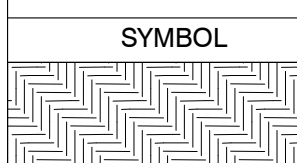


















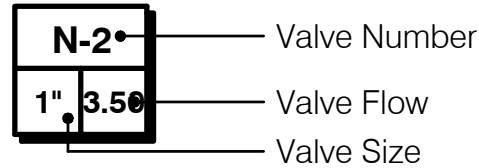


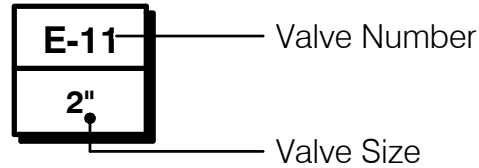
IRRIGATION SCHEDULE

SYMBOL	DESCRIPTION			
	Repair and/or Adjust existing irrigation as needed			
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	PSI	GPM	DETAIL
	Hunter MP1000 PROS-04-PRS30-CV Turf Rotator, 4" pop-up with check valve, pressure regulated to 30 psi, MP Rotator nozzle on PRS30 body.	30	0.45 0.45 0.46	(D)
	Rain Bird 1806-SAM-5 Series Stream w/ PCS 5H-030 Stream Bubbler 6.0" popup with check valve, pressure compensating screen.	30	0.30	(E)
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL		
	Rain Bird XCZLF-100-PRF Low Flow, 0.2-10 GPM, with 1" Low Flow Valve valve and 1" Pressure Regulating RBY filter and 40psi pressure regulator.	(F)		
	Dripline Start Connection	(H)		
	Netafim TL50V Manual flush valve	(K)		
	Netafim 10-F-01 Operation Indicator	(G)		
	Netafim TLCV-04-18 Techline Pressure Compensating Landscape Dripline with Checkvalve, 0.4 GPH emitters at 18" O.C. Installed 2'-3" below surface, stapled at max. 5' intervals (2 staples at each fitting) & covered with mulch per planting specs.	(I) (J)		
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL		
	Existing Valve			
	Existing Quick Coupler			
	Rain Bird 33-DRC 3/4" Brass Quick-Coupling Valve, with Corrosion-Resistant Stainless Steel Spring, Thermoplastic Rubber Cover, Double Track Key Lug, and 2-Piece Body.	(C)		
	Nibco line-size ball valve	(B)		
	Existing Neptune 2" Pressure Vacuum Breaker 2" Model 720 A			
	Hunter A2c-1800 M 18-station controller with (1) A2M-600 module in an outdoor grey stell wall mount enclosure.			
	Hunter WSS-SEN Wireless Solar, rain freeze sensor with outdoor interface, connects to ACC controller, install per mfr. instructions.			
	New Irrigation Lateral Line: PVC Schedule 40 3/4" size (install in sleeve 2x pipe diameter under paving)	(A)		
	Existing Irrigation Mainline			
	New Irrigation Mainline: PVC Schedule 40 2" size (install in sleeve 2x pipe diameter under paving)	(A)		
	Pipe Sleeve: PVC Schedule 40	(A)		

New Valve Callout



Existing Valve per Original Plan

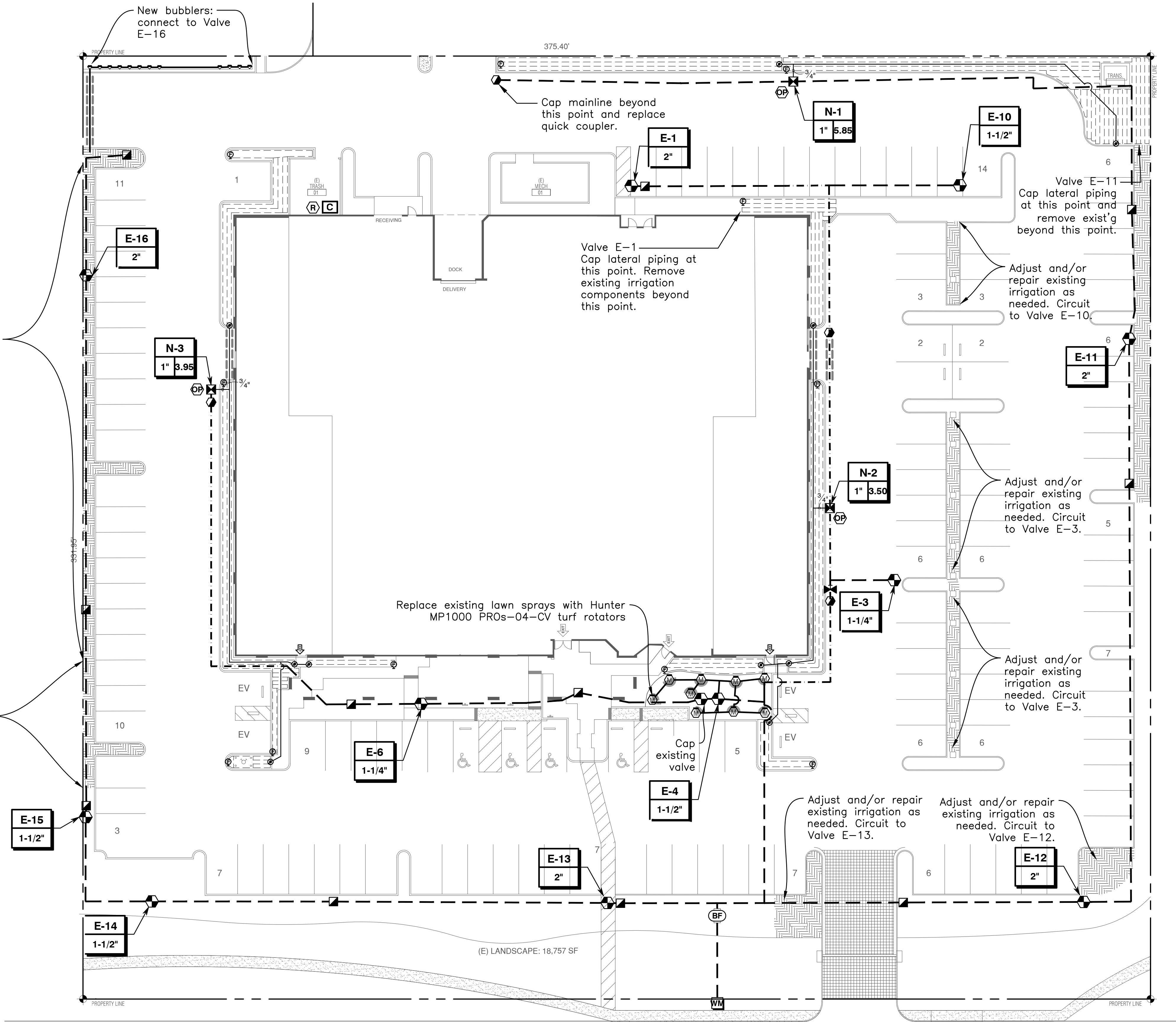


NOTES:

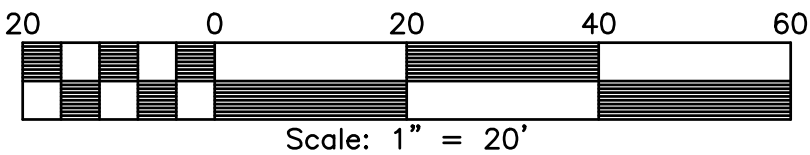
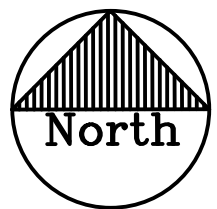
1. Mainline is shown in paved areas or outside property line for clarity only. Mainline shall be located in landscaped area with a minimum 18-inch clearance from hardscape or obstacles wherever possible.
2. For irrigation details and specifications, see sheet LI-2 & LI-3.
3. Coordinate irrigation removals and installation of new mainlines needed to provide water in all areas not affected by construction

Adjust and/or repair existing irrigation as needed. Circuit to Valve E-16.

Adjust and/or repair existing irrigation as needed. Circuit to Valve E-15.



166TH STREET



REVISIONS	BY

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IRRIGATION PLAN
BUILDING EXPANSION
GST, INC.
12881 166TH STREET, CERRITOS, CA 90703



DRAWN	S.L.
DATE	4/15/2022
SCALE	1"=20'
JOB NO.	5443
SHEET	

LI-1

IRRIGATION SPECIFICATIONS

I. SCOPE OF WORK:

- A. Provide all permits, labor, materials, transportation, and maintenance required to furnish and install a complete irrigation system as shown on plans and described herein.
- B. The intent of these plans and specifications is to provide an irrigation system complete and operable in an efficient and satisfactory manner, providing complete and even coverage.
- C. The Contractor shall inspect the site and check all finish grades within the work area to insure proper soil depth for the pipes, to check dimensions, and to verify the source and size of water supply.

II. MATERIALS:

- A. All materials and equipment shall be of the type and size indicated on the plans unless permission to change is granted by the Owner's representative. Materials are to be in new and perfect condition. All materials required but not specified on the plans shall be provided by the Contractor.
- B. Plastic pipe and fittings shall be 100% virgin PVC, well-formed, free of blisters, cracks, holes, and foreign materials, wrinkles, and dents.
- C. Control wire between remote control valves and controller shall be 24-volt, solid copper wire, number 14 UF (minimum size), direct-burial wire (UL-listed). Use white wire for common, blue for lawn systems, and black for shrub systems.

III. INSTALLATION:

A. General:

- Do not willfully install the irrigation system as shown on the plans when it is obvious that obstructions, grade differences, or measurement discrepancies exist that may not have been considered in the design. Immediately report such differences to the Owner's representative. In the event that this notification is not performed, the Irrigation Contractor shall assume full responsibility for any revision necessary.
- Irrigation plans are diagrammatic and approximate. All valves shall be located in planting areas. Mainlines and laterals shall be placed in the same trench and in planting areas wherever possible. Provide minimum horizontal clearance of 4 inches between parallel pipes.
- All equipment shall be installed as detailed on the plans. If the plans or specifications do not thoroughly describe the methods to be used, Contractor shall follow manufacturer's installation instructions.

B. Excavation & Backfill:

- Verify exact locations of all underground utilities prior to trenching.
- Trenches shall be cut to the required grade to provide uniform support for the full length of the pipe and to provide minimum coverage as shown in detail.
- Initial backfill to be fine granular material with no foreign objects larger than 1/2 inch. Tamp moist backfill to compact and conform to adjacent grades without sunken areas or other irregularities.
- Trenches under a.c. paving shall be backfilled with sand.
- Backfill shall be compacted to the same density as adjacent soil. If settlement occurs, Contractor shall make any adjustments in pipes, valves, heads, finish grades, or sod necessary at no extra cost.

C. Pipe:

- All piping, PVC electrical sleeves, etc., under paving shall be installed and tested prior to paving work. No tees, ells, or other turns in piping allowed under paving. Cap all ends hand-tight prior to backfill.
- All mainlines shall be capped and pressure-tested at system design pressure for one hour. Any leaks found shall be corrected by removing the leaking pipe or fittings and replacing with new materials, and then re-testing. All tests shall be observed and approved by Owner's Representative and shall be completed prior to backfilling.
- Wrap all galvanized pipe and fitting threads with teflon tape.

- D. Backflow Preventer: Contractor shall verify that backflow prevention device(s) specified meet(s) local plumbing & health code requirements.

E. Bubbler Heads:

- Install all heads on double-swing joints.
- Prior to installing heads, all laterals shall be flushed out with a full head of water.
- Risers to bubbler heads shall be set perpendicular to finish grade.

F. Controller:

- 120-volt service and hookup to controller shall be provided by others.
- Automatic controller shall be set plumb.
- Bundle and tape wires every 10 feet.
- Wire connections shall be made with Scotch-Lok Wire-Sealing Packs #3576, or approved equal.

G. Drip Line Irrigation Systems:

- Refer to legend and details for materials.
- Approximate drip line tubing runs are shown on the plan. All drip line systems shall be installed per the mfr's instructions. This includes, but is not limited to, soil type, plant type, slope locations, typical tubing layout, supply headers, flush headers, air-release valves, flush valves, soil staples, operation indicators, etc.
- PVC lateral piping from valve to drip line areas are shown schematically on plan. All supply headers and flush headers shall be PVC per legend, unless otherwise noted.
- Tubing shall run generally parallel to the long axis of the planting areas. The exception is on slopes, where tubing shall run parallel to the slope contours.
- Flush valves shall be installed at the low points of zones. Air-release valves shall be installed at the high points. Refer to mfr's directions for quantity of flush valves and air-release valves for each zone/valve.
- Drip line tubing shall be installed on finish grade, stapled down, and covered with mulch per planting plan, unless noted otherwise.
- Each drip line zone/valve shall include an operation indicator shall be installed at the farthest point away from the zone's valve.

- IV. CLEAN-UP: Clean up site as each portion of work progresses. Refuse and excess dirt shall be removed from the site; all walks and paving shall be swept and any damage to others' work shall be repaired.

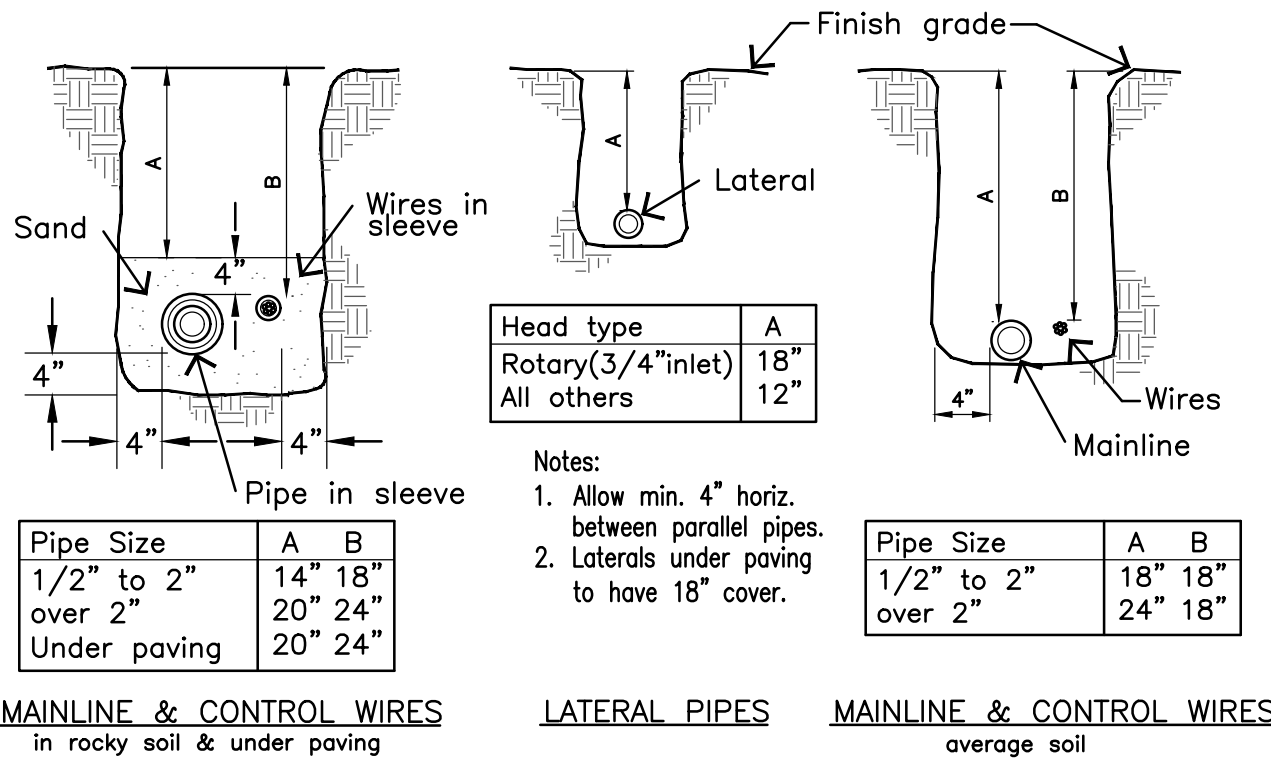
V. INSPECTIONS, AS-BUILTS, GUARANTEES:

- A. All inspections shall be made by Owner's Representative, as follows: (Give 48-hour notice prior to inspection)
- Open trenches.
 - Pressure tests.
 - Coverage tests.

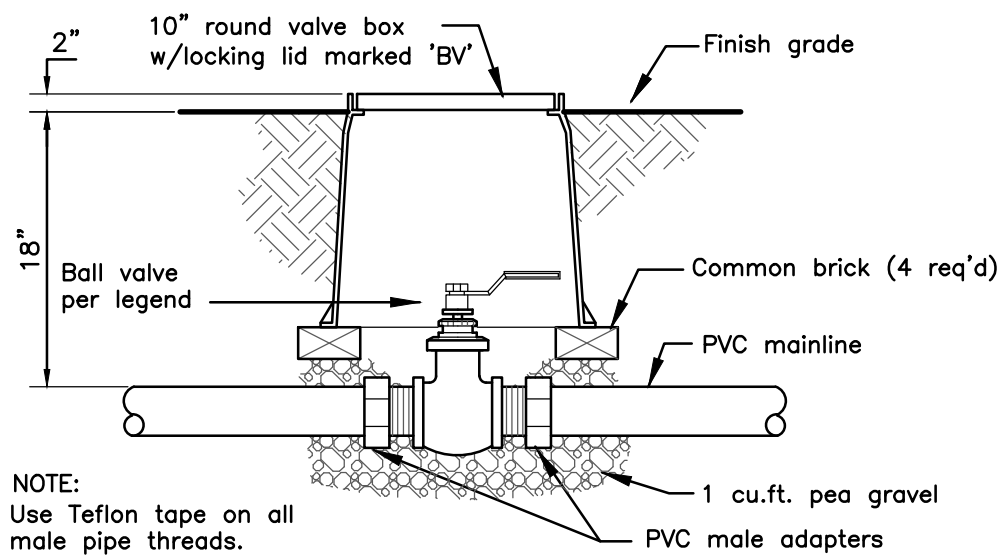
- B. Contractor shall furnish to Owner a complete "as-built" drawing showing exact locations of all items installed, dimensioned in two directions from permanent structures on site including the following items:
- Gate valves.
 - Routing of all main lines.
 - Connections to existing water lines.
 - Routing of control wires.
 - Irrigation control valves.

- C. Contractor shall guarantee irrigation system for one year against defective equipment, installation deficiency, and all problems not related to vandalism. Guarantee period shall commence on date of final acceptance of the work. Any operational difficulties which, in the opinion of the Owner's Representative, are due to inferior materials and/or workmanship, shall be immediately corrected by the Contractor at no additional cost to Owner.

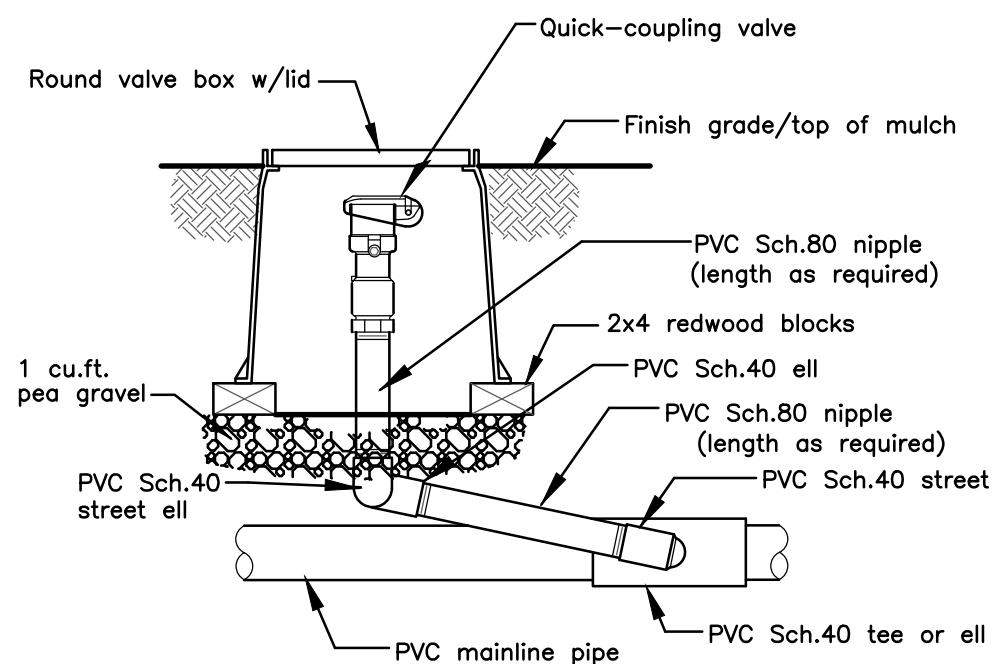
- VI. MAINTENANCE: Complete system shall be maintained 60 days after completion of planting. System shall be flushed and automatic controller reset at completion of maintenance period.



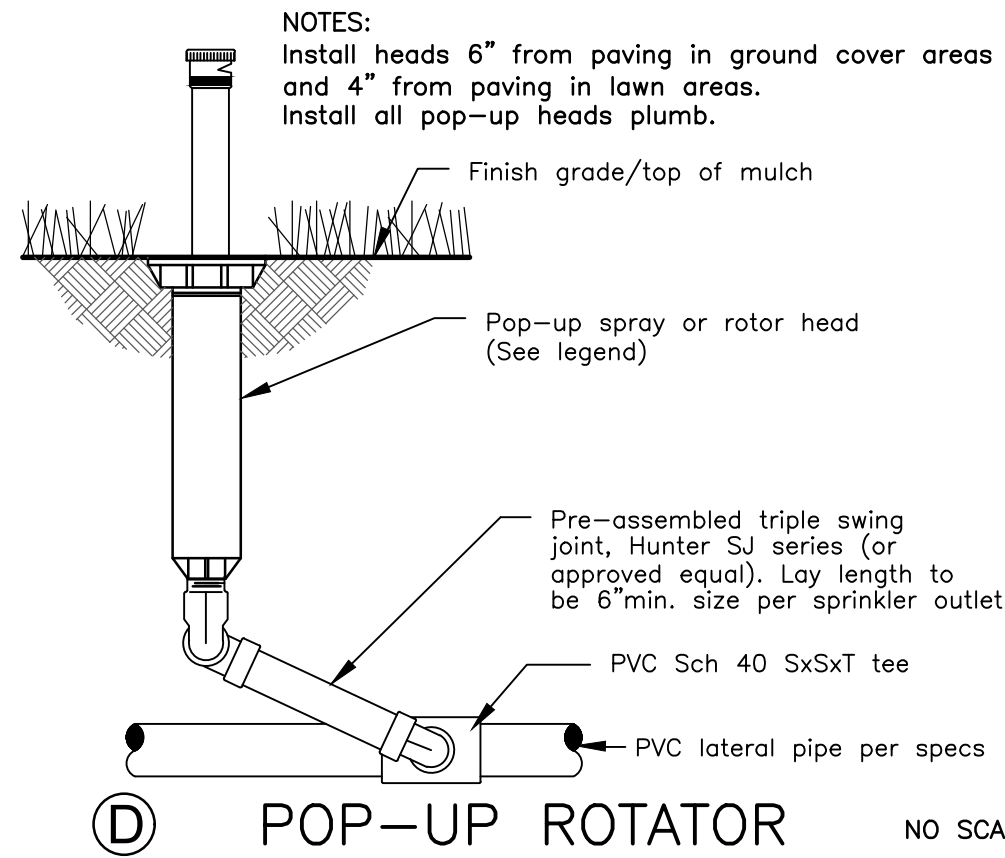
A TRENCHING DETAIL NO SCALE



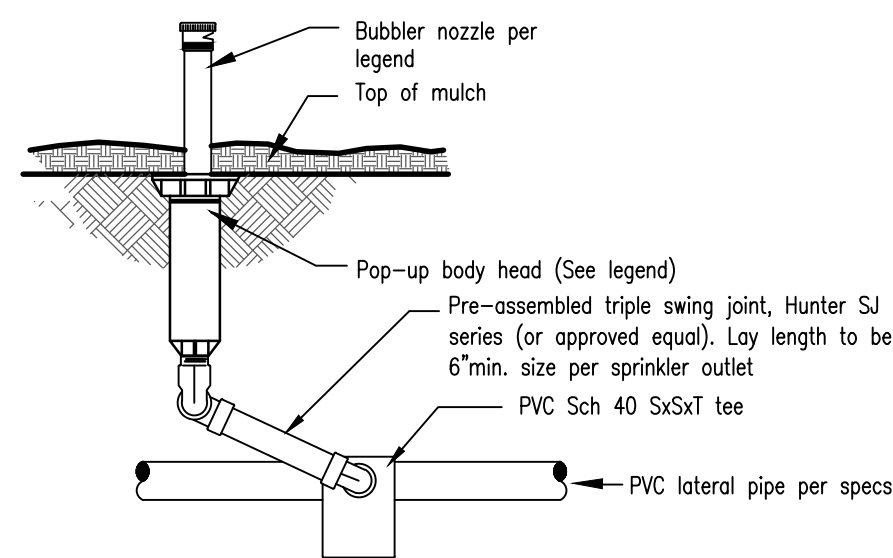
B BALL VALVE DETAIL NO SCALE



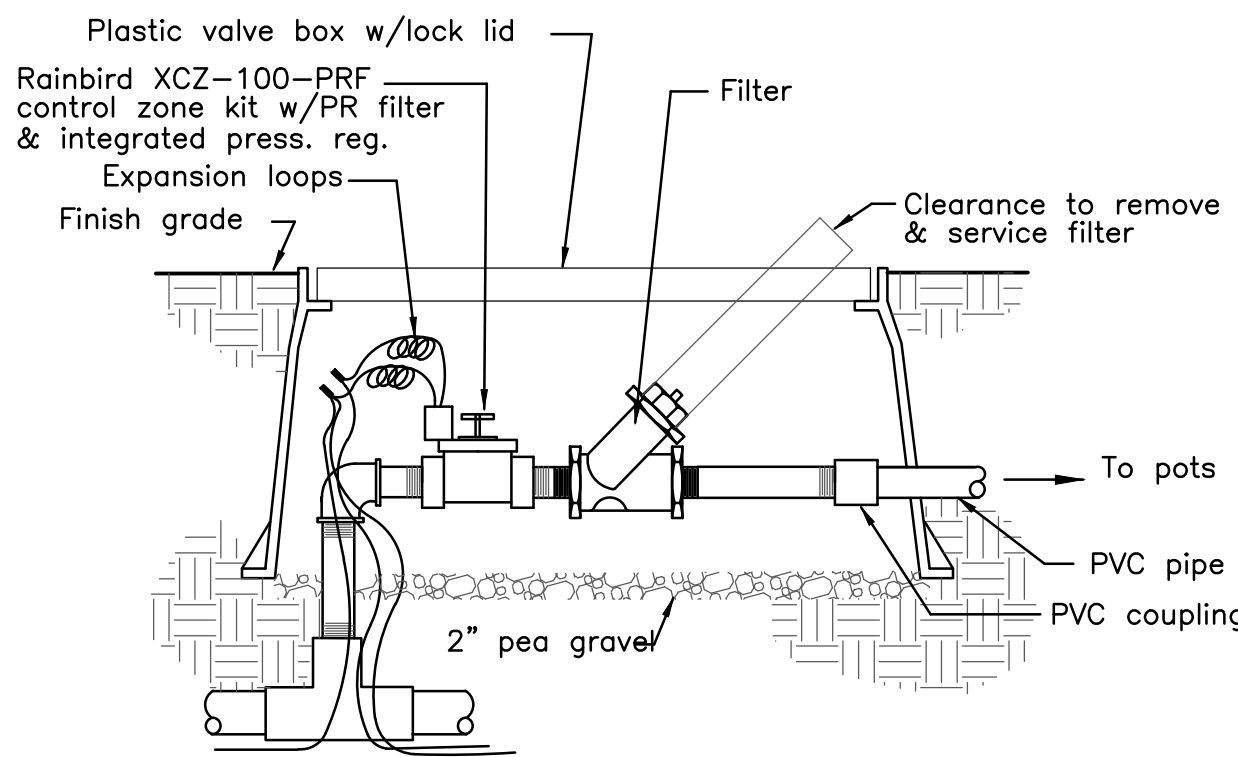
C QUICK COUPLER VALVE NO SCALE



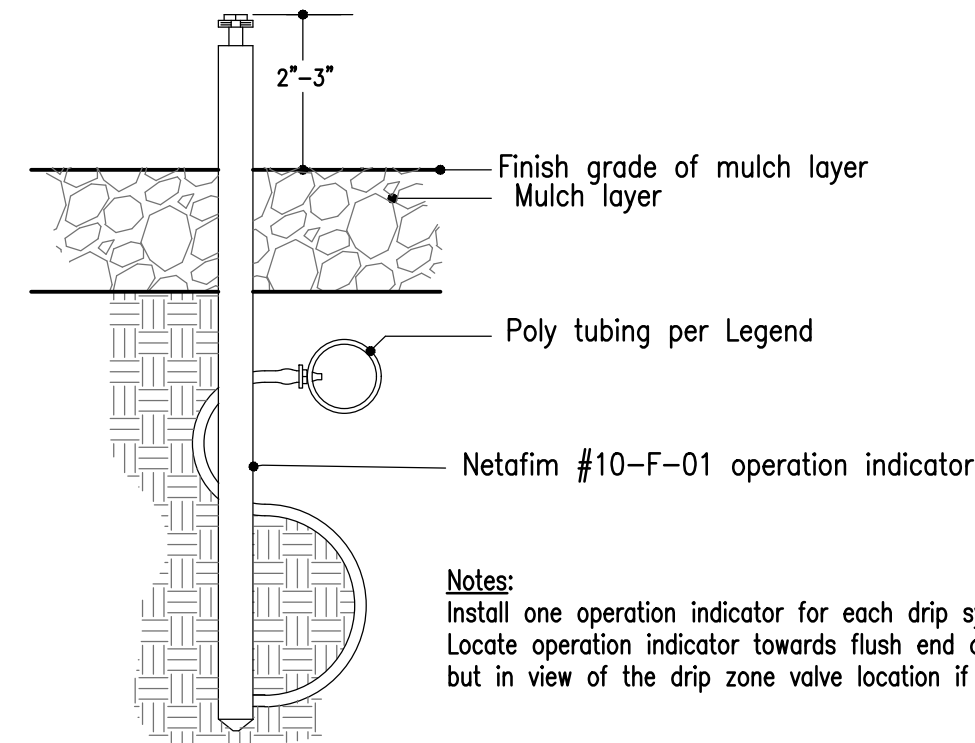
D POP-UP ROTATOR NO SCALE



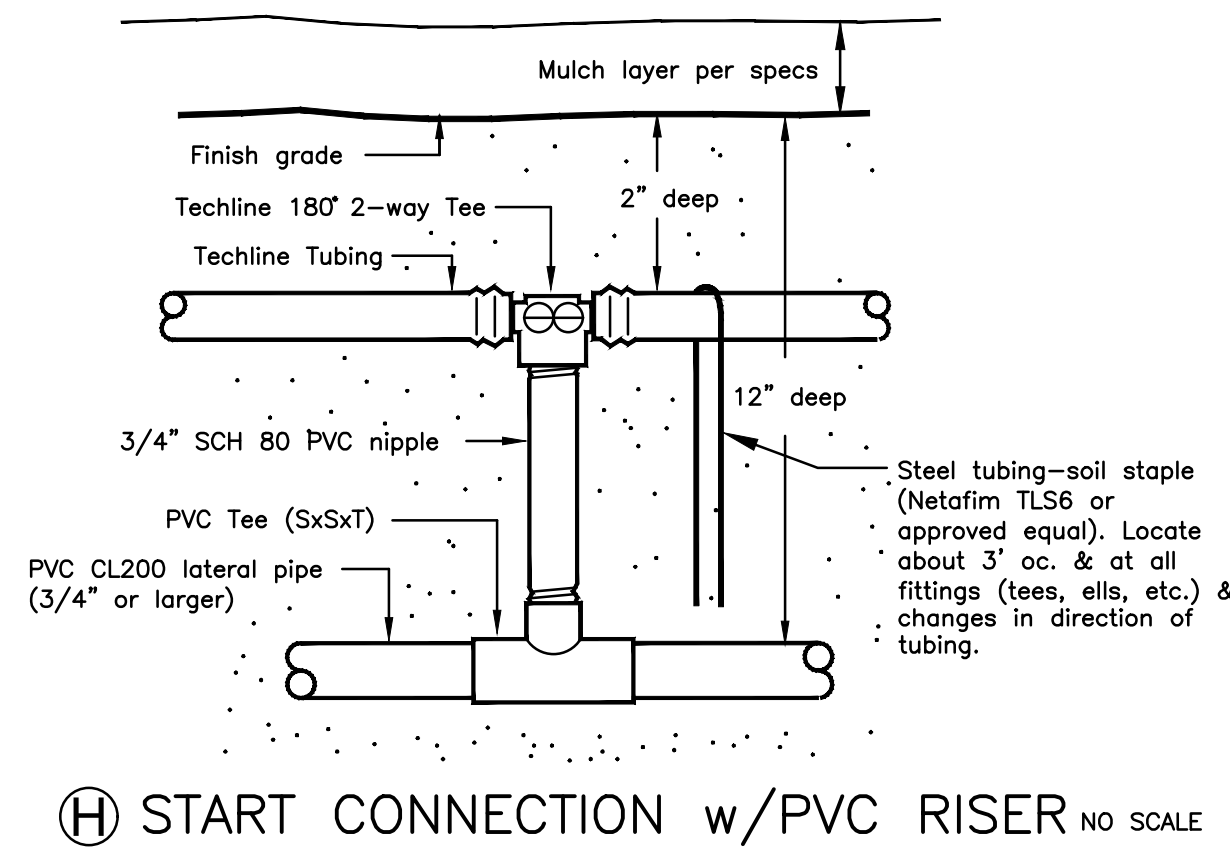
E STREAM BUBBLER NO SCALE



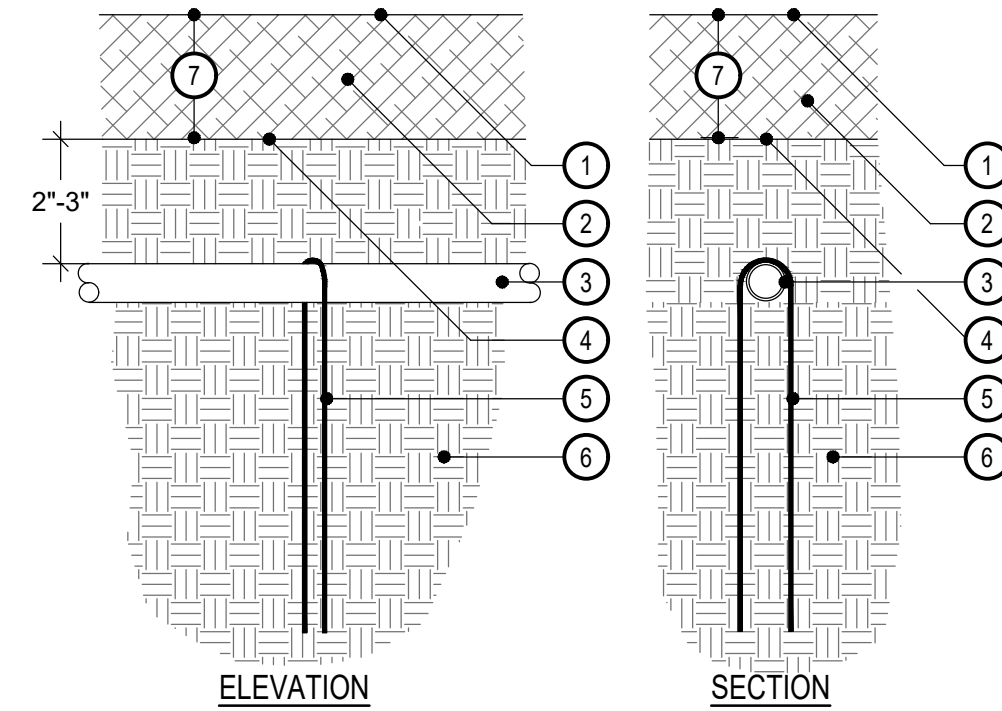
F DRIP IRRIG. VALVE NO SCALE



G DRIP OPERATION INDICATOR NO SCALE



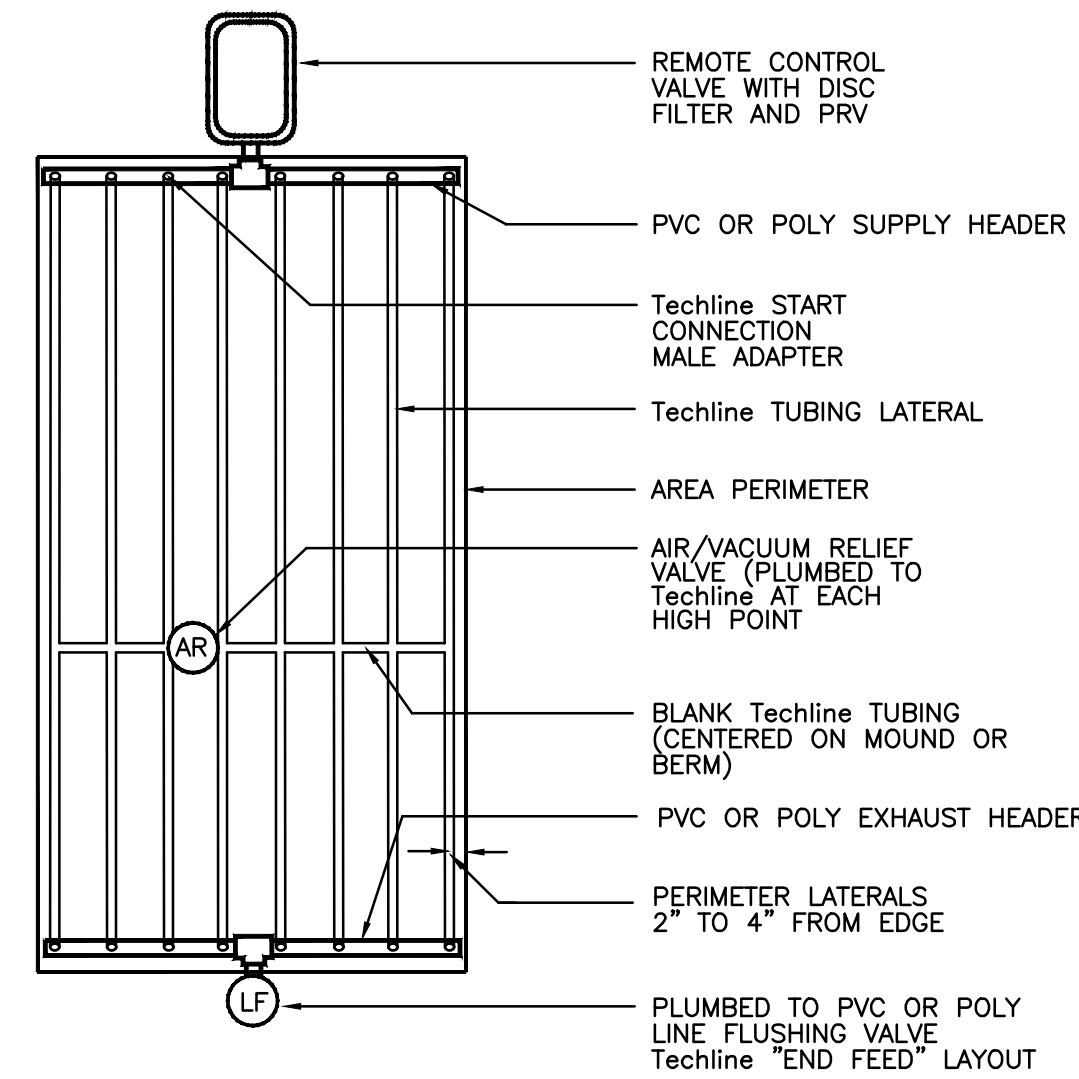
H START CONNECTION w/PVC RISER NO SCALE



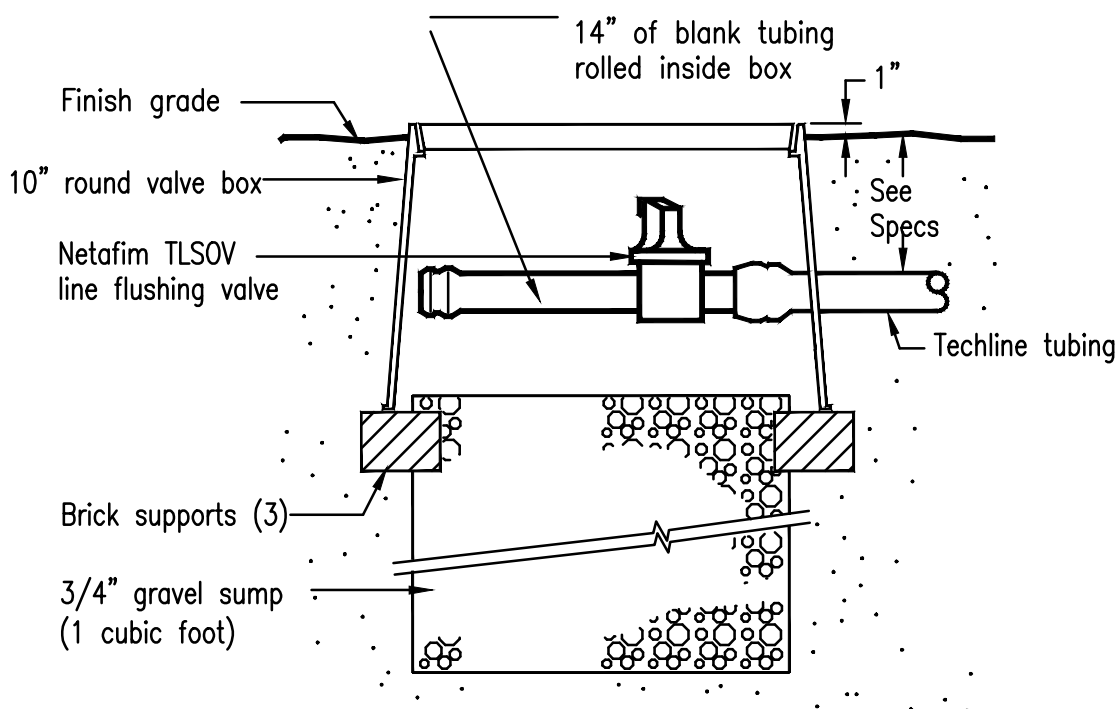
- FINISH GRADE OF MULCH LAYER
- MULCH TOP DRESSING PER PLANTING PLAN
- POLY TUBING PER IRRIGATION LEGEND
- FINISH GRADE
- STEEL TUBING-SOIL STAPLE (NETAFIM TLS6 OR APPROVED EQUAL)
- NATIVE SOIL
- DEPTH OF MULCH PER PLANTING PLAN OR SPECIFICATIONS

NOTES: LOCATE STAPLES ALONG TUBING AT ABOUT 5' O.C. AND AT ALL FITTINGS (TEES, ELLS, ETC.) AND CHANGES IN DIRECTION OF TUBING. BURY TUBING PER THE IRRIGATION PLAN / NOTES.

I BURIED DRIP TUBING NO SCALE



J DRIP TUBING LAYOUT NO SCALE



K MANUAL FLUSH VALVE NO SCALE

REVISIONS	BY

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IRRIGATION DETAILS & SPECIFICATIONS

BUILDING EXPANSION
GST, INC.
12881 166TH STREET, CERRITOS, CA 90703



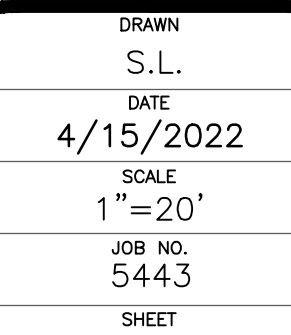
DRAWN	S.L.
DATE	4/15/2022
SCALE	AS SHOWN
JOB NO.	5443
SHEET	

LI-2

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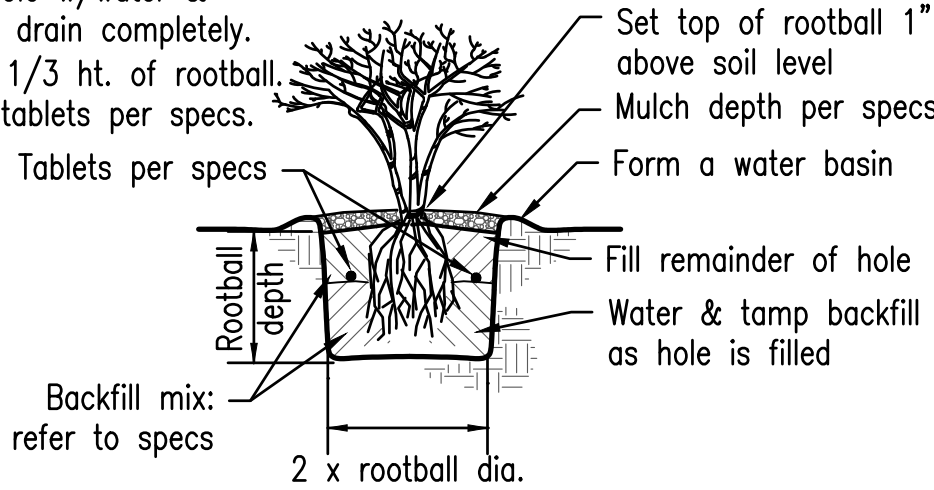
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12881 166TH STREET, CERRITOS, CA 90703



NOTES:

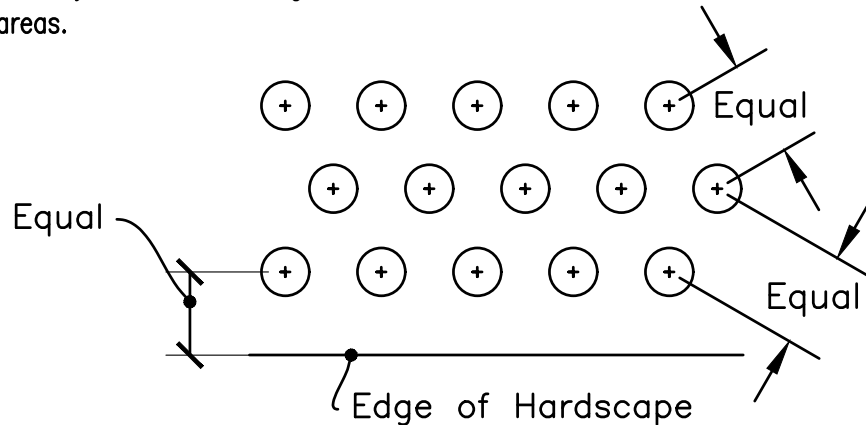
- Before planting, leach thoroughly by filling hole w/water & allowing to drain completely.
- Backfill to 1/3 ht. of rootball. Add plant tablets per specs.



○ PLANTING HOLE DETAIL NO SCALE

NOTE:

Spread 2" layer of mulch in ground cover areas.



○ GROUND COVER PLANTING NO SCALE

PLANTING SPECIFICATIONS

- I. PREPARATION:
- A. Coordination: All irrigation work shall be completed and approved by the Owner's representative prior to starting planting work.
- B. Soil Test: contractor is to supply complete soil test, including pH, nutrients, texture, salinity, etc., as per Note II A-2 below.
- II. PLANTING:
- A. Soil Preparation:
- Cultivate all lawn and planting areas (except slopes) to a depth of 6 inches. Dispose of all debris and rocks over 3 inches in size.
 - Soil amendments and quantities shall be determined by soil analysis. The Contractor shall take 2 samples from 2 different areas 6 to 12 inches deep and submit these to a local agricultural soil testing laboratory, who shall test for nutrients, pH, soil texture, and salts. A copy of the test results and amendment recommendations shall be sent directly to the Owner's representative. For bidding purposes, the following shall be used: (quantities per 1000 s.f.)
 - 4 c.y. composted nitrogen-stabilized redwood or fir shavings
 - 150 lbs. "GroPower Plus" (5-3-1) soil conditioner
 - 100 lbs. agricultural gypsum
 - Spread soil amendments evenly over all areas and till into top 4 inches of soil.
- B. Finish Grading:
- Grade all lawn and planting areas to smooth, uniform levels or slopes without abrupt changes of surface. Soil areas adjacent to buildings shall be graded to allow free flow of water to drainage devices.
 - Finish grade after adding soil amendment and settlement shall be one inch below curbs, headers, and paving in lawn areas, and two inches below in planting areas.
- C. Shrub and Tree Planting:
- Planting pits shall be as shown on detail. Backfill mix shall be determined by soil test per section A-2 above. For bidding purposes, the following mix shall be used:
 - 6 parts by volume rock-free on-site soil
 - 4 parts by volume composted nitrogen-stabilized redwood or fir shavings
 - Plant tablets shall be installed in plant pits as shown on detail. Tablets shall be Gro-Power 7-gram tablets at the following rates:
 - 1-gallon plant = 2 tablets
 - 5-gallon plant = 6 tablets
 - Water each plant immediately after planting. Apply water in such a manner as to not disturb backfill and in such a quantity that all materials in hole are wet.
 - Trees shall be staked per detail. Remove all nursery stakes and ties.
- D. Ground Cover Planting:
- Grade out earth berms around shrubs and trees before planting ground cover.
 - Spacing and varieties of ground covers shall be as shown on plan. Soil shall be firmly pressed around each plant and excess soil removed from the crown.
 - Each section of ground cover shall be thoroughly watered immediately after planting.
 - All ground cover areas shall be treated with a pre-emergent per mfr's instructions before final inspection. Weed all areas prior to application.
 - Spread mulch 2 inches deep in all planting areas.
- III. MISCELLANEOUS:
- A. Cleanup: Upon completion of all planting work and before final acceptance, Contractor shall remove all material and debris resulting from his work. Remove all tags, labels, nursery stakes, and ties from plants. All paved areas shall be swept clean and site left in a neat and acceptable condition as approved by Owner's representative.
- B. Guarantees: Contractor shall guarantee all plants, 15-gallon and larger for a period of one year. All other plants shall be guaranteed for a period of 90 days. Plants which die or lose more than 30% of their original leaves during this period shall be replaced by the Contractor. Replacements shall be made within 7 days of written notification to Contractor.
- C. Maintenance:
- Entire project shall be satisfactorily maintained for a period of sixty (60) days prior to final approval.
 - 30 days after planting, fertilize all lawn and ground cover areas with 16-6-8 commercial fertilizer at the rate of 6 lbs. per 1,000 s.f. (apply per mfr's instructions.).

REVISIONS	BY

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PLANTING SPECIFICATIONS & DETAILS
BUILDING EXPANSION
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SPRINKLER LEGEND AND NOTES

- PROVIDE PVC SCHEDULE 40 SLEEVES WHEREVER LATERAL OR MAIN SPRINKLER LINES PASS THROUGH OR GO UNDER MASONRY, PAVING, ETC.
- PROVIDE PVC SCHEDULE 40 CONDUIT FOR CONTROLLER WIRES WHEREVER CONNECTION BETWEEN ELECTRIC VALVE AND CONTROLLER PASSES THROUGH OR GOES UNDER MASONRY, PAVING, ETC.
- ALL SYSTEMS ARE SHOWN SCHEMATICALLY AND ARE TO BE LOCATED IN PLANTING AREAS.
- ALL VALVES TO BE IN BROOKS PLASTIC VALVE BOXES WITH COVERS.

CONTROLLER STATION NUMBER
VALVE SIZE
G.P.M.
PVC SCHEDULE 40 PLASTIC PIPE MAIN SPRINKLER LINE (SIZE NOTED).
PVC SCHEDULE 40 PLASTIC PIPE LATERAL SPRINKLER LINE (SIZE NOTED).
P.O.C. WATER METER OWNER.
NEPTUNE 2" PRESSURE VACUUM BREAKER - MODEL 720A.

SYMBOL	MANUFACTURER	MODEL	P.S.I.	G.P.M.	RADIUS	REMARKS
⊙	RAINBIRD LOW ANGLE SHRUB SPRAY	A-18-100-LA	20	0.33	8"	
⊙	RAINBIRD LOW ANGLE SHRUB SPRAY	A-18-10H-LA	20	0.65	8"	
⊙	RAINBIRD LOW ANGLE 6" POP-UP	1806-100-LA	20	0.33	8"	
⊙	RAINBIRD LOW ANGLE 6" POP-UP	1806-10H-LA	20	0.65	8"	
⊙	RAINBIRD SHRUB SPRAY	A-18-150	20	0.75	12"	
⊙	RAINBIRD SHRUB SPRAY	A-18-15H	20	1.50	12"	
⊙	RAINBIRD SHRUB SPRAY	A-18-15F	20	3.00	12"	
⊙	RAINBIRD 6" POP-UP	1806-150	20	0.75	12"	
⊙	RAINBIRD 6" POP-UP	1806-15H	20	1.50	12"	
⊙	RAINBIRD SIDE STRIP	A-18-150ST	20	1.00	4" X 14"	
⊙	RAINBIRD SIDE STRIP 6" POP-UP	1806-15SST	20	1.00	4" X 14"	
⊙	RAINBIRD 4" POP-UP	1804-150	20	0.75	12"	
⊙	RAINBIRD 4" POP-UP	1804-15H	20	1.50	12"	
⊙	RAINBIRD 4" POP-UP	1804-15F	20	3.00	12"	
⊙	RAINBIRD ELEC. REMOTE VALVE	EFA SERIES				SIZE NOTED
⊙	RAINBIRD QUICK COUPLER	44-44K				LOCATE IN VALVE BOX
⊙	IRRI-TROL AUTO. CONTROLLER	MC-8				WALL MOUNT
⊙	RAINBIRD FLOOD BUBBLER	1404	30	1.00		PRESSURE COMPENSATING

City of Cerritos
Plan Approval
for Landscape/Irrigation plan

Planning Div. *K.Hill* 12-12-84
Date

Engineering Div. *Scott Hanning* 12/12/84
Date

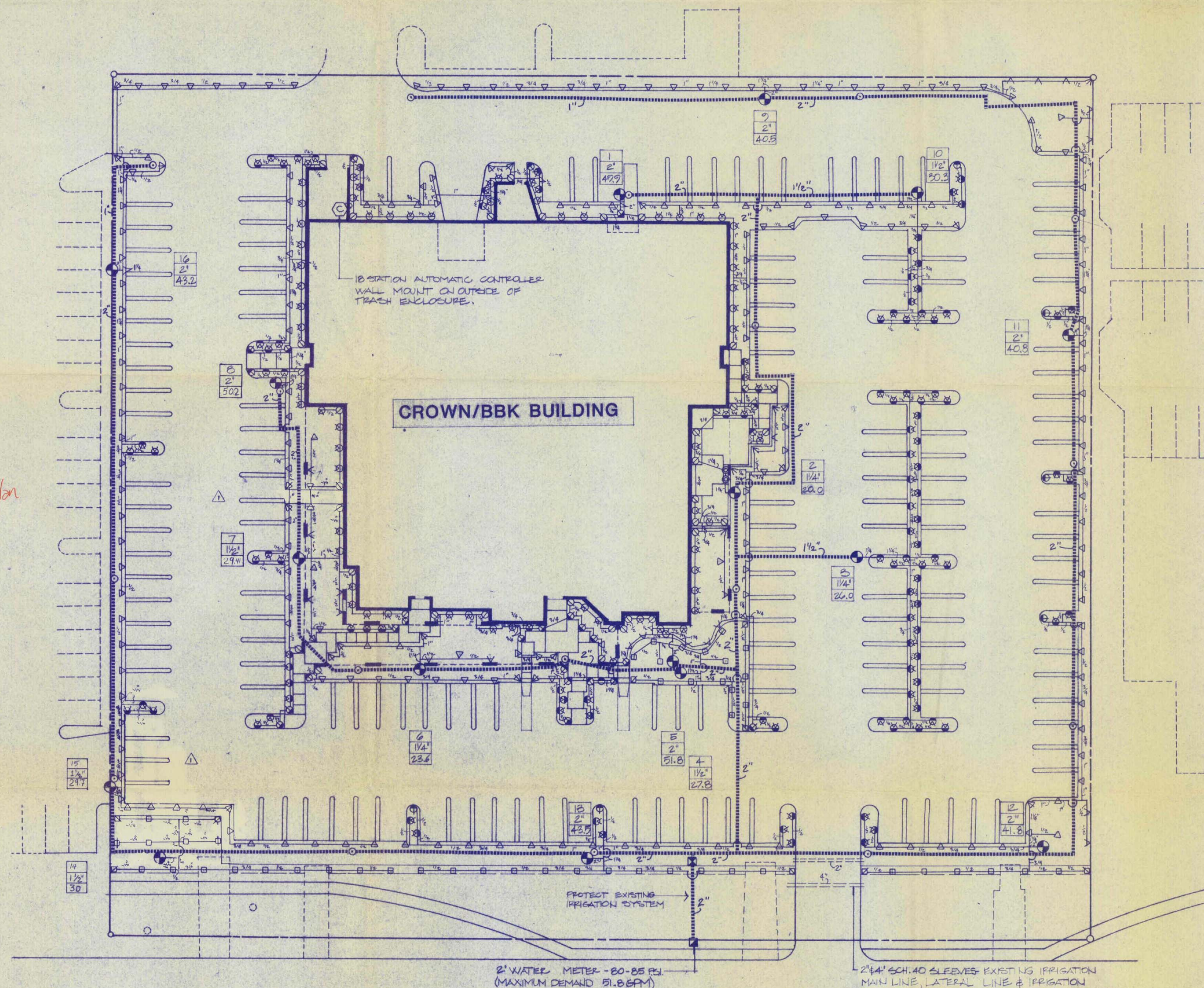
Water Div. *Ed Hill* 12-10-84
Date

Wildlan *[Signature]* Date

Parks Div. *[Signature]* 12-10-84
Date

all irrigation work to be done to City of Cerritos specifications

ISSUANCE OF PERMIT(S) SHALL NOT BE CONSTRUED AS FINAL APPROVAL OF THIS DEVELOPMENT. ALL APPLICABLE CONDITIONS OF APPROVAL, CERRITOS REGULATIONS AND DEVELOPMENT STANDARDS MUST BE FULLY COMPLIED WITH PRIOR TO ISSUANCE OF OCCUPANCY.



2" WATER METER - 80-85 PSI
(MAXIMUM DEMAND 51.8 GPM)

2" 1/4" SCH. 40 SLEEVES EXISTING IRRIGATION MAIN LINE, LATERAL LINE & IRRIGATION CONTROL WIRES PLACED IN SLEEVES & PROTECTED. ALL DAMAGE TO IRRIGATION SYSTEM TO BE REPAIRED WITHIN 24 HRS.



SHEET INCLUDED FOR REFERENCE ONLY

CROWN-BBK, INC.
12881 166TH STREET
CERRITOS, CALIFORNIA

REVISIONS	PER SITE PLAN CHANGE	A.H.
1	Δ	Δ
2	Δ	Δ
3	Δ	Δ

JOB NO. 84-111	DATE 12-10-84
DRAWN BY J.E.H.	CHECKED BY D. BRISTOL

BEAL & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
PLANNING
2875 WALNUT AVE. SUITE D, TURIN, CA 95060
(714) 838-8388

IRRIGATION PLAN
KOWALSKI-THORNTON & ASSOC. INC.
PLANNING ARCHITECTURE
550 E. DEL ANO BLVD. SUITE 600
CERRITOS, CALIF. 94730

SHEET
OF 8