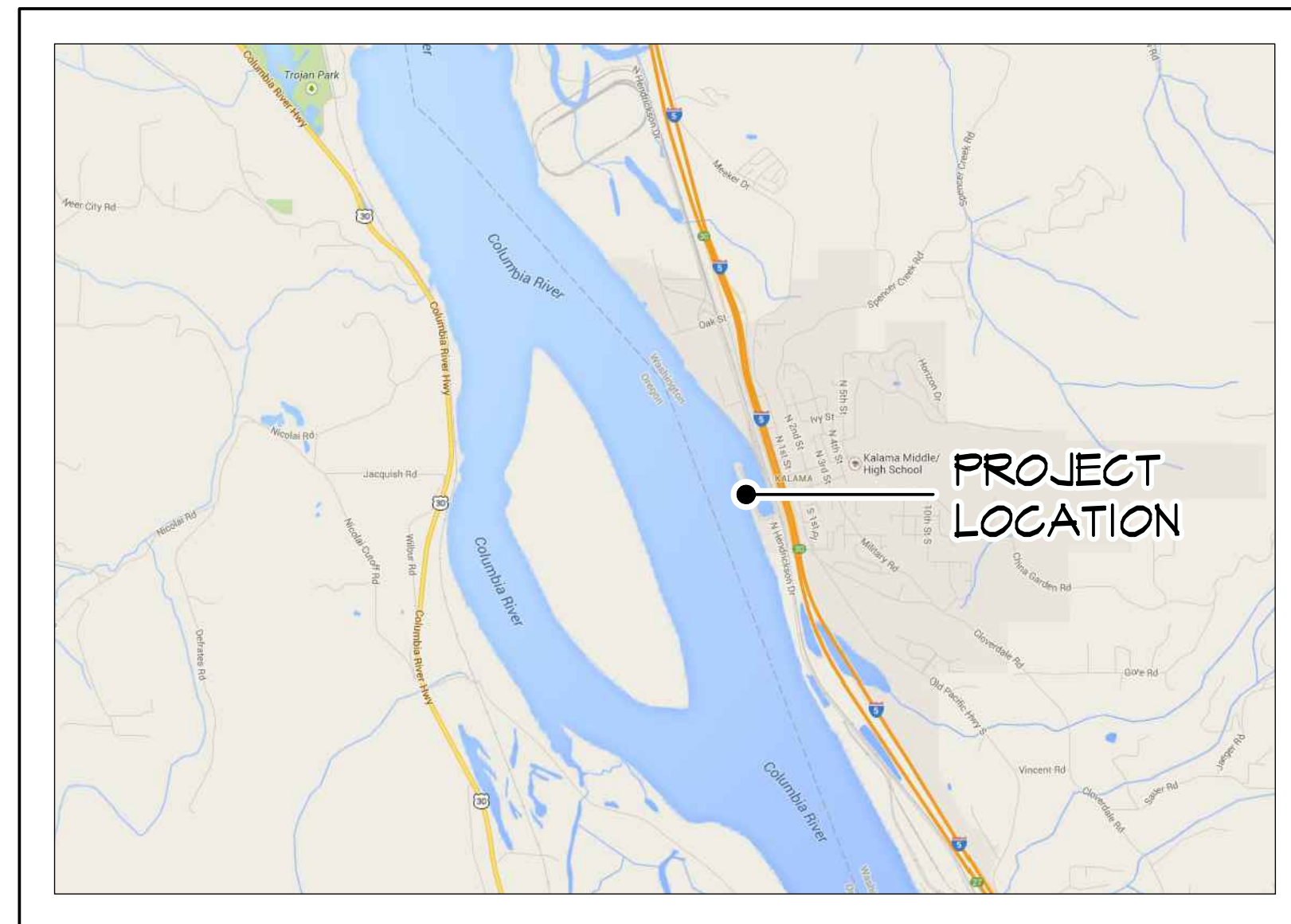


# PORT OF KALAMA - PARKING & TRAIL IMPROVEMENTS

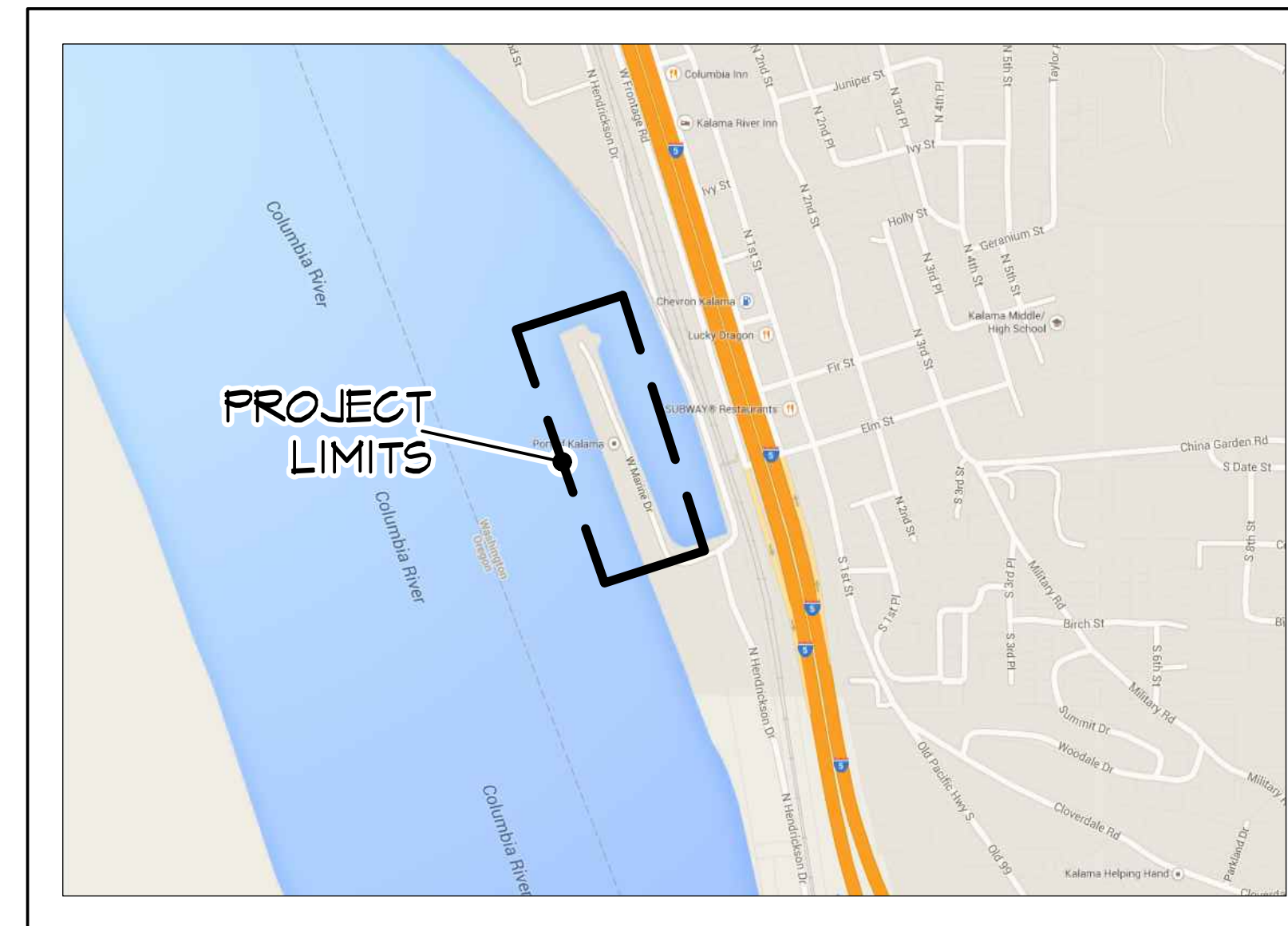
- Kalama, Washington ●

VICINITY MAP



GOOGLE MAPS 2014

PROJECT LOCATION MAP



GOOGLE MAPS 2014

SHEET INDEX

NO.	TITLE
-	COVER SHEET
L1	EXISTING CONDITIONS & DEMO PLAN
L2	LAYOUT & REFERENCE PLAN
L3	GRADING PLAN & NOTES
L4	BUILDING & PARKING ENLARGEMENT PLAN
L5	UPLAND PLANTING & RAIN GARDEN DETAILS
L6	STANDARD EROSION CONTROL DETAILS
L7	SITE DETAILS I
L8	SITE DETAILS II
L9	SITE DETAILS III
L10	IRRIGATION PLAN & LEGEND
L11	IRRIGATION DETAILS
L12	PLANTING PLAN & NOTES
L13	PLANTING LEGEND
E0.1	SITE PLAN - ELECTRICAL
E1.1PH	SITE PLAN - LIGHTING PHOTOMETRICS

100% CD SET

## OWNER & PROJECT MANAGER

PORT OF KALAMA  
 110 WEST MARINE DRIVE  
 KALAMA, WA 98625  
 CONTACT PERSON: ERIC YAKOVICH  
 PHONE: (360) 673-2337  
 EYAKOVICH@PORTOFKALAMA.COM



City Of Kalama	
Approved	Date
These drawings are approved for construction for a period of 12 months from the approval date shown above. The city reserves the right to make revisions, additions, deletions, or modifications should construction be delayed beyond this time limitation or if actual field conditions warrant same. The City, by approving these documents, in no way warrants their accuracy or acknowledges any omissions.	

## PROJECT STATISTICS

TOTAL ACREAGE:	3.5 ACRES
PARCEL NUMBER:	412640100
PARCEL ZONING:	I-1 INDUSTRIAL
SURVEY:	LOCATED IN THE NE 1/4 OF SECTION 18 T. 6 N., R. 1 W., W.M. COWLITZ COUNTY, WASHINGTON

## PROJECT CONSULTANTS

### LANDSCAPE ARCHITECT

J.D. WALSH & ASSOCIATES  
 215 WEST 4TH STREET, SUITE 203  
 VANCOUVER, WA 98660  
 CONTACT : JIM WALSH  
 PHONE: (360) 852-9227  
 EMAIL: JAMES@JDWALSH.NET

### SITE ELECTRICAL

R&W ENGINEERING, INC.  
 9615 SW ALLEN BLVD, SUITE 107  
 BEAVERTON, OR 97005  
 CONTACT: DOUG SHAW  
 PHONE: (503) 292-6000  
 EMAIL: DSHAW@RWENG.COM

### CIVIL ENGINEER

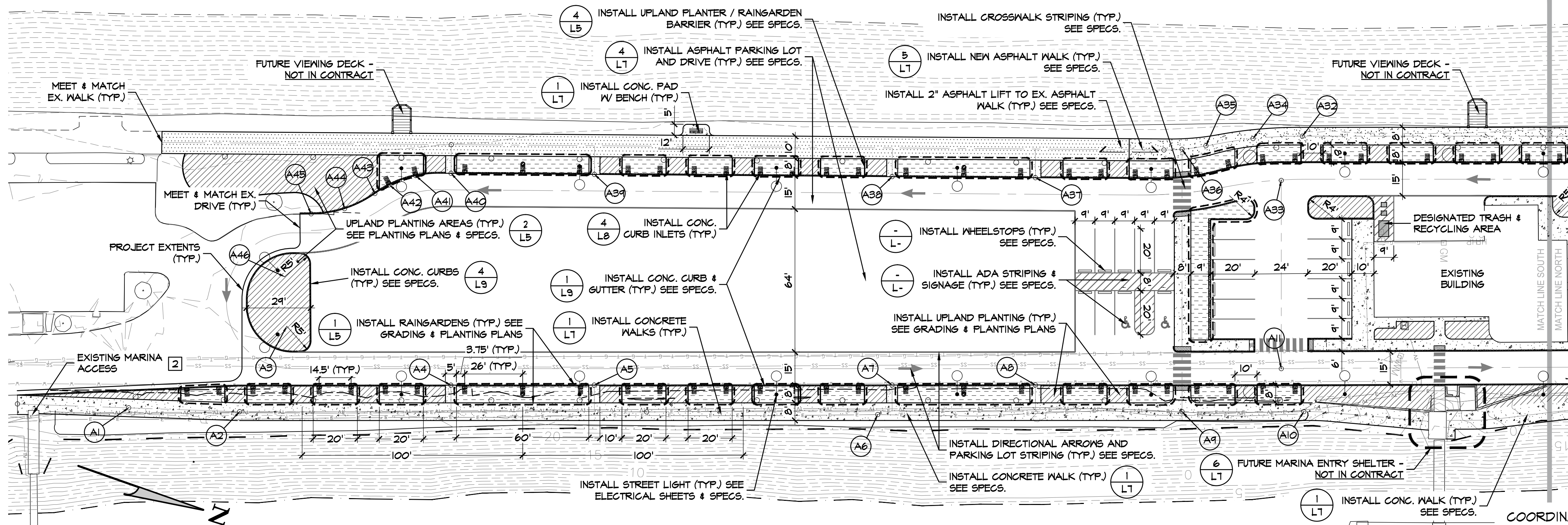
WALLIS ENGINEERING  
 215 WEST 4TH STREET, SUITE 200  
 VANCOUVER, WA 98660  
 CONTACT : DAVE BROKAW  
 PHONE: (360) 695-7041  
 EMAIL: DAVID.BROKAW@WALLISENG.NET

DATE                      JULY, 2015                       
 BID No.                       
 PORT OF KALAMA PROJECT No.                      ----



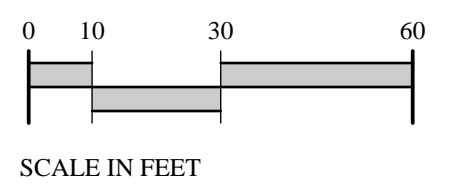






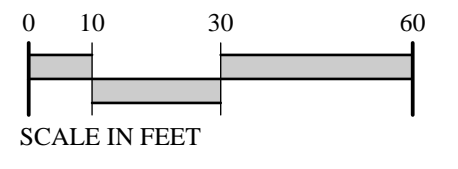
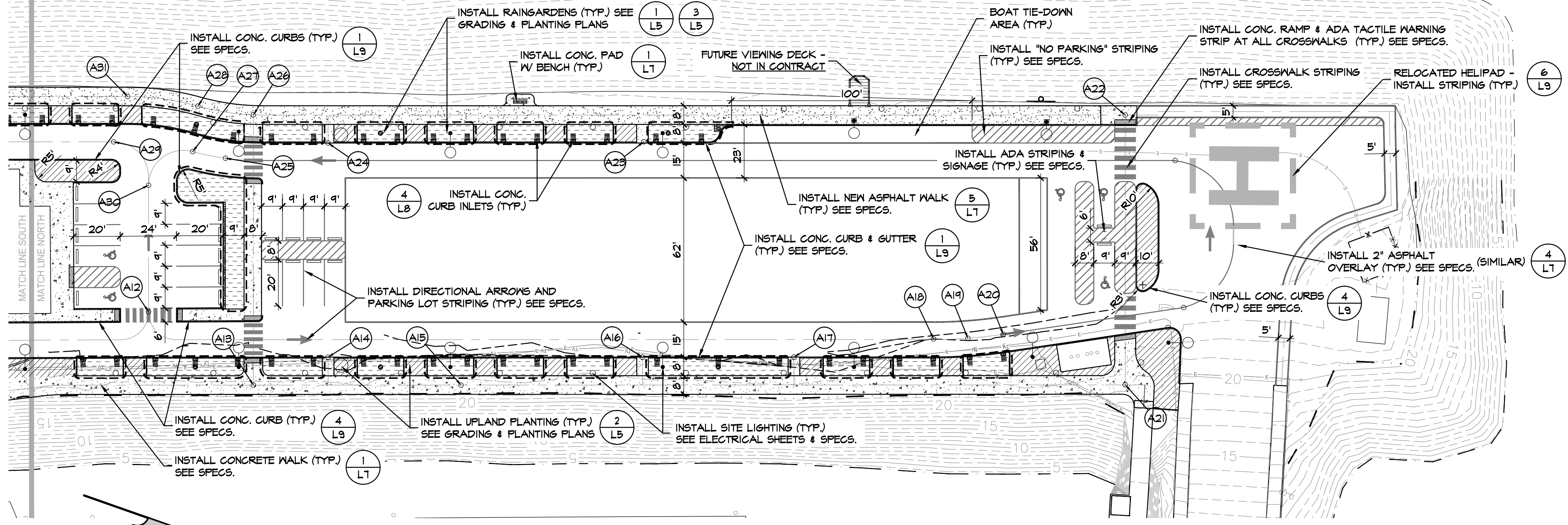
**GENERAL NOTES:**

- A. THE BOAT RAMP & PORTIONS OF THE PARKING AREA ARE TO REMAIN OPEN TO THE PUBLIC FOR THE DURATION OF THE PROJECT. CONTRACTOR TO COORDINATE WITH OWNER FOR SEQUENCING THE WORK TO ALLOW ACCESS AND PARKING. THE EXISTING OFFICE BUILDING WILL REMAIN OPEN AND REQUIRE TENANT ACCESS & PARKING.
- B. CONSTRUCTION ACTIVITIES ARE LIMITED TO THE EXISTING PARKING AREA AND TRAIL. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE AND THE COST OF ANY RESTORATION WORK.
- C. PROTECT ALL EXISTING ITEMS TO REMAIN & RESTORE DAMAGED ELEMENTS TO ORIGINAL CONDITIONS, SEE SPECS.
- D. ORIGINAL TOPOGRAPHIC SURVEY - SURVEYS PERFORMED FOR PORT OF KALAMA BY MINISTER-GLAESER SURVEYORS INC. (360) 694-3913 06/2011 WITH SUPPLEMENTAL INFORMATION PROVIDED 03/2014. SEE SURVEY SHEETS FOR HORIZONTAL & VERTICAL DATUM INFORMATION.
- E. LAYOUT - ALL CONTROL POINTS SHOWN ON PLANS AS A MINIMUM SHALL BE SURVEYED BY STATE OF WASHINGTON LICENSED SURVEYOR. ADDITIONAL CONTROL POINTS MAY BE NEEDED TO PROVIDE SMOOTH CURVES & TRANSITIONS. SEE SPECIFICATIONS FOR MINIMUM REQUIREMENTS.
- F. FINAL LOCATIONS OF SIGNS & SITE FURNISHINGS TO BE APPROVED IN FIELD BY OWNER OR PROJECT REPRESENTATIVE.



**COORDINATE TABLE**

#	NORTHING	EASTING	NOTES
A1	254263.86	1043946.44	CENTERLINE CONG. WALK
A2	254311.91	1043931.62	CENTERLINE CONG. WALK
A3	254327.34	1043892.43	RADIUS CONG. CURB
A4	254398.54	1043888.90	CENTERLINE CONG. WALK
A5	254454.96	1043867.59	CENTERLINE CONG. WALK
A6	254585.75	1043838.15	CENTERLINE CONG. WALK
A7	254587.50	1043823.35	CENTERLINE CONG. WALK
A8	254648.91	1043802.04	CENTERLINE CONG. WALK
A9	254715.71	1043791.70	CENTERLINE CONG. WALK
A10	254767.89	1043773.61	CENTERLINE CONG. WALK
A11	254751.85	1043758.55	CENTERLINE PARKING AISLE
A12	254910.03	1043690.18	CENTERLINE PARKING AISLE
A13	254962.86	1043705.20	CENTERLINE CONG. WALK
A14	255047.10	1043675.99	CENTERLINE CONG. WALK
A15	255047.10	1043675.99	CENTERLINE CONG. WALK
A16	25516.71	1043634.11	CENTERLINE CONG. WALK
A17	255178.20	1043617.82	CENTERLINE CONG. WALK
A18	255232.33	1043590.83	CENTERLINE CONG. WALK
A19	255246.16	1043585.72	CENTERLINE CONG. WALK
A20	255254.94	1043579.16	CENTERLINE CONG. WALK
A21	255316.52	1043582.51	CENTERLINE CONG. WALK
A22	255278.58	1043473.03	CENTERLINE CONG. WALK
A23	255087.02	1043551.57	CENTERLINE CONG. WALK
A24	254954.12	1043546.44	CENTERLINE CONG. WALK
A25	254919.64	1043617.05	CENTERLINE PARKING AISLE
A26	254924.85	1043545.52	CENTERLINE ASPHALT WALK
A27	254905.41	1043618.95	CENTERLINE PARKING AISLE
A28	254901.12	1043599.76	CENTERLINE ASPHALT WALK
A29	254871.95	1043626.12	CENTERLINE PARKING AISLE
A30	254892.24	1043638.83	CENTERLINE PARKING AISLE
A31	254871.23	1043605.73	CENTERLINE ASPHALT WALK
A32	254726.40	1043655.92	CENTERLINE ASPHALT WALK
A33	254723.93	1043677.99	CENTERLINE PARKING AISLE
A34	254705.62	1043664.27	CENTERLINE ASPHALT WALK
A35	254686.50	1043674.32	CENTERLINE ASPHALT WALK
A36	254676.79	1043679.40	CENTERLINE ASPHALT WALK
A37	254618.22	1043713.33	CENTERLINE CONG. WALK
A38	254556.65	1043734.14	CENTERLINE CONG. WALK
A39	254428.77	1043771.40	CENTERLINE CONG. WALK
A40	254367.19	1043798.22	CENTERLINE CONG. WALK
A41	254352.39	1043804.45	ENDPOINT CONG. CURB
A42	254342.11	1043811.96	INTERMEDIATE POINT CONG. CURB
A43	254337.55	1043818.17	ENDPOINT CONG. CURB
A44	254326.81	1043824.13	INTERMEDIATE POINT CONG. CURB
A45	254313.26	1043836.32	ENDPOINT CONG. CURB
A46	254315.70	1043854.42	RADIUS CONG. CURB



**LAYOUT & REFERENCE PLAN CONSTRUCTION NOTES:**

- 1 COORDINATE POINTS - COORDINATES MAY NOT POINT TO CENTER OF RADIUS FOR CLARITY, AND MAY INSTEAD POINT TO END OF RADIUS DIMENSION.
- 2 MARINA ACCESS - KEEP EXISTING PEDESTRIAN MARINA ACCESS CLEAR OF CONSTRUCTION ACTIVITY AND EQUIPMENT.

**EX. OFFICE BUILDING PARKING DATA**

SPACES REQUIRED\* - 12 TOTAL (INCLUDING 1 ADA)

SPACES PROVIDED - 22 TOTAL (INCLUDING 2 ADA)

\*PER VMC 17.44.02Q(B) - 1 SPACE PER 400 SQ. FT. OFFICE FLOOR AREA

TOTAL EX. BUILDING FLOOR AREA = 4,778 SQ. FT.

**100% CD SET**

J. D. Walsh  
LANDSCAPE ARCHITECTS  
Associates, P.S.

215 West 4th Street Suite 203  
Vancouver, Washington 98660  
phone: 360-852-9227 fax: 360-696-4501

STATE OF WASHINGTON  
REGISTERED  
LANDSCAPE ARCHITECT  
James D. Walsh  
JAMES D. WALSH  
CERTIFICATE NO. 215

**PARKING & TRAIL IMPROVEMENTS  
LAYOUT & REFERENCE PLANS**

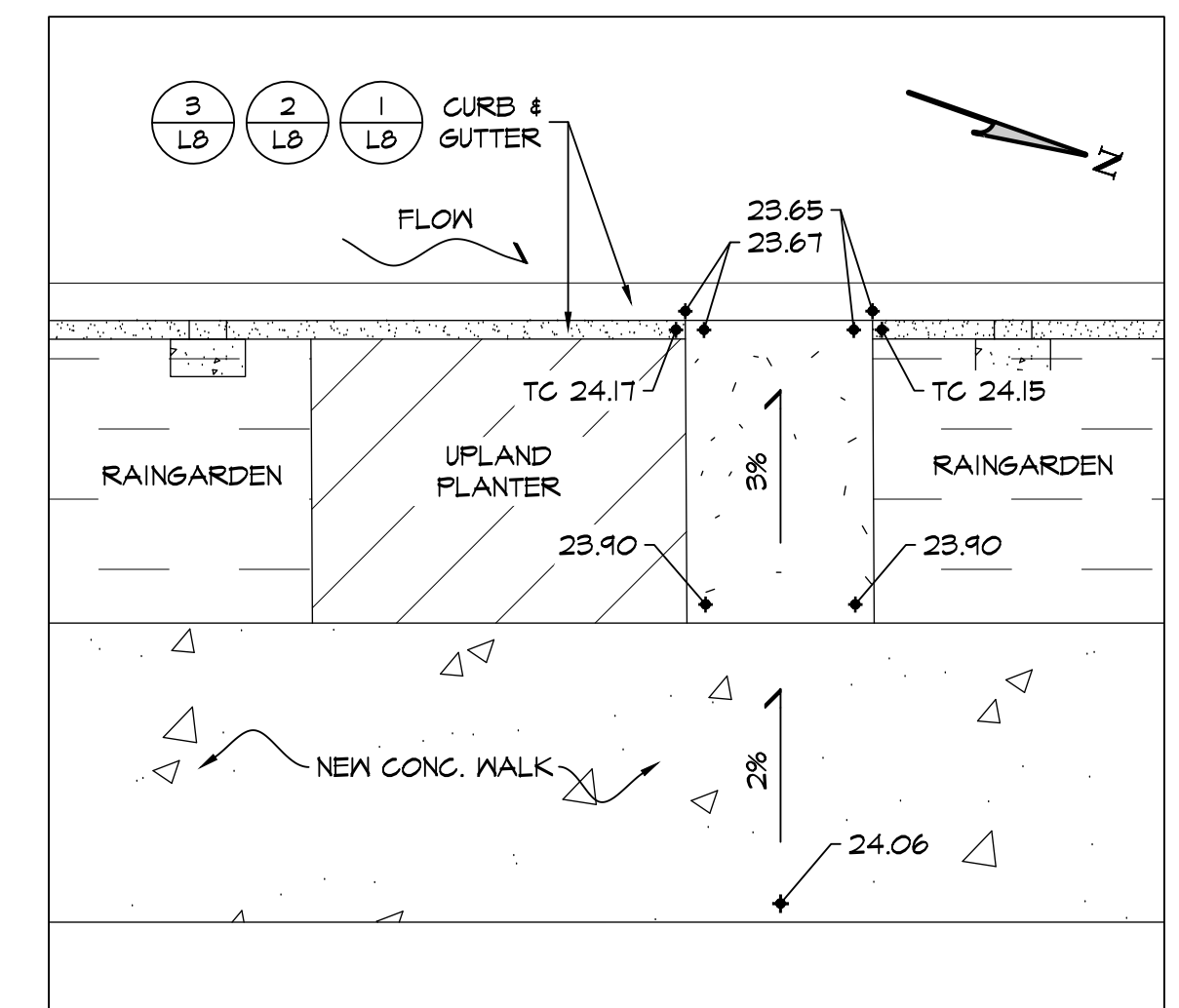
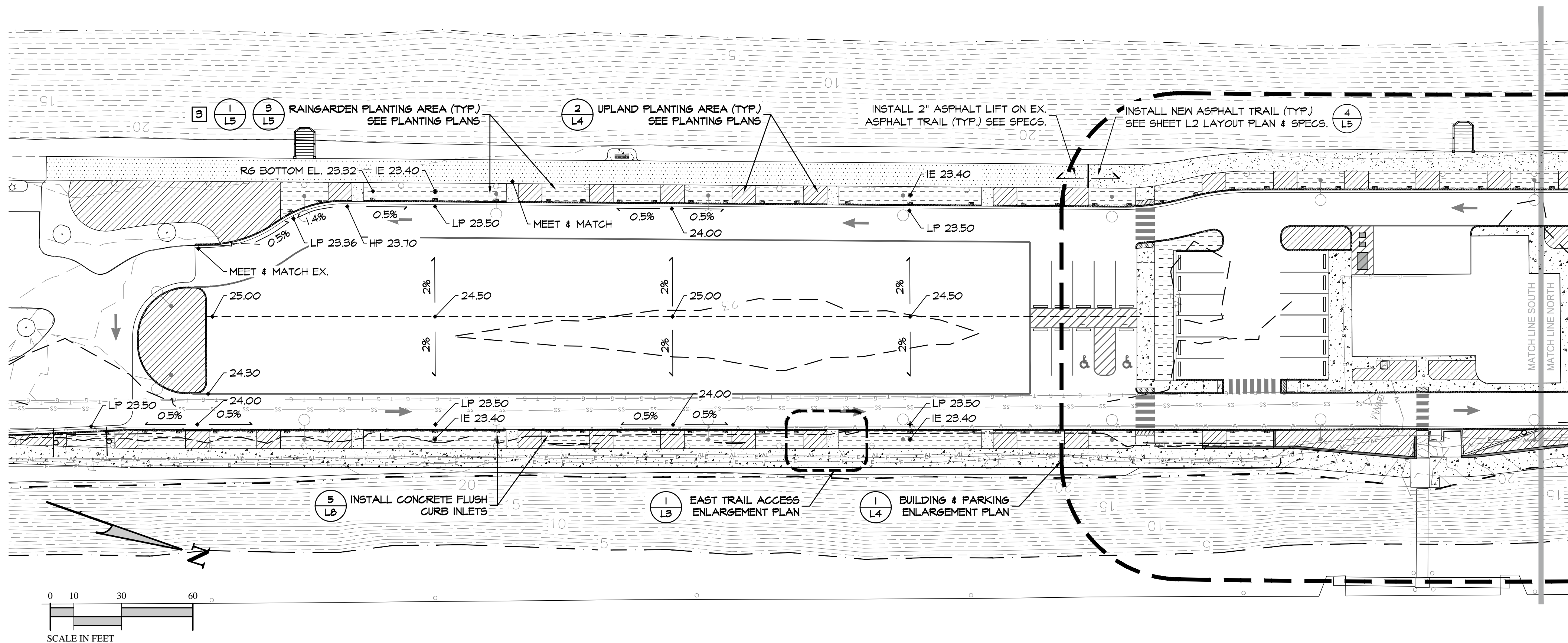
Port of Kalama  
380 W. MARINE DR.  
KALAMA, WA 8625-9500

DATE:	JULY 2015
PROJECT NO:	
DESIGNED:	JDW
DRAWN:	MJH
CHECKED:	JDW
REVISIONS:	

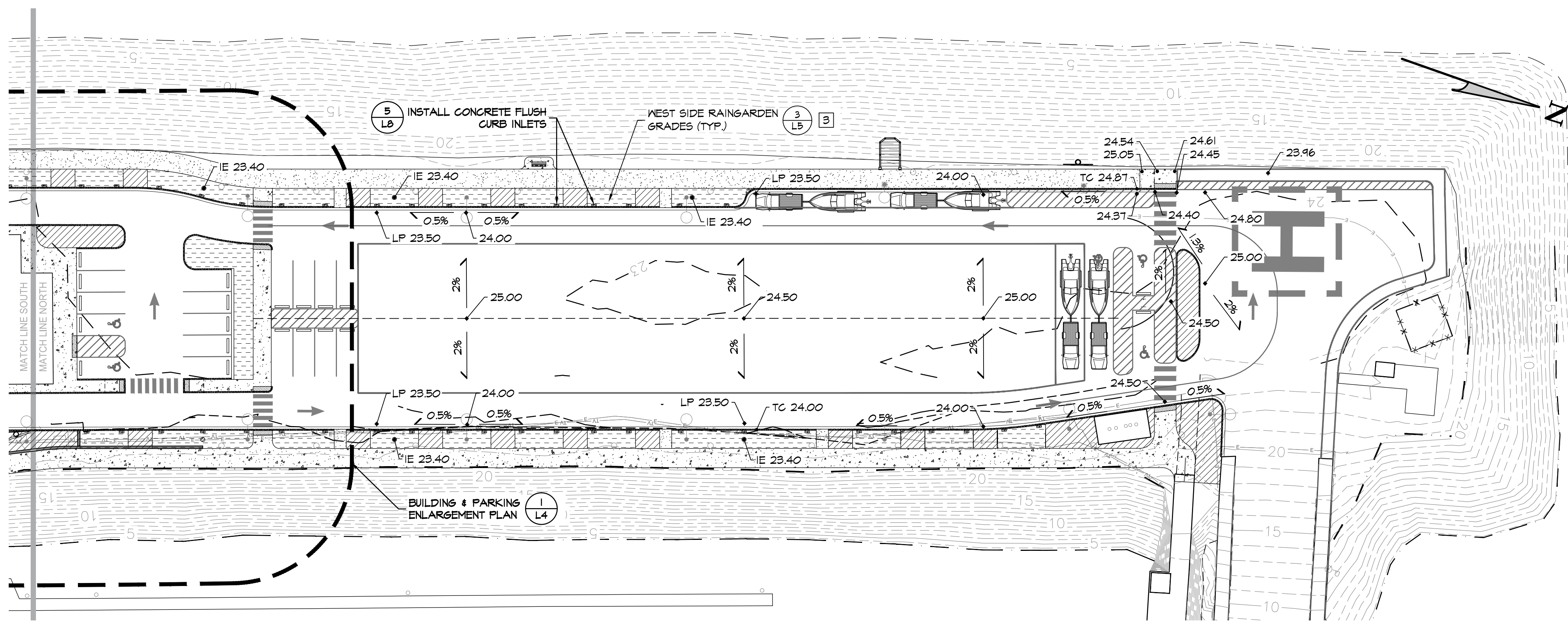
SHEET

**L2**





**EAST TRAIL ACCESS ENLARGEMENT PLAN DETAIL**  
 SCALE: 1"=5'

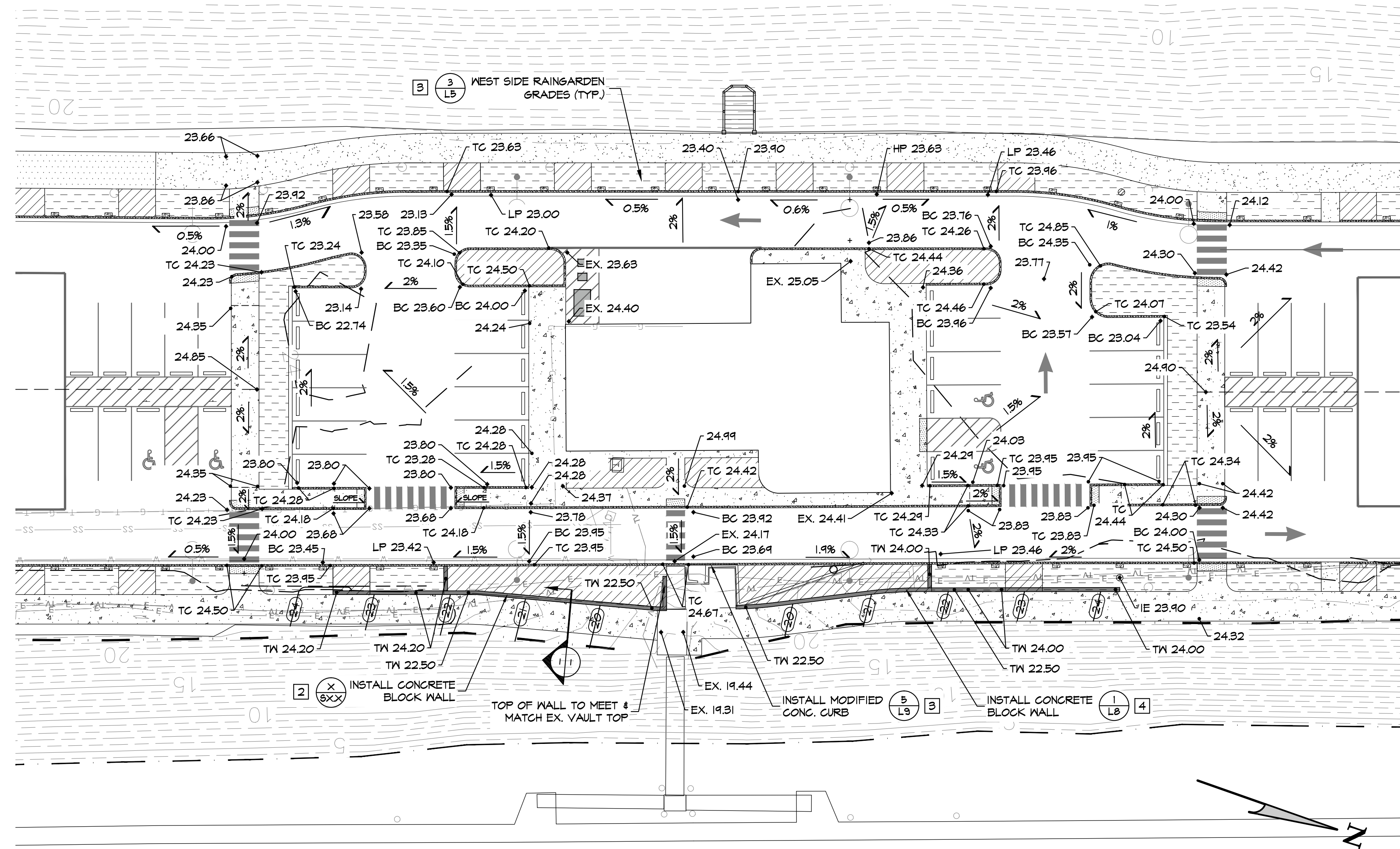


- CONSTRUCTION NOTES:**
- 1 EROSION CONTROL - INSTALL STANDARD AND SPECIFIED EROSION CONTROL MEASURES PER SHEET L4 AND SPECIFICATIONS.
  - 2 WALL GRADING & ELEVATIONS - WALLS TO BE STEPPED TO FOLLOW EXISTING GRADE. MAINTAIN MINIMUM FOOTING DEPTH AS SHOWN ON DETAILS.
  - 3 WEST SIDE RAINGARDEN GRADES - THE BOTTOM ELEVATION OF THE WEST SIDE RAINGARDEN SHALL BE 1'-0" BELOW EDGE OF ADJACENT ASPHALT WALK FINISH GRADE. SEE DETAIL 3/L5.
  - 4 MODIFIED CONCRETE CURB - INSTALL MODIFIED CONCRETE CURB & GUTTER IN THE SECTION. SEE DETAIL 5/L9

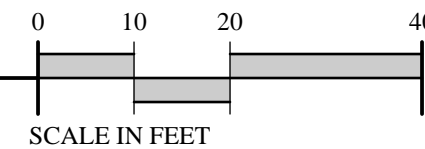
100% CD SET

DATE:	JULY 2015
PROJECT NO.:	-
DESIGNED:	JDW
DRAWN:	MJH
CHECKED:	JDW
REVISIONS:	-





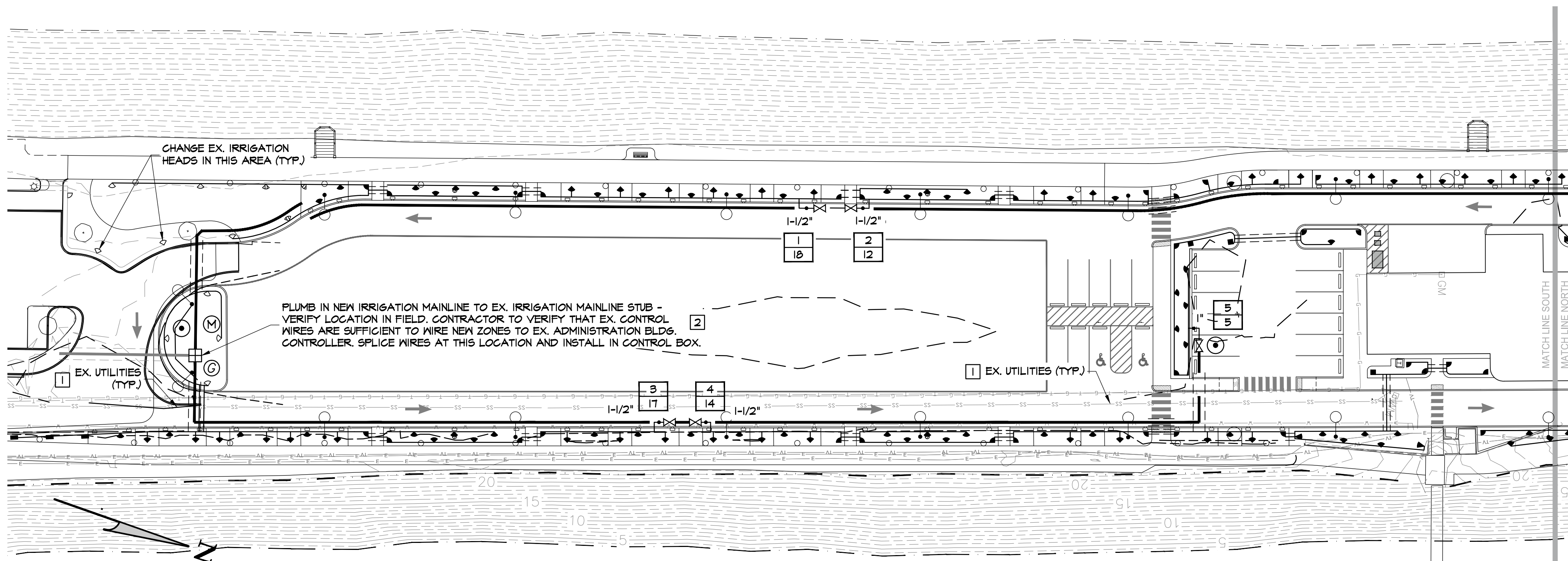
1  
L3 BUILDING ENLARGEMENT GRADING PLAN DETAIL  
SCALE: 1"=5'



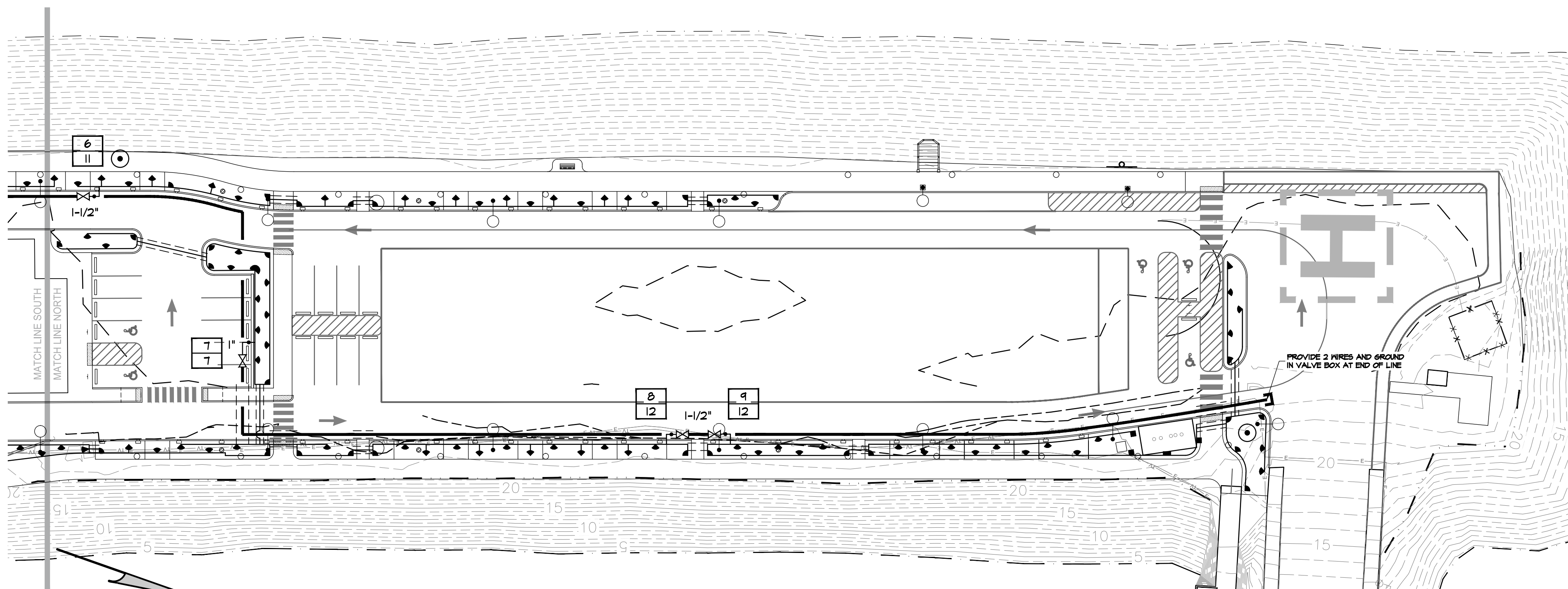
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  - 4 MODIFIED CONCRETE CURB - INSTALL MODIFIED CONCRETE CURB & GUTTER IN THE SECTION. SEE DETAIL 5/L4

DATE:	JULY 2015
PROJECT NO.:	-
DESIGNED:	JDW
DRAWN:	MJH
CHECKED:	JDW
REVISIONS:	-





- IRRIGATION LEGEND**
- 1-1/2" SCHEDULE 40 PVC MAINLINE PIPE (TYP.)
  - X — SCHEDULE 40 PVC LATERAL PIPE (TYP.). SIZE AS INDICATED ON PLANS. ALL PIPE SIZES ARE LABELED FROM VALVE TO END OF ZONE. CONTINUE INDICATED SIZE UNTIL NOTED OTHERWISE. DO NOT USE PIPE LESS THAN 1" SIZE.
  - - - SCHEDULE 40 PVC PIPE SLEEVE. PLACE SLEEVES WHERE NECESSARY AND /OR WHERE SHOWN ON PLAN. USE PIPE OF SUFFICIENT SIZE TO ACCOMMODATE BELL ENDS AND ANY CONTROL WIRES THAT NEED TO GO THROUGH SLEEVE.
  - 6" PS
  - X XX RAINBIRD FEB SERIES REMOTE CONTROL VALVE WITH OPTIONAL PRS-D PRESSURE REGULATING MODULE (TYP.). NUMBERS WITHIN BOX INDICATE VALVE CONTROLLER NUMBER OVER ZONE GPM.
  - 100-FEB-PRS-DIAL 0-30 G.P.M.  
150-FEB-PRS-DIAL 30-50 G.P.M.  
200-FEB-PRS-DIAL 50-120 G.P.M.
  - G GATE VALVE ALONG MAINLINE PIPE (TYP.), RESILIENT WEDGE, DUCTILE IRON, SQUARE OPERATING NUT, NIBCO MODEL F-619-RW-SON.
  - BALL VALVES AT AUTOMATIC CONTROL VALVES (TYP.), NON-LATCHING LEVER & NUT, 100 PERCENT MANUFACTURED IN USA, BRONZE, 600 PSI MINIMUM WITH STANDARD SEAT & THREADED PORTS, APOLLO MODEL 10-100 SERIES.
  - Q QUICK COUPLING VALVE (TYP.), RAINBIRD 1" LOCKING VALVE, NON-POTABLE, 0 - TO GPM, MODEL 5-NP W/ OPTIONAL LOCKING COVER.
  - M MANUAL DRAIN VALVE (TYP.), METAL BALL VALVE, SIZE 3/4", NON-LATCHING LEVER & NUT; VIRGIN TEFLON VITFE SEATS & TRIM; BLOW-OUT-PROOF STEM; 600 PSI CNP.



**ROTATING SPRAY HEAD ON RAINBIRD BODY LEGEND**

INSTALL HUNTER MP ROTATOR NOZZLE ON RAINBIRD 1800 SERIES SPRAY HEAD BODY W/ PRESSURE REGULATING STEM.  
 • PLANTING BEDS - 12" POP-UP HEIGHT, MODEL 1812-PRS

SYMBOL	NOZZLE	TYPE	PSI	RADIUS	GPM	FR-HR	COLOR
▶	MPCORNER	45°-40°	30	8'-12"	0.20	N/A	TURQUOISE
▶	MP1000	90°-210°	30	8'-12"	0.32	0.50	MAROON
▶	MP1000	210°-270°	30	8'-12"	0.37	0.50	LIGHT BLUE
●	MP1000	360°	30	8'-12"	0.65	0.50	OLIVE
●	MP2000	90°-210°	30	13'-17"	0.63	0.41	BLACK
●	MP2000	210°-270°	30	13'-17"	0.74	0.41	GREEN
●	MP2000	360°	30	13'-17"	1.27	0.41	RED
○	MP3000	90°-210°	30	20'-27"	1.58	0.48	BLUE
○	MP3000	210°-270°	30	20'-27"	2.37	0.48	YELLOW
○	MP3000	360°	30	20'-27"	3.15	0.48	GRAY
■	MP SIDE STRIP	-	30	4'-5" X 24'-30"	0.38	0.41	BROWN
■	MP LEFT STRIP	-	30	4'-5" X 12'-15"	0.19	0.41	IVORY
■	MP RIGHT STRIP	-	30	4'-5" X 12'-15"	0.19	0.41	COPPER

**IRRIGATION PLAN GENERAL NOTES:**

- IRRIGATION LEGEND, DETAILS, AND INSTALLATION REQUIREMENTS - SEE IRRIGATION DETAIL SHEETS L10.
- INSPECTION & APPROVAL - WORK SHALL NOT BE COVERED OR ENCLOSED UNTIL IT HAS BEEN INSPECTED, PRESSURE TESTED, TESTED FOR OPERATION IN PRESENCE OF A PROJECT REPRESENTATIVE. ALL COVERED WORK SHALL BE DUG UP AT CONTRACTOR'S EXPENSE.
- PLAN IS SCHEMATIC - DO NOT BEND MAINLINE PIPE. USE 45° ELBOWS TO MAKE 90° TURNS ON MAINLINE PIPE. PLACE MAINLINE & SYSTEM COMPONENTS WITHIN RIGHT-OF-WAY. MAINLINE PIPE MAY BE SHOWN WITH BREAKS FOR GRAPHIC CLARITY BUT SHALL BE INSTALLED AS CONTINUOUS PIPE. SYSTEM COMPONENTS MAY BE SHOWN OUTSIDE PLANTING AREAS FOR GRAPHIC CLARITY BUT SHALL BE INSTALLED WITHIN PLANTING AREAS OR AS INDICATED ON DRAWING. THERE ARE SHORT SECTIONS OF LATERAL PIPE THAT MAY NOT APPEAR ON THE PLAN THAT WILL MANIFOLD FROM EACH VALVE.
- PIPE SIZING - ALL PIPE SIZES ARE LABELED FROM END OF ZONE. CONTINUE INDICATED SIZE UNTIL NOTED OTHERWISE. DO NOT USE PIPE LESS THAN 1" SIZE. SOME PIPE HAS BEEN INTENTIONALLY OVERSIZED TO COUNTERACT THE PRESSURE LOSS EFFECTS OF LONG RUNS OR GAINS IN ELEVATION.

100% CD SET

J. D. Walsh Associates, P.S.  
 LANDSCAPE ARCHITECTS  
 215 West 4th Street Suite 203  
 Vancouver, Washington 98660  
 phone: 360-852-9227 fax: 360-696-4501

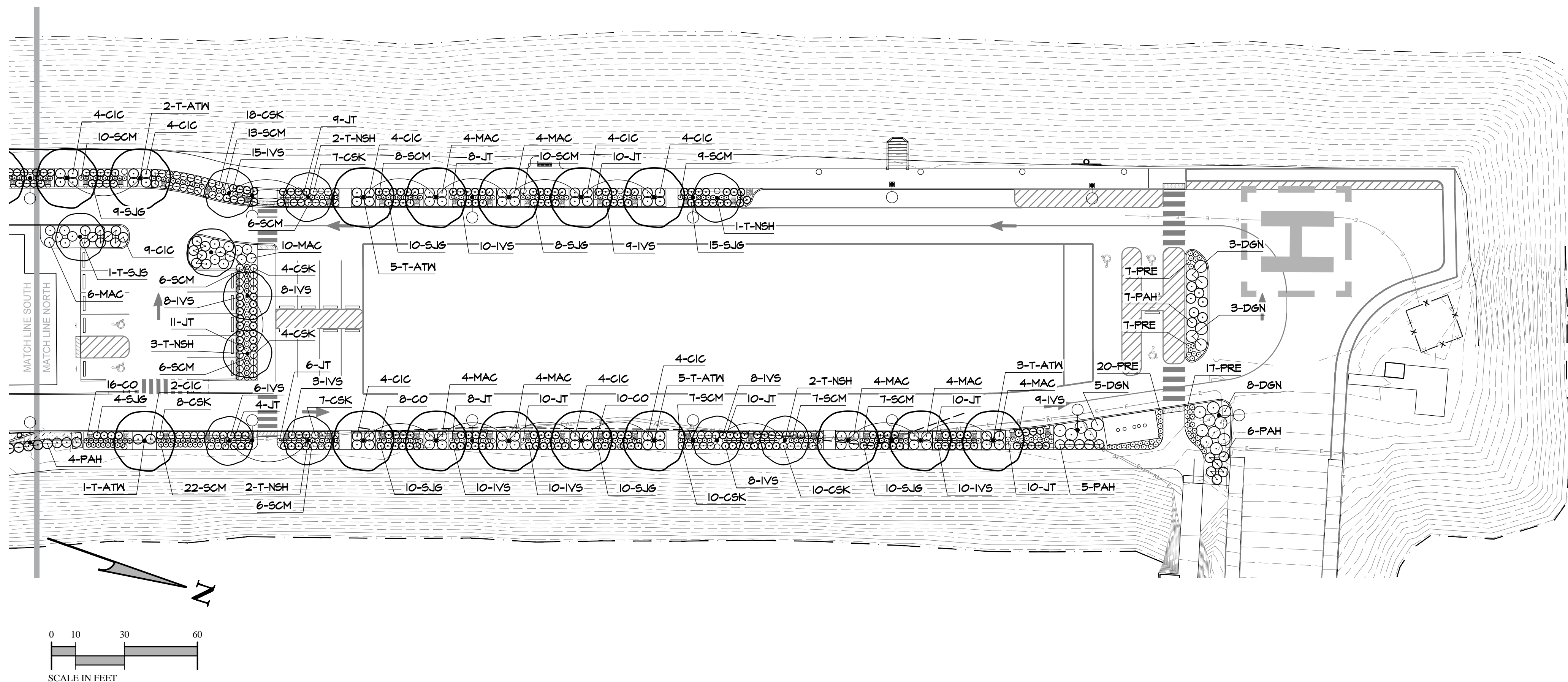
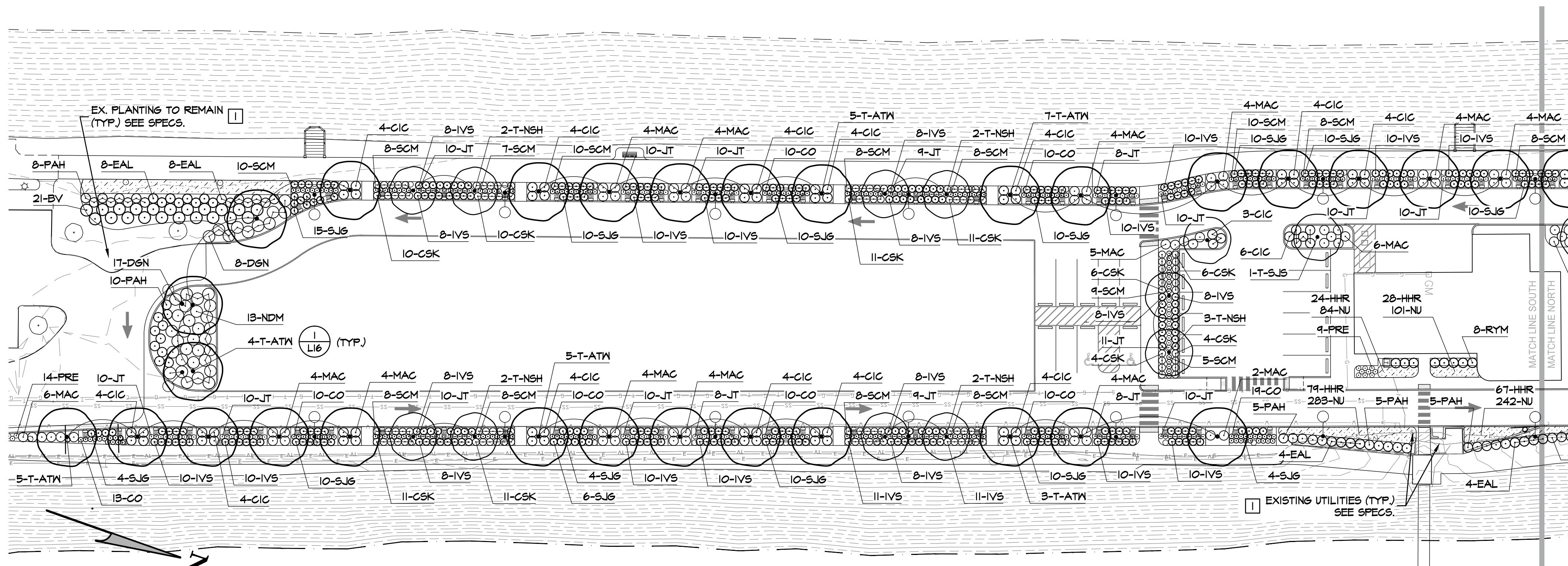
STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT  
 JAMES D. WALSH  
 CERTIFICATE NO. 215

PARKING & TRAIL IMPROVEMENTS  
 IRRIGATION PLANS & NOTES  
 PORT OF KALAMA  
 380 W. MARINE DR.  
 KALAMA, WA 8625-9500

DATE:	JUNE 2015
PROJECT NO.:	-
DESIGNED:	JDW
DRAWN:	MJH
CHECKED:	JDW
REVISIONS:	-

SHEET  
**L10**





**PLANTING PLAN CONSTRUCTION NOTES:**

□ EXISTING UTILITIES - VERIFY UTILITY LOCATIONS AND DEPTHS PRIOR TO CONSTRUCTION.

- PLANTING PLAN GENERAL NOTES:**
- A. **PLANT LEGEND, DETAILS & INSTALLATION REQUIREMENTS** - SEE SPECIFICATIONS & PLANT DETAILS SHEET L5.
  - B. **PREPARATION:** SCARIFY & PREPARE SUBSOIL. REMOVE EXTRANEANOUS MATERIAL & ROCKS 2 INCHES & LARGER, CRUSHED ROCK, ROOTS, & CONSTRUCTION DEBRIS. EXCAVATE SUBSOIL & DISPOSE OF AS DIRECTED TO PLACE TOPSOIL, COMPOST & BARK MULCH.
    - UPLAND / PARKING ISLANDS TREES, SHRUBS, & GROUNDCOVER - SCARIFY & PREPARE SUBSOIL TO 18 INCH MIN. DEPTH FROM FINISHED GRADE.
  - C. **TOPSOIL:** IMPORTED TOPSOIL (SEE SPECS).
    - UPLAND TREES, SHRUBS, & GROUNDCOVER - 280 C.Y. AT 9 INCH DEPTH TOPSOIL.
  - D. **COMPOST AMENDMENT:** SEE SPECS.
    - UPLAND TREES, SHRUBS & GROUNDCOVER - 94 C.Y. AT 3 INCH MIN. DEPTH
  - E. **COMPOST TOP DRESS:** SEE SPECS.
    - RAINGARDEN TREES, SHRUBS & GROUNDCOVER - 100 C.Y. AT 3 INCH MIN. DEPTH
  - F. **EROSION CONTROL BARK MULCH:** FINE GRIND DARK FIR BARK
    - UPLAND TREES, SHRUBS, & GROUNDCOVER - 94 C.Y. AT 3 INCH MIN. DEPTH. DO NOT PLACE BARK MULCH ON TOP OF ROOT BALL OR WITHIN 6 INCHES OF TRUNK OR STEM.
  - G. **BIO-RETENTION SOIL MIX:** SUBMIT 1 SAMPLES & LAB ANALYSIS FOR APPROVAL OF BIO-RETENTION SOIL MIX.
    - RAIN GARDENS - 544 C.Y. AT 18 INCH MIN. AVG. MIN DEPTH REQUIRED FOR RAIN GARDENS.
  - H. **MYCORRHIZAL INOCULUM:** MYCOAPPLY MICRONIZED ENDO / ECTO POWDER
    - TREES, SHRUBS, & GROUNDCOVER - 16 LBS. AT 3 TBS PER TREE / 1 TBS PER SHRUB & GROUNDCOVER. (1 LB = 48 TBS)
  - I. **PLANT MATERIAL QUANTITIES:** QUANTITIES SHOWN IN THE PLANTING LEGEND SHALL TAKE PRECEDENCE OVER SYMBOLS & LABELS SHOWN ON PLANTING PLAN.
  - J. **INSPECTION REQUIREMENTS:** NOTIFY PROJECT REPRESENTATIVE 24 HOURS IN ADVANCE. ALL SUBSEQUENT WORK SHALL BE REJECTED IF NOT APPROVED.
    - RAIN-GARDENS - SEE BIO-RETENTION SOIL SPECIFICATION FOR TESTING AND SUBMITTAL REQUIREMENT
    - SUB-GRADE PREPARATION SHALL BE REVIEWED & APPROVED PRIOR TO PLACEMENT OF TOPSOIL.
    - TOPSOIL PREPARATION & HUMUS INSTALLATION SHALL BE REVIEWED & APPROVED PRIOR TO PLANTING.
    - PLANT MATERIALS SHALL BE REVIEWED & APPROVED PRIOR TO PLANTING.
    - LAYOUT OF PLANT MATERIALS SHALL BE APPROVED PRIOR TO PLANTING.
    - MYCORRHIZAL POWDER INOCULUM SHALL BE APPROVED PRIOR TO IRRIGATION.
  - K. **MAINTENANCE:** 90 DAYS MIN. AFTER WRITTEN SUBSTANTIAL COMPLETION NOTICE & UNTIL FINAL ACCEPTANCE INCLUDING:
    - ALL PLANTING AREAS - WEEKLY VISITS TO NEED, WATER, PRUNE, SPRAY, REPLACE & RESET PLANTS, REPAIR SUPPORTS.
  - L. **AUTOMATIC IRRIGATION** - ALL NEW PLANT AREAS SHALL BE IRRIGATED BY A 100% FULLY AUTOMATIC IRRIGATION SYSTEM.

100% CD SET

DATE:	JULY 2015
PROJECT NO.:	
DESIGNED:	JDW
DRAWN:	MJH
CHECKED:	JDW
REVISIONS:	



UPLAND AND PARKING ISLAND PLANT LEGEND

LABEL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	COMMENTS	HT / WIDTH	SEASON	INTEREST
<b>TREES</b>								
T-ATN	ACER TRUNCATUM X PLAT. 'WARRENRED'	PACIFIC SUNSET MAPLE	2" CAL. / 14' HT.	45	B&B / TRUNK FREE OF BRANCHES T' / 30' O.C.	30' / 25'	FALL	YELLOW ORANGE TO BRIGHT RED FALL COLOR
T-SJS	STYRAX JAPONICUS 'SNOWCONE'	SNOWCONE JAPANESE SNOWBELL	2" CAL. / 12' HT.	2	B&B / TRUNK FREE OF BRANCHES T' / NO DOGLEG	25' / 20'	EARLY SUMMER	PURE WHITE EARLY SUMMER FLOWERS / BELL SHAPED FRUIT
<b>SHRUBS, GRASSES &amp; GROUNDCOVERS</b>								
BY	BERBERIS VERRUCULOSA	WARTY BARBERRY	30" HT. / # 5 / SHEARED	21	CONT. / SYMMETRICAL / HEAVY BRANCHING / 4' O.C.	5' / 5'	YEAR ROUND	YELLOW FLOWERS / EVERGREEN
GIC	CISTUS INCANUS CRETICUS	PINK ROCK ROSE	12" X 12" HT. / #2 / SHEARED	118	CONT. / HEAVY BRANCHING / 3' O.C.	3' / 3'	SPRING TO FALL	PINK FLOWERS WITH YELLOW HEARTS / WAVY GREY-GREEN LEAVES
DGN	DEUTZIA GRACILIS 'NIKKO'	DWARF NIKKO DEUTZIA	15" X 15" / #2 / 4 CANES	48	CONT. / DENSELY BRANCHED / 5' O.C.	18" / 4'	SPRING TO FALL	WHITE FLOWERS ON ARCHING BRANCHES / BURGUNDY FALL COLOR
EAL	EUONYMUS ALATUS 'LITTLE MOSES'	LITTLE MOSES DWARF BURNING BUSH	15" X 15" / #2 / 4 CANES	16	CONT. / 4' O.C.	3' / 4'	FALL	BRILLIANT RED FALL COLOR
HHR	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	9" x 9" / #1	198	CONT. / 24" O.C.	2' / 2'	SUMMER TO FALL	BRIGHT YELLOW FLOWERS / EVERBLOOMING
NU	NARCISSUS 'UNSURPASSABLE'	UNSURPASSABLE G. TRUMPET DAFFODIL	16 CM. +	710	BULB / 12" O.C.	2' / 2'	MARCH - APRIL	LARGE GOLDEN YELLOW TRUMPET FLOWERS
MAC	MAHONIA AQUIFOLIUM 'COMPACTA'	COMPACT OREGON GRAPEHOLLY	9" x 9" / #2 / SHEARED	99	CONT. / SYMMETRICAL / HEAVY BRANCHING / 4' O.C.	3' / 4'	YEAR ROUND	NATIVE SELECTION / EVERGREEN / YELLOW FLOWERS
NDM	NANDINA DOMESTICA 'MONUM'	PLUM PASSION NANDINA	12" x 12" / #2 / SHEARED	13	CONT. / 5' O.C.	5' / 4'	YEAR ROUND	WHITE FLOWERS / REDDISH PURPLE FALL COLOR
PAH	PENNISETUM ALOPECUROIDES 'HAMELN'	HAMELN DWARF FOUNTAIN GRASS	18" X 12" / #2	62	CONT. / 4' O.C.	3' / 4'	SUMMER TO FALL	ARCHING FLOWERS / RUSSET FALL & WINTER COLOR
PRE	PYRACANTHA X 'MONELP'	RED ELF PYRACANTHA	12" x 12" / #2 / SHEARED	74	CONT. / SYMMETRICAL / HEAVY BRANCHING / 2' O.C.	2' / 2'	YEAR ROUND	WHITE FLOWERS / BRIGHT RED PERSISTENT FRUIT / EVERGREEN
RYM	RHODODENDRON YAK. 'MARDI GRAS'	MARDI GRAS RHODODENDRON	21" HT. / #2 / SHEARED	8	CONT. / HEAVY BRANCHING / 4' O.C.	3' / 3'	YEAR ROUND	PURPLE FLOWERS / EVERGREEN / HEAT TOLERANT

RAIN GARDEN PLANT LEGEND

LABEL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	COMMENTS	HT / WIDTH	SEASON	INTEREST
<b>TREES</b>								
T-NGH	NYSSA SYLVATICA 'HYMANRED'	RED RAGE TUPELO	2" CAL. / 14' HT.	21	B&B / TRUNK FREE OF BRANCHES T' / NO DOGLEG	35' / 20'	FALL	DK GREEN GLOSSY LEAVES TURNING BRIGHT RED IN FALL
<b>SHRUBS &amp; GROUNDCOVER</b>								
CSK	CORNUS SERICEA 'KELSEYI'	KELSEY REDOISER DOGWOOD	6" x 6" / #2 / 3 CANES	185	CONT. / DENSELY BRANCHED / 3' O.C.	2' / 3'	FALL	DARK RED STEMS
IVS	ITEA VIRGINICA 'SPRICH'	LITTLE HENRY SWEETSPIRE	9" x 6" / #2 / 3 CANES	317	CONT. / DENSELY BRANCHED / 3' O.C.	3' / 3'	SUMMER	FRAGRANT WHITE SUMMER FLOWERS / VIVID RED FALL COLOR
SJG	SPIRAEA JAPONICA 'GOLDMOUND'	GOLDMOUND SPIRAEA	12" X 12" / #2 / 4 CANES	200	CONT. / DENSELY BRANCHED / 3' O.C.	3' / 3'	SPRING	ROSE-PINK FLOWERS, NEAT COMPACT ROUNDED FORM
<b>RUSHES &amp; SEDGES</b>								
CO	CAREX OBNUPTA	SLOUGH SEDGE	12" HT. / #1	219	CONT. / 2' O.C.	3' / 3'	YEAR ROUND	EVERGREEN / RHIZOMATOUS WETLAND PLANT / HIGHLY COMPETITIVE
JT	JUNCUS TENUIS	SLENDER RUSH	9" HT. / #1	262	CONT. / 2' O.C.	2' / 2'	SPRING TO FALL	FIBROUS ROOTS / TUFTED WETLAND PLANT / SURVIVES MITIGATION SITES
SCM	SCIRPUS MICROCARPUS	SMALL-FRUITED BULRUSH	12" HT. / #1	150	CONT. / 2' O.C.	2' / 2'	SPRING TO FALL	RHIZOMATOUS WETLAND PLANT / IMPORTANT WILDLIFE FOOD & NESTING

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STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT  
JAMES D. WALSH  
CERTIFICATE NO. 215

PARKING & TRAIL IMPROVEMENTS  
PLANTING LEGEND & DETAILS  
PORT OF KALAMA  
380 W. MARINE DR.  
KALAMA, WA 8625-9500

DATE:	JULY 2015
PROJECT NO:	-
DESIGNED:	JDW
DRAWN:	MJH
CHECKED:	JDW
REVISIONS:	-

SHEET  
**L13**