreen planting strip along total length of line adjacent to existing single family residential, or limit of expansion adjacent to existing single family. (Site plan must show land use on all sides of property)

CREDIT WORKSHEET: Sec. 33-123 (a) Tree planting equivalency credits

	STREET	PARKING
1. Number of proposed trees exceeding 4" in caliper. Each 4" tree is (1) credit.	2	N/A
2. Depositing of monies with Parks and Recreation Department, \$500 per tree. Proposed credits cannot exceed 30% of tree planting requirement above. Amount to be deposited: Proposed Credits x \$500.00 = \$	0	N/A
3. Preservation of on-site trees, per the following schedule in caliper: 0 minimum 4" - 6" 2 trees x _____ greater than 6" but less than 12" 3 trees x _____ 12" and greater 4 trees x _____ Total number of tree credits for this option trees.	0	N/A
4. Credit for preserving existing right of way street trees	6	N/A
5. Proposed total number of tree credits (to receive credit, documentation must be provided in conformance with Section 33-123).	8	N/A

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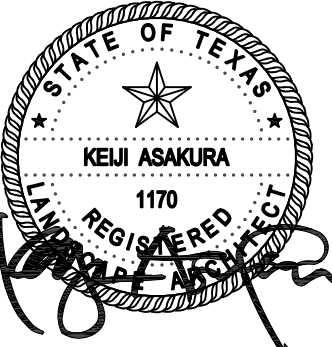
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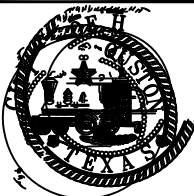
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GENERAL SERVICES
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REVIEWED :

N/A
PARKS PROGRAM MANAGER HERMAN PARK CONCERNCY

PROJECT MANAGER

DATE :
WBS. No. : [F-000870-0001]
SCALE : [AS NOTED]
DRAWN BY :
CHECKED BY :

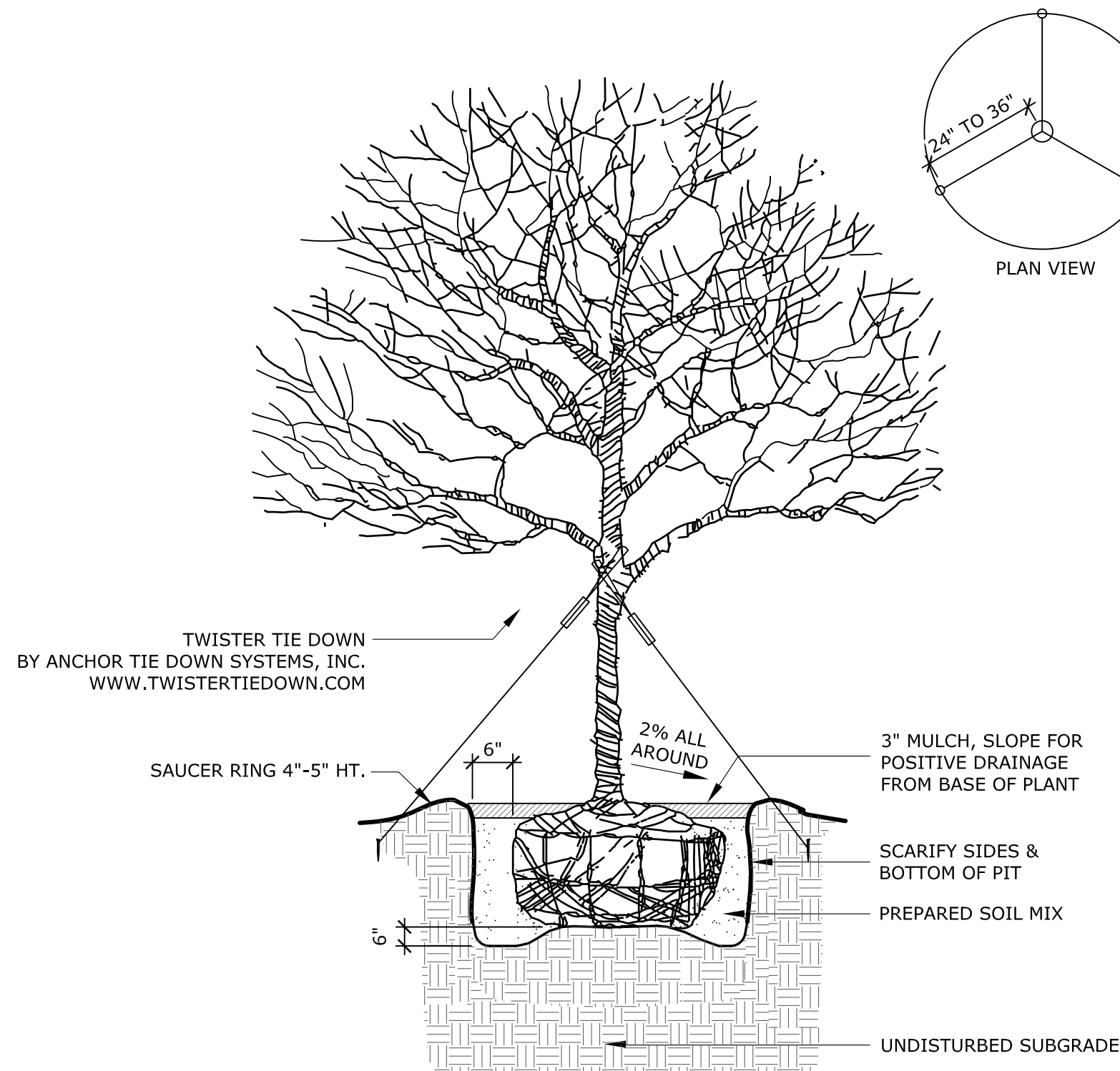
SHEET TITLE :
LANDSCAPE PLAN

SHEET NO. :

L - 5.0

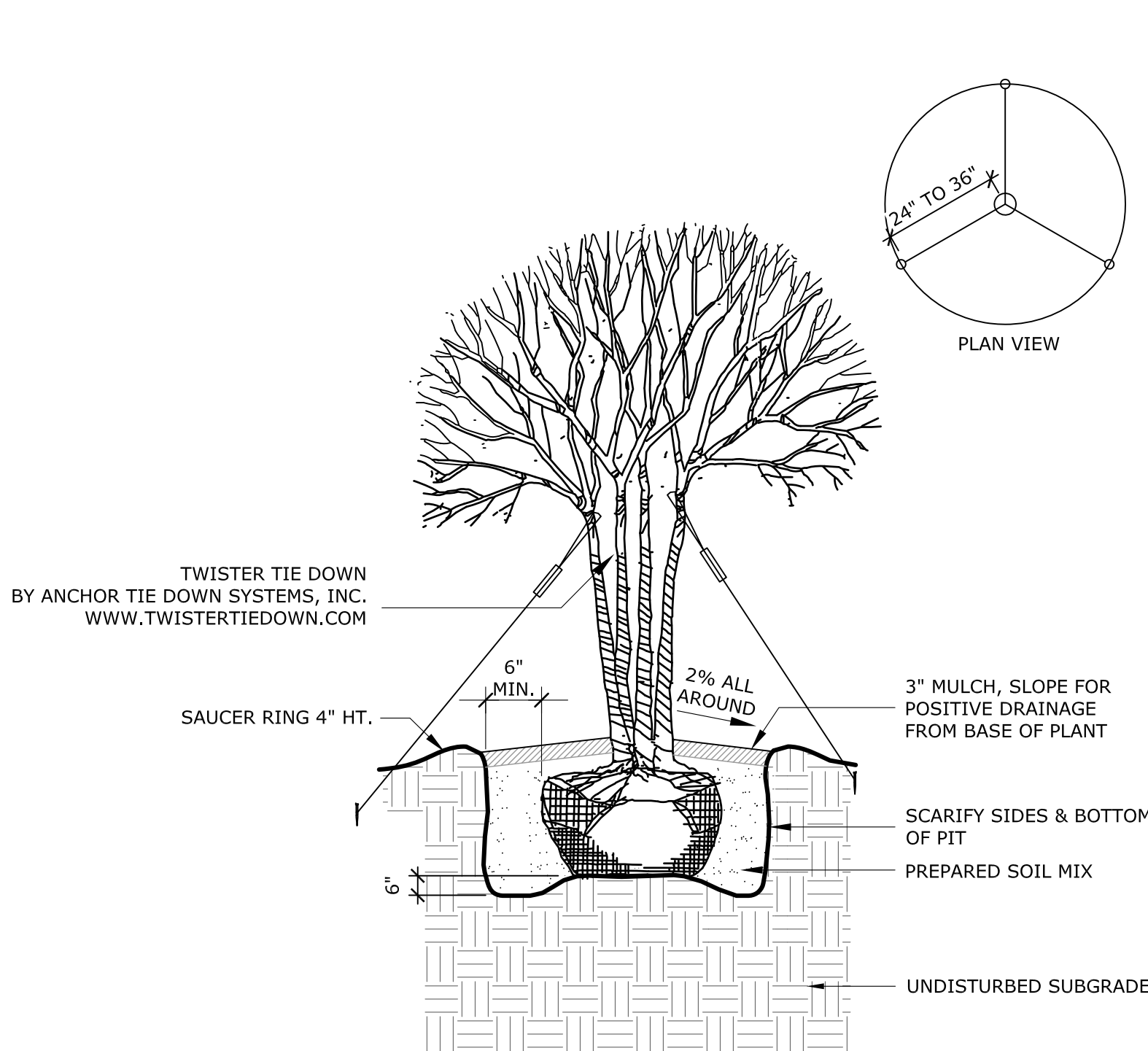
CITY DWG. NO. :

NOTE:
TWISTER TO BE REMOVED
BY CONTRACTOR WITHIN 6-12 MONTHS.



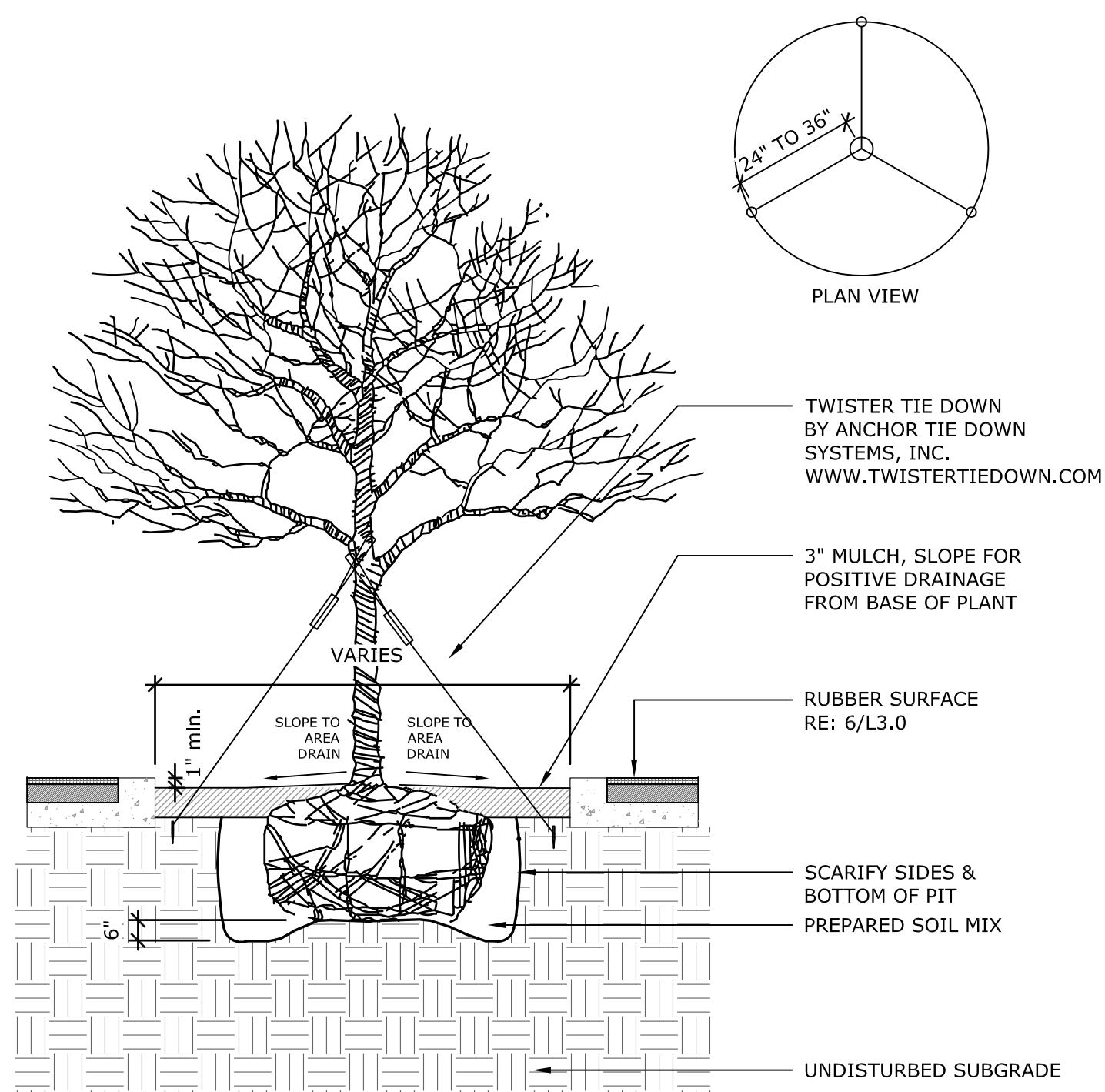
1 TYP. CANOPY TREE PLANTING DETAIL
N.T.S.

NOTE:
TWISTER TO BE REMOVED
BY CONTRACTOR WITHIN 6-12 MONTHS.



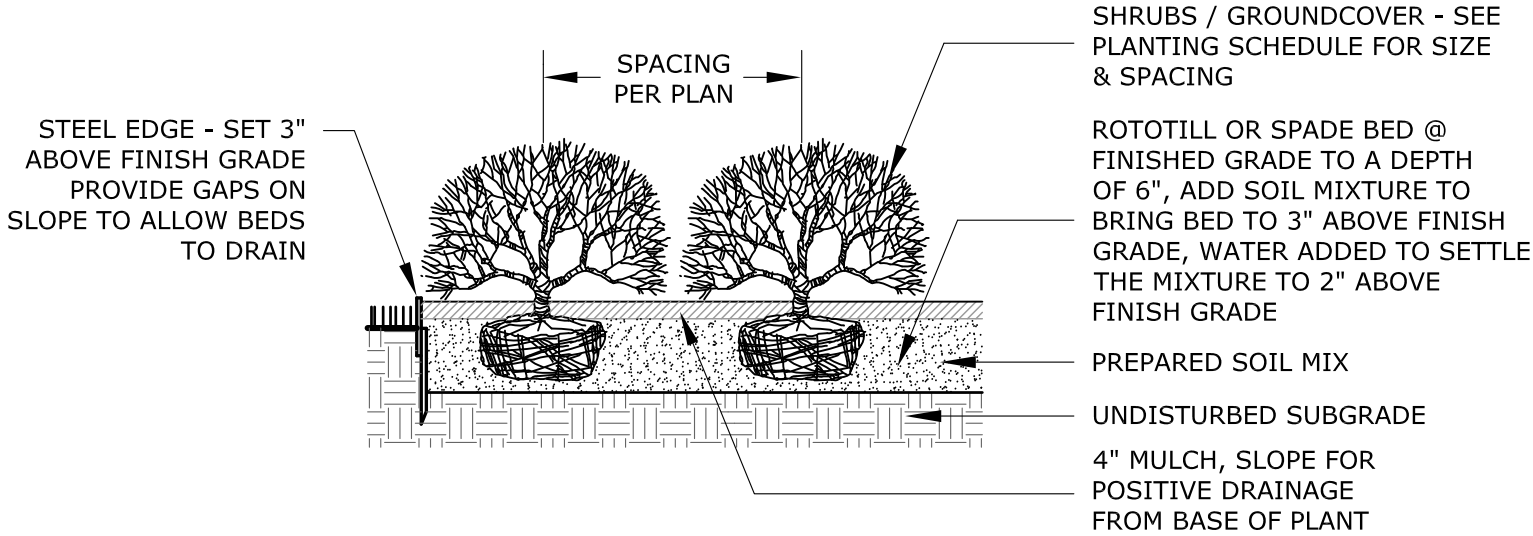
2 TYP. MULTI-TRUNKS TREE
PLANTING DETAIL
N.T.S.

NOTE:
TWISTER TO BE REMOVED
BY CONTRACTOR WITHIN 6-12 MONTHS.



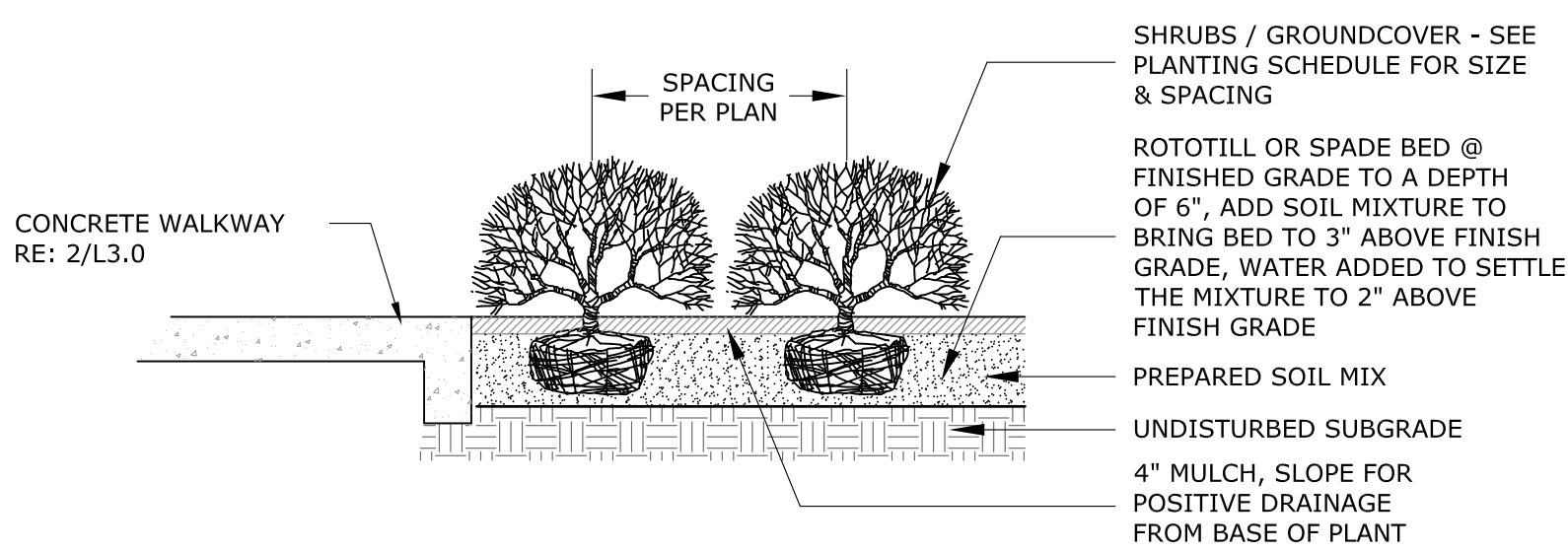
3 TYP. TREE PLANTING
@ RUBBER SURFACE
N.T.S.

SPACING	PLANTS/SF
6" O.C.	4.61
8" O.C.	2.60
9" O.C.	1.78
10" O.C.	1.66
12" O.C.	1.15
18" O.C.	.50
24" O.C.	.28
30" O.C.	.18
36" O.C.	.12
48" O.C.	.07

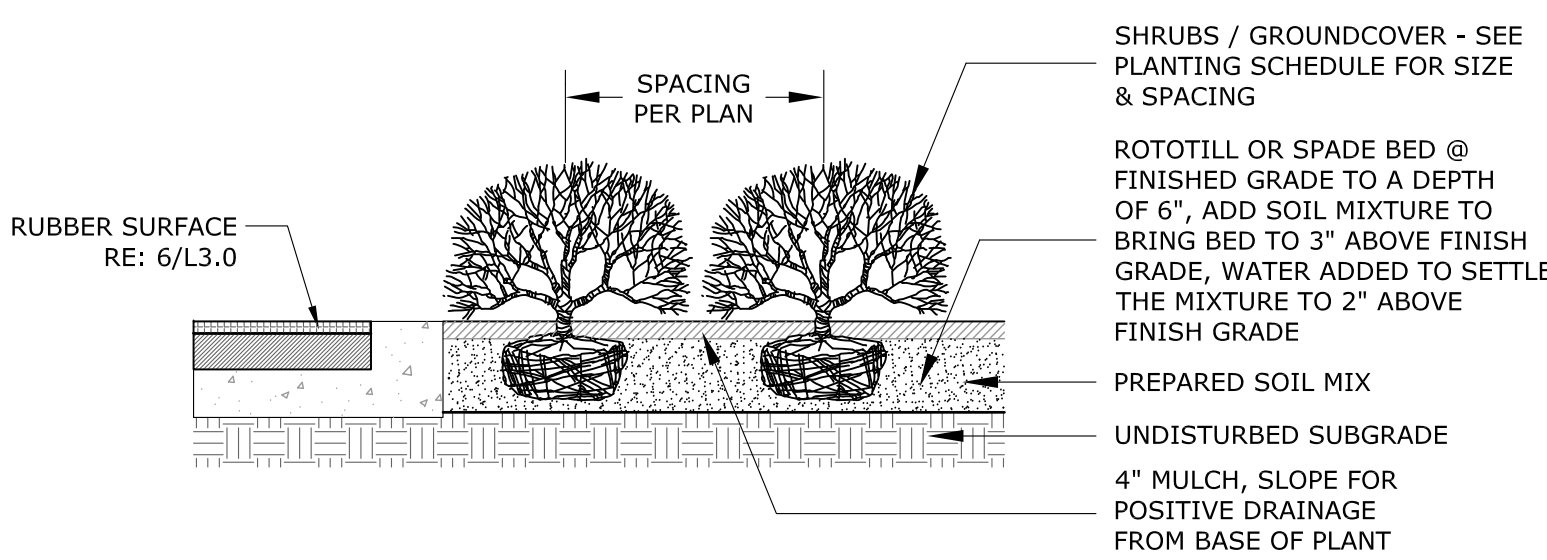


4 TYP. SHRUB / GROUND COVER PLANTING
DETAIL & SPACING CHART
N.T.S.

5 NOT USED
N.T.S.



6 TYP. PLANTING DETAIL @ TREE PIT
N.T.S.



7 TYP. PLANTING DETAIL
@ RUBBER SURFACE
N.T.S.

PLANTING NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING FAMILIAR WITH ALL UNDERGROUND UTILITIES, PIPES AND STRUCTURES. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF THESE UTILITIES.
- CONTRACTOR SHOULD NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED, WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING THE DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT UP TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH SUBCONTRACTORS AS REQUIRED TO ACCOMPLISH PLANTING OPERATION.
- LANDSCAPE CONTRACTOR TO RECEIVE SITE GRADE TO +0.10. CONTRACTOR SHALL OBTAIN LETTER OF GRADE CERTIFICATION FROM OWNER PRIOR TO PROJECT EXECUTION.
- CONTRACTOR SHALL NOTIFY OWNER'S AUTHORIZED REPRESENTATIVE 72 HOURS (WEEKENDS NOT INCLUDED) PRIOR TO COMMENCEMENT OF WORK TO COORDINATE PROJECT OBSERVATION SCHEDULE.
- IF CONFLICTS ARISE BETWEEN SIZE OF AREAS ON PLANS OR LAYOUT OF PLANS, CONTRACTOR SHOULD CONTACT LANDSCAPE ARCHITECT FOR RESOLUTION. FAILURE TO MAKE SUCH CONFLICTS KNOWN TO THE LANDSCAPE ARCHITECT WILL RESULT IN CONTRACTOR'S LIABILITY TO RELOCATE THE MATERIAL.
- PROTECT ALL EXISTING TREES TO REMAIN. CONTRACTOR SHALL REPLACE ANY TREES DAMAGED DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE FENCING, IF NECESSARY, AT THE TREE DRIP LINE TO PROTECT TRUNK AND ROOTS AND TO PREVENT COMPACTION FROM VEHICLE TRAFFIC OR MATERIAL STORAGE ON THE SOIL BELOW TREES. CONTRACTOR SHALL PROVIDE FOR THE FEEDING, WATERING AND GENERAL MAINTENANCE OF TREES TO KEEP THEM IN A HEALTHY CONDITION DURING CONSTRUCTION.
- CONTRACTOR SHALL SUBMIT PHOTOS OF REPRESENTATIVE TREES AND SHRUBS WITH SPECIFICATIONS ON THE BACK OF PHOTO INCLUDING HEIGHT, WIDTH AND CALIPER. IF A NURSERY VISIT IS REQUIRED THE CONTRACTOR WILL ARRANGE TO HAVE THE PARTICULAR NURSERIES PREPARED TO SHOW TREES. SHOULD CONTRACTOR INSTALL PLANT MATERIAL INFERIOR TO INDUSTRY STANDARD, IT IS AT HIS OWN RISK. ALL PHOTO SUBMITTALS ARE TO BE APPROVED PRIOR TO PLANTING.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH PLANT MATERIALS FREE OF PESTS AND DISEASES. PRE-SELECTED OR "TAGGED" MATERIAL MUST BE INSPECTED BY THE CONTRACTOR AND CERTIFIED PEST AND DISEASE FREE. IT IS THE CONTRACTOR'S OBLIGATION TO GUARANTEE ALL PLANT MATERIALS PER THE SPECIFICATIONS.
- CONTRACTOR SHALL STAKE ALL FINAL TREE LOCATIONS AND PLANTING BED LIMITS IN THE FIELD FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- STEEL EDGING SHALL BE PLACED BETWEEN ALL SHRUB BEDS AND TURF AREAS, AS WELL AS BETWEEN GRAVEL BED AND PLANTING BEDS.
- UPON INSTALLATION ALL TREE MATERIALS SHALL BE STAKED ACCORDING TO SPECIFICATIONS AND PLANTING DETAILS.
- TREE MATERIAL SHALL BE PLANTED A MINIMUM OF 5'-0" FROM ANY PROPOSED OR EXISTING STREET CURBS AND PAVED AREAS, UNLESS OTHERWISE NOTED ON THE PLANS.
- CONTRACTOR SHALL INSTALL DEEP/ROOT BARRIERS AT ALL TREES WITHIN 5'-0" OF CONCRETE WALKWAYS, STRUCTURES, WALLS, CURBS, ETC.
- ALL PLANTS SHALL BE TRIANGULARLY SPACED UNLESS OTHERWISE INDICATED.
- ALL PLANTING BEDS SHALL RECEIVE A MINIMUM OF 3" OF APPROVED SHREDDED MULCH.
- CONTRACTOR SHALL FINE GRADE ALL DISTURBED AREAS TO PROVIDE FOR PROPER DRAINAGE.

ISSUE LOG

NO.	DATE	DESCRIPTION
1	04.03.2015	100% DD
2	09.04.2015	50% CD
3	10.31.2016	75% CD
4	03.15.2017	95% CD
5	06.14.2017	100% CD
6	11.03.2017	100% CD
7	12.18.2017	PERMIT SET
8	09.27.2018	BID & CONSTRUCTION

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1002 Westinghouse Ave., Suite A
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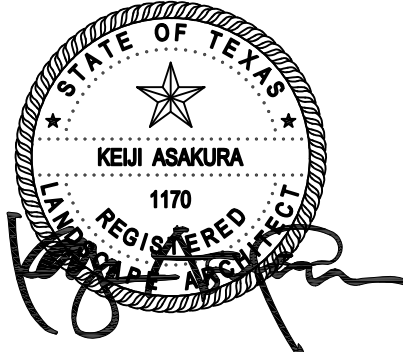
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www.metalabstudio.com

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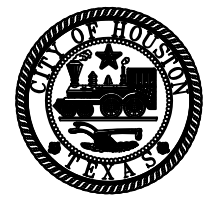
SEAL:



Parks Capital Improvement Program
for City of Houston
General Services Department and
Parks & Recreation Department

PARK NAME :

DOW SCHOOL PARK
1900 Kane Street Houston TX 77007
TIRZ #13



CITY OF HOUSTON
GENERAL SERVICES
DEPARTMENT

REVIEWED :

N/A
PARKS PROGRAM MANAGER HERMAN PARK CONSERVANCY

PROJECT MANAGER

DATE : _____
WBS. No. : [F-000870-001]
SCALE : [AS NOTED]
DRAWN BY : _____
CHECKED BY : _____

SHEET TITLE :

**LANDSCAPE
DETAILS**

SHEET NO. :

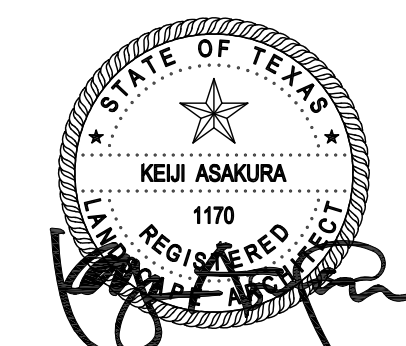
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CITY DWG. NO. :

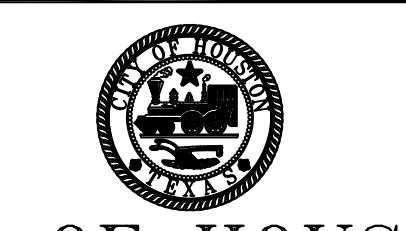
POLE LAMP - FIXTURE DETAILS

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www.metalabstudio.com



PARK NAME :
DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13



REVIEWED :

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DATE : _____

SHEET TITLE :

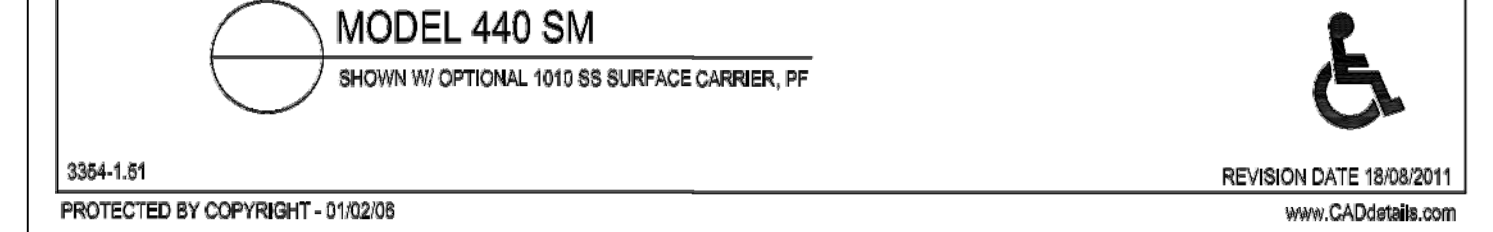
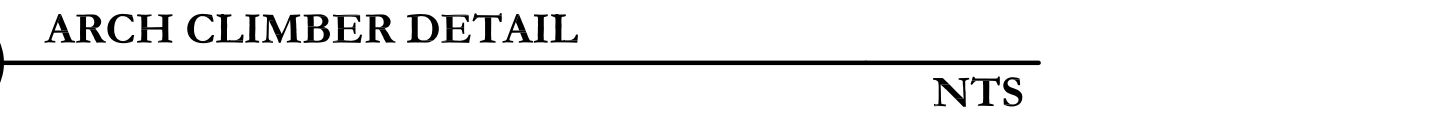
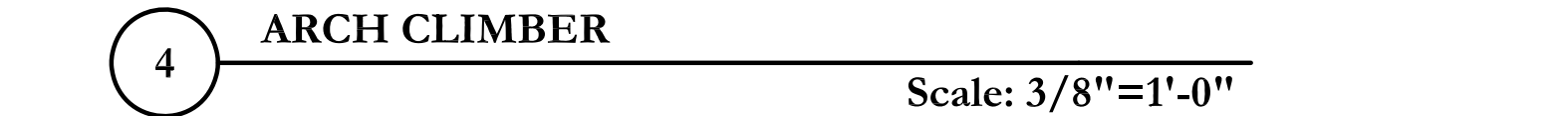
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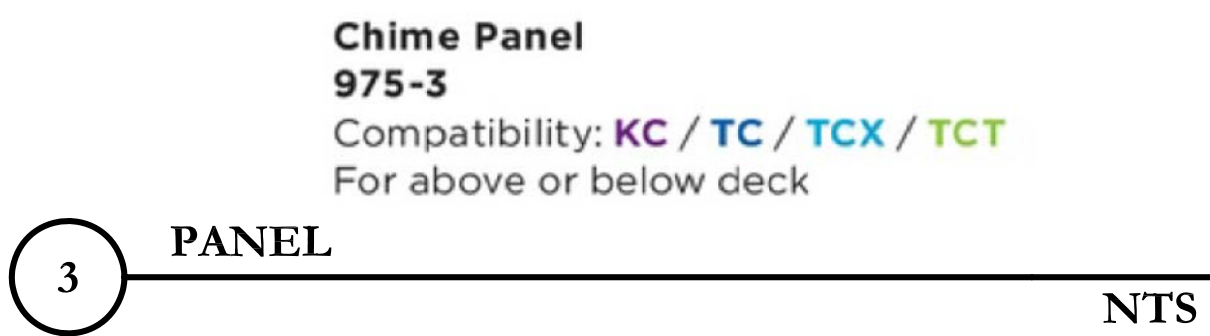
L - 6.1

CITY DWG. NO. :

PLAYGROUND EQUIPMENT							
1	SLIDE	1	LANDSCAPE STRUCTURES	MODEL #123337 48" HIGH	TANGERINE	POLYETHYLENE	LONE STAR RECREATION, INC. P: 281-970-9010 info@lonestarrecreation.com
2	ARCH CLIMBER	3	LANDSCAPE STRUCTURES	CUSTOM	ARCH: COOL SILVER MATTE CLAMP: LEAF	NA	LONE STAR RECREATION, INC. P: 281-970-9010 info@lonestarrecreation.com
3	BONGO PERCH	6	MIRACLE	MODEL 714-772-1	TROPICAL YELLOW	NA	JEFF BRATTON P: 281-288-1412 F: 281-288-0043 jeff@mayrecreation.com www.mayrecreation.com

1	POLE LIGHT	7	STERNBERG LIGHTING	FIXTURE: 1A-1910LEDRLM24-5P-3 ARC30T4-MDL03-A-EZ/ R2/8712T4-.125/BK	BLACK	NA	Facility Solutions Group, John Campsmith Ph: (512) 835-4971 x 18246 www.fsgj.com
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	NAME	QTY	MANUFACTURER	MODEL	COLOR	CONTACT
1	HALF HEX DECK	2	MIRACLE	714-503-9	MATCH EXISTING	JEFF BRATTON P: 281-288-1412 F: 281-288-0043 jeff@mayrecreation.com www.mayrecreation.com
2	SQUARE DECK	4	MIRACLE	714-502-9	MATCH EXISTING	JEFF BRATTON P: 281-288-1412 F: 281-288-0043 jeff@mayrecreation.com www.mayrecreation.com
3	WIDE BURMA BRIDGE	1	MIRACLE	732-W9	MATCH DECK COLOR	JEFF BRATTON P: 281-288-1412 F: 281-288-0043 jeff@mayrecreation.com www.mayrecreation.com
4	CHIME PANEL	1	MIRACLE	975-3	GREEN	JEFF BRATTON P: 281-288-1412 F: 281-288-0043 jeff@mayrecreation.com www.mayrecreation.com
5	ADA TRANSFER POINT	1	MIRACLE	714-965-9, 3'	MATCH EXISTING	JEFF BRATTON P: 281-288-1412 F: 281-288-0043 jeff@mayrecreation.com www.mayrecreation.com

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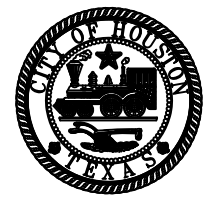
SEAL:



**for City of Houston
General Services Department and
Parks & Recreation Department**

PARK NAME :

DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13



CITY OF HOUSTON
GENERAL SERVICES
DEPARTMENT

REVIEWED :

	N/A
PARKS PROGRAM MANAGER	HERMANN PARK CONSERVANCY

PROJECT MANAGER

DATE : _____
WBS. No : _____ [F-000870-0001]
SCALE : _____ [AS NOTED]
DRAWN BY : _____
CHECKED BY : _____

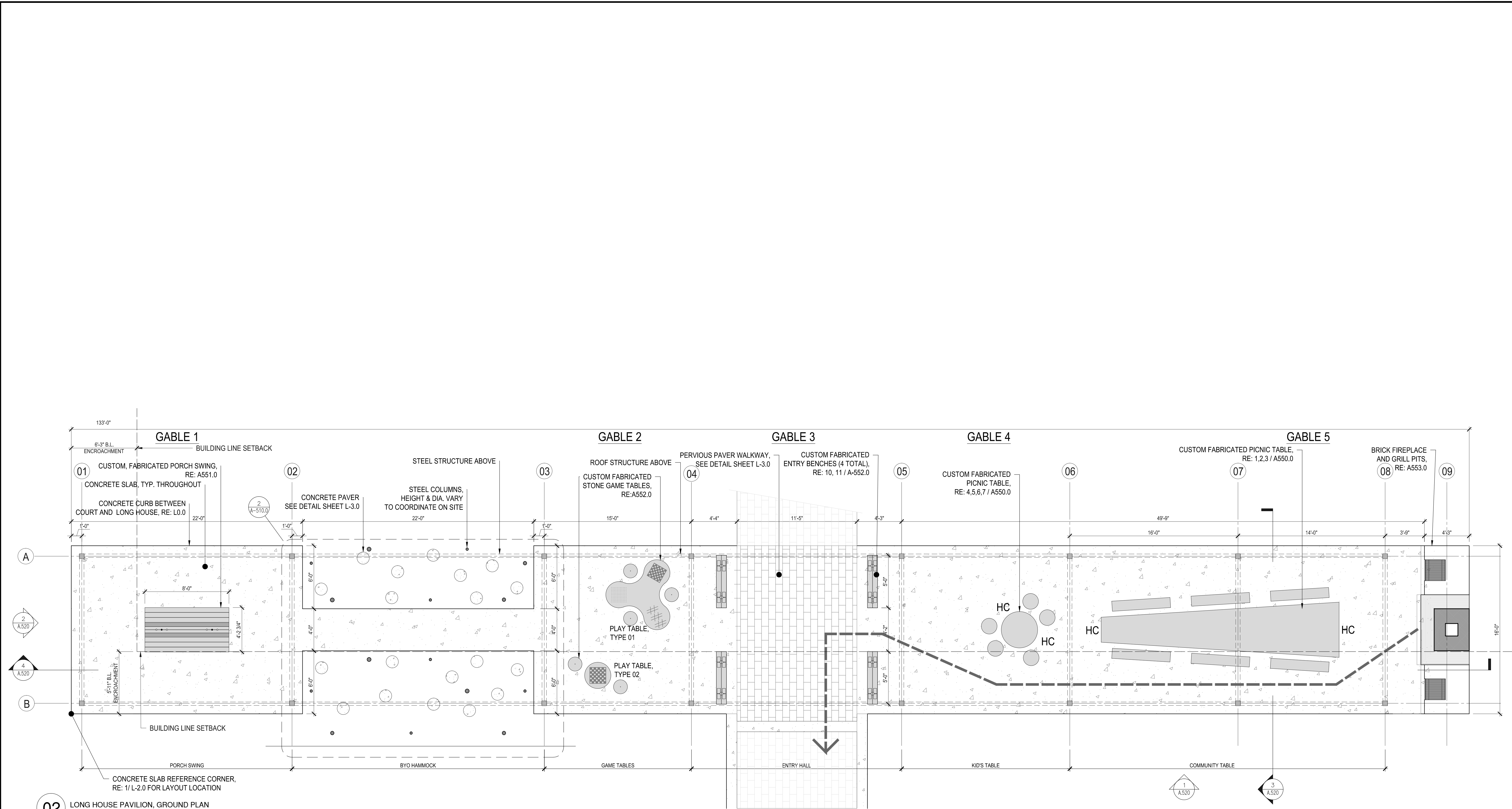
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PLAYGROUND DETAILS

SHEET NO. :

L - 6.2

CITY DWG. NO. :

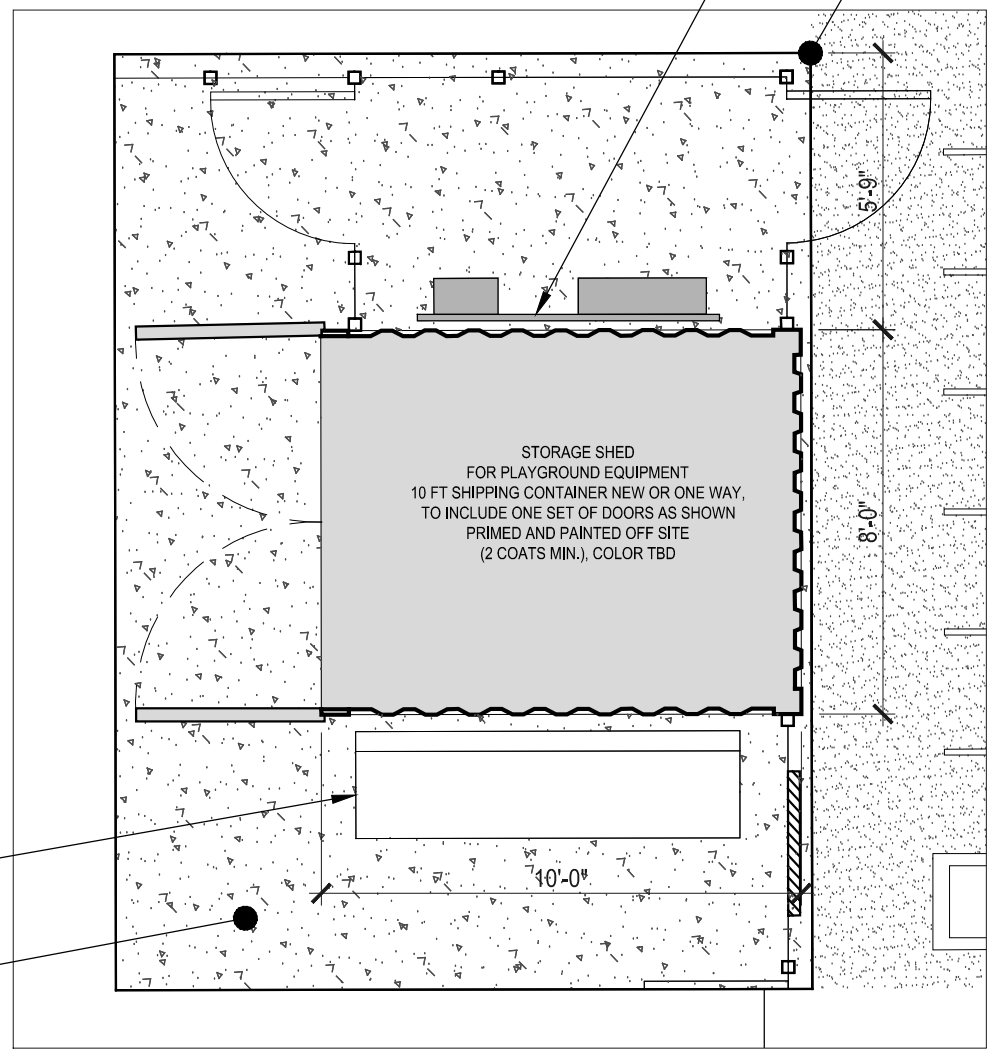


02 LONG HOUSE PAVILION, GROUND PLAN
1/4" = 1'-0"

CODE ANALYSIS
1900 KANE ST, BLDG A - MASTER PERMIT# 17143614

USE - Public Park Picnic Pavilion
OCCUPANCY - A3
AREA - 1230sf covered, 565sf open air
OCCUPANT LOAD - 56 based on fixed seats
LONGEST PATH OF EGRESS TRAVEL - 16ft
ADA accessible route - 68ft
CONSTRUCTION - Type Vb, steel primary structure and exposed concrete slab with wood framing, trim, finish, and fixed furniture

NOTES
- No fire rating required, north and west faces of pavilion fall within 10ft of property lines, adjacent to streets which are public right of way, which will never be built on.
- Exterior Signage at entryway will be permitted separately



01 STORAGE SHED GROUND PLAN
1/4" = 1'-0"

BENCH, RE: 3/ L-6.0
CONCRETE SLAB, RE: S700.1 FOR DETAILS

UNI-STRUT ELECTRICAL RACK FOR SITE ELECTRICAL SERVICE
FREE STANDING FRAME, MOUNTED TO SLAB
RE: EP1.1 FOR DETAILS

CONCRETE SLAB REFERENCE CORNER,
RE: 1/ L-2.0 FOR LAYOUT LOCATION

CODE ANALYSIS
1900 KANE ST, BLDG B - SUB PERMIT# 18009666

USE - Storage
OCCUPANCY - S-1
AREA - 80sf
OCCUPANT LOAD - 1
LONGEST PATH OF EGRESS TRAVEL - 10ft
CONSTRUCTION - Type Vb, non-combustible
Shipping container of all steel construction w/ steel doors
NOTES - No modifications to shipping container.
No electrical, no plumbing, no mechanical

ISSUE LOG		
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3	06.08.2018	COMMENT RESPONSE
8	11.02.2018	ISSUED FOR BID

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Parks Capital Improvement Program

for City of Houston
General Services Department and
Parks & Recreation Department

PARK NAME :

DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13

REVIEWED :

PARKS PROGRAM MANAGER N/A
HERMANN PARK CONSERVANCY

PROJECT MANAGER



DATE : _____
WBS. No. : [L-NNNN-NN-3]
SCALE : 1/4"=1'-0"
DRAWN BY : _____
CHECKED BY : _____

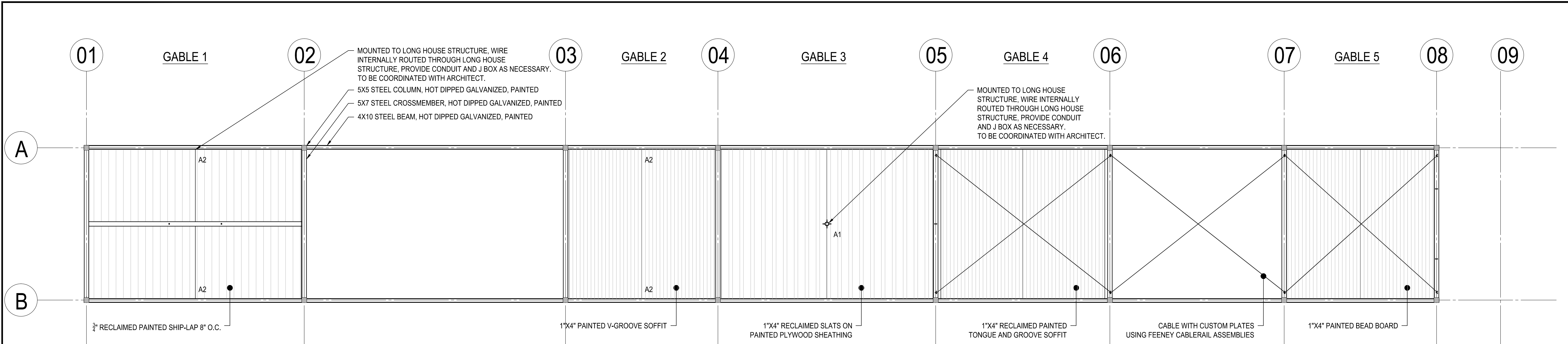
SHEET TITLE :

**LONG HOUSE
GROUND PLAN**

SHEET NO. :

A - 510.0

CITY DWG. NO. :



01 REFLECTED CEILING PLAN
1/4" = 1'-0"

UCM/UCL

Universe Collection® – Medium/Large Scale

CONTEMPORARY

- MicroCore™ technology
- First decorative, modular system with precise LED aiming capabilities
- Surge protection included
- 0-10v dimming ready
- IP66 optics
- DLC listed
- Powder coat finish in 13 standard colors with a polymer primer sealer

ORDERING INFORMATION

UCM/UCL - FLR - SR - TS - BL - PMS (REDAUNT)

MODEL	HOOD	COLOR TEMPERATURE	FIXTURE FINISH	OPTIONS
UCM - Universe Medium	ANG Angled hood	UCM	WH Arctic White	OPTIONS - HOOD
UCL - Universe Large	BEL Bell hood	32LED-3K Warm White, 3000K output	BL Black	COP Copper
UCM Upgrade Kit - UCM-LK	FLR Flared hood	32LED-4K Neutral White, 4000K output	BLT Matte Black	STS Stainless Steel
UPLT	STR Straight hood	32LED-5K Bright White, 5000K output	DGN Dark Green	OPTIONS
Distribution	SKB Skirted bell hood	UCM	DB Dark Bronze	SLC Luminous element: remains unit during normal operation
Color	LUMINOUS ELEMENTS OPTION	56LED-3K Warm White, 3000K output	TT Titanium	FTG Flat glass lens.
Driver	WND 4 luminous windows	56LED-4K Neutral White, 4000K output	WDB Weathered Bronze	FLD Lightly diffused finish on flat glass lens
Bezel Fishes	SR Solid rings	56LED-5K Bright White, 5000K output	MDB Metallic Bronze	RCK Rock guard, UCM only.
UCM Upgrade Kit - UCL-LK	VSL Vertical slots	DRIVER	CRT Corten	LDL Lightly diffused lens
UPLT	LUM Luminous rings	120 thru 277 volt	MAL Matte Aluminum	PCA-C Rotatable photocell housing: contemporary
Distribution	LUMINOUS RINGS COLOR OPTION	UCM	MG Medium Grey	SCP Programmable motion control, factory default is 50%, requires pole.
Color	BL Blue inner lens	700 700mA drive current, 132 watts	AGN Antique Green	
Driver	RD Red inner lens	450 450mA drive current, 84 watts	LG Light Grey	
Bezel Fishes	GRN Green inner lens	700 700mA drive current, 75 watts	RAL Provide a RAL 4 digit color number	
		450 450mA drive current, 49 watts	PREMIUM COLOR	
			CUSTOM COLOR	

SCP (Sensor Control, Programmable) pole accessory is available to provide occupancy detection for outdoor applications meeting California Title 24. For complete spec sheet and ordering information, visit www.aal.net/products/sensor_control_programmable/

Please visit www.aal.net for mounting, dimensions, weight and EPA.

A1

LIGHTING SCHEDULE

A1	1	PENDANT	
A2	4	SCONCE	

DESCRIPTION

Westwood 904 and 904-2 are small dimmable LED or MR16 low-voltage halogen luminaires. Model 904 provides downlight or uplight by way of its 180° rotational fixture head. Model 904-2 provides combination uplight and downlight. A square shroud option (-SQS) is available in both models, offering rectilinear styling instead of cylindrical. Both models mount directly to any wall surface or over a standard 4-inch J-box and require a remote 12-volt step-down transformer (not included). Various lenses, louvers, and color or dichroic filters can be combined - up to three at once - to create multiple lighting effects.

SPECIFICATION FEATURES

A ... Material

Housing and hood are precision-machined from corrosion-resistant 6061-T6 aluminum billet, brass, bronze or stainless steel. Mounting canopy is constructed from corrosion-resistant silicone aluminum, brass, bronze or stainless steel.

B ... Finish Painted

Fixtures constructed from 6061-T6 aluminum are double protected by an ROHS compliant chemical film undercoating and polyester powdercoat paint finish, surpassing the rigorous demands of the outdoor environment. A variety of standard colors are available. Brass, Bronze or Stainless Steel Fixtures constructed from brass, bronze or stainless steel are left unpainted to reveal the natural beauty of the material. Brass and bronze will patina naturally over time.

C ... Hood

Hood is removable for easy relamping and accepts up to three internal accessories at once (lenses, louvers, filters) to achieve multiple lighting effects. Weep holes prevent water collection on the uplight position.

D ... Gasket

Housing and hood are sealed with a high temperature silicone o-ring gasket to prevent water intrusion.

E ... Lens

Tempered glass lens, factory sealed with high temperature adhesive to prevent water intrusion and breakage due to thermal shock.

F ... Mounting

Both models mount directly to wall surface or over a standard 4" J-box and require remote 12V step-down transformer (not included). Model 904 provides downlight or uplight. Model 904-2 provides non-adjustable uplight and downlight. Lumière's exclusive Siphon Protection System (S.P.S.) prevents water from siphoning into the fixture through its own lead wires.

G ... Hardware

Stainless steel hardware is standard to provide maximum corrosion-resistance.

H ... Socket

Ceramic socket with 250° C Teflon® coated lead wires and GUS.3 bi-pin base.

I ... Electrical

Remote 12V transformer required (not included). NOTE: Initial power draw on LED equipped fixtures is 15 watts. When sizing transformer use 15 watts per LED fixture. Nominal power draw after start up is 10 or 6 watts accordingly. Also, LEDs are more voltage sensitive than standard halogen MR16 lamps. The LED module is designed to operate between 10 and 13 volts. Any less or more voltage can cause premature failures.

J ... Lamp

Halogen lamp not included. Available from Lumière as an accessory - see reverse side for details and catalog logic. LED modules are included and are available in four color temperatures (2700,3000,4000, and 5700) and three distributions (spot, narrow, and flood). Both color temperature and distribution must be specified when ordering - see reverse side for details and catalog logic.

K ... Labels & Approvals

UL and cUL listed, standard wet label. IP65 rated. Manufactured to ISO 9001-2000 Quality Systems Standard. IBEW union made.

L ... Warranty

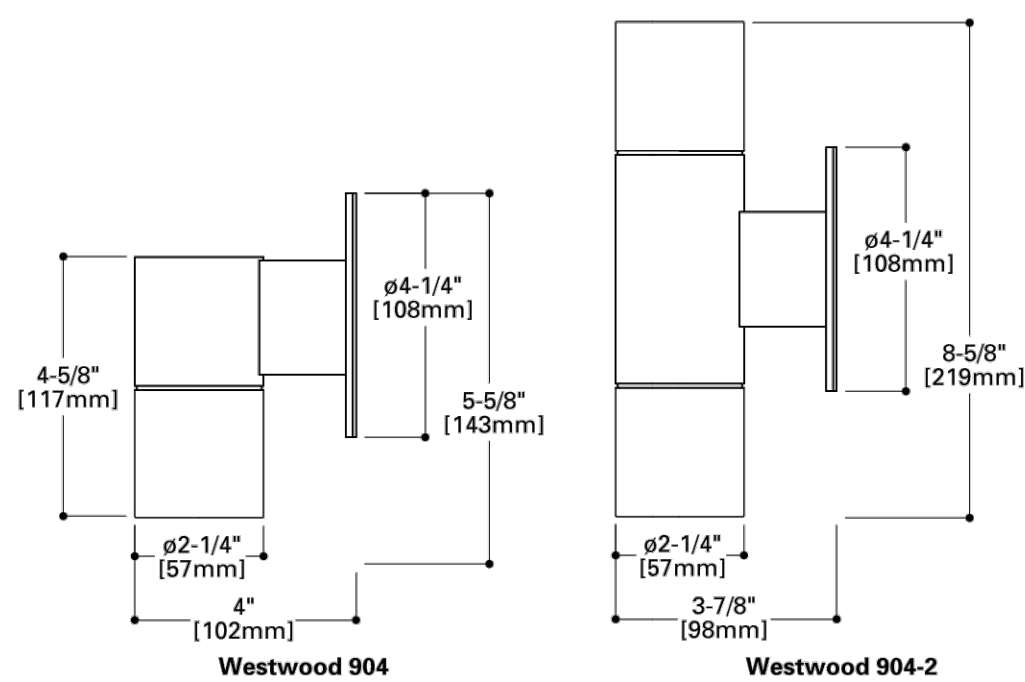
Lumière warrants its fixtures against defects in materials & workmanship for three (3) years. Auxiliary equipment such as transformers, ballasts and lamps carry the original manufacturer's warranty.

LUMIÈRE®

Catalog #	904-50MR16-12V-WT-DIF-FNV	Type
Project	DSP	
Comments		Date
Prepared by	Peter	



WESTWOOD
904
904-2
10W LED
6W LED
50W (max.) MR16
Low Voltage
Wall
IP65



COOPER Lighting
www.cooperlighting.com

Specifications and Dimensions subject to change without notice.
Consult your representative for additional options and finishes.

ADL032500
07/02/2012 11:36:14 AM

A2

ISSUE LOG

NO.	DATE	DESCRIPTION
2	09.04.2015	50% CD
3	10.31.2016	75% CD
4	03.15.2017	95% CD
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**Parks Capital
Improvement
Program**
for City of Houston
General Services Department and
Parks & Recreation Department

PARK NAME :

DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13

REVIEWED :

PARKS PROGRAM MANAGER N/A
HERMAN PARK CONSERVANCY

PROJECT MANAGER



DATE :
WBS. No. : [L-NNNN-NN-3]
SCALE : 1/4" = 1'-0"
DRAWN BY :
CHECKED BY :

SHEET TITLE :

**LONG HOUSE
REFLECTED CEILING
PLAN AND LIGHTING**

SHEET NO. :

A - 511.0

CITY DWG. NO. :



01 ROOF PLAN
1/4" = 1'-0"

ISSUE LOG		
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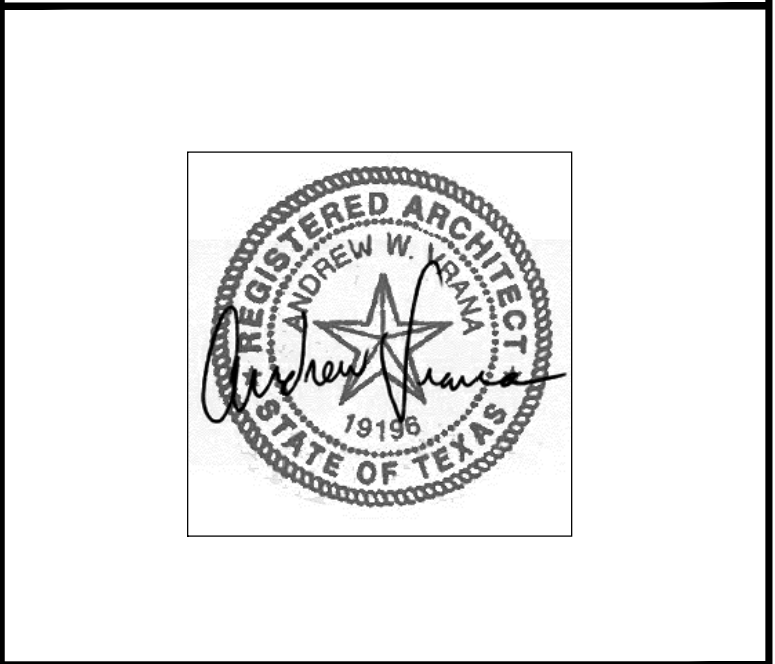
Parks Capital Improvement Program
for City of Houston
General Services Department and
Parks & Recreation Department

PARK NAME :
DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13

REVIEWED :

_____ N/A
PARKS PROGRAM MANAGER HERMANN PARK CONSERVANCY

_____ PROJECT MANAGER

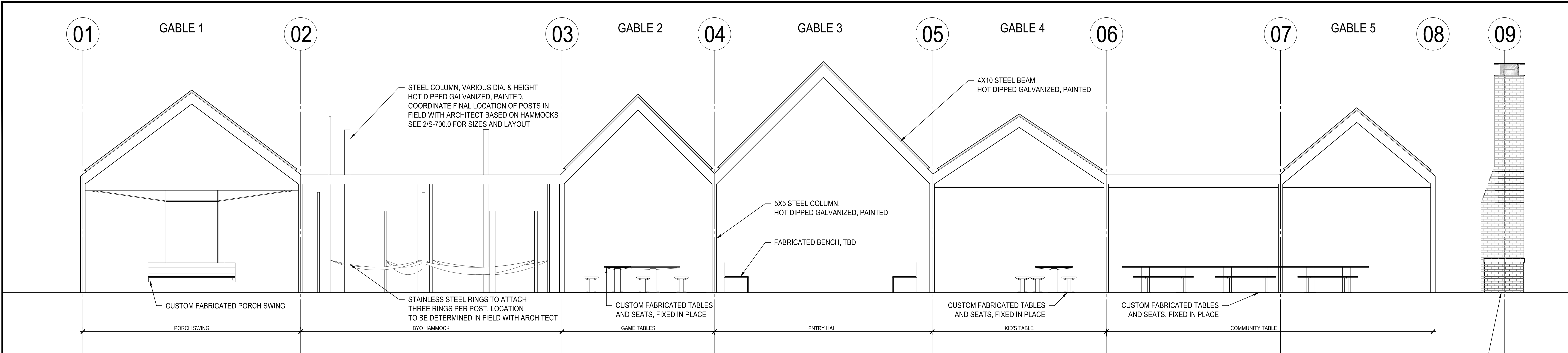


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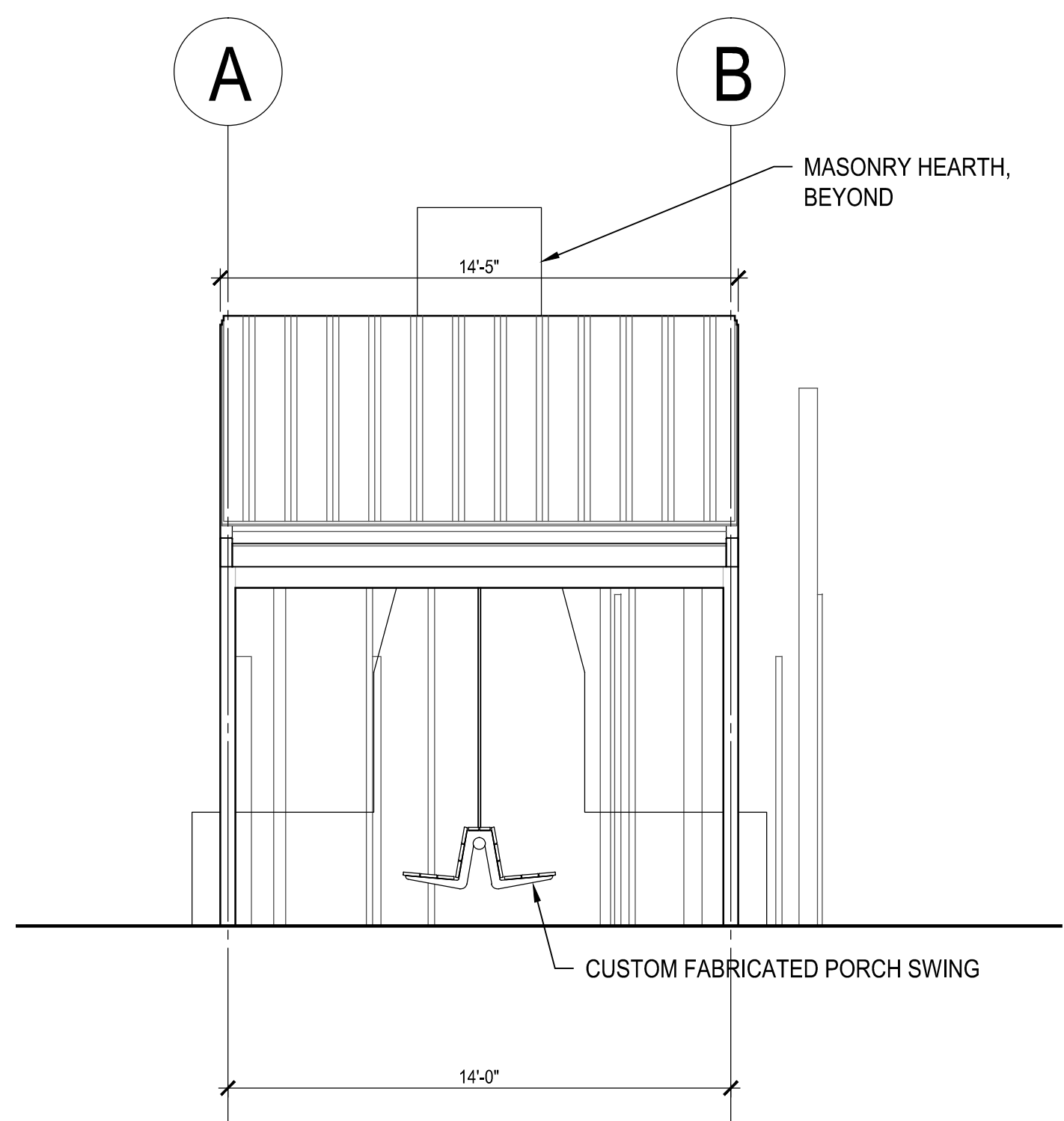
SHEET TITLE :
**LONG HOUSE
ROOF PLAN**

SHEET NO. :
A - 512.0

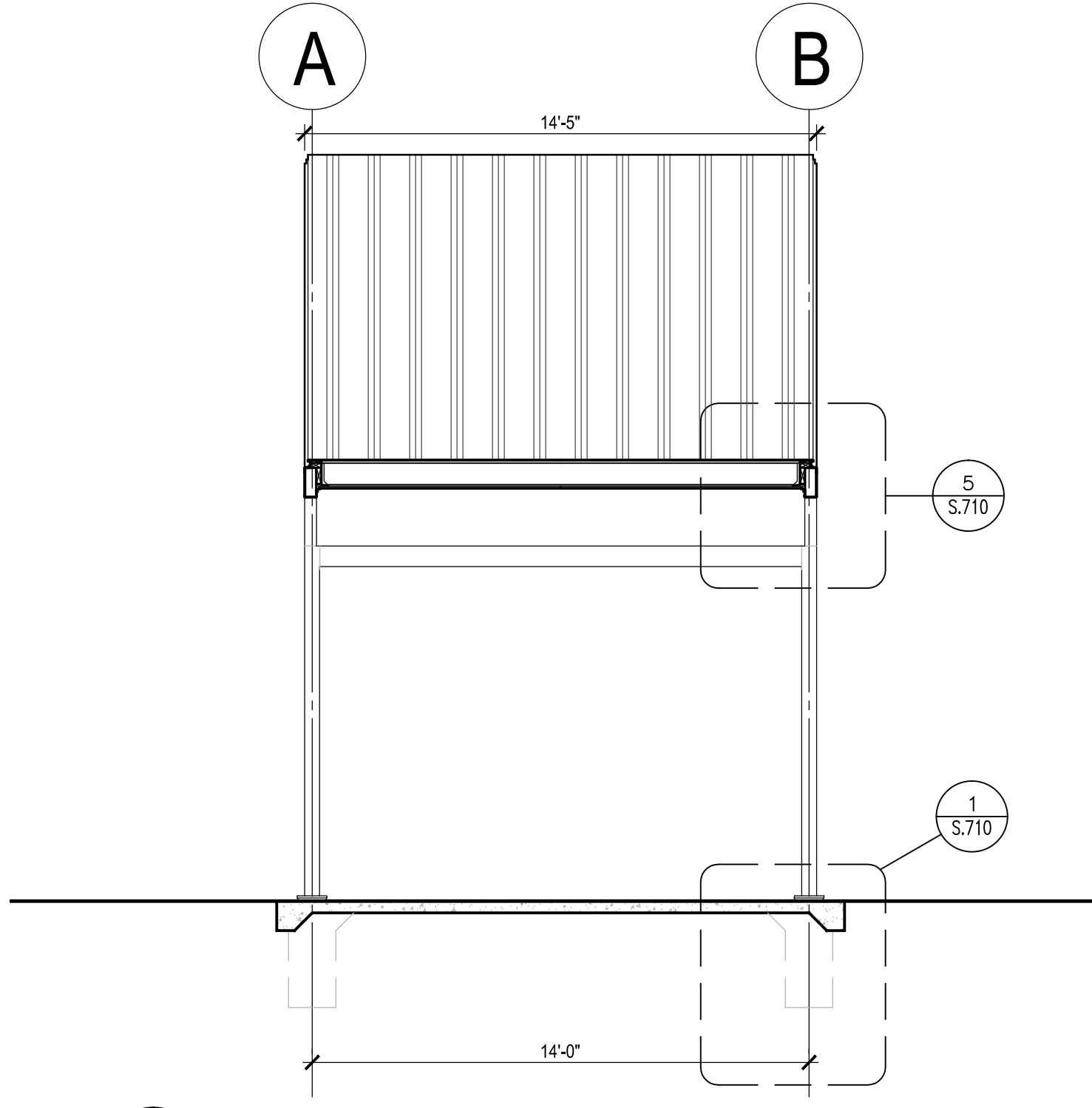
CITY DWG. NO. : _____



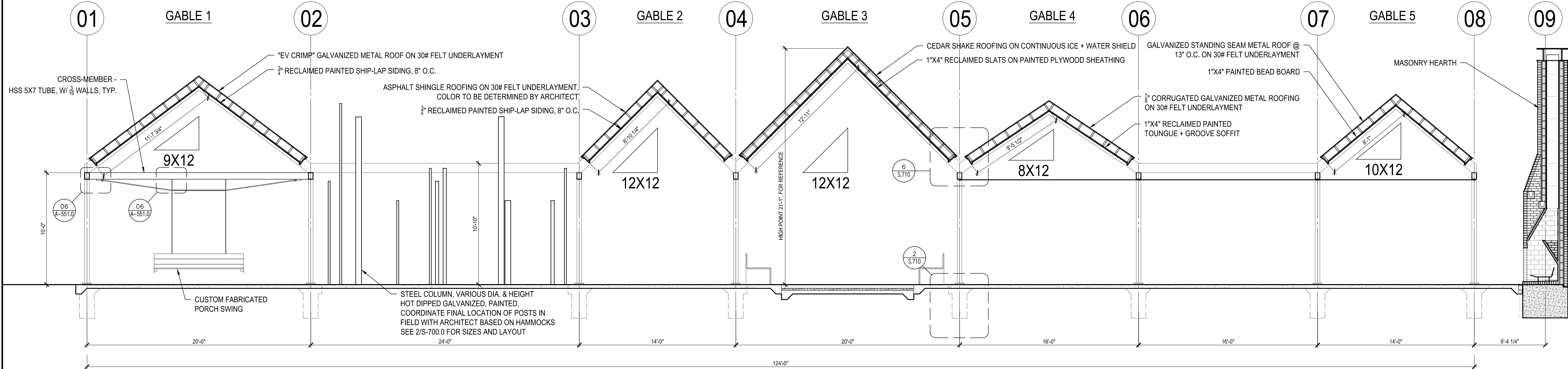
01 LONG ELEVATION
1/4" = 1'-0"



02 SHORT ELEVATION
1/4" = 1'-0"




03 SHORT SECTION
1/4" = 1'-0"



04 LONG SECTION
1/4" = 1'-0"

ISSUE LOG		
NO.	DATE	DESCRIPTION
2	09.04.2015	50% CD
3	10.31.2016	75% CD
4	03.15.2017	95% CD
5	06.14.2017	100% CD
6	11.03.2017	100% CD
7	12.18.2017	ISSUED FOR PERMIT
1	01.29.2018	COMMENT RESPONSE
2	04.02.2018	COMMENT RESPONSE
3	06.08.2018	COMMENT RESPONSE
8	11.02.2018	ISSUED FOR BID



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ENGINEER

Parks Capital Improvement Program
for City of Houston
General Services Department and
Parks & Recreation Department

PARK NAME :
DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13

REVIEWED :
N/A
PARKS PROGRAM MANAGER
HERMANN PARK CONSERVANCY
PROJECT MANAGER



DATE :
WBS. No : [L-NNNN-NN-3]
SCALE : 1/4"=1'-0"
DRAWN BY :
CHECKED BY :

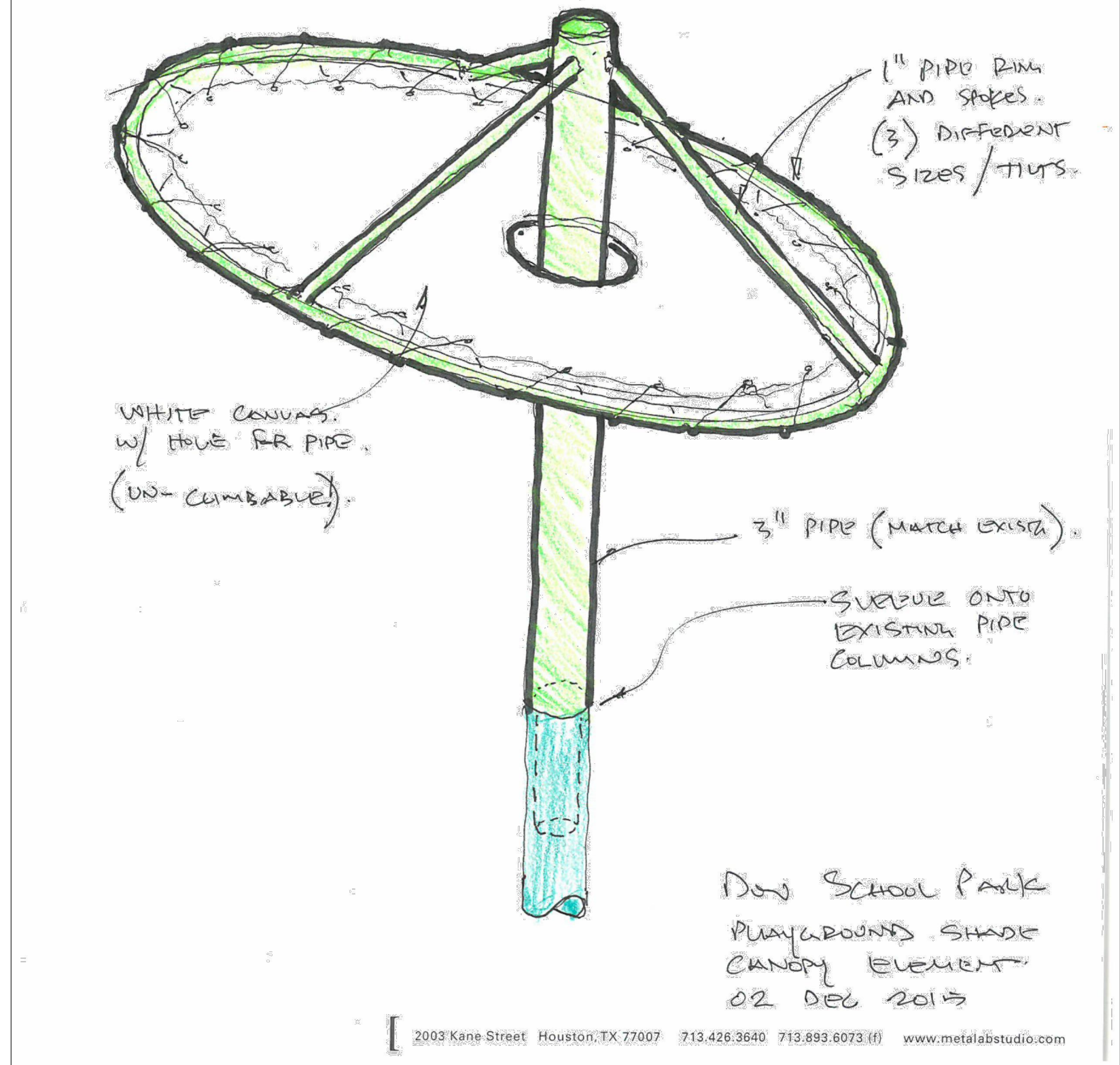
SHEET TITLE :
LONG HOUSE ELEVATIONS & SECTIONS

SHEET NO. :
A - 520.0

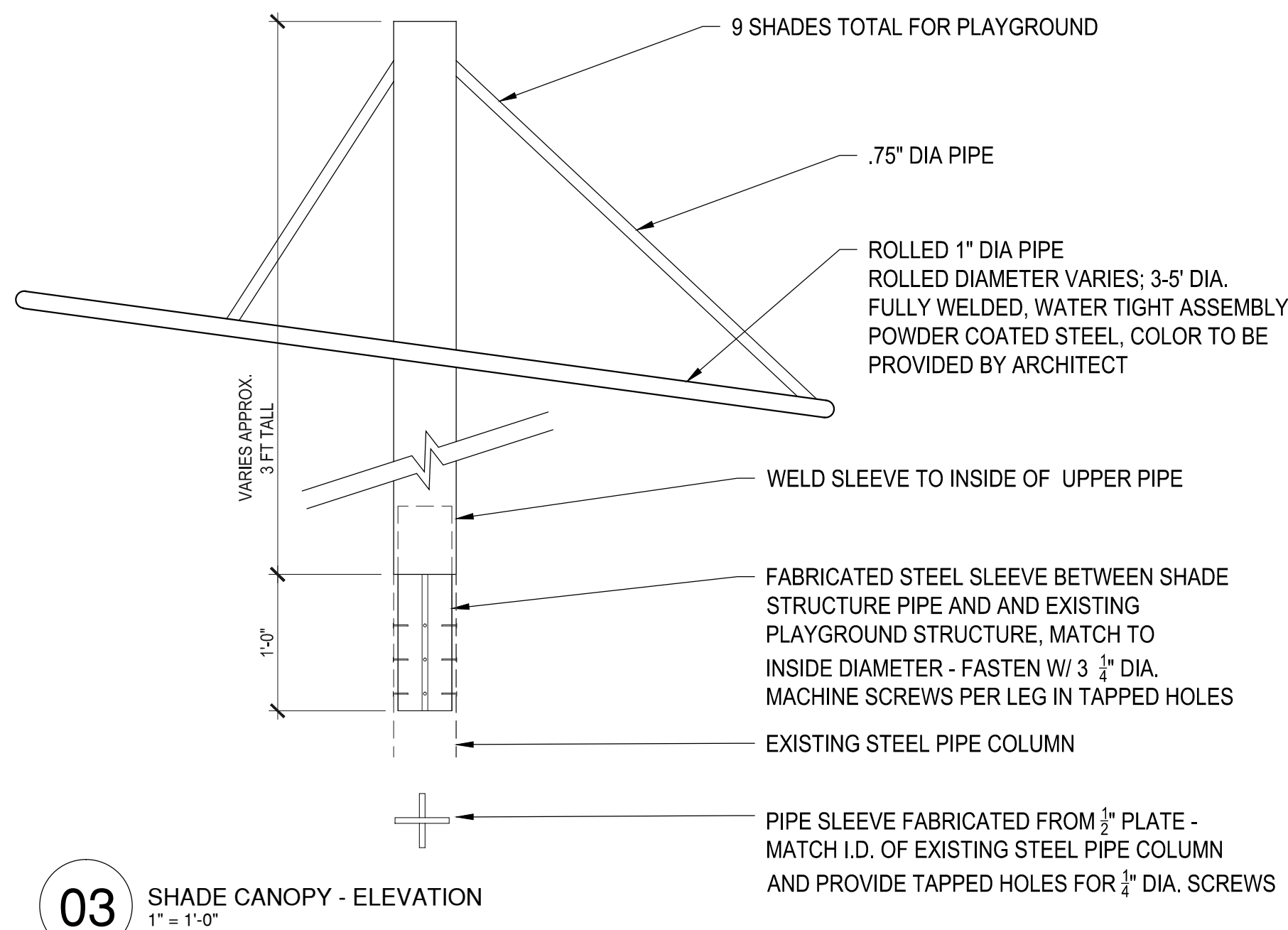
CITY DWG. NO. :

CITY DWG. NO. :

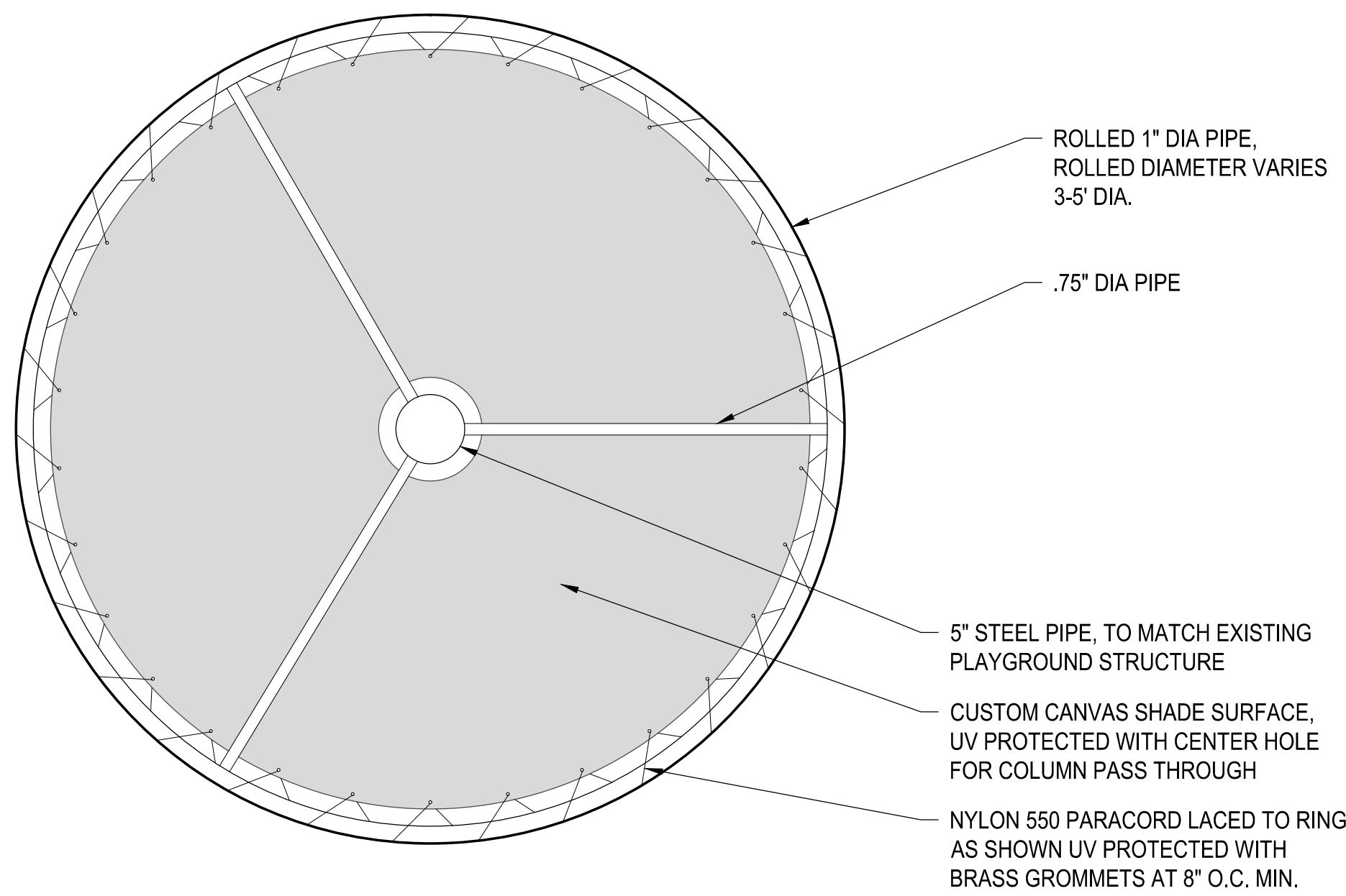
METALAB



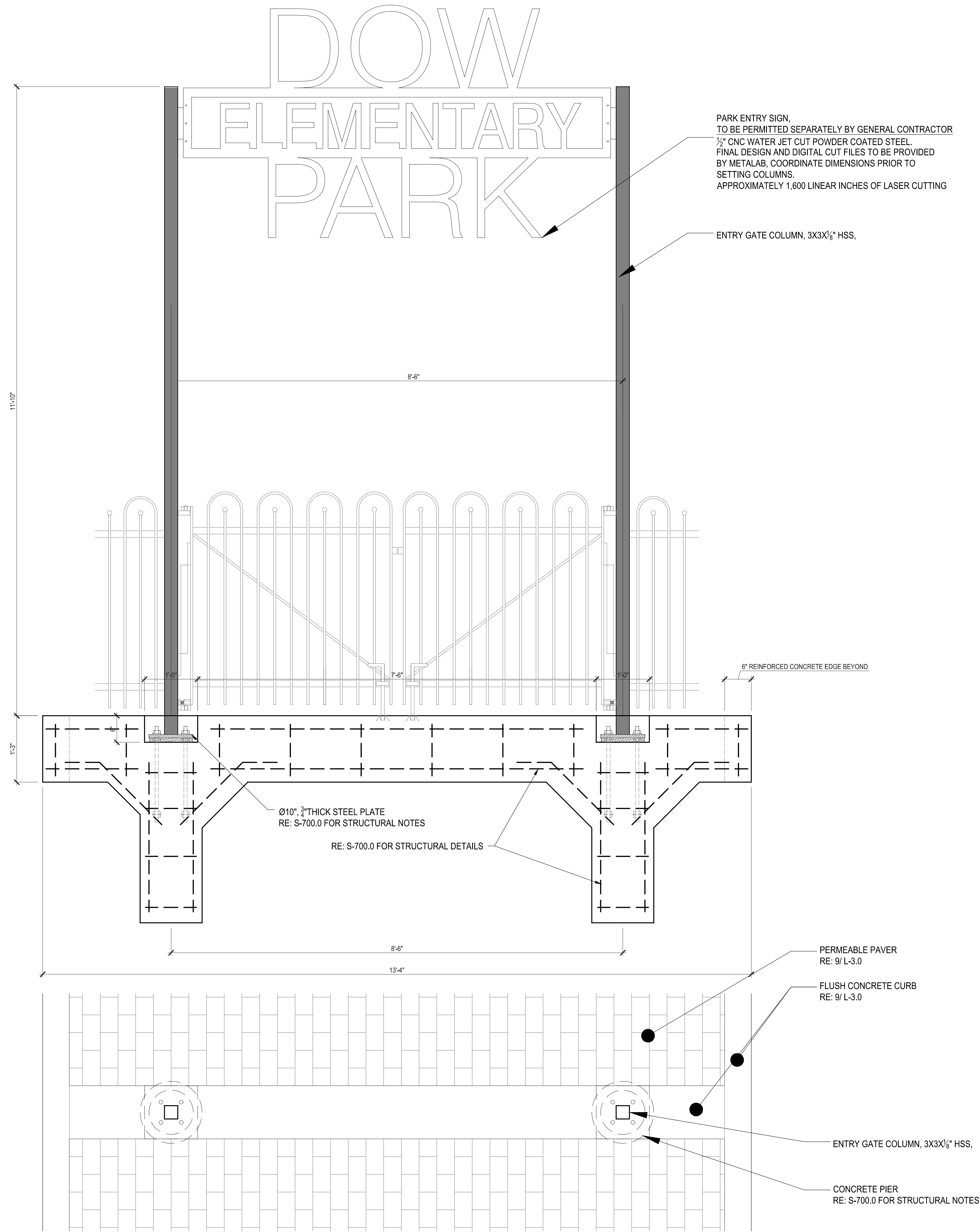
04 SHADE CANOPY - SKETCH



03 SHADE CANOPY - ELEVATION
1" = 1'-0"



02 SHADE CANOPY - PLAN
1" = 1'-0"



01 CUSTOM METAL ENTRY GATE, W/ SIGNAGE
1" = 1'-0"

-FENCE FINAL DIMENSIONS FOR FABRICATION TO BE COORDINATED WITH ARCHITECT.

-FINAL POST SPACING TO BE FIELD VERIFIED AND FRAME DIMENSIONS TO BE COORDINATED AND FABRICATED USING FENCE DIMENSIONS AND SPECS.

ISSUE LOG

NO.	DATE	DESCRIPTION
2	09.04.2015	50% CD
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for City of Houston
General Services Department and
Parks & Recreation Department

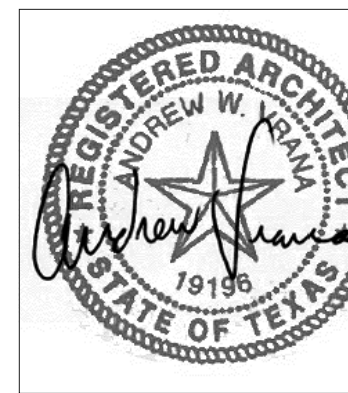
PARK NAME :

DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13

REVIEWED :

PARKS PROGRAM MANAGER N/A
HERMANN PARK CONSERVANCY

PROJECT MANAGER

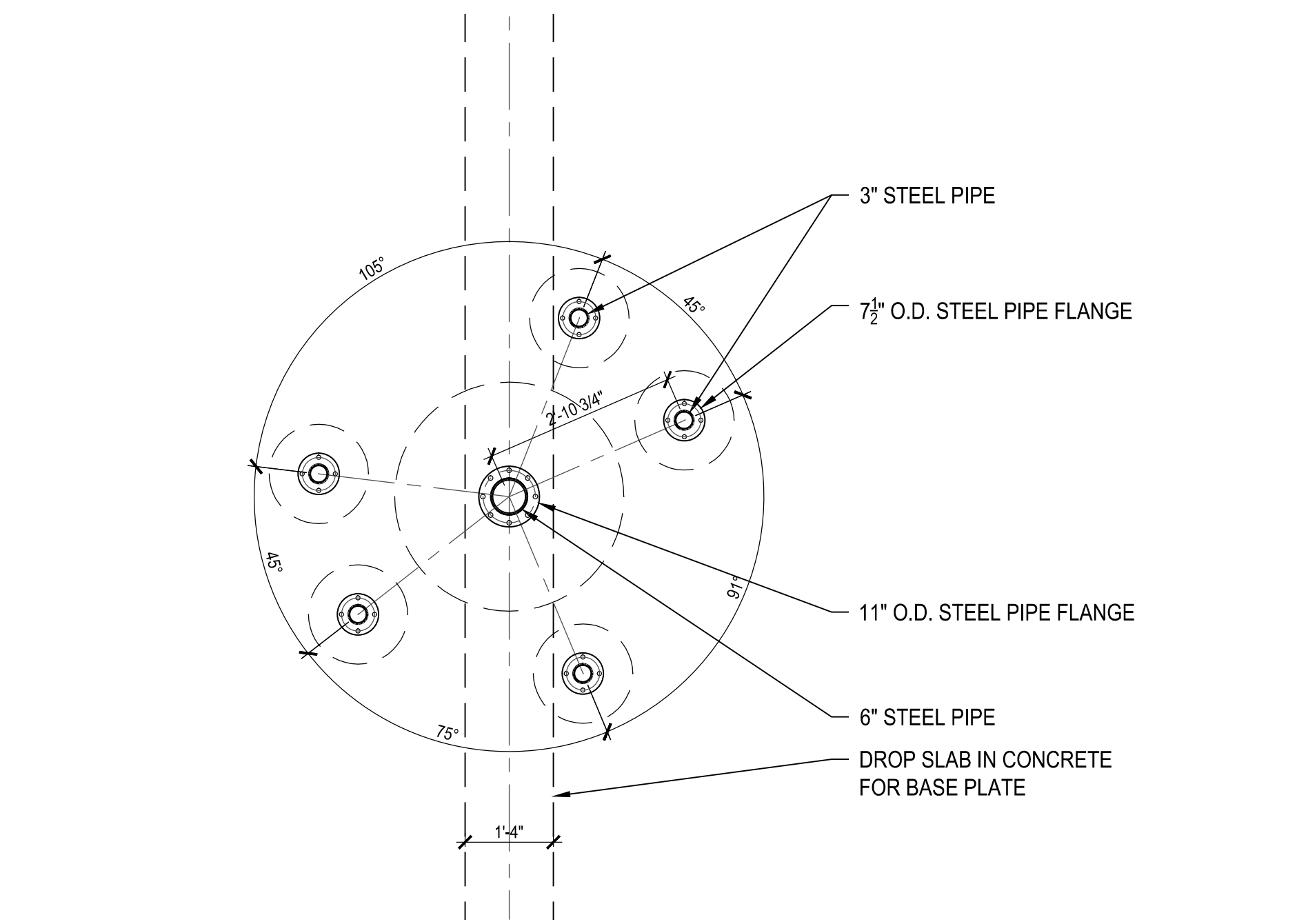


DATE :
WBS. No : [L-NNNN-NN-3]
SCALE : 1 1/2"=1'-0"
DRAWN BY :
CHECKED BY :

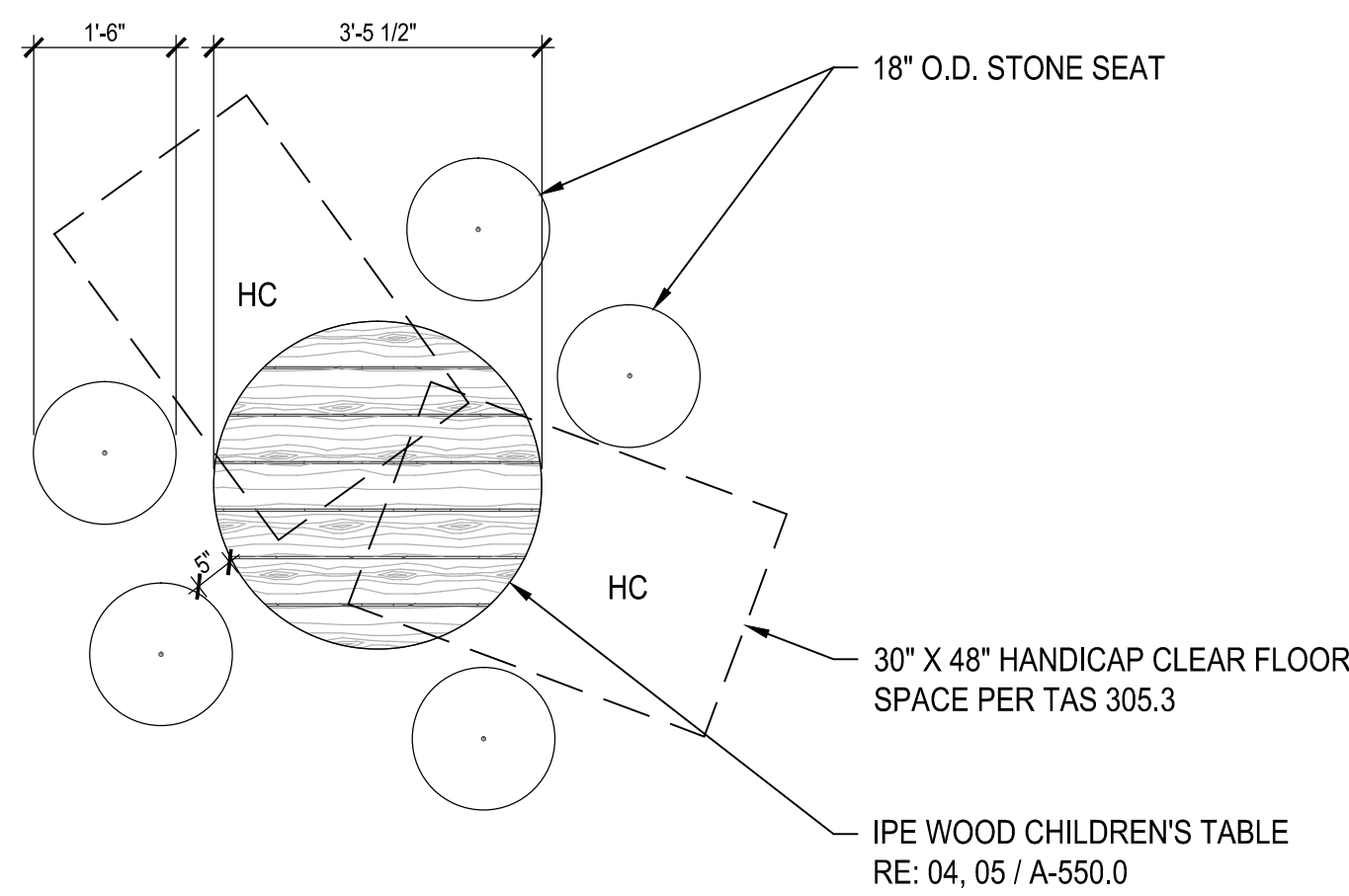
SHEET TITLE :
MISC. DETAILS

SHEET NO. :
A - 530.1

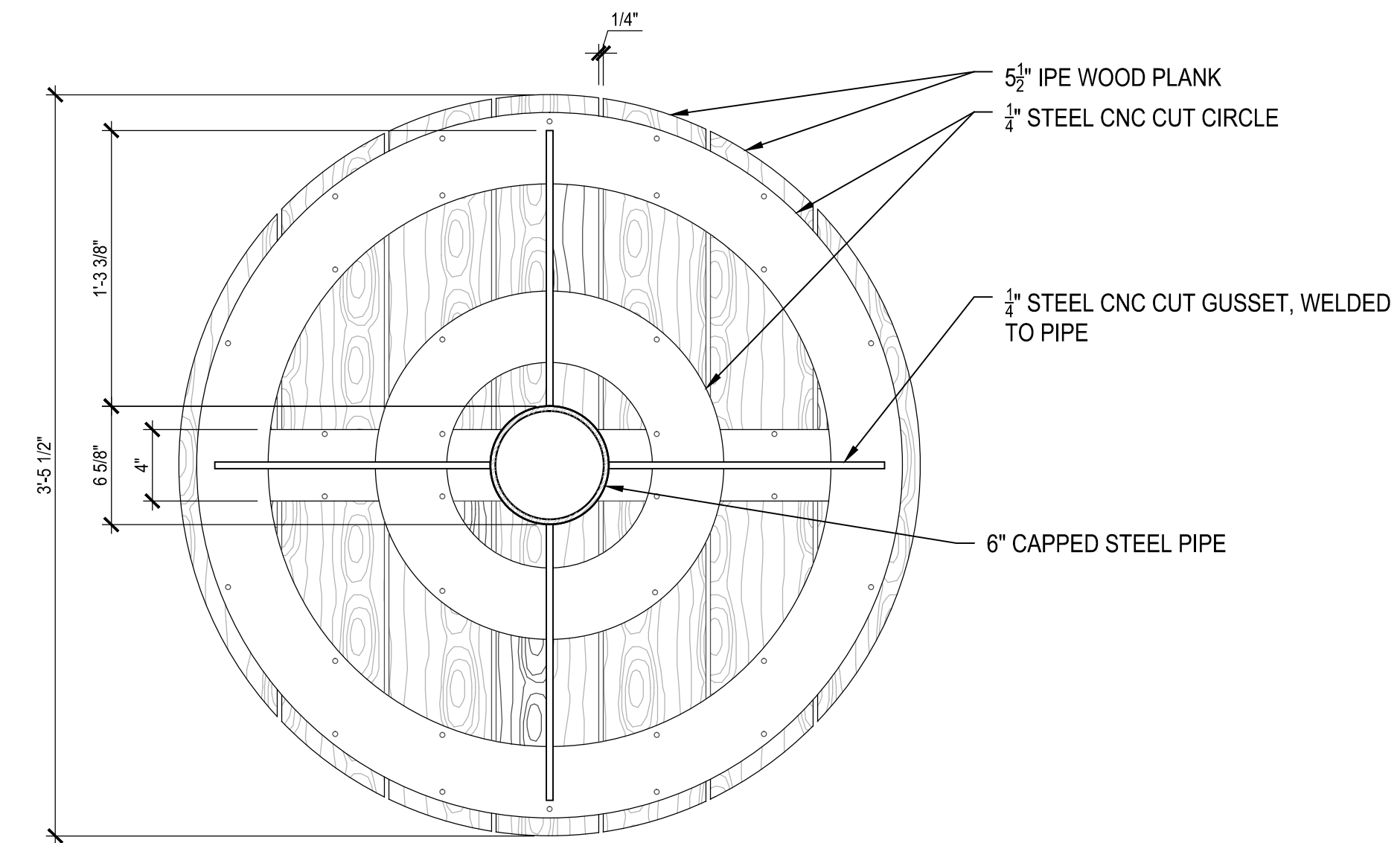
CITY DWG. NO. :



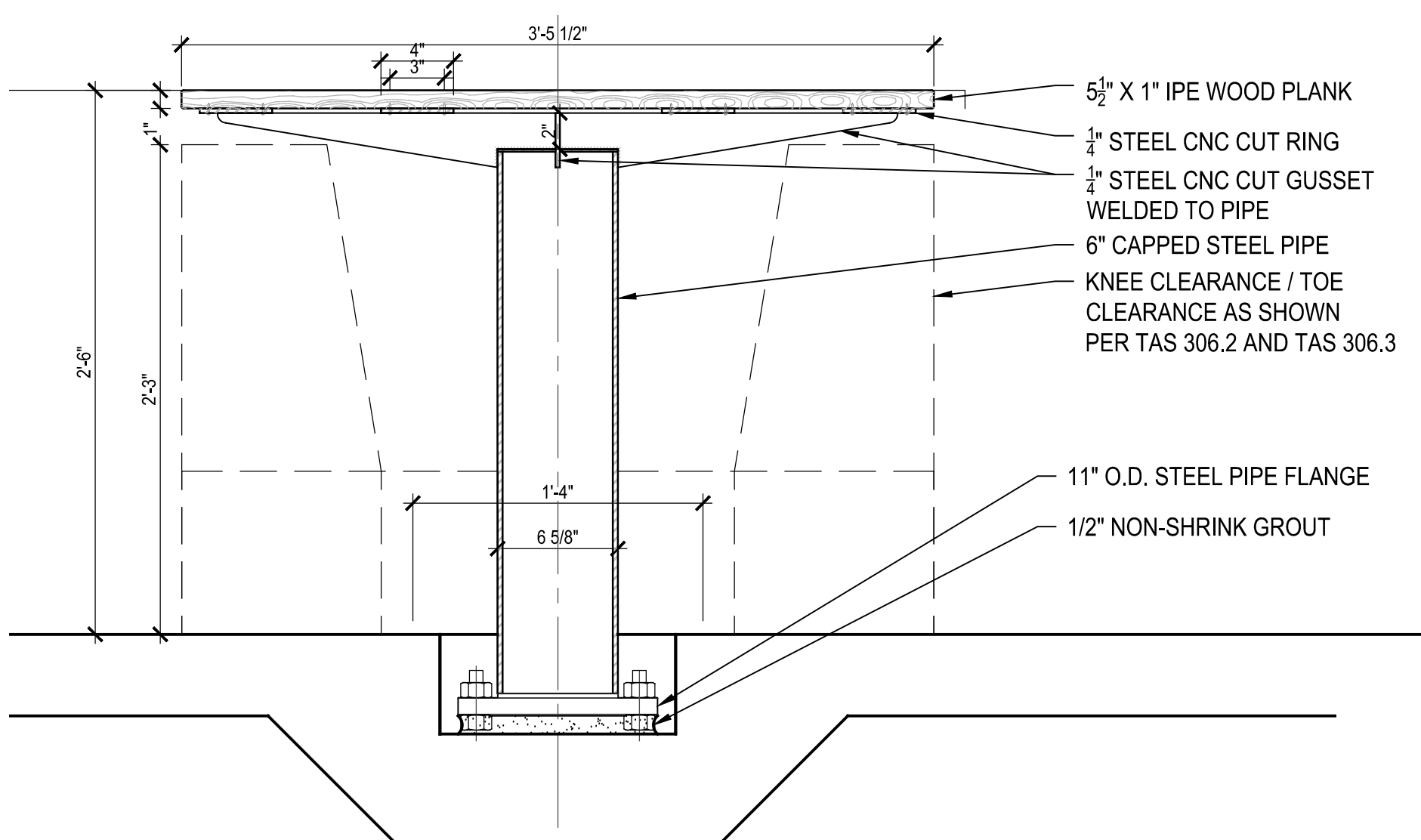
07 CIRCLE TABLE - FOUNDATION PLAN
1/2" = 1'-0"



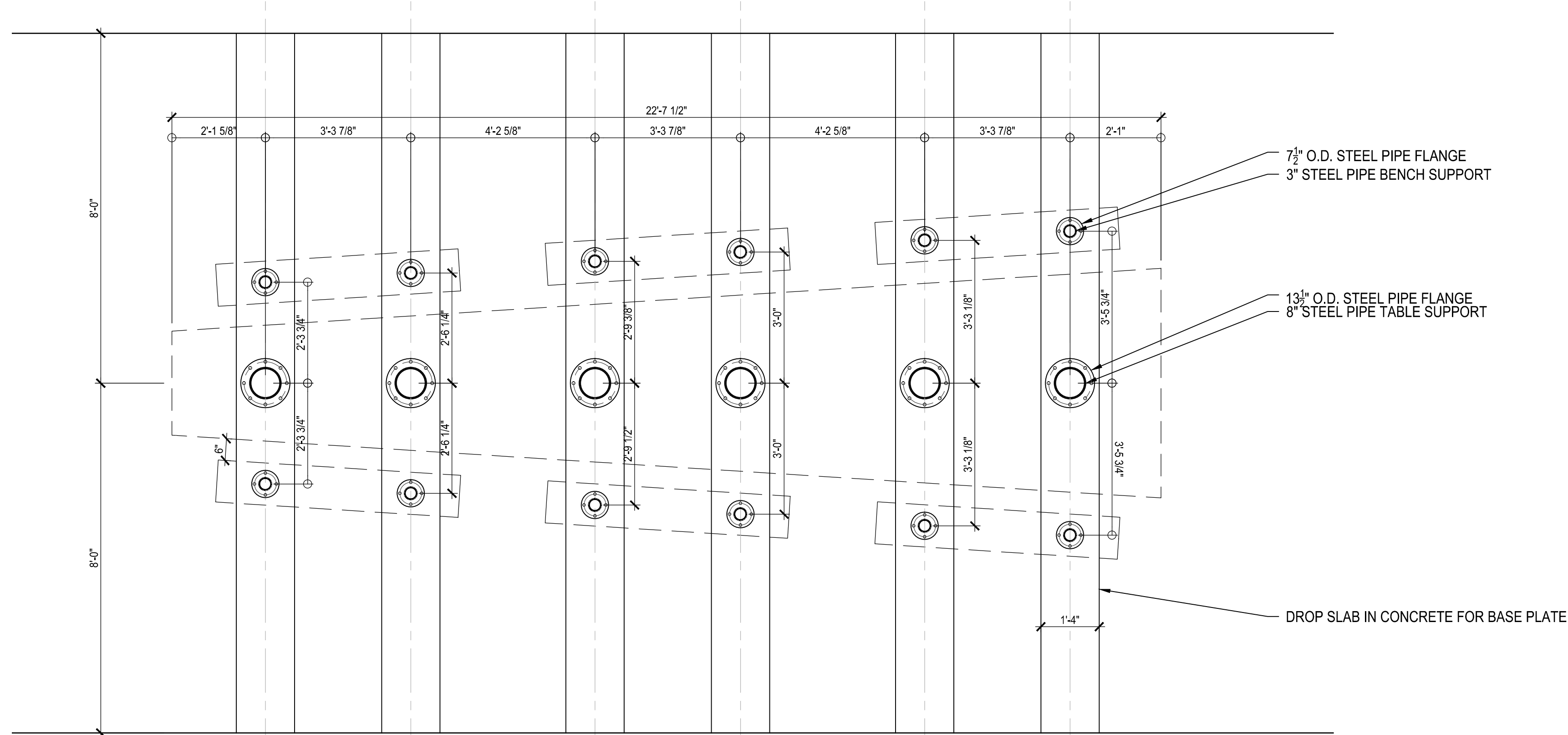
06 CIRCLE TABLE PLAN
1/2" = 1'-0"



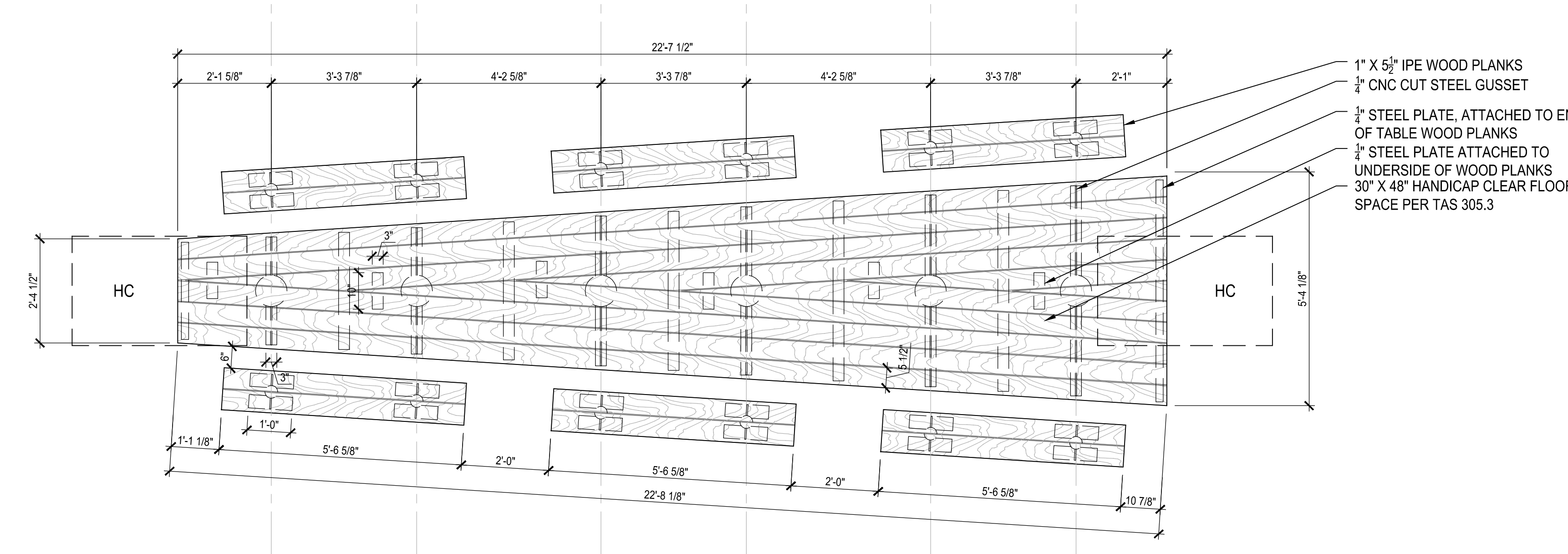
05 CIRCLE TABLE UNDERNEATH PLAN
1-1/2" = 1'-0"



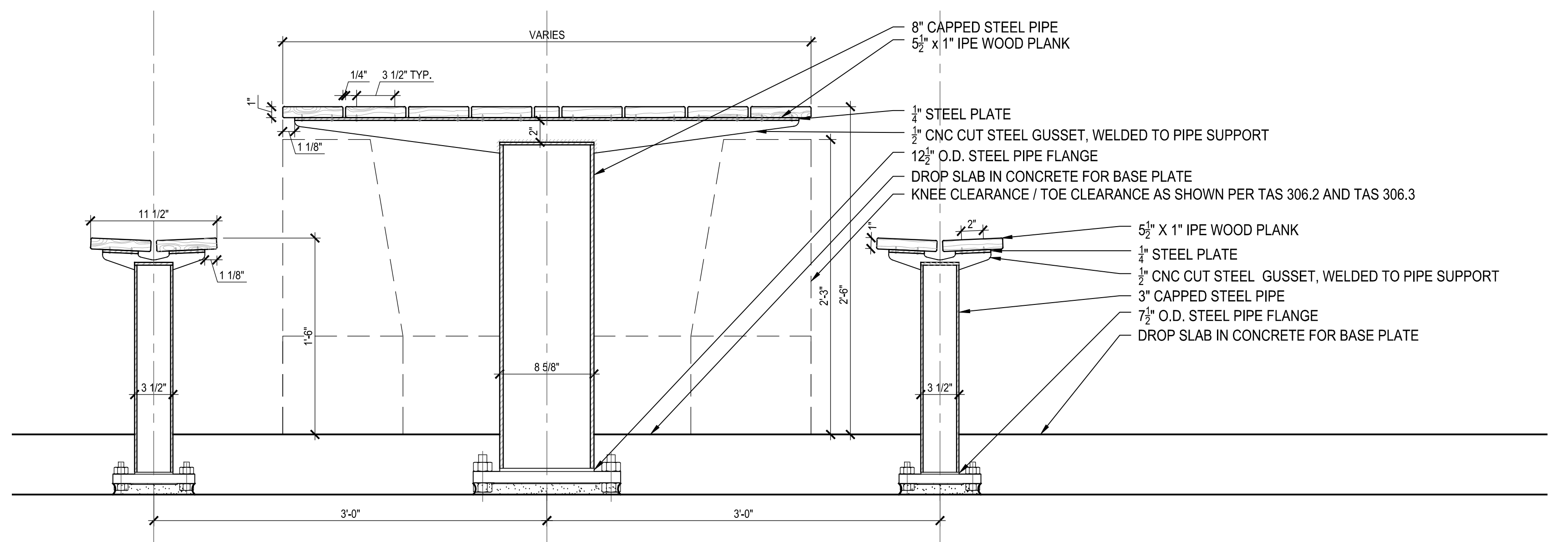
04 LONG TABLE SECTION
1-1/2" = 1'-0"



03 LONG TABLE - FOUNDATION PLAN
1/2" = 1'-0"



02 LONG TABLE PLAN
1/2" = 1'-0"



01 TABLE SECTION
1-1/2" = 1'-0"

ALL STEEL TO BE HOT DIPPED AND PAINTED, COLOR TO BE COORDINATED WITH ARCHITECT.

ISSUE LOG		
NO.	DATE	DESCRIPTION
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Parks Capital Improvement Program

for City of Houston
General Services Department and
Parks & Recreation Department

PARK NAME :
DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13

REVIEWED :
N/A
PARKS PROGRAM MANAGER
HERMANN PARK CONSERVANCY
PROJECT MANAGER

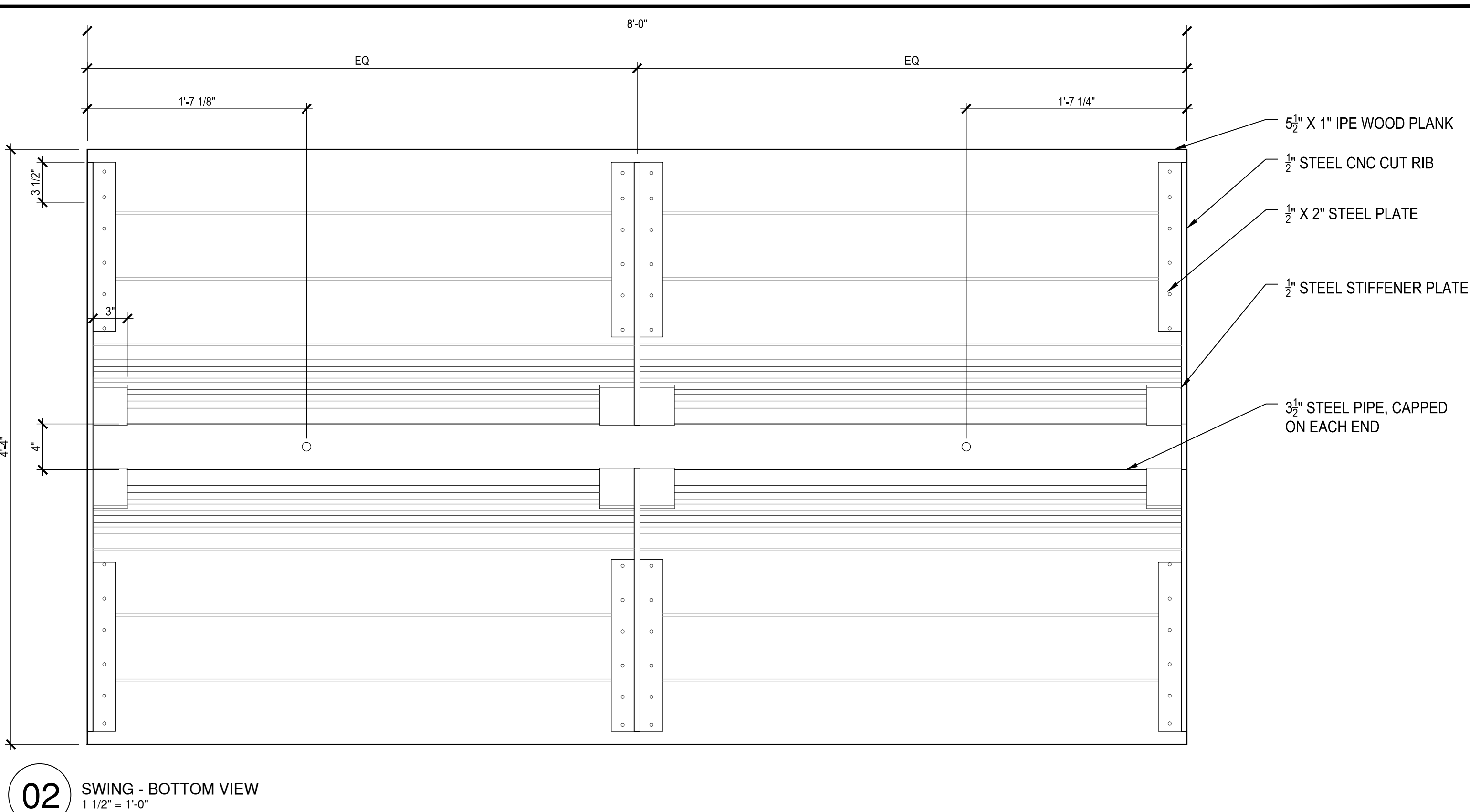


DATE :
WBS. No. : [L-NNNN-NN-3]
SCALE : 3/4"=1'-0"
DRAWN BY :
CHECKED BY :

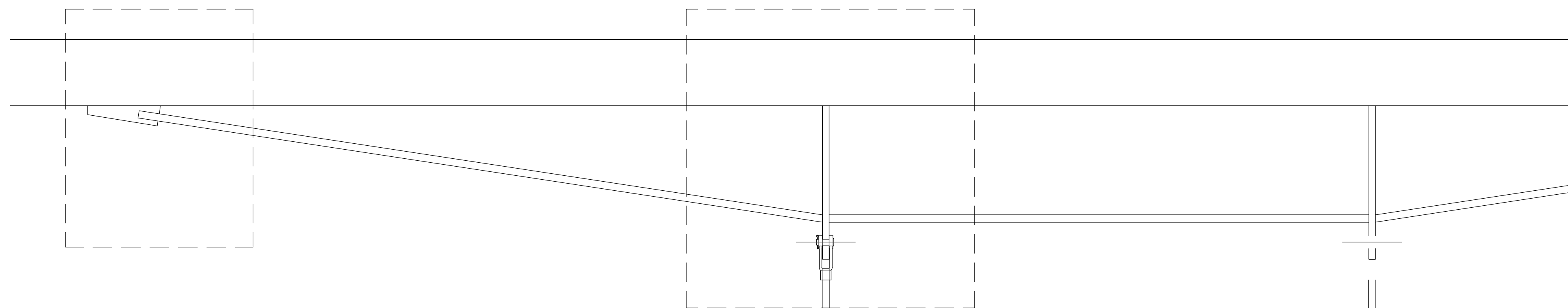
SHEET TITLE : LONG TABLE PLAN

SHEET NO. :
A - 550.0

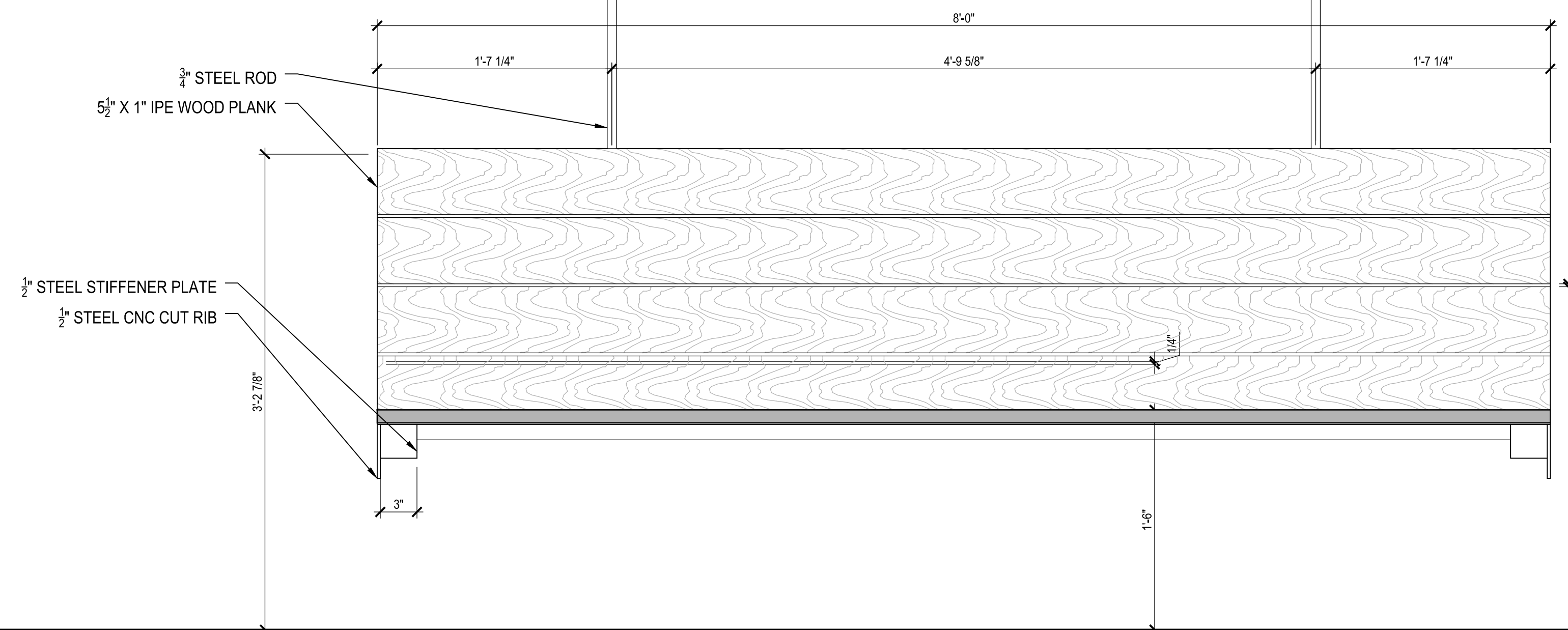
CITY DWG. NO. :



02 SWING - BOTTOM VIEW
1 1/2" = 1'-0"



05 SWING - TOP VIEW
1 1/2" = 1'-0"



01 SWING - SECTION
1 1/2" = 1'-0"

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Parks Capital Improvement Program

for City of Houston
General Services Department and
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PARK NAME :

DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13

REVIEWED :

	N/A
PARKS PROGRAM MANAGER	HERMANN PARK CONSERVANCY

PROJECT MANAGER



DATE : _____
WBS. No : _____ [L-NNNN-NN-3]
SCALE : _____ AS NOTED
DRAWN BY : _____
CHECKED BY : _____

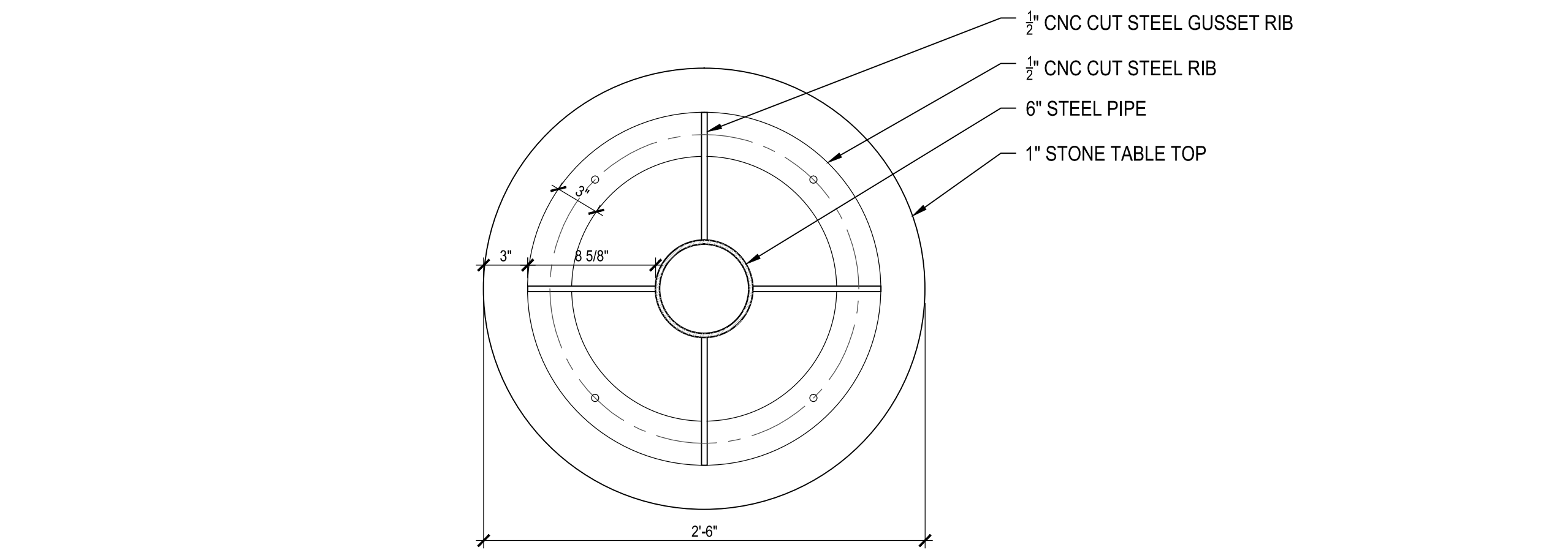
SHEET TITLE

SWING ELEVATIONS

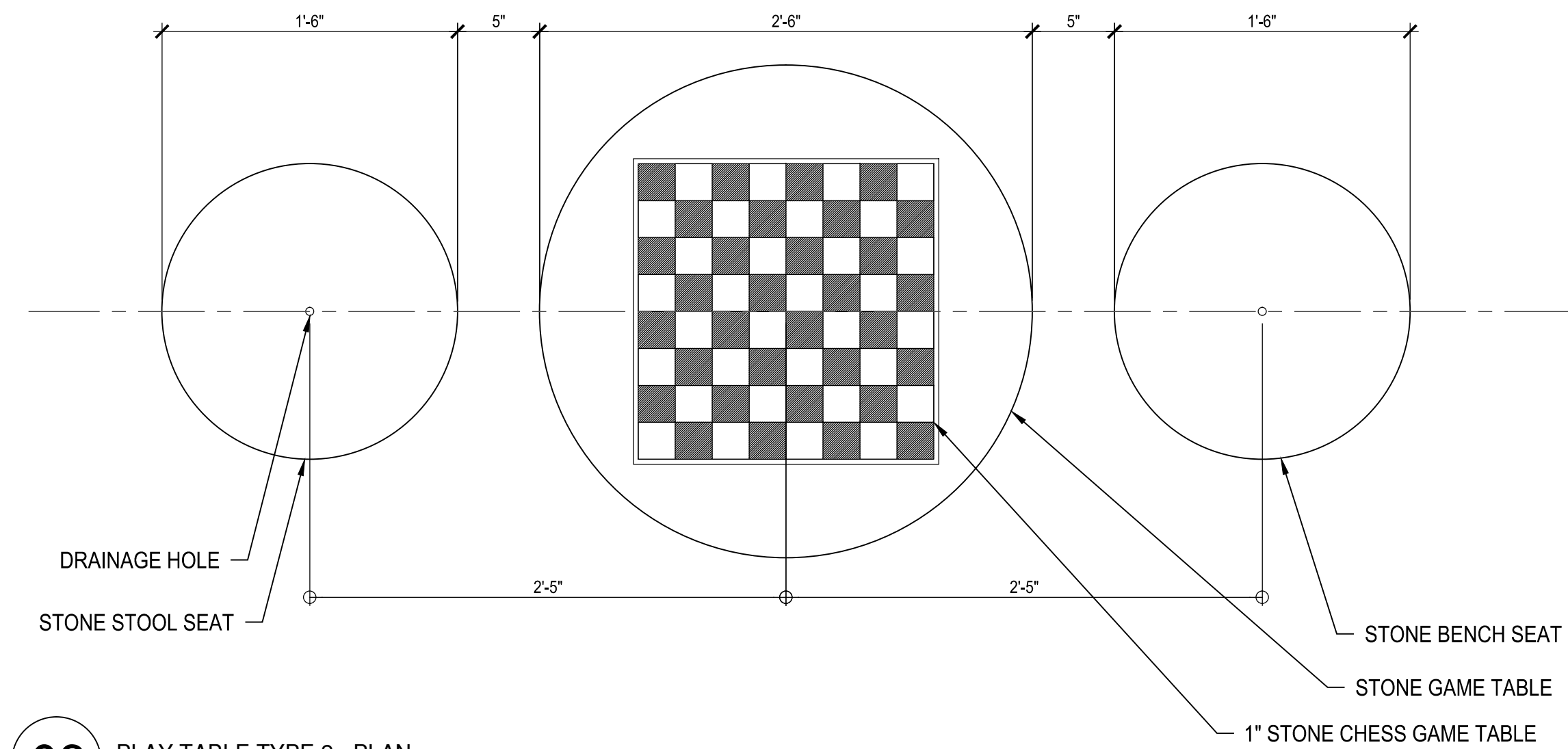
SHEET NO. :

A - 551.0

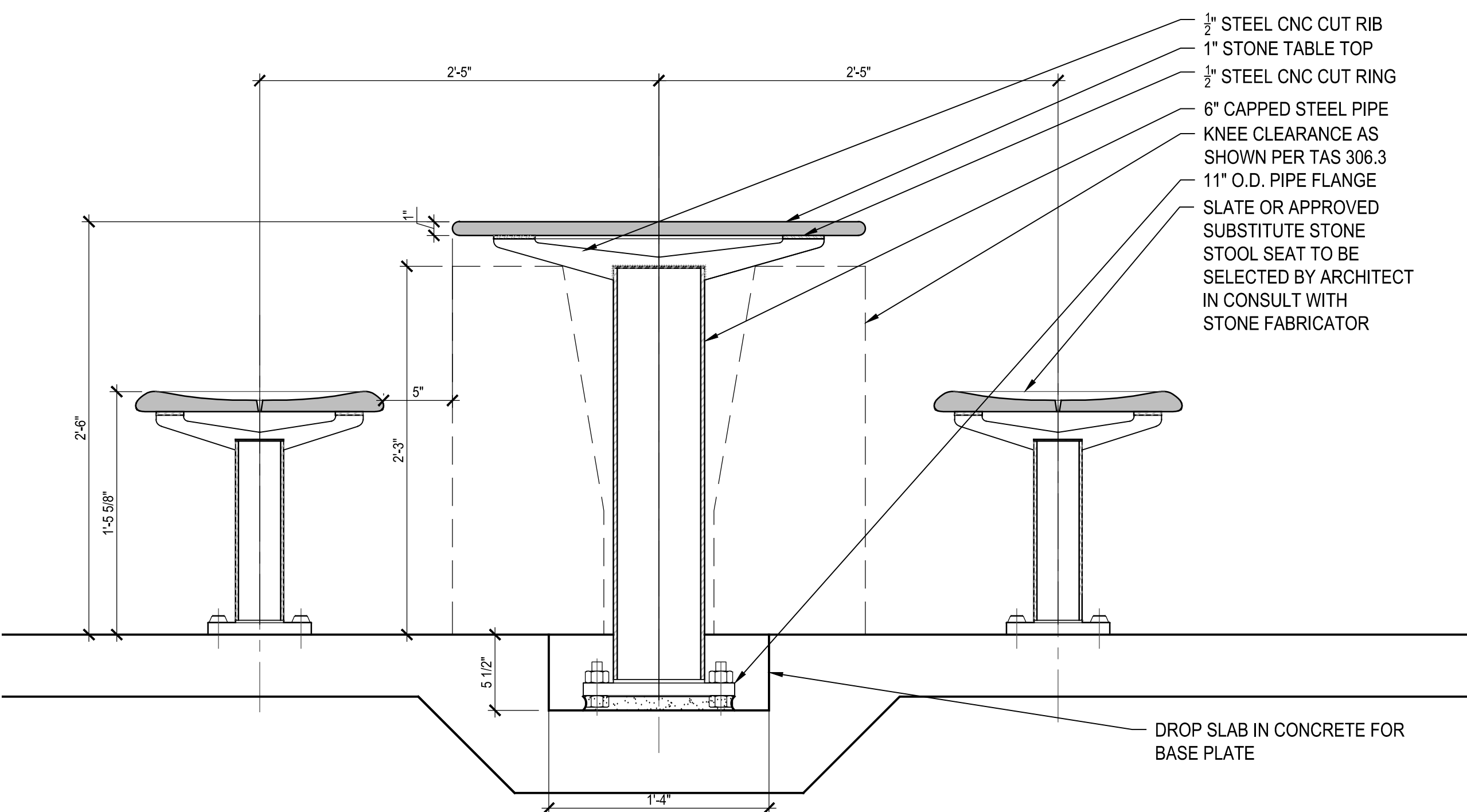
CITY DWG. NO.



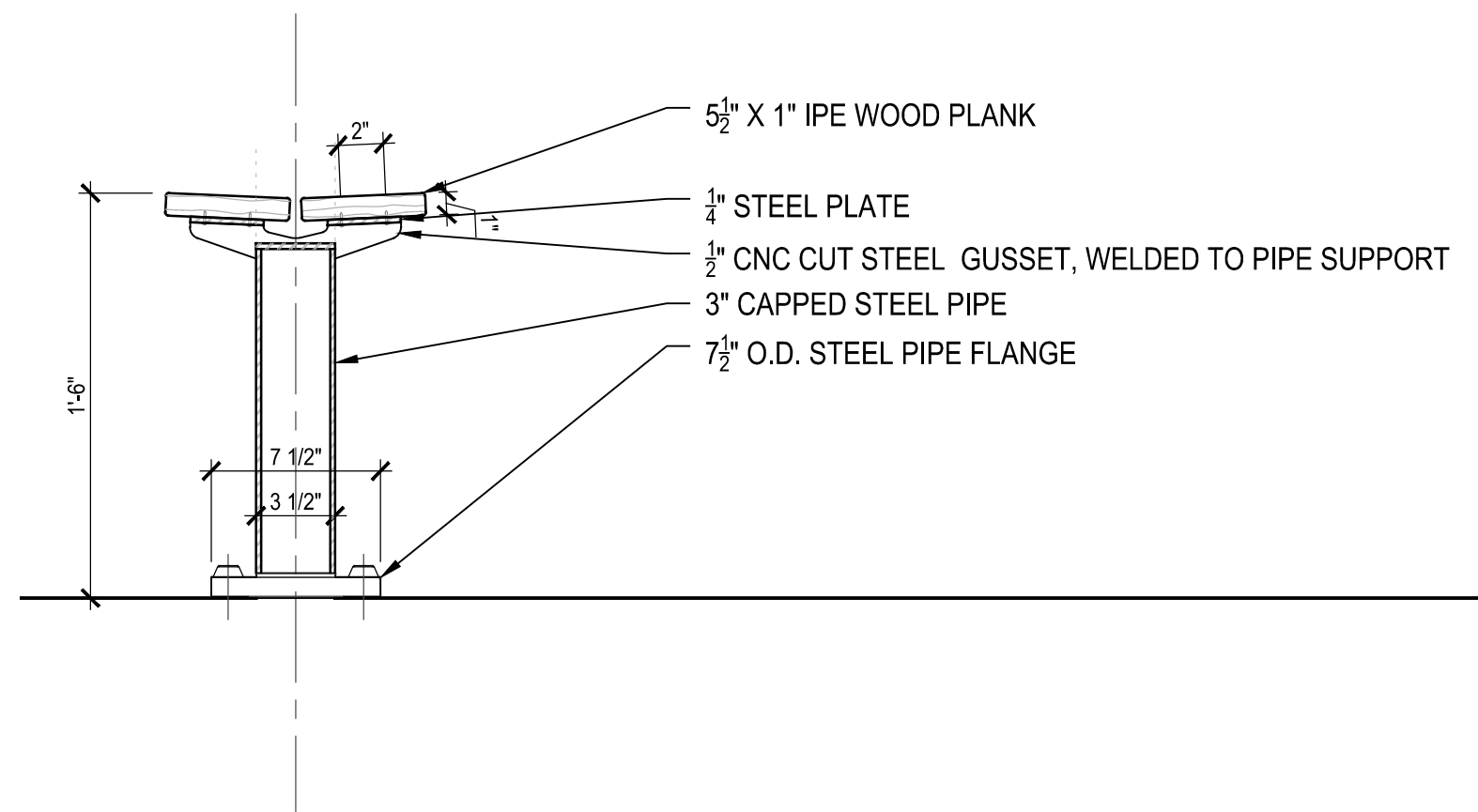
09 PLAY TABLE TYPE 2 - FOUNDATION PLAN
1 1/2" = 1'-0"



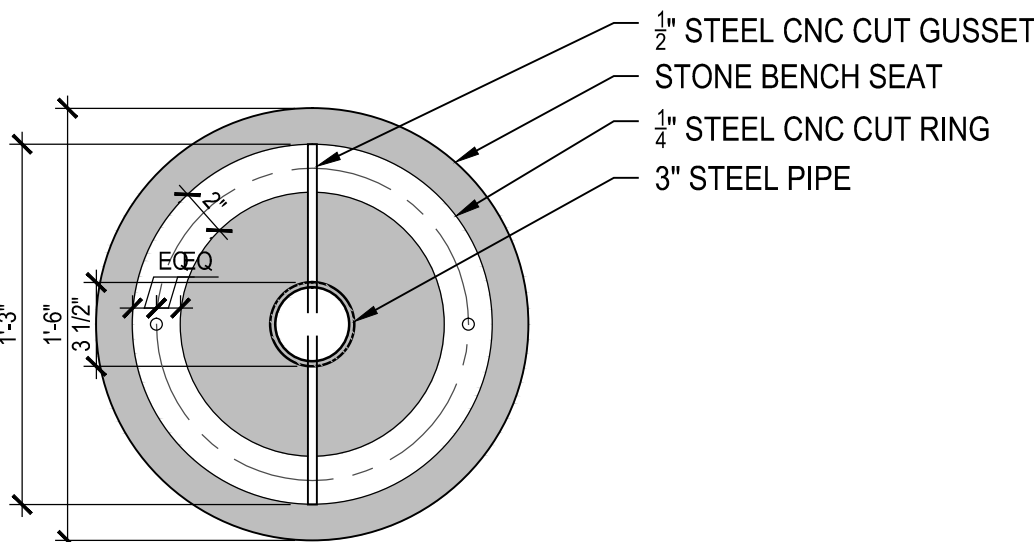
08 PLAY TABLE TYPE 2 - PLAN
1 1/2" = 1'-0"



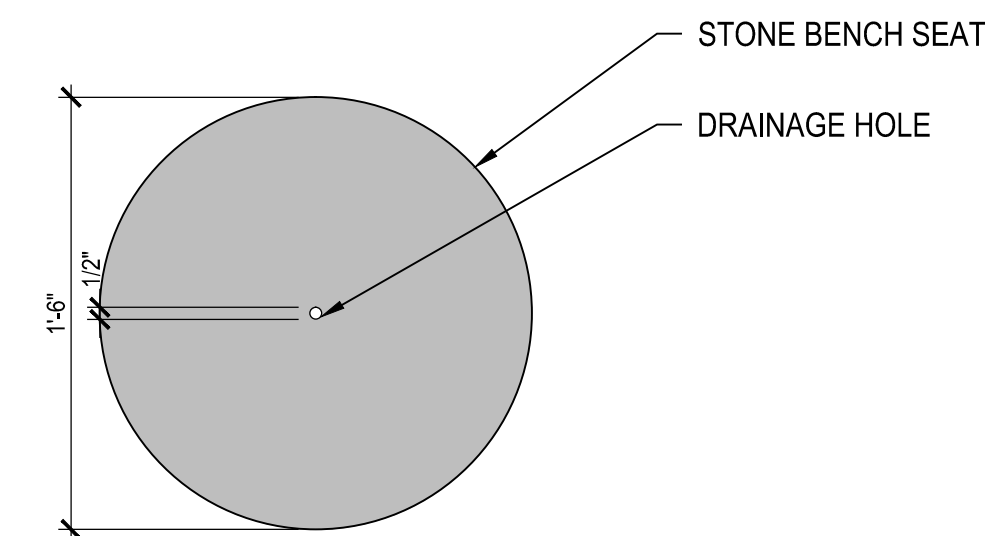
07 PLAY TABLE TYPE 2 - SECTION
1 1/2" = 1'-0"



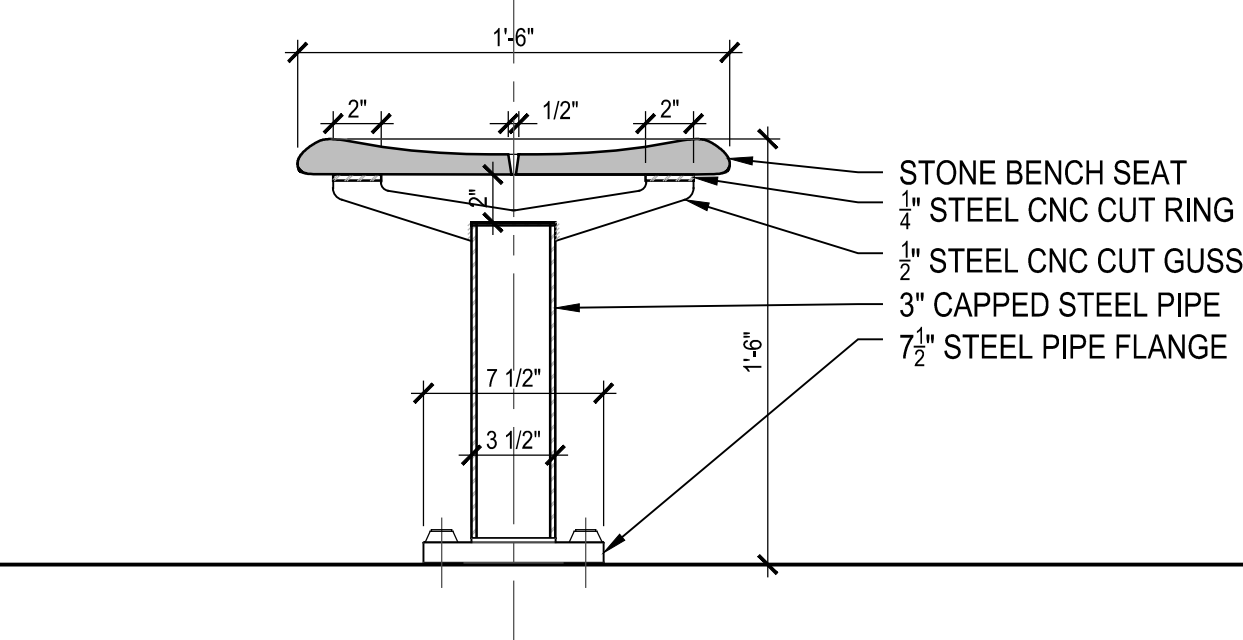
11 ENTRY BENCH
1 1/2" = 1'-0"



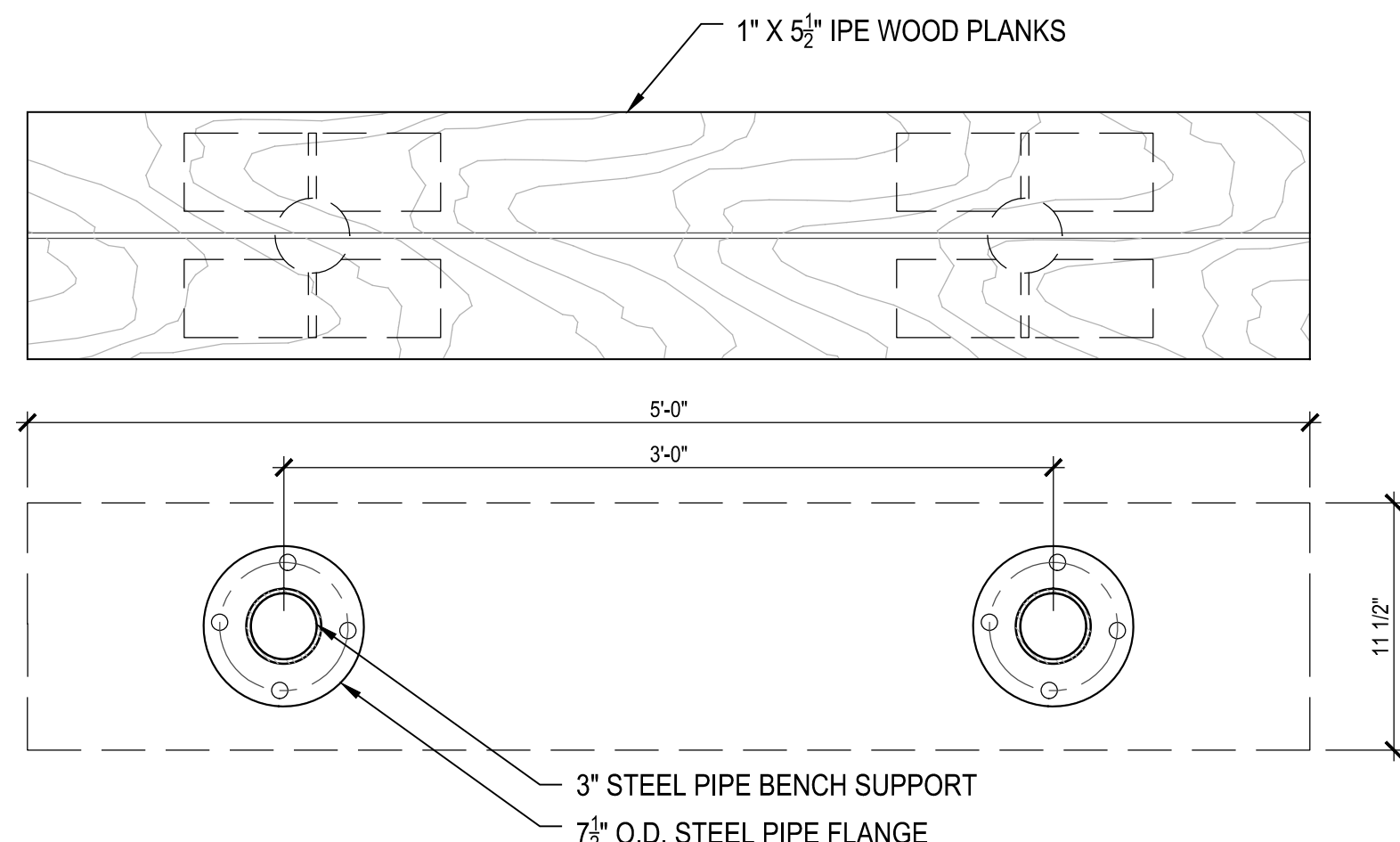
06 PLAY CHAIR TYPE 2 - FOUNDATION PLAN
1 1/2" = 1'-0"



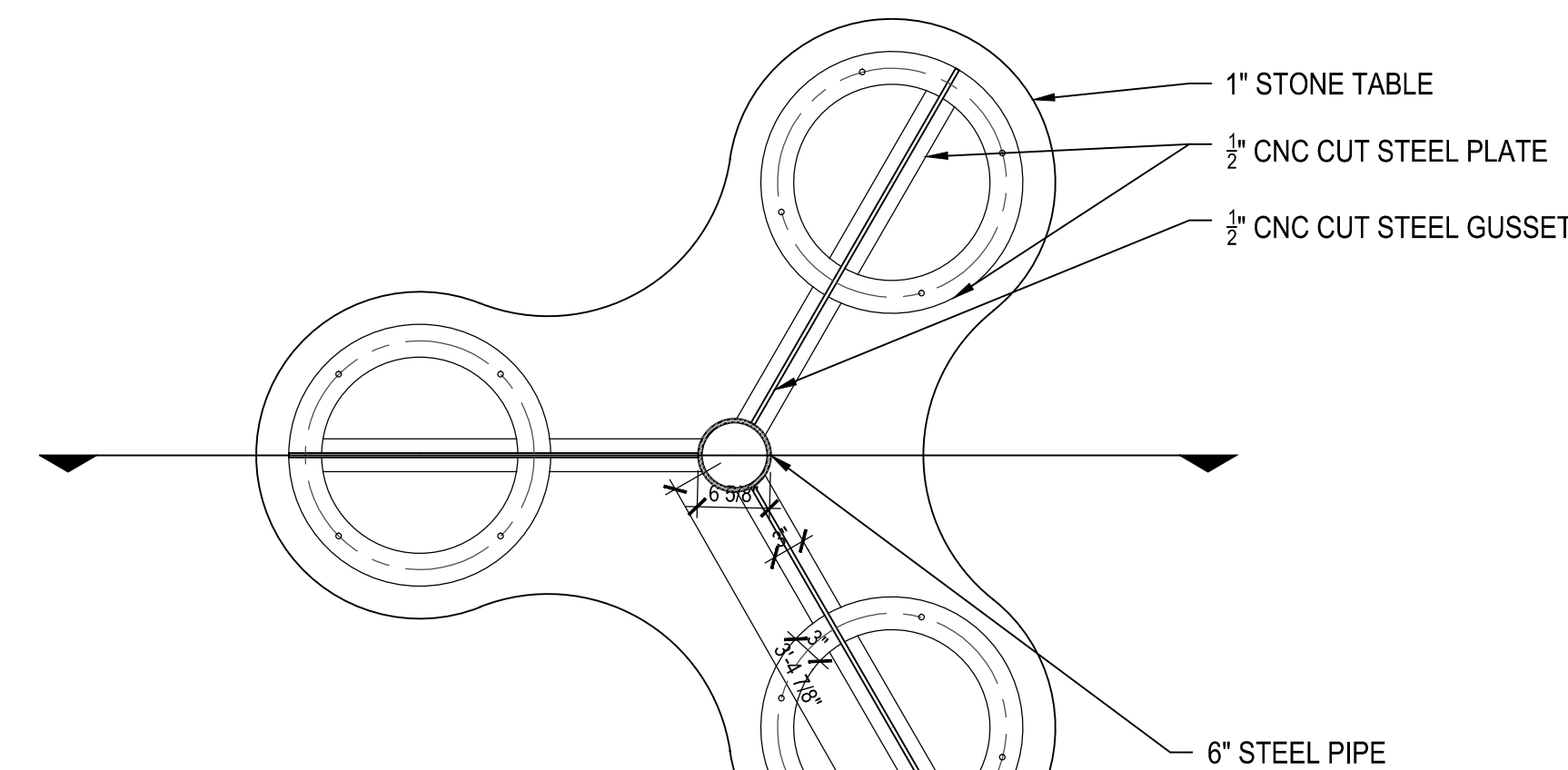
05 PLAY CHAIR TYPE 2 - PLAN
1 1/2" = 1'-0"



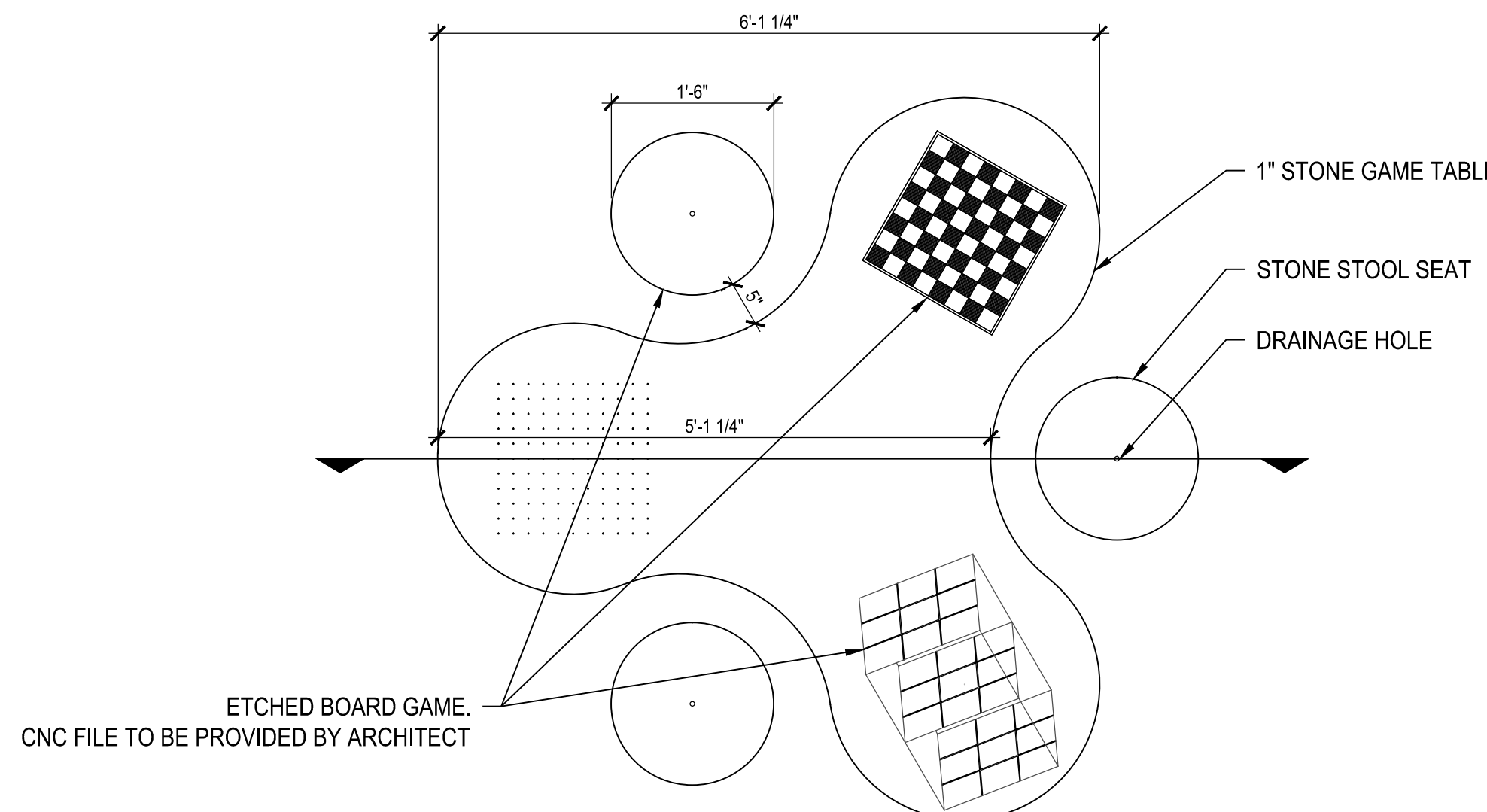
04 PLAY CHAIR TYPE 2 - SECTION
1 1/2" = 1'-0"



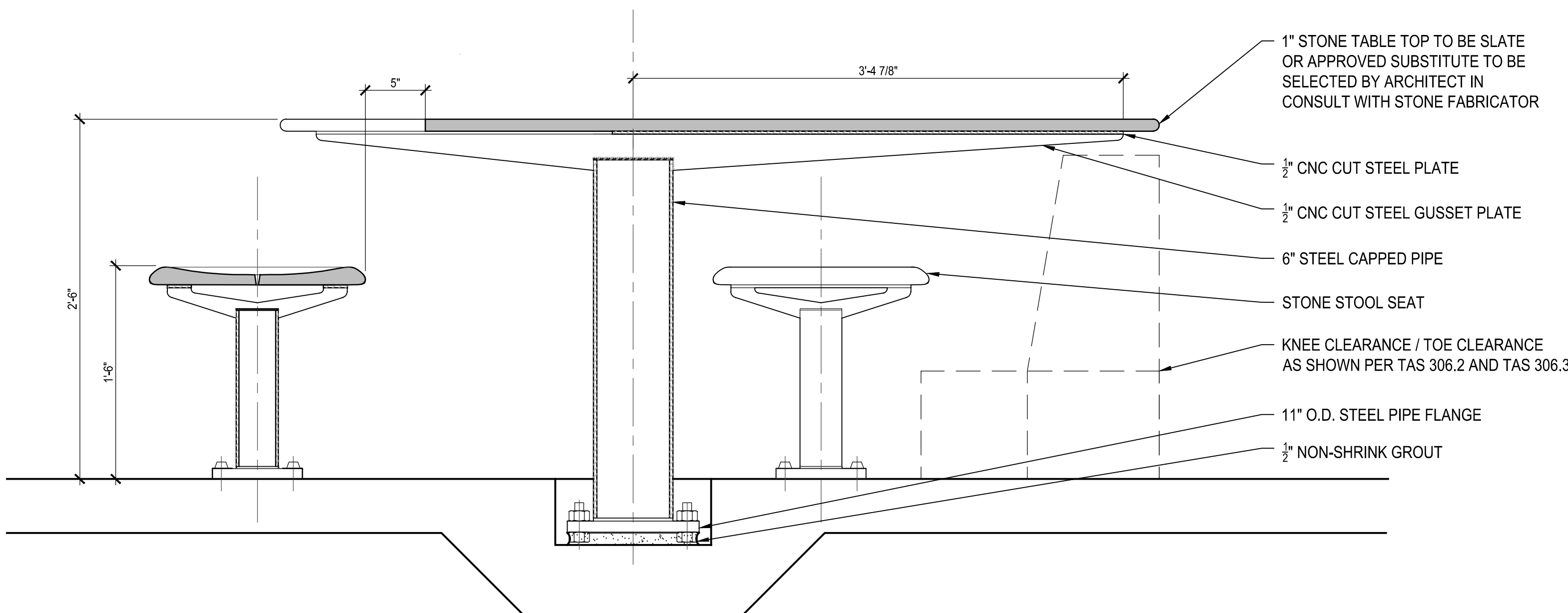
10 ENTRY BENCH
1 1/2" = 1'-0"



03 PLAY TABLE TYPE 1 - FOUNDATION PLAN
1 1/2" = 1'-0"



02 PLAY TABLE TYPE 1 - PLAN
1 1/2" = 1'-0"



01 PLAY TABLE TYPE 1 - SECTION
1 1/2" = 1'-0"

ISSUE LOG		
NO.	DATE	DESCRIPTION
2	09.04.2015	50% CD
3	10.31.2016	75% CD
4	03.15.2017	95% CD
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8	11.02.2018	ISSUED FOR BID

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Parks Capital Improvement Program for City of Houston General Services Department and Parks & Recreation Department

PARK NAME :
DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13

REVIEWED :
N/A
PARKS PROGRAM MANAGER HERMAN PARK CONSERVANCY
PROJECT MANAGER

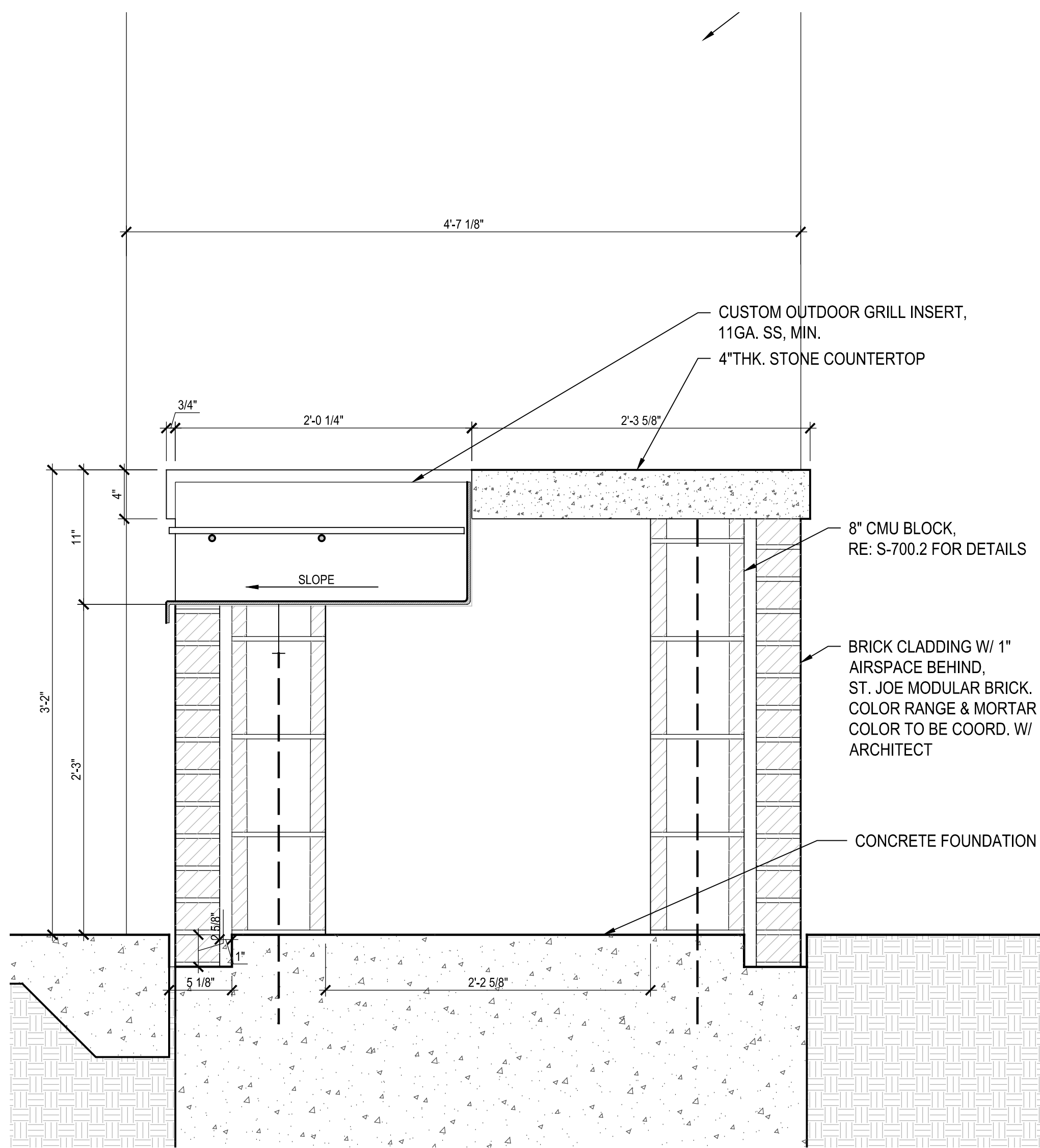


DATE :
WBS. No : [L-NNNN-NN-3]
SCALE : AS NOTED
DRAWN BY :
CHECKED BY :

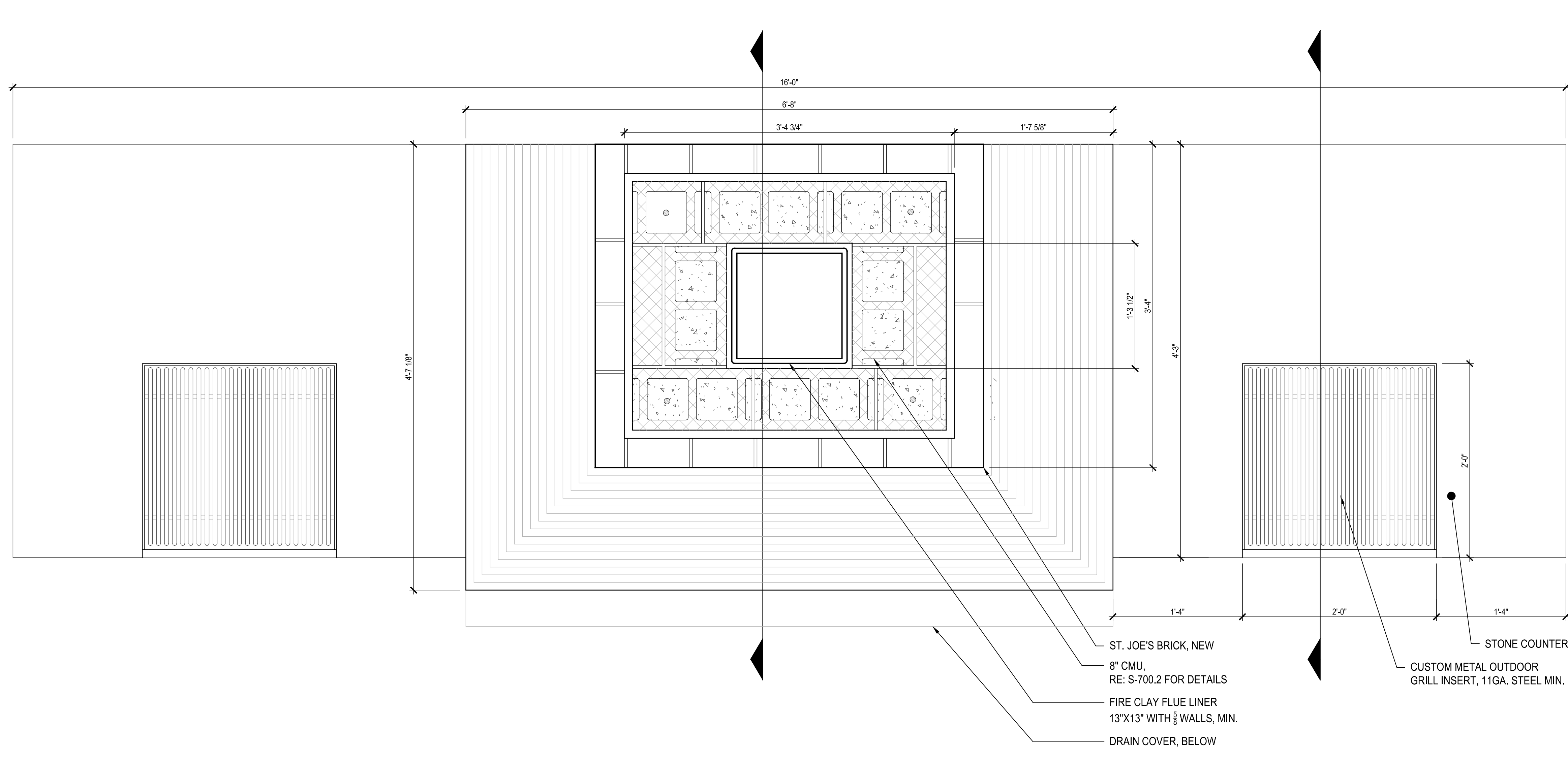
SHEET TITLE :
**GAME TABLE
PLAN / DETAILS**

SHEET NO. :
A - 552.0

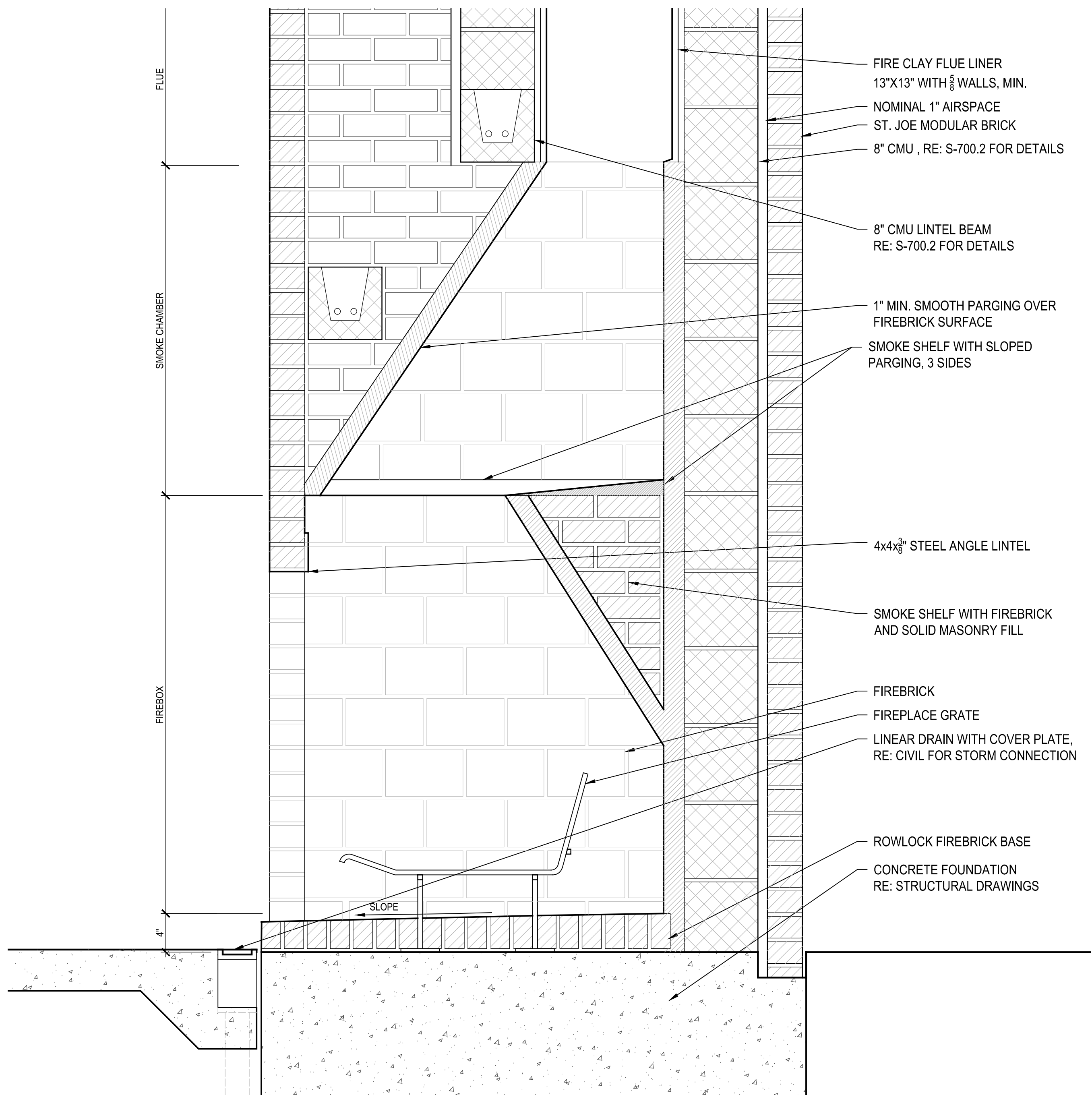
CITY DWG. NO. :



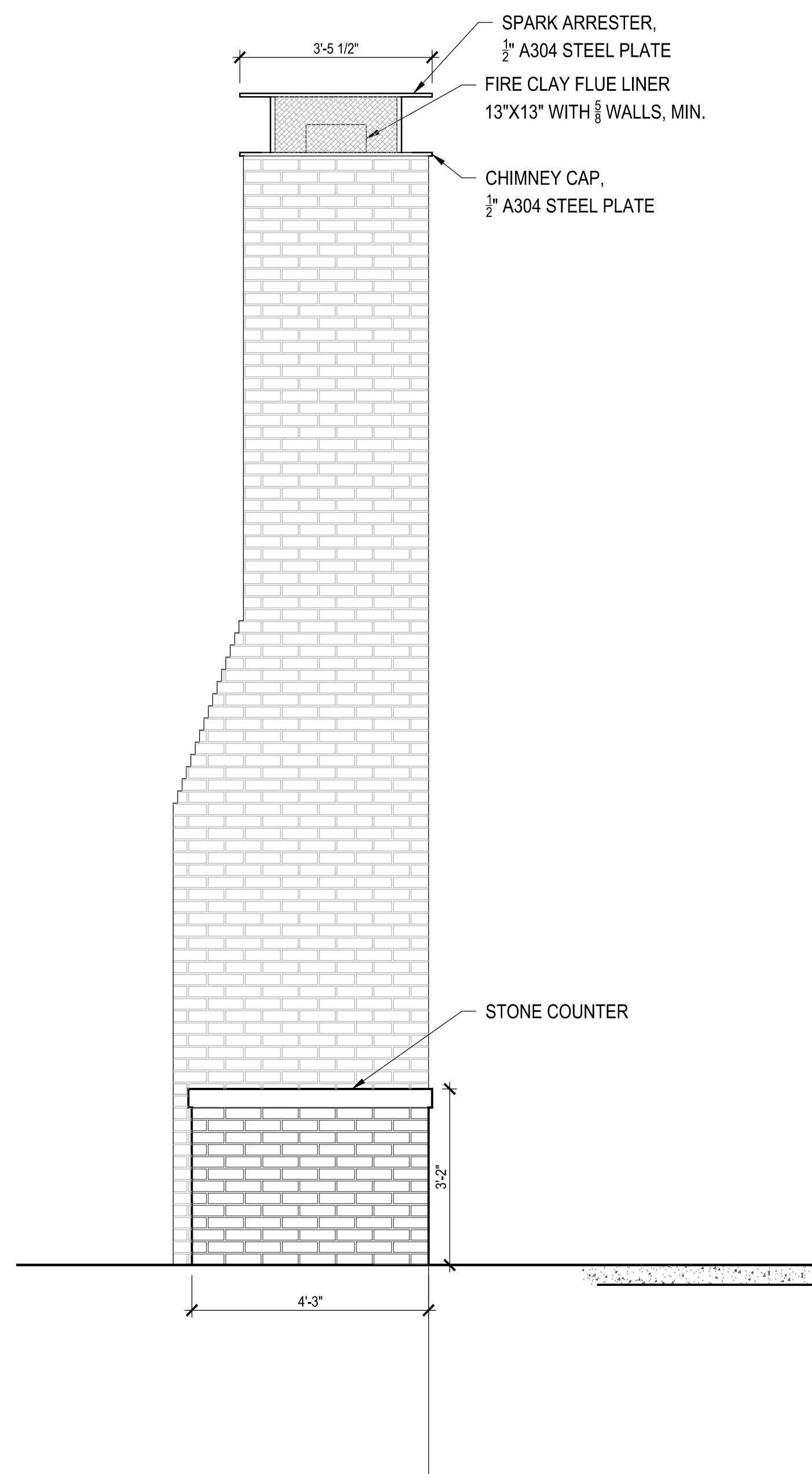
05 HEARTH SECTION @ GRILL
1 1/2" = 1'-0"



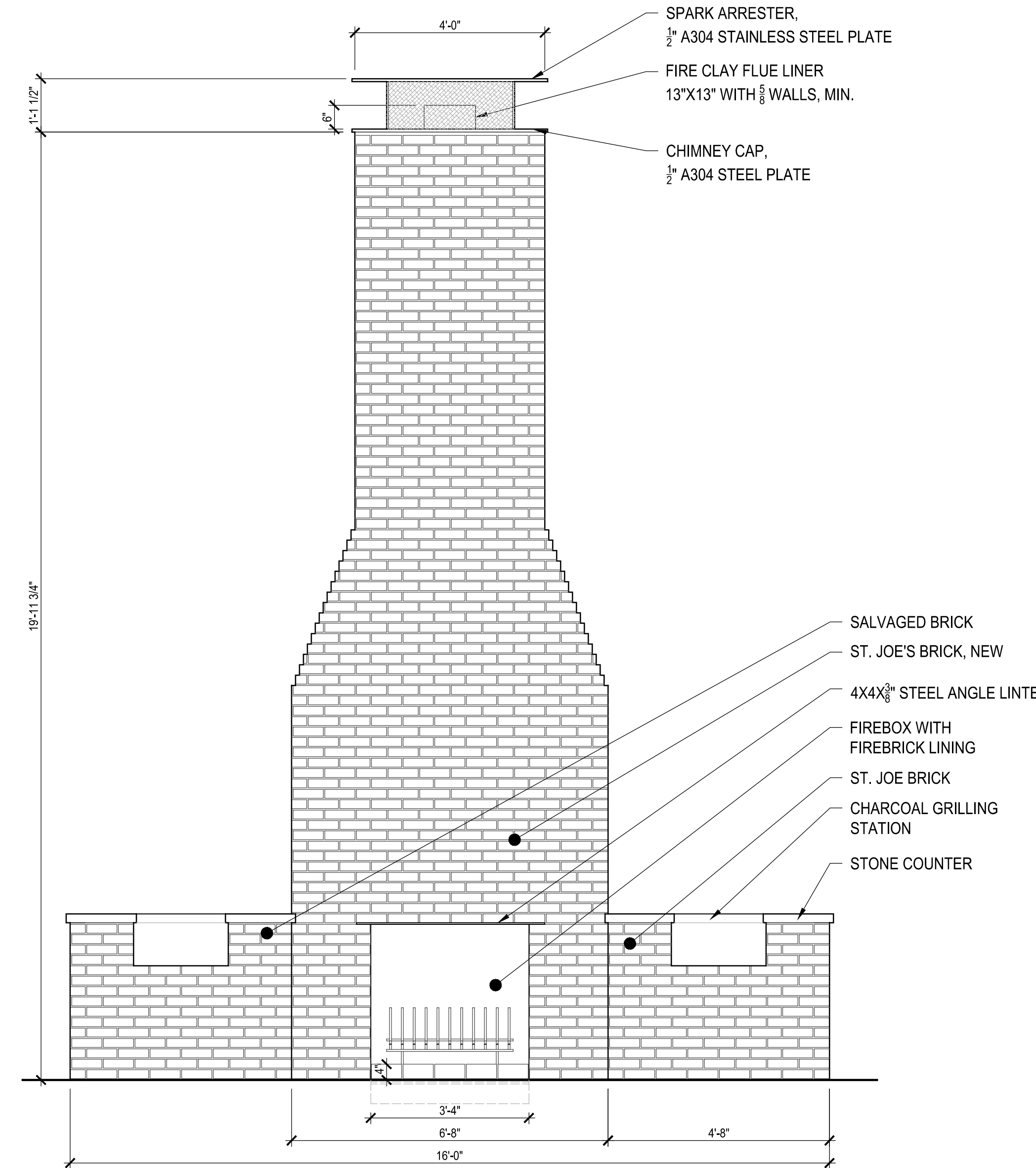
04 HEARTH - CHIMNEY PLAN
1 1/2" = 1'-0"



03 HEARTH SECTION @ FIREPLACE
1 1/2" = 1'-0"



02 HEARTH - SIDE ELEVATION
1/2" = 1'-0"



01 HEARTH - FRONT ELEVATION
1/2" = 1'-0"

ISSUE LOG		
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Parks Capital Improvement Program

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PARK NAME :
DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13

REVIEWED :
N/A
PARKS PROGRAM MANAGER : HERMANN PARK CONSERVANCY
PROJECT MANAGER :

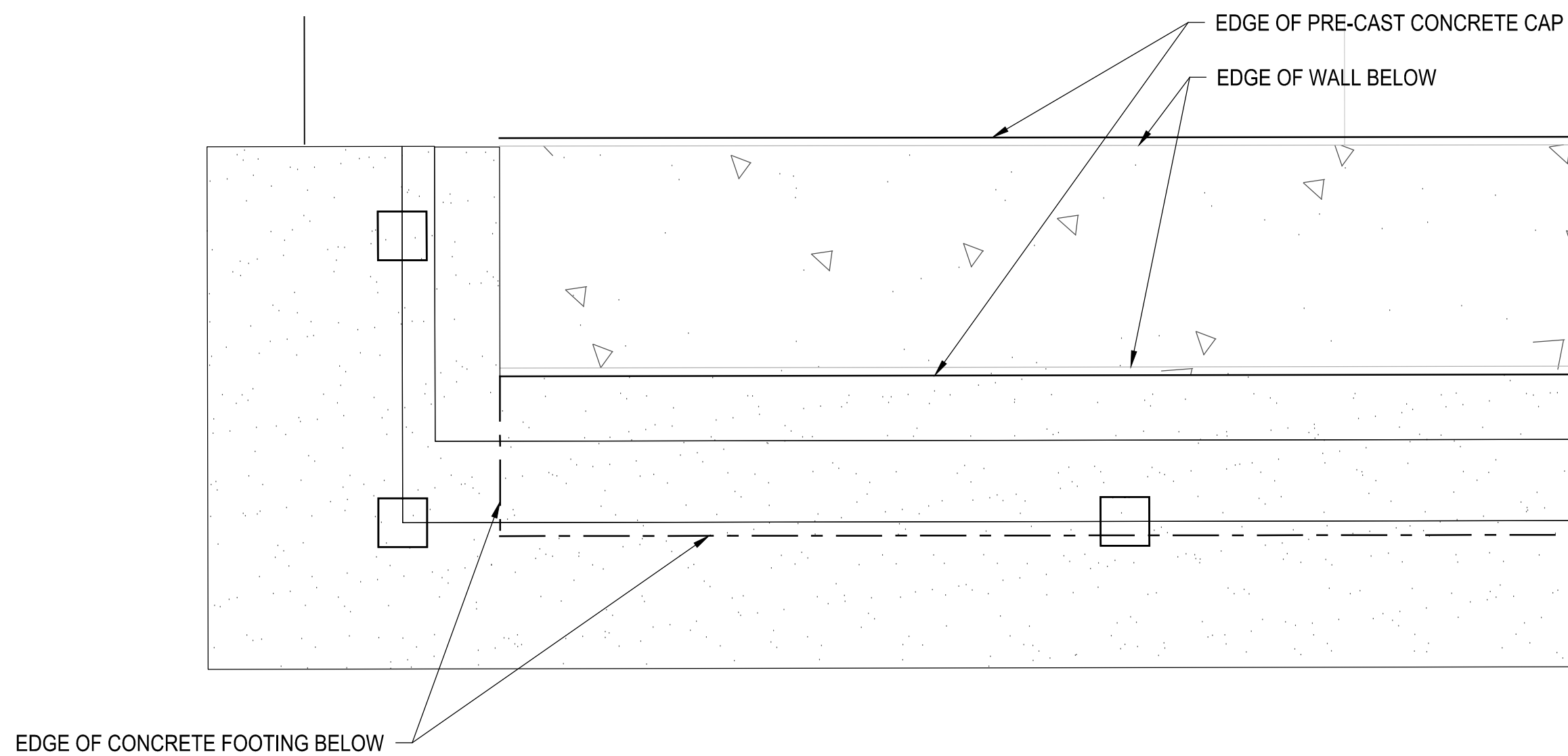


DATE :
WBS. No. : [L-NNNN-NN-3]
SCALE : 1 1/2"=1'-0"
DRAWN BY :
CHECKED BY :

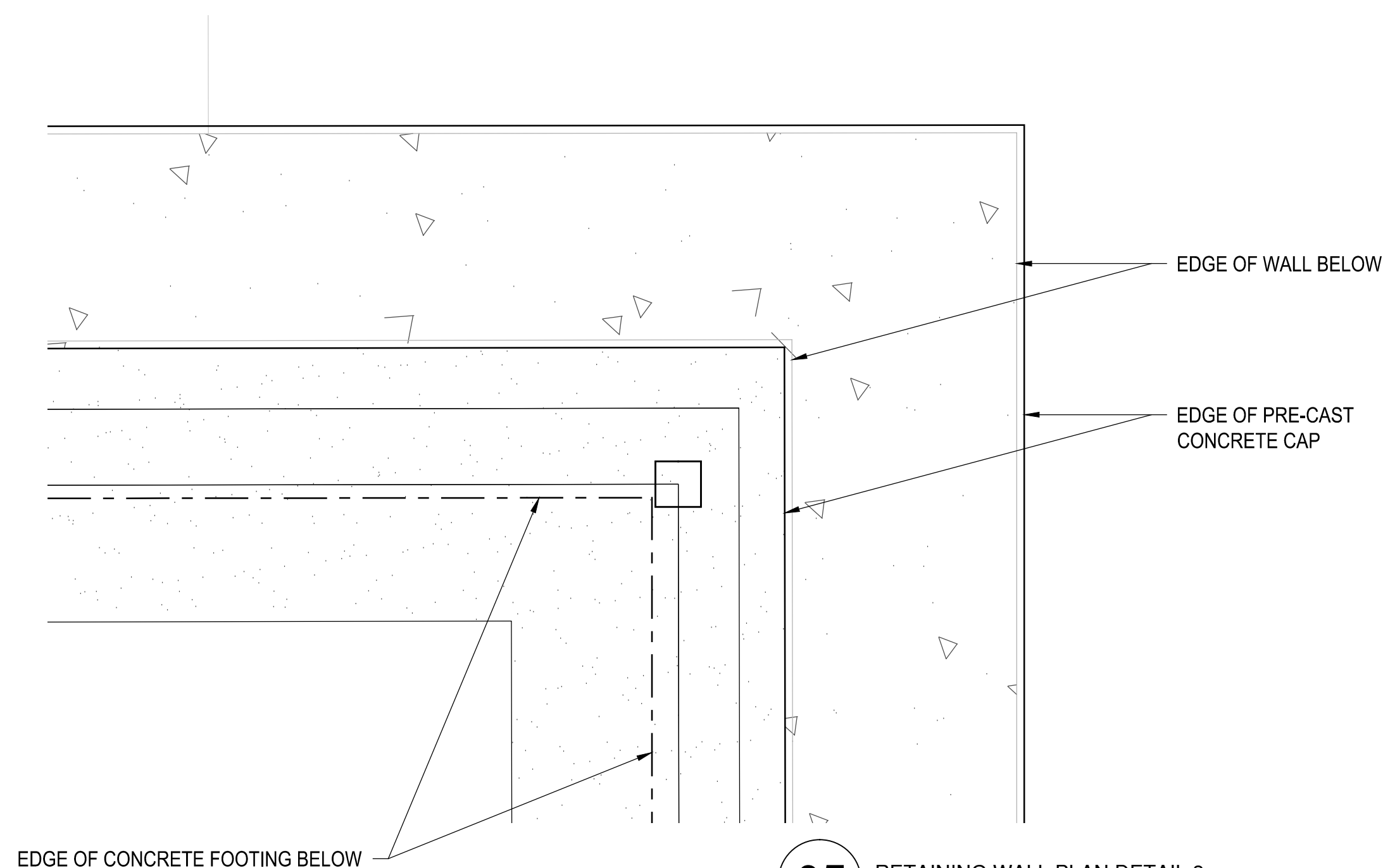
SHEET TITLE : FIREPLACE PLAN

SHEET NO. :
A - 553.0

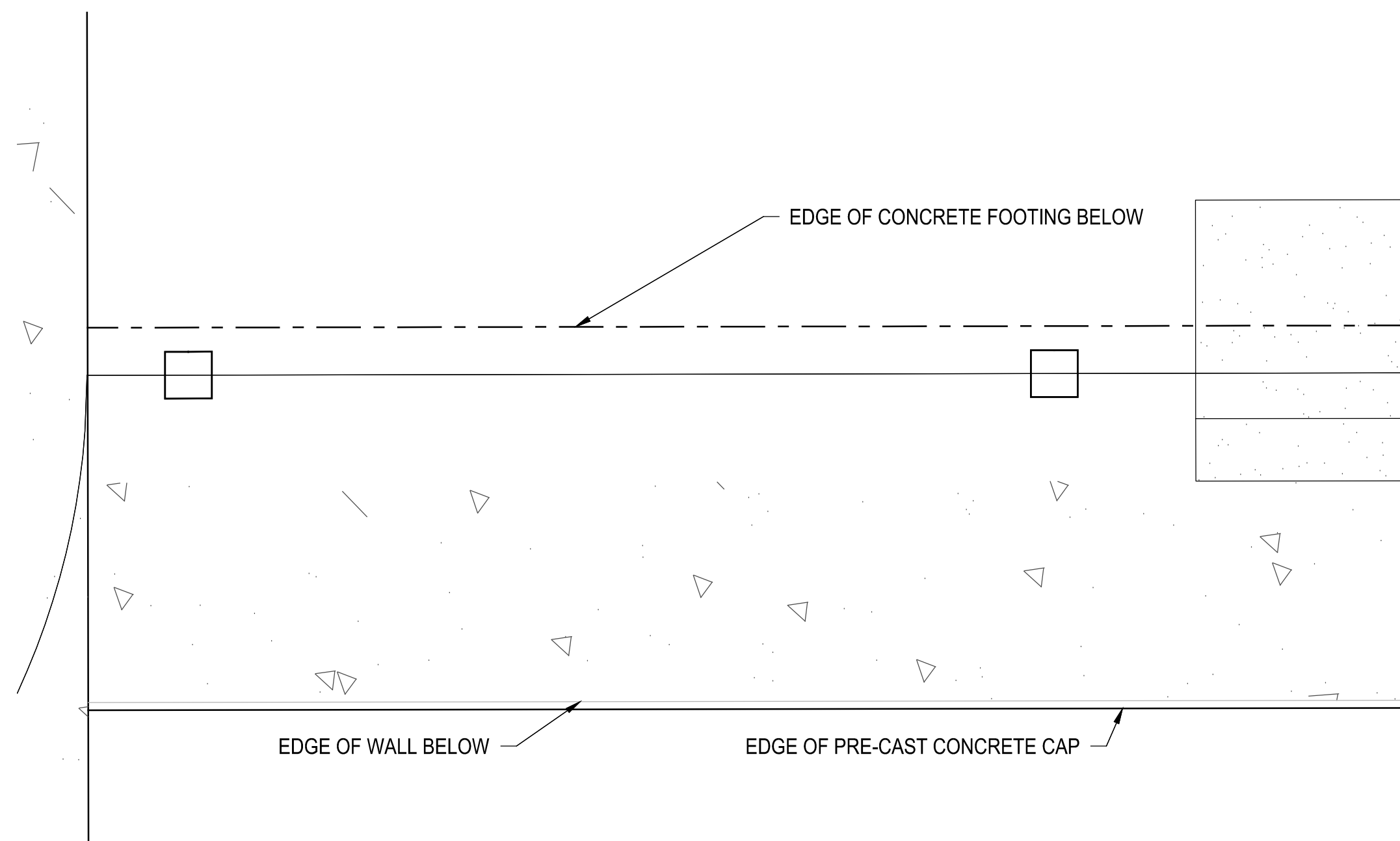
CITY DWG. NO. :



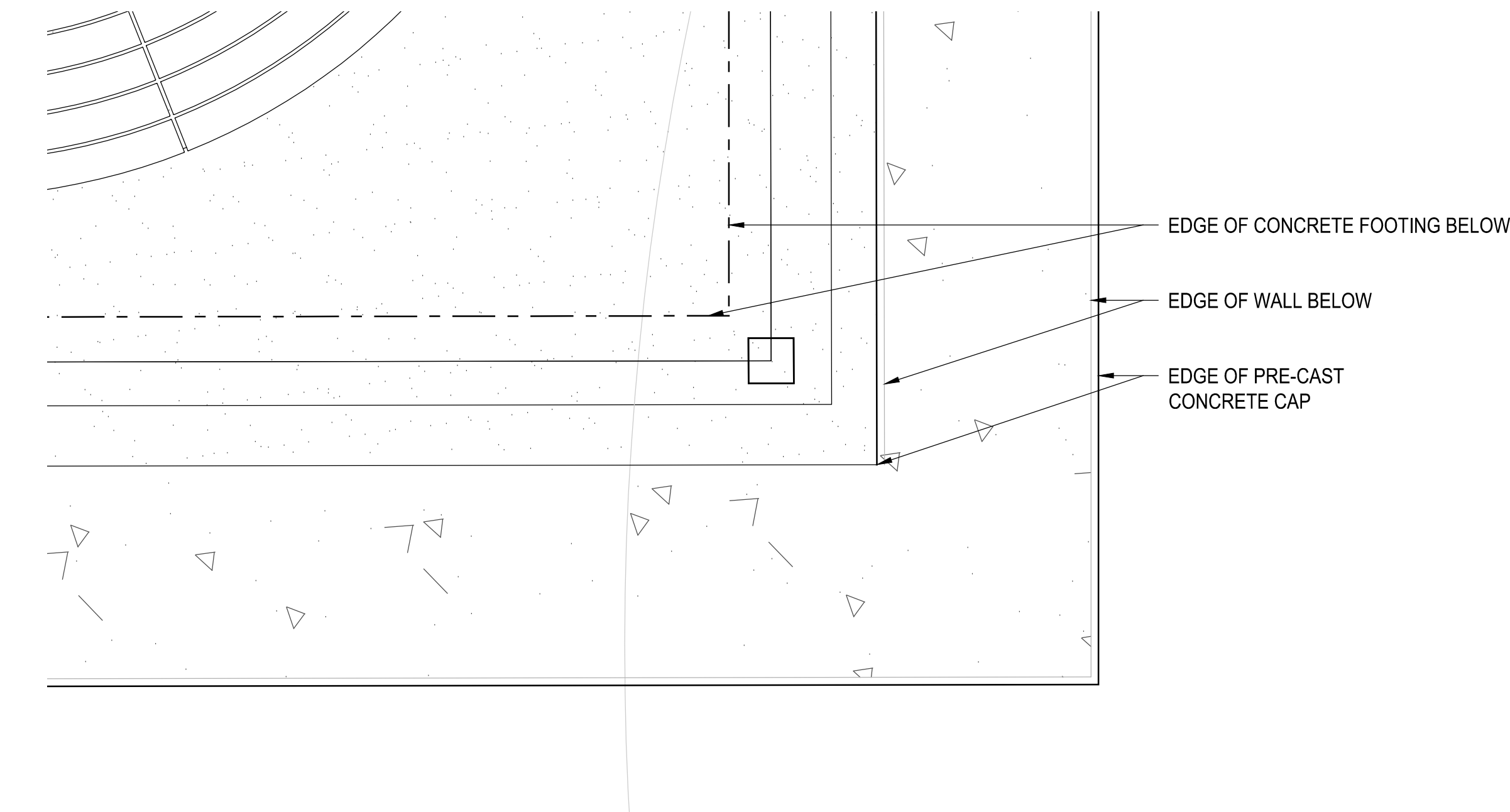
06 RETAINING WALL PLAN DETAIL 4
1-1/2" = 1'-0"



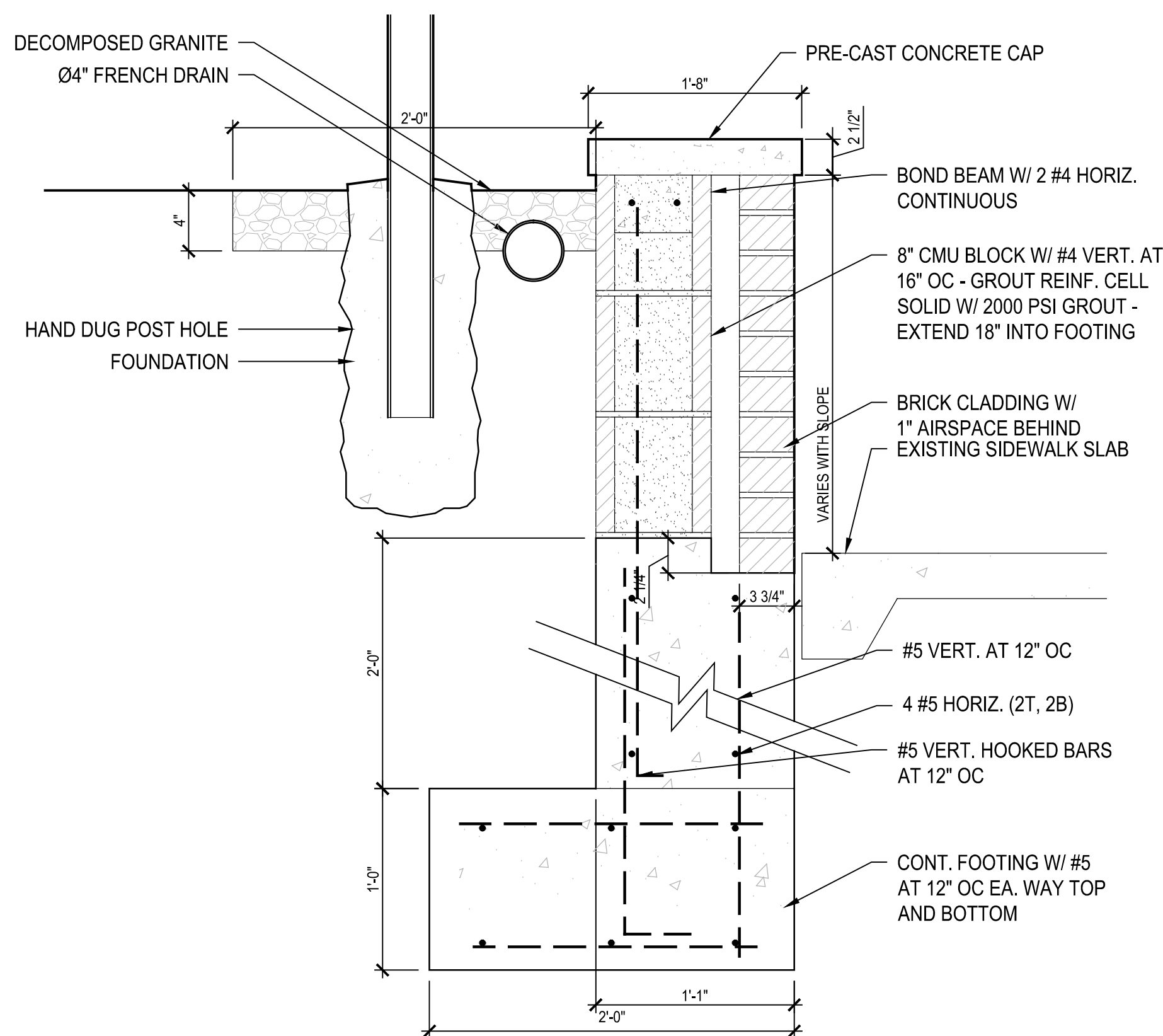
05 RETAINING WALL PLAN DETAIL 3
1-1/2" = 1'-0"



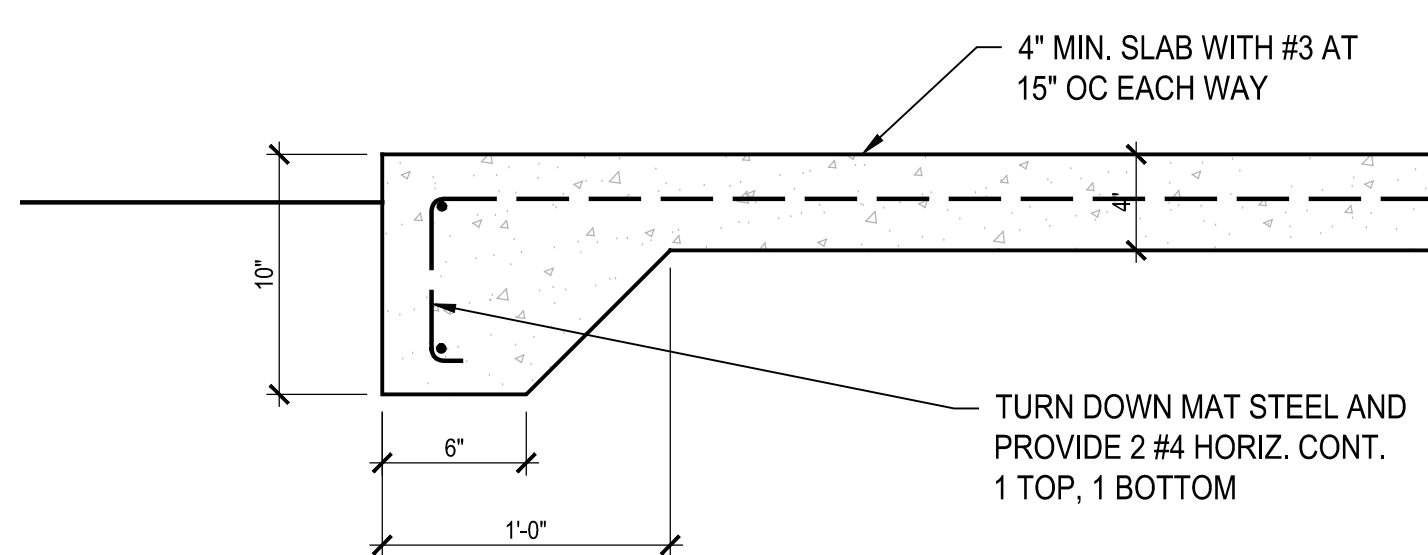
04 RETAINING WALL PLAN DETAIL 2
1-1/2" = 1'-0"



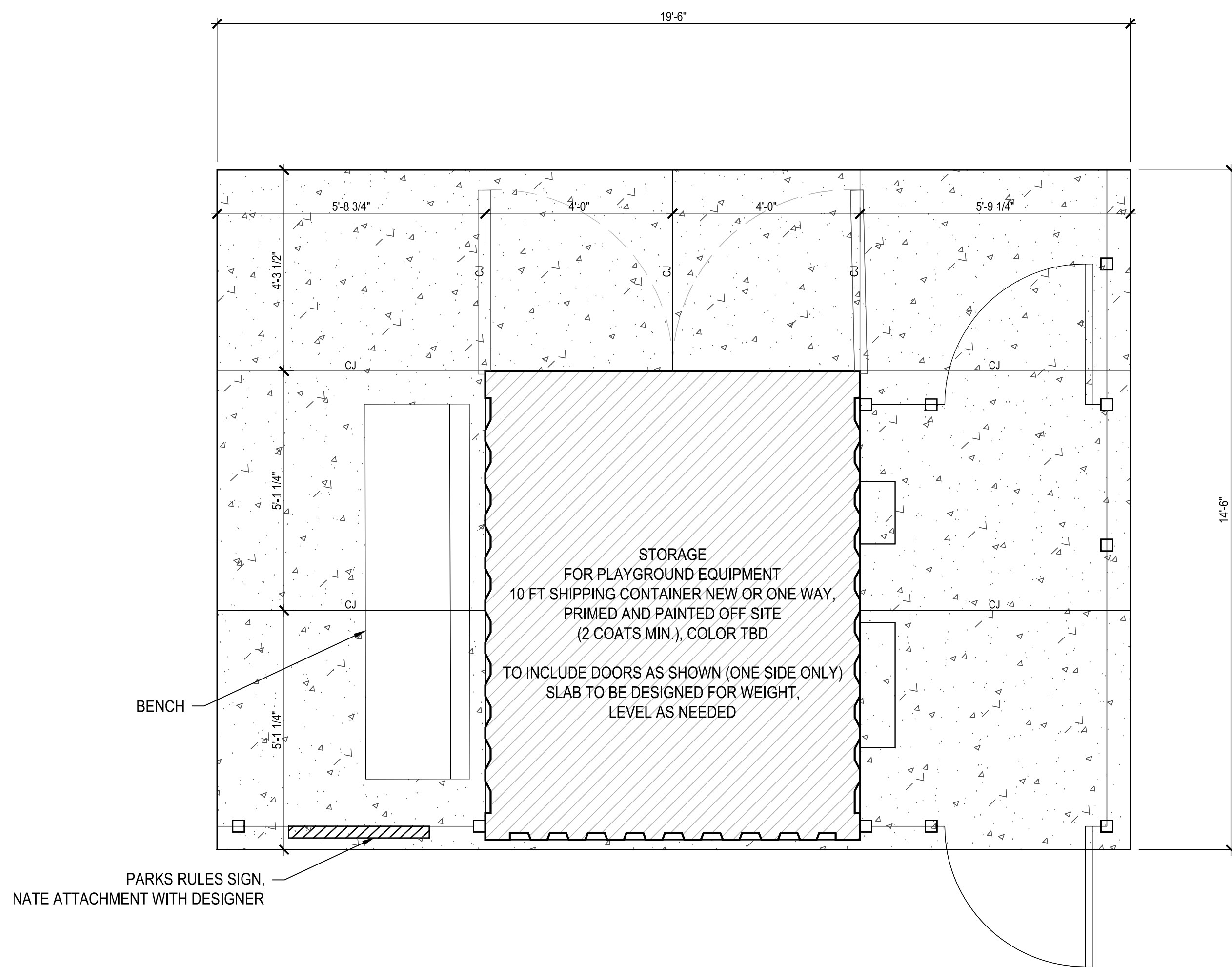
03 RETAINING WALL PLAN DETAIL 1
1-1/2" = 1'-0"



03 RETAINING WALL DETAIL, TYP.
1-1/2" = 1'-0"



02 CONTAINER PAD, SLAB EDGE, TYP.
1-1/2" = 1'-0"



01 CONTAINER PAD GROUND PLAN
1/2" = 1'-0"

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**Parks Capital
Improvement
Program**
for City of Houston
General Services Department and
Parks & Recreation Department

PARK NAME :

DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13

REVIEWED :

PARKS PROGRAM MANAGER
N/A
HERMANN PARK CONSERVANCY

PROJECT MANAGER

DATE :
WBS. No : [L-NNNN-NN-3]
SCALE : 1/2"=1'-0"
DRAWN BY :
CHECKED BY :

SHEET TITLE :
**STORAGE
CONTAINER, SLAB
PLAN & DETAILS**

SHEET NO. :

S - 700.1

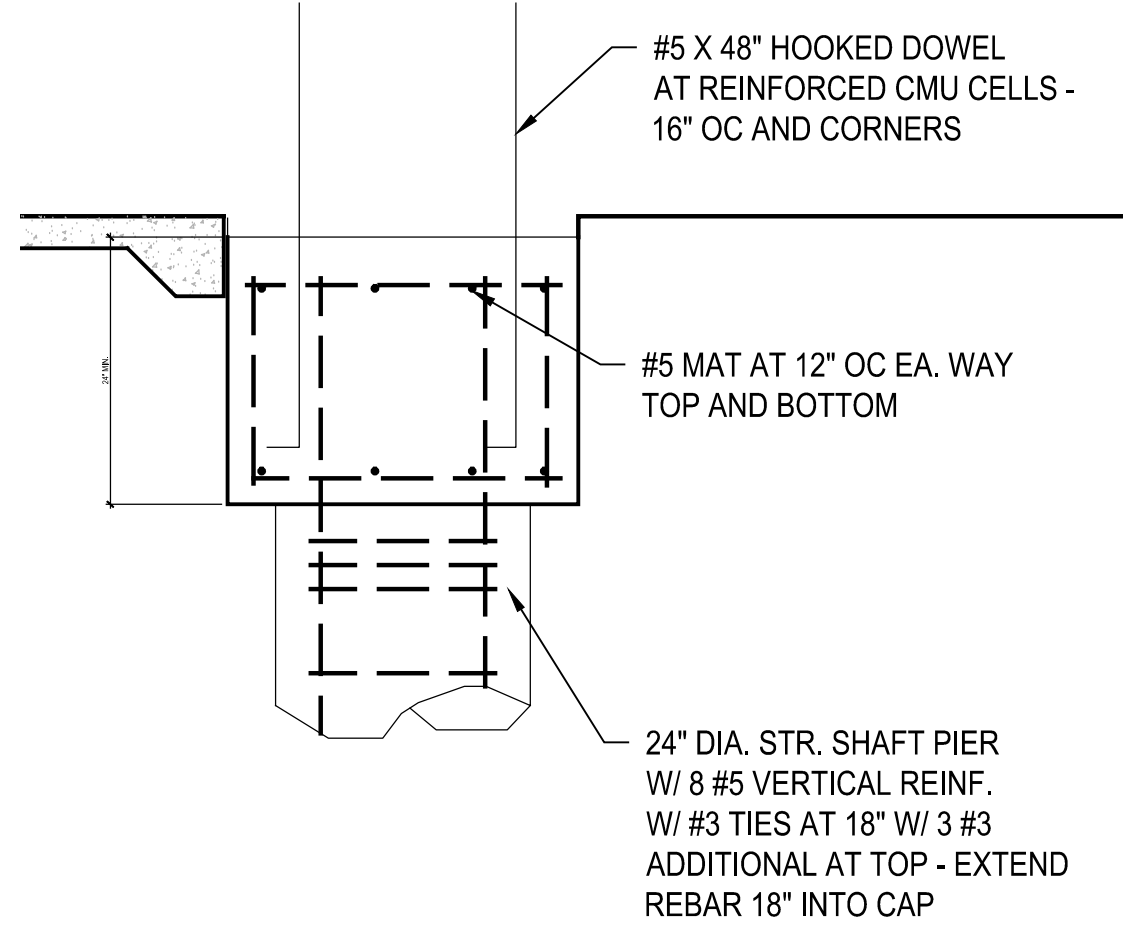
CITY DWG. NO. :

GENERAL NOTES-MASONRY CONSTRUCTION

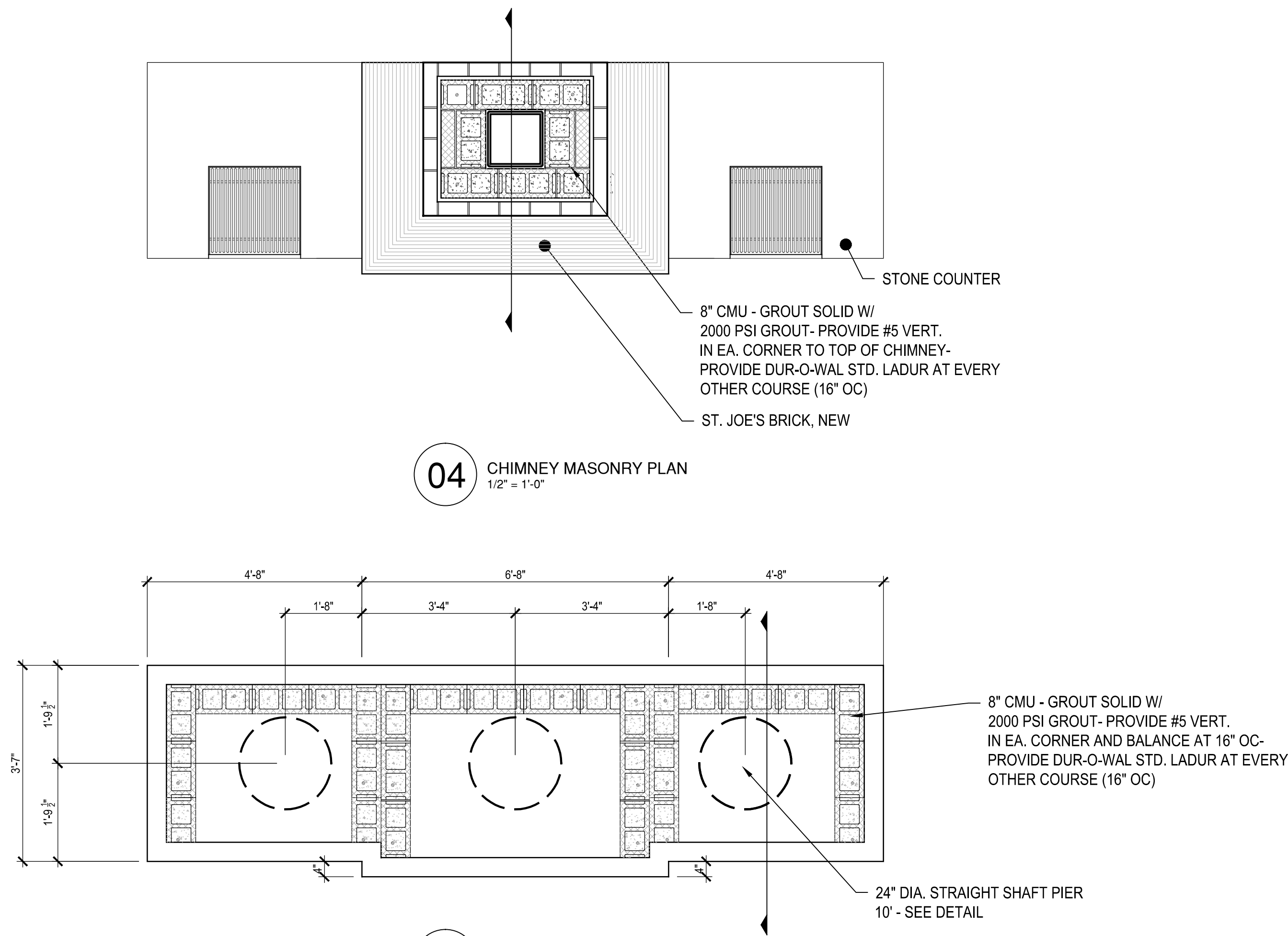
GENERAL

- Masonry construction shall conform to current building code (AIA 530.1/ASCE 8/MS 408), current edition.
- Hollow concrete masonry shall conform to ASTM C90, 125 pcf density with a minimum 1900 pcf compressive strength on the net area of the block.
- Mortar shall conform to ASTM C270, type S with a minimum compressive strength of 1900 pcf.
- Grout shall conform to ASTM C476 with a minimum compressive strength of 2000 pcf at 28 days.
- Reinforcing steel shall conform to AISI Grade 60 and shall be lapped 48 bar diameters if tied with wire or 71 bar diameters if otherwise. Vertical reinforcement shall be held in position at intervals not exceeding 192 bar diameters.
- Provide horizontal joint reinforcement (DUR-O-WAL standard LADUR galvanized or equal) at 16" on center. DUR-O-WAL shall be lapped 12" minimum.
- Horizontal reinforcing bars shall be placed in continuous masonry courses of either bond beams or lintel beams and shall be fully grouted in place. All splices shall be wire tied. Bond beams shall have 2 #5 reinforcing bars unless noted otherwise.
- All cells with vertical or horizontal reinforcing shall be fully grouted with 2000 pcf grout (noted above). Walls and cross webs shall be fully bedded in mortar. Cleanout openings shall be provided at the bottoms of all cells to be filled with at each lift or pour in excess of four feet.
- The first two cells at wall openings and corners or wall ends shall have 1 #5 vertical in each cell and grouted solid from foundation to top of wall.
- Refer to architectural plans for all expansion and construction joint locations.

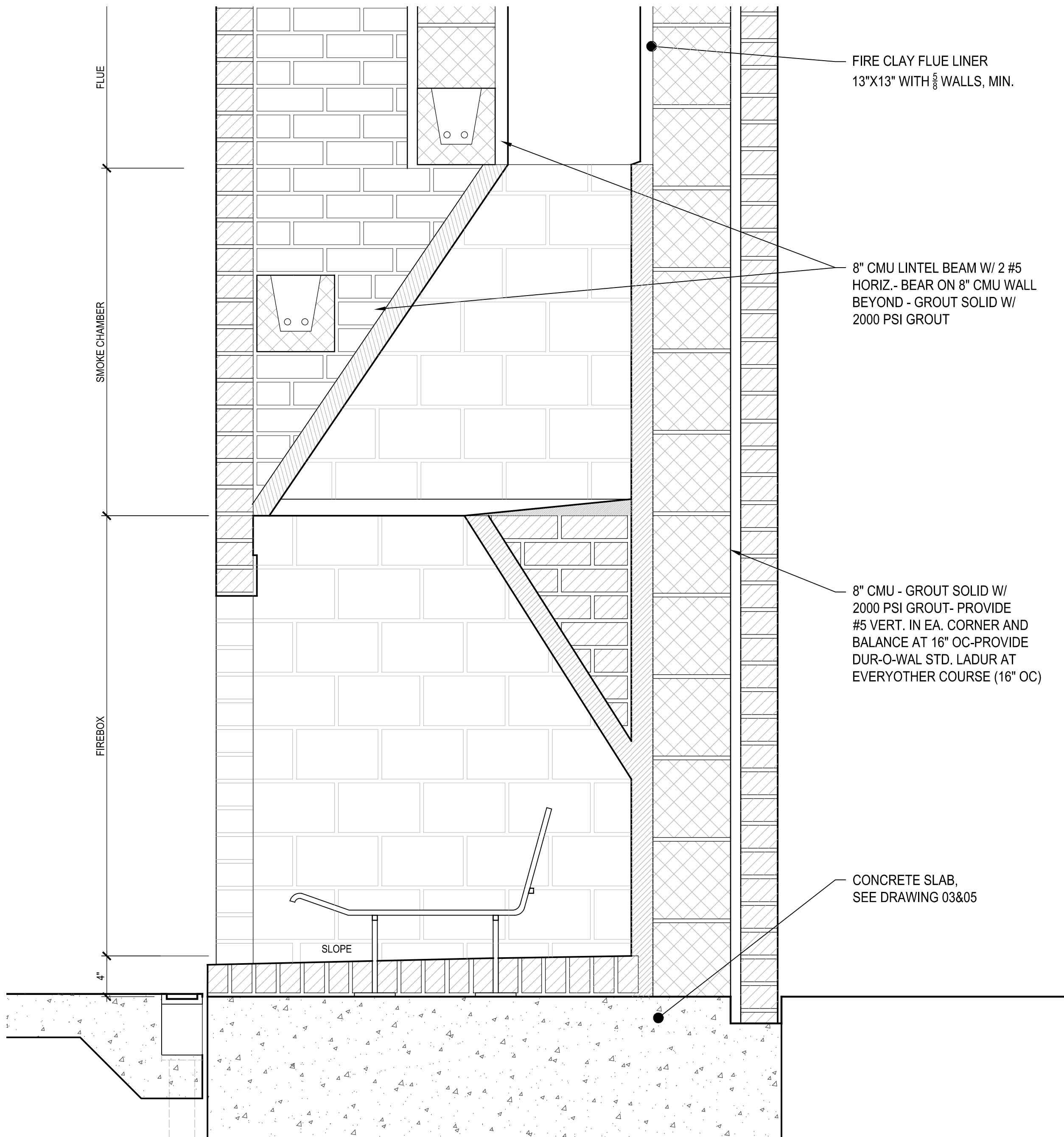
ALL MASONRY WALLS SHOWN ON THE STRUCTURAL PLANS HAVE BEEN DESIGNED TO RESIST THE NOTED BUILDING CODE LOADING CONDITIONS AFTER THE INSTALLATION OF ALL STRUCTURAL COMPONENTS. THE CONTRACTOR SHALL PROPERLY AND ADEQUATELY BRACE MASONRY WALLS AT ALL CONSTRUCTION PHASES TO RESIST ERECTION AND LATERAL LOADS APPLIED PRIOR TO THE COMPLETION OF CONSTRUCTION.



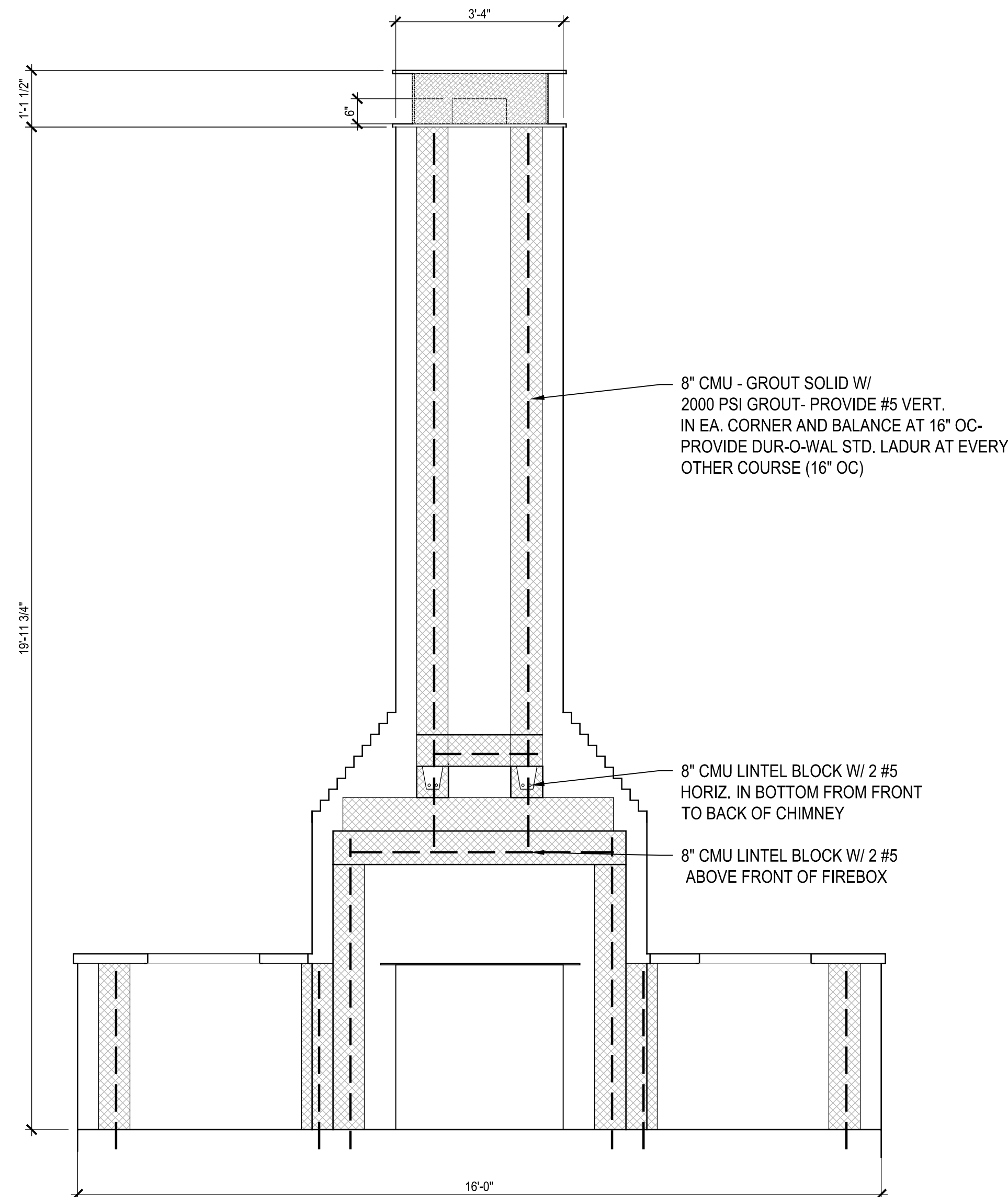
05 FOUNDATION SECTION
1/2" = 1'-0"



03 FOUNDATION PLAN
1/2" = 1'-0"



02 SECTION AT FIREBOX
1/2" = 1'-0"



01 CMU SECTION
1/2" = 1'-0"

ISSUE LOG

NO.	DATE	DESCRIPTION
2	09.04.2015	50% CD
3	10.31.2016	75% CD
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7	04.02.2018	COMMENT RESPONSE
7	06.08.2018	COMMENT RESPONSE
8	11.02.2018	ISSUED FOR BID

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PARKS PROGRAM MANAGER HERMAN PARK CONSERVANCY

PROJECT MANAGER

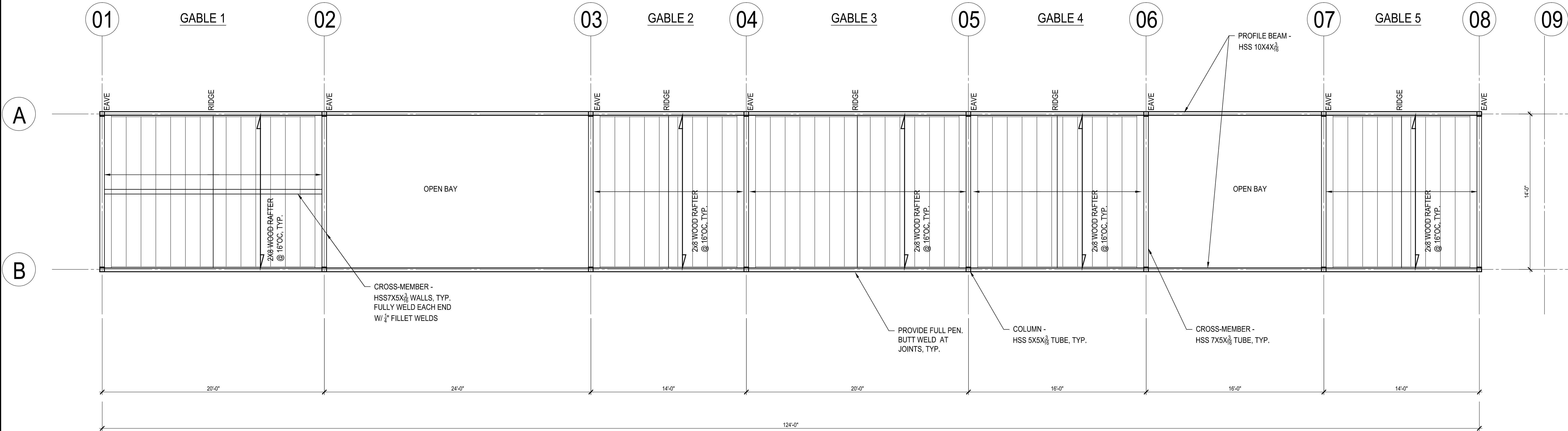
DATE : _____
WBS. No : [L-NNNN-NN-3]
SCALE : 1/4"=1'-0"
DRAWN BY : _____
CHECKED BY : _____

SHEET TITLE :
**MASONRY
CHIMNEY DETAILS**

SHEET NO. :

S - 700.2

CITY DWG. NO. :



01 FRAMING PLAN
1/4" = 1'-0"

DESIGN VALUES

INSIGHT Structures, Inc., is not responsible for any variations or modifications in the structural plans due to owner/contractor or architect changes, unless approved in writing by INSIGHT Structures, Inc.

- All construction shall be in code compliance with the 2012 IBC and conform to current city building code and requirements.
- The construction documents are valid only up to one year past the sealed date.
- The structure for this project has been designed to meet:

139 MPH | 3 SECOND GUST | EXPOSURE B
WINDSPEED REQUIREMENTS PER 2012 IBC
CATEGORY 2

DESIGN LIVE LOADS

Roof slope > 12/12	12 psf
Roof slope > 4/12	16 psf
Roof slope < 4/12	20 psf

Assembly Area	100 psf
Stairs/Exits	100 psf

* Handrails and guards by others shall be designed to resist 50plf or a single concentrated load of 200lb applied in any direction along the top. Attachments & supporting elements must transfer these loads to the appropriate structure

GENERAL NOTES-WOOD FRAMING

INSIGHT Structures, Inc., is not responsible for any variations in the framing plans due to owner/contractor or architect changes, unless approved in writing by INSIGHT Structures, Inc.

LUMBER

- All lumber 2" to 4" thick and 5" and wider shall be #2 Kd Southern Pine (SP) with 19% maximum moisture content, unless noted otherwise on plans. The modulus of elasticity must be greater than 1,400,000 psi. The shear stress shall be a minimum of 175psi.
- All lumber 2" to 4" thick and 2" to 4" wide and less than 10'-0" long shall be stud grade or better surface dry S.Y.P. or mixed southern pine with 19% maximum moisture content and minimum allowable bending stress $F_b = 750$ psi, #2 or better Douglas Fir-Larch with 19% maximum moisture content and minimum allowable bending stress $F_b = 875$ psi, or #2 or better hem-fir with 19% moisture content and minimum allowable bending stress $F_b = 850$ psi. Elasticity must be greater than 1,300,000 psi. Longer lengths shall be #2 S.Y.P., as described in note #4 or as stated on the plans. Top and bottom plates shall be of similar material.
- SPF (spruce, pine, fir) lumber and utility grade lumber is not acceptable for any structural element (studs, top plates, etc.)

ROOF FRAMING

- Roof deck shall be 3/4" CD exterior grade plywood as per architectural plans. Deck shall be fastened to support members with 8d nails at 6" centers at panel edges. Install 8d nails at 12" centers at all intermediate supports, unless noted otherwise. Install 8d nails at 4" centers at plywood to top plate at wall connections and at all locations within four feet of a roof boundary, unless noted otherwise. Refer to floor deck for plywood placement.

WOOD CONNECTIONS

- Bolt holes through wood shall be drilled 1/16" maximum larger than the diameter of the bolts to be installed.
- Bolts (A307) through wood shall be fitted with standard washers at head and nut ends.
- The number and size of nails connecting wood members together shall be in accordance with Table 2304.9.1 Fastening Schedule of the International Building Code (current edition), unless otherwise noted or detailed.
- Install Simpson "Standard LUS Joist Hangers" at flush connections, unless otherwise noted. Provide Simpson "pc" caps at post-beam connection, except as detailed differently. Provide Simpson "LCB Column Bases" at post-concrete connections, except as noted. Install all hardware per manufacturer's instructions.
- All timber fastening items shall be equal to those manufactured by Simpson Strong-Tie. Designated fastening items shown are found in the current Simpson catalog. When fastening items other than what is shown, technical data shall be submitted for approval.
- Double joists, headers or beams shall be nailed as follows:
3-16d nails at 12" centers for 2 x 6 and 2 x 8 members
4-16d nails at 12" centers for 2 x 10 and 2 x 12 members
Multiple member beams shall be installed centered under uniform or concentrated loads above, unless detailed otherwise.

GENERAL NOTES – STRUCTURAL STEEL

GENERAL

- Fabricator shall have an AISC quality certification in category 1.
- All construction shall conform to the current city building code.
- INSIGHT Structures, Inc. is not responsible for any variations in the framing plans due to contractor or architectural changes, unless approved in writing by INSIGHT Structures, Inc.

MATERIALS

- Structural steel shall be detailed, fabricated, and erected in accordance to AISC "Manual of Steel Construction", fifteenth edition and supplements.
- Wide flange shall conform to ASTM A992, channel, angle and plate shall conform to ASTM A36 and pipe shall conform to ASTM A53, grade B. Tube shall conform to ASTM A500, grade B.
- Anchor bolt material shall conform to ASTM-A36. Threads and hex nuts per ASTM-A307. Fabricator to furnish anchor bolts and setting plan. Field to set anchor bolts according to fabricator's bolt setting plan.
- Field connections are fastened with 3/4" diameter ASTM-A325N bolts, unless noted. All A325 bolts are to be fastened by "turn of nut" method.

PROCEDURE

- Beams framing to pipe or tube columns: use shop welded connection plate to columns and 2 vertical rows of holes for beam web connections, unless noted. Shop welds shall be determined by AISC-M, part 4, Table XIX, unless noted. Holes for bolts in beams shall be determined by AISC-M, part 4, Table XI, unless noted.
- Length of beam connection angles or plates shall be at least 1/2 the beam "t" dimension.
- Beams and columns shall be temporarily braced in place until surrounding framing is completed.

CONNECTIONS

- Standard drilled holes for field connections, unless noted. Burned holes are not allowed.
- Connections shall have a minimum of 3 bolts.
- Connection plates to be a minimum of 3/8" thick, unless noted.
- All re-entrant cuts to have a minimum of 1/2" radius.

SHOP DRAWINGS

- INSIGHT Structures' approval of shop drawings does not constitute this company's acceptance or responsibility for the design adequacy of any connections unless specifically noted on shop drawings to verify a particular connection. It is the fabricator's responsibility to assure all connections are made according to AISC specifications.
- Submit 3 copies of checked shop drawings for INSIGHT Structures' approval before fabrication. Unchecked shop drawings are subject to be returned for approval resubmittal.

VARIOUS

- All welding shall conform to AWS code. Welding electrodes to be E70.
- Paint steel with one (1) shop coat zinc chromate or red oxide primer, unless noted.
- All galvanized areas affected by field burning, welding, drilling, etc., shall be cleaned and painted with carbazinc #11 primer or equal.
- Splicing of members prohibited without prior approval in writing by INSIGHT Structures.
- Provide holes for attaching wood nailers and/or blocking at 16" on center, staggered, where applicable.

ISSUE LOG

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N/A
PARKS PROGRAM MANAGER HERMAN PARK CONSERVANCY

PROJECT MANAGER

DATE :
WBS. No. : [L-NNNN-NN-3]
SCALE : 1/4"=1'-0"
DRAWN BY :
CHECKED BY :

SHEET TITLE :

LONG HOUSE
FRAMING PLAN

SHEET NO. :

S - 701.0

CITY DWG. NO. :

ISSUE LOG		
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Parks Capital Improvement Program

for City of Houston
General Services Department and Parks & Recreation Department

PARK NAME : DOW ELEMENTARY PARK 1900 Kane Street Houston TX 77007 TIRZ #13
REVIEWED : <div style="float: right; text-align: right;">N/A</div> <hr/> <div style="display: flex; justify-content: space-between;"> PARKS PROGRAM MANAGER HERMANN PARK CONSERVANCY </div> <hr/> <div style="display: flex; justify-content: space-between;"> PROJECT MANAGER </div>

DATE : _____

WBS. No.: [L-NNNN-NN-3]

SCALE : AS NOTED

DRAWN BY : _____

CHECKED BY : _____

SHEET TITLE :

LONG HOUSE STRUCTURAL DETAILS

SHEET NO. :

S - 710.0

CITY DWG. NO. :

GENERAL NOTES:

A. SCOPE OF WORK:

1. WORK INCLUDED: FURNISH ALL LABOR, MATERIALS, EQUIPMENT, SERVICES, TRANSPORTATION, AND TESTING NECESSARY FOR AND REASONABLY INCIDENTAL TO THE PROPER AND SATISFACTORY INSTALLATION OF THE MECHANICAL, ELECTRICAL, AND PLUMBING (MEP) TENANT IMPROVEMENTS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN.
2. EXECUTION: WORK SHALL BE EXECUTED IN A WORKMANLIKE MANNER AND SHALL INCLUDE ALL LABOR AND MATERIALS ESSENTIAL TO PROVIDE THE COMPLETE AND FUNCTIONING SYSTEMS DESCRIBED. IN CASES OF DOUBT AS TO THE WORK INTENDED, OR IN THE EVENT OF NEED FOR EXPLANATION THEREOF, THE CONTRACTOR SHALL REQUEST SUPPLEMENTARY INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE PURCHASE, FABRICATION, OR INSTALLATION.

B. GENERAL REQUIREMENTS:

1. DRAWINGS:

- c) DUE TO THE DRAWING SCALE, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES WHICH MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE CONDITIONS SURROUNDING THE INSTALLATION OF HIS WORK AND SHALL FURNISH THE NECESSARY FITTINGS WHICH MAY BE REQUIRED TO COMPLETE THE INSTALLATION.
- b) THE DRAWINGS WERE PREPARED FROM THE BEST INFORMATION AVAILABLE AND ATTEMPT TO GIVE A REASONABLE INDICATION OF THE EXISTING EQUIPMENT. HOWEVER, BEFORE BEGINNING WORK, THE CONTRACTOR SHALL VERIFY, IN THE FIELD, THE LOCATION AND ROUTING OF EXISTING DUCTWORK, PIPING, AIR DISTRIBUTION EQUIPMENT, ELECTRICAL FEEDERS, STRUCTURE, ETC.

2. ALL WORK AND EQUIPMENT SHALL COMPLY WITH ALL APPLICABLE LAWS, CODES, ETC., OF ALL AUTHORITIES HAVING JURISDICTION, INCLUDING FEDERAL, STATE, DISTRICT, AND LOCAL AUTHORITIES. MODIFICATIONS REQUIRED BY THE ABOVE SAID AUTHORITIES SHALL BE MADE WITHOUT ADDITIONAL CHARGE TO THE TENANT. WHERE CONTRACT DOCUMENT REQUIREMENTS ARE IN EXCESS OF CODE REQUIREMENTS, THE CONTRACT DOCUMENTS SHALL GOVERN. DEVIATIONS FROM THE CONTRACT DOCUMENTS REQUIRED BY THE ABOVE SAID AUTHORITIES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.

3. PERMIT, FEES, AND LICENSES: FEES, PERMITS, AND LICENSES REQUIRED BY THE LEGALLY CONSTITUTED AUTHORITIES FOR INSTALLATION OF THE WORK ACCORDING TO THE PLANS AND SPECIFICATIONS SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL DELIVER THE ABOVE MENTIONED CERTIFICATES TO THE OWNER'S REPRESENTATIVE.

4. THE CONTRACTOR SHALL REVIEW THE SITE PRIOR TO BID SUBMISSION AND SHALL INCLUDE IN HIS BID THE COST OF REPLACEMENT, REPAIR, RELOCATION, OR REMOVAL OF EXISTING MEP ELEMENTS AS REQUIRED TO COMPLETE INSTALLATION OF ALL SYSTEMS SHOWN ON THESE DRAWINGS. ALL UNUSED TENANT EQUIPMENT SERVING THIS LEASE AREA SHALL BE REMOVED AND RETURNED TO THE LANDLORD'S STOCK. SOME WORK SHOWN MAY REQUIRE PREMIUM TIME TO AVOID DISRUPTION OF OTHER TENANTS' ACTIVITIES AND MEP SERVICES. CONTRACTOR SHALL CONFIRM THE REQUIREMENTS FOR PREMIUM TIME OR SPECIAL PROCEDURES WITH THE LANDLORD AND INCLUDE THE COST IN HIS BID PROPOSAL. THE CONTRACTOR BY SUBMITTING HIS BID PROPOSAL AGREES TO ACCEPT ALL EXISTING SITE CONDITIONS NOT SPECIFICALLY EXPECTED. ALL EXCEPTIONS SHALL BE PROVIDED IN WRITING TO THE ARCHITECT AND ENGINEER.

5. EXISTING CONDITIONS: THE TENANT MEP DESIGN SHOWN ON THESE DRAWINGS IS SUPPORTED BY EXISTING BASE BUILDING MEP SYSTEMS WHICH HAVE BEEN ASSUMED TO BE IN GOOD WORKING ORDER. ANY DEFICIENCY IN THE BASE BUILDING MEP SYSTEMS WHICH PREVENTS A COMPLETE INTERFACE WITH THE TENANT SYSTEMS OR PREVENTS THE TENANT SYSTEMS FROM BEING FULLY FUNCTIONAL AT THE COMPLETION OF CONSTRUCTION SHALL BE IDENTIFIED IN WRITING BY THE CONTRACTOR TO THE BUILDING MANAGER, ARCHITECT, AND ENGINEER AS SOON AS PRACTICAL AFTER DISCOVERY.

6. ACCESS: PROVIDE FREE AND CLEAR ACCESS TO EXISTING OR NEW EQUIPMENT FOR MAINTENANCE. NOTHING SHALL INHIBIT THE REMOVAL OF ACCESS PANELS ON THE BOTTOM OR SIDES OF EQUIPMENT, OR INHIBIT ACCESS TO THE POWER SWITCH OR CONTROL EQUIPMENT MOUNTED ON THE EXTERIOR OF THE EQUIPMENT. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING: BEAMS, WALLS, LIGHT FIXTURES, PIPING OF ANY KIND, CONDUIT, AND CEILING SUPPORTS (OTHER THAN RUNNERS).

7. A SET OF RECORD/COORDINATION DRAWINGS SHALL BE MAINTAINED IN THE GENERAL CONTRACTOR'S OFFICE AT THE JOB SITE CONSISTING OF REPRODUCIBLE SEPIAS OF THE MECHANICAL, ELECTRICAL, AND PLUMBING CONSTRUCTION DRAWINGS (WITH THE ENGINEER'S NAME REMOVED). ACTUAL LOCATIONS OF ALL EQUIPMENT PIPING DUCTWORK, ETC. AND ALL DEVIATIONS OF THE WORK FROM THAT SHOWN ON THE CONTRACT DOCUMENTS SHALL BE MARKED ON THE RECORD/COORDINATION DRAWINGS. EACH TRADE SHALL REVIEW THE RECORD/COORDINATION DRAWINGS AND RESOLVE ANY POTENTIAL CONFLICTS WITH OTHER TRADES PRIOR TO INSTALLING ANY PORTION OF THEIR WORK. THE GENERAL CONTRACTOR SHALL REQUEST AUTOCAD DRAWING FILES FROM THE PROJECT ENGINEER. INCORPORATE ALL MEP RECORD/COORDINATION DRAWING DEVIATIONS INTO THESE AUTOCAD DRAWING FILES, AND SUBMIT ELECTRONIC COPIES OF THE RECORD/COORDINATION AUTOCAD DRAWING FILES TO THE ARCHITECT AND ENGINEER FOR REVIEW PRIOR TO FINAL ACCEPTANCE OF THE WORK.

8. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO BRING TO THE ATTENTION OF THE MECHANICAL ENGINEER ANY SLAB-TO-SLAB PARTITIONS OTHER THAN THOSE SHOWN ON THE MECHANICAL DRAWINGS IN ORDER TO PRESERVE RETURN AIR PATHWAYS. ALL PENETRATIONS OF SLAB-TO-SLAB PARTITIONS SHALL BE SEALED AIRTIGHT.

9. NEW DUCTWORK, CONDUIT, AND PIPING SHOWN ON THE DRAWINGS SHALL BE INSTALLED AS HIGH AS POSSIBLE. CONTRACTORS SHALL COORDINATE DUCTWORK, CONDUIT, AND PIPING INSTALLATION WITH LIGHTING FIXTURES, SPECIAL CEILING CONSTRUCTION, AIR DISTRIBUTION, EQUIPMENT, ETC., AND PROVIDE ADDITIONAL RISERS, DROPS, AND OFFSETS AS REQUIRED. IF INSTALLED, NEW DUCTWORK, CONDUIT, OR PIPING IS FOUND TO BE IN CONFLICT WITH ARCHITECTURAL OR MEP ELEMENTS WHICH ARE EITHER EXISTING OR SHOWN ON THE CONTRACT DOCUMENTS, THE DUCTWORK, CONDUIT, OR PIPING SHALL BE RELOCATED WITHOUT ADDITIONAL COST.

10. TENANT MEP EQUIPMENT AND ASSOCIATED SERVICES WHICH MAY EXIST WITHIN THE PROJECT AREA ARE TO BE REMOVED BACK TO THE POINT OF CONNECTION WITH BASE BUILDING SYSTEMS UNLESS NOTED OTHERWISE ON THE DRAWINGS. EXISTING TENANT EQUIPMENT WHICH IS SHOWN AS "EXISTING TO REMAIN" ON THE DRAWINGS SHALL BE RENDERED FULLY FUNCTIONAL BY THE CONTRACTOR.

11. EACH ITEM OF TENANT EQUIPMENT SHALL BE IDENTIFIED BY A PERMANENTLY ATTACHED LAMINATED BAKELITE NAMEPLATE WITH ENGRAVED LETTERS WITH A DESIGNATION CORRESPONDING TO THE CONTRACT DOCUMENTS. IN FINISHED SPACES NO PRODUCT SHALL HAVE A VISIBLE TRADEMARK, INSIGNIA, ETC. INTENDED TO IDENTIFY THE MANUFACTURER OR VENDOR OF THE PRODUCT, EXCEPT THAT LABELS OF REQUIRED TESTING AGENCIES SHALL NOT BE REMOVED.

12. GUARANTEES:

- a) THE CONTRACTOR SHALL GUARANTEE HIS WORK UNCONDITIONALLY FOR A PERIOD OF ONE (1) YEAR AFTER FINAL ACCEPTANCE. IF, DURING THIS PERIOD, ANY MATERIALS, EQUIPMENT, OR ANY PART OF THE SYSTEM FAILS TO FUNCTION PROPERLY, THE CONTRACTOR SHALL MAKE GOOD THE DEFECTS PROMPTLY AND WITHOUT ANY EXPENSE TO THE OWNER.

- b) THE EQUIPMENT AND MATERIALS INSTALLED ON THIS PROJECT SHALL CONTAIN NO ASBESTOS OR PCB. PRIOR TO OWNER'S ACCEPTANCE OF THIS PROJECT, THE CONTRACTOR SHALL CARRY IN WRITING TO THE OWNER THAT THE INSTALLED EQUIPMENT AND MATERIALS CONTAIN NO ASBESTOS OR PCB. THE ENGINEER SHALL RECEIVE A COPY OF THE CERTIFICATION.

C. SUBMITTALS:

1. EACH MEP SUBCONTRACTOR SHALL PREPARE AND SUBMIT TO THE TENANT'S REPRESENTATIVE SIX (6) BOUND BOOKLETS CONTAINING A COMPLETE LIST AND DESCRIPTION OF THE MATERIALS, SPECIALTIES, AND EQUIPMENT HE INTENDS TO FURNISH FOR THE INSTALLATION. ALL PROPOSED DEVIATIONS FROM THE CONTRACT DOCUMENTS SHALL BE DESCRIBED IN THE SUBMITTALS. THE BOOKLETS SHALL INCLUDE THE FOLLOWING CERTIFICATION STATEMENT SIGNED BY AN AUTHORIZED REPRESENTATIVE OF THE SUBCONTRACTOR AND GENERAL CONTRACTOR:

I HEREBY CERTIFY THAT THIS SHOP DRAWING, PRODUCT DATA, AND/OR SAMPLE HAS BEEN CHECKED PRIOR TO SUBMITTAL AND THAT IT COMPLIES IN ALL RESPECTS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND PHYSICAL SPACE LIMITATIONS FOR THE PROJECT.

- AT THE COMPLETION OF THE PROJECT TWO (2) BOUND BOOKLETS EACH CONTAINING ONE COPY OF ALL MEP SUBMITTALS FOR THE PROJECT SHALL BE PREPARED BY THE CONTRACTOR AS OPERATIONS AND MAINTENANCE MANUALS. ONE BOOKLET SHALL BE PROVIDED TO THE TENANT'S REPRESENTATIVE AND ONE BOOKLET SHALL BE PROVIDED TO THE LANDLORD'S REPRESENTATIVE.

D. SITE REVIEWS:

1. ENGINEERING SITE REVIEWS MAY BE PERFORMED AT VARIOUS STAGES OF CONSTRUCTION. THE CONTRACTOR SHALL FURNISH A CONSTRUCTION SCHEDULE AND TIMELY UPDATES TO THE ENGINEER TO ALLOW ENGINEERING QUALITY ASSURANCE REVIEWS TO BE SCHEDULED.

2. THE CONTRACTOR SHALL PROVIDE AT LEAST ONE (1) WEEKS NOTICE TO THE ENGINEER PRIOR TO THE START OF CEILING TILE INSTALLATION AND THE COMPLETION OF THE MEP SYSTEM INSTALLATION.

ELECTRICAL SYSTEM GENERAL NOTES:

A. GENERAL REQUIREMENTS:

1. REFER TO THE ARCHITECTURAL PLANS FOR THE FINISH, EXACT LOCATION, MOUNTING DETAILS, AND HEIGHT OF ALL DEVICES.
2. ALL SIZE #10, #12, AND #14 AWG CONDUCTORS SHALL BE SOLID COPPER. SIZE #8 AWG AND LARGER CONDUCTORS SHALL BE STRANDED COPPER. INSULATION SHALL BE TYPE THHN, THW, OR THHW.
3. ALL DEDICATED RECEPTACLES SHALL BE NEMA 5-20R UNLESS OTHERWISE NOTED (ONE RECEPTACLE PER 20 AMP CIRCUIT).

4. SEAL ALL CONDUITS OR DATA CABLE PENETRATIONS OF FIRE RATED CONSTRUCTION WITH FACTORY BUILT DEVICES OR WITH MANUFACTURED FILL, VOID, OR CAVITY MATERIALS "CLASSIFIED" BY UNDERWRITERS LABORATORIES, INC. FOR USE AS A THROUGH-PENETRATION FIRESTOP.

5. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING CIRCUITS SERVING THE PRESENT LEASE SPACE AND THE EXISTING SPARE CIRCUITS IN THE PANELBOARDS SERVING THIS LEASE SPACE AND SHALL REPORT ANY FIELD CONDITIONS REQUIRING CIRCUITING DEVIATIONS IN WRITING TO THE ENGINEER FOR DIRECTION PRIOR TO PROCEEDING WITH CONSTRUCTION.

6. ALL EXISTING CONDUIT AND CONDUCTORS SERVING THE AREA UNDER CONTRACT NOT TO BE REUSED SHALL BE TERMINATED AT LAST PORTION OF CIRCUIT REQUIRING ENERGIZATION BEFORE THE DEMOLITION AREA. IF A CIRCUIT SERVICES ONLY THE DEMOLITION AREA, REMOVE ALL CONDUITS AND CONDUCTORS BACK TO THE PANELBOARD AND DE-ENERGIZE THE CIRCUIT BREAKER, MAKING IT A SPARE. NOTE SPARE CIRCUITS IN PANELBOARD DIRECTORY.

7. RELOCATE AND RECONNECT ACTIVE PORTIONS OF THE ELECTRICAL SYSTEM OUTSIDE OF THE SCOPE OF DEMOLITION, AS REQUIRED TO MAINTAIN A COMPLETE AND OPERATING SYSTEM THAT IS FUNCTIONALLY EQUIVALENT TO THE PRE-EXISTING SYSTEM PRIOR TO DEMOLITION.

B. GENERAL WIRING NOTES:

- a) ALL EXPOSED RACEWAYS INCLUDING THOSE IN MECHANICAL AND ELECTRICAL ROOMS SHALL BE RIGID CONDUIT OR EMT. CONDUIT OR EMT SHALL BE EXTENDED THROUGH THE EQUIPMENT ROOM WALLS.
- b) SEPARATE HOME RUNS SHOWN ON THE DRAWINGS SHALL HAVE INDIVIDUAL PHASE, GROUND, AND NEUTRAL CONDUCTORS AS SHOWN ON THE DRAWINGS BROUGHT BACK TO THE PANELBOARD.

- c) FOR 20 AMP CIRCUITS, NOT MORE THAN SIX #12 AWG THW OR NINE #12 AWG THHN CURRENT CARRYING CONDUCTORS SHALL BE INSTALLED IN EACH RACEWAY.

- d) ALL 120 VOLT, 20 AMP HOME RUNS LONGER THAN 100 FEET AND ALL 277 VOLT, 20 AMP HOME RUNS LONGER THAN 150 FEET SHALL BE #10 AWG MINIMUM.

- e) CONCEALED WIRING IN FINISHED AREAS WHERE PERMITTED BY LOCAL CODE MAY BE TWO WIRE AC OR THREE WIRE MC TYPE ARMORED CABLE FOR CONNECTING RECEPTACLE OR SWITCH CIRCUITS TO THE GRID SYSTEM. AC CABLE SHALL CONSIST OF TWO #12 AWG SOLID COPPER THHN INSULATED CONDUCTORS AND A BARE #18 AWG GROUNDING JUMPER IN A FLEXIBLE ALUMINUM OR STEEL JACKET AND SHALL BE MANUFACTURED BY SOUTHWIRE OR AFC. TYPE MC CABLE SHALL CONTAIN A #12 AWG SOLID COPPER THHN INSULATED GROUNDING CONDUCTOR. CABLES WITH LARGER WIRE SIZES SHALL BE USED WHERE REQUIRED TO LIMIT VOLTAGE DROP. ARMORED CABLE SHALL NOT BE BUNDLED TOGETHER AND SHALL NOT BE CLIPPED TO THE CEILING GRID SUPPORT WIRES OR SUPPORTED FROM PIPING OR DUCTWORK SUPPORT SYSTEMS. JUNCTION BOXES ABOVE THE CEILING SHALL BE RIGIDLY ATTACHED TO THE BUILDING STRUCTURE. ISOLATED GROUND CIRCUITS SHALL BE RUN WITH MC OR SUITABLY MARKED THREE WIRE AC CABLE.

9. PANELBOARDS SHALL BE FURNISHED WITH BOLT-ON TYPE THERMAL-MAGNETIC TRIP CIRCUIT BREAKERS.

10. EMT CONNECTORS AND COUPLINGS SHALL BE STEEL SET SCREW TYPE. ARMORED CABLE CONNECTORS AND COUPLINGS SHALL BE MALLEABLE IRON CLAMP TYPE. CONDUCTORS #8 AWG AND LARGER SHALL BE CONNECTED WITH HIGH CONDUCTIVITY WROUGHT COPPER COLOR KEVED COMPRESSION CONNECTORS. CONDUCTORS #8 AWG AND SMALLER SHALL BE CONNECTED WITH PRE-INSULATED SPRING CONNECTORS.

11. UNLESS OTHERWISE NOTED, ALL LIGHT SWITCHES AND RECEPTACLES SHALL BE WHITE "DECORA" STYLE WITH WHITE PLASTIC COVER PLATES AND SHALL BE EQUAL TO PASS AND SEYMOUR/LEGORAND "SIERRAplex" SERIES.

12. PANELBOARDS SHALL BE ARRANGED AS SHOWN ON THE DRAWINGS AND BE EQUAL TO GE TYPE AE (277/480 VOLT) OR GE TYPE AQ (120/208 VOLT) WITH BOLT-ON TYPE THERMAL-MAGNETIC TRIP CIRCUIT BREAKERS. BUS BARS SHALL BE COPPER. 120/208 VOLT PANELBOARD SHALL BE PROVIDED WITH AN EQUIPMENT GROUND BUS. MAIN LUGS CONNECTED TO #1/0 OR LARGER CONDUCTORS SHALL BE FURNISHED TO ACCOMMODATE COMPRESSION CONNECTORS. I.T.E. MANUFACTURED EQUIPMENT COMPLYING WITH THESE SPECIFICATIONS WILL BE ACCEPTED.

13. CONTRACTOR SHALL PROVIDE AND INSTALL EITHER SWITCHGEAR MANUFACTURER LISTED AND IDENTIFIED HANDLE TIES OR MULTI-POLE CIRCUIT BREAKERS FOR ALL MULTIWIRE BRANCH CIRCUITS TO COMPLY WITH 2008 NATIONAL ELECTRICAL CODE (NEC) ARTICLE 210.4.

14. THE CONTRACTOR SHALL FIELD SURVEY THE EXISTING ELECTRICAL PANELS AND SHALL ADD OR RELOCATE CIRCUIT BREAKERS AS REQUIRED TO PROVIDE THE BRANCH CIRCUITS INDICATED ON THE DRAWINGS. EXISTING CIRCUIT BREAKERS NOT USED SHALL REMAIN AND BE LABELED SPARES ON NEW ELECTRICAL PANEL SCHEDULES.

15. THE CONTRACTOR SHALL PROVIDE UPDATED (TYPEWRITTEN) ELECTRICAL PANEL SCHEDULES FOR ALL ELECTRICAL PANELS WITH CIRCUIT CHANGES.

16. SUBMITTALS: - DIVISION 16 PRODUCTS, PROCESSES, AND MATERIALS TO BE INCLUDED IN THE SUBMITTAL PACKAGE SHALL INCLUDE THE FOLLOWING, WHERE THE LISTED ITEM IS REQUIRED FOR THE INSTALLATION OF THE ELECTRICAL SYSTEMS SHOWN ON THE DRAWINGS:

- a) PANELBOARDS.
b) WIRING CABLES.
c) WIRING DEVICES.
d) SWITCHES AND FUSES.
e) LIGHTING FIXTURES.
f) FIRE ALARM SYSTEM.
g) OTHER ITEMS AS REQUIRED BY THE DRAWINGS.

PLUMBING SYSTEM GENERAL NOTES:

A. GENERAL REQUIREMENTS:

1. DOMESTIC WATER AND DRAIN PIPING FOR 150 PSIG WORKING PRESSURE SYSTEMS SHALL EITHER BE ASTM-A-102-57T SCHEDULE 40 GALVANIZED STEEL WITH SCREWED FITTINGS OR TYPE "L" HARD DRAWN COPPER WITH ASTM-B-32-76 GRADE 95TA TIN-ANTIMONY SOLDERED JOINTS. CONNECTIONS BETWEEN STEEL AND COPPER PIPING SYSTEMS SHALL BE MADE WITH INSULATING UNIONS OR COUPLINGS. STOP VALVES SHALL BE BRONZE BALL VALVES WITH STAINLESS STEEL BALLS AND TEFLON PACKING AND GASKETS. HANGERS FOR HORIZONTAL PIPE SHALL BE EQUAL TO ITT GRINELL FIGURE 260 (OR FEE AND MASON FIGURE 364 WITH FIGURE 227 ADJUSTABLE FOR COPPER PIPE).

2. ALL DOMESTIC HOT WATER PIPING LESS THAN OR EQUAL TO 1 1/2" DIAMETER SHALL BE INSULATED WITH 1 INCH THICK GLASS FIBER INSULATION (ASTM C547) WITH THERMAL CONDUCTIVITY (K-FACTOR) OF 0.27 BTU-IN/HR PER SF PER DEGREE F AT 75 DEGREE F MEAN TEMPERATURE. ALL DOMESTIC HOT WATER PIPING GREATER THAN 1 1/2" DIAMETER SHALL BE INSULATED WITH 2 INCH THICK GLASS FIBER INSULATION (ASTM C547) WITH THERMAL CONDUCTIVITY (K-FACTOR) OF 0.27 BTU-IN/HR PER SF PER DEGREE F AT 75 DEGREE F MEAN TEMPERATURE. DOMESTIC HOT WATER PIPING SHALL BE JOHNS-MANVILLE "MICRO-LOK" OR APPROVED EQUAL WITH "AP" NON-COMBUSTIBLE JACKET IN ALL LOCATIONS.

3. SANITARY WASTE AND VENT PIPING SHALL BE SERVICE WEIGHT CAST IRON WITH ONE OF THE FOLLOWING:

- a) BELL AND SPIGOT JOINTS YARNED AND WITH JUTE, COMPACTED AND POURED WITH ONE CONTINUOUS 1 INCH DEPTH OF LEAD CAULKED AT LEAST THREE TIMES AROUND.

- b) TYLER "TY-SEAL" JOINTS WITH NEOPRENE POSITIVE SEAL ELASTOMERIC COMPRESSION TYPE GASKETS WHERE EACH HORIZONTAL JOINT IS ADEQUATELY SUPPORTED ON ONE SIDE OF THE JOINT WITHIN 12-INCHES OF THE JOINT.

- c) TYLER "NO-HUB" STAINLESS STEEL CONNECTORS WHERE HANGERS ARE INSTALLED ON BOTH SIDES OF EACH HUB JOINT WITHIN 12-INCHES OF THE JOINTS AND OFFSETS ARE RESTRAINED IN AN APPROVED MANNER.

4. HANGERS FOR HORIZONTAL SANITARY PIPING SHALL BE EXPANSION RING OR CLEVIS TYPE SPACED NO MORE THAN 5-FEET APART. VERTICAL PIPE PASSING THROUGH SLABS SHALL BE SUPPORTED WITH FEE & MASON FIGURE 241 RISER CLAMPS.

5. ALL SLAB PENETRATIONS SHALL BE SLEEVED WITH MINIMUM 16 GAUGE GALVANIZED STEEL, FIRE AND WATER STOPPED, AND EXTENDING 2-INCHES ABOVE THE SLAB.

6. CONTRACTOR SHALL FIELD REVIEW THE LEASE SPACE PRIOR TO STARTING ANY WORK. ALL EXISTING PVC PLUMBING PIPING INSTALLED WITHIN A RETURN AIR PLENUM SHALL BE REMOVED AND REPLACED WITH ABOVE NOTED PLUMBING PIPING MATERIALS.

ELECTRICAL LEGEND	
NOTE: AN "E" ADJACENT TO A SYMBOL INDICATES EXISTING TO REMAIN.	
	FLUORESCENT LIGHTING FIXTURE (SEE FIXTURE SCHEDULE)
	INCANDESCENT LIGHTING FIXTURE (CEILING MOUNTED)
	INCANDESCENT LIGHTING FIXTURE (WALL MOUNTED)
	LIGHTING FIXTURE ON EMERGENCY AND/OR NIGHT LIGHTING CIRCUIT
	EXIT LIGHT (DOUBLE SIDED) DIRECTIONAL ARROWS AS INDICATED
	EXIT LIGHT (SINGLE SIDED) DIRECTIONAL ARROWS AS INDICATED
	EXIT LIGHT (SINGLE SIDED) DIRECTIONAL ARROWS AS INDICATED
	EXIT LIGHT (WALL MOUNTED) DIRECTIONAL ARROW AS INDICATED
	JUNCTION BOX (CONCEALED ABOVE CEILING)
	JUNCTION BOX (SURFACE MOUNTED)
	JUNCTION BOX (WALL MOUNTED)
	JUNCTION BOX - GRID
	TOGGLE SWITCH - SINGLE POLE
	TOGGLE SWITCH - TWO POLE
	TOGGLE SWITCH - THREE WAY
	TOGGLE SWITCH - WITH PILOT LIGHT
	KEYPAD SWITCH
	MANUAL MOTOR CONTROLLER WITH OVERLOAD PROTECTION
	SPST LIGHT SWITCH-LETTER DENOTES FIXTURES TO BE CONTROLLED
	DIMMER SWITCH
	MULTI-OUTLET STRIP (PLUGMOLD)
	SIMPLEX RECEPTACLE--FLUSH MOUNTED
	SIMPLEX RECEPTACLE--SURFACE MOUNTED
	DUPLEX RECEPTACLE--FLUSH MOUNTED
	DUPLEX RECEPTACLE--SURFACE MOUNTED
	SPECIAL RECEPTACLE
	SPLIT-WIRED RECEPTACLE
	CRT/COMPUTER RECEPTACLE WITH GROUNDING STRAP
	WEATHERPROOF DEVICE
	BUS DUCT RISER
	ELEVATOR LOBBY EMERGENCY SIGN
	PHOTOELECTRIC TYPE SMOKE DETECTOR
	IONIZATION TYPE SMOKE DETECTOR
	RATE OF RISE HEAT DETECTOR
	SPEAKER HORN
	MANUAL PULL STATION--FIRE ALARM
	FIREMANS TELEPHONE JACK
	FIREMANS TELEPHONE JACK W/HANDSET
	MONITOR FOR SUPERVISED VALVES
	DATA GATHERING PANEL
	HIGH LEVEL ALARM
	LOW LEVEL ALARM
	OVERFLOW ALARM
	WATER FLOW SWITCH
	ADA APPROVED FIRE ALARM STROBE W/ LIGHT INTENSITY LEVEL AS NOTED.
	ADA APPROVED FIRE ALARM AUDIBLE/ STROBE W/ LIGHT INTENSITY LEVEL AS NOTED.
	COMMUNICATION OUTLET
	WALL MOUNTED COMMUNICATION OUTLET
	WALL MOUNTED COMMUNICATION OUTLET
	COMMUNICATION FLOOR OUTLET
	POWER FLOOR OUTLET
	DATA FLOOR OUTLET
	EXISTING 120 VOLT POWER GRID (SEE FIXTURE SCHEDULE)
	EXISTING 277 VOLT LIGHTING GRID (HOMERUN INDICATES BRANCH CIRCUITS AVAILABLE)
	EXISTING CONDUIT
	CONDUIT IN OR UNDER FLOOR
	CONDUIT WITH PULLWIRE ONLY--SIZE AS SHOWN
	FLEXIBLE METAL CONDUIT--SEE SPECIFICATIONS FOR USE
	HOMERUN TO PANEL, PANEL AND CIRCUIT INDICATED. SEE PANEL SCHEDULE FOR NUMBER OF CONDUCTORS AND ANY SPECIAL REQUIREMENTS
	ELECTRIC THERMOSTAT
	CLOCK OUTLET
	TIME CLOCK
	PUSHBUTTON--REMOTE CONTROL STATION
	BELL
	BUZZER
	SOUND SYSTEM SPEAKER OUTLET
	INTERCOM STATION
	TELEPHONE TERMINAL BOARD
	SINGLE PHASE MOTOR
	THREE PHASE MOTOR
	MOTOR CONTROLLER WITH NEMA SIZE
	COMBINATION MOTOR CONTROLLER/ CIRCUIT BREAKER
	FUSED OR NON-FUSED DISCONNECT (3P-30/40F U.N.G.)
	CIRCUIT BREAKER IN NEMA SIZE 1
	CONTROL PANEL UNDER ANOTHER DIVISION--FURNISHED WITH EQUIPMENT
	MODULAR WIRING DISTRIBUTION BOX
	ELECTRICAL SERVICE METER
	GROUND FAULT INTERRUPTER
	LOW VOLTAGE PANELBOARD--FLUSH MOUNTED
	LOW VOLTAGE PANELBOARD--SURFACE MOUNTED
	HIGH VOLTAGE PANELBOARD--FLUSH MOUNTED
	HIGH VOLTAGE PANELBOARD--SURFACE MOUNTED
	POWER TRANSFORMER
	MAIN SWITCHBOARD
	DISTRIBUTION PANEL
	MOTOR CONTROL CENTER
	AUTOMATIC TRANSFER SWITCH
	CONTACTOR
	PHOTOCELL
	FUSE
	CIRCUIT BREAKER
	GROUND
	NORMALLY OPEN CONTACT
	NORMALLY CLOSED CONTACT
	SINGLE-POLE, SINGLE-THROW SWITCH
	DISCONNECT OR DRAW-OUT DEVICE
	CAPACITOR
	COMMUNICATION OUTLET
	COMBINATION MOTOR CONTROLLER/ DISCONNECT WITH NEMA SIZE
	CONTINUATION OF WIRING TO SIMILAR SYMBOL WITH MATCHING LETTER INSIDE OF CIRCLE

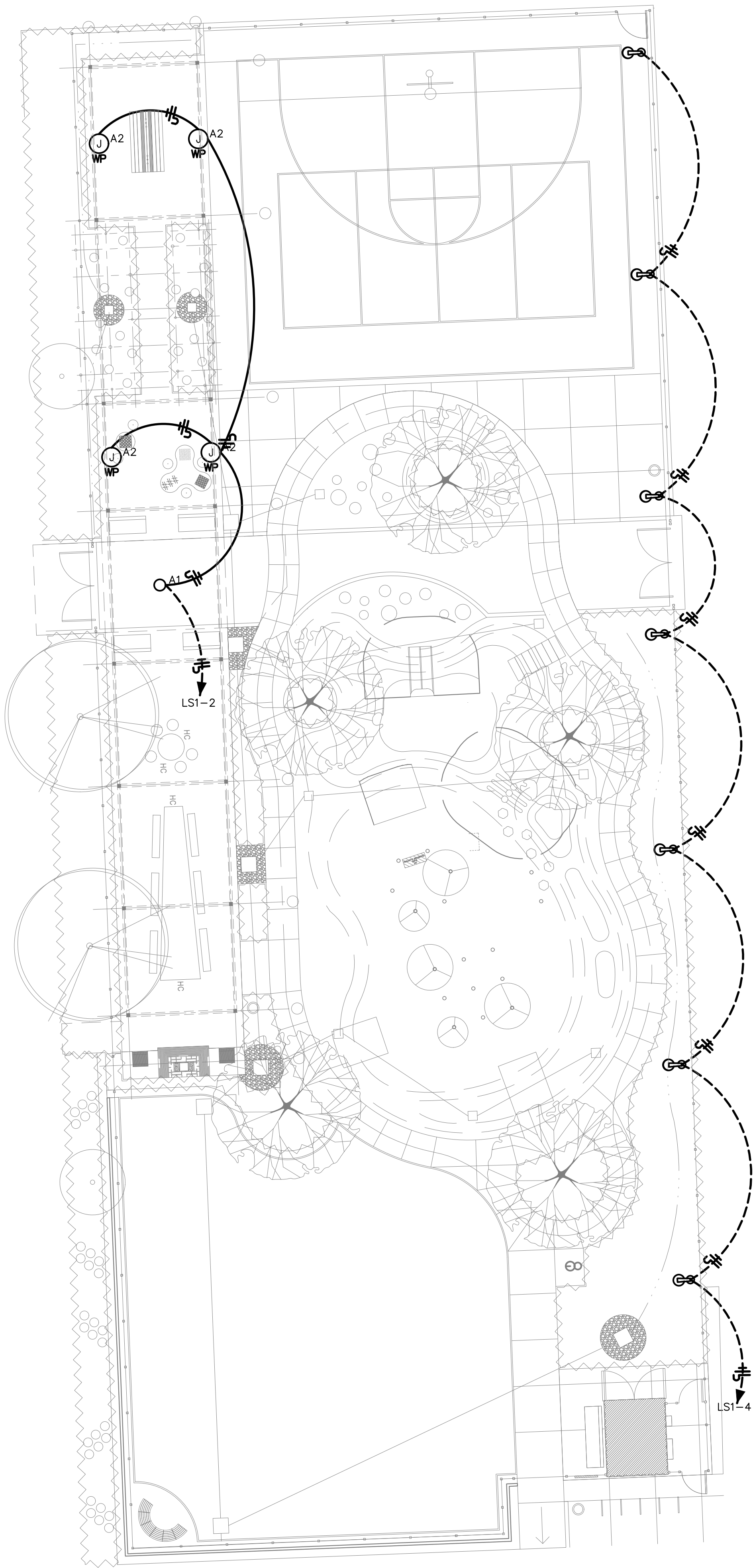
ELECTRICAL LINE TYPE LEGEND

- EXISTING ELECTRICAL EQUIPMENT TO REMAIN.
- NEW ELECTRICAL EQUIPMENT.
- EXISTING ELECTRICAL EQUIPMENT TO BE REMOVED.

MECHANICAL/PLUMBING LINE TYPE LEGEND

- EXISTING MECHANICAL AND PLUMBING EQUIPMENT TO REMAIN.
- NEW MECHANICAL AND PLUMBING EQUIPMENT.
- EXISTING MECHANICAL AND PLUMBING EQUIPMENT TO BE REMOVED.

LEGEND OF PLUMBING SYMBOLS						
FIXTURES						
SYMBOLS	DESCRIPTION	SIZE OF CONNECTION				
		SOIL	WASTE	VENT	C.W.	H.W.
	W C WATER CLOSET (FLUSH VALVE)	4"	—	2"	1"	—
	W C WATER CLOSET (TANK TYPE)	4"	—	2"	1/2"	—
	U URINAL	2"	—	2"	1"	—
	L LAVATORY	—	1 1/4"	1 1/4"	1 1/2"	1 1/2"
	BT BATH TUB	—	1 1/2"	1 1/2"	1 1/2"	1 1/2"
	SS SERVICE SINK	—	3"	2"	1 1/2"	1 1/2"
	SK SINK	—	2"	2"	1 1/2"	1 1/2"
	SK--"X" SINK (BY OTHERS)	—	2"	2"	1 1/2"	1 1/2"
	SH SHOWER	—	2"	2"	1 1/2"	1 1/2"
	EW C ELECTRIC WATER COOLER	—	1 1/4"	1 1/4"	1 1/2"	—
	DF DRINKING FOUNTAIN	—	1 1/4"	1 1/4"	1 1/2"	—
	FHC FIRE HOSE CABINET	—	—	—	1 1/2"	—
	FHR FIRE HOSE RACK	—	—	—	1 1/2"	—
	FHV FIRE HOSE VALVE	—	—	—	2 1/2"	—
PIPING						
	SANITARY SOIL OR WASTE		A.D.	AREA DRAIN		
	SANITARY VENT		F.D.	FLOOR DRAIN		
	SD STORM DRAINAGE		R.D.	ROOF DRAIN		
	COLD WATER (CW)		H.D.	HUB DRAIN		
	HOT WATER SUPPLY (HWS)			HOSE BIBB		
	HOT WATER RETURN (HWR)		V.T.R.	VENT THRU ROOF		
	ICE WATER RETURN (IWR)		AFF	ABOVE FINISHED FLOOR		
	FIRE LINE		P.I.V.	POST INDICATOR VALVE		
	GAS LINE		UH	UNIT HEATER		
	GAS COOK			THERMOMETER		
	GATE VALVE			THERMOMETER WELL		
	UNION			PLUMBING WASTE STACK		
	CHECK VALVE			STORM WATER DOWNSPOUT		
	STRAINER			FIRE STANDPIPE		
	GLOBE VALVE		SP	SPRINKLER PIPE		
	PLUG VALVE		FDC	FIRE DEPT. CONNECTION		
	BALANCING VALVE		FPCT	FIRE PUMP TEST CONNECTION		
	CONTROL VALVE		W.H.	WALL HYDRANT		



LIGHTING FIXTURE SCHEDULE						
MARK	MANUFACTURER AND CATALOG NUMBER	MOUNTING	LAMPS		VOLTS	REMARKS
			WATTS	TYPE		
OA 	STERNBERG LIGHTING #1A-1910LEDRLM24-5P- 3ARC30T4-MDL03-A-EZ/R2/ 8712T4-125/BKT	POLE	52W MAX.	LED	120	
	STERNBERG LIGHTING #8712T4-125/BKT	POLE				12'-0" TALL 4'-3" TAPERED SMOOTH ALUMINUM POLE (ONE FOR EACH TYPE "OA" SITELIGHT) WITH 3" O.D. TENON.
A1	ARCHITECTURAL AREA LIGHTING #UMC-FLR-T5-32LED-3K-700-BL-120-277	PENDANT	1/71	LED	120	REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
A2	LUMIERE #904-50MR16-12V-WT-DIFFNV	SURFACE	1/50	MR16	120	UP/DOWN SINGLE HEAD HALOGEN WALL SCONCE.

- LIGHTING FIXTURE SCHEDULE NOTES:
- THIS LIGHTING FIXTURE SCHEDULE SHALL APPLY TO LIGHT FIXTURES USED ON THIS PROJECT IN THE ABSENCE OF AN ARCHITECTURAL LIGHT FIXTURE SCHEDULE. DIFFERENCES BETWEEN VOLTAGE AND/OR WATTAGE OF LIGHT FIXTURES SCHEDULED ON THE ELECTRICAL DRAWINGS AND THOSE SHOWN ON THE ARCHITECTURAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING BY THE CONTRACTOR. IF EXISTING LIGHTING FIXTURES ARE REUSED, REPAIR AS REQUIRED. RE-LAMP ALL NON-FUNCTIONING LAMPS AND PROVIDE THERMAL OVERLOAD PROTECTION AS REQUIRED. **REFER TO DRAWINGS L-6.1 AND A-511.0 FOR ADDITIONAL LIGHTING FIXTURE INFORMATION AND DETAILS.**
 - ALL COMPACT FLUORESCENT LIGHTING FIXTURES SHALL BE PROVIDED WITH LAMPS AND BALLASTS HAVING AN "END OF LIFE" PROTECTION FEATURE.
 - ALL FLUORESCENT LIGHTING FIXTURES SHOWN TO BE DIMMED SHALL BE PROVIDED WITH DIMMING TYPE LAMPS AND BALLASTS.
 - ALL RECESSED LIGHTING FIXTURES NOT INSTALLED WITHIN A RETURN AIR PLENUM SHALL BE TYPE IC RATED, MANUFACTURED WITH NO PENETRATIONS BETWEEN THE INSIDE OF THE RECESSED LIGHTING FIXTURE AND THE CEILING CAVITY AND SEALED TO PREVENT AIR LEAKAGE, OR SHALL BE INSTALLED IN A SEALED BOX MAINTAINING THE REQUIRED CLEARANCES OF NOT LESS THAN 1" FROM COMBUSTIBLE MATERIAL AND NOT LESS THAN 3" FROM INSULATION MATERIAL.
 - ALL FLUORESCENT LIGHTING FIXTURES SHOWN TO BE CONTROLLED BY OCCUPANCY SENSORS SHALL BE PROVIDED WITH PROGRAM START TYPE BALLASTS.

- ELECTRICAL LIGHTING PLAN NOTES:
- BASE BUILDING STANDARDS AND SPECIFICATIONS SHALL APPLY TO ALL WORK SHOWN ON THESE TENANT IMPROVEMENT CONTRACT DOCUMENTS.
 - REFER TO DRAWING EP.1 ELECTRICAL/PLUMBING GENERAL NOTES AND LEGENDS.
 - REFER TO DRAWING EP1.1 FOR ELECTRICAL PANEL AND EQUIPMENT LOCATIONS.

ISSUE LOG		
NO.	DATE	DESCRIPTION
	04.03.2015	100% DD
	09.04.2015	50% CD
	10.31.2016	75% CD
	03.15.2017	95% CD
	11.03.2017	100% CD
	12.18.2017	ISSUED FOR PERMIT
	09.28.2018	BID & CONSTRUCTION
	01.14.2019	ADDENDUM 1

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SEAL:

EVERY SHEET MUST BE SEALED AND SIGNED BY AN ARCHITECT OR ENGINEER LICENSED IN TEXAS PRIOR TO PERMITTING AND CONSTRUCTION

Parks Capital Improvement Program
for City of Houston
General Services Department and Parks & Recreation Department

PARK NAME :
DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13

CITY OF HOUSTON
GENERAL SERVICES
DEPARTMENT

REVIEWED :
N/A
PARKS PROGRAM MANAGER : HERMANN PARK CONSERVANCY
PROJECT MANAGER :

01-14-19

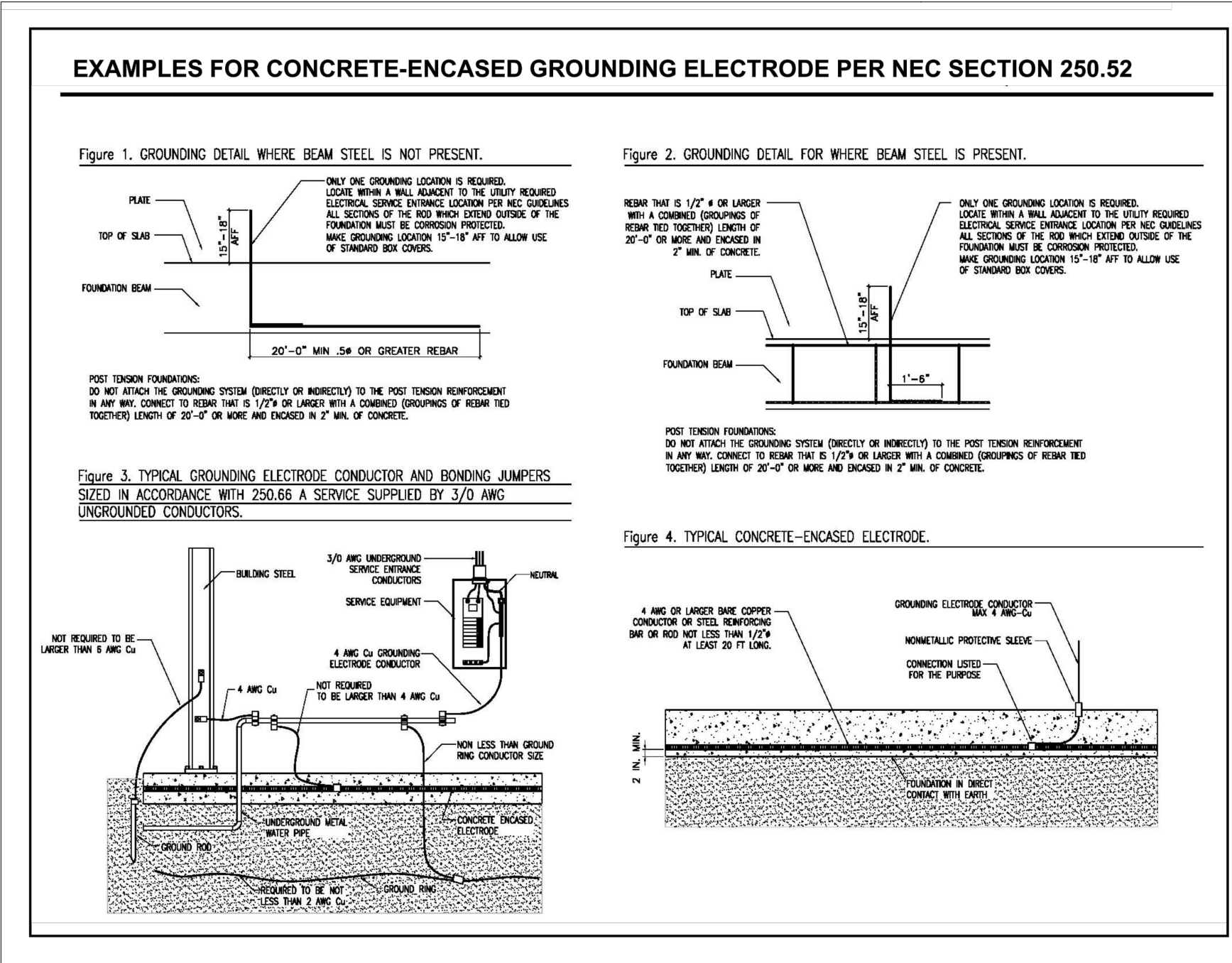
DATE : 01-14-19
DII No : 14010-842-01
SCALE : AS NOTED
DRAWN BY : DII
CHECKED BY : DII

SHEET TITLE :
**ELECTRICAL
LIGHTING PLAN**

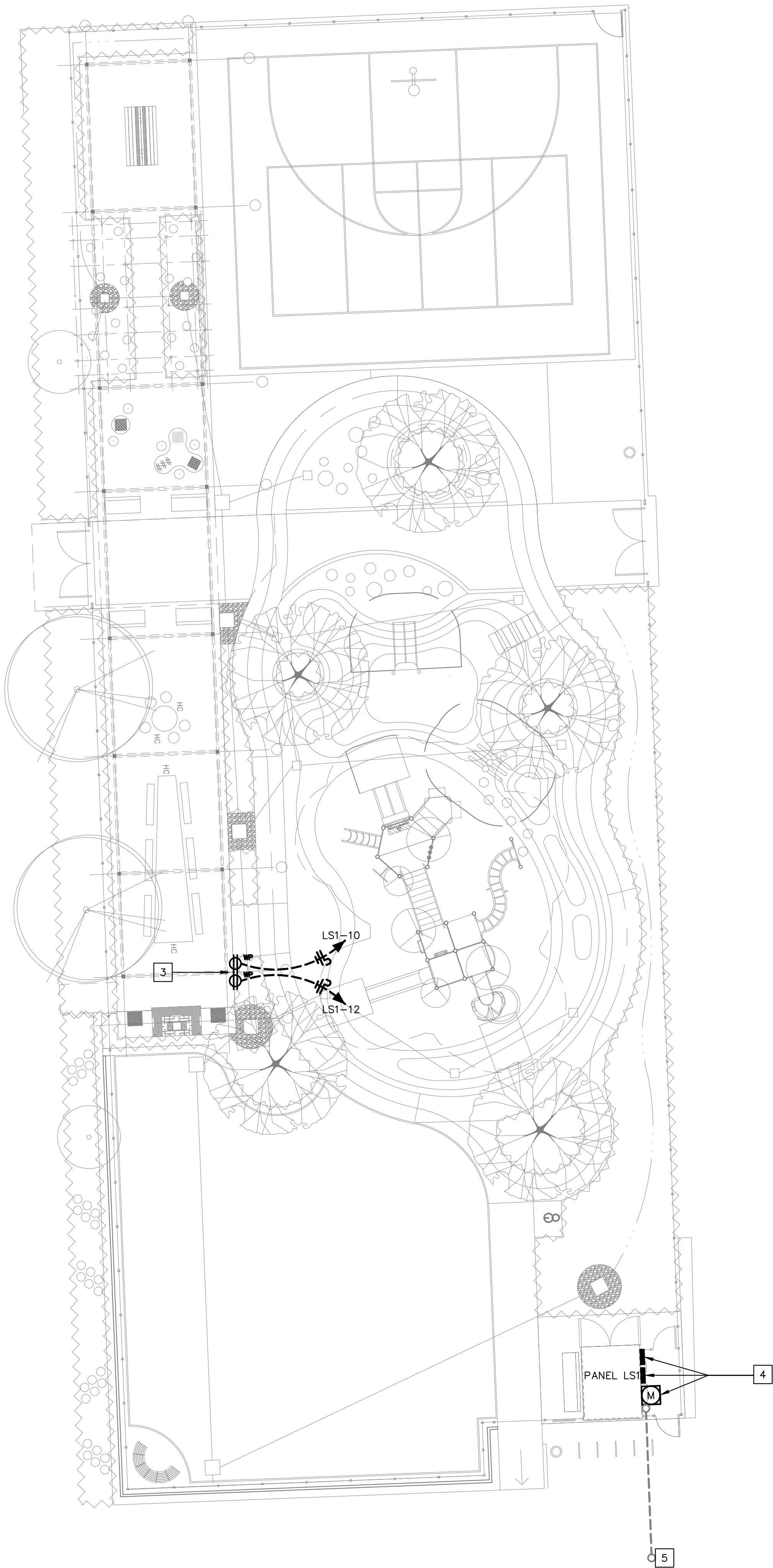
SHEET NO. :
EL1.1

CITY DWG. NO. :

1



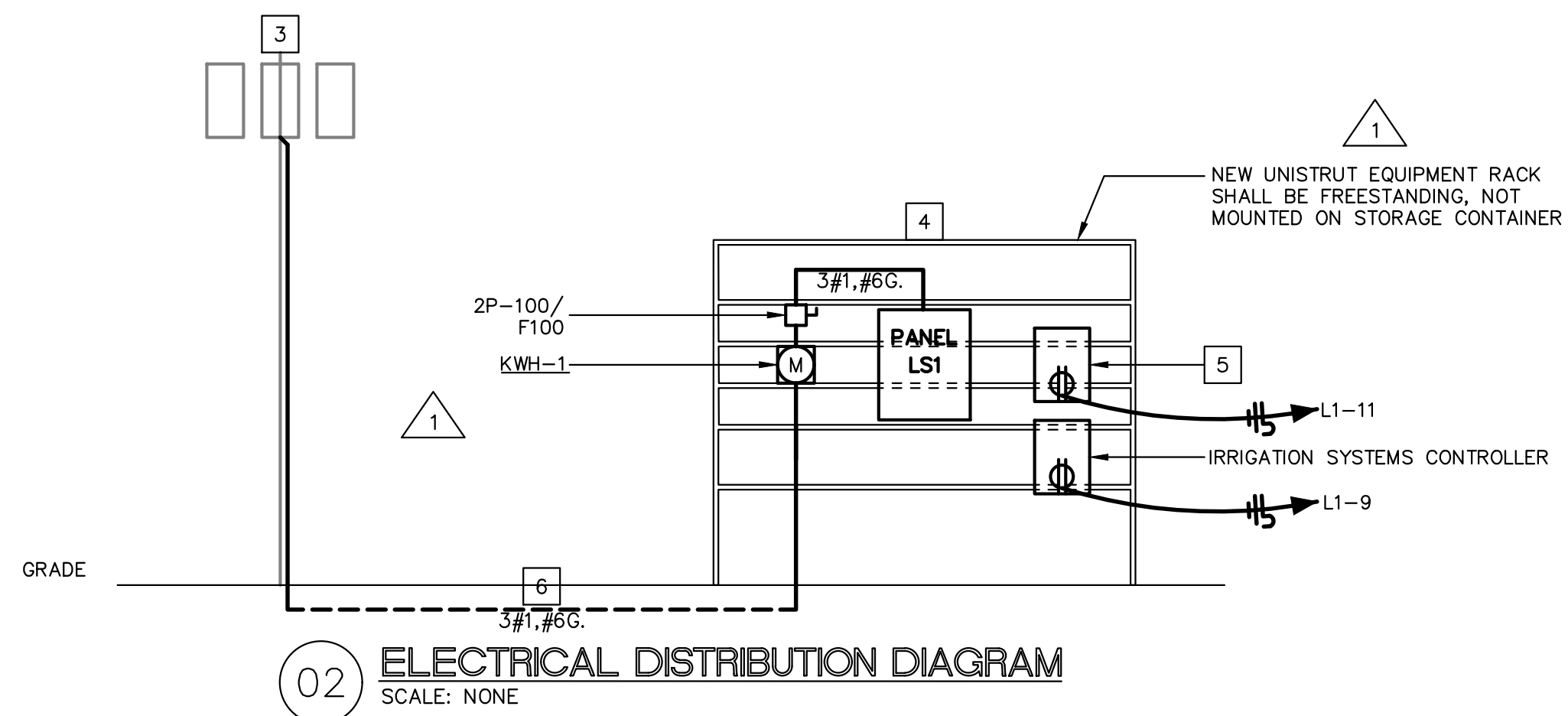
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ELECTRICAL POWER PLAN
SCALE: 1" = 10'-0"

- ELECTRICAL POWER PLAN NOTES:**
- BASE BUILDING STANDARDS AND SPECIFICATIONS SHALL APPLY TO ALL WORK SHOWN ON THESE TENANT IMPROVEMENT CONTRACT DOCUMENTS.
 - REFER TO DRAWING EP.1 FOR ELECTRICAL/PLUMBING GENERAL NOTES, DETAILS, AND LEGENDS.
 - APPROXIMATE LOCATION OF TWO (2) NEW WEATHERPROOF NEMA 5-20GRC RECEPTACLES WITH LOCKING COVERS (BOTH INSTALLED 4'-0" ABOVE GRADE). CONTRACTOR SHALL FIELD COORDINATE EXACT REQUIREMENTS, DIMENSIONED LOCATION, INSTALLATION DETAILS, ETC. WITH PROJECT ARCHITECT PRIOR TO STARTING ANY WORK.
 - APPROXIMATE LOCATION OF NEW 120/240 VOLT, SINGLE PHASE, 3 WIRE, 100 AMP ELECTRICAL SERVICE. REFER TO DRAWING EP.1.02 FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL FIELD COORDINATE EXACT REQUIREMENTS, DIMENSIONED LOCATION, INSTALLATION DETAILS, ETC. WITH CITY OF HOUSTON, PROJECT ARCHITECT, AND CENTERPOINT ENERGY PRIOR FINALIZING ANY PRICING OR STARTING ANY WORK.
 - APPROXIMATE LOCATION OF EXISTING ELECTRICAL UTILITY POLE. CONTRACTOR SHALL FIELD COORDINATE EXACT REQUIREMENTS, DIMENSIONED LOCATION, INSTALLATION DETAILS, ETC. WITH CENTERPOINT ENERGY PRIOR TO STARTING ANY WORK.

DOMINION INTERESTS, INC.
CONSULTING ENGINEERS
2402 COMMONWEALTH STREET, SUITE 200
HOUSTON, TEXAS 77006
713.628.7155 / FAX: 832-699-2497
TEXAS REGISTRATION NO. P-6881



- ELECTRICAL DISTRIBUTION DIAGRAM NOTES:**
- REFER TO DRAWING EP.1 FOR ELECTRICAL/PLUMBING GENERAL NOTES, DETAILS, AND LEGENDS.
 - CONTRACTOR SHALL PROVIDE AND INSTALL CITY OF HOUSTON (COH) STANDARD RMC, INC. OR PLASTERBOND FOR ALL ABOVE GRADE CONDUIT. ALL GROUND BOXES SHALL BE COH STANDARD "QUAZITE TYPE" (NO CONCRETE, NO METAL COVERS). CONTRACTOR SHALL PROVIDE AND INSTALL COH STANDARD ELECTRICAL SERVICE CONCRETE PAD AND BLACK WROUGHT IRON FENCE WITH TWO (2) GATES (ONE FOR PARKS AND ONE FOR CENTERPOINT ENERGY). CONTRACTOR SHALL ENSURE THAT ALL CITY OF HOUSTON AND CODE REQUIRED ELECTRICAL SERVICE CLEARANCES ARE PROVIDED. CONTRACTOR SHALL FIELD COORDINATE ALL CITY OF HOUSTON STANDARD REQUIREMENTS WITH OWNER AND PROJECT ARCHITECT PRIOR TO FINALIZING ANY PRICING OR STARTING ANY WORK.
 - APPROXIMATE LOCATION OF EXISTING ELECTRICAL UTILITY POLE. CONTRACTOR SHALL FIELD COORDINATE EXACT REQUIREMENTS, DIMENSIONED LOCATION, INSTALLATION DETAILS, ETC. WITH CENTERPOINT ENERGY PRIOR TO STARTING ANY WORK.
 - APPROXIMATE LOCATION OF NEW 120/240 VOLT, SINGLE PHASE, 3 WIRE, 100 AMP ELECTRICAL SERVICE. CONTRACTOR SHALL FIELD COORDINATE EXACT REQUIREMENTS, DIMENSIONED LOCATION, INSTALLATION DETAILS, ETC. WITH PROJECT ARCHITECT AND CENTERPOINT ENERGY PRIOR TO STARTING ANY WORK.
 - APPROXIMATE LOCATION OF NEW LC&D "BLUE BOX" MODEL NUMBER GR1416L7/B-- DTCOMDEM-HL-SM LIGHTING CONTROL RELAY PANEL WITH NEMA 4 ENCLOSURE AND PHOTOCELL. NEW ECCC COMPLIANT LIGHTING CONTROL SYSTEM SHALL AUTOMATICALLY SHUT OFF LIGHTING FIXTURES ON A SCHEDULED BASIS, USING TIME OF DAY, WITH AN INDEPENDENT PROGRAM SCHEDULE. CONTRACTOR SHALL PROVIDE FACTORY REPRESENTATIVE (LESCO, INC. - MR. TREVOR CONE 713-924-1104) LIGHTING CONTROL SYSTEM PROGRAMMING, START-UP, AND OWNER TRAINING.
 - IN ACCORDANCE WITH CITY OF HOUSTON REQUIREMENTS, CONTRACTOR SHALL PROVIDE AND INSTALL BELOW GRADE SCHEDULE 80 PVC CONDUIT BEFORE AND AFTER THE FIRST 90 DEGREE ELBOW. CONTRACTOR SHALL ENSURE THAT ALL CITY OF HOUSTON AND CODE REQUIRED ELECTRICAL SERVICE CLEARANCES ARE PROVIDED. CONTRACTOR SHALL FIELD COORDINATE ALL CITY OF HOUSTON STANDARD REQUIREMENTS WITH OWNER AND PROJECT ARCHITECT PRIOR TO FINALIZING ANY PRICING OR STARTING ANY WORK.

PANEL LS1 (EXISTING)										1 PHASE, 3W, 120/240V, 225 AMP BUS		
VOLT AMPS	WIRE/ CONDUIT	SERVING	BKR	SP-250A	MCB	BKR	SERVING	WIRE/ CONDUIT	VOLT AMPS			
		SPARE	1P-20	1	A	2	1P-20	A1 & A2 LIGHTS	#8	270		
			1P-20	3	C	4	1P-20	ON POLE LIGHTS	#1	660		
			1P-20	5	A	6	1P-20	LOAD BLUE BOX	#1	360		
			1P-20	7	C	8	1P-20	BREAKER SYSTEM	#1	360		
			1P-20	9	A	10	1P-20	RECEP	#10	360		
			1P-20	11	C	12	1P-20	SPACE	#1	360		
			1P-20	13	A	14	1P-20					
			1P-20	15	C	16	1P-20					
			1P-20	17	A	18	1P-20					
			1P-20	19	C	20	1P-20					
			1P-20	21	A	22	1P-20					
			1P-20	23	C	24	1P-20					
			1P-20	25	A	26		SPACE				
			1P-20	27	C	28						
			1P-20	29	A	30						
			1P-20	31	C	32						
			1P-20	33	A	34						
			1P-20	35	C	36						
			1P-20	37	A	38						
			1P-20	39	C	40						
			1P-20	41	A	42						
			A				C	TOT CONN LOAD: 2.27 KVA				
			1.0				1.3	@ LARGEST PHASE: 8.3 AMPS				

LOAD ANALYSIS FOR PANEL LS1				REMARKS	
LOAD TYPE	CONNECTED (VA)	DIVERSITY (VA)	DESIGN (VA)		
KITCHEN EQUIP	0	65 %	0		
RECEPTACLES	720	100 %	720	* FIRST 10,000 VA - 100%, REMAINDER - 50%	
LIGHTING	830	125 %	1038		
MISC EQUIP	720	100 %	720		
MECH EQUIP	0	100 %	0		
TOTAL	1270		2478	DESIGN AMPS: 10.3	

ALL 20 AMP BRANCH CIRCUITS SHALL BE #12 AWG MINIMUM.
L- NEW CIRCUIT AND CIRCUIT BREAKER WIRING THROUGH AND CONTROLLED BY NEW LOAD BLUE BOX/PHOTOCELL.

ELECTRICAL SERVICE NOTES:
1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING FUSES AT MAIN SERVICE DISCONNECTS WITH INTERRUPTING CAPACITIES EQUAL TO OR GREATER THAN THE ELECTRICAL UTILITY SERVICE AVAILABLE.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING PANEL BOARD MAIN CIRCUIT BREAKERS WITH INTERRUPTING CAPACITIES EQUAL TO OR GREATER THAN THE AVAILABLE SHORT CIRCUIT CURRENT OF THE MAIN SERVICE DISCONNECT FUSES.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL DOWNSTREAM PANEL BOARD CIRCUIT BREAKERS WITH INTERRUPTING CAPACITIES EQUAL TO OR GREATER THAN THE AVAILABLE SHORT CIRCUIT CURRENT OF THEIR PANEL'S MAIN CIRCUIT BREAKER OR BE SERIES RATED FOR USE WITH THEIR PANEL'S MAIN CIRCUIT BREAKER.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING ARC FAULT CURRENTS AND PROVIDING AND INSTALLING ARC FAULT CURRENT LABELS ON ALL REQUIRED ELECTRICAL EQUIPMENT.

ISSUE LOG		
NO.	DATE	DESCRIPTION
	04.03.2015	100% DD
	09.04.2015	50% CD
	10.31.2016	75% CD
	03.15.2017	95% CD
	11.03.2017	100% CD
	12.18.2017	ISSUED FOR PERMIT
	01.29.2018	PERMIT COMMENT
		RESPONSE
	09.28.2018	BID & CONSTRUCTION

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SEAL:

EVERY SHEET MUST BE SEALED AND SIGNED BY AN ARCHITECT OR ENGINEER LICENSED IN TEXAS PRIOR TO PERMITTING AND CONSTRUCTION

Parks Capital Improvement Program
for City of Houston
General Services Department and Parks & Recreation Department

PARK NAME:
DOW ELEMENTARY PARK
1900 Kane Street Houston TX 77007
TIRZ #13

CITY OF HOUSTON
GENERAL SERVICES DEPARTMENT

REVIEWED:

PARKS PROGRAM MANAGER: HERMAN PARK CONCERNANCY

PROJECT MANAGER:

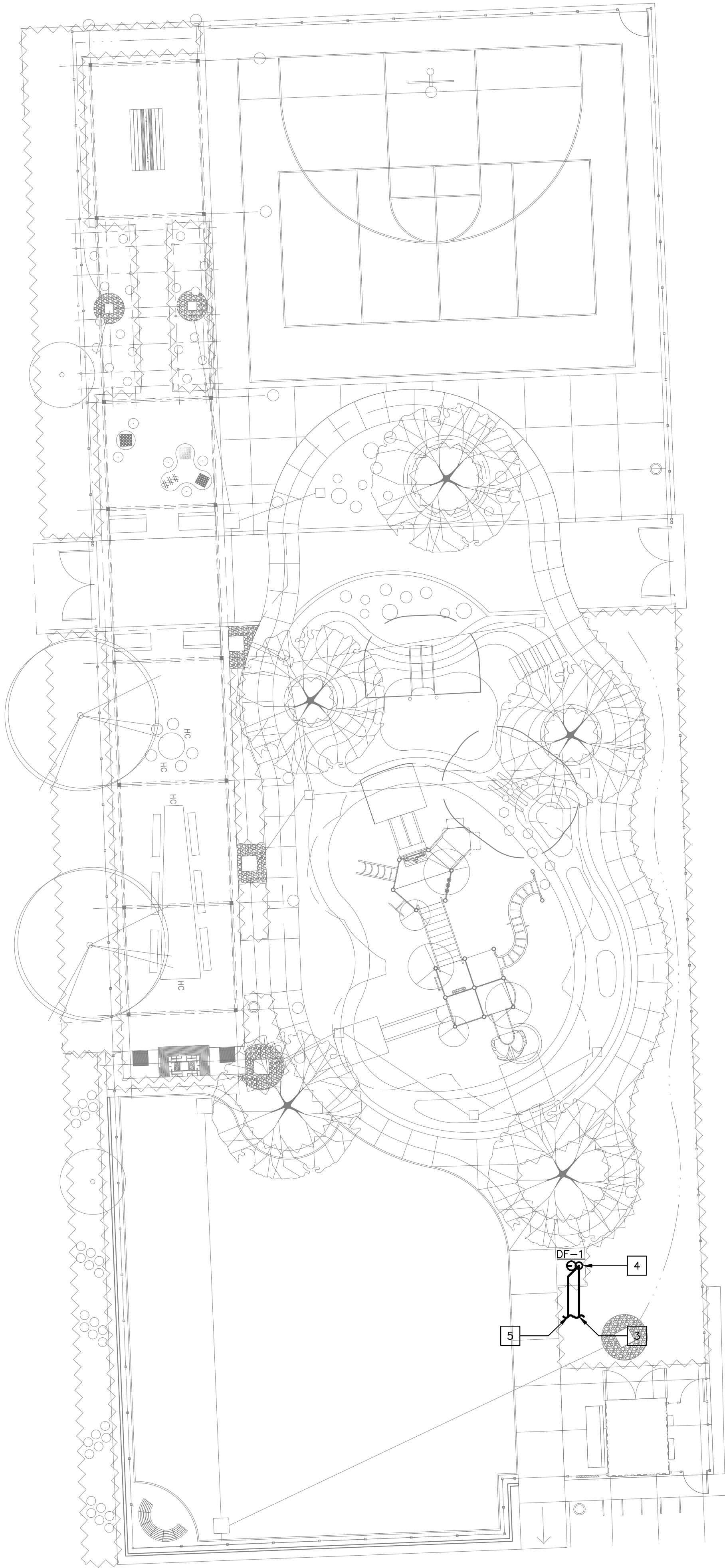
STATE OF TEXAS
REGISTERED PROFESSIONAL ENGINEER
1865
09-28-18

DATE: 09-28-18
DII No: 14010-842-01
SCALE: AS NOTED
DRAWN BY: DII
CHECKED BY: DII

SHEET TITLE:
ELECTRICAL POWER PLAN

SHEET NO.:
EP1.1

CITY DWG. NO.:



PLUMBING PIPING MATERIALS		
SYSTEM	PIPE MATERIAL	STANDARD
WATER PIPE, OUTSIDE	SCHEDULE 80 PVC	ASTM D-1785-88
WATER PIPE, INSIDE	TYPE L COPPER (NOTE 1)	ASTM B-88
SANITARY SEWER, OUTSIDE	SCHEDULE 40 PVC	ASTM D-2665-88
SANITARY SEWER, INSIDE	SCHEDULE 40 PVC (NOTE 2)	1APMO-15 9-80
STORM SEWER, OUTSIDE	SDR 35 PLASTIC PIPE	ASTM D-2665-88
STORM SEWER, INSIDE	SCHEDULE 40 PVC (NOTE 2)	1APMO-15 9-80
NATURAL GAS, OUTSIDE	SCHEDULE 40 BLACK STEEL	ASTM A-53 (NOTE 3)
NATURAL GAS, INSIDE	SCHEDULE 40 BLACK STEEL	ASTM A-53 (NOTE 3)

PLUMBING PIPING MATERIALS NOTES:

- UNDERFLOOR WATER PIPING SHALL BE TYPE "K" COPPER WITHOUT JOINTS.
- SANITARY AND STORM SEWER LINES ABOVE FLOOR AND WITHIN ENVIRONMENTAL RETURN AIR PLENUMS SHALL BE SERVICE WEIGHT CAST IRON (ANSI A.112.2.5.1).
- NATURAL GAS PIPING 2" DIAMETER AND SMALLER MAY BE SCHEDULE 40 GALVANIZED STEEL.

PLUMBING PLAN NOTES:

- BASE BUILDING STANDARDS AND SPECIFICATIONS SHALL APPLY TO ALL WORK SHOWN ON THESE TENANT IMPROVEMENT CONTRACT DOCUMENTS.
- REFER TO DRAWING EP.1 FOR ELECTRICAL/PLUMBING GENERAL NOTES, DETAILS, AND LEGENDS.
- APPROXIMATE LOCATION OF EXISTING DOMESTIC WATER METER, SHUT-OFF VALVE, CLEANOUT, DRYWELL, ETC. TO BE REUSED AND EXISTING DRINKING FOUNTAIN TO BE REMOVED. THE EXISTING COLD WATER AND WASTE LINE PIPING SERVING THE REMOVED DRINKING FOUNTAIN ARE INTENDED TO BE REUSED TO SERVE THE NEW DRINKING FOUNTAIN. CONTRACTOR SHALL INSTALL NEW BRICKS BELOW THE EXISTING DOMESTIC WATER METER BOX TO PREVENT IT FROM BEING "PUSHED" BELOW GRADE. CONTRACTOR SHALL FIELD COORDINATE EXACT REQUIREMENTS, DIMENSIONED LOCATIONS, INSTALLATION DETAILS, ETC. WITH CITY OF HOUSTON, LANDSCAPE ARCHITECT, AND PROJECT ARCHITECT PRIOR TO STARTING ANY WORK.
- APPROXIMATE LOCATION OF NEW DRINKING FOUNTAIN DE=1' TIE NEW BELOW GRADE 1/2" DOMESTIC COLD WATER PIPING TO NEAREST EXISTING BASE BUILDING DOMESTIC COLD WATER PIPING WITH SUFFICIENT SPARE CAPACITY. PROVIDE AND INSTALL NEW 1/2" SHUT-OFF VALVE TO PROVIDE ISOLATION FOR FUTURE MAINTENANCE. CONTRACTOR SHALL FIELD COORDINATE EXACT REQUIREMENTS, DIMENSIONED LOCATION, INSTALLATION DETAILS, LOCATION OF EXISTING BASE BUILDING DOMESTIC COLD WATER PIPING, ETC. WITH PROJECT ARCHITECT AND BASE BUILDING ENGINEER PRIOR TO STARTING ANY WORK.
- TIE NEW BELOW GRADE 2" SANITARY SEWER PIPING TO NEAREST EXISTING BASE BUILDING SANITARY SEWER PIPING WITH SUFFICIENT SPARE CAPACITY. CONTRACTOR SHALL FIELD COORDINATE EXACT REQUIREMENTS, DIMENSIONED LOCATION, INSTALLATION DETAILS, LOCATION OF EXISTING BASE BUILDING SANITARY SEWER PIPING, ETC. WITH PROJECT ARCHITECT AND BASE BUILDING ENGINEER PRIOR TO STARTING ANY WORK.

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REVIEWED :
N/A
PARKS PROGRAM MANAGER: HERMANN PARK CONSERVANCY
PROJECT MANAGER:



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