

### **MEMORANDUM**

**TO:** Mayor Miller, City Council Members

**FROM:** Tony Ekins, City Planner

**SUBJECT:** Cory Waddoups, Unreasonable Capital Hyrum LLC - To request approval to an

amendment of the Final Plat for Harvest Valley Court P.U.D. consisting of 28 townhouses located at approximately 43 North 300 East to align its east

boundary with Hyrum City's right-of-way.

**DATE:** June 13, 2025

CITY COUNCIL MEETING: June 19, 2025

#### **OVERVIEW:**

The applicant is proposing to amend the Final Plat to correct lot line issues that were discovered in the Original Plat. In addition to the Fial Plat corrections, the applicant has submitted updated civil site plans and landscape plans. On May 1, 2025, The City Council reviewed the application and made a motion (5-0 Vote) to continue the discussion with the following conditions:

- 1. Resolution of City Staff comments; and
- 2. Applicants Landscape Development Committee review and include the placement of the pickleball court in the landscaping plan; and
- 3. Landscaping Plan also include the irrigation lines; and
- 4. Landscaping Plan show the screen walls between units.

Upon receiving the submittals, staff prepared the following responses to advise the City Council of current status of the project pertaining to City inspections. Staff requests that responses to comments are provided by the developer prior to staff concluding a comprehensive review for attached Civil Plans and Landscape Plans.

#### **STAFF COMMENTS:**

#### Planning and Zoning:

- 1. The updated landscaping plan does not include placement of a pickleball court.
- 2. Landscaping plan includes an irrigation plan and irrigation lines.
- 3. Staff cannot identify screen walls between units on the landscape plans.
- 4. The planting schedule on sheet LP100 does not provide an eligible text height to review proposed planting types.
- 5. Why is there turf grass behind all units except units 19-28? Recommend turf grass on top and bottom shelf of the middle rockery (see detail 5 on sheet C2.3).

#### **Engineering:**

- 1. See attached Memorandum to City Council prepared by City Engineer.
- 2. Plat Comments:
  - a. The adjacent owners' information needs to be updated. The property to the west is no longer owned by the Topels.
  - b. It is recommended that all of "Open Space A" not be dedicated as a public utility easement.
  - c. In the corporate acknowledgement, two corporations are listed. Please make sure the word corporations is changed to plural to be consistent.

- 3. Construction Comments: A full review of the construction drawings has not been performed at this time. The original direction previously discussed was to:
  - a. Have the plat corrected.
  - b. Survey/evaluate the locations and elevations of the previous installation.
  - c. Finalize the plans with an understanding of what is acceptable and what is not, and what must be removed and replaced.
- 4. Landscape Drawings:
  - Street tree spacing will need to meet HCC 12.22. Crimson Sunset Maple is a medium-sized tree.
  - b. Trees at the intersections will need to be arranged to keep a clear view of approaching vehicle and pedestrian traffic. Please review spacing and tree selections. Elevation differences between roads and plantings will be a factor. Evergreens in this area may need to be thinned/laced to allow visibility or relocated. See HCC 17.28.170
  - c. Underground systems such as the irrigation canal and stormdrain should be considered when placing large trees with extensive root systems.
  - d. A separate water connection/meter should be considered for the pavilion and the planter boxes.
  - e. A separate power connection/meter will be needed for the irrigation controllers.

#### **Power Department:**

- 1. The conduit for power was installed and backfilled without required trench inspections. Require all conduit to be exposed for inspection to verify trench depths, locations, alignments, and conduit joints are appropriately glued.
- 2. The electrical boxes (transformers and secondary boxes) locations will need to be verified so that they will be located as approved by the site plan.

#### Water & Roads:

- 1. The City contracted Legrand Johnsons to remove gutter, patch and shoulder roads in the public right of way affected by the development to be prepared for the 2024-2025 winter and snowplow removal. The City paid Legrand Johnsons \$11,861.70 for the services which Unreasonable Capital Hyrum LLC is required to reimburse back to the City.
- 2. All water lines have been inspected for proper installation. However, the survey was never complete and positioning of service lines, fire hydrants, and offsets from the sewer was never verified.
- 3. Pressure tests and bacteria samples were never done.
- 4. No inspection of tie in for secondary water to existing services has been addressed.
- 5. No storm drain boxes or pipes have been inspected for proper install or positioning.
- 6. Curb and gutter that have been dug underneath for new water services all need to be replaced due to compaction problems.
- 7. Staff also never saw survey markers for curb offsets on any curb and gutter.

#### **Water Reclamation:**

1. My department did not do any of the lateral inspections. Matt Holmes was involved in doing those. I have not seen any pressure tests of the sewer mains nor any video.

#### **ATTACHMENTS:**

- 1. City Engineer Memorandum
- 2. Legrand Johnson Abatement Invoice
- 3. May 1, 2025 City Council Meeting Minutes
- 4. Harvest Valley Court Final Plat First Amendment
- 5. Harvest Valley Court Civil Plans
- 6. Harvest Valley Court Landscape Plans



60 West Main Street, Hyrum, Utah 84319 • 435-245-6033

Stephanie Miller, Mayor Council Members -Stephen G. Adams Jared L. Clawson Paul C. James Craig L. Rasmussen Michael Nelson Ron W. Salvesen, City Administrator Stephanie B. Fricke, Recorder Todd Perkins, Treasurer

June 13, 2025 Memorandum to City Council Re: Harvest Valley Court P.U.D.

Dear Hyrum City Council,

Below is a summary of the Harvest Valley Court project and the challenges it has faced. Timeline:

Application for Harvest Valley Court PUD by David Madsen Review by Planning Commission Review by City Council

There were originally concerns over boundary and survey. A meeting between Gardner and Foresight (surveyors) was arranged to work out boundary issues, Madsen stated that this was worked out and would accept the boundary as seen by local surveyors. Approval by City Council

David Madsen released development rights back to Michael Nielsen (landowner) as they did not feel that the development would give them the expected return on investment. Construction drawings not completed.

The development was purchased by Unreasonable Capital and Construction drawings finished. Construction was started under Affinity as contractor with Impact as sub-contractor for site work.

During the construction the location of items were questioned multiple times. The overflow structure box was questioned at staking, and then after installation. When the new curbing was built, the contractor had to cut into the newly paved asphalt to pour the concrete. At this point we stopped work to review the survey.

The surveyor for the construction staking was different than the layout/design surveyor. When questioned the construction surveyor only checked the construction staking file for accuracy, it was never checked against the agreed upon boundaries. Staked locations did not match the ground landmarks as shown on the construction documents. The locations for the construction drawings matched the existing ground location well. During the investigation of the survey, it was determined that the original boundary survey used old monuments that had no documentation of how and why they were set. They were set by a civil engineer that was legally allowed to practice survey work but was known to local surveyors as not having strong skills in the practice of boundary work. This was discussed between Gardner and Foresight early on. Other monuments and evidence from deeds were seemingly ignored to make the engineer's monuments work.

The irrigation canal pipe was removed and rebuilt 3 times. The first time it was built it was run uphill to a height of about 4.5 feet. This water leaked out of the unfinished diversion structure all winter long. This led to flooding of neighbors' properties. Rather than fix the issue, the contractor pumped water for weeks. The pumping, while a good short-term remedy, was continued far too long. The second time damaged pipe was used to rebuild the canal. Gaskets were not installed and many holes were observed in the pipe. The alignment of the pipe was not acceptable as it curved and has abrupt changes in direction.

The water line was not installed to the correct depth in several areas, and when it was exposed for correction, it was determined that the pipe was not installed to manufacturer's specifications. Spigots were installed deeper into the bells than permitted, deflection angles exceeded 1 degree, fire hydrants were not installed in the correct locations and were not installed with ductile iron laterals. Pressure test and bacteria tests were not performed. Service laterals did not have tracer wire, and were not buried to depth and the barrels were not at grade. The water main and services were buried without proper inspection. An early attempt at laying the line in 30 North failed to install an angle fitting that prevented the pipe from reaching minimum depth.

During the excavation of the water line, many sewer laterals were cut. Curb and gutter was undermined in many locations to expose the main and laterals. Water main has been replaced and laid straight, but was done without the benefit of construction staking. Ductile laterals for the fire hydrants have been installed and the looped connection to main street has been made. These mains are still waiting for final inspection including bac-T testing and have not been charged for use. The reinstallation of the water main was built based on the existing curb location. This concern was discussed with Affinity. This will need to be re-evaluated to verify location. Curb will need to be removed and rebuilt after the ground is recompacted and new base material is laid.

Electrical conduit was installed by Impact but the location was based on the original survey and was not removed. This needs to be removed and replaced. Many of the joints came apart as they were not glued and joined properly. Several locations were not buried to the correct depth. Trenches were left open and spoils were left in the right of way obstructing mail service.

Work was frequently done on weekends when there was no inspector to verify the work.

It was discussed in City Council that the approval of the project was based on information as presented. The presented plat and plans were approved upon the understanding that the surveyor had accepted the local survey boundaries. David Madsen's team told us and we believe that he was forthright in his statement. We do not know that the Gardner surveyor intentionally falsified the survey, but it became apparent that this was not correctly portrayed on the final documents. Approval can be revoked due to misrepresentation of the survey work that the project is dependent on the information included, such as open and landscaped area, amenities, street improvements, locations of facilities. I believe that this project is still worthwhile to Hyrum and can be a benefit to the community, but it will take work and effort to do so.

Sincerely.

Matthew S. Holmes. Matthew Holmes - City Engineer













# **Invoice**

Bill to:

**Hyrum City** 60 West Main Street Hyrum, UT 84319

Ship to:

60 West Main Street Hyrum, UT 84319 US

Cust#	Customer Ref	Invoice #	Invoice Date	Due Date	Terms
21105	(67325) Harvest Cove Sub	178-6462	12/20/24	1/19/2025	Net 30 Days

Mth	Description	Contract	Contract Item	Unit Price	Quantity	Total
12/24	Grand for T Patch	1780335-	20		2,500.00	2,500.00
12/24	Saw Cutting	1780335-	21		550.00	550.00
12/24	Remove Curb & Haul Away	1780335-	30		2.62	890.00
12/24	Shoulder Road	1780335-	31		6.23	2,118.20
12/24	Scratch & Patch Asphalt	1780335-	32		3.18	5,803.50

Total To Date Plus Sales Tax	11,861.70 0.00
Less Retainage	0.00
Total Due This Invoice	11,861.70

COREY WADDOUPS, UNREASONABLE CAPITAL HYRUM - TO REQUEST APPROVAL FOR THE AMENDMENT TO THE FINAL PLAT OF HARVEST VALLEY COURT P.U.D. LOCATED AT APPROXIMATELY 43 NORTH 300 EAST TO ADJUST THE EAST BOUNDARY OF THE PLAT TO REFLECT THE CITY RIGHT-OF-WAY.

Elliot Able said Corey Waddoups with Unreasonable Capital Hyrum asked him to represent his request at tonight's City Council Meeting. Unreasonable Capital Hyrum requested approval for the amendment to the Final Plat of Harvest Valley Court P.U.D. located at approximately 43 North 300 East to adjust the East Boundary of the Plat to reflect the City right-of-way. Since the last meeting the plat has been amended to include: 1. Lot lines and building envelops for lots 24-28 have been adjusted to make the lines and building areas consistent with each other; 2. Property boundaries for Lots 23 and 24 have been adjusted to exclude the sidewalk along 260 East; 3. Lot lines have been reduced to the building envelop to put more land in open area; and 4. A new landscape exhibit has been provided.

Ryan Smith said he has lived at 256 East 100 North for 18 years and never had a problem with flooding until construction of Harvest Valley Court started. He has dug trenches around his property to divert the drainage water coming from Harvest Valley Court but it's not enough, he is still getting water. He has tried to be a good neighbor, but he has had to get an attorney. He wants the City Council to address the drainage problem in the approval of the final plat. He feels like he is being pushed out of his home and every time it rains he worries that his house will flood and his sump pump won't be able to handle the water. The developers need to take responsibility and fix the problem.

Councilmember Adams said it is not fair for the residents bordering Harvest Valley Court to have flooding issues that are not being addressed by the developer.

A short discussion ensued to the various times that City Staff, and City Council has addressed water drainage from Harvest Valley that is causing flooding has been addressed with the developer of this property and instructed the developer to take care of the problem.

Councilmember Rasmussen asked about the dividers on the back of each unit so that each person could have a private space.

Elliot Able said that the back patio dividers will be shown on the civil and landscaping plan.

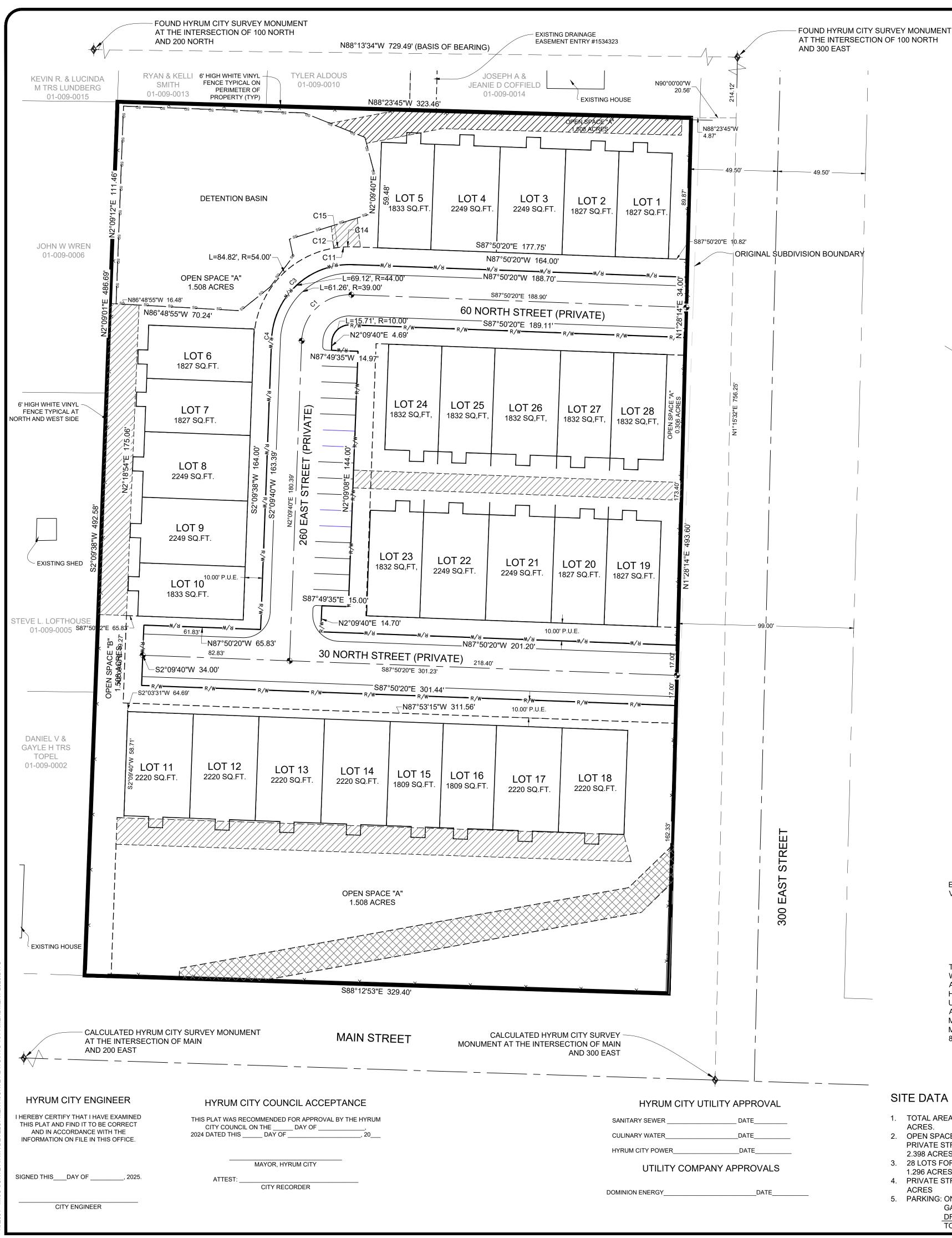
Councilmember Rasmussen said the easement for the water line on 30 North is no longer on the plat and it needs to be put back on. The landscaping plan has not been submitted. The City has discussed multiple times that there needs to be additional amenities including a pickleball court on the property. The code requires open space with amenities in exchange for higher density, however, there are no amenities other than a couple of benches and planter boxes. These are not amenities.

Elliot Able said the developers do not want to put in a pickleball court and do not thing the property would be suitable to build one on it.

Councilmember Rasmussen said he has looked at the property and the grades of the property and the developers can build a pickleball on the southwest side of the property. There is room and it wouldn't take a lot of work to level the ground.

**ACTION** 

Councilmember Rasmussen made a motion to continue the discussion on the final plat of Harvest Valley Court P.U.D. located at approximately 43 North 300 East to adjust the East boundary of the plat to reflect the City right-of-way with the following conditions: Resolution of City Staff Comments; 2. Applicants Landscape Development Committee review and include the placement of the pickleball court in the landscaping plan; 3. Landscaping Plan also include the irrigation lines; and 4. Landscaping Plan show the screen walls between units. Councilmember James seconded the motion. Councilmembers Adams, Clawson, James, Nelson, Rasmussen voted aye.



# HARVEST VALLEY COURT P.U.D. 1ST AMENDMENT

# A SENIOR LIVING COMMUNITY

# LOCATED IN THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 10 NORTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN, HYRUM CITY, CACHE COUNTY, UTAH

**VICINITY MAP** 

NOT TO SCALE

**CURVE TABLE** 

CURVE # LENGTH RADIUS DELTA CHORD BEARING CHORD LENGTH

42.41 | 27.00 | 90.00 | N47° 09' 40"E | 38.18

63.49 | 44.00 | 82.67 | N50° 49' 26"E | 58.12

5.63 | 44.00 | 7.33 | N5° 49' 26"E | 5.62

**LEGEND** 

\_\_\_\_ LOT LINE

\_\_ \_ STREET CENTERLINE

- - - PUBLIC UTILITY EASEMENT

NOTE:

EASEMENTS AND DEDICATIONS HAVE NOT CHANGED. USE THE ORIGINAL PLAT OF HARVEST

NARRATIVE

THE PURPOSE OF THIS SURVEY WAS TO AMEND A PLANNED UNIT DEVELOPMENT SUBDIVISION WITH 28 LOTS/UNITS FOR SENIOR LIVING. THE SURVEY WAS ORDERED BY DREW WHITEHEAD. THE AMENDMENT IS INTENDED TO CLARIFY DISCREPANCIES OF RIGHT-OF-WAY ALONG 300 EAST AND

HONOR THE RIGHT-OF-WAY AS DETERMINED BY FORESIGHT LAND SURVEYING. THE CONTROL

USED TO ESTABLISH THE BOUNDARY WAS THE EXISTING HYRUM CITY SURVEY MONUMENTATION AS SHOWN AND NOTED HEREON.THE BASIS OF BEARING IS THE LINE BETWEEN THE HYRUM CITY MONUMENT FOUND AT THE INTERSECTION OF 100 NORTH AND 200 NORTH AND THE HYRUM CITY

MONUMENT FOUND AT THE INTERSECTION OF 100 NORTH AND 300 EAST WHICH BEARS NORTH

88°13'34" WEST CACHE COUNTY, UTAH NORTH, NAD 83 STATE PLANE GRID BEARING.

VALLEY COURT P.U.D. FOR ADDITIONAL EASEMENT AND DEDICATION INFORMATION.

—— — — ADJACENT PARCEL

— — SURVEY TIE LINE

——as——as— DETENTION BASIN

Scale in Feet

1" = 30'

HYRUM CITY SURVEY MONUMENT AS

O SET 24" REBAR AND CAP MARKED GARDNER ENGINEERING

◆ STREET CENTERLINE MONUMENTS

SUBDIVISION BOUNDARY

PROPOSED FENCE LINE

IRRIGATION EASEMENT

PRIVATE RIGHT OF WAY

PRIVATE STORM DRAIN EASEMENT

## **BOUNDARY DESCRIPTION**

ALL OF LOTS 1, 7, 8 OF BLOCK 22 PLAT A HYRUM CITY SURVEY, ALSO BEING A PART OF THE NORTHWEST QUARTER OF SECTION 4 TOWNSHIP 10 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDIAN. CONTAINING 3.72 ACRES MORE OR LESS.

## SURVEYOR'S CERTIFICATE

I, KLINT H. WHITNEY, DO HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF UTAH AND THAT I HOLD CERTIFICATE NO. 8227228 IN ACCORDANCE WITH TITLE 58, CHAPTER 22, OF THE PROFESSIONAL ENGINEERS AND LAND SURVEYORS ACT; I FURTHER CERTIFY THAT BY AUTHORITY OF THE OWNERS I HAVE COMPLETED A SURVEY OF THE PROPERTY AS SHOWN AND DESCRIBED ON THIS PLAT, AND HAVE SUBDIVIDED SAID PROPERTY INTO LOTS AND STREETS, TOGETHER WITH EASEMENTS, HEREAFTER TO BE KNOWN AS HARVEST VALLEY COURT P.U.D. 1ST AMENDMENT A SENIOR LIVING COMMUNITY IN ACCORDANCE WITH SECTION 17-23-17 AND HAVE VERIFIED ALL MEASUREMENTS; THAT THE REFERENCE MONUMENTS SHOWN HEREON ARE LOCATED AS INDICATED AND ARE SUFFICIENT TO RETRACE OR REESTABLISH THIS SURVEY; THAT ALL LOTS MEET THE REQUIREMENTS OF THE LAND USE CODE; AND THAT THE INFORMATION SHOWN HEREIN IS SUFFICIENT TO ACCURATELY ESTABLISH THE LATERAL BOUNDARIES OF THE HEREIN DESCRIBED TRACT OF REAL PROPERTY.

SIGNED THIS \_\_\_\_\_ DAY OF \_\_



KLINT H. WHITNEY, PLS NO. 8227228

## OWNER'S DEDICATION

I THE UNDERSIGNED OWNER OF THE HEREON DESCRIBED TRACT OF LAND, HEREBY SET APART AND SUBDIVIDE THE SAME INTO LOTS, PARCELS AND STREETS AS SHOWN ON THIS PLAT AND NAME SAID TRACT:

## HARVEST VALLEY COURT P.U.D. 1ST AMENDMENT A SENIOR LIVING COMMUNITY

I HEREBY STATE THAT I AM THE MANAGER OF UNREASONABLE CAPITAL HYRUM LLC, & HARVEST VALLEY COURT OWNERS ASSOCIATION, INC AND THAT I AM THE ONLY PERSON WHOSE CONSENT IS NECESSARY TO PASS A CLEAR TITLE TO SAID LAND; THAT I CONSENT TO THE MAKING AND RECORDING OF THIS SUBDIVISION MAP AS SHOWN WITHIN THE DISTINCTIVE BORDER LINE

WE HEREBY DEDICATE THE REAL PROPERTY DESCRIBED BELOW IS DEDICATED AS EASEMENTS FOR

ALL LAND SHOWN HEREON AS BOUNDED BY THE DESIGNATED LINES LABELED AS A PUBLIC UTILITY EASEMENT IS DEDICATED TO HYRUM CITY FOR SAID PUBLIC UTILITY PURPOSES: ALL LAND SHOWN HEREON AS BOUNDED BY THE DESIGNATED LINES LABELED AS A PUBLIC RIGHT OF WAY IS DEDICATED TO HYRUM CITY FOR SAID PUBLIC RIGHT OF WAY AND PUBLIC UTILITY PURPOSES: THE REAL PROPERTY DESCRIBED HEREON IS DEDICATED AS AN EASEMENT FOR STORMDRAIN AND

IRRIGATION PURPOSES IS HEREBY DEDICATED TO HYRUM IRRIGATION COMPANY FOR SAID CONVEYANCE ALL LAND SHOWN HEREON AS PRIVATE STREETS AS WELL AS OPEN SPACE A TO ALSO BE DEDICATED TO

HYRUM CITY AS PUBLIC UTILITY AND DRAINAGE PURPOSES FOR THE INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES AND DRAINAGE PURPOSES AS SEEN FIT BY HYRUM CITY; WE HEREBY DEDICATE THE LAND DESIGNATED AS IRRIGATION EASEMENT TO HYRUM IRRIGATION COMPANY

FOR THE INSTALLATION AND MAINTENANCE OF IRRIGATION FACILITIES AND DRAINAGE. WE HEREBY RETAIN THE PORTIONS INDICATED AS "PRIVATE STREETS," AS SHOWN HEREON FOR PRIVATE USE, FOR THE SOLE BENEFIT OF OURSELVES, OUR SUCCESSORS, ASSIGNEES, AND LOT OWNERS WITHIN

WE HEREBY RETAIN THE PORTIONS NOT LOCATED WITHIN A NUMBERED LOT FOR THE HOMEOWNERS ASSOCIATION AS COMMON SPACE, FOR THE SOLE BENEFIT OF OURSELVES, OUR SUCCESSORS, ASSIGNEES, AND LOT OWNERS WITHIN THIS PLAT, TO BE USED FOR RECREATIONAL AND OPEN SPACE PURPOSES FOR THE BENEFIT OF EACH UNIT OWNER AND TO BE MAINTAINED BY THE HOMEOWNERS' ASSOCIATION; COMMON SPACE IS DESIGNATED AS OPEN SPACE "A".

WE HEREBY RETAIN THE PORTION OF LAND DESIGNATED AS PRIVATE STORM DRAIN EASEMENT AND DETENTION POND EASEMENT TO BE USE BY THE HOMEOWNERS' ASSOCIATION FOR THE INSTALLATION AND MAINTENANCE OF STORM DRAIN FACILITIES, DRAINAGE AND THE MAINTENANCE AND REPAIRS FOR WALLS DITCHES OR BERMS USED FOR GRADING AND DRAINING PURPOSES.

SIGNED THIS \_\_\_\_\_\_DAY OF \_\_\_\_\_\_, 2024. SIGNED THIS \_\_\_\_\_DAY OF \_\_\_\_ UNREASONABLE CAPITAL HYRUM, LLC HARVEST VALLEY COURT OWNERS ASSOCIATION, INC

BY: CORY WADDOUPS, MANAGER

ACKNOWLEDGEMENT

BY: CORY WADDOUPS, MANAGER

**ACKNOWLEDGEMENT** 

STATE OF UTAH COUNTY OF WEBER

THIS PLAT;

On this\_\_\_\_day of\_\_ \_\_2024, personally appeared before me CORY WADDOUPS, whose identity is personally known to me (or proven on the basis of satisfactory evidence) and who by me duly sworn/affirmed, did say that he/she is the MANAGER of UNREASONABLE CAPITAL HYRUM, LLC, & HARVEST VALLEY COURT OWNERS ASSOCIATION, INC and that said document was signed by him/her in behalf of said corporation by Authority of its Bylaws, or (Resolution of its Board of Directors), and said CORY WADDOUPS acknowledged to me that said corporation executed the same.

SIGNATURE

A NOTARY PUBLIC COMMISSIONED IN UTAH

**COMMISSION NUMBER - EXPIRES** DEVELOPER:

CORY WADDOUPS

MIDVALE UTAH, 84047

411 WEST 7200 SOUTH STE 201

FILED FOR AND RECORDED . IN BOOK \_\_\_\_\_ OF OFFICIAL

COUNTY RECORDER

(SEAL)

COUNTY RECORDER

RECORDS, PAGE MUNICIPAL - LAND SURVEYING 5150 SOUTH 375 EAST OGDEN, UT OFFICE: 801.476.0202 FAX: 801.476.0066

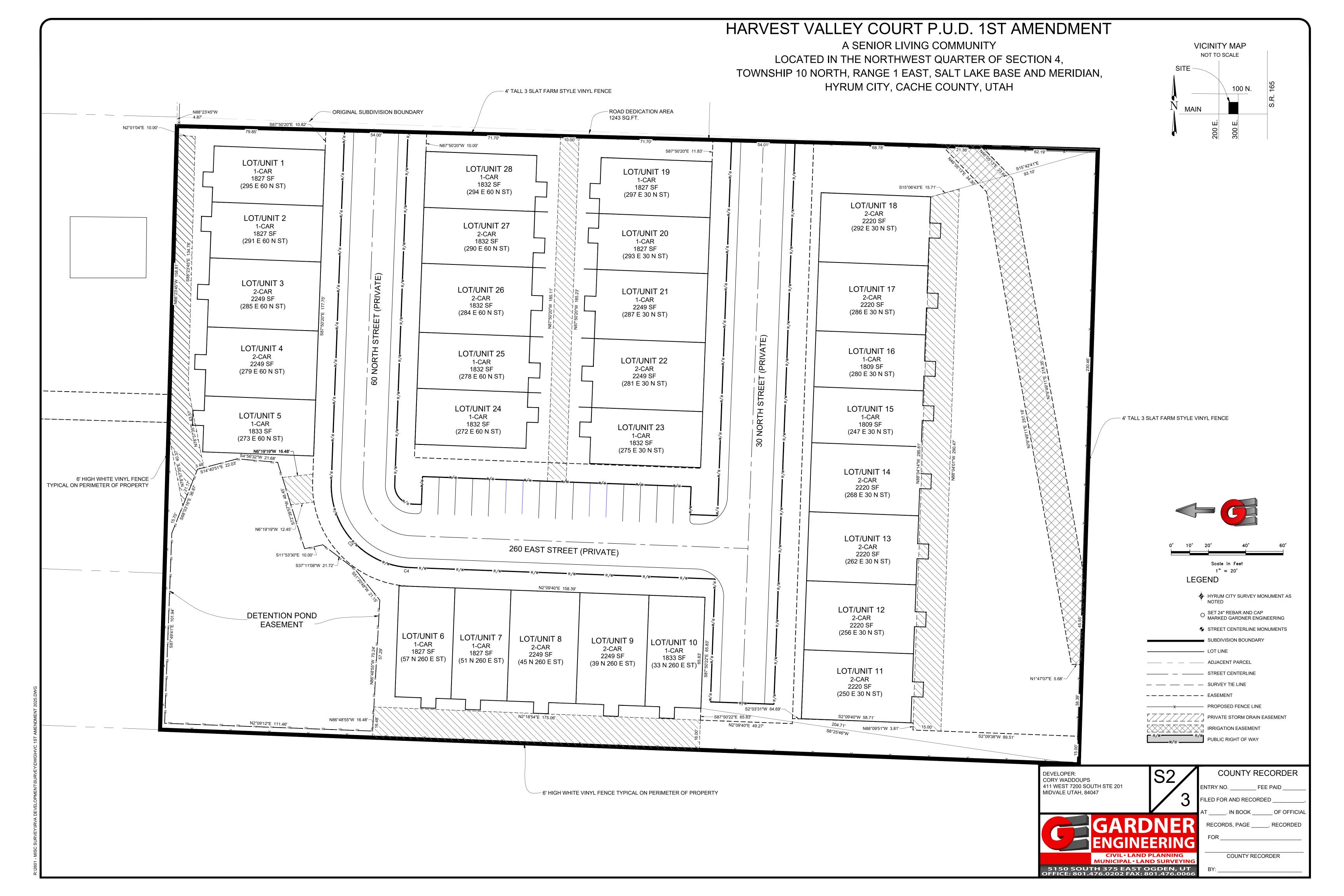
- 1. TOTAL AREA 160,955 SQ. FT. OR 3.695
- 2. OPEN SPACE / COMMON AREA (INCLUDING PRIVATE STREETS): 104,486 SQ. FT. OR 2.398 ACRES
- 3. 28 LOTS FOR A TOTAL OF 56,469 SQ. FT. OR 1.296 ACRES
- 4. PRIVATE STREETS: 25,463 SQ. FT. 0.585
- 5. PARKING: ON STREET PARKING 16 STALLS GARAGE PARKING 41 STALLS DRIVEWAY PARKING 41 STALLS TOTAL PARKING 98 STALLS
- ZONING FOR THIS LOT AND SURROUNDING AREA IS R-2 THIS AREA IS SUBJECT TO THE NORMAL EVERYDAY SOUND, ODORS, SIGHTS, EQUIPMENT, FACILITIES, AND ALL OTHER ASPECTS ASSOCIATED WITH AN AGRICULTURAL LIFESTYLE FUTURE RESIDENTS SHOULD ALSO RECOGNIZE THE RISKS INHERENT WITH

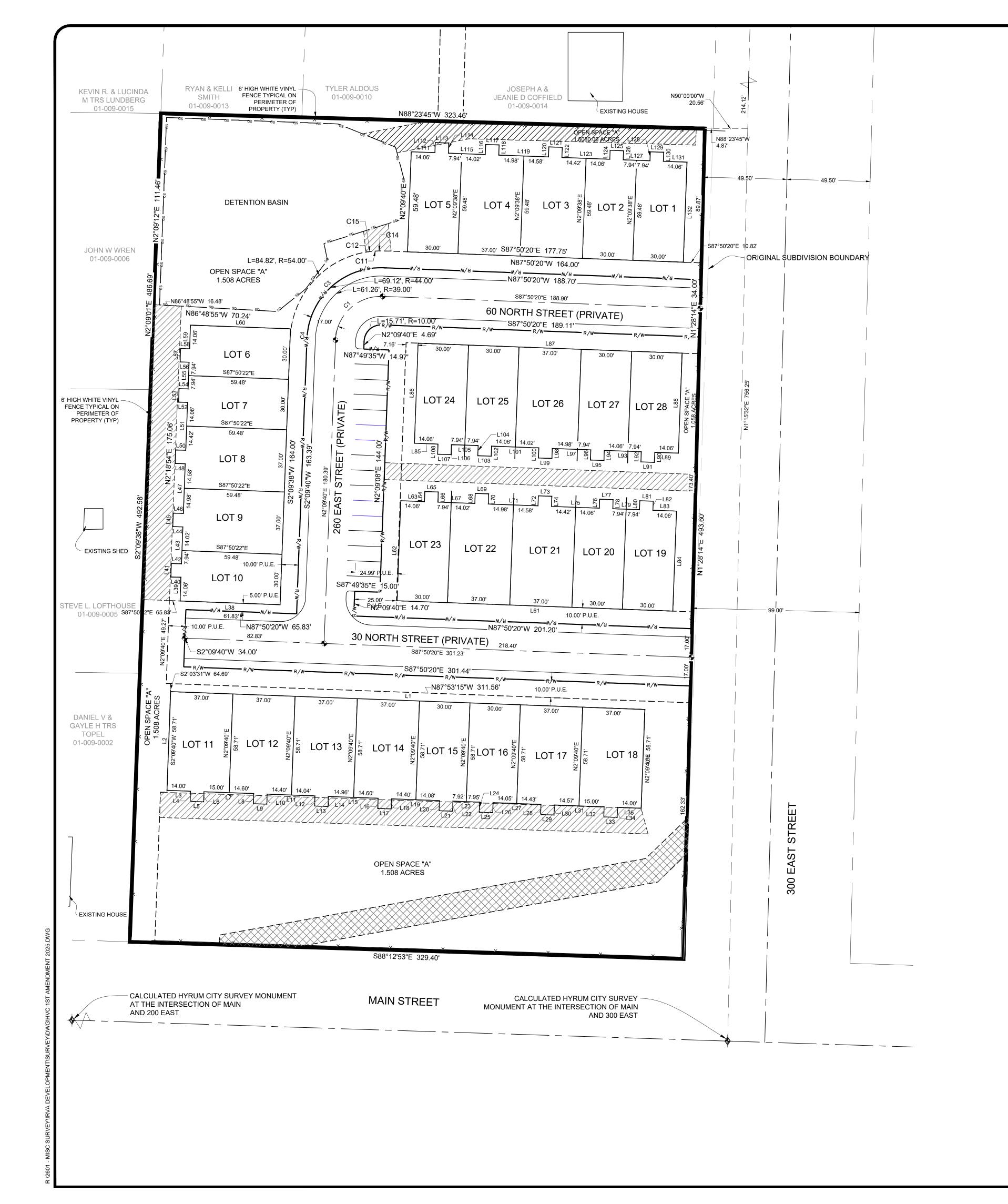
**NOTES** 

3. SUBJECT PROPERTY FALLS WITHIN FEMA FLOOD ZONE "X" - AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. PER FEMA MAP NO. 49005C0.90C WITH AN EFFECTIVE DATE OF 5/24/2011.

LIVESTOCK.

- PLANNED UNIT DEVELOPMENTS. 5. THE PURPOSE OF THIS SUBDIVISION AMENDMENT IS TO
- 4. DEVELOPER WILL PLANT TREES PER LANDSCAPE PLAN AND ACCORDING TO HYRUM CITY STANDARDS FOR
- ADJUST THE SUBDIVISION BOUNDARY TO FIT THE WEST RIGHT-OF-WAY LINE OF 300 EAST STREET AS DETERMINED BY FORESIGHT LAND SURVEYING.





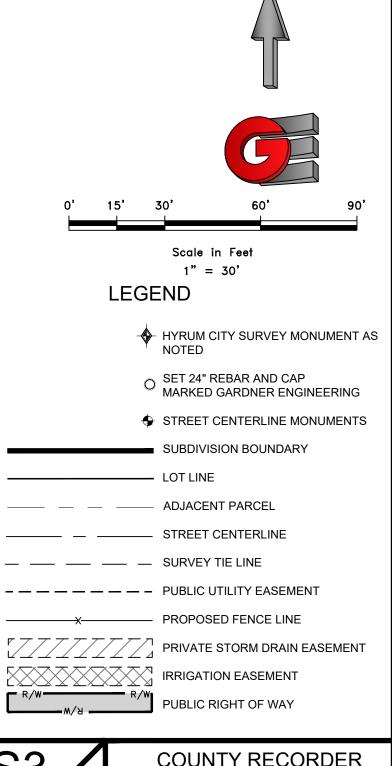
# HARVEST VALLEY COURT P.U.D. 1ST AMENDMENT

A SENIOR LIVING COMMUNITY

LOCATED IN THE NORTHWEST QUARTER OF SECTION 4,
TOWNSHIP 10 NORTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN,
HYRUM CITY, CACHE COUNTY, UTAH

		DI E	LINE TABLE		Г	LINE TABLE			
	LINE TA	ABLE		LINE TA	ABLE			LINE IA	ABLE
LINE #	LENGTH	BEARING	LINE #	LENGTH	BEARING		LINE#	LENGTH	BEARING
L1	282.00	N87° 50' 20"W	L41	8.00	N2° 09' 38"E		L81	8.00	S87° 50' 17"E
L2	58.71	S2° 09' 40"W	L42	6.00	S87° 50' 22"E		L82	5.34	S2° 09' 43"W
L3	14.02	S87° 50' 20"E	L43	21.96	N2° 09' 40"E		L83	14.06	S87° 50' 17"E
L4	6.00	S2° 09' 40"W	L44	5.99	N87° 50' 22"W		L84	59.48	S2° 09' 43"W
L5	8.00	S87° 50' 20"E	L45	8.00	N2° 09' 40"E		L85	14.06	N87° 50' 19"W
L6	6.00	N2° 09' 40"E	L46	5.99	S87° 50' 22"E		L86	59.48	N2° 09' 41"E
L7	29.56	S87° 50' 20"E	L47	29.56	N2° 09' 40"E		L87	157.00	S87° 50' 20"E
L8	6.00	S2° 09' 40"W	L48	5.99	N87° 50' 25"W		L88	59.48	S2° 09' 41"W
L9	8.00	S87° 50' 20"E	L49	8.00	N2° 09' 40"E		L89	14.06	N87° 50' 19"W
L10	6.00	N2° 09' 54"E	L50	5.99	S87° 50' 25"E		L90	6.00	S2° 09' 41"W
L11	28.44	S87° 50' 20"E	L51	28.48	N2° 09' 40"E		L91	8.00	N87° 50' 19"W
L12	6.00	S2° 09' 40"W	L52	5.34	N87° 50' 20"W		L92	6.00	N2° 09' 41"E
L13	8.00	S87° 50' 20"E	L53	8.00	N2° 09' 40"E		L93	22.00	N87° 50' 19"W
L14	6.00	N2° 09' 40"E	L54	5.34	S87° 50' 20"E		L94	6.00	S2° 09' 41"W
L15	29.56	S87° 50' 20"E	L55	15.87	N2° 09' 40"E		L95	8.00	N87° 50' 19"W
L16	6.00	S2° 09' 40"W	L56	5.34	N87° 50' 20"W		L96	6.00	N2° 09' 41"E
L17	8.00	S87° 50' 20"E	L57	8.00	N2° 09' 40"E		L97	22.92	N87° 50' 19"W
L18	6.00	N2° 09' 40"E	L58	5.34	S87° 50' 20"E		L98	6.00	S2° 09' 41"W
L19	28.48	S87° 50' 20"E	L59	14.06	N2° 09' 40"E		L99	8.00	N87° 50' 19"W
L20	6.00	S2° 09' 40"W	L60	59.48	S87° 50' 20"E		L100	6.00	N2° 09' 41"E
L21	8.00	S87° 50' 20"E	L61	164.00	N87° 50' 20"W		L101	28.08	N87° 50' 19"W
L22	6.00	N2° 09' 40"E	L62	59.48	N2° 09' 40"E		L102	6.00	S2° 09' 41"W
L23	15.87	S87° 50' 20"E	L63	14.06	S87° 50' 17"E		L103	8.00	N87° 50' 19"W
L24	6.00	S2° 09' 40"W	L64	6.00	N2° 09' 40"E		L104	6.00	N2° 09' 41"E
L25	8.00	S87° 50' 20"E	L65	8.00	S87° 50' 20"E		L105	15.87	N87° 50' 19"W
L26	6.00	N2° 09' 40"E	L66	6.00	S2° 09' 40"W		L106	6.00	S2° 09' 41"W
L27	28.48	S87° 50' 20"E	L67	21.96	S87° 50' 17"E		L107	8.00	N87° 50' 19"W
L28	6.00	S2° 09' 40"W	L68	5.99	N2° 09' 40"E		L108	6.00	N2° 09' 41"E
L29	8.00	S87° 50' 20"E	L69	8.00	S87° 50' 17"E		L109	164.00	N87° 50' 20"W
L30	6.00	N2° 09' 40"E	L70	5.99	S2° 09' 40"W		L110	59.48	N2° 09' 40"E
L31	29.56	S87° 50' 20"E	L71	29.56	S87° 50' 17"E		L111	14.06	S87° 50' 17"E
L32	6.00	S2° 09' 40"W	L72	5.99	N2° 09' 38"E		L112	6.00	N2° 09' 40"E
L33	8.00	S87° 50' 20"E	L73	8.00	S87° 50' 17"E		L113	8.00	S87° 50' 20"E
L34	6.00	N2° 09' 40"E	L74	5.99	S2° 09' 38"W		L114	6.00	S2° 09' 40"W
L35	14.02	S87° 50' 20"E	L75	28.48	S87° 50' 17"E		L115	21.96	S87° 50' 17"E
L36	58.71	N2° 09' 40"E	L76	5.34	N2° 09' 43"E		L116	5.99	N2° 09' 40"E
L37	164.00	S2° 09' 40" W	L77	8.00	S87° 50' 17"E		L117	8.00	S87° 50' 17"E
L38	59.48	N87° 50' 20" W	L78	5.34	S2° 09' 43"W		L118	5.99	S2° 09' 40"W
L39	14.06	N2° 09' 40"E	L79	15.87	S87° 50' 17"E		L119	29.56	S87° 50' 17"E
L40	6.00	N87° 50' 22"W	L80	5.34	N2° 09' 43"E		L120	5.99	N2° 09' 38"E
				1		L			

LINE TABLE					
LINE#	LENGTH	BEARING			
L121	8.00	S87° 50' 17"E			
L122	5.99	S2° 09' 38"W			
L123	28.48	S87° 50' 17"E			
L124	5.34	N2° 09' 43"E			
L125	8.00	S87° 50' 17"E			
L126	5.34	S2° 09' 43"W			
L127	15.87	S87° 50' 17"E			
L128	5.34	N2° 09' 43"E			
L129	8.00	S87° 50' 17"E			
L130	5.34	S2° 09' 43"W			
L131	14.06	S87° 50' 17"E			
L132	59.48	S2° 09' 43"W			





EX ASPHALT EX CONCRETE X X X X X EX WIRE FENCE ASPHALT PAVEMENT BUILDING SETBACK

LEGEND

SITE DATA PARCEL NUMBER: 01-009-0001 SITE ADDRESS: 43 N 300 E HYRUM CITY, UT 84319 SITE AREA: 162,198 SF (3.72 AC) OPEN SPACE: 75,051 SF (1.72 AC)(46%) R-2. RESIDENTIAL. MULTI-FAMILY ZONING:

# PROJECT INFO

APPLICANT/CLIENT/OWNER: IRVA DEVELOPMENT BEYLER CONSULTING 411 WEST 7200 SOUTH, 5920 100TH ST SW, STE 25 SUITE 200 LAKEWOOD, WA 98499 MIDVALE, UT 84047 CONTACT: LANDON BEYLER, P.E. TEL: 801-231-8277 TEL: 253-984-2900

GARDNER ENGINEERING 5150 SOUTH 375 EAST OGDEN, UT CONTACT: KLINT H. WHITNEY P.L.S

# TEL: 801-476-0202

HYRUM CITY CULINARY WATER AUTHORITY SEWER: GRAVITY HYRUM CITY SEWER AUTHORITY POWER: HYRUM CITY POWER DOMINION ENERGY

UTILITIES

# LEGAL DESCRIPTION

ALL OF LOTS 1, 7, 8 OF BLOCK 22 PLAT A HYRUM CITY SURVEY, ALSO BEING A PART OF THE NORTHWEST QUARTER OF SECTION 4 TOWNSHIP 10 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDAN

# SHEET INDEX

C1.0 COVER SHEET / SITE PLAN C1.1 LOT, TRACT AND EASEMENT PLAN C1.2 SWPPP / T.E.S.C. PLAN

C1.3 T.E.S.C. DETAILS AND NOTES C2.0 GRADING AND STORM DRAINAGE PLAN C2.1 STORMWATER MANAGEMENT DETAILS

C2.2 SITE DETAILS C2.3 ROADWAY PROFILES AND SECTIONS

CITY ENGINEER

C3.0 UTILITY PLAN C3.1 SEWER DETAILS

C3.2 WATER DETAILS

CITY ENGINEER APPROVAL I CERTIFY THAT I HAVE EXAMINED THIS PLAT AND FIND IT TO BE IN GENERAL COMPLIANCE TO THE CITY STANDARDS

DATE

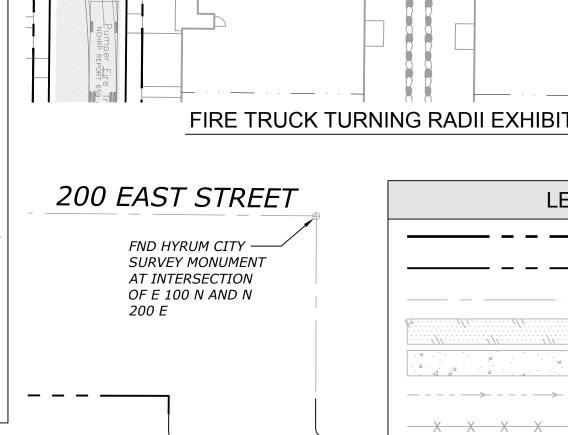
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DO

JOB NUMBER 22.00188

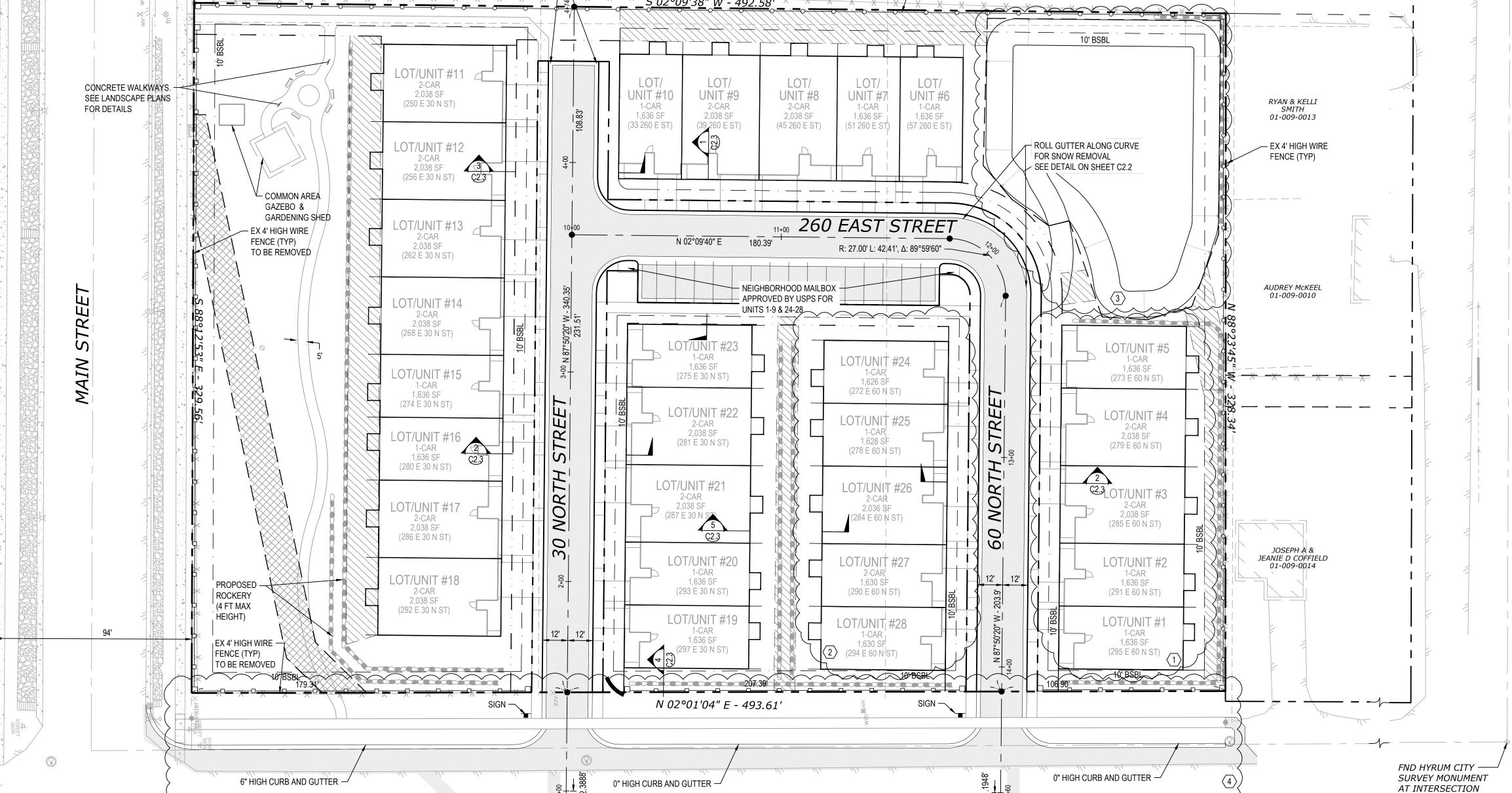
- 22. CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS, HARDWARE, LABOR, ETC TO CONSTRUCT VERTICAL AND HORIZONTAL BENDS IN PIPE AS NEEDED TO MEET THE REQUIRED GRADES, ALIGNMENTS AND COVER REQUIREMENTS.
- 23. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF HYRUM FOR ALL UTILITY INSPECTIONS PRIOR TO BACKFILLING. NOTICE MUST BE GIVEN TO CITY 48 HOURS PRIOR TO INSPECTION.
- 24. ALL WATER SYSTEM COMPONENTS SHALL BE INSTALLED, PRESSURE TESTED, AND CHLORINATED PRIOR TO COMPLETING ANY ROADWAY
- 25. ONE MYLAR AND ONE PAPER SET OF AS-BUILTS SHAL BE SUBMITTED TO THE CITY UPON COMPLETION OF PUBLIC IMPROVEMENTS. A DIGITAL COPY OF THE DRAWINGS WILL ALSO BE REQUIRED FOR GIS LINEWORK. AS BUILT PLANS WILL BE REQUIRED TO B SUBMITTED TO THE CITY BEFORE WARRANTY BONDS SHALL BE RELEASED.

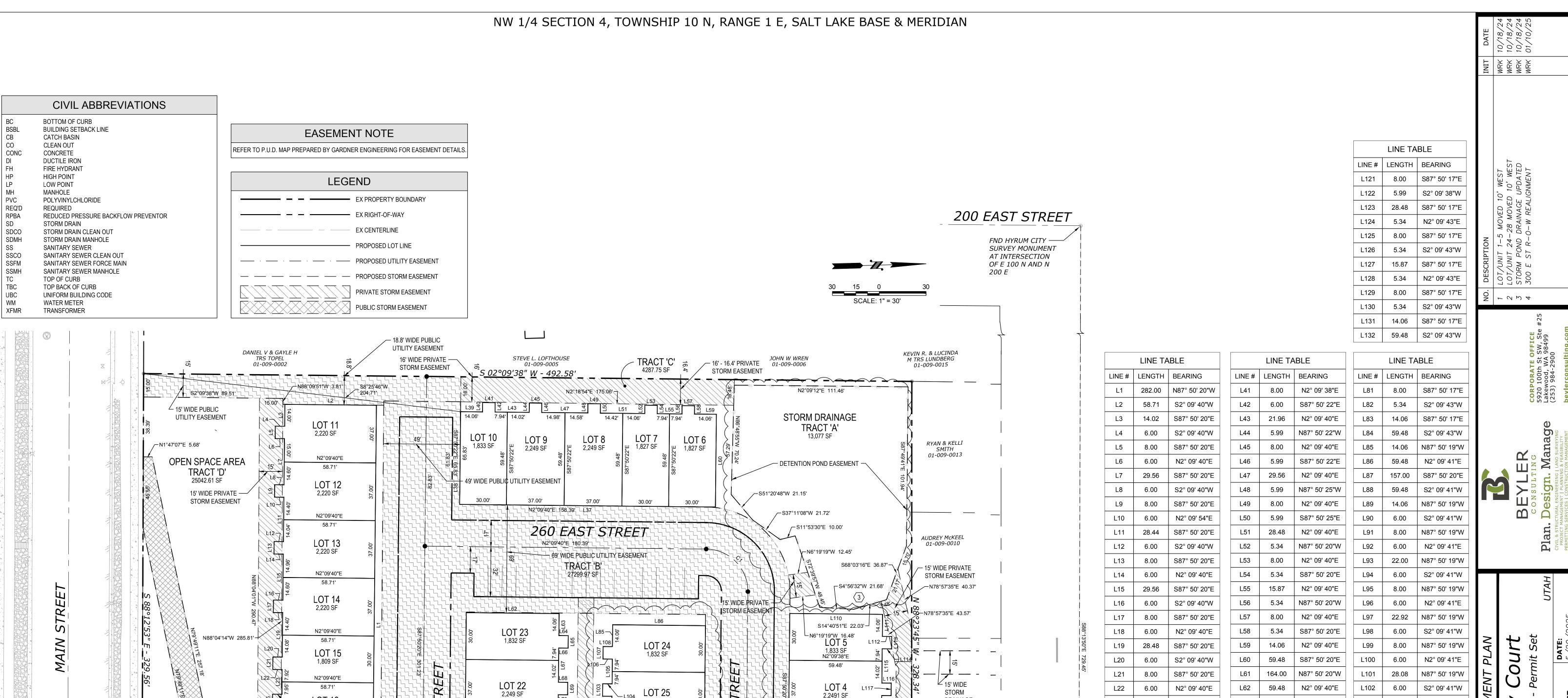
KEVIN R. & LUCINDA



OF E 100 N AND N

300 E





LOT 4

2,2491 SF

N2°09'38"E

59.48'

2,249 SF

N2°09'38"E

LOT 2

1,827 SF

N2°09'38"E

54' WIDE PUBLIC UTILITY EASEMENT

DRAINAGE

EASEMENT

2538.23 SF

JEANIE D COFFIELD 01-009-0014

/-- N2°01'04"E 10.00'

N90°00'00"W

LOT 25

LOT 26

1,832 SF

LOT 27

N1°15'32"E 756.25'

LOT 21 2,249 SF

LOT 20 1,827 SF

LOT 19 1,827 SF

N 02°01'04" E - 493.61'

1,809 SF

N2°09'40"E

2,220 SF

N2°09'40"E

2,220 SF

54' WIDE PUBLIC UTILITY EASEMENT

\_**W**\_

6.00 S2° 09' 41"W

8.00 N87° 50' 19"W

164.00 N87° 50' 20"W

6.00

15.87

6.00

8.00

6.00

8.00

L120 | 5.99 | N2° 09' 38"E

N2° 09' 41"E

N87° 50' 19"W

S2° 09' 41"W

N2° 09' 40"E

S87° 50' 20"E

S2° 09' 40"W

N2° 09' 40"E

S87° 50' 17"E

29.56 S87° 50' 17"E

L102

L103

L104

L105

L106

L109

L113

L114

L116

L117

L119

JOB NUMBER 22.00188

CITY ENGINEER APPROVAL I CERTIFY THAT I HAVE EXAMINED THIS PLAT AND FIND IT TO BE IN

DATE

15' WIDE PUBLIC IRRIGATION EASEMENT —

N46°05'13"E 23.64'-

CITY ENGINEER

GENERAL COMPLIANCE TO THE CITY STANDARDS

59.48 N2° 09' 40"E

14.06 | S87° 50' 17"E

6.00 | S2° 09' 40"W

8.00 S87° 50' 17"E

8.00 S87° 50' 17"E

5.99 S2° 09' 38"W

15.87 S87° 50' 17"E

5.34 N2° 09' 43"E

S87° 50' 20"E

N2° 09' 40"E

S2° 09' 40"W

S87° 50' 17"E

N2° 09' 38"E

N2° 09' 43"E

S87° 50' 17"E

L22

L25

L26

L28

L29

L30

L31

L32

L33

L36

L37

L38

L39

00

FND HYRUM CITY —

SURVEY MONUMENT

AT INTERSECTION
OF E 100 N AND N
300 E

15.87 | S87° 50' 20"E

6.00 | S2° 09' 40"W

6.00 | S2° 09' 40"W

6.00 | S2° 09' 40"W

6.00 N2° 09' 40"E

14.02 | S87° 50' 20"E

164.00 | S2° 09' 38"W

14.06 N2° 09' 40"E

6.00 N87° 50' 22"W

N2° 09' 40"E

8.00

6.00

28.48

8.00

29.56

58.71

S87° 50' 20"E

N2° 09' 40"E

S87° 50' 20"E

N2° 09' 40"E

L65

L66

L71

L72

L73

L74

L75

L76

L77

L78

L79

L80

8.00

5.99

5.99

5.99

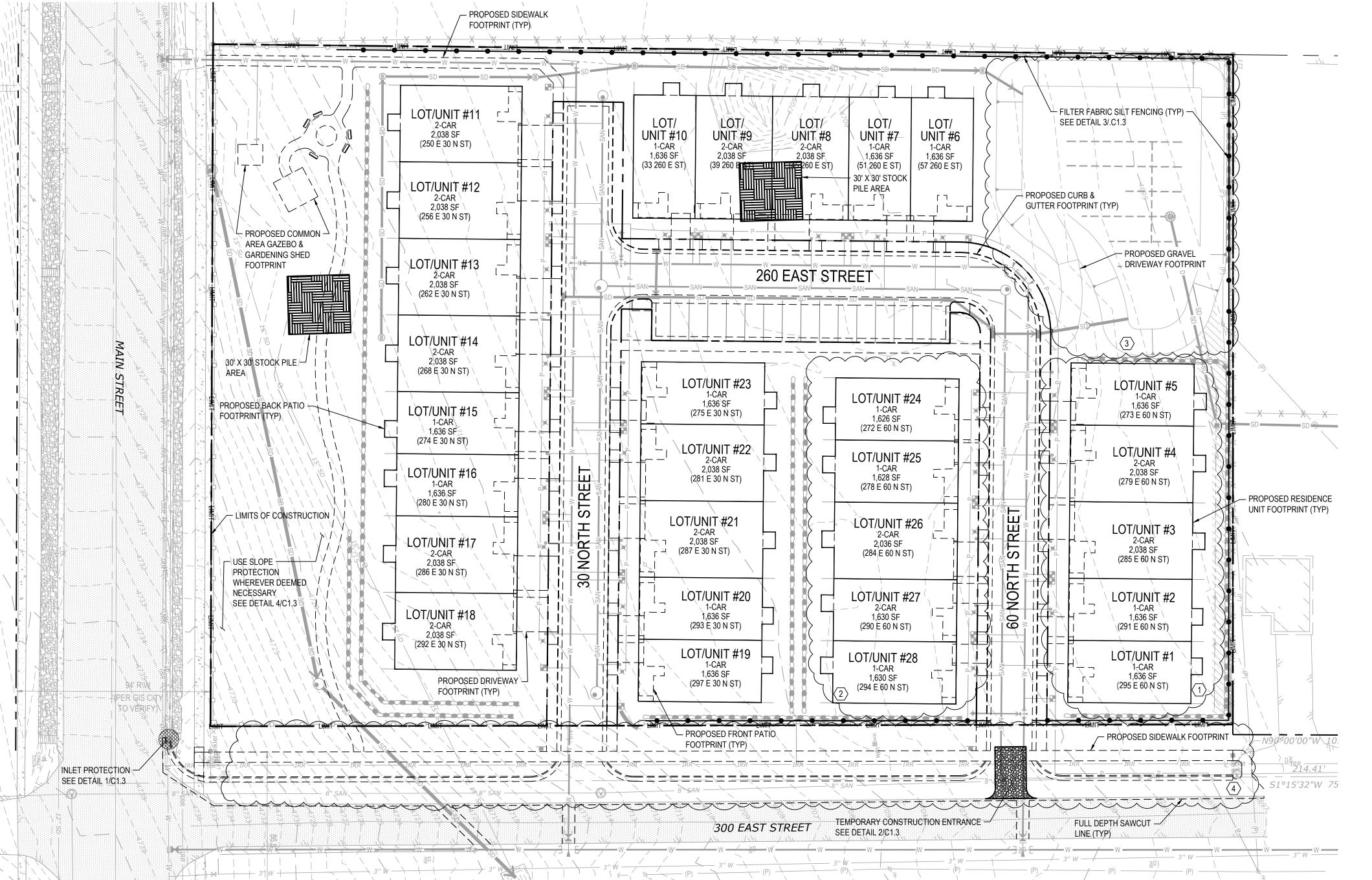
5.34

8.00

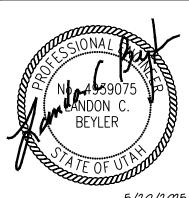
29.56

SCALE: 1" = 30'





Court



JOB NUMBER 22.00188

CITY ENGINEER APPROVAL I CERTIFY THAT I HAVE EXAMINED THIS PLAT AND FIND IT TO BE IN

DATE

CITY ENGINEER

GENERAL COMPLIANCE TO THE CITY STANDARDS

**INLET PROTECTION NOTE:** 

RETENTION FACILITIES, UTILITIES, ETC.).

DURATION OF CONSTRUCTION.

VEGETATION/LANDSCAPING IS ESTABLISHED.

TO ENSURE THEIR CONTINUED FUNCTIONING.

AND SHALL BE CHECKED AFTER STORM EVENTS.

BARE SOIL.

WITHIN THE 48 HOURS FOLLOWING A MAJOR STORM EVENT.

PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

CLEANED OR REPLACES WHEN 1/3 FULL.

INLET PROTECTION DETAIL

**EROSION CONTROL** 

APPROVAL OF THIS EROSION AND SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF

THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR

GRADING ACTIVITIES. AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT

THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS.

DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED

THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY

THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR

AT NO TIME SHALL MORE THAN 1 FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH

MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL

SWEEPING OF STREETS AND GUTTERS SHALL BE DONE AS NEEDED TO PREVENT EXCESSIVE SEDIMENT TRANSPORT

STABILIZED SOILS

**OPTIONS** 

ALL EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY APPLICATION OF EFFECTIVE BMPS THAT PROTECT

FULL STABILIZATION MEANS ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND AREAS WHERE THE SOIL OR NATURAL VEGETATIVE COVER HAS BEEN DISTURBED. QUARRY SPALLS USED AS DITCH LINING; APPLICATION OF THICK LAYERS OF GRAVEL OR MULCH; OR VEGETATIVE COVER IN A MANNER THAT WILL FULLY PREVENT SOIL EROSION. WHERE THE TERM "FULLY ESTABLISHED" IS USED TO DESCRIBE VEGETATIVE COVER OR PLANTINGS, IT SHALL BE UNDERSTOOD TO MEAN THAT HEALTHY VEGETATION COVERS 90 PERCENT OF EXPOSED

BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND

STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.

TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING

LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE APPLICANT/CONTRACTOR FOR THE

THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND

PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS,

THE IMPLEMENTATION OF THESE EROSION AND SEDIMENT CONTROL PLANS AND THE CONSTRUCTION,

APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND

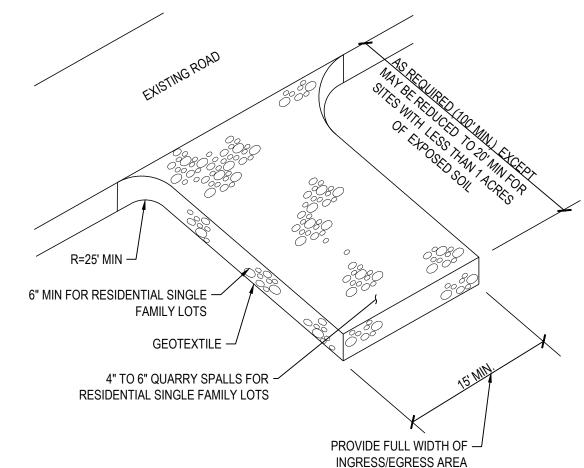
ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.

OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.

THE SOIL FROM THE EROSIVE FORCES OF RAINDROP IMPACT, FLOWING WATER, AND WIND.

MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE

FILTERS SHALL BE INSPECTED AFTER EACH STORM EVENT AND



## CONSTRUCTION ENTRANCE NOTES

- MATERIAL SHALL BE 4 INCH TO 8 INCH QUARRY SPALLS (4 TO 6 INCH FOR RESIDENTIAL SINGLE FAMILY LOTS) AND MAY BE TOP-DRESSED WITH 1 INCH TO 3 INCH ROCK.
- 2. THE ROCK PAD SHALL BE AT LEAST 12 INCHES THICK AND 50 FEET LONG (20 FEET FOR SITES WITH LESS THAN 1 ACRE OF DISTURBED SOIL), WIDTH SHALL BE THE FULL WIDTH OF THE VEHICLE INGRESS AND EGRESS AREA. SMALLER PADS MAY BE APPROVED FOR SINGLE-FAMILY RESIDENTIAL AND SMALL COMMERCIAL SITES.
- MAINTAIN PROPER FUNCTION OF PAD.
- 4. IF THE PAD DOES NOT ADEQUATELY REMOVE THE MUD FROM THE VEHICLE WHEELS, THE WHEELS SHALL BE HOSED OFF BEFORE THE VEHICLE ENTERS A PAVED STREET. THE WASHING SHALL BE DONE IN AN AREA COVERED WITH CRUSHED ROCK AND WASH WATER SHALL DRAIN TO A SEDIMENT RETENTION FACILITY OR THROUGH A SILT FENCE.
- GEOTEXTILE SHALL MEET THE FOLLOWING STANDARDS: -GRAB TENSILE STRENGTH (ASTM D4751) - 200 PSI MIN. -GRAB TENSILE ELONGATION (ASTM D4632) - 30% MAX

CONSTRUCTION ENTRANCE DETAIL

# SOIL MANAGEMENT

RETAIN, IN AN UNDISTURBED STATE, THE DUFF LAYER AND NATIVE TOPSOIL TO THE MAXIMUM EXTENT PRACTICABLE. IN ANY AREAS REQUIRING GRADING REMOVE AND STOCKPILE THE DUFF LAYER AND TOPSOIL ON SITE IN A DESIGNATED, CONTROLLED AREA, NOT ADJACENT TO PUBLIC RESOURCES AND CRITICAL AREAS, TO BE REAPPLIED TO OTHER PORTIONS OF THE SITE WHERE FEASIBLE.

ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE SHALL DEMONSTRATE THE FOLLOWING:

1) A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 5% ORGANIC MATTER AND A PH FROM 6.0 TO 8.0 OR MATCHING PH OF THE UNDISTURBED SOIL. THE TOPSOIL LAYER SHALL HAVE A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA.

SOIL QUALITY DESIGN CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW.

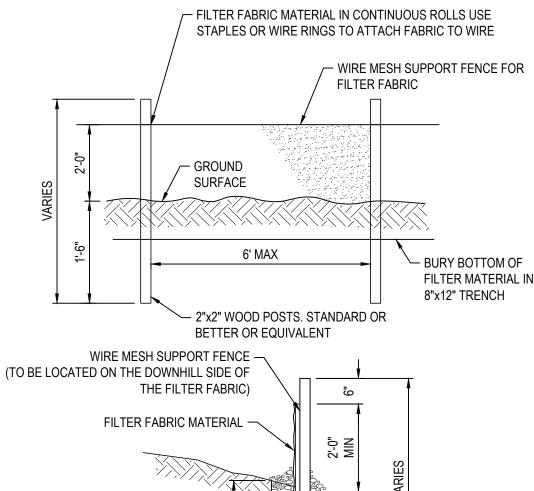
OPTION 1: LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FORM COMPACTION DURING CONSTRUCTION

OPTION 2: AMEND EXISTING SITE TOPSOIL OR SUBSOIL, EITHER AT DEFAULT "PRE-APPROVED" RATES.

OPTION 3: STOCKPILE EXISTING TOP DURING GRADING, AND REPLACE IT PRIOR TO PLANTING. STOCKPILED TOPSOIL MUST ALSO BE AMENDED IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH REQUIREMENTS, EITHER AT A DEFAULT "PRE-APPROVED" RATE OR AT A CUSTOM CALCULATED RATE.

OPTION 4: IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET REQUIREMENTS.

- (STATE STANDARD SPECIFICATIONS, SECTION 8-15.)
- ADDITIONAL ROCK SHALL BE ADDED PERIODICALLY TO
- -MULLEN BURST STRENGTH (ASTM D3786-80a) 400 PSI MIN -AOS (ASTM D4751) - 20 TO 45 (U.S. STANDARD SIEVE SIZE)

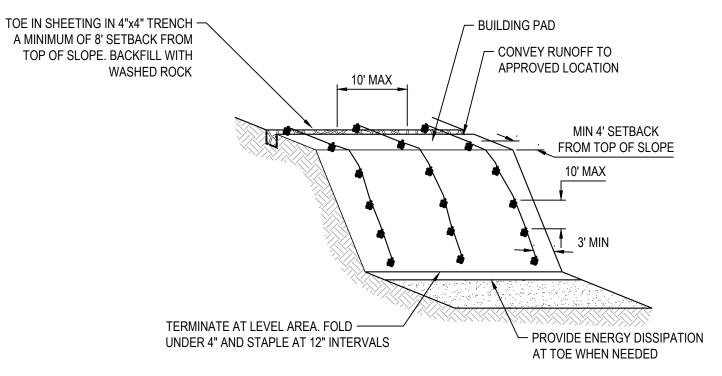


# FILTER MATERIAL IN

## FILTER FABRIC FENCE NOTES

- FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL AND CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT THE SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND SECURELY FASTENED AT BOTH ENDS TO POST.
- 2. POST SHALL BE SPACED A MAXIMUM OF 6 FEET APART AND DRIVEN
- SECURELY INTO THE GROUND (MINIMUM OF 30 INCHES). A TRENCH SHALL BE EXCAVATED APPROXIMATELY 8 INCHES WIDE AND 12 INCHES DEEP ALONG THE LINE OF POST AND UPSLOPE FROM THE BARRIER. THIS TRENCH SHALL BE BACKFILLED WITH WASHED GRAVEL.
- WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POST USING A HEAVY-DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES OR HOG RINGS.THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 4 INCHES AND SHALL NOT EXTEND MORE THAN 24 INCHES
- ABOVE THE ORIGINAL GROUND SURFACE. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 20 INCHES OF THE FABRIC SHALL BE EXTENDED TO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 24 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
- WHEN EXTRA-STRENGTH FILTER FABRIC AND CLOSER POST SPACING IS USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH CASE, THE FILTER FABRIC IS STAPLED OR WIRE DIRECTLY TO THE POST WITH ALL OTHER PROVISIONS OF ABOVE NOTES APPLYING.
- 7. FILTER FABRIC FENCES SHALL NOT BE REMOVED BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED. 8. FILTER FABRIC FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH
- RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
- 9. SILT FENCES WILL BE INSTALLED PARALLEL TO ANY SLOPE CONTOURS. 10. CONTRIBUTING LENGTH TO FENCE WILL NOT BE GREATER THAN 100 FEET.
- 11. DO NOT INSTALL BELOW AN OUTLET PIPE OR WEIR. 12. INSTALL DOWNSLOPE OF EXPOSED AREAS.
- 13. DO NOT DRIVE OVER OR FILL OVER SILT FENCES.

FILTER FABRIC FENCE DETAIL



8" MIN

NATIVE OR WASHED GRAVEL BACKFILL

BURY BOTTOM OF FILTER MATERIAL -

3/4"-3" IN TRENCH

IN 8"x12" TRENCH

- 1. TIRES, SANDBAGS, OR EQUIVALENT MAY BE USED TO WEIGHT PLASTIC SHEETING.
- 2. SEAMS BETWEEN SHEETS MUST OVERLAP A MINIMUM OF 12" AND BE WEIGHTED OR TAPED.
- 3. PLASTIC SHEETING SHALL HAVE A MINIMUM THICKNESS OF 6 MIL.
- DUE TO RAPID RUNOFF CAUSED BY PLASTIC SHEETING, THIS METHOD SHALL NOT BE USED UPSLOPE OF AREAS THAT MIGHT BE ADVERSELY IMPACTED BY CONCENTRATED RUNOFF.
- 5. IF EROSION AT THE TOE OF SLOPE IS LIKELY, A GRAVEL BERM, RIP-RAP, OR OTHER SUITABLE PROTECTION SHALL BE INSTALLED AT THE TOE OF SLOPE IN ORDER TO REDUCE THE VELOCITY OF RUNOFF.

SLOPE PROTECTION DETAIL

CITY ENGINEER APPROVAL

I CERTIFY THAT I HAVE EXAMINED THIS PLAT AND FIND IT TO BE IN GENERAL COMPLIANCE TO THE CITY STANDARDS

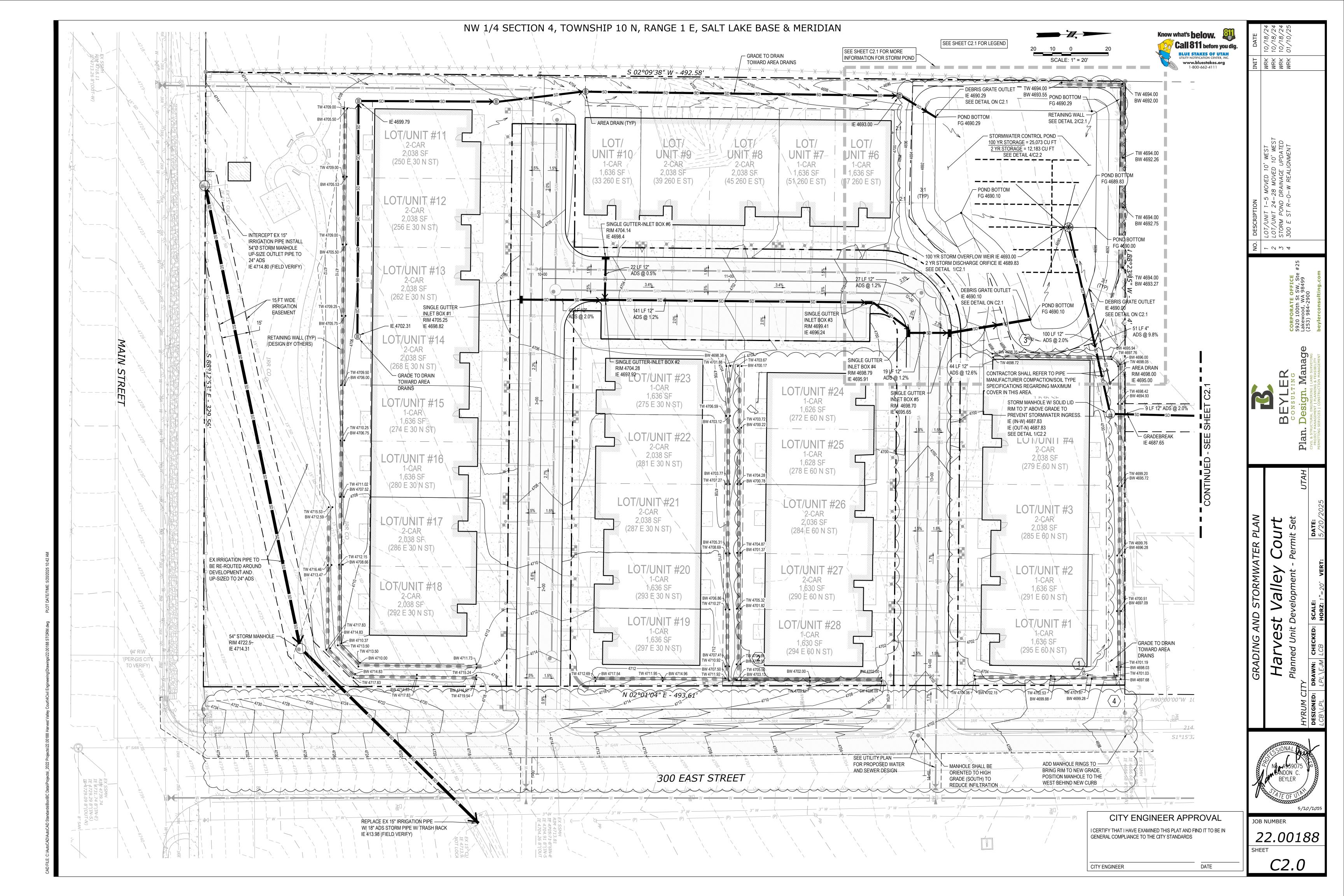
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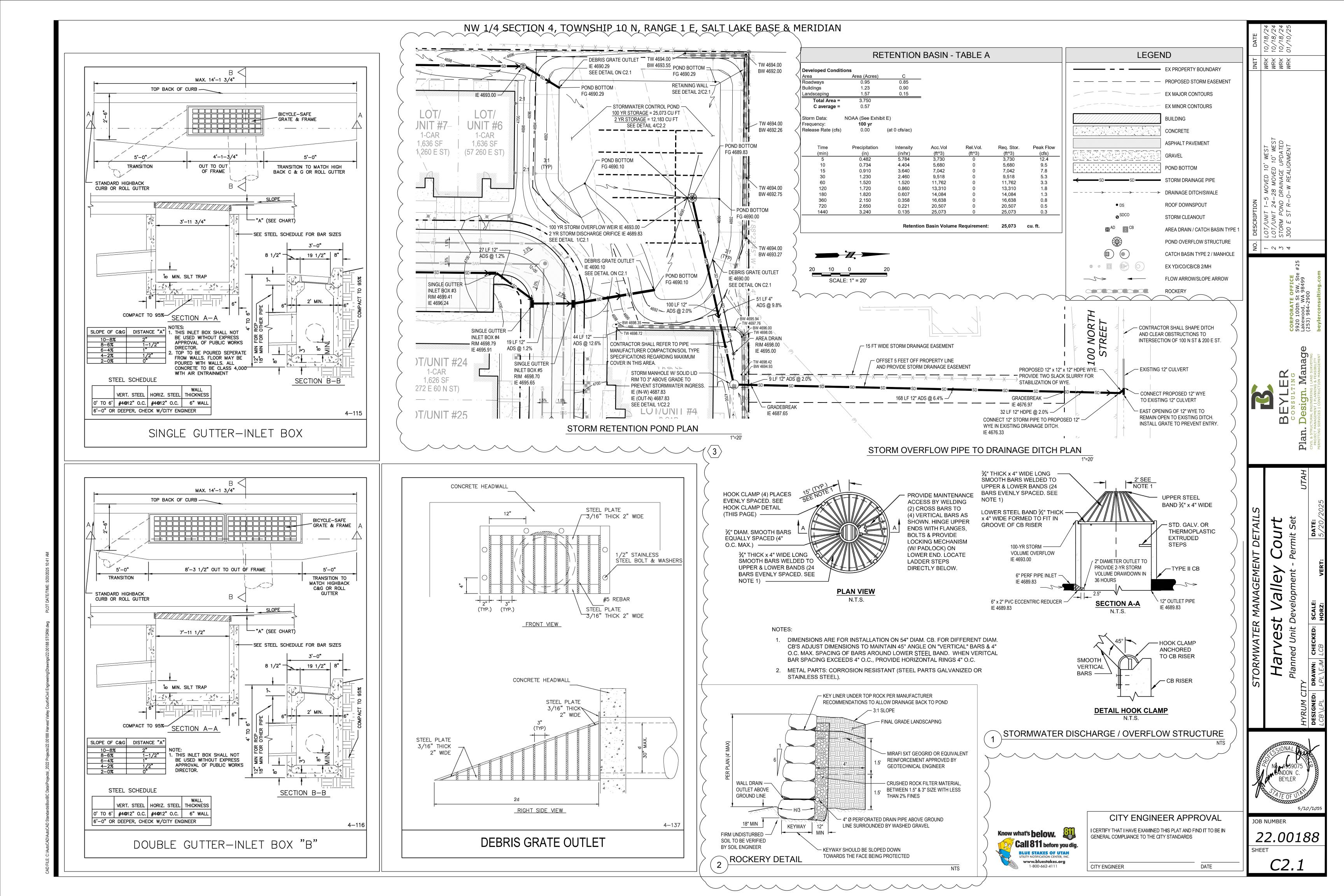
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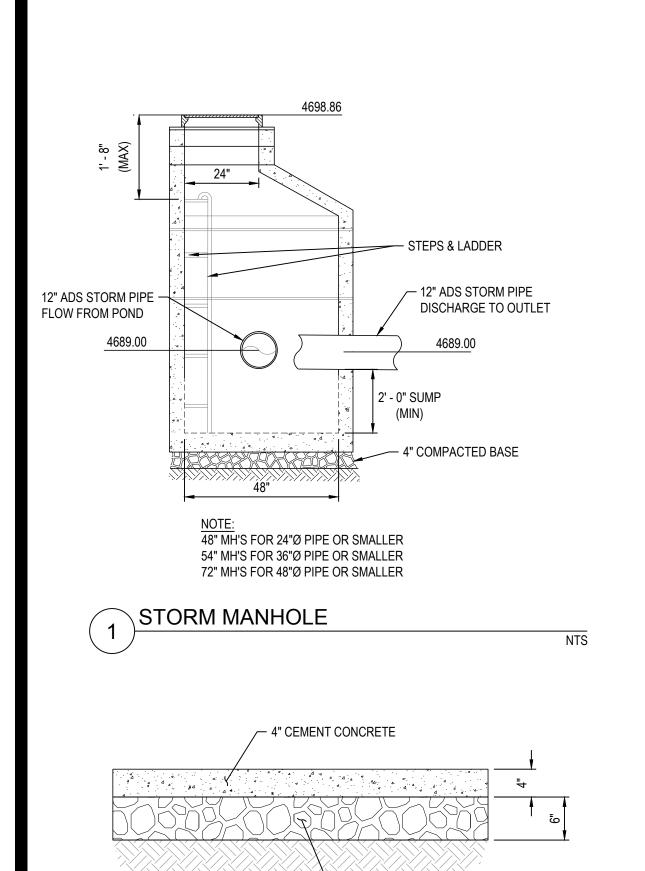
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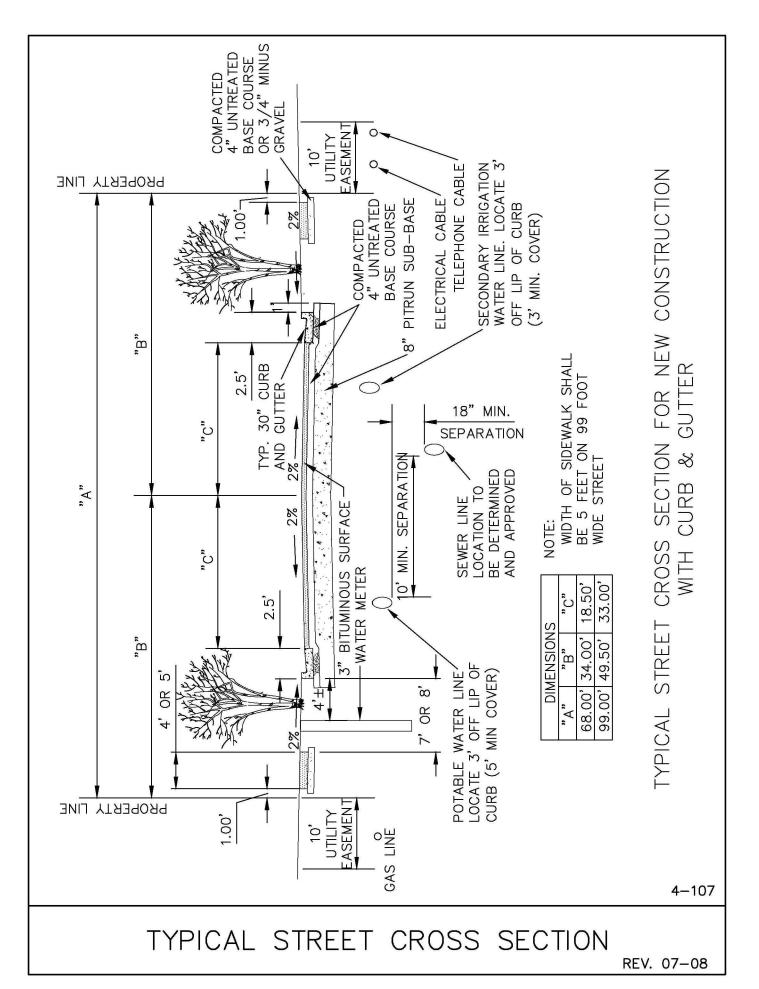
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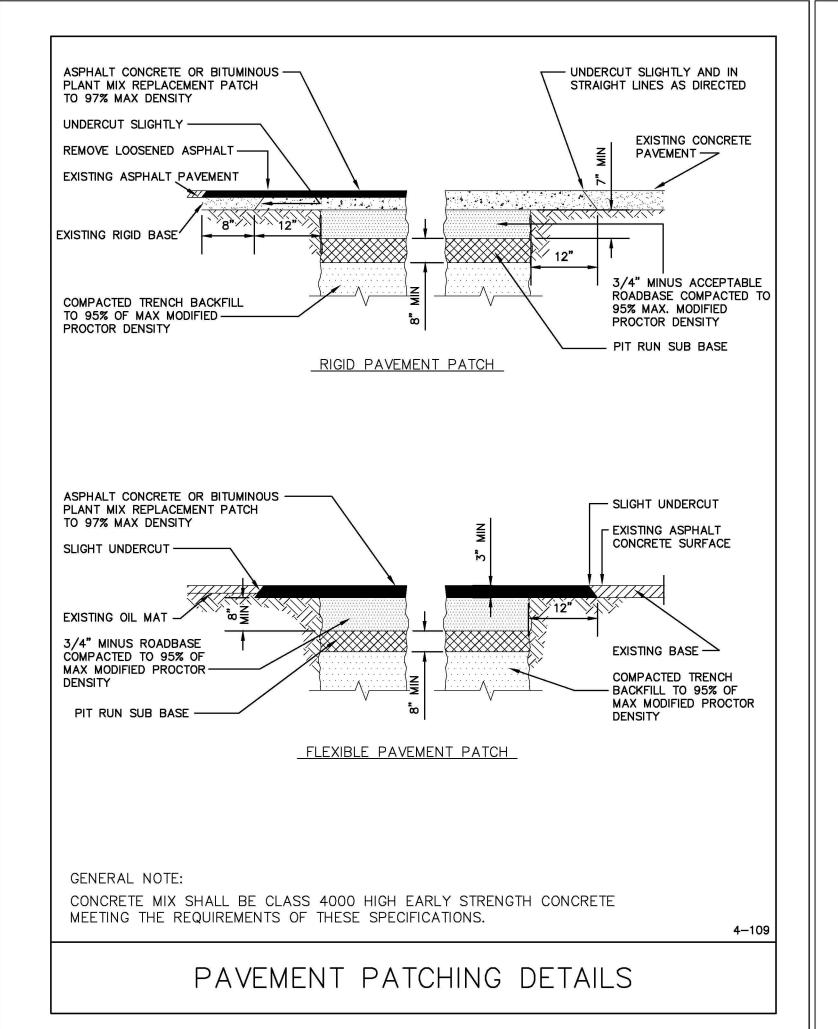
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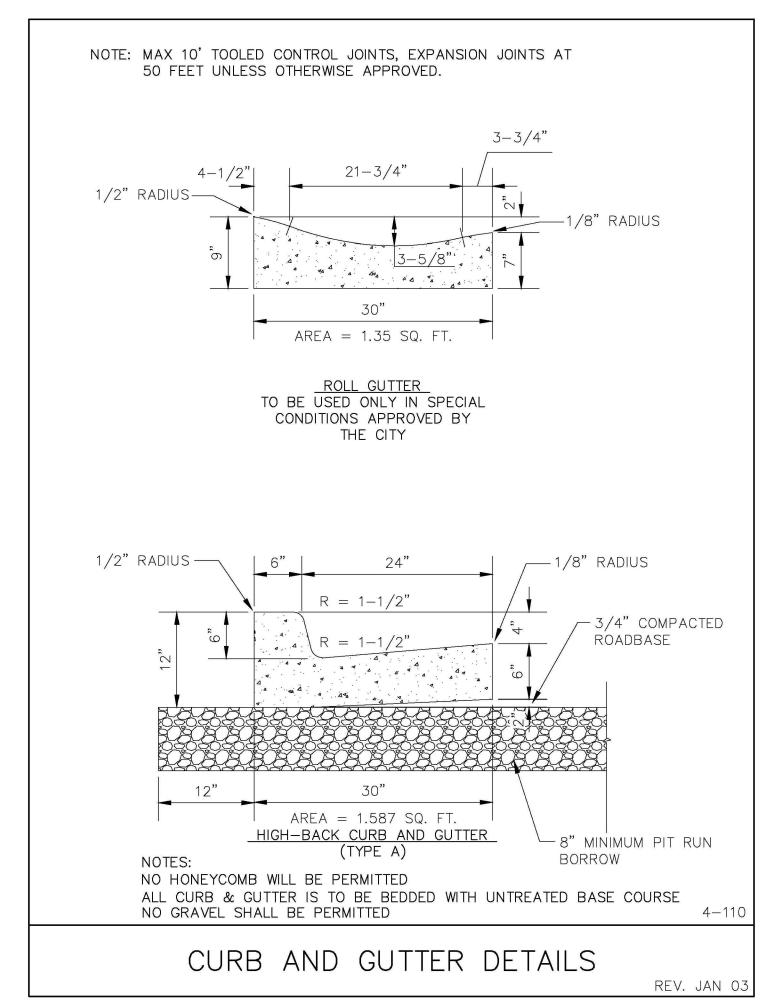


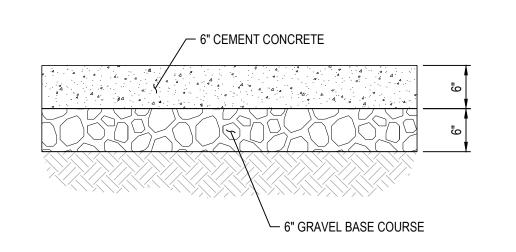












SIDEWALK DETAIL THROUGH DRIVEWAYS

POND LINER, OR

**STORMWATER POND SECTION** 

**EQUIVALENT** 

SIDEWALK DETAIL FOR PUBLIC WALKWAYS

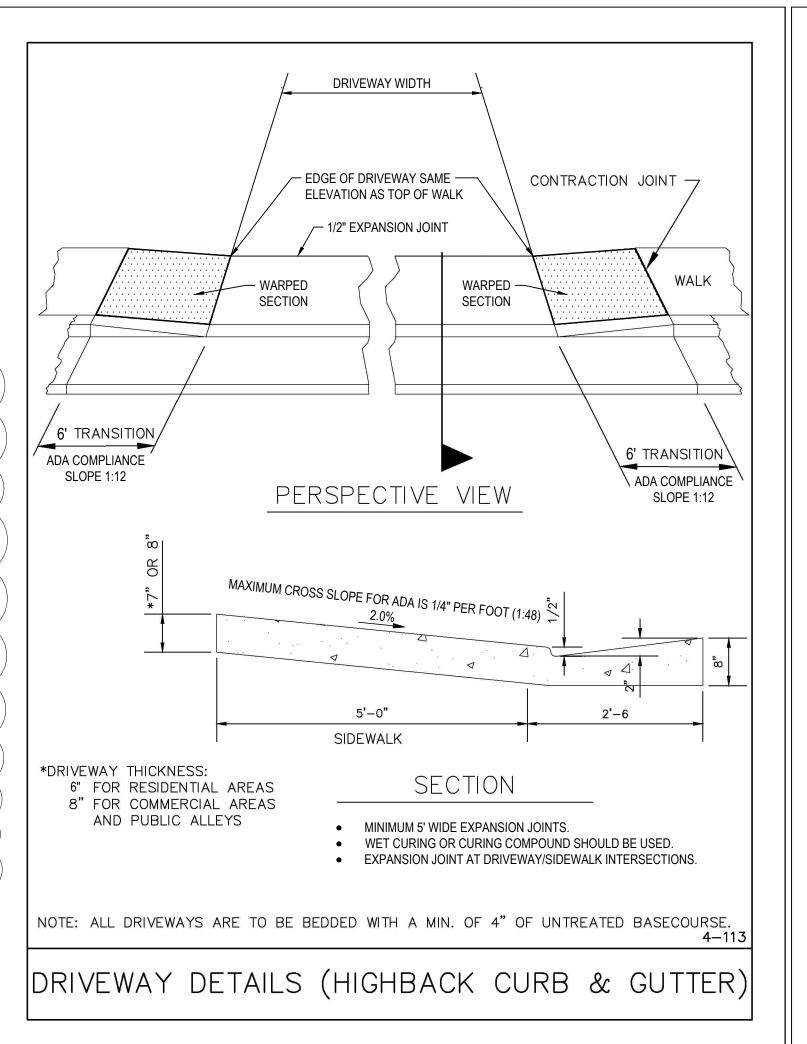
← 6" GRAVEL BASE COURSE

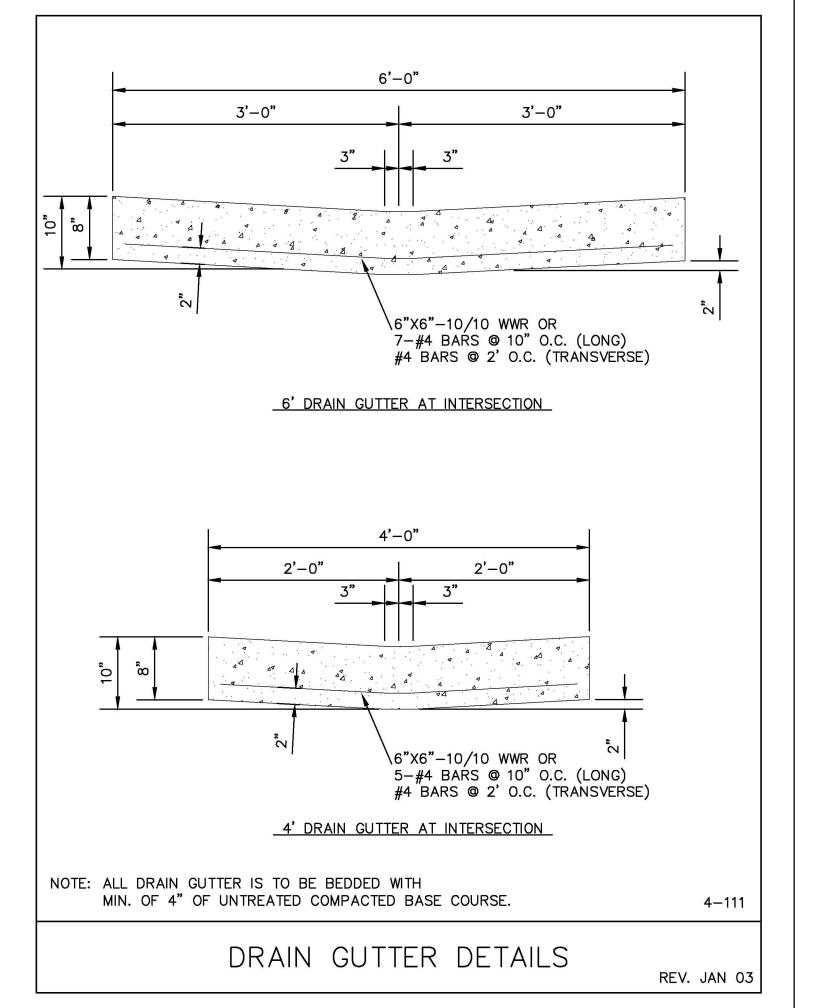
STORM POND DISCHARGE STRUCTURE -SEE DETAIL 1/C2.1 — POND TOP EL 4694.00 1' FREEBOARD 100-YR STORM VOLUME —— OVERFLOW TO POND OUTLET — 100-YR STORM VOLUME EL 4693.00 6" PERF PIPE UNDERDRAIN -TREATMENT SAND INSTALL MIRAFI 160N — GEOTEXTILE DRAINAGE FABRIC, OR EQUIVALENT - INSTALL AND ANCHOR POND LINER PER MANUFACTURERS INSTRUCTIONS ordinary manager INSTALL AQUAARMOR -- 6" LAYER OF GRAVEL BTL - 30 MIL IMPERVIOUS

BASE COURSE

6" x 2" ECCENTRIC REDUCER —

SEE DETAIL 1/C2.1





# GENERAL NOTES THE EXISTING CONTOURS SHOWN HEREON WERE OBTAINED VIA FIELD SURVEY COMPLETED IN MAY 2022.

THE SITE GENERALLY SLOPES NORTHWESTERLY TOWARDS THE PROPOSED

STORM RUNOFF GENERATED FROM THE PROPOSED DEVELOPMENT WILL BE

A. DOWNSPOUTS FROM ROOF AREAS WILL BE DIRECTED TO LANDSCAPE AREAS OR STREETS.

B. LANDSCAPE AREAS WILL SHEET FLOW TO SWALES AND COLLECTED BY AREA DRAINS AND CARRIED TO THE RETENTION BASIN THROUGH UNDERGROUND PIPING.

C. FRONT YARDS, DRIVEWAYS, AND PORCHES WILL FLOW TO STREETS WHERE CURB AND GUTTER WILL CHANNEL THE FLOW TO CURB INLETS AT INTERSECTIONS AND LOW POINTS. UNDERGROUND PIPING INTERCONNECTING THE INLETS WILL DISCHARGE RUNOFF INTO THE

PIPE AND RETENTION BASIN SIZING WAS PERFORMED USING THE RATIONAL METHOD (Q = C \* I \* A) WHERE:

A. Q = DESIGN FLOW IN CUBIC FEET PER SECOND (CFS)

C = RUNOFF COEFFICIENT WHICH REPRESENTS THE PERCENT OF PRECIPITATION THAT WILL

C. I = RAINFALL INTENSITY IN INCHES PER HOUR (IN/HR)

D. A = DRAINAGE AREA IN ACRES

THE 100 YEAR - 24 HOUR STORM EVENT WAS USED TO SIZE THE RETENTION

BASIN AS SHOWN HEREON IN TABLE A. NO INFILTRATION WAS UTILIZED WHEN DETERMINING THE VOLUME REQUIRED TO RETAIN THE DESIGN

STORM INTENSITIES USED IN THIS STUDY AREA ARE TAKEN FROM THE NATIONAL WEATHER SERVICE'S PRECIPITATION FREQUENCY DATA SERVER. INTENSITIES FOR THE 100 YEAR STORM ARE SHOWN IN TABLE A.

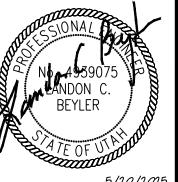
A COMPREHENSIVE STORM DRAINAGE STUDY WILL BE PROVIDED AS PART OF THE FINAL PLAT SUBMITTAL.

# CITY ENGINEER APPROVAL

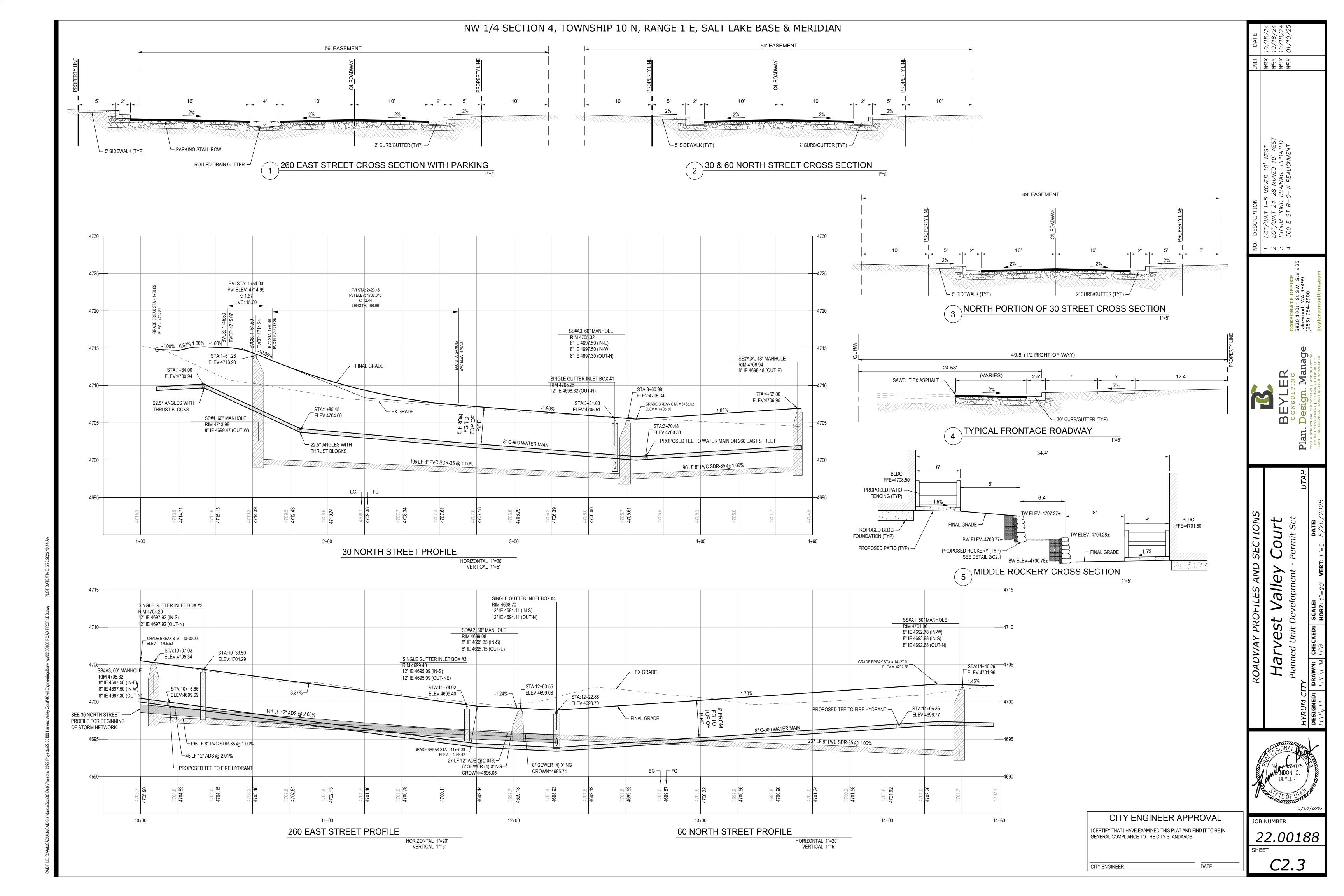
I CERTIFY THAT I HAVE EXAMINED THIS PLAT AND FIND IT TO BE IN GENERAL COMPLIANCE TO THE CITY STANDARDS

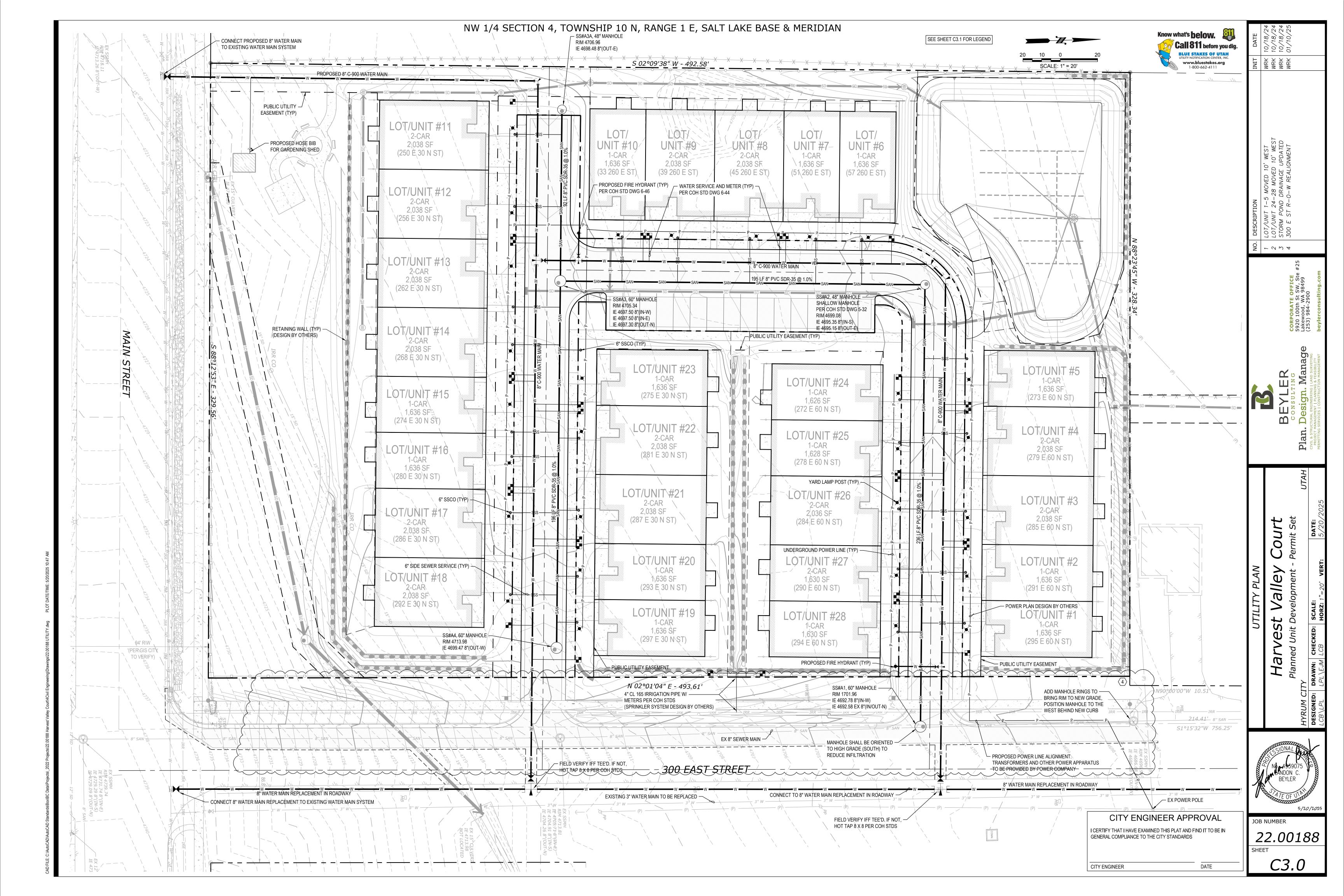
DATE CITY ENGINEER

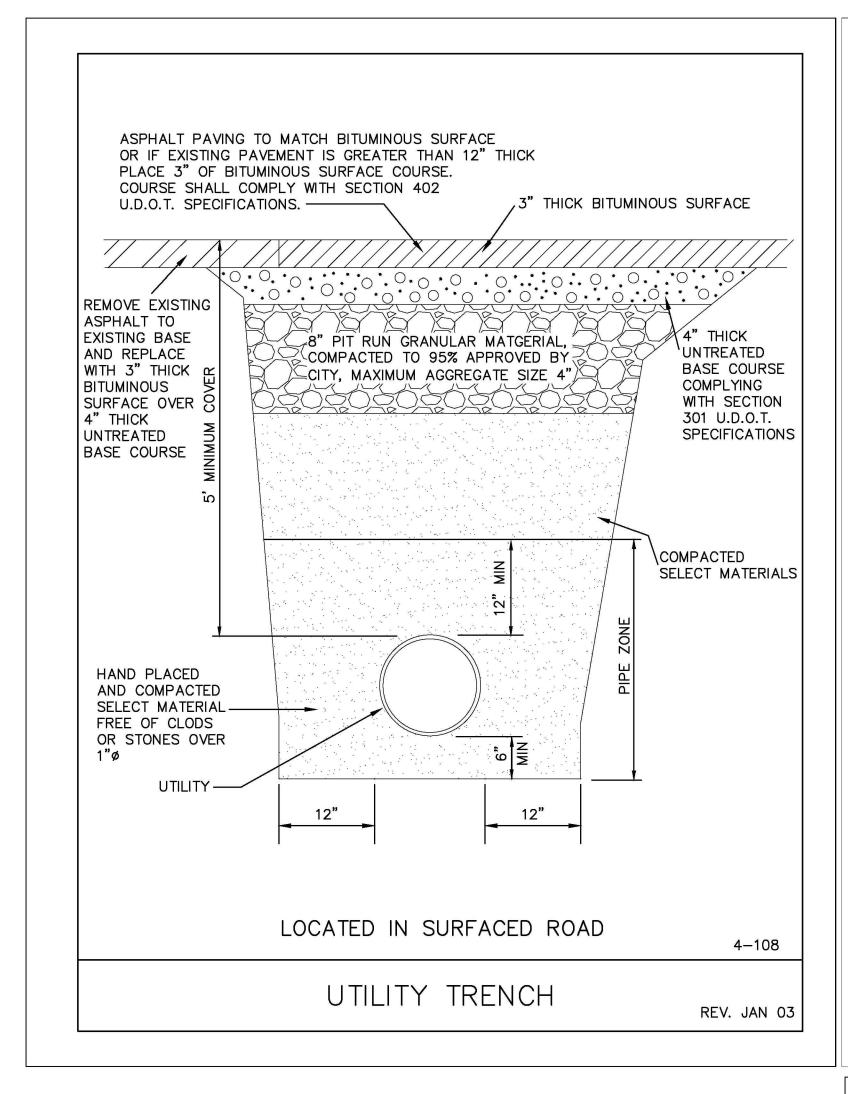
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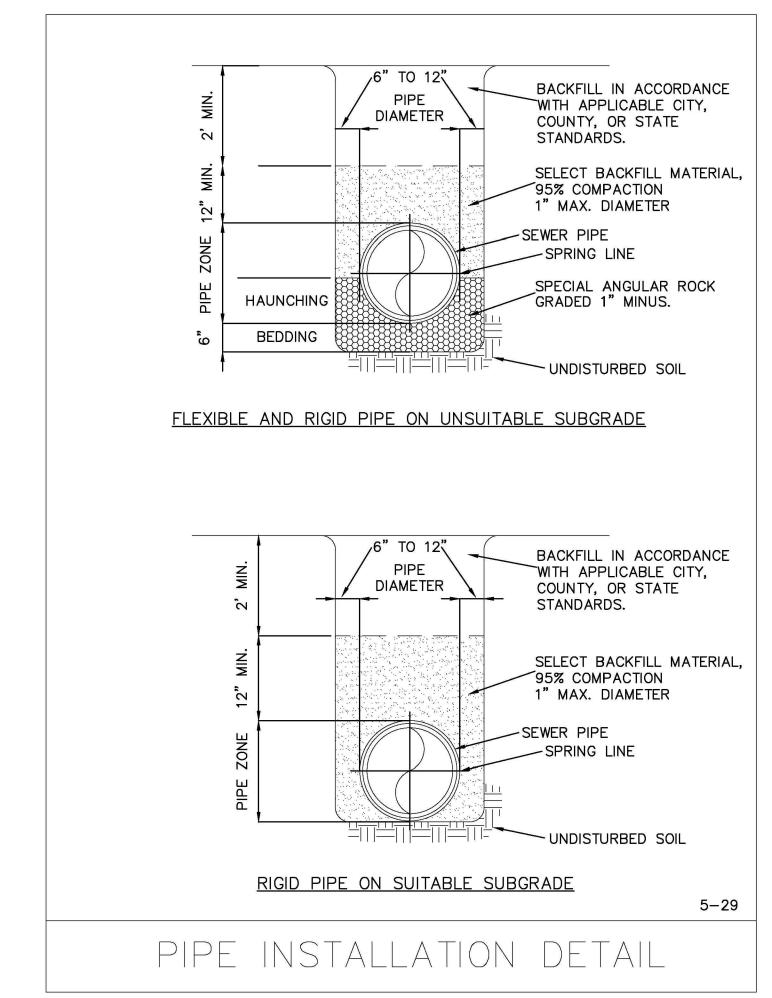


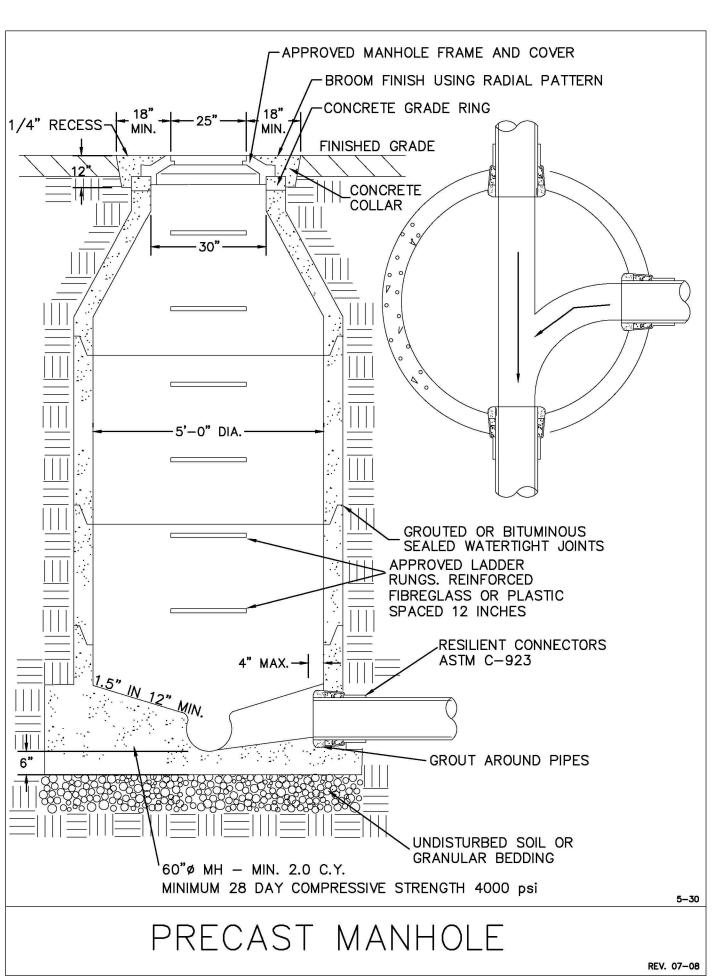
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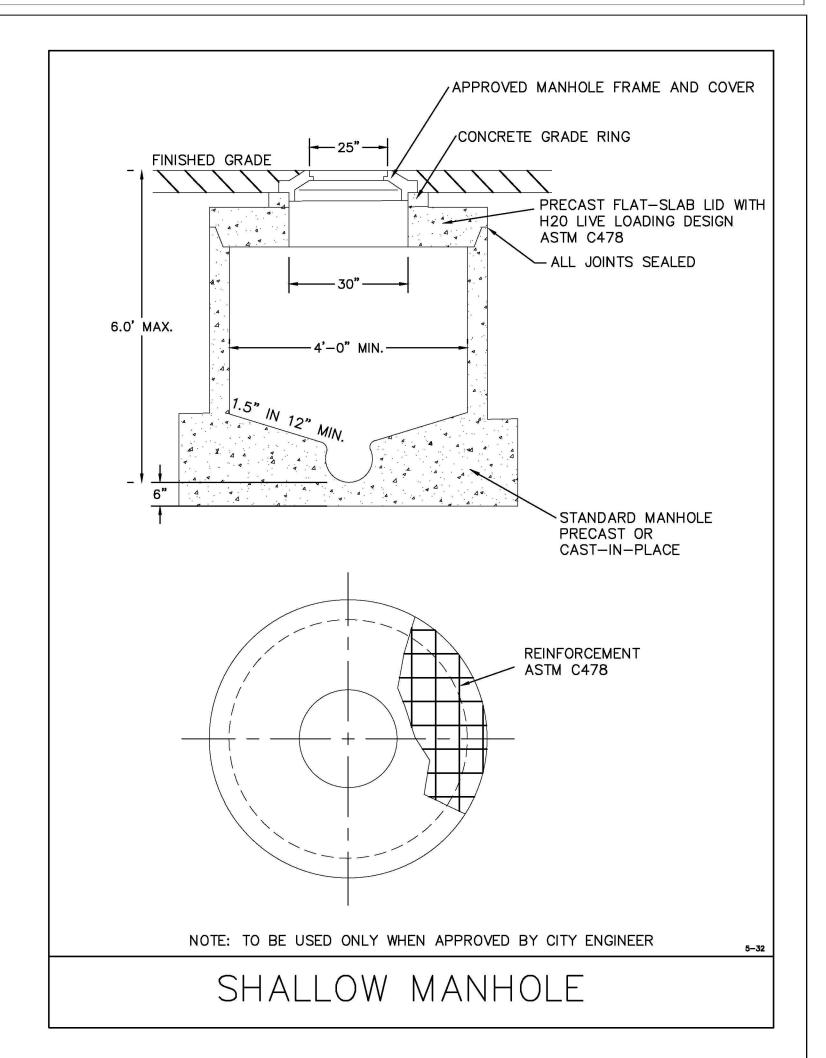


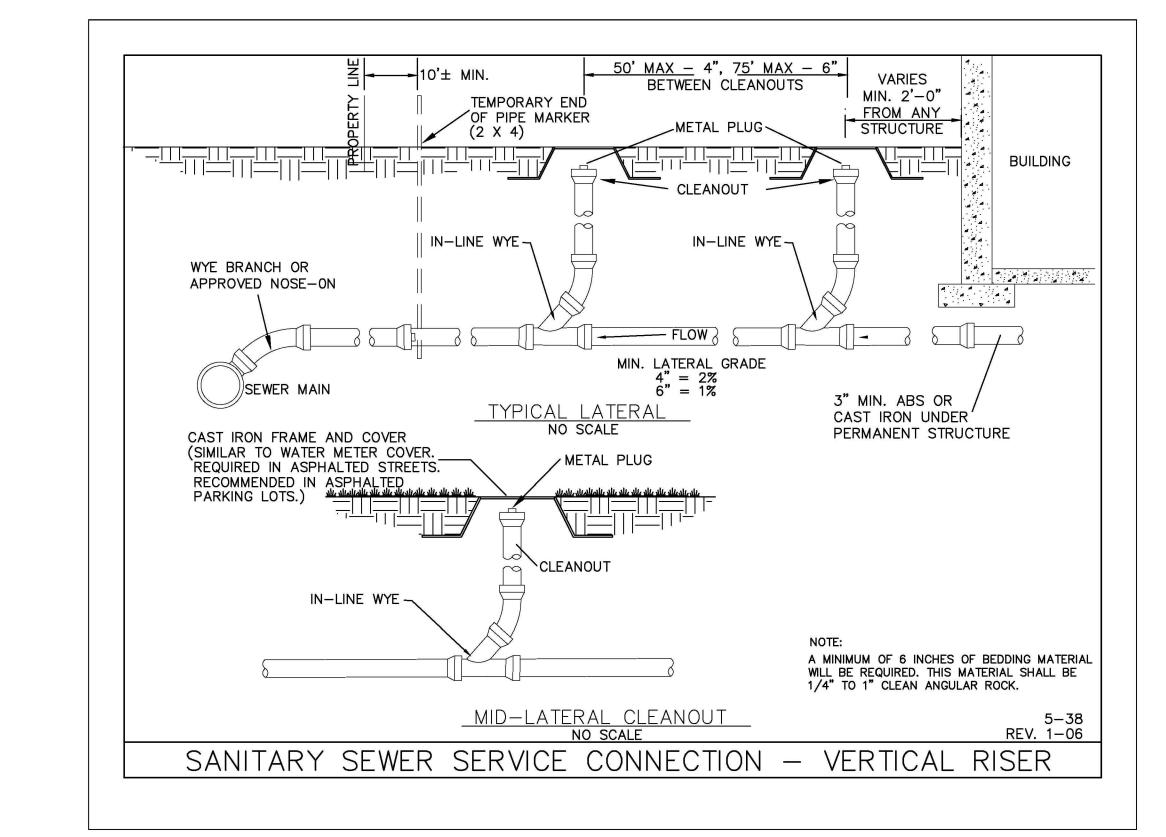










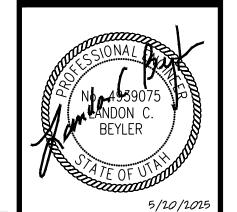


EXISTING	UTILITIES
	EX WATER LINE
	EX METER
$\bowtie$	EX GATE VALVE
	EX SEWER PIPE
<ul><li>∅</li></ul>	EX SANITARY MH/CO
SDSD	EX STORM DRAINAGE PIPE
	EX YD/CO/CB/CB 2/MH
>SD	STORM DRAINAGE CULVERT
<b>←</b> ──────	EX STREET LIGHT
———— (P)	EX OVERHEAD POWER LINE

LEGE	END
	EX PROPERTY BOUNDARY
	EX RIGHT-OF-WAY
	EX CENTERLINE
	PROPOSED UTILITY EASEMENT
	EX MAJOR CONTOURS
	EX MINOR CONTOURS
SAN—SAN—	SANITARY SEWER PIPE
	SANITARY SEWER LATERAL
• •	SANITARY MANHOLE / CLEANOUT
	WATER MAIN
	WATER SERVICE LATERAL
WM	METER
11.25° 22.5° 45° 90°	WATER BENDS
P — P — P — P	UNDERGROUND POWER LINE
*	YARD LIGHT

# **CONSTRUCTION NOTES**

- ALL CONSTRUCTION TO MEET HYRUM CITY STANDARDS AND SPECIFICATIONS AND SHALL ADHERE TO APPROVED SWPPP GUIDELINES. STANDARDS MAY BE DOWNLOADED FROM THE HYRUM CITY
- ALL WATER LINE SERVICES TO BE 1-INCH COPPER WITH 18 INCH X 48 INCH ABS OR PVC METER BARRELS. LIDS TO HAVE 2-INCH DIA HOLES. ALL METERS TO BE LOCATED WITHIN THE PARK STRIP. SEE HYRUM STANDARD DRAWING 6-44.
- 3. ALL WATER LINES TO HAVE A MINIMUM COVER OF 5 FEET. INSTALL FIRE HYDRANT PER HYRUM
- WATER MAIN TO BE 8-INCH CLASS 350 DI OR PVC C-900 DR18 THRUST BLOCK PER HYRUM STANDARD DRAWING 6-42.
- SEWER SERVICES SHALL BE 4-INCH SDR-35 PVC PER HYRUM STANDARD DRAWINGS 5-36 THROUGH 38
- 6. SEWER SERVICES TO EXTEND 10 FEET INSIDE LOT LINES WITH A 2x4 MARKING THE END.
- TOP ELEVATIONS ARE APPROXIMATE AND ALL MANHOLES ARE TO BE ADJUSTED TO FINISHED GRADE.
- MANHOLES ARE TO BE PER HYRUM STANDARD DRAWINGS 5-30, 5-31, 5-34, 5-35.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND FEES REQUIRED FOR THE COMPLETION OF THE WORK AND AS REQUIRED BY THE CITY.
- 10. ALL CATCH BASINS SHALL BE PER HYRUM STANDARD 4-115 AND 4-117. RECOMMEND WEEP HOLES IN BASIN TO PREVENT MOSQUITO/VECTOR ISSUES.
- 11. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING EXCAVATION.
- 12. SHUT-OFF VALVES FOR CULINARY WATER LINES ARE REQUIRED AND TO BE INSTALLED AT LOT LINES. THESE ARE CONTAINED IN THE WATER METER VAULT AND SHALL BE PLACED IN THE 10' PUE. NIPPLES FOR SERVICE SHALL BE STAINLESS STEEL.
- 13. THE VALVE FOR THE HYDRANTS SHALL BE LOCATED NEXT TO THE MAIN LINE.
- 14. CONCRETE COLLARS SHALL BE REQUIRED AROUND ALL WATER VALVES. ROUND FOR POTABLE WATER AND SQUARE FOR IRRIGATION.
- 15. CONTRACTOR TO FIELD VERIFY EXISTING SEWER INVERTS PRIOR TO BEGINNING CONSTRUCTION.
- 16. SEE HYRUM STANDARD DRAWING 4-110 FOR CURB AND GUTTER DETAIL.
- 17. SEE HYRUM STANDARD DRAWING 4-112 FOR HANDICAP RAMP DETAIL. CONTRACTOR TO VERIFY THE ADA COMPATIBILITY BEFORE POURING RAMPS.



CITY ENGINEER APPROVAL I CERTIFY THAT I HAVE EXAMINED THIS PLAT AND FIND IT TO BE IN

GENERAL COMPLIANCE TO THE CITY STANDARDS

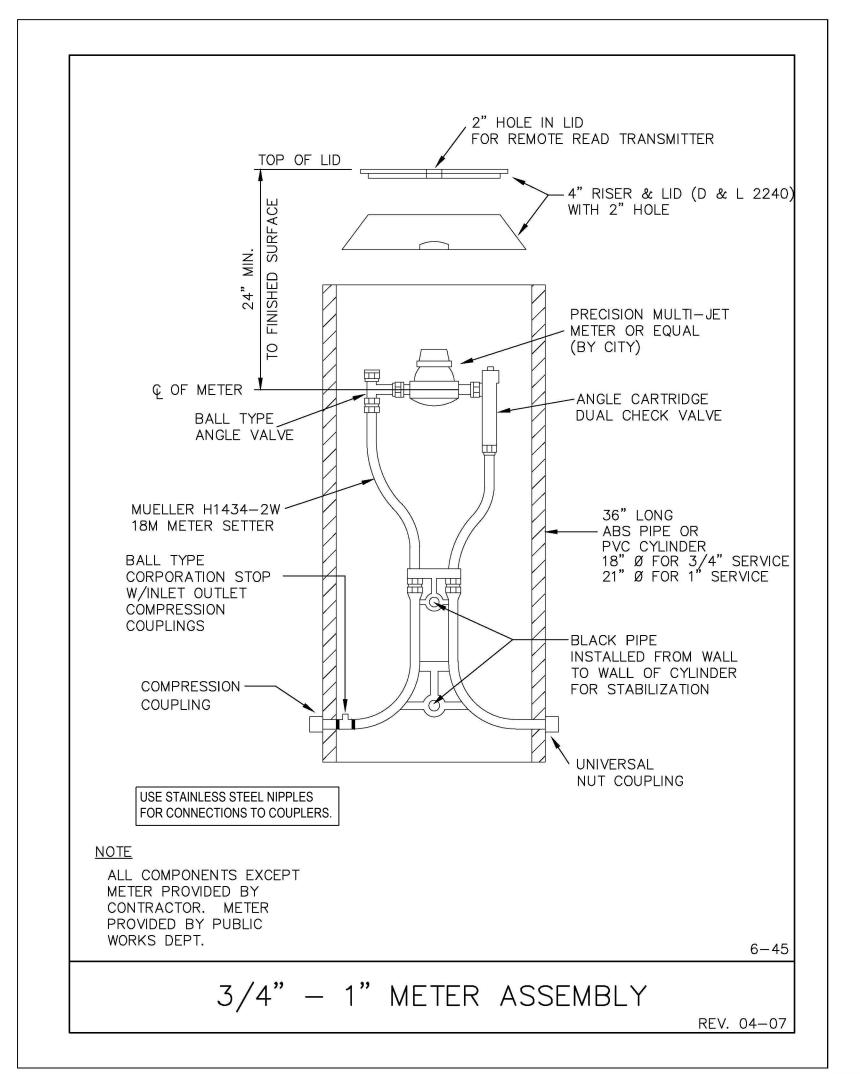
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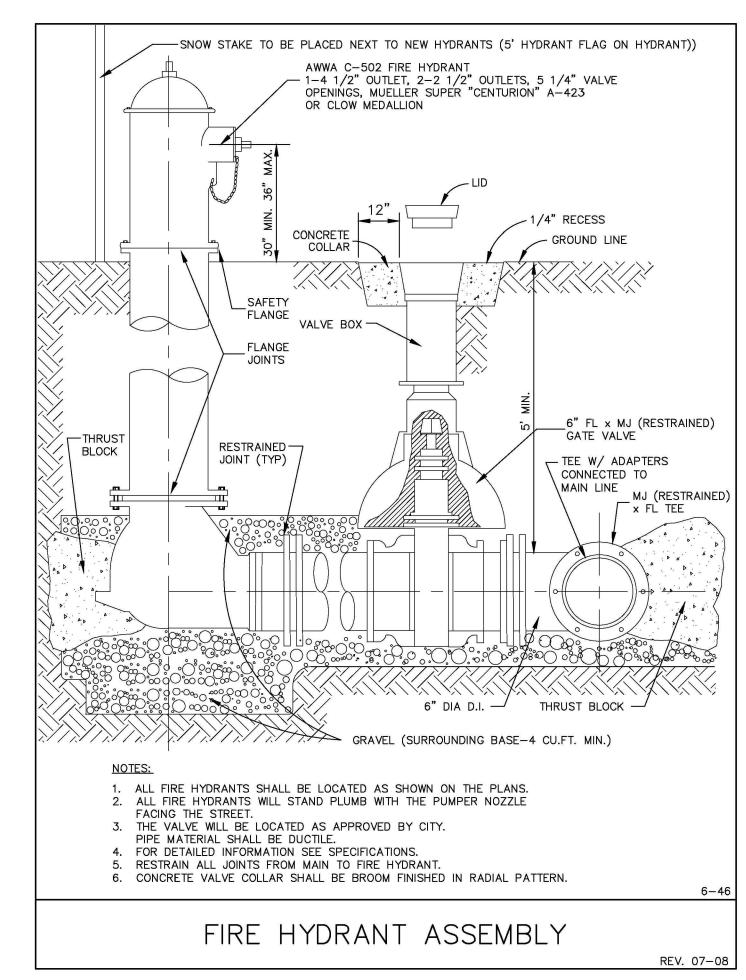
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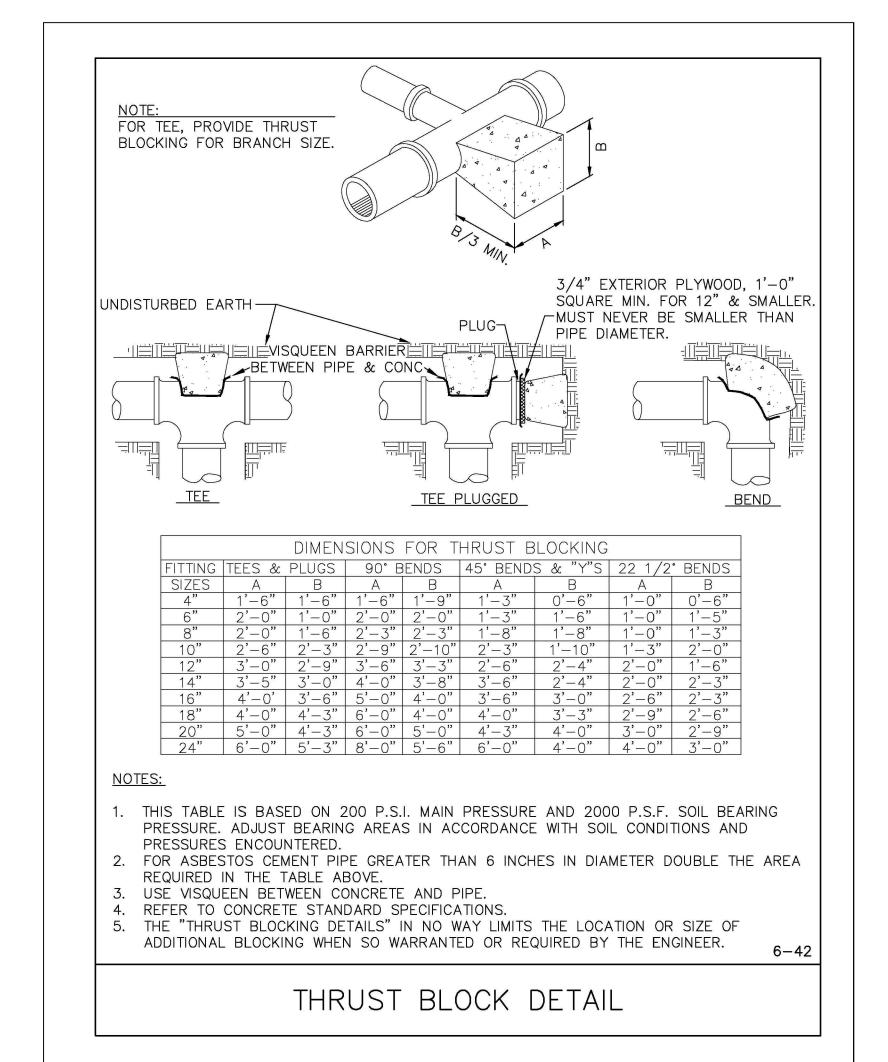
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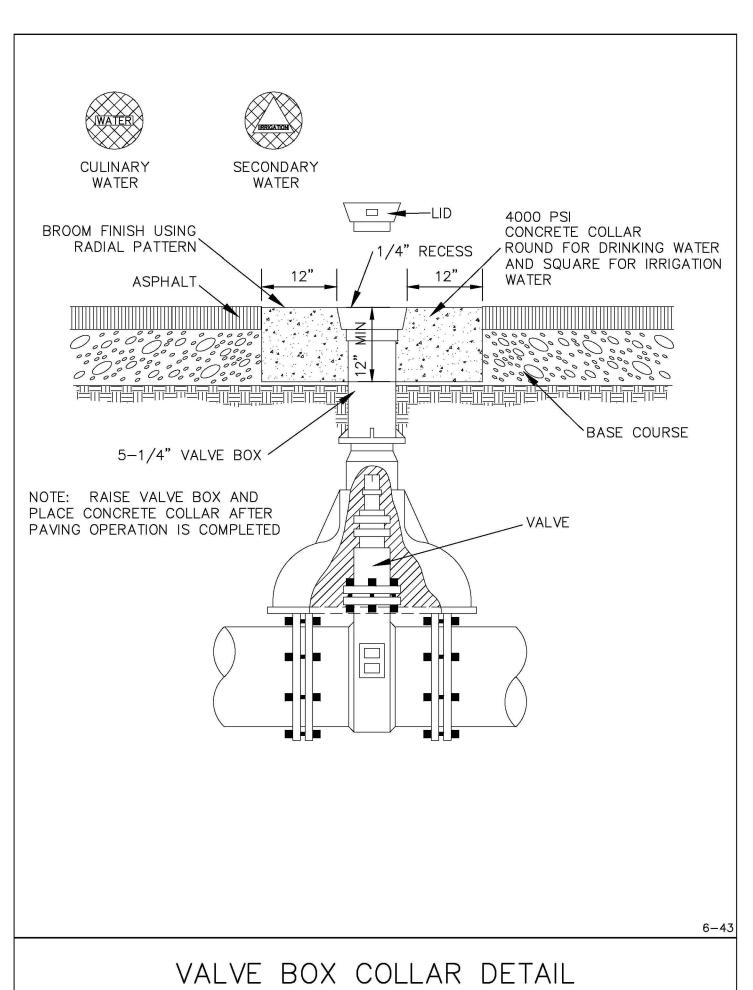
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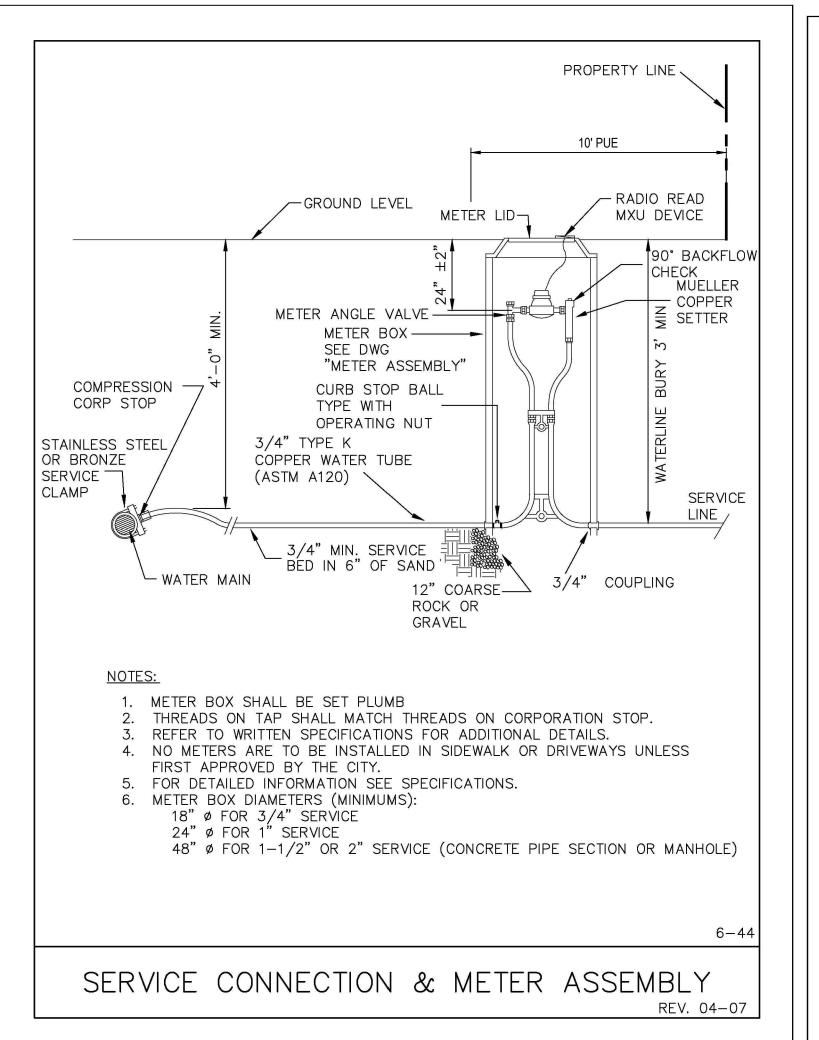


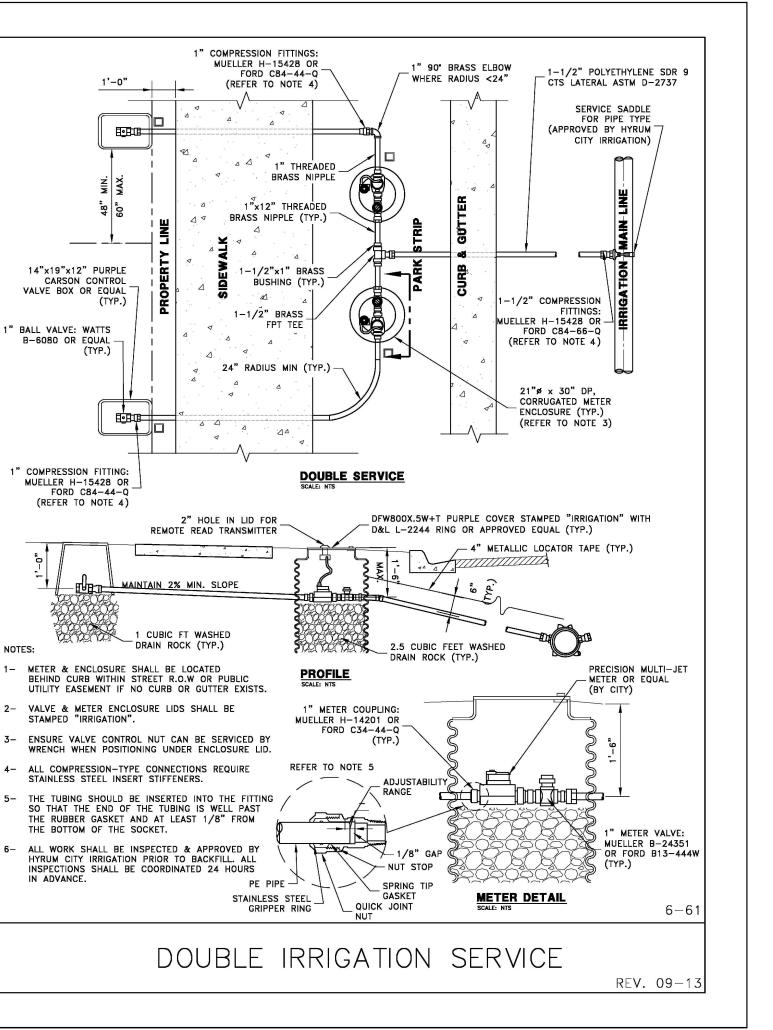


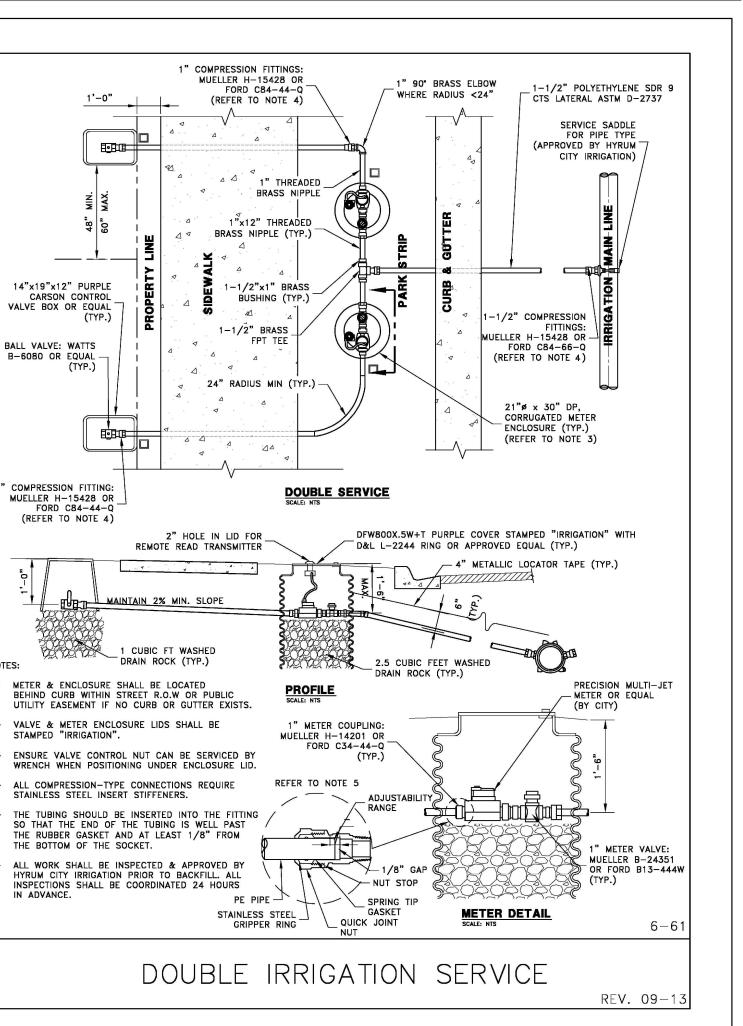




REV. 07-08







CITY ENGINEER APPROVAL I CERTIFY THAT I HAVE EXAMINED THIS PLAT AND FIND IT TO BE IN GENERAL COMPLIANCE TO THE CITY STANDARDS

CITY ENGINEER

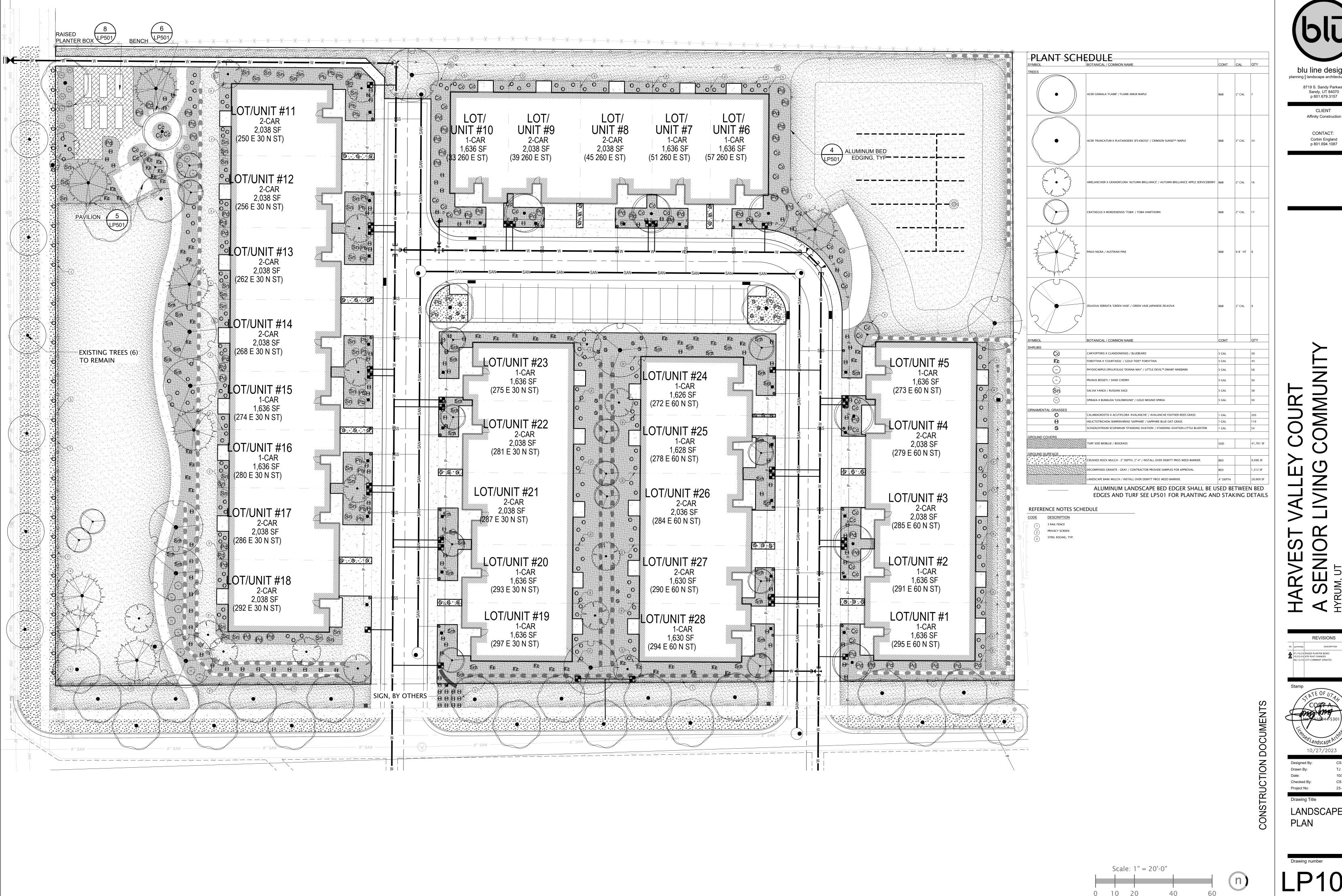
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p 801.679.3157 CLIENT

CONTACT: Corbin England p 801.694.1087

OMMON LIVING A SENIOR HYRUM, UT

REVISIONS

LANDSCAPE

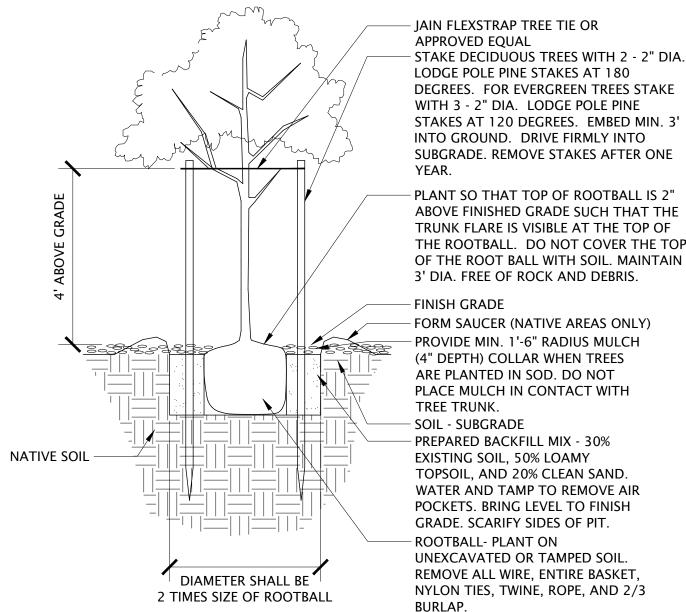
EDGES AND TURF SEE LP501 FOR PLANTING AND STAKING DETAILS

# REFERENCE NOTES SCHEDULE

- CODE DESCRIPTION
- PRIVACY SCREEN STEEL EDGING, TYP

# LANDSCAPE NOTES:

- 1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE LATEST AMERICAN PUBLIC WORKS ASSOCIATION (APWA) AND HYRUM CITY STANDARDS, SPECIFICATIONS, AND DETAILS
- 2. ALL PLANT MATERIAL SHALL BE GROWN IN CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THIS WORK AND SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1 UNLESS OTHERWISE NOTED. PROVIDE TREES OF NORMAL GROWTH AND UNIFORM HEIGHTS, ACCORDING TO SPECIES, WITH STRAIGHT TRUNKS AND WELL DEVELOPED LEADERS, LATERALS, AND ROOTS.
- EXISTING UTILITIES. EASEMENTS. AND STRUCTURES SHOWN ON THE DRAWINGS ARE IN ACCORDANCE WITH AVAILABLE RECORDS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION. SIZE. TYPE. AND STRUCTURES TO BE ENCOUNTERED ON THE PROJECT PRIOR TO ANY EXCAVATION AND CONSTRUCTION IN THE VICINITY OF THE EXISTING UTILITIES AND STRUCTURES.
- 4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL REQUIRED PERMITS, LICENSES, AND APPROVALS REQUIRED TO LEGALLY AND RESPONSIBLY COMPLETE THE WORK.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL, DISPOSAL, OR RELOCATION OF ALL OBSTRUCTIONS AND DEBRIS WITHIN THE DELINEATED CONSTRUCTION AREA PRIOR TO STARTING NEW CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ANY DEBRIS RESULTING FROM NEW CONSTRUCTION.
- DAMAGE TO ANY EXISTING IMPROVEMENTS OR TO ANY PORTION OF THE PROJECT'S SURROUNDING AREA DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID DAMAGE TO THE PROJECT'S SURROUNDING AREAS AND EXISTING FEATURES AND FACILITIES SCHEDULED TO REMAIN AS PART OF THE FINISHED CONSTRUCTION. REPAIR, REPLACEMENT, AND/OR REMOVAL AS DETERMINED BY OWNER SHALL BE AT THE CONTRACTOR'S EXPENSE.
- 7. THE CONTRACTOR SHALL CALL BLUE STAKES AT 1-800-662-4111 FOR UNDERGROUND UTILITY LOCATIONS AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION.
- 8. CONTRACTOR SHALL ROUGH GRADE TO WITHIN +/- A TENTH OF A FOOT FROM FINISH GRADE. ALL TURF GRASS AREAS SHALL BE GRADED 6" BELOW PROPOSED FINISH GRADE. SHRUB BEDS SHALL BE GRADED 15" BELOW PROPOSED FINISH GRADE.
- 9. ALL COMPACTED AREAS DEVELOPED THROUGH CONSTRUCTION WITHIN PROPOSED LANDSCAPE AREAS SHALL BE SCARIFIED AND LOOSENED TO A DEPTH OF 12" PRIOR TO LANDSCAPE AND IRRIGATION WORK BEGINNING.
- 10. INSTALL A MIN. OF 4" OF PREMIUM TOPSOIL FOR ALL TURF AREAS. INSTALL 12" OF PREMIUM TOPSOIL IN ALL SHRUB BEDS.
- 11. INSTALL A MIN. OF 4" OF BARK MULCH ON WEED BARRIER FABRIC IN ALL SHRUB BEDS UNLESS OTHERWISE SHOWN. APPLY PRE-EMERGENT TO ALL PLANTING BEDS BEFORE INSTALLING BARK MULCH. CONTRACTOR TO PROVIDE OWNER WITH BARK MULCH SAMPLES FOR APPROVAL PRIOR TO INSTALLATION.
- 12. NO PLANT SPECIES SUBSTITUTIONS WILL BE MADE WITHOUT APPROVAL OF OWNER.
- 13. ALL PLANT LAYOUT SHALL BE VERIFIED AND APPROVED IN FIELD BY OWNER PRIOR TO PLANTING. FAILURE TO RECEIVE APPROVAL MAY RESULT IN RE-WORK BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 14. CONTRACTOR SHALL VERIFY IN FIELD WITH OWNER ALL EXISTING TREES AND PLANT MATERIAL TO BE REMOVED PRIOR TO CONSTRUCTION AND CLEARING AND GRUBBING ACTIVITIES. CONTRACTOR SHALL REMOVE ALL RUSSIAN OLIVES FROM PROJECT AREA.
- 15. ALL AREAS WITHIN AND AFFECTED BY THIS PROJECT SHALL HAVE POSITIVE DRAINAGE. POSITIVE DRAINAGE SHALL BE PROVIDED TO DIRECT STORMWATER AWAY FROM ALL STRUCTURES.
- 16. ALL CLARIFICATIONS OF DISCREPANCIES BETWEEN THE DRAWINGS AND THE SITE SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER PRIOR TO BEGINNING OF WORK.
- 17. LAYOUT OF ALL EDGER SHALL BE REVIEWED AND APPROVED IN FIELD BY OWNER PRIOR TO INSTALLATION.

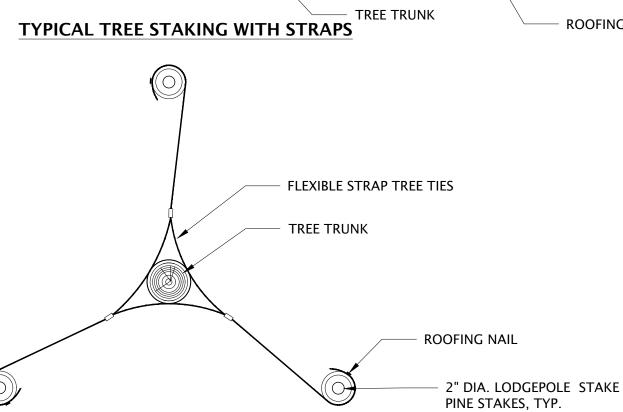


- SOIL - SUBGRADE PREPARED BACKFILL MIX - 30% EXISTING SOIL, 50% LOAMY TOPSOIL, AND 20% CLEAN SAND. WATER AND TAMP TO REMOVE AIR POCKETS. BRING LEVEL TO FINISH GRADE. SCARIFY SIDES OF PIT. - ROOTBALL- PLANT ON UNEXCAVATED OR TAMPED SOIL. REMOVE ALL WIRE, ENTIRE BASKET, NYLON TIES, TWINE, ROPE, AND 2/3

TREE PLANTING - FLEX STRAP

NOT TO SCALE

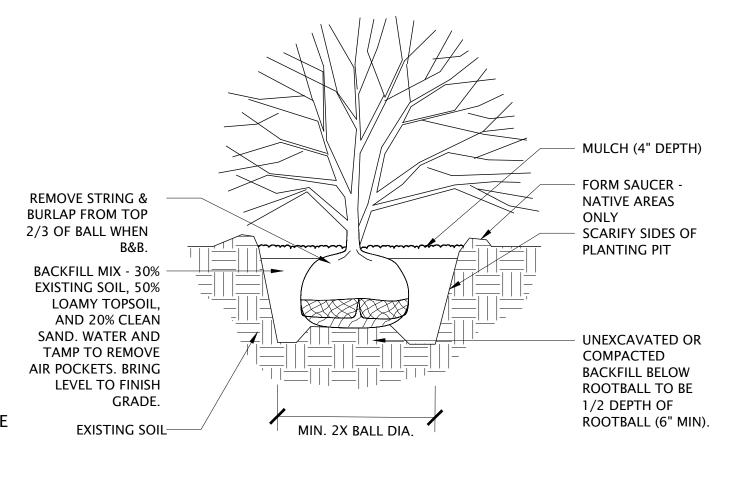
FLEXIBLE STRAP TREE TIE -ONE CONTINUOUS STRAP. LODGEPOLE STAKE PINE STAKES, TYP. TREE TRUNK **ROOFING NAIL** 



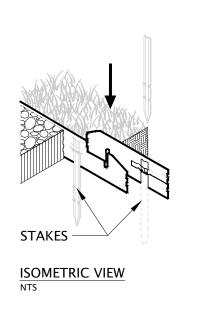
TREES IN WINDY CONDITIONS OR LARGER THAN 2" CAL

TREE STAKING - FLEX STRAPS

NOT TO SCALE



BLACK ALUMINUM EDGING. TOP OF EDGING TO BE MAXIMUM OF ½" ABOVE SURFACE MATERIAL 1" CRUSHED ROCK MULCH COMPACT GRADES ADJACENT TO EDGING TO AVOID SETTLING 12" ALUMINUM STAKES TO LOCK INTO PREFORMED LOOPS ON THE EDGING



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1. PLANT SO THAT TOP OF ROOT BALL IS 2" ABOVE FINISHED GRADE

SHRUB DETAIL NOT TO SCALE

ALUMINUM LANDSCAPE BED EDGING

P-23-162-05



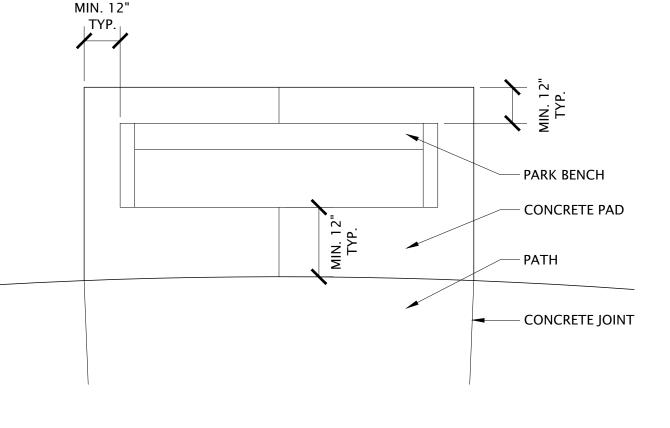
1. COLOR AS SELECTED BY OWNER.

MOUNT/FOOTINGS PER MANUFACTURER'S INSTRUCTIONS. 3. PAVILION SHALL BE SMITH STEELWORKS OR APPROVED EQUAL CONTACT: RUSSEL SMITH - 801.414.1724.



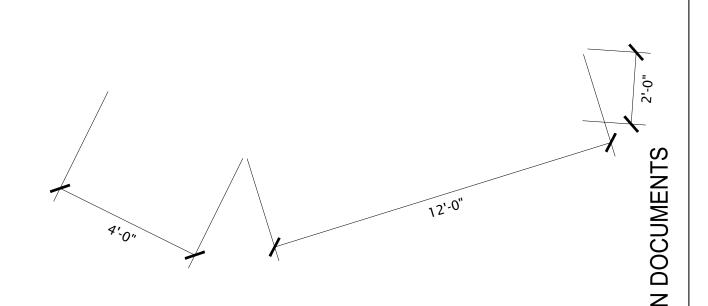
COLOR AS SELECTED BY OWNER.

- SURFACE MOUNT BENCH PER MANUFACTURER'S INSTRUCTIONS. BENCH SHALL BE SMITH STEELWORKS CLASSIC 6' BENCH OR APPROVED EQUAL,
- CONTACT: RUSSEL SMITH 801.414.1724.
- 4. SEE 7/LP501 FOR BENCH PAD DIMENSIONS



- EXACT BENCH DIMENSIONS VARY BASED ON SELECTED PRODUCT. ADJUST SIZE OF
- BENCH PAD AS NECESSARY TO MEET MINIMUM OFFSET REQUIREMENTS.
- 2. INSTALL BENCH PER MANUFACTURER'S RECOMMENDATIONS. 3. SEE 6/LP501 FOR BENCH MODEL AND MANUFACTURER.

**BENCH PAD** NOT TO SCALE



NOT TO SCALE

P-23-162-14

- IMAGE FOR REPRESENTATIVE PURPOSES ONLY. CONTRACTOR TO PURCHASE AND OR BUILD PLANTER BOX. OWNER TO APPROVE PRODUCT MODEL OR DESIGN PRIOR TO FABRICATION OR PURCHASE AND
- INSTALLATION. 3. EXACT PLANTER DIMENSIONS VARY BASED ON SELECTED PRODUCT. ADJUST SIZE AS
- NECESSARY TO MEET DESIGN INTENT.
- 4. INSTALL PLANTER BOX PER MANUFACTURER'S INSTRUCTIONS.
- 5. SEE ABOVE FOR DIMENSIONS.

RAISED PLANTER BOX

P-23-162-07

LANDSCAPE

& SITE

**DETAILS** 

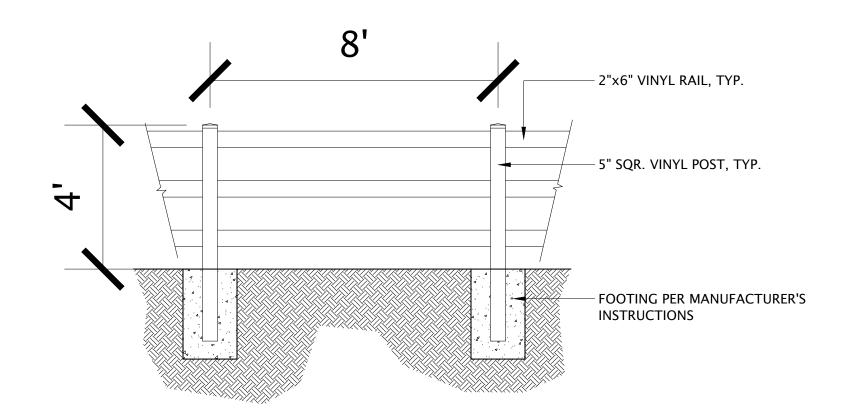
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**BENCH** NOT TO SCALE



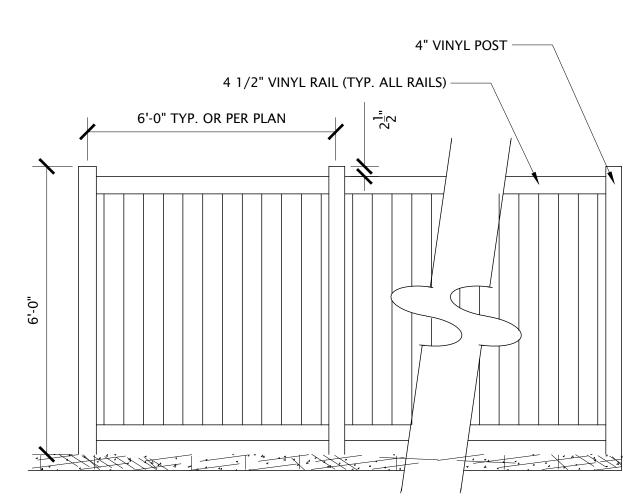


**EXAMPLE** 



NOTES:
1. ALL VINYL FENCING SHALL BE WHITE UNLESS OTHERWISE APPROVED.
2. CONTRACTOR SHALL SUBMIT PRODUCT SUBMITTAL FOR OWNER REVIEW AND APPROVAL PRIOR TO INSTALLATION.





NOTES:

1. 6' SOLID VINYL FENCE TO BE CONSTRUCTED PER CITY STANDARDS AND SPECIFICATIONS.

2. CONTRACTOR TO MATCH COLOR OF THREE RAIL FENCE, TYP.



NTS

P-23-162-22

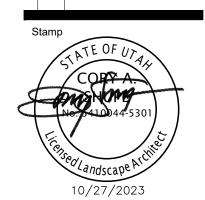
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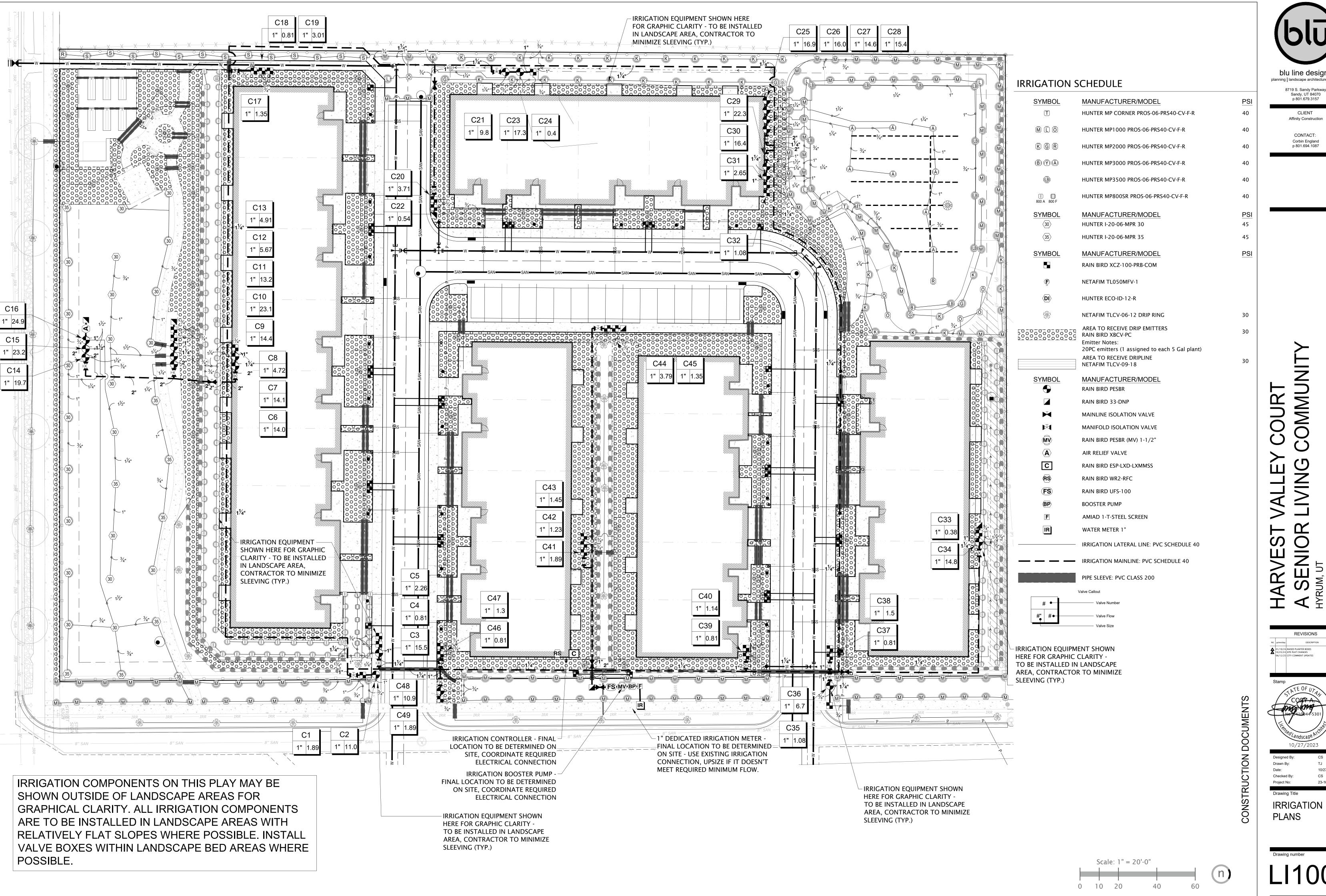
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LANDSCAPE & SITE

**DETAILS** 





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CONTACT: p 801.694.1087

**IRRIGATION PLANS** 

# **IRRIGATION SCHEDULE**

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>PSI</u>	DETAIL		TECHLINE PRESSURE COMPENSATING LANDSCAPE DRIPLINE 30 WITH CHECK VALVE. 0.9 GPH EMITTERS AT 18" O.C.	0 9	/LI503
T	HUNTER MP CORNER PROS-06-PRS40-CV-F-R TURF ROTATOR, 6IN. POP-UP WITH FACTORY INSTALLED	40	1/LI502		DRIPLINE LATERALS SPACED AT 18" APART, WITH EMITTERS  OFFSET FOR TRIANGULAR PATTERN. 17MM.		
T	CHECK VALVE, FLOGUARD, RECLAIMED BODY CAP, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40	40	1/11302	SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u></u>	DETAIL
MLO	BODY. T=TURQUOISE ADJ ARC 45-105.  HUNTER MP1000 PROS-06-PRS40-CV-F-R  TURF ROTATOR, 6IN. POP-UP WITH CHECK VALVE,  FLOGUARD, RECLAIMED BODY CAP, PRESSURE REGULATED  TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY.	40	1/LI502	•	RAIN BIRD PESBR 1 IN., 1-1/2IN. DURABLE CHLORINE-RESISTANT VALVES FOR RECLAIMED WATER APPLICATIONS. WITH SCRUBBER MECHANISM TECHNOLOGY, AND PURPLE FLOW CONTROL HANDLE.	8	3/L1502
K G R	M=MAROON ADJ ARC 90 TO 210, L=LIGHT BLUE 210 TO 270 ARC, O=OLIVE 360 ARC.  HUNTER MP2000 PROS-06-PRS40-CV-F-R TURF ROTATOR, 6IN. POP-UP WITH CHECK VALVE, FLOGUARD, RECLAIMED BODY CAP, PRESSURE REGULATED	40	1/LI502		RAIN BIRD 33-DNP 3/4IN. BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, LOCKING THERMOPLASTIC NON-POTABLE PURPLE RUBBER COVER, AND 2-PIECE BODY.	9	)/L1502
	TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. K=BLACK ADJ ARC 90-210, G=GREEN ADJ ARC 210-270, R=RED 360 ARC.				MAINLINE ISOLATION VALVE NIBCO T-113-K CLASS 125 BRONZE GATE SHUT OFF VALVE WITH CROSS HANDLE, SIZE PER LINE.	1	0/LI502
BYA	HUNTER MP3000 PROS-06-PRS40-CV-F-R TURF ROTATOR, 6IN. POP-UP WITH FACTORY INSTALLED CHECK VALVE, FLOGUARD, RECLAIMED BODY CAP, PRESSURE	40	1/LI502	×	MANIFOLD ISOLATION VALVE SPEARS 2122 TRUE UNION BALL VALVE, SIZE PER LINE.	1	1/LI502
	REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. B=BLUE ADJ ARC 90-210, Y=YELLOW ADJ ARC 210-270, A=GRAY 360 ARC.			<b>MV</b>	RAIN BIRD PESBR (MV) 1-1/2" 1-1/2IN. DURABLE CHLORINE-RESISTANT MASTER VALVES FOR RECLAIMED WATER APPLICATIONS. WITH SCRUBBER	1	2/LI502
B	HUNTER MP3500 PROS-06-PRS40-CV-F-R TURF ROTATOR, 6IN. POP-UP WITH FACTORY INSTALLED CHECK VALVE, FLOGUARD, RECLAIMED PURPLE CAP, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. LB=LIGHT BROWN ADJUSTABLE ARC, 90-210.	40	1/LI502	$\langle \mathbf{A} \rangle$	MECHANISM TECHNOLOGY, AND PURPLE FLOW CONTROL HANDLE.  AIR RELIEF VALVE  RAIN BIRD ESP-LXD-LXMMSS	1	/LI503
800 A 800 F	HUNTER MP800SR PROS-06-PRS40-CV-F-R TURF ROTATOR, 6IN. POP-UP WITH CHECK VALVE, FLOGUARD, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. ADJ=ORANGE AND GRAY (ARC 90-210), 360=LIME GREEN AND GRAY (ARC 360)	40	1/LI502	С	50 STATION, 2-WIRE DECODER BASED CONTROLLER IN STAINLESS STEEL WALL-MOUNTED CABINET. (1) ESP-LXD 50-STATION, INDOOR/OUTDOOR, PLASTIC WALL-MOUNT ENCLOSURE. INSTALL IN RAIN BIRD LXMMSS STAINLESS STEEL CABINET. SYSTEM REQUIREMENTS: RAIN BIRD FD-XXX-TURF FIELD DECODERS, PAIGE ELECTRIC CABLE	2	:/LI503
SYMBOL (30)	MANUFACTURER/MODEL/DESCRIPTION  HUNTER I-20-06-MPR 30 TURF ROTOR, 6IN. POP-UP. ADJUSTABLE AND FULL CIRCLE.	<u>PSI</u> 45	DETAIL		P7072D & RAIN BIRD WC20 DRY SPLICES ONLY. GROUND SYSTEM W/ (X) LSP-1 TURF LINE SURGE PROTECTORS IN RAIN BIRD ROUND VALVE BOXES. INSTALL PER MANUFACTURERS RECOMMENDATIONS.		
<b>\(\)</b> 35\(\)	PLASTIC RISER. DRAIN CHECK VALVE. MPR NOZZLE.  HUNTER I-20-06-MPR 35  TURF ROTOR, 6IN. POP-UP. ADJUSTABLE AND FULL CIRCLE. PLASTIC RISER. DRAIN CHECK VALVE. MPR NOZZLE.	45		RS	RAIN BIRD WR2-RFC WIRELESS RAIN AND FREEZE SENSOR COMBO, INCLUDES 1 RECEIVER AND 1 RAIN/FREEZE SENSOR TRANSMITTER.	3	/LI503
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION  RAIN BIRD XCZ-100-PRB-COM	<u>PSI</u>	DETAIL	FS	RAIN BIRD UFS-100 1IN. ULTRASONIC FLOW SENSORS, WITH GLASS FILLED NYLON BODY. OPERATING RANGE .3 GPM-50 GPM. SIZE FOR	4	l/LI503
	WIDE FLOW DRIP CONTROL KIT FOR COMMERCIAL APPLICATIONS. 1IN. BALL VALVE WITH 1IN. PESB VALVE AND 1IN. PRESSURE REGULATING 40PSI QUICK-CHECK BASKET		2/LI502	<b>BP</b>	FLOW NOT ACCORDING TO PIPE SIZE.  BOOSTER PUMP RAIN BIRD ACLP05EAC		
Ē	FILTER. 0.3 GPM-20 GPM  NETAFIM TL050MFV-1  AUTOMATIC FLUSH VALVE, 1/2IN. MALE PIPE THREAD.		3/LI502	F	AMIAD 1-T-STEEL SCREEN AMIAD 1IN. T MANUAL PLASTIC FILTER, NPT THREAD, STEEL SCREEN ELEMENT. ENGINEERED-PLASTIC MATERIAL, MAXIMUM WORKING PRESSURE 150PSI.	5	/LI503
<b>(DI</b> )	HUNTER ECO-ID-12-R ECO-ID: 1/2IN. FPT CONNECTION WITH 15 PSI - 100 PSI OPERATING PRESSURE. SPECIFY WITH HUNTER SJ SWING JOINT. RECLAIMED.		4/LI502	IR	WATER METER 1"  — IRRIGATION LATERAL LINE: PVC SCHEDULE 40	7	/LI503
( <u>(</u> )	NETAFIM TLCV-06-12 DRIP RING	30	5/LI502		IRRIGATION MAINLINE: PVC SCHEDULE 40	7	//LI503
	AREA TO RECEIVE DRIP EMITTERS RAIN BIRD XBCV-PC SINGLE OUTLET, PRESSURE COMPENSATING DRIP EMITTERS. FLOW RATES OF 0.5 GPH=BLUE, 1.0 GPH=BLACK, AND 2.0 GPH=RED. COMES WITH A SELF-PIERCING BARB INLET X BARB OUTLET. WITH CHECK VALVE. Emitter Notes: 20PC emitters (1 assigned to each 5 Gal plant)	30	6/LI502		PIPE SLEEVE: PVC CLASS 200 TYPICAL PIPE SLEEVE FOR IRRIGATION PIPE. PIPE SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR		

**VALVE SCHEDULE** 

AREA TO RECEIVE DRIPLINE

RAIN BIRD XCZ-100-PRB-COM 1"

NUMBER	MODEL	SIZE	TYPE	<u>GPM</u>	DESIGN PSI	<u>PSI</u>	PSI @ PO
C1	RAIN BIRD XCZ-100-PRB-COM	1"	DRIP RING	1.89	30	43.2	55.5
C2	RAIN BIRD PESBR	1"	TURF ROTARY	11.02	40	45.9	
C3	RAIN BIRD PESBR	1"	TURF ROTARY	15.48	40	45.0	56.7
C4	RAIN BIRD XCZ-100-PRB-COM	1"	DRIP RING	0.81	30	37.9	49.6
C5	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIP EMITTERS	2.26	30	36.3	48.0
C6	RAIN BIRD PESBR	1"	TURF ROTARY	13.98	40	48.3	66.9
C7	RAIN BIRD PESBR	1"	TURF ROTARY	14.14	40	46.3	65.0
C8	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIP EMITTERS	4.72	30	39.6	58.3
C9	RAIN BIRD PESBR	1"	TURF ROTOR	14.39	45	50.4	69.0
C10	RAIN BIRD PESBR	1"	TURF ROTOR	23.12	45	52.7	71.3
C11	RAIN BIRD PESBR	1"	TURF ROTOR	13.24	45	50.5	69.2
C12	RAIN BIRD XCZ-100-PRB-COM	1"	DRIP RING	5.67	30	46.2	
C13	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIP EMITTERS	4.91	30	40.1	58.8
C14	RAIN BIRD PESBR	1"	TURF ROTOR	19.68	45	54.7	73.4
C15	RAIN BIRD PESBR	1"	TURF ROTOR	23.16	45	53.1	71.8
C16	RAIN BIRD PESBR	1"	TURF ROTOR	24.92	45	52.8	71.5
C17	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIPLINE	1.35	30	40.6	60.0
C18	RAIN BIRD XCZ-100-PRB-COM	1"	DRIP RING	0.81	30	37.0	56.4
C19	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIP EMITTERS	3.01	30	37.5	56.8
C20	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIP EMITTERS	3.71	30	37.3	55.8
C21	RAIN BIRD PESBR	1"	TURF ROTARY	9.8	40	44.9	
C22	RAIN BIRD XCZ-100-PRB-COM	1"	DRIP RING	0.54	30	36.2	54.7
C23	RAIN BIRD PESBR	1"	TURF ROTARY	17.31	40	46.4	
C24	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIP EMITTERS	0.4	30	37.4	56.4
C25	RAIN BIRD PESBR	1"	TURF ROTARY	16.87	40	43.0	62.4
C26	RAIN BIRD PESBR	1"	TURF ROTARY	16.04	40	42.6	61.9
C27	RAIN BIRD PESBR	1"	TURF ROTARY	14.56	40	40.9	60.3
C28	RAIN BIRD PESBR	1"	TURF ROTARY	15.38	40	43.1	62.5
C29	RAIN BIRD PESBR	1"	TURF ROTARY	22.33	40	46.6	66.0
C30	RAIN BIRD PESBR	1"	TURF ROTARY	16.42	40	43.5	63.0
C31	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIP EMITTERS	2.65	30	37.2	56.6
C32	RAIN BIRD XCZ-100-PRB-COM	1"	DRIP RING	1.08	30	37.0	56.4
C33	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIP EMITTERS	0.38	30	37.0	50.7
C34	RAIN BIRD PESBR	1"	TURF ROTARY	14.84	40	43.5	57.3
C35	RAIN BIRD XCZ-100-PRB-COM	1"	DRIP RING	1.08	30	36.6	48.9
C36	RAIN BIRD PESBR	1"	TURF ROTARY	6.7	40	42.4	40.2
C37	RAIN BIRD XCZ-100-PRB-COM	1"	DRIP RING	0.81	30	37.0	49.3
C38	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIP EMITTERS	1.5	30	36.8	49
C39	RAIN BIRD XCZ-100-PRB-COM	1"	DRIP RING	0.81	30	37.0	47.0
C40	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIP EMITTERS	1.14	30	37.1	47.0
C41	RAIN BIRD XCZ-100-PRB-COM	1"	DRIP RING	1.89	30	37.5	44.0
C42	RAIN BIRD XCZ-100-PRB-COM	]"	AREA FOR DRIP EMITTERS	1.23	30	39.2	45.7
C43	RAIN BIRD XCZ-100-PRB-COM	]" 1"	AREA FOR DRIP EMITTERS	1.45	30	37.9	44.5
C44	RAIN BIRD XCZ-100-PRB-COM	]" 1"	AREA FOR DRIP EMITTERS	3.79	30	39.0	46.5
C45	RAIN BIRD XCZ-100-PRB-COM	]" 1"	DRIP RING	1.35	30	38.8	46.3
C46	RAIN BIRD XCZ-100-PRB-COM	]" 1"	DRIP RING	0.81	30	36.6	46.5
C47	RAIN BIRD XCZ-100-PRB-COM	1" 1"	AREA FOR DRIP EMITTERS	1.3	30	37.1	47.0
C48	RAIN BIRD PESBR	- "	TURF ROTARY	10.87	40	44.2	46.3

DRIP RING

1.89 30

36.2 46.2

# CRITICAL ANALYSIS

Generated:	2025-06-06 16:21
P.O.C. NUMBER: 01	
Water Source Information:	
FLOW AVAILABLE	
Water Meter Size:	2"
Flow Available	120 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	45 PSI
Elevation Change:	5.00 ft
Service Line Size:	3"
Length of Service Line:	20 ft
Booster Pump pressure provided:	50 PSI
Pressure Available:	92 PSI
DESIGN ANALYSIS	
Maximum Multi-valve Flow:	35 GPM
Flow Available at POC:	120 GPM
Residual Flow Available:	85 GPM
Critical Station:	C13
Design Pressure:	45 PSI
Friction Loss:	3.1 PSI
Fittings Loss:	0.31 PSI
Elevation Loss:	3.46 PSI
Loss through Valve:	2.86 PSI
Pressure Req. at Critical Station:	54.7 PSI
Loss for Fittings:	1.28 PSI
Loss for Main Line:	12.8 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	0 PSI
Loss for Master Valve:	3.55 PSI
Loss for Water Meter:	1 PSI
Critical Station Pressure at POC:	73.4 PSI
Pressure Available:	92 PSI
Residual Pressure Available:	18.6 PSI

# GENERAL IRRIGATION NOTES:

1. THIS DRAWING IS DIAGRAMMATIC AND IS INTENDED TO CONVEY THE GENERAL LAYOUT OF IRRIGATION SYSTEM COMPONENTS. ALL IRRIGATION EQUIPMENT SHALL BE INSTALLED IN PLANTING AREAS WHEREVER POSSIBLE. LOCATE MAINLINE AND VALVES NEAR WALKS WHERE FEASIBLE.

2. THE CONTRACTOR SHALL VERIFY THE AVAILABLE WATER PRESSURE AT THE SITE PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES BETWEEN THE WATER PRESSURE SHOWN ON THE DRAWINGS AND ACTUAL PRESSURE READINGS AT THE POINT OF CONNECTION TO THE LANDSCAPE ARCHITECT. WATER PRESSURE AT THE POINT OF CONNECTION IS EXPECTED TO BE A MINIMUM OF 75 PSI. IN THE EVENT THAT PRESSURE DIFFERENCES ARE NOT REPORTED PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.

3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL STRUCTURES, SITE IMPROVEMENTS, WALKS, UTILITIES, AND GRADE CHANGES. COORDINATE LAYOUT OF THE IRRIGATION SYSTEM WITH OTHER TRADES SO THAT CONSTRUCTION CAN CONTINUE IN A NORMAL SEQUENCE OF EVENTS. ADJUSTMENTS MAY BE NECESSARY TO MAINTAIN FULL COVERAGE DEPENDING ON ACTUAL SITE CONDITIONS. ANY SIGNIFICANT CHANGES WILL REQUIRE WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO PLACEMENT. ALL MODIFICATIONS SHALL BE RECORDED ON 'AS-BUILT' DRAWINGS.
4. DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM WHEN IT IS APPARENT IN THE FIELD THAT UNKNOWN OBSTRUCTIONS OR GRADING DIFFERENCES MAY NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.

5. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT SITE CONDITIONS AND EXISTING IRRIGATION SYSTEM (IF ANY). IN THE EVENT THAT THE CONTRACTOR DAMAGES, DISPLACES OR OTHERWISE CAUSES OTHER TRADES WORK TO BE REINSTALLED, THE CONTRACTOR SHALL BE

RESPONSIBLE FOR RESTORING TO ORIGINAL CONDITION AT HIS OWN EXPENSE.

6. THE CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS AND VALVES FOR OPTIMUM PERFORMANCE. INSTALL HEADS WITH THE APPROPRIATE ARC AND RADIUS FOR THE AREA TO BE COVERED. ADJUST NOZZLES TO ELIMINATE OVERSPRAY ONTO WALKS, BUILDINGS, ETC.

7. IRRIGATION CONTROLLER(S) SHALL BE GROUNDED PER ESTABLISHED ASIC GUIDELINES.
8. IRRIGATION CONTROL WIRES SHALL BE COLOR CODED WIRE FOR DIRECT BURIAL. COMMON, HOT, & SPARE WIRES SHALL BE 14 AWG (WHITE, RED & YELLOW RESPECTIVELY). FOR CONTROL WIRE RUNS EXCEEDING 3000 FEET OR COMMON WIRE RUNS EXCEEDING 1500 FEET, USE 12 AWG WIRE. CONTRACTOR SHALL RUN 1 DEDICATED SPARE WIRE 'HOMERUN' FROM CONTROLLER TO TERMINUS OF <u>EACH</u> WIRE LEG. WHERE REQUIRED, COMMUNICATION WIRE TO FLOW SENSOR SHALL BE PAIGE ELECTRIC PE-39-3 CABLE. ALL WIRE SPLICES TO BE LOCATED IN VALVE BOX. ALL WIRE CONNECTIONS SHALL BE 3M DBRY.

9. CONTRACTOR SHALL INSTALL IN-LINE ANTI-DRAIN VALVES AS WARRANTED BY SITE CONDITIONS TO ALLEVIATE LOW HEAD DRAINAGE.

10. ALL MAINLINES, LATERAL LINES, AND CONTROL WIRES UNDER PAVING SHALL BE INSTALLED IN SEPARATE SLEEVES.

11. ALL MAINLINE AND LATERAL LINE PIPE SHALL BE SCHEDULE 40 PVC THROUGH 3" PIPE 4" TO 6"

11. ALL MAINLINE AND LATERAL LINE PIPE SHALL BE SCHEDULE 40 PVC THROUGH 3" PIPE. 4" TO 6" PIPE SHALL BE CLASS 200 PVC. ALL LATERAL LINE FITTINGS SHALL BE SCHEDULE 40 PVC UNLESS OTHERWISE NOTED. ALL MAINLINE FITTINGS UNDER 3" SHALL BE SCHEDULE 80 PVC. MAINLINE FITTINGS 3" AND LARGER SHALL BE HARCO DUCTILE IRON, RESTRAIN PER MANUFACTURER'S RECOMMENDATIONS.

12. CONTRACTOR SHALL USE WELD-ON P-70 PRIMER AND 711 LOW VOC CEMENT FOR ALL SOLVENT WELDED JOINTS.

13. ALL LINES SHALL SLOPE TO DRAIN. ADD MANUAL DRAINS AT ALL MAINLINE LOW POINTS AS NECESSARY FOR COMPLETE DRAINAGE OF THE ENTIRE SYSTEM. INDICATE ALL DRAIN LOCATIONS ON 'AS-BUILT' DRAWINGS.

14. ALL VALVE BOXES AND LIDS IN ROCK MULCH AREAS ARE TO BE TAN IN COLOR. VALVE BOXES AND LIDS IN BARK MULCH AND LAWN AREAS ARE TO BE STANDARD GREEN. ALIGN VALVE BOXES PARALLEL WITH EDGE OF PAVEMENT/PLANTING BEDS. WHERE FEASIBLE, LOCATE THE EDGE OF VALVE BOX 12"-18" FROM EDGE OF PAVEMENT.

15. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE. HEADS SHALL BE LOCATED 1" AWAY FROM AND 1/4" BELOW ADJACENT CURBS, WALLS, WALKS, AND MOWSTRIPS.

16. DRIP DISTRIBUTION TUBING TO BE BURIED BELOW MULCH AND STAKED AT MIN. 6' O.C. DRIP FITTINGS SHALL BE BARBED INSERT TYPE FITTINGS, COMPRESSION TYPE FITTINGS WILL NOT BE ACCEPTED.

EMITTERS SHALL BE LOCATED ON UPHILL SIDE OF PLANTS. INSTALL DRIP FLUSH VALVE AT LOW POINT OF EACH DRIP ZONE AND AT THE END DRIP LINES.

17. GUARANTEE: ALL WORK SHALL BE GUARANTEED FOR ONE YEAR FROM DATE OF ACCEPTANCE AGAINST ALL DEFECTS IN MATERIAL, EQUIPMENT, AND WORKMANSHIP. GUARANTEE SHALL COVER REPAIR

AGAINST ALL DEFECTS IN MATERIAL, EQUIPMENT, AND WORKMANSHIP. GUARANTEE SHALL COVER REPAIR OF DAMAGE TO ANY PART OF THE PREMISES RESULTING FROM LEAKS OR OTHER DEFECTS IN MATERIAL, EQUIPMENT, OR WORKMANSHIP TO THE SATISFACTION OF THE OWNER. REPAIRS, IF REQUIRED, SHALL BE DONE PROMPTLY AND AT NO ADDITIONAL COST TO THE OWNER.

18. SEE DETAILS FOR ADDITIONAL INFORMATION. ALL IRRIGATION EQUIPMENT NOT OTHERWISE DETAILED

18. SEE DETAILS FOR ADDITIONAL INFORMATION. ALL IRRIGATION EQUIPMENT NOT OTHERWISE DETAILE SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.

19. IRRIGATION DESIGN IS BASED UPON A MINIMUM OPERATING PRESSURE OF 45 PSI AT METER WITH A MAXIMUM DEMAND OF 35 GPM AT THE POINT OF CONNECTION. IRRIGATION WATER VELOCITY NOT TO EXCEED 5 FEET PER SECOND.

# SUPPLEMENTAL 2-WIRE IRRIGATION NOTES:

DECODER

TOP OF VALVE BOX.

1. ALL VALVES SHALL BE CONNECTED TO SYSTEM VIA DECODERS.

2. CONTRACTOR SHALL LAY OUT DECODERS AS REQUIRED BY SYSTEM. NO TWO VALVES ARE TO SHARE THE SAME ADDRESS, ALL VALVES MUST BE WITHIN 10' OF THE DECODER TO WHICH THEY ARE CONNECTED.

3. MASTER VALVE TO BE CONNECTED VIA SINGLE STATION DECODER. FLOW SENSOR TO BE WIRED DIRECTLY WITH

COMMUNICATION WIRE.

4. DECODERS SHALL BE MOUNTED BY BRACKET TO INSIDE WALL OF VALVE BOX WITH DECODER ID ORIENTED TOWARD THE

MODELS: VALVE DECODERS: FD-101TURF, FD-102TURF, FD-202TURF, FD-401TURF, & FD-601TURF SENSOR DECODER: SD-211TURF

SURGE PROTECTION AND GROUNDING:

1. SURGE PROTECTION AND GROUNDING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AT A MINIMUM OF EVERY 500' OR 5 DECODERS, WHICHEVER IS LESS. ADDITIONALLY, SURGE PROTECTION AND GROUNDING IS TO BE INSTALLED ALONG THE 2-WIRE PATH AT THE CONTROLLER AND AT THE END OF EACH 2-WIRE SPUR LONGER THAN 25'.

2. REFER TO MANUFACTURER FOR INSTALLATION GUIDELINES. ALL GROUNDING RODS SHALL ALLOW FOR 10 OHMS OF RESISTANCE OR LESS.

MODELS: LSP1TURF

VIRE:

1. INSTALL 2-WIRE PATH IN 1" CONDUIT.

2. WIRE FROM CONTROLLER TO DECODERS SHALL BE RAIN BIRD WIRE (PAIGE ELECTRIC P7354D) PER MANUFACTURER'S RECOMMENDATIONS. SUPPLEMENTAL WIRE RUNS FROM DECODER TO VALVE(S) (NOT TO EXCEED 10' IN LENGTH) SHALL BE 14 AWG DIRECT BURIAL WIRE.

3. FOR TROUBLESHOOTING PURPOSES, A STAR CONFIGURATION IS TO BE USED FOR WIRING AS OPPOSED TO A LOOPED CONFIGURATION.

4. 3M DECODER CABLE FUSE DEVICE (DCFD) TO BE INSTALLED AT ALL SPLITS IN THE 2-WIRE PATH WHERE MORE THAN TWO RUNS OF WEATHERTRAK WIRE COME TOGETHER. INSTALL DCFD AND EXTRA CABLE IN STANDARD SIZE VALVE BOX.
5. EACH 2-WIRE BRANCH IS TO BE EITHER A DIFFERENT COLOR OF WIRE, OR MARKED WITH COLORED TAPE AT ALL SPLICES FOR TROUBLESHOOTING PURPOSES.

6. 3' OF EXTRA CABLE LENGTH TO BE INSTALLED AT ALL SPLICES.



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HARVEST VALLEY COURT A SENIOR LIVING COMMUNITY

REVISIONS

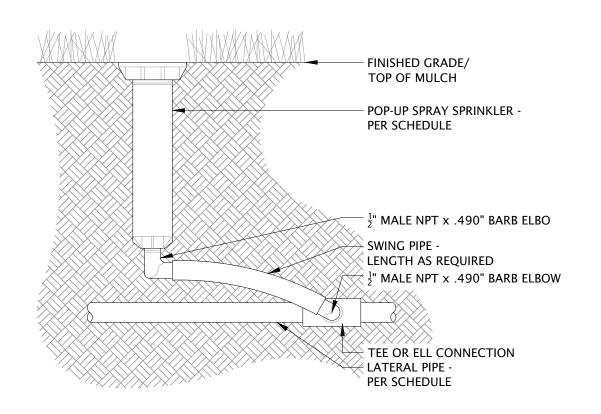
DETAILS

**IRRIGATION** 

DOCUM

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- 2. AFTER FLUSHING HEADS, REGRADE AND COMPACT AS NEEDED TO RETURN TO FINISH GRADE CONDITION.
- 3. SPRINKLERS SHALL BE MIN. 12" FROM ANY WALLS OR BUILDINGS. 4. ADJUST ALL SPRINKLER HEADS TO AVOID OVERSPRAY ON ANY WALLS, HARDSCAPE, ETC.
- 5. **DO NOT** USE SEALANT OR TAPE ON THREADED INSERTS TO SPRINKLER HEAD.



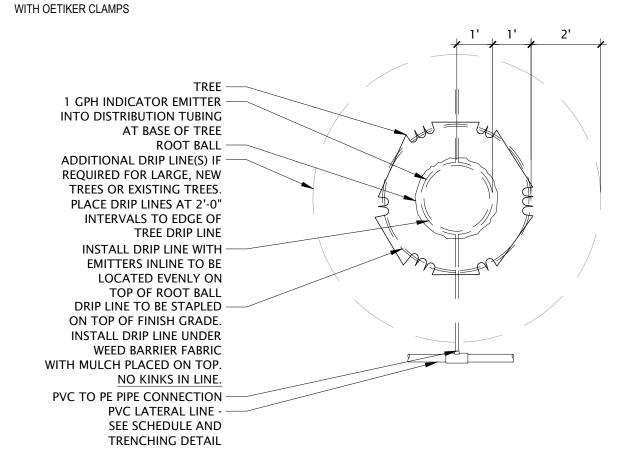
POP-UP SPRAY - SWING PIPE ASSEMBLY NOT TO SCALE

1. FOR EVERGREEN TREES, LOCATE INDICATOR EMITTERS ON OUTSIDE OF OUTER DRIP RING. 2. ALL FITTINGS TO IN-LINE DRIP TUBING TO BE COMPRESSION FITTINGS. IF MALE INSERTS ARE NEEDED, INSTALL

P-BWIC-HEA-02

P-BWIC-DRI-23

MAXIMUM LENGTH.



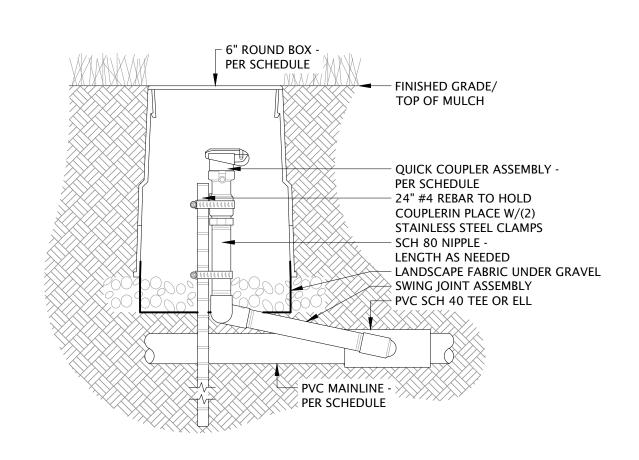
TREE DRIP RINGS - PLAN VIEW (PLANTER AREAS)

EACH QUICK COUPLER SHALL BE IN A SEPARATE VALVE BOX. PROVIDE (1) QUICK COUPLER KEY FOR EACH QUICK COUPLER VALVE

NOT TO SCALE

NOT TO SCALE

3. ALL THREADED CONNECTIONS SHALL BE COATED WITH RECTORSEAL PIPE SEALANT OR EQUIVALENT



6 NOT TO SCALE

1. COMPACT SOIL AROUND GATE VALVE ASSEMBLY TO THE SAME DENSITY AS ADJACENT, UNDISTURBED

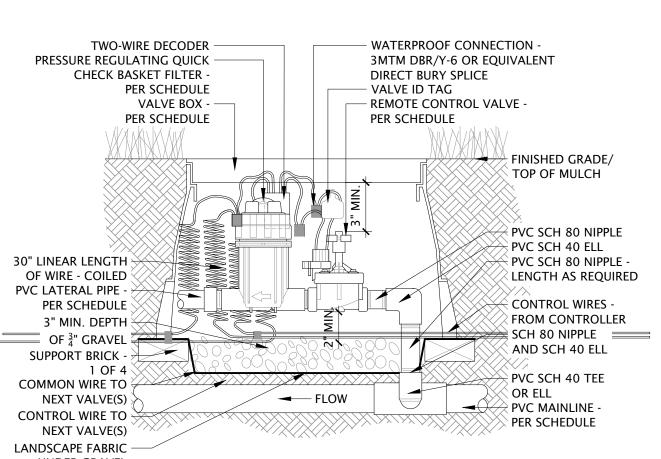
2. DO NOT REST VALVE BOX OR ACCESS SLEEVE ON MAINLINE OR LATERAL LINE.

3. PROVIDE GATE VALVE KEY - LENGTH AS NEEDED.

- ROUND BOX PER SCHEDULE -TOP OF BOX TO BE FLUSH WITH FINISHED GRADE — FINISHED GRADE 6" CL 160 PVC ACCESS SLEEVE -LENGTH AS REQUIRED GATE VALVE -PER SCHEDULE 3/4" GRAVEL SUMP -BRICK SUPPORTS FILL IN AND AROUND (2) MIN. **BOX AS REQUIRED -**EXTEND 6" BEYOND EDGE OF BOX THREADED MALE PVC MAINLINE PER SCHEDULE ADAPTER

SEAL WIRE ENDS WITH WATERPROOF SPLICING MATERIAL. 2. 30" MIN. LENGTH OF PATH WIRE, COIL AND PLACE IN BOX AT WATERPROOF CONNECTION TO DECODER AND SOLENOID. 3. INSTALL DECODERS PER MANUFACTURER'S SPECIFICATIONS FOR WIRING AND GROUNDING.

4. MOUNT DECODERS TO SIDE OF VALVE BOX WITH STAINLESS STEEL SCREWS AND LABEL WITH VALVE ID.



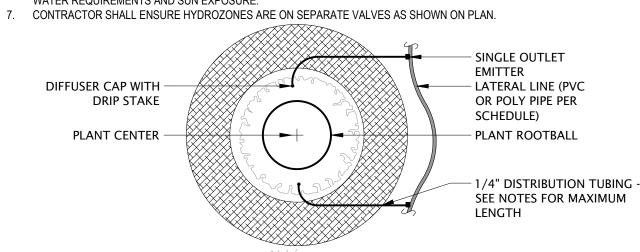
UNDER GRAVEL DRIP VALVE ASSEMBLY W/PRS BASKET (2-WIRE)

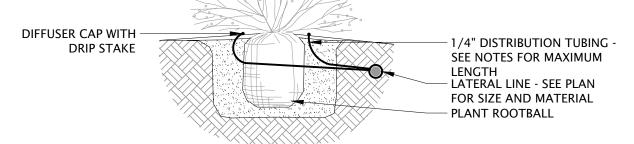
NOT TO SCALE P-BWIC-DRI-21

1. TYPICAL MAXIMUM LENGTH OF ONE DISTRIBUTION TUBE SHALL BE 8', SEE NOTES FOR JOB SPECIFIC

EMITTERS SHALL BE EQUALLY SPACED AROUND ROOTBALL. FLUSH ALL LINES THOROUGHLY PRIOR TO EMITTER INSTALLATION. 4. IF PLANTING ON A 4:1 SLOPE OR STEEPER, INSTALL EMITTERS ON THE UPHILL SIDE OF PLANT.

EMITTERS SHALL BE SELF-FLUSHING AND PRESSURE COMPENSATING UNLESS NOTED OTHERWISE. 6. DRIP VALVE ZONES (HYDROZONES) ARE DESIGNED TO ACCOUNT FOR DIFFERENCES IN PLANT WATER REQUIREMENTS AND SUN EXPOSURE.





SHRUB EMITTER PLACEMENT P-BWIC-DRI-04

1. COMPACT SOIL AROUND BALL VALVE ASSEMBLY TO THE SAME DENSITY AS ADJACENT, UNDISTURBED SUBGRADE. 2. DO NOT REST VALVE BOX OR ACCESS SLEEVE ON MAINLINE OR LATERAL LINE. 3. ALL THREADED CONNECTIONS SHALL BE COATED WITH TEFLON TAPE.

SHRUB EMITTER PLACEMENT NEAR BUILDING

DRIPLINE FLUSH VALVE - AUTOMATIC

1. ALL IRRIGATION TO BE A MINIMUM OF 5' FROM BUILDING, OR AS DEFINED WITHIN THE GEOTECH REPORT,

ROUND BOX & COVER -

TOP OF BOX TO BE

FINISHED GRADE/

TOP OF MULCH

P-BWIC-DRI-10

EXTERIOR OF BUILDING

- EMISSION POINT

DIFFUSER CAP W/

DRIP STAKE (TYP.)

— FINISH GRADE

 $\hat{\ }$  Lateral line per schedule - -

SEE NOTE FOR PLACEMENT OF

PIPE AND EMITTERS RELATIVE

TO BUILDING FOUNDATION

— 1/4" DISTRIBUTION TUBING

P-BWIC-DRI-05

SERVICE LINE

PER IRRIGATION SCHEDULE -

FLUSH WITH FINISH GRADE

AUTOMATIC -

BRICK SUPPORT (2)

FLUSH VALVE -

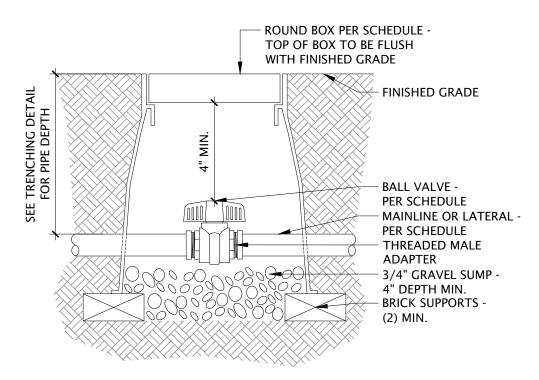
PER SCHEDULE

3/4" GRAVEL SUMP -

NOT TO SCALE

WHICHEVER IS GREATER.

1 CUBIC FOOT



VALVE BOX -

PER SCHEDULE

MASTER VALVE ASSEMBLY

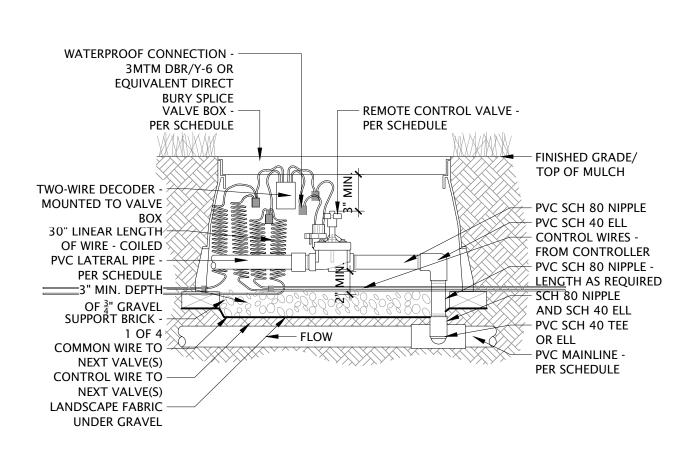
- FINISH GRADE - MULCH - PER PLAN OPERATION INDICATOR PER SCHEDULE - PVC LATERAL LINE -PER PLAN - SCH 40 PVC TEE - FLEX TUBING

DRIPLINE OPERATION INDICATOR (HUNTER)

NOT TO SCALE P-BWIC-DRI-17

1. SEAL WIRE ENDS WITH WATERPROOF SPLICING MATERIAL 2. 30" MIN. LENGTH OF PATH WIRE COILED AND PLACE IN BOX AT WATERPROOF CONNECTION TO DECODER AND SOLENOID.

3. INSTALL DECODERS PER MANUFACTURER'S SPECIFICATIONS FOR WIRING AND GROUNDING.



TURF VALVE ASSEMBLY (2-WIRE)

NOT TO SCALE P-BWIC-VAL-15

- MOISTURE RESISTANT CONNECTOR

EQUAL. TO BE INSTALLED IN VERTICAL

FINISHED GRADE/ TOP OF MULCH

SCHEDULE

WIRES TO

(2) MIN.

8" DEPTH

CONTROLLER

— BRICK SUPPORTS ·

- 3/4" GRAVEL SUMP

P-BWIC-VAL-05

30" LINEAR LENGTH

FLANGED CONNECTION

OF WIRE - COILED

— MASTER VALVE PER

TO BE 3M DBR/Y-6 OR APPROVED

POSITION AS SHOWN

REVISIONS

Ž

blu line designs

planning | landscape architecture | design

8719 S. Sandy Parkway

CLIENT

Affinity Construction

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DOCUMENTS

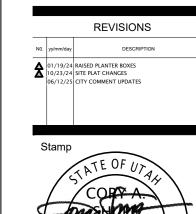
CONSTRUCTION

**IRRIGATION DETAILS** 

GATE VALVE - 3" AND SMALLER P-BWIC-VAL-04 P-BWIC-VAL-10 P-BWIC-VAL-A-07







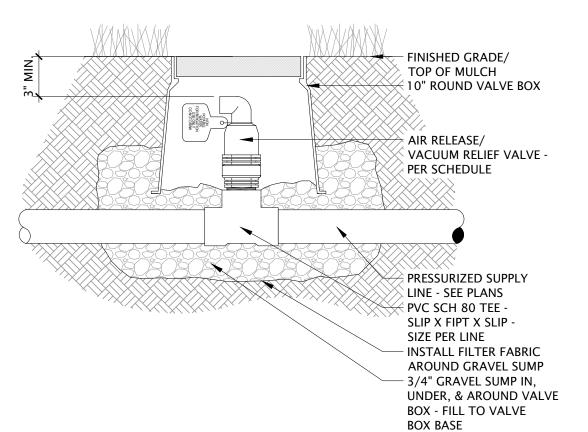


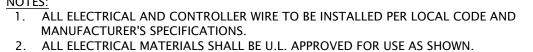
DOCUMENTS

CONSTRUCTION

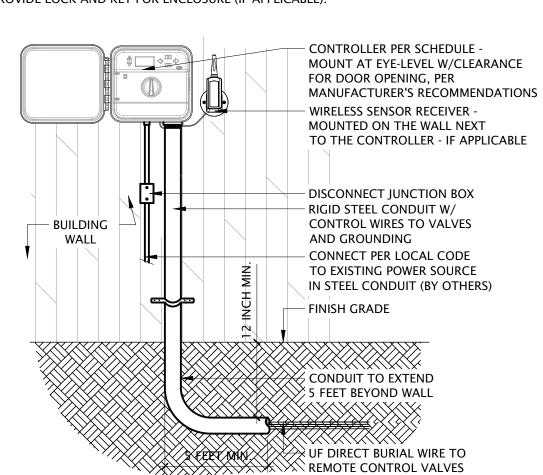
**IRRIGATION DETAILS** 



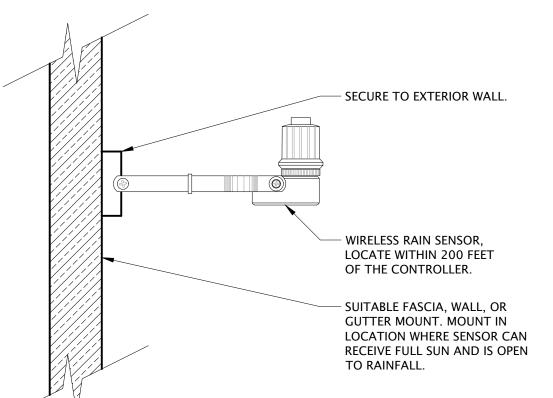


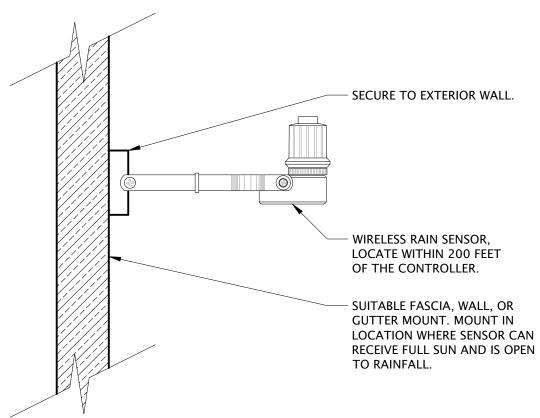


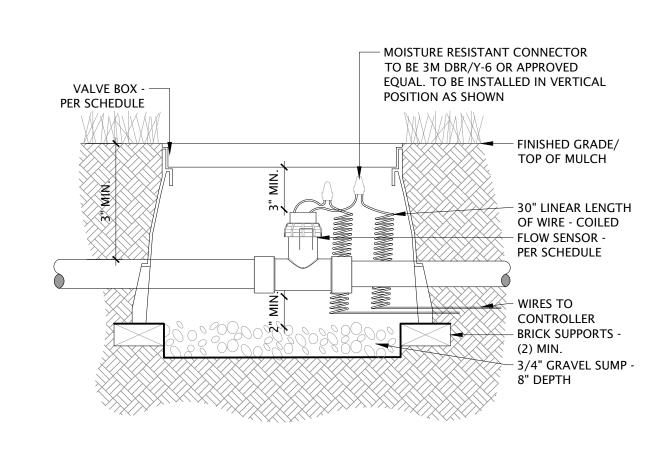
ALL ELECTRICAL MATERIALS SHALL BE U.L. APPROVED FOR USE AS SHOWN. GROUND CONTROLLER PER LOCAL CODE AND MANUFACTURER'S SPECIFICATIONS. PROVIDE WATERPROOF SEALANT FOR ALL CONDUIT AND WIRE ACCESS POINTS. 5. PROVIDE LOCK AND KEY FOR ENCLOSURE (IF APPLICABLE).



# INSTALL SENSOR PER MANUFACTURER'S SPECIFICATIONS. 2. FINAL LOCATION AND MOUNTING SYSTEM TO BE APPROVED BY OWNER'S REPRESENTATIVE.















&ward

Sixiaicik

STANDARD LIFT-OFF

**GUARDSHACK INTERNAL** 

DIMENSIONS

GS-.5 | 10"W x 18"H x 12"L

GS-1 10"W x 24"H x 22"L

GS-2 10"W x 24"H x 30"L

PVC MAINLINE -

END FEED EXAMPLE

MULCH- PER -

RISER PIPE

LANDSCAPE PLAN

SCH 40 ELL (TYP.)

TYPICAL OFFSET: 2' FROM HARDSCAPE,

4" FROM PLANTER AREA

TYPICAL FPT ADAPTER AND

COMPRESSION COUPLER

DRIP VALVE/FILTER/REGULATOR

3/4" PVC LATERAL PIPE

POLYETHYLENE OR PVC HEADER

MANIFOLD, SIZE AS PER "MAXIMUM

FLOW PER ZONE" CHART

TYPICAL COMPRESSION

FITTING

DRIPLINE SPACING AS NOTED -EMITTERS OFFSET FOR TRIANGULAR SPACING

TYPICAL DRIPLINE WITH EMITTER SPACING AS NOTED -TIE DOWN STAKES REQUIRED AT ALL TEES, ELLS, AND 4' O.C. IN CLAY, 3' O.C. IN LOAM, OR 2' O.C. IN SAND

FLUSH VALVE OR CAP AT LOW END -AS NOTED





P-BWIC-AUXE-03

/ 11	OT TO SCALE		

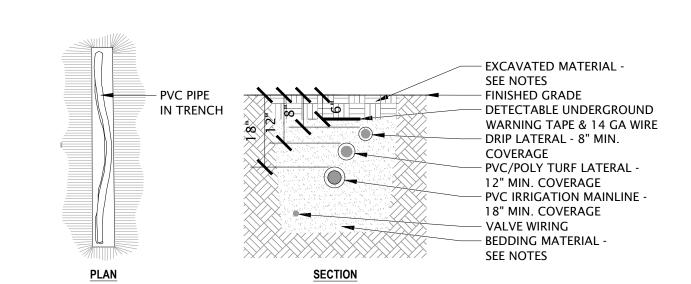
1. STRAIGHT PIPE - 10 PIPE DIAMETERS UPSTREAM

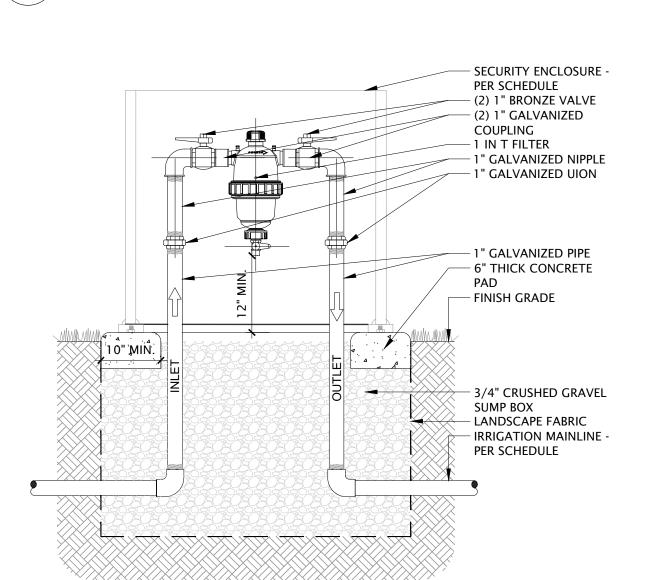
& 5 PIPE DIAMETERS DOWNSTREAM

- 1. ALL MAINLINES TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. ALL PVC PIPING TO BE SNAKED IN TRENCHES AS SHOWN IN PLAN VIEW. 3. ALL 120 VOLT WIRING IN CONDUIT TO BE INSTALLED AS PER LOCAL CODES.
- MADE WITH 3MTM DBR/Y-6 WATERPROOF CONNECTORS, OR APPROVED EQUAL. 5. BUNDLE AND TAPE WIRING IN 10' INTERVALS.
- 6. VALVE WIRES TO BE INSTALLED WITHIN MAINLINE TRENCH WHEREVER POSSIBLE. 7. BEDDING MATERIAL SHALL BE 3/4" BASE OR SAND AND SHALL BE 3" BELOW LOWEST PIPE OR WIRE AND 3"

4. ALL ELECTRICAL WIRE CONNECTIONS TO VALVES AND SPLICES TO BE INSTALLED WITHIN A VALVE BOX AND

- ABOVE HIGHEST PIPE OR WIRE WITHIN TRENCH. 8. BEDDING MATERIAL SHALL BE IN MAINLINE TRENCH ONLY.
- 9. BEDDING IS NOT REQUIRED IN POLYETHYLENE TUBING TRENCHES BUT NO ROCKS LARGER THAN 3/4". 10. EXCAVATED COVER MATERIAL SHALL BE FREE FROM DEBRIS AND ROCKS 3/4" OR GREATER.
- 11. PIPE BEDDING MATERIAL TO BE ROCK AND DEBRIS FREE, BACKFILL IN 6" LIFTS, PUDDLE WITH WATER BETWEEN







DOGBONE SHAPED





POLYGON SHAPED





LIFT-OFF

GUARDSHACK

**ENCLOSURE** 

LOCK SHEILD

HOLES FOR

INFLOW/OUTFLOW PIPES OF

BACKFLOW PREVENTER/FILTER

FINISH GRADE

CONCRETE PAD - PAD TO BE 6"

LARGER ON ALL SIDES THAN

INTERIOR DIMENSIONS OF ENCLOSURE

GUARDSHACK

HOLES FOR INFLOW/

**OUTFLOW PIPES OF** 

BACKFLOW PREVENTER/

PAD TO BE 6" LARGER

INTERIOR DIMENSIONS

ON ALL SIDES THAN

ENCLOSURE

FILTER

PVC MANIFOLD LINE

ADAPTER

COUPLING

W/ PVC TEE

- FLUSH CAP

TUBING

SCH 40 PVC TEE OR ELL

- EASY FIT COMPRESSION

- EASY FIT COMPRESSION

- LANDSCAPE DRIPLINE

- WATER SOURCE: DRIP VALVE OR LATERAL FROM VALVE

- LANDSCAPE DRIPLINE

– PVC MANIFOLD LINE

TUBING - PER SCHEDULE

- LOCK SHEILD

— CONCRETE PAD -

OF ENCLOSURE

EQ.



CENTER FEED EXAMPLE

- PRE-INSTALLED

BARB FITTING

CLAMP

- SUPPLY HEADER

SLOF	PED CONDITION NOTES:
1.	DRIPLINE LATERALS SHOULD FOLLOW THE CONTOURS OF THE SLOPE WHENEVER POSSIBLE.

	١.	DITILLINE EXTENDED TOLLOW THE CONTOURS OF THE GLOFE WHENEVER'T COOLDEE.
	2.	INSTALL AIR RELIEF VALVE AT THE HIGHEST POINT.
	3.	NORMAL SPACING WITHIN THE TOP 2/3 OF SLOPE.
	4.	INSTALL DRIPLINE AT 25% GREATER SPACING AT THE BOTTOM 1/3 THE SLOPE.
111	-	WHEN ELEVATION OF IN 10 TO ELEVATION OF INTERPRETARIAN OF A DEPARTMENT OF THE POTTOM O

	CI	DID DDECIDITATION DATES (INI/UD)	MANUALIM ELOM/ DED ZONE
1	5.	WHEN ELEVATION CHANGE IS 10 FT OR MORE, ZO	ONE THE BOTTOM 3 ON A SEPARATE VALVE.
	4.	INSTALL DRIPLINE AT 25% GREATER SPACING AT	THE BOTTOM 1/3 THE SLOPE.

MAX GPM PSI LOSS			
SCHEDULE 40 PVC HEADER SIZE			
1/2"       4.7 GPM       7.7 PSI         3/4"       8.3 GPM       5.6 PSI         1"       13.5 GPM       4.2 PSI         1-1/2"       33.9 GPM       2.9 PSI         2"       52.4 GPM       1.9 PSI			
POLY PIPE HEADER SIZE			
1/2" 4.7 GPM 8.8 PSI 3/4" 8.3 GPM 6.3 PSI 1" 13.5 GPM 4.8 PSI			
1-1/2" 31.8 GPM 2.9 PSI 2" 52.4 GPM 2.2 PSI			

0.6 GPH 0.9 GPH	1.0 GPM 1.5 GPM	0.67 GPM 1.0 GPM	0.50 GPM 0.75 GPM		1-1/2" 2"	.8 ( 2.4 (
	MAXIMUN	/ LATERAL	LENGTH (	FEE	T)	
	EMITT	ER FLOW F	RATE GPH			
PSI	12" SPACI 0.6 0.9		PACING 0.9	24" 0.6	SPACING 0.9	
10 20 30 40 50	125 9 249 19 307 23 350 26 125 9	91 350 36 434 68 495	171 333 380	218 442 550 627 218 218		

FOR LATERALS FOR MAINLINE FOR MAINLINE		- PAVING - FINISHED GRADE/ TOP OF MULCH - WRAP 12 GAUGE WIRE AROUND EACH END OF SLEEVE (10 WRAPS MIN.) AND EXTEND TO SURFACE AS A LOCATING DEVICE - PLACE IN 6" ROUND VALVE BOX - COMPACT SOIL AROUND SLEEVE TO SAME DENSITY AS ADJACENT UNDISTURBED SOIL
	12" MIN.	— BACKFILL WITH EXISTING SOIL AFTER REMOVING ROCKS LARGER THAN 3/4" OR 3/4" ROADBASE OR SAND — PVC SLEEVE PER SCHEDULE - TWICE THE DIAMETER OF THE PIPES/WIRES MIN.



8

AMIAD FILTER - 1" T

ALL SLEEVES SHALL BE INSPECTED PRIOR TO BACKFILLING.

4. IRRIGATION PIPE AND WIRE SHALL NOT SHARE THE SAME SLEEVED.

CAP SLEEVES WITH 90° FITTING AND EXTEND PIPE TO SURFACE UNTIL USE.

MULTIPLE SLEEVES REQUIRE 4" HORIZONTAL SEPARATION WITHIN SAME SLEEVE TRENCH.

5. MARK/STAMP - 'X' AND/OR INSTALL PLACARD AT BACK OF CURB OR ROOFING NAIL IN ASPHALT





MALE ADAPTER INSERT SUPPLY PIPE CURVED POLYGON HOURGLASS SHAPED "C" SHAPED SUPPLY PIPE

P-BWIC-DRI-08

P-BWIC-AUXE-04

P-BWIC-PIP-01